

Complaint

IN THE MATTER OF
NATIONAL COMMISSION ON EGG NUTRITION, ET AL.

ORDER, OPINION, ETC., IN REGARD TO ALLEGED VIOLATION OF
SECS. 5 AND 12 OF THE FEDERAL TRADE COMMISSION ACT

Docket 8987. Complaint, July 23, 1974—Final Order, July 20, 1976

Order requiring a Park Ridge, Ill., egg industry trade association and a New York City public relations firm, among other things to cease misrepresenting the physiological effects of consuming dietary cholesterol or eggs and to cease using a misleading trade name.

Appearances

For the Commission: *Lynne C. McCoy, Bret S. Smart, Stewart A. Block, and Mark A. Heller.*

For the respondents: *James Fox, Moses, Gibbons, Abramson & Fox, Chicago, Ill.*

COMPLAINT

Pursuant to the provisions of the Federal Trade Commission Act, and by virtue of the authority vested in it by said Act, the Federal Trade Commission, having reason to believe that the National Commission on Egg Nutrition and Richard Weiner, Inc., corporations, hereinafter referred to as respondents, have violated the provisions of said Act, and it appearing to the Commission that a proceeding by it in respect thereof would be in the public interest, hereby issues its complaint stating its charges in that respect as follows:¹

PARAGRAPH 1. Respondent National Commission on Egg Nutrition is a corporation organized, existing and doing business under and by virtue of the laws of the State of Illinois, with its office and principal place of business located at 205 Touhy Ave., Park Ridge, Illinois.

Respondent Richard Weiner, Inc. is a corporation organized, existing and doing business under and by virtue of the laws of the State of New York with its principal office and place of business located at 888 7th Ave., New York, New York.

PAR. 2. Respondent National Commission on Egg Nutrition (hereinafter, NCEN) is a trade association which was organized and is maintained for the purpose of promoting, fostering and advancing the interests of its members, who consist of individuals and firms engaged in businesses relating to the egg industry, including associations of egg

¹ For purposes of this complaint, the following definitions shall apply:

a) "commerce" means commerce as defined in the Federal Trade Commission Act, and

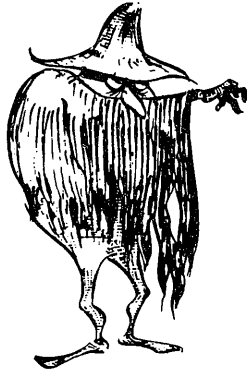
b) "false advertisement" means false advertisement as defined in the Federal Trade Commission Act.

producers and distributors as well as individual egg producers. NCEN has been and now is engaged in a wide range of activities of mutual interest to its members, including but not limited to the dissemination, publishing and distribution of advertisements and promotional material for the purpose of promoting the sale of poultry eggs for human consumption, which come within the classification of "food" as defined in the Federal Trade Commission Act.

Respondent Richard Weiner, Inc. is now and for some time last past has been a public relations and advertising agency for NCEN and now and for some time last past has prepared and placed for publication and has caused the dissemination of advertising and promotional material, including but not limited to the advertising referred to herein, to promote the sale of said eggs.

PAR. 3. In the course and conduct of their said businesses, the respondents have disseminated and caused the dissemination of certain advertisements concerning said eggs by the United States mail and by various means in commerce, including, but not limited to, advertisements inserted in newspapers and an advertisement in the form of a booklet, entitled "Eggs Your Diet and Your Health" and sent through the United States mail, for the purpose of inducing and which were likely to induce, directly or indirectly, the purchase of said eggs; and have disseminated, and caused the dissemination of, advertisements concerning said products by various means, including but not limited to the aforesaid media, for the purpose of inducing and which were likely to induce, directly or indirectly, the purchase of said products in commerce.

PAR. 4. Typical of the statements and representations in said advertisements, disseminated as aforesaid, but not necessarily inclusive thereof, are the following:



Cholesterol and the Egg: A Mystery.



There is absolutely no scientific evidence that eating eggs in any way increases the risk of heart attack. Yet the cholesterol bugaboo persists. The mystery is why. Why in the face of overwhelming evidence to the contrary do some people fear eggs cholesterol heart attack?

Millions of dollars have been spent over the years in research and studies by physicians and nutritionists and the mystery persists. There is absolutely no scientific evidence that eating eggs in any way increases the risk of heart attack. We follow these studies very closely because we're America's egg producers and are vitally concerned with the findings. What are the facts?

Eggs contain cholesterol—as do all foods of animal origin—but eating eggs does not increase the blood cholesterol in a normal person. If you set about deliberately to avoid all the cholesterol you could in your diet, your body would still manufacture cholesterol. The less cholesterol you eat, the more your body would manufacture because you need cholesterol. Every cell in your body requires cholesterol for life and cholesterol is the building block of sex hormones.

The late Dr. Paul Dudley White, whom many considered to be America's leading heart specialist, stated, "The amount of cholesterol in the blood—we call it serum cholesterol—is not necessarily related to cholesterol found in food."

Dr. Michael De Bakey, the world famous heart surgeon, in an article in *The Journal of the American Medical Association*, wrote, "An analysis of cholesterol values by usual hospital laboratory methods in 1,700 patients with atherosclerotic disease revealed no definite correlation between serum cholesterol levels and the nature and extent of atherosclerotic disease. Eight out of ten patients had cholesterol values below 300 mg/100 ml, the upper limits of normal for the procedure employed. Associated diseases such as diabetes mellitus and arteriosclerotic heart disease, age, and anatomical location and extent of atherosclerotic disease did not significantly alter the distribution of cholesterol values."

There is absolutely no scientific evidence that eating eggs in any way increases the risk of heart disease is what we've been saying. We'd like to share the facts with you in the form of a new booklet we've prepared which is yours, free, for the asking. The booklet will give you facts on cholesterol, medical studies, nutritional information. We've even prepared two coupons for your use. Fill in one for yourself and one for someone else to whom you'd like a booklet sent—a friend, relative, your physician, or your child's teacher.

NATIONAL COMMISSION ON EGG NUTRITION

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1-800-4-A-EGG
1-800-4-2334
1-800-4-2334
1-800-4-2334

FOR YOU

Eggs
205 Touchy Avenue
Park Ridge, Illinois 60068

☐ Please send me your booklet

Name _____

Address _____

City _____

State _____ Zip _____

FOR SOMEBODY ELSE

Eggs
205 Touchy Avenue
Park Ridge, Illinois 60068

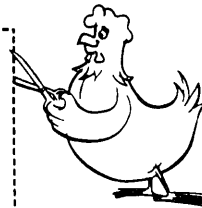
☐ Please also send a booklet to

Name _____

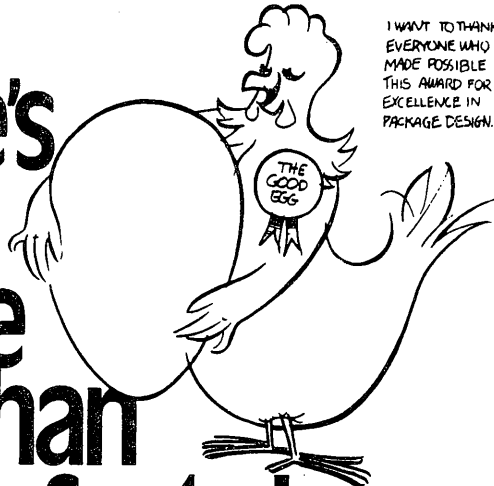
Address _____

City _____

State _____ Zip _____



There's more to the egg than its perfect shape.



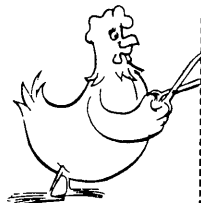
The case for eggs has never rested upon the universally acclaimed perfection of the egg's shape. Its beautiful, biodegradable container is the ultimate of excellence in package design. But the esthetics of the egg is only the beginning of the good things the egg has in store for you. The convenience the egg offers, and the chemical additives the egg does NOT contain. It is a fact that eggs are the best source of protein in human nutrition. Further, eggs have fewer calories per gram of protein than any other natural food. Pound for pound, compared with ALL other foods, eggs contain the most concentrated nourishment and are one of the best value buys in your supermarket. Eggs are an important source of vitamins A, B, D, and E and are a preferred source of iron in any of their many, and varied uses. Eggs do NOT require freezer storage, defrosting, shaking or measuring. Eggs do not have extra calories and certainly do not contain chemical additives. There are NO emulsifiers (vegetable lecithin, mono- and diglycerides and propylene glycol monostearate), cellulose, xanthan gums, trisodium and triethyl citrate, aluminum sulfate or iron phosphate. And eggs do not need artificial

flavorings or artificial color. Perhaps you've heard that you should cut down on eating eggs because of their cholesterol content. There is absolutely no scientific evidence that eating eggs, even in quantity, will increase the risk of a heart attack. There is in fact preliminary evidence that the opposite is true, which has led Dr. Roger Williams to write, "Anyone who deliberately avoids cholesterol in his diet may inadvertently be courting heart disease." In one recent study, four hundred obese, mostly middle-aged, policemen were placed on a diet that included two or more eggs each day. By Dr. Sam S. Berman, a Boston physician. After eight years, there has not been a single heart attack reported in the group.

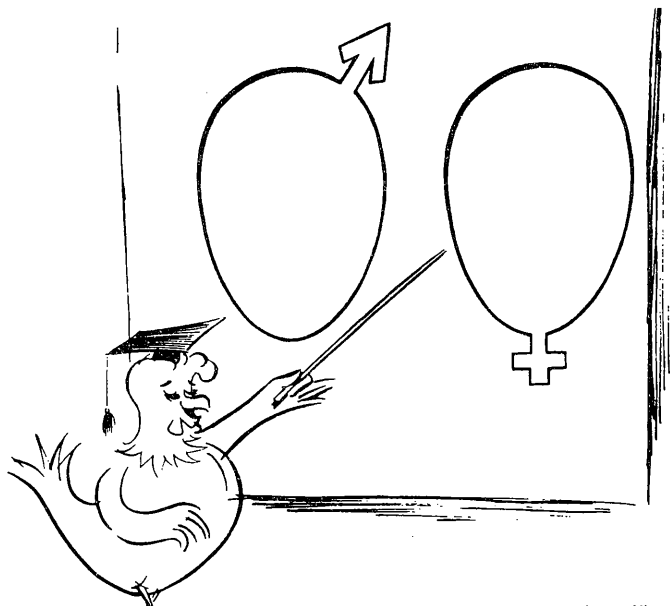
We're egg people—America's egg producers—and admittedly, we're committed to the case for eggs, but we hold for good, wholesome natural nutrition. We'd be glad to share the facts with you in the form of a new booklet which you can obtain simply by filling out the coupon on the left and sending it to us. If you'd like us to send a booklet to your physician, your child's teacher, or anyone else, please fill out the coupon on the right. Left or right, you're in good shape with eggs.

The National Commission on Egg Nutrition

121 Page 2, National Commission on Egg Nutrition, P.O. Box 1010, Egg City, N.C.



FOR YOU	FOR SOMEBODY ELSE
Eggs 205 Tenth Avenue P.O. Box 1010 ☐ Please send me your booklet	Eggs 205 Tenth Avenue P.O. Box 1010 ☐ Please send a booklet #110
Name _____	Name _____
Address _____	Address _____
City _____	City _____
State _____	State _____



The 'Sexy' Egg

You've been meaning to start on that diet because you're somewhat overweight but you are awfully fond of many foods you shouldn't eat. And smoking — you know you should give up cigarettes but it is hard. And you probably should cut back on drinking somewhat too. It sort of reminds you of the old saw, "Everything I like is either illegal, immoral or fattening" — and makes you wonder what's next! What's next? — in fact, it's "now" — is that there are those who maguodately advocate cutting down on eggs because of their cholesterol content. So we thought we'd offer a few facts in evidence about what you're being asked to give up "now".

- 1 Cholesterol is the building block of sex hormones
- 2 Cholesterol is needed for your nerves to transmit their impulses throughout your body
- 3 Cholesterol is essential for life for every cell in your body
- 4 The less cholesterol you eat, the more cholesterol your body produces because you need cholesterol
- 5 The average person's body will eliminate just about the same amount of cholesterol as that eaten
- 6 Eggs contain cholesterol — as do all foods of animal origin — and are the richest source of protein in human nutrition

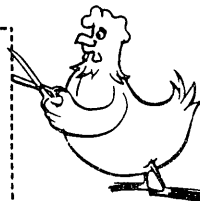
There is absolutely no scientific evidence whatsoever that eating eggs in any way increases the risk of heart attack. We follow these matters very closely because we're America's egg producers. Yes, we're committed to eggs but medical and nutritional authorities are with us in advocating good, wholesome, natural nutrition.

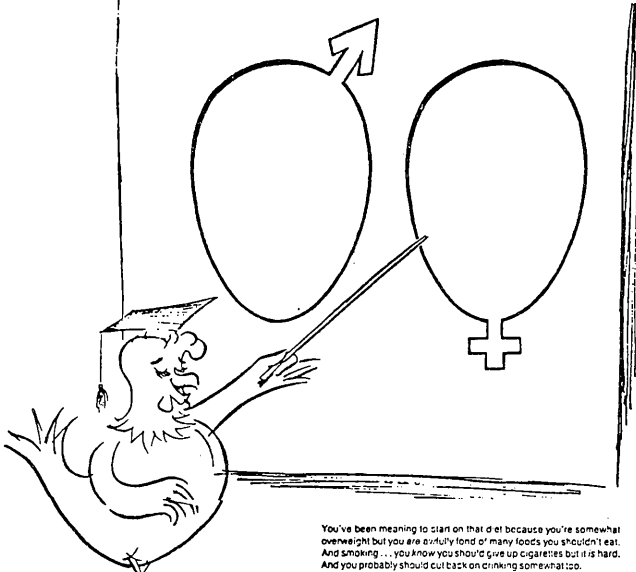
We'll be pleased to share the facts with you in the form of a new booklet. Just fill out the coupon on the left and send it to us. If you'd like us to send a booklet to someone else — a friend, relative, your physician, your child's teacher — fill out the coupon on the right. As we've said before, left or right you're in good shape with eggs.

NATIONAL COMMISSION ON EGG NUTRITION

900-1
Number 1
in series
of messages
from America's
egg producers

FOR YOU	FOR SOMEBODY ELSE
Eggs 200 Touhy Avenue Parsippany, N.J. 07054	Eggs 200 Touhy Avenue Parsippany, N.J. 07054
☐ Please send me your booklet	☐ Please also send a booklet to
Name _____	Name _____
Address _____	Address _____
City _____	City _____
State _____ Zip _____	State _____ Zip _____





The 'Sexy' Egg

You've been meaning to start on that diet because you're somewhat overweight but you are awfully fond of many foods you shouldn't eat. And smoking . . . you know you should give up cigarettes but it is hard. And you probably should cut back on drinking somewhat too. It sort of reminds one of the old saw, "Everything I like is either illegal, immoral or fattening!" — and makes one wonder what's next! What's "next" — in fact, it's "now!" — is that there are those who may advocate — some even for profit — cutting down on eggs because of their cholesterol content. So we thought we'd offer a few facts about what people are being stalling to give up "now."

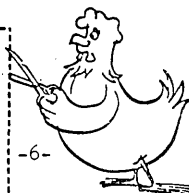
1. Cholesterol is the building block of sex hormones.
2. Cholesterol is needed for the nerves to transmit their impulses throughout the body.
3. Cholesterol is essential for life for every cell in the body.
4. The less cholesterol one eats, the more cholesterol the body produces because a person's system needs cholesterol.
5. The normal per. girl's body will eliminate just about the same amount of cholesterol as that eaten.
6. Eggs contain cholesterol — as do all foods of animal origin — and are the richest source of protein in human nutrition.

There is absolutely no scientific proof that eating good, whole-some, fresh eggs — nature's miracle in a shell — increases the risk of heart attack, the "killer" in "heart" disease, because we're vitally concerned with health and good, natural nutrition.

We'll be pleased to share the facts with you in the form of a new booklet. Just fill out the coupon on the left and send it to us. If you'd like us to send a booklet to somebody else — a friend, relative, your physician, your child's teacher — fill out the coupon on the right. As we've said before, left or right, you're in good shape with eggs.

NATIONAL COMMISSION ON EGG NUTRITION

FOR YOU		FOR SOMEBODY ELSE	
NCEN 205 Touhy Avenue Park Ridge, Illinois 60068 ☐ Please send me your booklet.		NCEN 205 Touhy Avenue Park Ridge, Illinois 60068 ☐ Please also send a booklet to	
Name _____	Name _____	Name _____	Name _____
Address _____	Address _____	Address _____	Address _____
City _____	City _____	City _____	City _____
State _____	State _____	State _____	State _____



PAR. 5. Through the use of said advertisements and others referred to in Paragraphs Three and Four, respondents represented, and are now representing, directly or by implication that:

a. There is absolutely no competent and reliable scientific evidence that eating eggs, even in quantity, increases the risk of heart attacks or heart disease;

b. There is overwhelming competent and reliable scientific evidence that eating eggs does not increase the risk of heart attacks;

c. There is competent and reliable scientific evidence that dietary cholesterol,² including that in eggs, decreases the risk of heart disease;

d. There is competent and reliable scientific evidence that avoiding dietary cholesterol, including that in eggs, increases the risk of heart disease;

e. Eating eggs does not increase the blood cholesterol level³ in a normal person;

f. A person's blood cholesterol level is prevented from being raised or lowered by dietary cholesterol intake because

1) The human body increases its manufacture of cholesterol in an amount equal to a decrease in dietary cholesterol intake and

2) The human body eliminates the same amount of cholesterol as that eaten;

g. Dietary cholesterol including that in eggs, is needed by the body for building sex hormones, for transmitting nerve impulses and for maintaining life in cells.

PAR. 6. In truth and in fact,

a. There is competent and reliable scientific evidence that eating eggs does increase the risk of heart attacks and heart disease;

b. There is not overwhelming competent and reliable scientific evidence that eating eggs does not increase the risk of heart attacks;

c. There is no competent and reliable scientific evidence that dietary cholesterol, including that in eggs, decreases the risk of heart disease;

d. There is no competent and reliable scientific evidence that avoiding dietary cholesterol, including that in eggs, increases the risk of heart disease;

e. Eating eggs does increase the blood cholesterol level in most people;

f. A person's body mechanisms do not prevent the blood cholesterol

² Dietary cholesterol is that cholesterol contained in food.

³ Blood cholesterol level is the amount of cholesterol contained in a person's blood stream.

level from being raised or lowered by the level of dietary cholesterol intake;

g. Dietary cholesterol, including that in eggs, is not needed by the body for building sex hormones, for transmitting nerve impulses and for maintaining life in cells.

Therefore, the advertisements referred to in Paragraphs Three and Four were and are misleading in material respects and constituted, and now constitute, false advertisements, and the statements and representations set forth in Paragraph Five were, and are, false, misleading or deceptive.

PAR. 7. Furthermore, through the use of the advertisements referred to in Paragraphs Three and Four, respondents represented, and are now representing, directly or by implication,

a) That eating eggs does not increase the risk of heart attacks and heart disease,

b) That dietary cholesterol, including that in eggs, decreases the risk of heart attacks and heart disease, and

c) That avoiding dietary cholesterol, including that in eggs, increases the risk of heart disease.

PAR. 8. There existed at the time of said representations in Paragraph Seven no reasonable basis for making the above representations. Therefore, the making and dissemination of said representations as alleged constituted, and now constitute, unfair or deceptive acts or practices in commerce.

PAR. 9. In the course and conduct of its aforesaid business, and at all times mentioned herein, respondent NCEN as an agent or representative of its membership constituency, has been, and now is, in substantial competition in commerce with corporations, firms and individuals representing or engaged in the food industry.

PAR. 10. In the course and conduct of its aforesaid business, and at all times mentioned herein, respondent Richard Weiner, Inc. has been, and now is, in substantial competition in commerce with other public relations and advertising agencies.

PAR. 11. The use by respondents of the aforesaid unfair or deceptive representations and the dissemination of the aforesaid false advertisements has had, and now has, the capacity and tendency to mislead members of the consuming public into the erroneous and mistaken belief that said representations were and are true.

PAR. 12. The aforesaid acts and practices of respondents, as herein alleged, including the dissemination of the aforesaid false advertisements, were and are all to the prejudice and injury of the public and of

respondents' competitors, and constituted, and now constitute, unfair methods of competition in commerce, and unfair or deceptive acts or practices in commerce, in violation of Sections 5 and 12 of the Federal Trade Commission Act.

INITIAL DECISION BY ERNEST G. BARNES, ADMINISTRATIVE
LAW JUDGE

NOVEMBER 24, 1975

PRELIMINARY STATEMENT

[1] Respondents National Commission on Egg Nutrition (hereinafter "NCEN") and Richard Weiner, Inc. (hereinafter "Weiner"), corporations, are charged with unfair methods of competition in commerce, and unfair or deceptive acts or practices in commerce, in violation of Sections 5 and 12 of the Federal Trade Commission Act.

[2] The Commission issued its complaint in this proceeding on July 23, 1974, charging that respondents, in the course and conduct of their businesses, have disseminated and caused the dissemination of certain advertisements concerning poultry eggs for human consumption, by the United States mail and by various means in commerce, including, but not limited to, advertisements inserted in newspapers and an advertisement in the form of a booklet, entitled "Eggs Your Diet and Your Health," for the purpose of inducing, and which were likely to induce, directly or indirectly, the purchase of said eggs in commerce.

The complaint sets forth *in toto* four advertisements, and alleges that respondents, through statements and representations in said advertisements, and other advertisements, have falsely represented, directly or by implication, that (1) there is absolutely no competent and reliable scientific evidence that eating eggs, even in quantity, increases the risk of heart attacks or heart disease; (2) there is overwhelming competent and reliable scientific evidence that eating eggs does not increase the risk of heart attacks; (3) there is competent and reliable scientific evidence that dietary cholesterol (cholesterol contained in food), including that in eggs, decreases the risk of heart disease; (4) there is competent and reliable scientific evidence that avoiding dietary cholesterol, including that in eggs, increases the risk of heart disease; (5) eating eggs does not increase the blood cholesterol level (cholesterol contained in a person's blood stream) in a normal person; (6) a person's blood cholesterol level is prevented from being raised or lowered by dietary cholesterol intake because (a) the human body increases its manufacture of cholesterol in an amount equal to a decrease in dietary cholesterol intake and (b) the human body eliminates the same amount

of cholesterol as that eaten; and (7) dietary cholesterol, including that in eggs, is needed by the body for building sex hormones, for transmitting nerve impulses and for maintaining life in cells.

In truth and in fact, the complaint alleges, (1) there is competent and reliable scientific evidence that eating eggs does increase the risk of heart attacks and heart disease; (2) there is not overwhelming competent and reliable scientific evidence that eating eggs does not increase the risk of heart attacks; (3) there is no competent and reliable scientific evidence that dietary cholesterol, including that in eggs, decreases the risk [3] of heart disease; (4) there is no competent and reliable scientific evidence that avoiding dietary cholesterol, including that in eggs, increases the risk of heart disease; (5) eating eggs does increase the blood cholesterol level in most people; (6) a person's body mechanisms do not prevent the blood cholesterol level from being raised or lowered by the level of dietary cholesterol intake; and (7) dietary cholesterol, including that in eggs, is not needed by the body for building sex hormones, for transmitting nerve impulses and for maintaining life in cells.

The complaint further alleges that, through the use of statements and representations in the aforesaid advertisements, respondents have represented, directly or by implication, that (a) eating eggs does not increase the risk of heart attacks and heart disease; (b) dietary cholesterol, including that in eggs, decreases the risk of heart attacks and heart disease, and (c) avoiding dietary cholesterol, including that in eggs, increases the risk of heart disease. The complaint alleges that, at the time these representations were made, no reasonable bases for making such representations existed.

The complaint was served on the respondents on August 5, 1974. A prehearing conference was held on September 11, 1974 and thereafter, on September 16, 1974, respondents filed their answer, admitting in part and denying in part the allegations of the complaint. On May 5, 1975, respondents filed a motion to amend their answer by adding the affirmative defenses that NCEN is not a corporation within the meaning of Section 4 of the Federal Trade Commission Act, and that the Federal Trade Commission lacks jurisdiction over NCEN. Respondents' said motion was granted by the administrative law judge on the record at the hearing held on May 13, 1975.

After various pretrial proceedings, hearings for the case-in-chief were held in Washington, D.C., during the period May 12, 1975 through May 30, 1975; and defense hearings were held during the period June 9, 1975 through June 18, 1975. In a total of 16 hearing days, complaint counsel called five witnesses, all experts, and respondents called as witnesses four NCEN officials and six experts. The official record

contains 2,389 pages of transcript (including 51 pages of prehearing conference transcript) and several hundred exhibits, including many medical treatises.

[4] In collateral litigation, the Commission, pursuant to Section 13 of the Federal Trade Commission Act, sought an order granting a temporary injunction against respondent NCEN to restrain dissemination of certain publications pending a determination of the administrative proceeding. The District Court declined to grant the injunctive relief sought. *Federal Trade Commission v. National Commission On Egg Nutrition*, 1975-1 Trade Cases ¶60,246 [9 S&D 1109]. On appeal, the United States Court of Appeals for the Seventh Circuit reversed the lower court and entered an injunction pending completion of this administrative proceeding. *Federal Trade Commission v. National Commission On Egg Nutrition*, 5 CCH Trade Reg. Rep., ¶60,320 [517 F.2d 485 (1975)] [9 S&D —]. This collateral litigation has not been considered by the administrative law judge in ruling on this proceeding.

This matter is now before the undersigned upon the complaint, answers, pretrial proceedings, testimony and other evidence of record, proposed findings of fact, conclusions and briefs filed by complaint counsel and counsel for respondents. These submissions by the parties have been given careful consideration and, to the extent not adopted by this decision in the form proposed or in substance, are rejected as not supported by the record or as immaterial. Any motions not heretofore or herein specifically ruled upon, either directly or by the necessary effect of the conclusions in this decision, are hereby denied. The findings of fact made herein are based on a review of the entire record and upon consideration of the demeanor of the witnesses who gave testimony in this proceeding. The findings of fact include references to the principal supporting evidentiary items in the record.¹ Such references are intended to [5] serve as convenient guides to the testimony and exhibits supporting the findings of fact, but do not necessarily represent complete summaries of the evidence considered in arriving at such findings.

¹ References to the record are set forth in parentheses, and contain certain abbreviations, as follows:

CPF — Complaint Counsel's Proposed Findings of Fact, Conclusions, and Proposed Order.
 CM — Complaint Counsel's Memorandum.
 CRB — Complaint Counsel's Reply Brief.
 RPF — Respondents' Proposed Findings of Fact, Conclusions, and Proposed Order.
 RM — Respondents' Memorandum.
 RRB — Respondents' Reply Brief.
 Ad. — Response by Respondents to Complaint Counsel's Requests for Admissions, followed by the number of the request.

A witness' name followed by a number is the reference to the transcript page of the witness' testimony being cited.

FINDINGS OF FACT

I. IDENTITY OF RESPONDENTS

A. NCEN

1. National Commission on Egg Nutrition is a corporation organized and doing business under and by virtue of the laws of the State of Illinois, with its office and principal place of business located at 205 Touhy Ave., Park Ridge, Illinois. NCEN is a not-for-profit corporation (Answer, p. 1; CX 123A).

2. In July 1971, the American Poultry Hatchery Federation (APHF) appropriated \$30,000 and authorized the executive committee of APHF to appoint a five-man group to look into the egg-heart disease controversy (Smith, 1503, 1521-22). Mr. Blanton Smith, a director of APHF, was appointed to the five-man group (Smith, 1522), who called themselves the National Commission on Egg Nutrition (CX 150A).

3. NCEN commenced operations on August 9, 1971 (CX 150A), and was incorporated under the laws of the State of Illinois on December 7, 1971 (CX 136A). The objective of NCEN was stated to be: "* * * To establish the true nutritional values of eggs, particularly in the light of the adverse publicity concerning cholesterol" (CX 150A). In the Articles of Incorporation, the purposes [6] of the corporation were stated to be: "To promote and establish the true nutritional values of eggs to consumers and to undertake, encourage and support research relating to the nutritional values of eggs and present said findings to consumers; and to promote the general interests of the egg industry" (CX 136B). Eggs come within the classification of "food," as used in Section 12 of the Federal Trade Commission Act (Answer, p. 1).

4. NCEN's five (5) members are appointed, respectively, by the following organizations: (1) American Egg Board (AEB); (2) Northeastern Poultry Producers Counsel (NEPPCO); (3) Pacific Egg and Poultry Association (PEPA); (4) Southeastern Poultry and Egg Association (SEPA); and (5) United Egg Producers (UEP) (Answer, Para. 2; CX 101B, 123B, 142B, 143B, 144B, 152, 154D, 198B, 199A, 200A; Smith, 1608-1610). For example, in 1973 Blanton Smith, Chairman of NCEN, represented UEP; and members Edward D. Murphy represented NEPPCO, Harry Trembath represented PEEA, Maurice Pickler represented SEPA, and Ted Wasden represented AEB (CX 97, 152; see also Smith, 1612).

5. Each of the five (5) member organizations of NCEN are made up of individuals and firms engaged in businesses relating to the egg industry, including associations of egg producers and distributors as well as individual egg producers (CX 177B, Ad. 4; CX 1, 2, 3). Blanton

Smith, Chairman of NCEN from its inception to January 1974 (CX 177B-C, Ad. 5) and who is still an NCEN Commissioner, testified that AEB, NEPPCO, PEPA, SEPA, and UEP "are commercial operators and they are trade associations and co-ops which, obviously, are in existence to help those in commercial operations" (Smith, 1664). The NCEN Commissioners have been, and are, individuals involved in commercial enterprises of, or relating to, the egg industry (Smith, 1613-18; Pickler, 1716; Hecht, 1704-1706; Wentink, 1735-37; CX 158A-B; RX 85, p. 17; Finding 13, *infra*).

6. In January 1975, NCEN appointed Robert Fisher of *Hyline* magazine, an egg industry publication, to be the sixth Commissioner (Smith, 1619-1620; CX 158A-B).

b. *Richard Weiner, Inc.*

7. Richard Weiner, Inc. (hereinafter "Weiner"), is a corporation organized, existing and doing business [7] under and by virtue of the laws of the State of New York with its principal office and place of business located at 888 Seventh Ave., New York, New York. (Answer, p. 1).

8. Weiner is a public relations firm and advertising agency (Answer, p. 1; CX 130A), which has been in the employment of NCEN from on or about May 25, 1973 (CX 151B) through the present time (CX 177-0, Ad. 64).

9. Weiner specializes in health and education projects (CX 120B), and performs public relations and advertising services for several health-related clients (CX 177U, 120C). Weiner has one other client, besides NCEN, who advertises and disseminates statements with respect to eggs or cholesterol (CX 177U, Ad. 84). Weiner, from 1971 through 1973, had average annual billings of about \$300,000 of which approximately \$110,000 represented fees from print advertising for 1973 (CX 130A).

10. Richard Weiner, the president and chief executive officer of Weiner (CX 130A), has a master's degree in genetics and has published in science-related magazines (CX 120B). He has been a consultant to the National Institutes of Health and other agencies (CX 120C).

11. In the course and conduct of its business, Weiner has been, and now is, in substantial competition in commerce with other public relations and advertising agencies (Answer, p. 4).

II. NCEN'S RELATIONSHIP TO THE EGG INDUSTRY

A. *Membership and Commissioners*

12. The member organizations of NCEN comprise a national

geographic distribution of the egg industry (Smith, 1610; CX 150A). More specifically, UEP is a national trade association composed of five regional co-ops which are each composed of egg producers from all parts of the United States (Smith, 1611-12). NEPPCO is an egg industry regional trade association (Smith, 1612). PEPA is likewise an egg industry trade association and is located on the West Coast (Smith, 1612). [8] SEPA is a major regional egg industry trade association located in the Southeast (Smith, 1612; RX 85, p. 17). NCEN member AEB (formerly Poultry and Egg National Board — PENB — Smith, 1578) is a national egg industry organization whose membership includes one or more regional, State and local organizations of egg producers, firms and individuals in or associated with the egg industry (CX 177E, Ad. 20). AEB is actively engaged in producing advertisements promoting the sale and consumption of eggs (Smith, 1623; CX 177E-F, Ad. 21). The AEB advertisements do not concern the relationship of eggs to coronary heart disease (Smith, 1623).

13. The Commission members, themselves, are engaged in the egg industry. Blanton Smith, Chairman of NCEN from its organization until early 1974 (Smith, 1607), has been engaged in the hatchery business all his life, a producer of day-old baby chicks and ready-to-lay pullets (Smith, 1502-1503, 1614). Hendrik Wentink, who succeeded Mr. Smith as Chairman of NCEN in January 1974 (Wentink, 1743), since 1958 has been an employee of Pennfield Corporation, a firm engaged in egg production and marketing, broiler production and processing, and the manufacture and marketing of feed products (Wentink, 1735-36; CX 116). Pennfield made Mr. Wentink's services available to NCEN on the basis that "if it's good for the egg industry, it's good for * * * Pennfield" (CX 158B). A Mr. Harry Trembath, an original NCEN Commissioner appointed by PEPA, was an employee of a cooperative of egg producers (Smith, 1613, 1616; CX 150A) and was later replaced by a Mr. Bookey from the same organization (Smith, 1617; CX 117). Mr. Cleland, an early NCEN Commissioner (CX 150A), was with a hatchery company located in Lincoln, Nebraska (Smith, 1615-16). Mr. Murphy, likewise an early NCEN Commissioner (CX 150A), was with a company engaged in the egg packaging business (Smith, 1616). Mr. Norman Hecht, an NCEN Commissioner since January 1974 (Hecht, 1679), has been in the egg business for many years, operates a hatchery, and has investments in an egg-producing farm (Hecht, 1670, 1705). Mr. Maurice Pickler, an NCEN Commissioner since 1972, is engaged in the production and marketing of eggs (Pickler, 1716, 1718).

14. As representatives for the five (5) member organizations (CX 96 — see printed description of Commissioners at bottom of page), the Commissioners [9] reported matters concerning NCEN to their

respective organizations (CX 150C, 199, 200, 165B), and the member organizations' determinations and instructions were followed by their respective representatives (CX 199A, 200A). NCEN Commissioners have had particularly close ties with the AEB. Seven of the eleven people who have served as NCEN Commissioners were, or are now, on the Board of Directors and/or the Executive Committee of the American Egg Board (Smith, 1615, 1618-19; CX 161A). More specifically, Blanton Smith, Malcolm Cleland and Edward Murphy served on both the AEB's Board of Directors and its Executive Committee (Smith, 1615, 1618-19; CX 161A), and Mr. Trembath and Mr. Pickler, Mr. Wasden and Mr. Bookey served on AEB's Board of Directors (Smith, 1619). Present NCEN Commissioner, Mr. Hecht, is a member of AEB (Hecht, 1710) and he and NCEN's present Chairman, Hendrik Wentink, as well as NCEN staff persons, L. A. Wilhelm and Florence Coates, attended AEB meetings (CX 160A, 161A, 165A). From 1973 to the present, NCEN's Chairman has made regular or frequent reports of NCEN's activities to the Board of Directors of AEB (CX 177G, Ad. 29; CX 158D).

B. NCEN Is Funded by the Egg Industry

15. Substantially all of NCEN's funding from 1971 to February 5, 1975 has been derived from organizations which have the objective of promoting increased sales of eggs and/or which are made up of individuals or firms engaged in businesses relating to the egg industry (CX 177D-E, Ad. 15). The great preponderance of NCEN's funding has come from AEB. Over half of NCEN's funds from August 24, 1971 through January 25, 1974, and substantially all of NCEN's 1974 and 1975 budgets were, and are being, provided by AEB (Wentink, 1789; CX 131A, 177E, Ad. 16; 198B). NCEN made itemized budget requests for a year's operating funds from AEB (CX 159A-B-C, 165B, 200B; Wentink, 1790). AEB, upon presentation by NCEN (CX 159A), reviewed such requests in detail and approved them as AEB deemed appropriate (CX 165, 156C, 159A-C). Apparently some of the AEB funds came through egg carton checkoffs (CX 97).

16. Since its inception, AEB has provided office space and assistance for NCEN (CX 177E, Ad. 18). AEB has provided all of NCEN's staff. From the inception of [10] NCEN until his death on November 15, 1974, approximately one-third of L. A. Wilhelm's working hours were spent on activities undertaken as Secretary-Treasurer of NCEN; the remainder of his working hours were spent on activities relating to his position as President or Vice-President of AEB (CX 177D, Ad. 13). His total salary was paid by AEB during this period (CX 177D, Ad. 14). From the inception of NCEN, Florence Coates, L. A. Wilhelm's secretary, spent

approximately one-third of her time on activities concerning NCEN and the remainder of her working hours were spent on AEB activities. During this period, her total salary was paid by AEB. AEB also paid for the travel and related expenses of L. A. Wilhelm and Florence Coates (Wentink, 1786; CX 124). An accurate accounting, for 1974, of AEB expenses for telephone and mail expenses devoted to NCEN's work and one-third of the total labor cost and related expenses of L. A. Wilhelm and Florence Coates is estimated to be in excess of \$20,000 (CX 124B).

17. AEB, on occasion, appropriated monies for specific NCEN activities. At such times in the past when NCEN was in need of funds in order to carry on its activities, it presented its proposed programs to the AEB Board of Directors and/or AEB's Executive Committee for their approval (Wentink, 1790-91; CX 152, 163A, 199B, 154B, 164). Pursuant to such presentations, monetary contributions by AEB were made (CX 151A, 152, 160B, 163, 198B). For example, AEB provided NCEN \$50,000 as supplemental funds for proposed advertisements which appeared in *The Wall Street Journal* and *The New York Times* (CX 151A, 152B, 96, 97, 160B). These advertisements are identified as CX 1-3 (CX 177G, Ad. 30). AEB also provided funds to NCEN for the specific purpose of placing CX 6, an advertisement entitled "The Sexy Egg," in the *Chicago Tribune* (CX 177F, Ad. 25; CX 155A-B; CX 6). AEB approved and provided funds to NCEN for reprinting 50,000 copies of the NCEN Booklet, "Eggs Your Diet and Your Health," identified as CX 7 (CX 163A-B; CX 177F, Ad. 25). Also, the initial printing and subsequent reprinting of NCEN's egg carton insert, identified as CX 9, were paid for by AEB (CX 177F, Ad. 27). AEB also provided funds to assist NCEN in the present litigation. AEB paid for the Gallup Survey prepared for NCEN by Dr. Irving Crespi, which was prepared in direct anticipation of this litigation (Wentink, 1790-91; Crespi, 2176-77; RX 170). [11]

C. Testimony by NCEN Commissioners

18. NCEN Commissioners who testified in this proceeding (Blanton Smith, Hendrik Wentink, Norman Hecht and Maurice Pickler) stated that they served on NCEN without pay and at a personal loss since they pay their own expenses. It appears, however, that expenses of NCEN Commissioners are borne by their respective commercial companies (Smith, 1582, 1609; Pickler, 1720-1721; Hecht, 1697-98; Wentink, 1772; CX 150A). Further, CX 174C indicates NCEN paid some travel expenses for Blanton Smith.

These officials also testified that NCEN Commissioners do not serve as representatives of any commercial groups, do not report to them, and are not advised or influenced by any commercial group (Smith,

1582-83, 1608-1609; Wentink, 1759, 1767-69, 1790-91; Hecht, 1708-1711). However, both Mr. Wentink and Mr. Hecht admitted that on at least one occasion, when an important matter was at issue, each sought advice from their respective industry organizations (Wentink, 1760; Hecht, 1708; CX 199, 200). Said officials further testified that they joined NCEN to find and disseminate the truth on the cholesterol question and in response to humanitarian, social and religious feelings (Hecht, 1686-87, 1698; Pickler, 1719-1720; Wentink, 1738-1740, 1773-74; Smith, 1530, 1665-66), their only acknowledged reasons for serving on NCEN.

This testimony must be viewed in light of each individual's long association with, and deep financial commitment to, commercial egg operations. Further, this testimony must be contrasted with other evidence of record, such as NCEN's detailed reporting to AEB on budget matters and AEB's funding of NCEN, Mr. Hecht's and Mr. Wentink's admissions in their testimony that they did consult their respective organizations, and evidence indicating NCEN is advocating the egg industry view (CX 117, 142). This objective evidence directly contradicts the testimony by these officials.

D. NCEN *Is in Substantial*

Competition in Commerce

19. In the course and conduct of its business, NCEN has been, and now is, in substantial competition in commerce with corporations, firms and individuals representing or engaged in the food industry. NCEN is [12] composed of member organizations who in turn are made up of individuals and firms engaged in businesses relating to the egg industry, including associations of egg producers and distributors as well as individual egg producers (Findings 5, 12, *supra*). NCEN Commissioners are individuals who are, and have been for many years, engaged in commercial egg operations (Findings 13, 18, *supra*). Eggs are sold in competition with other foods, including cholesterol-free egg substitutes and other breakfast foods (CX 1770, Ad. 70; CX 114, 144B, 153A, 156B, 157B).

III. RESPONDENTS' ADVERTISING AND PROMOTIONAL ACTIVITIES

A. *Purpose of NCEN's Activities*

20. Anti-cholesterol attacks on eggs have resulted in severe economic loss to the egg industry through a reduction in egg consumption (CX 101A, 102B; Schrader, 2227). The egg industry

created NCEN in response to this economic stress (CX 101, 102A, 150B, 154C) to combat the anti-cholesterol, anti-egg publicity (CX 198A, 114, 101B, 117B; Smith, 1503, 1521-22, 1636).

21. To combat and strike back at the adverse publicity concerning eggs, NCEN developed an advertising and public relations campaign to present the view of the egg industry (CX 142A, 114, 115, 117, 120A; Smith, 1636; RX 85Z-19). NCEN was primarily concerned with reaching the consuming public with its pro-egg statements (CX 98, 115, 147, 152B), and the advertisements provided potent incentives for the public to buy eggs (Smith, 1635-36). Most of NCEN's advertisements and promotional materials carried clear messages that eggs are an excellent food product; are highly nutritious; are completely safe even when eaten in quantity; are needed by the body for normal functioning; and that it may even be hazardous to avoid eggs (CX 2, 4, 5, 6, 7B-C, 8B-C). CX 2 and 5 state, for example:

It is a fact that eggs are the best source of protein in human nutrition. Further, eggs have fewer calories per gram of protein than any other natural food. Pound for pound, compared with ALL other foods, eggs contain the most concentrated nourishment and are one [13] of the best value buys in your supermarket. Eggs are an important source of vitamins A, B, D, and E and are a preferred source of iron.

Generic advertising is quite common, and such advertisers expect to recoup advertising expenditures through a favorable impact on product demand (Schrader, 2279-2280).

B. Newspaper Advertisements

22. NCEN and Weiner developed a number of advertisements concerning the relationship of eggs to coronary heart disease (CHD) identified as CX 1-6, 171-173, and 175-176 (Tr. 42-43). CX 1-3 were disseminated as follows: *The Wall Street Journal*, November 19, November 26, December 3, 1973; and *The New York Times*, November 18, November 25, December 2, 1973 (CX 177G, Ad. 30).

23. CX 6 was disseminated in the *Chicago Tribune* on March 25, 1974 (CX 177G, Ad. 31); CX 171 in the *Chicago Daily News* on January 9, 1975; CX 172 in the *Chicago Sun-Times* on January 9, 1975; CX 173 in the *Washington Post* on January 7, 1975; CX 175 in the *Chicago Daily News* on April 8, 1975, and in the *Chicago Sun-Times* on April 9, 1975 (Tr. 43); and CX 176 in the *Chicago Daily News* on April 14, 1975, and in the *Chicago Sun-Times* on April 15, 1975 (Tr. 43).

24. CX 1-6 were disseminated in the following newspapers on the following dates:

- (a) Richmond (Va.) *Times Dispatch*, April 21, 24, 26, 1974
- (b) Norfolk (Va.) *Virginia Pilot*, April 21, 26, 1974

- (c) Norfolk (Va.) *Ledger Star*, April 24, 1974
- (d) Roanoke (Va.) *Times*, April 21, 28, May 5, 1974
- (e) Harrisburg (Va.) *News Record*, April 22, 25, 26, 1974
- (f) Winchester (Va.) *Star*, April 22, 24, 26, 1974
- (g) Charlottesville (Va.) *Progress*, April 21, 28, May 5, 1974
- (h) Newport News (Va.) *Newport News*, April 21, 28, May 5, 1974
- (i) *Globe Newspaper* (Nine weeklies in Northern Virginia — Alexandria, Annandale, Arlington, Fairfax, Falls Church, Herndon, McLean, Springfield, Vienna — June 6, 13, 30, 1974
- (j) Bluefield (W. Va.) *Telegraph*, April 28, May 5, 12, 1974
- (k) Alexandria (La.) *Talk*, June 6, 20, 27, 1974
- (l) Lafayette (La.) *Advertiser*, June 5, 16, 30, 1974
- (m) Monroe (La.) *World*, June 6, 16, 30, 1974 [14]
- (n) New Orleans (La.) *Picayune*, June 6, 16, 30, 1974
- (o) Shreveport (La.) *Times*, June 6, 20, 27, 1974
- (p) Baton Rouge (La.) *Advocate*, May 29, June 12, 26, 1974
- (q) Baton Rouge (La.) *Times*, May 30, June 16, 30, 1974
- (r) Lake Charles (La.) *Press*, June 5, 16, 30, 1974
- (s) Nashville *Banner*, December 13, 18, 1973; January 8, 1974
- (t) Nashville *Tennessean*, December 14, 19, 1973; January 9, 1974 (CX 177, Ad. 37, 38, 83; CX 126.)

The aforesaid newspapers were disseminated in interstate commerce and through the United States mail (CX 177J, Ad. 39).

25. The advertisements listed above appeared over NCEN's name and were apparently paid for by egg industry groups (CX 126A, 130B, 165B, 118B; CX 177T, Ad. 83; CX 177I, Ad. 37). NCEN and Weiner encouraged the dissemination of CX 1-6 in the newspapers listed above by providing advertisement preprints to, and granting prior approval and authorization to, local and regional egg industry organizations wishing to reproduce NCEN advertisements locally, and providing specific instructions concerning methods for, and costs of, locally disseminating NCEN ads (CX 94, 96, 97, 98, 153; 177H, Ad. 34, 35). Encouragement of local placement of NCEN advertisements was done for the purpose of stimulating coverage without using NCEN's funds (CX 95).

C. Other Forms of Promotion

26. NCEN and Weiner developed two booklets, identified as CX 7 and 8, which were disseminated through the United States mail (CX 177J-K, Ad. 40, 42-re). The booklets, entitled "Eggs Your Diet And Your Health," were offered to the public via a coupon appearing at the

bottom of CX 1-6. NCEN mailed out copies of CX 7 and 8 upon request, some of the copies to members of the public; NCEN also provided copies to egg industry firms, organizations and individuals for distribution by the latter persons to the public (Smith, 1627; CX 177K, Ad. 42, 43, 45; CX 96-98). In addition, CX 7 or 8 were offered to the public in the April 1974 *Changing Times* magazine (CX 106). Approximately 135,000 copies of CX 7 were disseminated between December 1973 and March 1974, and approximately 30,000 copies of CX 8, apparently a revised edition of CX 7, were disseminated [15] between May-June, 1974 to September 1974 (CX 177K, Ad. 42-43).

27. NCEN utilized an egg carton insert CX 9, prepared by L. A. Wilhelm, who was the Secretary-Treasurer of NCEN (CX 177C, Ad. 7, 47). The costs of printing and mailing CX 9 were paid for by NCEN (CX 177G, Ad. 28). Copies of CX 9 were sent by NCEN to egg packers upon their request (CX 177L, Ad. 50) for dissemination to the public by insertion in egg cartons (Smith, 1624-25). Approximately 2,000,000 copies of CX 9 were disseminated between February and June, 1974, except for approximately 200,000 which were destroyed (Smith, 1624-25; CX 123D).

28. NCEN and Weiner also developed CX 10, a portable exhibit, 4 X 8 feet in size, designed to be displayed on a tabletop (CX 103), which depicts reproductions of CX 4-6 and contains a pocket in which copies of the booklet, CX 8, can be placed. CX 10 has been disseminated by NCEN in interstate commerce (CX 177M, Ad. 53-54; CX 177Z-1, Ad. 53). CX 10, of which there are five (5) copies valued at \$900 apiece (Tr. 66-67; CX 103), has been loaned by NCEN to poultry and egg industry groups for use by those organizations (Wentink, 1792; CX 103, 105, 158C). CX 10 was first made available in May 1974 (CX 103), and the exhibit was widely circulated (CX 158C).

29. NCEN hired Dr. Kurt Oster in 1974 as a medical consultant to be an industry spokesman on behalf of NCEN (CX 107, 110, 116A). Dr. Oster, who testified in this proceeding (Oster, 1807-1922), is a practicing cardiologist, and is an experienced pharmacologist (Oster, 1807-1815). As industry spokesman, he was expected to "be able to defend the egg industries point of view when attacked by professionals with the opposite point of view" (CX 117A). Dr. Oster's program was designed "* * * to hit the consumer first and hopefully that part of the scientific community which watches TV and listens to radio programs" (CX 115). As a result, NCEN expected to receive considerable publicity which would have advantageous effects on the egg industry (CX 115). Dr. Oster's activities included a ten-city tour with appearances on local television and radio programs and interviews with local newspapers. The cities visited on the tour included Chicago, Boston, Philadelphia,

Dallas, Los Angeles and San Francisco (CX 111, 113, 114, 115). The two California [16] cities were chosen because the egg substitute, "Second Nature," was being promoted in that State (CX 114).

30. NCEN's promotional campaign, including the newspaper advertisements, booklets, egg carton inserts, portable exhibits and Dr. Oster's activities, involved substantial amounts of money. NCEN's expenditures include approximately \$83,000 for disseminating CX 1-3 in *The Wall Street Journal*, *The New York Times*, *Nashville Banner* and *Tennessean* (CX 130B); approximately \$7,000 for placing CX 6 in the *Chicago Tribune* (CX 132); approximately \$14,000 for printing, reprinting and mailing one of the booklets, CX 7 or CX 8, for the period January 1, 1974 to August 22, 1974 (CX 132); approximately \$5,000 for the exhibit, CX 10, for the first eight months of 1974 (CX 132); approximately \$1,600 for the egg carton insert, CX 9, for the first eight months of 1974 (CX 132). In addition, NCEN budgeted \$25,000 for the costs attributable to Dr. Oster's activities (CX 116A). The total of the expenditures listed is \$135,600. This understates to some extent the total costs of the promotional campaign for it does not include costs of disseminating CX 1-6 (in the newspapers listed in Finding 24, *supra*), CX 171-173 or CX 175-176. In addition, it covers expenditures relating to CX 7-10 for the period January 1, 1974 to August 22, 1974 only.

IV. REPRESENTATIONS MADE BY RESPONDENTS

31. The complaint alleges in Paragraph Five that respondents, directly or by implication, have made the following representations (subletters as appear in Paragraph Five of the complaint):

- a. There is absolutely no competent and reliable scientific evidence that eating eggs, even in quantity, increases the risk of heart attacks or heart disease;
- b. There is overwhelming competent and reliable scientific evidence that eating eggs does not increase the risk of heart attacks;
- c. There is competent and reliable scientific evidence that dietary cholesterol, including that in eggs, decreases the risk of heart disease; [17]
- d. There is competent and reliable scientific evidence that avoiding dietary cholesterol, including that in eggs, increases the risk of heart disease;
- e. Eating eggs does not increase the blood cholesterol level in a normal person;
- f. A person's blood cholesterol level is prevented from being raised or lowered by dietary cholesterol intake because

- 1) The human body increases its manufacture of cholesterol in an amount equal to a decrease in dietary cholesterol intake and
- 2) The human body eliminates the same amount of cholesterol as that eaten; and
- g. Dietary cholesterol, including that in eggs, is needed by the body for building sex hormones, for transmitting nerve impulses and for maintaining life in cells.

The above representations are alleged to be false, misleading or deceptive (Complaint, Par. Six).

Paragraph Seven of the complaint alleges that respondents, directly or by implication, have made the following representations:

- a. Eating eggs does not increase the risk of heart attacks and heart disease;
- b. Dietary cholesterol, including that in eggs, decreases the risk of heart attacks and heart disease; and
- c. Avoiding dietary cholesterol, including that in eggs, increases the risk of heart disease.

It is alleged that, at the time the above representations were made, there existed no reasonable bases for the said representations, and said representations therefore constitute unfair or deceptive practices (Complaint, Par. Eight).

[18] Complaint counsel rely on the administrative law judge's expertise, and the Commission's expertise, to interpret the representations in respondents' advertisements.

32. NCEN and Weiner have admitted that they have represented that "there is absolutely no scientific evidence that eating eggs, even in quantity, increases the risk of heart attacks or heart disease" (Answer, p. 2). The complaint in challenging this representation includes the adjectives "competent" and "reliable" to qualify "scientific evidence." These additional qualifying words make no essential difference in respondents' representation. The net impression conveyed by the term "no scientific evidence" is unequivocal; it means no scientific evidence whatsoever and includes within its literal meaning the lesser representation that there is no competent and reliable scientific evidence. Scientific evidence is generally understood to mean competent and reliable evidence.²

[19] 33. More specifically, CX 1-9, 171-173 and 175-176 convey this

² "Scientific" means, *inter alia*: "(4) agreeing with or conducted or prepared strictly according to the principles and practice of or for the furtherance of exact science: skilled in the methods of exact science: characteristic or typical of a true scientist, esp., in perfect disinterestedness; (5) conducted or systematized after the manner of science or according to results of investigation by science: practicing thoroughness of systematic methods approximating those of scientists or devised by scientists: applying expert knowledge or technical skill (as in sports,

(Continued)

alleged representation, even though the advertisements do not expressly make the representation in the exact language alleged. The advertisements state both "there is absolutely no scientific evidence that eating eggs in any way increases the risk of heart attack" and "there is absolutely no scientific evidence that eating eggs in any way increases the risk of heart disease." The latter representation is in bold type. The representation is absolute in nature, with no qualifying language concerning numbers of eggs eaten. The failure to qualify the number of eggs conveys the impression that the statements apply to any reasonable number of eggs which might be consumed by a normal person. Thus, these direct statements are indistinguishable in meaning from the representation alleged in Paragraph Five a. of the complaint, even though they do not contain the words "even in quantity," as alleged in the complaint.

Furthermore, the reference to scientific evidence carries an implicit representation that such evidence is competent and reliable. The nature of the subject matter discussed in the advertisements, as well as the presence of references to scientific evidence, would lead a consumer to believe that the evidence referred to is of a competent and reliable nature (see Finding 32, *supra*).

34. CX 2 virtually states the claim as set forth in Paragraph Five a. of the complaint. The advertisement states, in bold-faced print, that "there is absolutely no scientific evidence that eating eggs, even in quantity, will increase the risk of a heart attack." CX 3 states that "there is absolutely no scientific evidence whatsoever that eating eggs in any way increases the risk of heart attack." Again, there is no qualifying language as to quantity of eggs eaten, and the implicit representation of the evidence being competent and reliable is made. The use of the word "whatsoever" has been added, which reinforces and makes more positive the representation that no evidence exists.

35. The first booklet, CX 7, states both "there is no scientific evidence whatsoever indicating that eating eggs will increase the risk of heart attack" and "there is absolutely no scientific evidence whatsoever that eating eggs in any way increases the risk of heart attack." The latter statement is set out on the back [20] page of the booklet for added reader visibility. As with CX 1-3, the statements are indistinguishable in substance from those alleged in Paragraph Five a. of the complaint.

warfare, management)."

"Scientific method" means, *inter alia*: "The principles and procedures used in the systematic pursuit of intersubjectively accessible knowledge and involving as necessary conditions the recognition and formulation of a problem, the collection of data through observation and if possible experiment, the formulation of hypotheses, and the testing and confirmation of the hypotheses formulated." *Webster's Third New International Dictionary* (1963).

36. CX 171-173, which are identical in wording but published in different newspapers, state in a banner headline that "a British study has found no evidence that eating eggs is related to a risk of heart attack." Further, in the body of CX 171-173, it is stated that the British study "* * * found no evidence which relates the numbers of eggs consumed to a risk of [CHD]." These statements are identical in substance to those alleged in Paragraph Five a. The fact that the claims are couched as the findings of a British study does not change the nature of the representations conveyed to consumers — the message is still that no evidence exists. The reference to "an official British Government report" can only heighten the reliability of the representation that no evidence exists.

CX 175 also cites the same British report and states that a "panel of renowned British doctors and scientists" said that they had "found no evidence which relates the number of eggs consumed to a risk of coronary heart disease." Further, the newspaper advertisement states in bolder type that "there is no scientific evidence that eating eggs increases the risk of a heart attack." As with CX 1-3, 7, and 171-173, the statements are identical in substance to the representation alleged in Paragraph Five a. of the complaint.

37. CX 4-6, 8, and 176 set forth essentially the representation alleged in Paragraph Five a. of the complaint, although they substitute the word "proof" for "evidence." This substitution does not alter the basic representation made, since any distinction between "proof" and "evidence" would not be generally recognized by the public in the context of respondents' advertisements. CX 4-6 and 8 stress the nutritional goodness of eggs by stating that eating eggs may be beneficial but that avoiding eggs may be hazardous in terms of courting heart disease. CX 176, which uses the term "no scientific proof," also represents that there is no evidence. "Proof" is used twice and "evidence" is mentioned three times — all in terms of describing the basic message that there is no evidence of a link between eggs and CHD. Consumers, [21] therefore, when viewing the entirety of these advertisements, will consider "proof" and "evidence" as interchangeable equivalents.

38. CX 9, an egg carton insert entitled "Why You Need Cholesterol Everyday," states "there is no proof that eating cholesterol-rich eggs, butter and meat will cause heart attacks." This statement is surrounded by representations which stress the need for cholesterol and indicate that avoiding cholesterol may be dangerous to your health. Thus, the total advertisement leaves the impression that eggs may be essential to one's physical well-being, and that there is no evidence supporting a

positive relationship between eggs and the risk of heart attacks, as alleged in Paragraph Five a. of the complaint.

39. CX 1, 2, and 7-8 represent that there is overwhelming competent and reliable scientific evidence that eating eggs does not increase the risk of heart attacks, the allegation in Paragraph Five b. of the complaint. Although the advertisements do not expressly state the aforementioned representation, certain words and phrases used in the context of the advertisement create the *net impression* alleged in Paragraph Five b. More specifically, CX 1 states "there is absolutely no scientific evidence that eating eggs in any way increases the risk of heart attack. [CX 2 makes a similar statement with "proof" substituted for "evidence."] Yet the cholesterol bugaboo persists. The mystery is why. Why, in the face of overwhelming evidence to the contrary, do some people fear eggs, cholesterol, heart attacks?" The clear meaning of this portion of CX 1 is that there is overwhelming scientific evidence that eating eggs does not increase the risk of heart attack, since the word "contrary" means opposite or opposition. CX 2 states there is no scientific proof that eating eggs increases the risk of heart attack and follows this with the statement that "there is, in fact, preliminary evidence that the opposite is true * * *," which creates the net impression that there is evidence that eating eggs will prevent the risk of a heart attack. CX 5 makes the same representation as CX 2.

40. CX 7 states:

There is no scientific evidence whatsoever indicating that eating eggs [22] will increase the risk of heart attack. There is considerable evidence that the opposite is true.

* * * we can only assume that these statements [connecting diet to CHD] are still made, in the face of overwhelming evidence to the contrary, to keep research funds coming from commercial interests (CX 7C).

CX 7 thus communicates the representation that there is considerable scientific evidence that eating eggs does not increase the risk of heart attacks, and especially so since right after the statements quoted above, it proceeds to cite and describe studies which purport to be evidence that eggs and dietary cholesterol do not increase the risk of CHD.

41. The revised booklet, CX 8, also represents that there is substantial competent and reliable evidence that eating eggs does not increase the risk of heart attacks. While CX 8 does not make the claim in express terms as did the earlier booklet, CX 7, the net impression of the advertisement clearly conveys the alleged representation. First, CX 8 states that "there is no scientific proof * * *" (CX 8B), and "it has not been scientifically established that there is a relationship between blood cholesterol level and the possibility of having a heart attack" (CX 8C). The booklet then proceeds to list and describe purported scientific

evidence which shows no relationship. The clear import of the booklet taken as a whole is that there is substantial evidence that eggs and dietary cholesterol do not increase the risk of CHD, the representation challenged in Paragraph 5 b. of the complaint.

42. The newspaper advertisements CX 2 and 5, and both booklets CX 7 and 8 represent that there is competent and reliable scientific evidence that dietary cholesterol, including that in eggs, decreases the risk of heart disease, the allegation challenged in Paragraph 5 c. of the complaint. More specifically, CX 2 and 5 represent that there is no scientific evidence that eating eggs will increase the risk of heart attacks (Finding 33, *supra*). The advertisements then respectively represent that the [23] opposite is true — that anyone who avoids dietary cholesterol and eggs may be courting heart disease. Immediately following these representations, CX 2 and 5 describe a study by Dr. Sam S. Berman, which purportedly found that persons who eat eggs will avoid suffering a heart attack. These representations, coupled with the advertisements' discussion of the good nutritional value of eggs, create the net impression that there is competent and reliable scientific evidence that dietary cholesterol, including that in eggs, decreases the risk of heart disease.

43. Similar to CX 2 and 5, CX 7 and 8 represent that there is no scientific evidence that eating eggs will increase the risk of heart attack (Finding 33, *supra*), but that there is evidence that eggs decrease the risk. CX 7 states so expressly (CX 7C) and then proceeds to describe several studies which purportedly show that egg eaters have a lower risk of heart attack, fewer deaths from heart attacks and strokes and lower serum levels than non-egg, or greatly limited egg, eaters (CX 7E-G). CX 8 does not expressly state that there is evidence of decreasing risk of CHD through eating eggs, but does discuss the studies purportedly showing such a conclusion (CX 8D-G). Thus, in both CX 7 and 8, the clear message conveyed to consumers is that there is scientific evidence that dietary cholesterol, including that in eggs, will decrease the risk of heart disease.

44. CX 2, 5, 7-9 all represent that there is competent and reliable scientific evidence that avoiding dietary cholesterol, including that in eggs, increases the risk of heart disease, the representation challenged in Paragraph Five d. of the complaint. Although the advertisements do not explicitly state the aforementioned representation, certain words and phrases create that impression. More specifically, CX 2, 5, 7D, 8D, and 9 all state that, "Anyone who deliberately avoids cholesterol in his diet may be inadvertently courting heart disease," in the context of the opinion of Dr. Roger Williams. In all the advertisements, the above quote is proffered amid a discussion of scientific evidence and, in fact, it

is put forth as a statement of scientific evidence. Further, in CX 7, 8 and 9, effort is made to establish the scientific reliability of the above quote by describing Dr. Williams' scientific achievements (CX 7D and 8D), and by referring [24] to him as an "eminent authority" (CX 9). The representation is especially strong in CX 9 because of its repeated statements concerning the dangers involved in avoiding dietary cholesterol. Dr. Williams' statement speaks of cholesterol in the diet and not eggs. The public, however, will interpret the statement as referring to eggs, since the thrust of all the entire documents concerns eggs and the cholesterol contained therein.

45. Respondents NCEN and Weiner have represented that eating eggs does not increase the blood cholesterol level in a normal person, the representation challenged in Paragraph Five e. of the complaint. CX 1 expressly conveys this representation and CX 7E and 8E do so impliedly. More specifically, CX 1 states, "* * * eating eggs does not increase the blood cholesterol in a normal person." CX 7C and 8C both state that the consumption of several eggs will only have a temporary effect on serum cholesterol levels which after a few hours will return to their original levels if a person's metabolism is functioning normally. This is in substance the representation alleged in Paragraph Five e. of the complaint.

46. CX 1, 3, 4, and 6-8 make the representation challenged in Paragraph Five f. of the complaint that a person's blood cholesterol level is prevented from being raised or lowered by dietary cholesterol intake because (1) the human body increases its manufacture of cholesterol in an amount equal to a decrease in dietary cholesterol intake; and (2) the human body eliminates the same amount of cholesterol as that eaten. Although the advertisements do not explicitly state the representation, certain words and phrases create the net impression that a person's cholesterol level is unaffected by dietary cholesterol intake.

More specifically, CX 1 states, "* * * eating eggs does not increase the blood cholesterol in a normal person" and "the less cholesterol you eat, the more your body would manufacture * * * ." CX 4 does not make the first statement, but does aver that "the less cholesterol one eats, the more one's body manufactures * * * ." The statements in CX 1 and 4 represent that eating eggs, a cholesterol-rich food, will not raise blood cholesterol levels and that the body's internal production of cholesterol is regulated to complement or offset the level of dietary intake. The clear message is that a person's cholesterol [25] level is constant and that the human body's mechanisms maintain this constant level, so that a person need not avoid dietary cholesterol, including that in eggs.

CX 3, 6, 7E and 8E represent that the less cholesterol a person eats, the more the body produces and that the normal person will eliminate just about the same amount of cholesterol as that eaten. The clear implication of these statements is that a person's blood level is prevented from being raised or lowered by dietary cholesterol intake through bodily maintenance of a constant serum cholesterol level. The fact that the advertisement states that the body will eliminate "just about" the same amount of cholesterol as that eaten does not alter the basic representation, in the context of the whole advertisement, which is that cholesterol is necessary and the body naturally maintains a certain serum cholesterol level, despite dietary cholesterol intake, for its maintenance.

47. CX 1, 3, 4, and 6-9 represent that dietary cholesterol, including that in eggs, is needed by the body for building sex hormones, for transmitting nerve impulses and for maintaining life in cells, the representations challenged in Paragraph Five g. of the complaint. Although these advertisements do not explicitly state the aforementioned representation, the net impression created is that dietary cholesterol is needed for normal body functions. More specifically, CX 3, 6, 7C and 8C state that (1) cholesterol is needed for the nerves to transmit their impulses throughout the body; (2) cholesterol is the building block of sex hormones; and (3) cholesterol is essential for life for every cell in the body. From the context of these advertisements, the impression created is that the reference to cholesterol is dietary cholesterol. In CX 3 and 6, the above representations are part of an enumeration of the necessities a person would give up if he cut down his egg consumption. In CX 7D and 8D, the above representations follow a subtitle of "Eggs and Cholesterol" and immediately follow an introductory statement that "cholesterol is a physiologically important substance in animal tissues. All foods of animal origin contain cholesterol." The impression created is that dietary cholesterol, including that in eggs, is needed by the body for building sex hormones, for transmitting nerve impulses, and is essential for life.

[26] Additionally, CX 1, 4 and 9 expressly state that every cell in the body requires cholesterol for life, and CX 1 and 4 further state that cholesterol is the building block of sex hormones. Since the subject matter of the advertisements is eggs and their benefits, the representation communicated is the bodily need for dietary cholesterol, such as in eggs.

48. Respondents have represented that there is competent and reliable scientific evidence (a) that eating eggs does not increase the risk of heart attacks and heart disease; (b) that dietary cholesterol, including that in eggs, decreases the risk of heart attacks and heart

disease; and (c) that avoiding dietary cholesterol, including that in eggs, increases the risk of heart disease (Findings 39 thru 44, *supra*). In all respondents' advertisements and promotional materials, the representations include references to facts and evidence; in most instances, reference is made to named experts and to medical articles. Thus, respondents have represented that they had a reasonable basis for making the asserted representations and the public will so perceive the representations.

49. The name "National Commission on Egg Nutrition" has the tendency and the capacity to mislead the public into believing that the corporation is an impartial, independent, quasi-governmental health commission which is knowledgeable in the benefits and effects of dietary cholesterol and eggs. In truth, the corporation is an association of persons engaged in the egg industry (Finding 5, *supra*). As such, the name has the tendency and capacity to enhance the representations made in NCEN's advertisements and promotional materials and to mislead and deceive the public.

The above representation is conveyed primarily by the words "National" and "Commission," and the failure to adequately disclose the nature of the corporation. CX 4 and 6 state that "we [NCEN] follow these matters very closely because, just like medical and nutritional authorities, we are vitally concerned with health and good, natural nutrition," and CX 5 states that "we've followed studies like this very closely because we're vitally concerned with health and good, natural nutrition." [27] Both of these statements have the capacity to mislead the public into believing that NCEN is an independent health organization. In addition, CX 176 states that the advertisement is "published in the public interest * * *," which conveys an impression of impartiality and independence.

CX 1-3 make a disclosure in the body of the text that NCEN is composed of egg producers. CX 1 and 3 also make such a disclosure in small print at the end of the text. These disclosures are not in immediate juxtaposition with the NCEN name, and, in context of the entire advertisements, are not adequate disclosures of the nature of NCEN. CX 4-10, 171-173 or 175-176 make no disclosure as to the composition of NCEN.

50. NCEN was aware of the aura which its name could convey. The NCEN name was chosen to replace "Egg Industry Cholesterol Commission" (Smith, 1668-69) for public relations purposes (CX 150A). Since NCEN has utilized a name which appears to describe an independent, impartial health commission, and has not made adequate disclosure of its relationship with the egg industry, readers are unable

to realistically evaluate the representations contained in the NCEN advertisements.

V. RESPONDENTS' REPRESENTATIONS ARE FALSE, MISLEADING
AND DECEPTIVE

A. *Coronary Heart Disease*

51. Coronary heart disease (CHD) is generally defined among the medical community as an affliction of the heart muscle and its function due to inadequate blood supply to the heart (Blackburn, 151; Stamler, 690; Yudkin, 1367-68). The term "ischaemic heart disease" (IHD) is used interchangeably with CHD. "Ischaemia" means a lack of blood supply (Blackburn, 152; Cooper, 1254; RX 112, p. 24). The inadequacy of the blood supply to the heart is due to partial or complete obstruction of the coronary arteries caused by a gradual narrowing and occlusion of the coronary arteries by the continued buildup of fatty materials on the inside of the arterial wall, impairing the blood flow to the heart (Blackburn, 151-153; Connor, 558, 560; Yudkin, 1368; RX 112, p. 24). [28] In the process of this buildup, a hard plaque (sometimes referred to as a lesion) is formed on the inner wall of the artery. This plaque usually consists of a core of lipid (fatty) materials called the atheroma, which is covered by a raised cap of scar tissue. The main lipid ingredient of the atheroma is cholesterol — a fat-like, waxy alcohol, although other deposits are present (Connor, 470, 558-560; Cooper, 1266-67; Blackburn, 151, 172). There may also be a blood clot formed from the roughened artery wall, and this clot (or thrombus) can play a role in impairing the flow of blood to the heart (Connor, 559-560; Yudkin, 1369-1370; Cooper, 1266-67).

52. The process of a gradual buildup of a plaque on the arterial wall is medically known as atherosclerosis (Blackburn, 153; Connor, 560; Yudkin, 1368; CX 17, p. 36). The name "atherosclerosis" derives from the Greek words describing the result on the affected artery: *atheroma* means the mushy, gruel-like substance on the inner arterial wall and *sclerosis* refers to the hard scar tissue cap (Stamler, 716; Connor, 560; Yudkin, 1368; CX 17, pp. 36, 40).

"Arteriosclerosis" is the generic term for hardening of the arteries; atherosclerosis is the type relating to a form of hardening in the inner walls of the artery by the presence of atherosclerotic plaque (Blackburn, 153; CX 17, p. 36; Stamler, 715; Cooper, 1205).

Atherosclerosis can be found in arteries anywhere in the body. Severe or advanced atherosclerosis of the coronary arteries can result in CHD (Blackburn, 153; Stamler, 687, 715). When severe atherosclerosis appears in the brain, it can lead to cerebrovascular disease and stroke.

In the lower limbs, atherosclerosis can lead to impaired circulation of the lower limbs (Blackburn, 153).

53. The major clinical manifestations of CHD are myocardial infarction (commonly known as heart attack or coronary thrombosis), sudden death, angina pectoris, disturbances in the heart rhythm and congestive heart failure (Blackburn, 152; Stamler, 707; CX 17, pp. 36-37).

Approximately 3 1/2 million Americans have some clinical manifestation of CHD, and each year there are 1,250,000 heart attacks in the United States. More specifically, there are 800,000 first heart attacks [29] each year and 450,000 second or subsequent heart attacks (Cooper, 1284).

The mortality rate for a first heart attack is on the order of 25 percent for the first three hours subsequent to the attack and 15 percent for survivors of the first three-hour period. The mortality rate for a first heart attack victim for the year subsequent to the attack is 50 percent (Blackburn, 156-157).

For the year 1973, the death rate from CHD in the United States was 684,066 people (Blackburn, 154; Cooper, 1284; CX 191). Of those deaths, 167,020 can be classified as premature; that is, death occurred in young or middle-aged persons prior to age 65 (Stamler, 690; Blackburn, 154-156). There are an equal number of heart attacks which result in disabilities (Blackburn, 156).

CHD is responsible for more deaths in the United States than any other disease. The next most prevalent killing disease, cancer, has approximately one-half the annual death rate of CHD (Blackburn, 155). Furthermore, the United States has the third highest death rate from CHD in the world (Blackburn, 159).

CHD kills rapidly and early and is associated with a permanent excess risk of death for its victims beyond ten years. More specifically, using an insurance actuarial approach, the risk of death for heart attack survivors, for the first year after return to work, is twelve and a half times, or 1,250 percent, greater than for persons of the same age and sex who have not had a heart attack. Even after ten years, a heart attack victim has a risk of death three and a half times greater than that for non-heart attack persons of the same age and sex (Blackburn, 157-158).

Economically, CHD costs the United States an estimated \$40 billion annually. This includes both direct costs, such as medical expenses and lost income, and indirect costs (Cooper, 1285-86).

There are also other forms of heart disease besides CHD. These are classified by their presumed causes, such as hypertensive heart disease, pulmonary heart disease (due to chronic lung troubles), congenital

heart disease (due to congenital heart defects), and infectious heart disease (Blackburn, 154).

[30] 54. Atherosclerosis is a disease, not a normal aging process (Cooper, 1330; Blackburn, 192). Since it is a disease, it must have causal influences and be potentially preventive (Blackburn, 192). Therefore, emphasis should be on prevention of CHD instead of treatment after the process is well advanced (Connor, 559).

CHD is believed to be a multifactorial disease. The factors generally considered as CHD "risk factors" are: (1) serum cholesterol level; (2) blood pressure; (3) smoking; (4) sex (males have more premature heart attacks than females); (5) age; (6) sedentary living habits; (7) heredity; (8) obesity; and (9) diabetes (Stamler, 704-705, 725, 738, 960; Blackburn, 163, 217-219; Stare, 1048, 1096; Oliver, 2092, 2098, 2107). The first three are so-called *major risk factors* (Stamler, 704; Blackburn, 164-165; Stare, 1045, 1050; Oliver, 2125), and it is the opinion of some that of these three cholesterol is the most significant (Connor, 555, 592; Blackburn, 217-219; Cooper, 1241, 1306, 1348). Dr. Oliver, respondents' expert witness, was of the opinion that heredity was the most important risk factor (Oliver, 2113-16). One who possesses more than one risk factor is at increased risk (Stamler, 704-706, 732-734).

The "triggering event" of a heart attack is not precisely known (Cooper, 1342-43; Oliver, 2098). There might be a "whole host of things" that might cause the actual heart attack, such as stress and adrenalin; however, one would have to have "badly occluded arteries" before an attack occurs (Connor, 654 L-O; Oliver, 2106).

B. *Eggs, Dietary Cholesterol and Saturated Fat*

55. Dietary cholesterol is found only in animal food products, such as eggs, meats and shellfish (Blackburn, 173; Connor, 476). The average egg contains approximately 250 milligrams (mg.) of cholesterol (Blackburn, 175; Stare, 1021; Connor, 477) and about 4 grams of saturated fat (Blackburn, 175). The cholesterol and saturated fat in the egg are found in the egg's yolk rather than in the white (Stamler, 813; Connor, 477). Eggs are the major source of dietary cholesterol in the American diet (Stare, 1026; Stamler, 747, 855); in fact, eggs are the single most important source of dietary cholesterol in industrialized countries (Stamler, 790; Stare, 1021).

The amount of cholesterol contained in one egg yolk is about one-third or more of the average daily cholesterol intake for Americans, which is approximately 600-800 mg. [31] (Stare, 1032; Connor, 477; Cooper, 1226). Egg yoke has substantially more cholesterol than all other commonly eaten foods; for example, a six-ounce serving of meat,

which is a normal serving size, has 120 mg. of cholesterol, and an eight-ounce glass of milk has only 25 mg. of cholesterol (Stare, 1021).

56. The saturated fat content of the egg, which is 4 grams in amount (Blackburn, 175), comprises about 50 percent of the calories of an egg (Blackburn, 176), and contributes significantly to the saturated fat content of the American diet (Stamler, 813, 844). Further, eggs are one of the five sources of saturated fat in industrialized countries (Stamler, 790).

Eggs constitute a complete food containing high-quality, complete protein, easily digested. Eggs contain all essential amino acids, and are a source of vitamins A, the B complex, D, E and K; iron, copper, sulfur, magnesium and phosphorus (CX 7B).

57. Dietary cholesterol and saturated fat are chemically distinct compounds which serve different functions. Fat is a nutrient, while cholesterol is not (Blackburn, 172-173).

Cholesterol is a fat-like waxy alcohol with a sturdy and durable ring chemical structure which cannot be broken down (Blackburn, 172; Connor, 470); therefore, cholesterol remains intact in the blood serum and body for lengthy periods of time, until it is excreted. Cholesterol has a half-life of 80 days, as compared to glucose or sugar which has a half-life of a few hours (Connor, 470-471). The cholesterol in the egg is chemically the same as the cholesterol found in other foods (Blackburn, 176; Connor, 477; Stare, 1028). Eggs, however, have a slightly higher elevating effect on human serum cholesterol levels than other foods or equivalent dietary cholesterol in its crystalline form (Blackburn, 178).

Saturated fats, on the other hand, are fats of the 12, 14 and 16 carbon chain links, which are the most common natural fats. These fats are called lauric acid, myristic acid and palmitic acid. They all have the same caloric value in the diet and have similar effects on blood lipids (Blackburn, 177). [32]

*C. Scientific Evidence concerning Relationship between Egg
Ingestion and Increased Risk of Heart Attacks or Heart
Disease*

(1) Summary

58. A substantial body of scientific evidence has led to the manifestation of an hypothesis which relates the saturated fat and cholesterol in the diet to the serum (blood) cholesterol level of the body and, in turn, the serum cholesterol level to the incidence or risk of CHD (Blackburn, 171-172, 362; Stamler, 813-814; Connor, 599-600; Stare, 1036-37; Cooper, 1207, 1294). This substantial body of scientific evidence supporting the diet-heart hypothesis falls within several

different disciplines, generally described as the clinical-pathological discipline, the laboratory experimental discipline, and the epidemiological discipline (Blackburn, 167-168; Stamler, 815; Cooper, 1208-1210, 1214; Stare, 1037; Connor, 491-492; Kummerow, 2030-31). This accumulation of evidence from which the diet-heart hypothesis is formulated also constitutes competent and reliable scientific evidence that eating eggs increases the risk of heart attacks or heart disease (Blackburn, 183; Stamler, 714; Connor, 491-492, 599-600; Cooper, 1206-1207; Stare, 1045-1047).

59. To state the hypothesis is not to be construed as a finding that the hypothesis is established in fact. The record is clear that reputable, sincere scientists view this same evidence but do not agree with the prevailing diet-heart interpretation (Blackburn, 374-375, 393-394; Stamler, 920-924, 941-942; Connor, 600-601; Stare, 1148; Yudkin, 1373-79; Oliver, 2121-23). It does appear from the record, however, that the predominant and most authoritative view in the medical and scientific field today supports the diet-heart hypothesis (Connor, 592, 601, 654-X; Stamler, 846, 937-938, 963-964; Stare, 1148; Blackburn, 393; Cooper, 1257-58; CX 172; Oliver, 2093-94, 2110, 2121, 2125, 2128, 2140-41, 2151-52, 2157; Yudkin, 1476-78, 1486).

(2) Clinical-Pathological Evidence

60. Clinical-pathological evidence is data developed from observations of relationships between a disease and certain symptoms of phenomena in the [33] diseased persons — observed either by clinical observations or by autopsy (Blackburn, 167-168; Stamler, 735-737). The clinical-pathological method made its first contribution in the research on atherosclerosis about two hundred years ago when a Swiss pathologist focused attention on the fact that the hardened arteries of autopsied patients were characterized by an atherosclerotic lesion composed of the soft atheroma and hardened scar tissue (Stamler, 716).

Through the development of organic chemistry in the second half of the 19th century and the development of microscopic pathology, scientists began to analyze the autopsied hardened atherosclerotic arteries and found that they contained a large excess of fatty tissues, particularly cholesterol. It was found that the proportions of fat-free cholesterol, esterified cholesterol, and other lipids in the atherosclerotic lesion were similar to those substances in the blood stream (Stamler, 717). These basic facts about the similarities between the excess cholesterol in the developing lesion and the cholesterol in the blood stream led to the hypothesis that the main source of the materials in the atheroma was the fat-free cholesterol, esterified cholesterol and other lipids circulating in the blood through the arteries (Stamler, 715-

718). Recent isotopic tagging studies have traced isotopically-tagged cholesterol from ingestion by man in the diet to the blood stream and ultimately to the atheroma of the plaque (CX 190; Conner, 543-544; Stamler, 718-719; Cooper, 1221-22; Yudkin, 1466).

61. During the late 19th and early 20th centuries, physicians began to note that several rare diseases, having apparently nothing in common, were all characterized by incidentally high elevations of the serum cholesterol and that patients suffering from these diseases are characterized by the development of premature, severe atherosclerosis (Stamler, 720-721). Clinical observations about the relationship between the development of CHD and elevated serum cholesterol levels were made during the 1920's to 1950's when comparisons were made of the serum cholesterol levels of people, mostly men, who had had heart attacks at a given age and demographically similar people of the same age who were clinically free of CHD (Stamler, 735). They are known as retrospective studies because they ask the question whether there are any observable differences between healthy and diseased persons (Stamler, 736). These [34] studies have repeatedly shown that men who have had a heart attack, particularly at a younger age such as between 25 and 40 years, have on the average much higher blood cholesterol levels than men who have not had a heart attack at those ages (Stamler, 736; Oliver, 2152).

(3) Experimental Evidence

62. The experimental discipline encompasses studies in which induced change is measured against some control or standard. For example, the discipline includes metabolic ward experiments, where regulated diets are fed to human subjects and any resulting changes in serum cholesterol levels are observed. Similar experimental studies have also been conducted on animals. The discipline further includes studies done on free living populations, where diets have been modified in an effort to lower serum cholesterol levels (Findings 63-77, *infra*).

a. Animal Experimental Evidence

63. Scientific evidence developed in animal studies has shown that the ingestion of dietary cholesterol and fat, including that in egg yolk, elevates the serum cholesterol levels and causes extensive atherosclerotic lesions in various animal species. In one study severe atherosclerosis, which had been produced in monkeys by egg yolk and large amounts of fat, regressed after the cholesterol and fat were eliminated from the diet, thus suggesting that complicated lesions may be reversible through dietary change (Findings 64-68, *infra*).

64. During the first decade of the 20th century, it was discovered that feeding rabbits a diet rich in milk, meat and eggs produced both an elevation of the serum cholesterol level and arterial lesions. Further inquiry showed that the active agents in the foods were dietary cholesterol and fat (Stamler, 724-725; Connor, 513-515). Subsequently, other investigators have shown that it is possible to produce experimental atherosclerosis in a wide range of animal species — avian, mammalian, herbivorous, omnivorous and carnivorous, including subhuman primates (Stamler, 731; Connor, 515).

[35] In all the species, it was found that a dietary change involving increased ingestion of dietary cholesterol and fat and an elevation of the serum cholesterol level is a virtual prerequisite for producing atherosclerosis (Stamler, 731; Connor, 514-515; Blackburn, 406-407). The animal experiments have also shown that once a high dietary cholesterol and high fat diet is present, other factors, such as high blood pressure, act to aggravate the development of the lesion (Stamler, 731).

65. Of all the animals used in these experiments, the use of the subhuman primate is the most clearly generalizable to man (Connor, 525; Stare, 1050, 1099; Cooper, 1215-16). Studies have shown that the addition of dietary cholesterol and fat to the diets of monkeys, particularly the addition of eggs, results in elevated serum cholesterol levels and the production over time of complex lesions remarkably similar to those seen in human patients with atherosclerosis (Connor, 520, 526-527; Stare, 1039-1040; Cooper, 1216; CX 85).

66. CX 52 reports work by Armstrong, Warner and Connor on 40 adult male rhesus monkeys. Ten of the monkeys served as controls and were fed a low-fat, cholesterol-free diet throughout the study. The other thirty monkeys were fed a daily diet consisting of about 800 mg. of dietary cholesterol (provided mostly by egg yolk); furthermore, 41 percent of the calories came from fat. This amount of cholesterol is comparable to the range of cholesterol consumption humans might normally eat and is the cholesterol equivalent of approximately three or four eggs per day. The high fat, high cholesterol diet was fed to the group for 17 months, and the animals experienced a substantial elevation of their cholesterol levels (CX 52B; Connor, 521-526).

At the end of the 17 months, one-third of the experimental group was autopsied and examined for atherosclerosis; significant coronary atherosclerosis was found (Connor, 520; Stamler, 729). This atherosclerosis resulted in marked obstruction of the coronary arteries very similar to that in human patients who die from CHD (Connor, 520). The remaining monkeys were then fed for 40 months a cholesterol-free diet designed to lower serum cholesterol levels and were then autopsied. This group showed significantly less atherosclerosis after the period of

[36] time, indicating that the lesions in their complicated stage may be reversible through dietary change (CX 52; Connor, 522, 524; Stamler, 728-729).

67. Dr. Bruce Taylor similarly fed dietary cholesterol and fat to monkeys for a long period of time and produced elevation of the serum cholesterol levels and such severe atherosclerosis that some of the animals developed peripheral gangrene similar to that which some human CHD patients get. At least one monkey suffered a fatal heart attack due to severe atherosclerosis (Stamler, 727).

Dr. Robert Wissler has also produced atherosclerosis in monkeys. He took regular prepared table food from a hospital — which included fresh hard-boiled eggs — and fed it to monkeys. Elevated serum cholesterol levels and severe hardening of the arteries resulted from the diet (Stamler, 727-728; Connor, 528).

68. Animal studies are widely used in medical science, and are of crucial importance in atherosclerosis research (Stamler, 888-889; Connor, 512, 528; Yudkin, 1461-62).

b. Human Experimental Evidence

69. The serum cholesterol level of man like that of animals is influenced by the diet — particularly by dietary cholesterol, saturated fat and polyunsaturated fat. This has been repeatedly demonstrated by human dietary experiments both in metabolic wards, where specific elements of the diet are varied and the rest of the diet and total calories strictly controlled, and in free living populations, where diets have been consciously modified to lower serum cholesterol (Stamler, 748, 792-793, 802; Connor, 473, 475, 540; Cooper, 1224, 1226-27; Stare, 1025-26; Blackburn, 221, 229, 238, 246; Findings 70-77, *infra*).

70. Metabolic ward studies were carried out by Doctors Keys, Anderson and Grande of the University of Minnesota Laboratory of Physiological Hygiene. The results of the Keys group's studies, involving dozens of experiments over a period of 15 to 20 years, are reported and summarized in CX 78, 79, 80 and 81 (Blackburn, 221). The underlying published data from the Keys group [37] concerning the effect of dietary cholesterol on the serum cholesterol level is summarized in CX 183A-B (Blackburn, 225). This summary, prepared by Dr. Joseph Anderson, one of the authors of CX 79 (Blackburn, 230), demonstrates that when dietary cholesterol, in amounts within the range of human consumption, is added to an established diet, there is a consistent elevation in the serum cholesterol level (Blackburn, 229). The dietary cholesterol used in these experiments was derived either from egg yolk or from crystalline cholesterol (*i.e.*, the chemical cholesterol itself). The data shows that egg yolk has a slightly greater elevating

effect than pure crystalline cholesterol because the egg yolk is absorbed by the human body more efficiently (Blackburn, 178, 299; Connor, 532-533).

71. Metabolic ward work has also been carried out by Doctors Hegsted, McGandy, Myers and Stare at the Harvard University School of Public Health. Their work is reported in CX 70 (Blackburn, 223; Stare, 1007), and they conclude that the addition of 100 mg. of dietary cholesterol to the diet provokes a rise in serum cholesterol of approximately 5 mg. percent (Stare, 1030-31). The response of the serum cholesterol to dietary cholesterol is independent of, and additive to, the response induced by saturated fat (CX 70M).

72. Another set of metabolic ward studies was performed by Dr. Connor and several co-investigators. Some of their work is reported in CX 62 and 64. Both studies show that dietary cholesterol provided by egg yolk causes a significant increase in serum cholesterol concentration when added to a previously cholesterol-free diet (CX 62B, 64C; Connor, 531-533, 554-556).

In CX 62, Dr. Connor also compared the relative effects of equal amounts of egg yolk cholesterol and crystalline cholesterol and found that the effect of crystalline cholesterol added to a cholesterol-free diet was significant but did not produce as great a rise in serum cholesterol levels as did egg yolk cholesterol (CX 62G; Connor, 532).

CX 64 reports a similar experiment showing the serum cholesterol elevating effect of dietary cholesterol even where polyunsaturated fat content is high. Conversely, [38] the serum cholesterol levels of the subjects were lowered when cholesterol was eliminated from the diet, even where the saturated fat content of the diet was high (CX 64E; Connor, 554-556).

73. A metabolic ward study was done by Doctors Mattson, Erickson and Kligman, reported in CX 86. The study was aimed at determining the effect of dietary cholesterol on serum cholesterol levels, where all other dietary factors (amount and type of fat, protein, carbohydrate, and caloric content) were held constant (CX 86A). Dietary cholesterol was provided by egg yolk (CX 86A). The experiment showed that each addition of 100 mg. of dietary cholesterol per 100 calories produced a rise in the serum cholesterol level of 12 mg. percent. The subjects receiving an amount of dietary cholesterol equivalent to that found in a typical American diet had their serum cholesterol levels raised an average of 40 mg. percent higher than the period of time when they were receiving no dietary cholesterol (CX 86F).

74. The results of the Connor and the Mattson experiments are graphically summarized in CX 189 (Connor, 536-540). The graph expresses a linear relationship between the intake of dietary cholesterol-

ol and the change (elevation) in serum cholesterol levels as dietary cholesterol, in amounts up to 1000 mg. per day, is added to a cholesterol-free diet (Connor, 536; 540). In other words, each addition of cholesterol to the diet — up to a total of 1000 mg. per day — will produce an increase in the serum level.

75. Based upon their respective findings, the Keys group, the Hegsted group and the Mattson group each have developed a formula expressing the effect of diet on serum cholesterol levels. Each formula expresses a linear relationship between the intake of dietary cholesterol and a change in the serum cholesterol level (Connor, 540). While these formulas differ slightly from one another, they are similar qualitatively in that they all recognize that the serum cholesterol level is influenced by three constituents of the diet — dietary cholesterol, saturated fat, and polyunsaturated fat (Blackburn, 350-351; Stamler, 872-873; Connor, 540, 617-618; Stare, 1131). The respective findings all show that dietary cholesterol produces an increase in serum level (Connor, 618).

[39] 76. In addition to the metabolic ward studies, *supra*, there have been several studies of free-living people where serum cholesterol levels were lowered by dietary manipulation. These studies have consistently shown that by lowering the cholesterol and saturated fat content of the diet, a significant and long-term lowering of the serum cholesterol level can be achieved in most people.

One such study, reported in CX 196, was conducted by Doctors Ford, McGandy and Stare on adolescent boys, aged 12 to 18, at St. Paul's Academy, a boarding school. In this study a low-fat, low-cholesterol diet was introduced at the school; saturated fats were decreased, polyunsaturated fats were increased and dietary cholesterol was reduced from 540 mg. to 300 mg. per day (CX 196A). The latter change was accomplished chiefly by reducing the numbers of eggs in the diet and by substituting a powdered egg mix with half the cholesterol of whole eggs (CX 196C; Stare, 1015-1022).

The result of the dietary changes in the St. Paul's Study was an average 15 percent decrease in the boys' serum cholesterol levels. The levels remained lowered until the spring vacation when the boys returned home and went off the diet for two weeks. Upon their return, the diet was reinstituted, and the same lowering effect was shown and retained for the remainder of the school year. After their return from a three-month summer vacation, their serum cholesterol levels were again at their pre-experiment level (CX 196A, 196G; Stare, 1016-1019).

77. In addition to the St. Paul's School Study, there have been several "intervention" studies which manipulated the diets of the subjects. These studies are the National Diet Heart Study (Stamler,

805-807); the Los Angeles Veterans Administration Domiciliary Study by Dayton and Pierce, RX 11 (Stamler, 795, 808-809; Blackburn, 239); The Finnish Mental Hospital Study by Miettinen, Turpeinen, et al., RX 38 (Stamler, 795; Blackburn, 239); The Oslo Diet-Heart Study by Leren, RX 70 (Stamler, 809-810); The New York Anti-Coronary Club Study by Joeliffe, Rinzler and Archer (Stamler, 804; Blackburn, 241-242); and Dr. Stamler's Chicago Coronary Prevention Evaluation Program (Stamler, 809; Blackburn, 241-242). Each of these studies shows that lowering the intake of dietary cholesterol and saturated fat (and in some an elevation of polyunsaturates) [40] can produce a significant and long-term reduction in serum cholesterol levels (Blackburn, 241-242).

(4) Epidemiological Evidence

78. Epidemiological evidence involves population studies which have several purposes: to define the burden or amount of disease in the community; to describe the distribution of disease within the community by age, sex, ethnic groups, or other characteristics; to develop normal standards upon which medical judgments as to existence of abnormality can be made; to determine whether there is a relationship between a given factor or set of factors and the emergence of a given disease; and to test theories or find leads about the cause of a disease in a real life experiment where groups of people differ with respect to a given aspect which is under scrutiny (Blackburn, 162-163, 169; Cooper, 1213-1214; Oliver, 2091-2092). These studies include both those comparing one population to others (international epidemiological studies) and those which test only one population group (intra-cultural epidemiological studies) (Findings 79-98, *infra*). Epidemiology is widely used in medical science and is considered a basic tool in environmental health research (Blackburn, 143, 166, 168-169, 329-330; Cooper, 1213-14; Oliver, 2151; Stamler, 737, 979-981).

a. International Epidemiological Studies

79. International epidemiology studying of CHD began in the early 20th century as European physicians trained in clinical investigation and autopsy noticed that, while atherosclerosis and CHD were common in Europe, the conditions were rare in people in the developing countries (Stamler, 721). Epidemiologists observed that one of the differences between populations in the developing countries with a low rate of CHD and those with a high rate was the habitual diet of the natives. One of the major scientific reviews in the 1930's made the following generalization based upon an analysis of 28 papers then in the literature, including findings from clinical and pathological studies in

China, East Africa, Egypt, India, Malaya, Austria, Germany, the United States and elsewhere:

[41] * * * in no race for which a high cholesterol intake (in the form of eggs, butter and milk) and fat intake are recorded is atherosclerosis absent. * * * Where a high protein diet is consumed, which naturally contains small quantities of cholesterol, but where the neutral fat intake is low, atherosclerosis is not prevalent. (CX 192, p. 101; see Stamler, 721-722.)

Another early epidemiological report noted that

the diet of the [Dutch East Indies] natives consists chiefly of cereals. Blood cholesterol is low but rises in those who adopt European dietary habits. (CX 192, p. 84.)

80. Since World War II, there has been an expanded effort in international epidemiological research on CHD. Several methods have been utilized, described as follows:

- (1) In-depth, prospective population studies;
- (2) International autopsy studies; and
- (3) Use of international vital statistics from the World Health Organization and food balance sheets from the Food and Agriculture Organization.

Each of these methodologies has yielded similar data confirming the impressions of the earlier epidemiologists that underdeveloped populations do in fact differ from the industrialized Western nations in the national rate of CHD and, as well, that certain differences in habitual diets are highly correlated to these differences in CHD incidence (Findings 81-98, *infra*).

81. One of the most widely respected prospective epidemiological studies is "Coronary Heart Disease in Seven Countries," commonly called the Seven Countries Study (CX 76), edited by Dr. Ancel Keys, and in which complaint counsel's witness, Dr. Henry W. Blackburn, Jr., participated (Stamler, 789-790). The study is prospective [42] in that members of various population groups were characterized at entry into the study and the differences in incidence of new heart disease during the succeeding five years were evaluated against these entry characteristics (Blackburn, 185-189). The study consisted of an in-depth examination of over 12,000 men, aged 40-59, from 18 population samples from seven countries: Finland, Greece, Italy, Japan, The Netherlands, United States, and Yugoslavia (CX 76; RX 123, p. 4). These countries were chosen because vital statistics suggested that there would be differences in the CHD rate among them, and because the inhabitants had for centuries eaten dissimilar diets (Blackburn, 186).

In each country, except for the United States where railroad employees were utilized, a stable rural area was selected, and every man between the ages of 40 and 59 living in that area was examined and followed. The study successfully surveyed and followed 98-99 percent of the men in the specified age groups (Blackburn, 186-188). A sample of over 1200 United States railroad workers, both clerical and moderately active switchmen and right-of-way men who were present or former railroad employees, was followed, representing a 70 percent sample of all United States railroad employees (Blackburn, 191; RX 123D).

82. At the time of entry into the study, each man was examined for various clinical signs of CHD and several individual characteristics, such as serum cholesterol level, blood pressure, number of cigarettes smoked, weight, and amount of physical activity, were recorded. A team of dieticians collected information on everything the men and their families ate for a period of a week. The dietary information was reevaluated regularly to take in any seasonal variations in food consumption. All information obtained was coded and processed in one center, with one cardiologist reviewing all clinical data and a single laboratory performing all serum cholesterol and diet sample analyses. The workers were blinded as to the origin of the samples (Blackburn, 187-188; CX 76; RX 123D).

After an interval of five years, the men were reexamined for signs of CHD, and the ascribed causes of any intervening deaths were recorded. The number of new cases and types of CHD in each sample was recorded, [43] and the current status of those men with clinical CHD at entry was noted (Blackburn, 188).

83. The results of the first five-year examination are reported in CX 76. In determining whether any factors were significantly correlated with new incidences of CHD, the Seven Countries Study investigated possible correlations between the various categorizations developed at entry and the rate of new CHD in the populations. Of these characteristics, it was found that between cigarette smoking, physical inactivity, obesity, relative body weight, blood pressure, and serum cholesterol levels, the mean entry serum cholesterol level of each cohort was most clearly and directly related to the subsequent development of new CHD (CX 76Z171-Z176).

The correlation found between the mean entry serum cholesterol level for each cohort and the subsequent new incidence of CHD was highly significant, both for (1) new CHD deaths and definite non-fatal heart attacks ($r = 0.76$)³ and (2) all new diagnoses of CHD clinical manifestations ($r = 0.81$). In other words, the samples with the higher

³ The correlation coefficient (r) is a statistical expression of the degree of congruity of the relationship between

average serum cholesterol levels at entry showed higher rates of new CHD and, similarly, those with the lower average entry serum cholesterol levels had lower rates of new CHD (Blackburn, 197; Stamler, 738, 789; Yudkin, 1464; CX 76Z154).

[44] 84. The Seven Countries Study also investigated the relationship of the habitual diets of each cohort to both its mean entry serum cholesterol level and subsequent rate of new CHD. It was found that the percent of calories from saturated fat in the diet is highly significantly correlated to both the mean entry serum cholesterol level ($r = 0.89$) and to the subsequent incidence of new CHD ($r = 0.84$) (CX 76Z151-Z156). This finding indicates that a very strong determinant of the serum cholesterol level is the saturated fat content of the diet (Blackburn, 197-198; Yudkin, 1464).

Other dietary elements were also investigated and serum cholesterol levels and incidence of new CHD were not found to be related to either the total calories or the percent of calories provided by protein, monounsaturated fats, or polyunsaturated fats, and were only slightly correlated to total calories from all fats (CX 76Z176, 76Z156-Z157; Blackburn, 196).

85. The Seven Countries Study did not directly measure the amount of dietary cholesterol in the diet. Therefore, it was not possible to estimate any independent contribution of dietary cholesterol to either serum cholesterol or CHD incidence (CX 76Z155; Stamler, 787). Even though the Seven Countries Study did not directly measure dietary cholesterol intake, its findings on saturated fats are highly relevant to the effect of dietary cholesterol, including that in eggs, on serum cholesterol levels and on CHD incidence (Stamler, 790). This is because (1) a general correlation between dietary cholesterol and saturated fats has been shown in different populations; (2) eggs are among the most important sources of cholesterol in the diet; and (3) a substantial part of the saturated fat in the diets of industrialized nations comes from eggs (Stamler, 790).

86. Another international prospective survey compared new CHD incidence among male residents of Oahu Island, Hawaii, who were between the ages of 44 and 65 and who had immigrated to Hawaii from Japan, with the published data on new CHD incidence in similarly aged men in Japan and in Framingham, Massachusetts. This study found

two variables. A correlation coefficient of 1.0 indicates a perfect positive agreement between the two variables; a correlation coefficient of - 1.0 indicates a perfect negative correlation; a correlation coefficient of 0.0 shows no relationship between the two variables.

The "significance" of a correlation refers to the degree that such a correlation would probably not happen by pure chance. The significance of a given correlation depends on both the sample size and the differences between individual measurements. In large sample sizes, a correlation coefficient of 0.6 or 0.7 is a very good correlation, and a correlation of 0.9 or over is highly significant and quite rare in medicine (Blackburn, 198-200; Stamler, 752-760).

wide differences in the two-year incidence of CHD between the three cohorts, with those in Framingham having the highest incidence and those in Japan the lowest. Serum levels followed the same relationships (CX 71B; Blackburn, 205-206).

[45] 87. A study by Dr. Ancel Keys compared Japanese men aged 40 to 49 in several Japanese cities to similarly aged Japanese men living in Hawaii and to similarly aged male Japanese Nisei (American born children of Japanese immigrants) living in Los Angeles. This study found a correlation between average serum cholesterol levels and the average percent of calories from fat in the diet. Specifically, the average serum cholesterol levels of the Japanese living in Japan were lower than those of the Japanese men living in Hawaii, and both were lower than those of the Nisei in Los Angeles. Moreover, dietary data on all subjects were obtained, with the result that the average serum cholesterol levels closely followed the average percent of calories from fat in the diet of the various groups studied (CX 192 0Z7).

88. Another type of international epidemiological study is the International Atherosclerosis Project which involved the systematic classification of the severity of aorta and coronary atherosclerosis at autopsy of 21,000 decedents aged 10-69 during 1960-1965 in 15 cities throughout the world. This study revealed marked differences in the degree of severity of atherosclerosis between the African and Latin American countries on the one hand and those in the United States (New Orleans) and Norway (Oslo) (CX 192B, C; Stamler, 698).

89. The International Atherosclerosis Project also reviewed the available published nutritional data of the different nations studied. These countries were ranked as to their average serum cholesterol level and as to nutritional data, such as percent of total calories from fat, amount of fat from animal origin, animal protein and consumption of sucrose. Egg consumption was not included because data was too fragmentary. The ranking of these countries on severity of atherosclerosis at autopsy was then compared to the respective rankings for average serum cholesterol levels and the nutritional data. The study concluded:

* * * severity of atherosclerosis is closely associated with proportion of total calories derived from fat and with serum cholesterol concentration. These findings are consistent with the large body of experimental and epidemiologic evidence relating atherosclerosis [46] to fat consumption and serum cholesterol. Available data regarding dietary consumption were not sufficiently precise to determine whether type of fat [*e.g.*, saturated fat] and amount of dietary cholesterol in the diet are important in relation to atherosclerosis. (CX 193, 49-50; Stamler, 766-768.)

90. A group of international epidemiological studies have analyzed

differences in CHD rates in various countries through use of the World Health Organization's (WHO) CHD age specific mortality data and the Food and Agriculture Organization's (FAO) food balance sheets. WHO and FAO are agencies of the United Nations (Stamler, 739). Six such analyses of WHO-FAO data have been published during the last 25 years — including analyses by complaint counsel's witnesses, Doctors Connor and Stamler, and one by respondents' witness, Dr. Yudkin (Stamler, 750; Connor, 494; references for these six works are given at references 25-30 in CX 193Z44 - Z45). Dr. Connor's analysis is summarized in CX 61, and Dr. Stamler's work is reported in CX 192. Dr. Yudkin's work, relating to correlations between CHD mortality and sucrose, was not introduced.

Dr. Connor's analysis correlated the mortality rates of 24 countries for males aged 55-59 for the years 1955-1956 from data published by the WHO, with the mean daily dietary cholesterol intake from all food sources calculated from the FAO's food balance sheets for the years 1952 through 1956. The analysis shows a highly significant correlation between the average daily dietary cholesterol intake of these 24 countries and their CHD mortality rates ($r = 0.83$) (CX 61D; Connor, 494).

Dr. Connor also obtained essentially similar findings using another set of WHO-FAO data for thirty countries. The thirty-country analysis shows a significant correlation between the CHD death rate and the average daily intake of dietary cholesterol ($r = .762$) and eggs ($r = .666$) (CX 61C).

91. Dr. Stamler conducted a similar analysis using the WHO's CHD mortality rates for 20 countries and the mean daily available nutrient intake tables for the years 1954-1962 calculated from FAO data (Stamler, 750; CX 192S-T). Dr. Stamler's analysis shows that there [47] is a statistically significant correlation between the 1964 CHD mortality rates and several dietary items, including dietary cholesterol ($r = 0.617$) and the percent of calories from saturated fat ($r = 0.546$) (CX 192V; Stamler, 739, 740-741).

Dr. Stamler's analysis of the WHO-FAO data in CX 192 concerns only the relationships between various nutrients and CHD mortality; he did not attempt to correlate CHD mortality with any particular food item on the food balance sheets (Stamler, 741). However, stimulated by the publication of the respondents' challenged advertisements in 1973, Dr. Stamler reanalyzed the WHO-FAO data to determine whether there are any significant correlations between egg consumption and rates of CHD mortality (Stamler, 916). CX 194 reports Dr. Stamler's analysis of the 1971 CHD mortality data for twenty countries and shows a significant correlation between each country's daily intake of eggs and the national

CHD mortality rate for both males and females (CX 194A, Column #1, "Egg Calories Per Day;" Stamler, 741, 745). CX 194B shows that where other elements of the diet which potentially affect serum levels are held constant — such as non-egg cholesterol, non-egg saturated fat, non-egg polyunsaturated fat, sucrose and tobacco — there still remains a significant correlation between the number of eggs per day in the diet and CHD mortality in a majority of the age groups (Stamler, 742).

CX 194C represents further results of Dr. Stamler's reanalysis. The twenty countries were ranked from high to low in terms of per capita egg consumption. The consumption for the ten highest and ten lowest are then averaged and compared to the average of CHD mortality for each group of ten. This comparison indicates that the number of eggs in the habitual diet correlates positively with the CHD mortality rate, the average mortality rate for the high egg-using nations being about 50 percent higher than for the lower egg-consumption nations (CX 194C; Stamler, 747, 751).

b. Intra-cultural Epidemiological Studies

92. There have been several intra-cultural prospective epidemiological studies in which a small population group is studied for several years. In the [48] United States, studies have followed population samples in Framingham, Massachusetts (CX 72); Albany, New York (CX 66); Tecumseh, Michigan (CX 68 [referred to in testimony but not introduced in evidence]); Chicago Western Electric workers (CX 90); Minneapolis-St. Paul Businessmen (CX 77); and the Chicago Peoples Gas Company employees (CX 193). (Stamler, 702; Stare, 1043-1044.) Each of the six studies selected from the general population a group of people who were clinically free of CHD, characterized them at entry on a variety of factors, followed them for a period of years and then attempted to determine in what ways the entry characteristics of the group of people who developed CHD during the study period differed from the entry characteristics of those who remained clinically free of CHD (Stamler, 773).

93. Specifically regarding the relationship between serum cholesterol levels and subsequent CHD incidence, each of these studies found that there is a steep increase in risk of subsequent CHD in persons with higher serum cholesterol levels over those with lower levels (Blackburn, 215; Stamler, 702-704; Stare, 1044-1045; CX 72-I; CX 66E-F, 7G-I, 90F, 193R). For example, the Framingham study concluded that moderate elevations in the range of serum levels between 250 mg. and 350 mg./100 ml., depending on age and sex, are associated with a risk of coronary heart disease two to five times higher than is noted with values below the American average of about 220 mg./100 ml. (CX

72-I). The Albany study found that CHD “* * * occurred more frequently as the serum total cholesterol level rose. Thus, above a level of 275 mg/100 ml the risk of ischemic heart disease was six times greater than at a level of 200 mg/100 ml or less” (CX 66E-F).

94. The data from all six studies were combined to produce a sample of nearly 8,000 men between the ages of 30 to 59 at entry who were then followed for 10 years. This enlarged data pool was then reanalyzed in the National Cooperative Pooling Project (Blackburn, 213; Stamler, 709; Cooper, 1303). The analysis is contained in the Report of the Inter-society Commission on Heart Disease Resources (CX 18M, Q-T; Stamler, 744). Principal graphs from the Pooling Project also appear in CX 193. The Pooling Project data shows that, considering only the entry serum cholesterol level, increases in serum cholesterol levels were directly related to increases [49] in the future risk of sustaining a “first major coronary event,” defined to be either a fatal or non-fatal heart attack or sudden death (death within three hours after onset of symptoms) (CX 18L-M; Blackburn, 210-211; Stamler, 772; CX 193-O-P). The data further shows that, within the serum cholesterol levels common in the United States — below 175 mg. percent is rare in middle-aged American men, and approximately 80 percent of the population have serum cholesterol levels of 185 mg. percent and over (Stamler, 772-773):

* * * The relationship between level of serum cholesterol and [coronary heart] disease is continuous. With increasing cholesterol concentration risk is increased. There is no evidence of a critical level of serum cholesterol which separates high from low risk individuals. (CX 18L; see also Blackburn, 210; Stamler, 704.)

95. The Pooling Project data also found that in American prospective epidemiological studies serum cholesterol levels, blood pressure and cigarette smoking are all independent and additive; that is, the risk for future CHD is greater than would be the case if only one of the conditions were present (CX 18T-V; Blackburn, 163-164, 217; Stamler, 704, 706, 773; CX 193Z1; Finding 54, *supra*). Thus, for example, a serum cholesterol level of 220 mg./100 ml., which is moderate for Americans, is of greater significance if the individual is a smoker or has elevated blood pressure (Stamler, 906-907).

As a result of these American epidemiological studies, serum cholesterol, blood pressure and cigarette smoking have become known as “major risk factors for premature CHD” (Blackburn, 163-164; Stamler, 704-705; CX 18T, 193Z1; Finding 54, *supra*). While these risk factors are additive to one another, serum cholesterol level is the most potent risk factor for CHD; high blood pressure is the most potent risk factor for cerebrovascular disease; and cigarette smoking is the most

potent for peripheral vascular disease (Cooper, 1348; Connor, 590-592; CX 193Z38).

96. Based upon data from the Framingham study, CX 72, a mathematical equation was developed which predicts the risk of developing future CHD. Called the Truett-Cornfield multi-variate regression analysis, the equation [50] makes it possible to compute a risk probability for an individual based upon the simultaneous evaluation of his serum cholesterol, blood pressure, smoking habits, age, sex and other specific factors (CX 193, 222; Stamler, 711). The Truett-Cornfield equation was subsequently tested in the Seven Countries Study, CX 76, and in the Chicago Peoples Gas Study, CX 193. In the Seven Countries Study, the equation was highly successful in predicting the number of observed new incidences of CHD (CX 76Z129); and in the Chicago Peoples Gas Company Study, it was reasonably good in predicting the number of observed incidences (CX 193Z24-Z25; Stamler, 711-714).

97. Based on the Truett-Cornfield equation, the National Diet Heart Study, sponsored by National Heart and Lung Institute of the National Institutes of Health, prepared a table which shows the predicted decrease in the new incidence of CHD from a lowering of the average serum cholesterol level of the United States population (CX 185; Blackburn, 262-264; Stamler, 874). The table can also be used to predict an increase in new CHD incidence flowing from an elevation of the national average serum cholesterol level (CX 185).

The Framingham data have also been used by Cornfield to express the steep increase in risk of future CHD mortality that is reflected in various gradations of serum cholesterol. The Framingham data (as well as the rest of the Pooling Project data) show that the relationship between serum cholesterol levels and future risk of CHD mortality is curvilinear rather than linear. In other words, there is a greater risk of CHD mortality from raising the serum level at a higher part of the scale than from raising the serum cholesterol by the same amount at lower points on the curve (Stamler, 874-876).

98. In a study headed by Dr. Connor on the Tarahumara Indians of Mexico, a relationship between diet and cholesterol was observed. The Tarahumaras vary widely in their diets. As a whole, they eat very few animal products, and most of the dietary cholesterol in the Tarahumara diet comes from the consumption of eggs. However, between individuals, the amount of dietary cholesterol in the daily diet ranges widely from 20 mg. per day to 140 mg. per day (Connor, 495-500). CX 187 plots the relationship between the individual rates of dietary cholesterol consumption of 94 Tarahumaras [51] and their respective serum cholesterol levels, with each dot representing one individual. The graph

shows a linear relationship between the two factors, so that as the amount of dietary cholesterol rises, the serum cholesterol level likewise increases. The degree of correlation is very high ($r = 0.898$) (Connor, 495-500, 502-506). Similar correlations have been obtained and published by other investigators working with New Guineans (Connor, 507, 510-511).

D. *The Studies in This Record Constitute Competent and Reliable Scientific Evidence*

(1) Summary

99. The studies discussed in Findings 60-98, *supra*, constitute competent and reliable scientific evidence. They were conducted using scientific methodologies, were performed by competent and highly regarded investigators, have been reported in recognized scientific journals after peer review, and have been generally accepted by experts in the field and by the scientific community. Moreover, reputable governmental and private scientific organizations have reviewed the evidence and relied on it in making recommendations to the medical profession and to the public for the treatment and prevention of CHD. Finally, complaint counsel's own witnesses relied on the evidence to form expert opinions regarding the relationship of diet to CHD and as to the effect of adding an egg per day to the average American diet (Findings 100-105, *infra*).

(2) The Studies Were Conducted in a Scientific Manner and Are Competent and Reliable

100. Scientific evidence is data gathered by using systematic, technologically reliable and acceptable methods. Reliable scientific evidence is evidence which is repeatable; it can be gathered by other investigators using the same methods to produce the same results. Competent scientific evidence refers both to the competency of the people performing the study and the manner and detail in which the data is reported so as to permit [52] critical evaluation (Blackburn, 167; Connor, 557-558; Stamler, 814-815; Stare, 1034-1035; Cooper, 1228-1230; Yudkin, 1463; Oster, 1910; Kummerow, 2029).

The various studies described in Findings 60-98, *supra*, constitute competent and reliable scientific evidence that the consumption of dietary cholesterol and saturated fat, including that in eggs, is directly related to the serum cholesterol level and that elevated serum cholesterol levels are causally related to an increase in the risk of developing CHD (Blackburn, 246-247; Connor, 492-494, 556-558; Stamler, 814-815; Stare, 1045-1050; Cooper, 1228-1229). Furthermore, the

various methodologies described in Findings 60-98, *supra* — clinical-pathological, experimental (animal and human, including metabolic ward studies and studies on free-living populations), and epidemiological evidence — are recognized as acceptable methodologies of medical research (Blackburn, 167-170; Connor, 491-492, 556-558; Stamler, 814-815; Stare, 1034-1037, 1046; Cooper, 1228; Yudkin, 1462; Kummerow, 2029-2031).

(3) Reputable Scientific Bodies Have Relied on the Studies in Making Recommendations

101. A number of reputable governmental and private organizations have reviewed the scientific studies in Findings 60-98, *supra*, on the question of the relationship of diet to CHD, and have relied on those studies in making recommendations to the medical community and to the public concerning the treatment and prevention of CHD (Findings 102-105, *infra*).

102. The Inter-Society Commission for Heart Disease Resources (hereinafter "Inter-Society Commission") was created to help the Congressionally-established Regional Medical Programs Service develop guidelines for optimal medical resources for the prevention and treatment of heart disease. The Inter-Society Commission brought together over 20 of the Nation's leading medical organizations to review and report on these guidelines, including the American Academy of Family Physicians, the American Academy of Pediatrics, the American Board of Internal Medicine, the American College of Cardiology, the American College of Physicians, the American Medical [53] Association, and the American Heart Association (CX 18C). The Inter-Society Commission was divided into two study groups, each of which independently reviewed the scientific evidence relating to the development, prevention, and treatment of CHD. The Report of Inter-Society Commission for Heart Disease Resources, CX 18, revised April 1972, was the unanimous report of both study groups (Stamler, 775-778). CX 18 thus reports an in-depth review of scientific evidence concerning the development of CHD by a prestigious group of independent scientific bodies, which review included many of the pieces of epidemiological, experimental and clinical-pathological scientific evidence received in evidence in this proceeding and referred to by the expert witnesses who testified in this proceeding (CX 18Z19 - Z23).

The Inter-Society Commission Report concludes that:

Converging lines of epidemiological, clinical and experimental evidence, both animal and human, support the judgment that the relationship between the risk factors, particularly the major risk factors — i.e., hypercholesterolemia, cigarette smoking, hypertension — and the development of coronary heart disease is

probably causal. This should not be interpreted as implying that the evidence is conclusive. Nevertheless, the data strongly indicate that to a considerable degree coronary heart disease in the United States, particularly in the under 60 age group, results principally from the impact of these three widely prevalent risk factors.
* * * (CX 18Z9.)

The Inter-Society Commission recommended that there be “* * * modifications of diet for the general public, and particularly for individuals with marked increase in risk of premature atherosclerotic diseases” (CX 18Z12). The recommended modifications are that (1) caloric intake be adjusted to achieve and maintain optimal weight; (2) a reduction of dietary cholesterol to less than 300 mg. per day; and (3) substantial reduction of dietary saturated fats (CX 18Z12). Specifically, the Report recommended that “* * * the public should be encouraged to avoid egg yolk consumption, * * *.” since the “* * * ingestion of two eggs a day * * * will seriously hamper dietary programs aimed at reducing serum cholesterol” (CX 18Z14).

[54] 103. The National Heart and Lung Institute Task Force on Arteriosclerosis, a Federal Government organization, was assembled by Dr. Theodore Cooper, then the Director of the National Heart and Lung Institute, and it was composed of non-governmental experts of fine reputation and who, with one exception, have specific expertise in the various facets of arteriosclerosis, heart disease, and its causes. The Task Force was convened for the purpose of providing the National Heart and Lung Institute advice concerning the state of the art on arteriosclerosis, as well as recommending a program concerning arteriosclerosis research (CX 17; Cooper, 1256-1258). The Task Force evaluated the scientific evidence available prior to 1969 pertaining to heart disease and transmitted their final report to Dr. Cooper, which represented the unanimous opinion of all the Task Force members (Cooper, 1257, 1259).

The Task Force concluded that it is not “known ” whether all risk factors are causally related to atherosclerotic cardiovascular diseases, but the “best judgment from present knowledge indicates that a significant reduction in the incidence of such diseases may be achieved” by controlling blood lipids, blood pressure and cigarette smoking (CX 17Z4). One of the Task Force’s specific recommendations was that since

* * * elevation of serum lipids is implicated in the etiology of arteriosclerotic disease * * * it therefore would appear prudent for the American people to follow a diet aimed at lowering serum lipid concentrations. For most individuals, this can be achieved by lowering intake of calories, cholesterol, and saturated fats. * * * In certain individuals with clearly elevated levels of serum cholesterol or tryglycerides, close medical supervision with more vigorous attention to the diet and the use of drugs may be necessary. (CX 17Z4.)

104. CX 20 is the Joint Policy Statement of the American Medical Association Council on Foods and Nutrition and the Food and Nutrition Board of the National Academy of Sciences — National Research Council. The American Medical Association Council on Foods and Nutrition is a scientific body designed to advise physicians about [55] the role of nutritional factors and their relationship to the production of human disease. This Council consists of a broad cross-section of experts in the area of nutrition (Connor, 579-580. The Food and Nutrition Board of the National Academy of Sciences - National Research Council is a broad committee designed to advise the Federal Government about the influence of various nutrients on human disease. This Council also sets up the human requirements for various nutrients (Connor, 580). Both organizations are held in very high repute and both are conservative in their positions (Connor, 580; Blackburn, 297). Dr. Connor stated, “* * * I never heard them really make statements ahead of time. They are usually slightly behind, and perhaps that’s the way they should be, in advising the public” (Connor, 580). Experts in the field of heart research generally rely on the recommendations of these organizations (Blackburn, 297-298).

The two Councils jointly reviewed the evidence concerning the risk of developing coronary heart disease and stated:

Epidemiologic, experimental, and clinical investigations have identified a number of “risk factors” associated with susceptibility to CHD that can be manipulated. * * * The evidence is not sufficient to quantitate the benefits that may be expected to come from modifying these various risk factors, but the seriousness of the situation demands that all reasonable means be used to reduce the conditions that contribute to risk of CHD.

There is abundant evidence that the risk of developing CHD is positively correlated with the level of cholesterol in the plasma. * * * There is extensive evidence that the level of cholesterol in the plasma of most people can be lowered by appropriate dietary modification. (CX 20.)

Further, these organizations recommended, among other things, that

[56]In [coronary heart disease]“risk categories” it is important to decrease substantially the intake of saturated fat and to lower cholesterol consumption. (CX 20.)

105. CX 21 is a 1973 American Heart Association (AHA) statement entitled, *Diet and Coronary Heart Disease*. The AHA is a volunteer health agency consisting of a professional staff, a group of volunteer professional people heading its scientific councils, and a widely-disseminated lay membership which is interested in cardiovascular problems (Blackburn, 298). The Committee on Nutrition reviewed evidence concerning factors associated with the risk of CHD (CX 21B-C,

E), and made recommendations (CX 21C-D) to physicians and other health professionals (CX 21A).

The AHA recommended, among other things, a substantial reduction in saturated fats and dietary cholesterol (CX 21C). More specifically, it was “* * * recommended that the average daily intake of cholesterol approximate 300 mg. For persons with severe hypercholesterolemia, an even greater reduction may be warranted” (CX 21C). In addition, the AHA recommended that intake of saturated fat be limited to no more than 10 percent of total calories (CX 21C).

(4) Complaint Counsel's Expert Witnesses Relied on the
Studies in Forming an Opinion as to the Effect of Egg
Consumption on Coronary Heart Disease

106. Complaint counsel offered the testimony of five expert witnesses: (1) Dr. Henry W. Blackburn, Jr.; (2) Dr. William E. Connor; (3) Dr. Jeremiah Stamler; (4) Dr. Frederick J. Stare; and (5) Dr. Theodore Cooper. These men possess outstanding credentials (CX 11, 12, 13, 15, 16) too lengthy to set forth in detail herein. They are highly respected in the medical profession and in the scientific community. They each have had substantial experience as medical doctors, professors of medicine, University department heads, and as research directors, specifically in the causes, treatment and prevention of CHD. Dr. Cooper is the Nation's top medical officer, serving as Assistant Secretary for Health, Department of [57] Health, Education and Welfare (Cooper, 1195). Their qualifications as experts on CHD are unchallenged (see CX 11, 12, 13, 15 and 16 for their curriculum vitae).

107. Complaint counsel's expert witnesses testified that the studies introduced in evidence in this proceeding constitute competent and reliable scientific evidence relating ingestion of eggs to CHD (Findings 58-59, *supra*; Blackburn, 214; Connor, 557; Stamler, 789, 813-815; Stare, 1046-47; Cooper, 1210-12), and they relied upon this scientific evidence in forming opinions as to the effect of increasing egg consumption. They concluded that, in their respective opinions, the habitual adding of an egg to the present American diet would increase the risk of CHD across the population (Blackburn, 259-262, 322-323, 380-382, 428; Stamler, 714, 814, 846, 875-877; Cooper, 1325, 1226-1227, 1298; Stare, 1027, 1171; Connor, 475-476, 482, 491-492, 654R-S).

More specifically, Doctors Cooper, Stare and Connor stated that habitually adding an egg to the diet would raise serum cholesterol levels (Cooper, 1226-1227, 1325; Stare, 1027; Connor, 475-476, 482, 530-533), and that elevated serum cholesterol levels are related to an increased risk of CHD (Cooper, 1298; Stare, 1171; Connor, 494, 654R-S).

Dr. Connor testified that lowering serum cholesterol levels would produce a reduction of CHD (Connor, 654Z32).

Respondents' expert witness, Dr. Michael Oliver, testified that there is substantial epidemiological evidence showing saturated fat is implicated in the development of CHD, and that there is a "large body of evidence" that persons who suffer from CHD have higher levels of cholesterol than other people (Oliver, 2151-2152). He also testified that, if one could control cholesterol, cigarette smoking, blood pressure, and increase physical activity, it might be possible to get "some control" over CHD (Oliver, 2125).

108. Doctors Blackburn and Stamler made detailed predictions concerning the effect that adding an egg to the daily American diet would have on the rate of CHD in the United States. Doctors Blackburn's and Stamler's opinions are based on equations generated from metabolic ward studies by the Keys group, CX 78-81, and the Hegsted group, CX 70, and from the Cornfield regression equation (see Finding 75, *supra*). The [58] predictive power of these equations is extremely high, with correlation coefficients which approach a perfect correlation (Stare, 1187-88; Blackburn, 198; CX 70G; CX 81A).

109. Dr. Stamler, for purposes of his prediction, assumed a typical American diet which contains about 600 mg. of cholesterol per day (Stamler, 869) and a given fat composition expressed in percent of calories (CX 195). Further, Dr. Stamler assumed the isocaloric addition of one egg per day, defined as an egg containing 230 mg. of cholesterol (Stamler, 869-870). Given the above assumptions, Dr. Stamler concluded that the addition of one egg per day would increase the mean serum cholesterol level of a population with an average serum cholesterol level of 225 by 2.3 percent, or 5.2 mg. percent, when calculated by the Keys equation or 7.2 percent, or 16.1 mg. percent, when using the Hegsted equation. A cholesterol level of 225 is a reasonable assumption for men aged 30 and over in the United States (Stamler, 872-873; CX 195).

In relating these figures to an estimated increased risk of heart disease, Dr. Stamler stated that the relationship between raised mean serum cholesterol levels and the risk of CHD is not linear — that is, it is not a one to one relationship — but is curvilinear. In other words, the risk of estimated CHD is greater than the estimated increase in mean serum cholesterol levels (Stamler, 874-876).

Dr. Stamler, through the use of the Cornfield equation (Stamler, 873, 875-876), estimated that the 2.3 percent increase in serum cholesterol levels due to the addition of an egg to the daily American diet, as calculated from the Keys formula, would result in an approximately 5.2 percent increase in the risk of CHD across the

population. Using the 7.2 percent increase in mean serum cholesterol levels calculated from the Hegsted equation, Dr. Stamler estimated a 17 percent increase in the risk of CHD in the United States (Stamler, 876-877).

110. Dr. Blackburn, for purposes of prediction, assumed an average daily American diet of 2565 calories, 533 mg. of cholesterol and a given composition of fat expressed in percent calories (CX 184; Blackburn, 250). Dr. Blackburn further assumed two situations: (1) adding daily an egg containing 252 milligrams of cholesterol to the above diet; and (2) isocalorically substituting such an egg for carbohydrates (CX 184; Blackburn, 252-253).

[59] Given the above assumptions, Dr. Blackburn, using the Keys equation from CX 78-81 (Blackburn, 251), determined what effect the addition and isocaloric substitution of an egg to the average American diet would have on a serum cholesterol level of 224 (Blackburn, 252-253). A serum level of 224 is the average for middle-aged, disease-free men in the Diet Heart Study (Blackburn, 250, 252). Dr. Blackburn estimated that the addition of an egg to the American diet would cause a 6.4 mg. percent increase and that the isocaloric substitution of an egg for carbohydrates would cause an 8.1 mg. percent increase in the population's average serum cholesterol level (CX 184; Blackburn, 252-253). The 8.1 mg. percent increase in the population's average serum cholesterol level would be a 3 1/2 percent increase in serum cholesterol levels (Blackburn, 265-266).

Dr. Blackburn, using the Truett-Cornfield regression equation, estimated that a 3 1/2 percent increase in the population's habitual serum cholesterol level would translate into approximately an 8 percent increase in the population's risk of CHD (Blackburn, 266).

E. *There Does Not Exist Competent and Reliable Scientific Evidence Supporting Respondents' Representations*

(1) Respondents' Representation That There Is Absolutely No Competent and Reliable Scientific Evidence That Eating Eggs, Even in Quantity, Increases the Risk of Heart Attacks or Heart Disease

111. The most significant representation by respondents challenged in this proceeding is the representation that there is absolutely no scientific evidence that eating eggs, even in quantity, will increase the risk of a heart attack (CX 2). This representation, in substantially the above form, has been made in other advertisements and promotional bulletins (Findings 32-38, *supra*). Findings 58-110, *supra*, set forth in detail the evidence of record supporting a conclusion that there is a

substantial body of competent and reliable scientific evidence supporting a medical hypothesis that eating eggs increases the risk of a heart attack (see especially Findings 58-59, 99-107, *supra*). [60]

(2) Respondents' Representation That Eating Eggs Does Not Increase the Risk of Heart Attacks or Heart Disease

112. There is not overwhelming competent and reliable scientific evidence supporting respondents' representation (see Findings 39-41, *supra*) that eating eggs does not increase the risk of heart attacks. Complaint counsel's witnesses testified that they know of no such evidence (Blackburn, 311-312; Connor, 563-564; Stamler, 846, 889; Stare, 1051, 1055; Cooper, 1238-39, 1277). The several studies and opinions referred to in respondents' advertising, CX 1-9, do not constitute competent and reliable scientific evidence for the proposition that eating eggs does not increase the risk of heart attacks (Blackburn, 271-279; Connor, 564-569; Stamler, 848-864; Stare, 1052-54, 1056-58, 1067; Cooper, 1238-1249). In fact, as Dr. Blackburn testified, to support respondents' contention that eating eggs does not increase the risk of heart disease would require studies of equal and opposite force from the studies in the record of this proceeding, and some explanation of why this vast disparity exists between the two lines of evidence (Blackburn, 311-312).

(3) Respondents' Representation That Dietary Cholesterol, Including That in Eggs, Decreases the Risk of Heart Attacks or Heart Disease

113. There is no competent and reliable scientific evidence supporting respondents' representation (see Findings 42-43, *supra*) that dietary cholesterol, including that in eggs, decreases the risk of heart disease (Blackburn, 268; Connor, 570; Stamler, 846; Stare, 1055; Cooper, 1252; Oliver, 2153). The several studies and opinions referred to in CX 1-9 do not constitute competent and reliable scientific evidence for the proposition that dietary cholesterol, including that in eggs, decreases the risk of heart disease (Blackburn, 278; Connor, 564; Stare, 1055-57; Cooper, 1252-1253). No witness for respondents stated affirmatively that he agreed with such a proposition, and none referred to any piece of evidence which, in his view, would support such a proposition. In fact, Dr. Oliver, respondents' expert, stated that he knew of no such evidence (Oliver, Tr. 2153). Dr. Connor testified that "* * * the exact opposite is the case" (Connor, 570). [61]

(4) Respondents' Representation That Avoiding Dietary Cholesterol, Including That in Eggs, Increases the Risk of Heart Attacks or Heart Disease

114. There is no competent and reliable scientific evidence supporting respondents' representation (see Finding 44, *supra*) that avoiding dietary cholesterol, including that in eggs, increases the risk of heart disease (Blackburn, 307; Connor, 570; Stare, 1057; Cooper, 1251; Kummerow, 2051; Oliver, 2154). The several studies and opinions referred to in CX 1-9 do not constitute competent and reliable scientific evidence for the proposition that avoiding dietary cholesterol, including that in eggs, increases the risk of heart disease (Blackburn, 273; Connor, 573; Stamler, 863-864; Stare, 1057-1060; Cooper, 1250-1251). Furthermore, no witness for respondents affirmatively stated that he agreed with such a proposition, and none referred to any piece of evidence which in his view would support such a proposition. Dr. Oliver, respondents' expert, stated, "* * * I have not knowledge of such evidence" (Oliver, 2153).

(5) Respondents' Representation That Eating Eggs Does Not Increase the Blood Cholesterol Level in Most People

115. There is no competent and reliable scientific evidence supporting respondents' representation (see Finding 45, *supra*) that eating eggs does not increase the blood cholesterol level in a normal person. The evidence of record supports the exact opposite conclusion — eating eggs does increase the blood cholesterol level in most people (Blackburn, 259-260; Connor, 476-477, 479, 482; Stamler, 864-873; Stare, 1020-21, 1036; Cooper, 1227; Yudkin, 1410-1413, 1474, 1478; Oster, 1910-1911; Oliver, 2101; RX 168). The elements of the egg which have a cholesterol-raising effect are the dietary cholesterol and saturated fat content of the yolk. The elevating effect of egg yolk on serum levels has been repeatedly demonstrated in a large number of studies. This is almost a "universal reaction of man" (Connor, 476). [62]

(6) Respondents' Representation That a Person's Body Mechanisms Prevent the Blood Cholesterol Level from Being Raised or Lowered by the Level of Dietary Cholesterol Intake

116. There is no competent and reliable scientific evidence to support respondents' representation (see Finding 46, *supra*) that a person's body mechanisms prevent his blood cholesterol level from being raised or lowered by the amount of dietary cholesterol intake (Blackburn, 445, 424-425; Connor, 484-487; Stamler, 929-930; Stare,

1060-61; Cooper, 1271-72, 1275; Kummerow, 1061). While the human body constantly produces and eliminates cholesterol, the body does not have the capacity to eliminate excess cholesterol taken in from the diet (Connor, 487; Cooper, 1274). Moreover, even though internal production of cholesterol may be reduced when dietary cholesterol is increased, and vice versa, the increase or decrease in internal production of cholesterol will not be necessarily directly proportional to the decrease or increase of dietary cholesterol intake (Kummerow, 2061). Furthermore, no witness affirmatively stated that he agreed with the proposition that a person's body mechanisms prevent the blood cholesterol level from being raised or lowered by dietary cholesterol intake. As indicated previously (Finding 115, *supra*), dietary cholesterol influences the cholesterol serum level of man. Respondents' representation that the body will eliminate "just about" the same amount of cholesterol as that eaten may be literally true, but it is nevertheless misleading and deceptive for the reason that the clear implication of the total representation is that a person's cholesterol serum level is prevented from being raised or lowered by this elimination process and thereby dietary cholesterol does not affect serum level. This total representation is not true (Finding 115, *supra*).

(7) Respondents' Representation That Dietary Cholesterol,
Including That in Eggs, Is Needed by the Body for Building
Sex Hormones, for Transmitting Nerve Impulses and for
Maintaining Life in Cells

117. There is no competent and reliable scientific evidence to support respondents' representation (see Finding 47, *supra*) that dietary cholesterol, including that in eggs, [63] is needed by the body for building sex hormones, for transmitting nerve impulses and for maintaining life in cells (Blackburn, 422, 426-427; Connor, 586, 588; Stare, 1064; Cooper, 1276). In fact, while cholesterol is important to each of these functions, the cholesterol produced in the body is ample to fulfill these needs, and dietary cholesterol is not needed to supplement the internal cholesterol production (Blackburn, 422, 426-427; Connor, 586). Respondents' witnesses each stated that dietary cholesterol is not an essential nutrient (Yudkin, 1457, 1473; Oster, 1873; Kummerow, 2050-2051; Oliver, 2154).

VI. NO REASONABLE BASIS EXISTED AT THE TIME THE
RESPONDENTS MADE THE ADVERTISING REPRESENTATIONS
CHALLENGED IN PARAGRAPH SEVEN OF THE COMPLAINT

118. Respondents had no reasonable basis for making the represen-

tation that eating eggs does not increase the risk of heart attacks and heart disease at the time the representation was first made (Blackburn, 312; Connor, 578; Stamler, 889; Stare, 1064; Cooper, 1278). The substantiation necessary to form a reasonable basis for the representation would be the existence of a consistent body of competent and reliable scientific evidence indicating that eating eggs does not increase the risk of CHD. Such evidence should come from each of the various disciplines of medical science and be of the same caliber of design, analysis and interpretation as the substantial existing body of evidence which supports the opposite conclusion — that eating eggs does increase the serum cholesterol level of most people and that the serum cholesterol level is related to an increase in risk of CHD. The substantiating data would also have to offer some rational explanation for the discrepancy of results between the claimed substantiating evidence and the existing body of evidence (Blackburn, 311-312; Connor, 578-579; Stamler, 887-890; Stare, 1063; Cooper, 1277-78; Finding 112, *supra*).

119. Respondents had no reasonable basis for making the representations that dietary cholesterol, including that in eggs, decreases the risk of heart attacks and heart disease, or that avoiding dietary cholesterol, including that in eggs, increases the risk [64] of heart attacks and heart disease at the time the representations were first made (Blackburn, 312-313; Connor, 579; Stare, 1064; Cooper, 1278). The substantiation necessary to form a reasonable basis for these representations would be a body of competent and reliable scientific evidence from a variety of disciplines showing that dietary cholesterol, including that in eggs, decreases the risk of heart disease and that avoiding dietary cholesterol, including that in eggs, increases the risk of CHD. Such body of evidence should be of equal weight to the existing evidence and explain the differences in results from the current body of evidence (Blackburn, 312; Connor, 579; Stare, 1063-64; Cooper, 1277-78; Findings 113, 114, *supra*).

Furthermore, respondents admitted in their answer that they “have insufficient knowledge either to admit or deny” the allegations of Paragraphs Six c. and Six d. of the complaint (Answer, p. 3). The two allegations in question state that there is no competent and reliable scientific evidence that dietary cholesterol, including that in eggs, decreases the risk of heart disease and that avoiding dietary cholesterol, including that in eggs, increases the risk of heart disease (Complaint, Par. Six c., Six d.). Thus, respondents are in effect admitting that they did not possess and rely on a reasonable basis for their advertising representations contained in Paragraphs Seven b. and

Seven c. of the complaint at the time of the first dissemination of the challenged advertisements.

VII. RESPONDENTS' CONTENTIONS WITH RESPECT TO THE SCIENTIFIC EVIDENCE

120. Respondents contend that the statement that there is no scientific evidence that eating eggs increases the risk of heart attack is synonymous with the statement that there is no scientific evidence that eating eggs *causes* a heart attack (RPF 18, p. 13). Accordingly, respondents directed questions to the expert witnesses in this proceeding to establish whether the cause of heart attacks, or atherogenesis, or atherosclerosis, is known. It was generally conceded that the *cause* of atherosclerosis is not know, *i.e.*, not proven or established in fact. Some of this testimony is set out in respondents' memorandum in support of their proposed findings (RM, pp. 56-57, 60-63; but see Connor, 608; Blackburn, 336). Dr. Stare testified: [65]

Is there scientific evidence that eating eggs per se causes heart disease? I would say no. [Stare, 1036.]

* * * * *

Q. Can you assure the man who decreases his intake of saturated fatty acid and dietary cholesterol that he will live longer?

A. No.

Q. Can you assure him that he wouldn't die of coronary heart disease?

A. No. (Stare, 1107-1108.)

Dr. Cooper testified:

Q. Doctor, it is a fact, I think, isn't it, that the cause of atherogenesis is still in this year of Our Lord, unknown?

A. Correct. [Cooper, 1330.]

* * * * *

Q. Can you assure Americans that if they alter their diets, they will avoid coronary heart disease?

A. No. [Cooper, 1332.]

* * * * *

Q. Doctor, you would agree, would you not, that it is not known at the present time whether diet modification will reduce CHD mortality in any way whatsoever?

A. It is not proven.

Q. It is not known, is it, Doctor?

A. It is not known. (Cooper, 1323.)

This testimony, however, cannot be construed as establishing as a fact that no scientific evidence exists which supports a medical

hypothesis that diet is causally related to coronary heart disease. Rather, the proper conclusion to be drawn from this testimony, and other evidence of record, is as stated by the Inter-Society Commission for Heart Disease Resources (Finding 102, *supra*): [66]

Converging lines of epidemiological, clinical and experimental evidence, both animal and human, support the judgment that the relationship between the risk factors, particularly the major risk factors — i.e., hypercholesterolemia, cigarette smoking, hypertension — and the development of coronary heart disease is probably causal. This should not be interpreted as implying that the evidence is conclusive. (CX 18Z9; Emphasis in original.)

The testimony relied upon by respondents is an expression of opinion by the witnesses that the scientific evidence as to the causes of coronary heart disease is not conclusive, which is consistent with the Inter-Society Commission's conclusion. Further, other testimony in the record establishes that in medicine, one seldom has conclusive proof (Stamler, 977-978; Cooper, 1207, 1294; Connor, 599, 654Q; Blackburn, 310-311, 332). As stated by respondents' expert, Dr. Oliver:

Obviously, "absolute evidence" would be a one-to-one relationship, which exists very seldom in scientific work. (Oliver, 2136; see also Connor, 654Q.)

Further, exact proof of the diet-heart hypothesis is not practicable (Stamler, 873, 889-890; Connor, 578, 599, 654Q; Blackburn, 332-333, 335-336, 365-366, 407).

120. Respondents also take the position that approximately 70 million Americans believe the case against cholesterol and eggs is proven. This belief on the part of Americans is based on a Gallup survey introduced in evidence by respondents (RX 170, p. 7; Crespi, 2183-84, 2187-88). NCEN seeks to justify its views on cholesterol as being in the public interest on the basis of correcting the public misconception (RPF 12, p. 9). To correct a public misconception, if one exists, by creating another misconception, would not be in the public interest.

[67] 121. Respondents also state that no demonstrable or even arguable harm will likely result from dissemination of NCEN's views on cholesterol (RPF 13, p. 9). Respondents' representations concern matters of public health and safety requiring precise accuracy in any product claims. Further, a significant percentage of the American population, up to 10 percent, suffers from hypercholesterolemia (CX 17Z4; RX 8G; Oliver, 2142-44, 2157; Finding 127, *infra*) and could be endangered by respondents' representations.

VIII. WEINER PARTICIPATED IN THE DEVELOPMENT OF THE
CHALLENGED ADVERTISEMENTS AND KNEW OR SHOULD HAVE
KNOWN THAT THE ADVERTISEMENTS WERE FALSE,
MISLEADING OR DECEPTIVE

A. *Weiner Participated in the Development of the
Advertisements*

122. Weiner, as NCEN's advertising and public relations agency, participated actively in the creation, development, and dissemination of the challenged advertisements from the beginning of the NCEN promotional campaign (CX 177-0, Ad. 64; CX 142B, 143A, 144A).

Weiner devised and recommended to NCEN its whole promotional campaign. In particular, Weiner advised NCEN that "* * * the egg industry is under severe attack and has a major problem [concerning cholesterol]," particularly from promotion of products competitive to eggs (CX 120A). Weiner's proposed strategy in response to the egg industry's problem involved a combination of advertising and public relations "debunking the opposition" and stressing "a totally positive approach" (CX 120A). Weiner recommended a quick and attention-getting approach (CX 120A).

Weiner suggested a booklet as a "first priority" (CX 120A) and also strongly recommended advertising over public relations publicity (CX 120B). Weiner further recommended large-size advertisements in *The Wall Street Journal* and *The New York Times*, with an advertising schedule in such newspapers which would provide "* * * maximum readership and impact * * *" (CX 120B).

[68] 123. Later, at the time the challenged advertisements were created, prepared and disseminated, Weiner provided, among others, the following services to NCEN:

- a. offered general advice concerning methods to allay public misconceptions regarding cholesterol engendered, among others, by misleading advertising for low-or no-cholesterol products (CX 177S-T, Ad. 81);
- b. formulated plans for publishing NCEN's opinions on the cholesterol question (CX 177S-T, Ad. 81);
- c. prepared the layouts and copy for the newspaper and booklet advertisements, CX 1-8 (CX 177S-T, Ad. 81; CX 143A, 144A);
- d. originated ideas for publication of NCEN's opinions (CX 177S-T, Ad. 81; CX 199A, 129A, 143A, 144A, 156A, 154A, 155B);
- e. participated in the preparation of and put into final form the advertisements, CX 1-8 and the display identified as CX 10 (CX 177T, Ad. 82);

- f. distributed news and press releases announcing the advertisements, such as CX 142, 143 and 144 (CX 177Z3, Ad. 79; CX 130B);
- g. placed CX 1-6 in the newspapers listed in Finding 24, *supra* (CX 177T, Ad. 83);
- h. promoted NCEN's advertising booklet, CX 7 or 8, by sending letters, with an enclosed booklet and instructions on how more copies may be obtained, to Action Line Editors around the country (CX 177Z2, Ad. 77; CX 130B, 122);
- i. encouraged, coordinated and provided information to egg industry groups about placement of copies of CX 1-6 in local newspapers around the United States (CX 94, 98; CX 177T, Ad. 83); and
- j. participated in the production of the NCEN advertisements, identified as CX 175 and 176, run in April 1975 (Wentink, 1800).

[69] 124. Jerome Gillman, Vice-President of Weiner and NCEN's account supervisor (CX 177S, Ad. 80) also planned appearances for Dr. Kurt Oster, NCEN's egg industry spokesman (CX 109A-C, 110A-C and 113A-B) and coached Dr. Oster in order to improve his presentation in interviews and public appearances (CX 107 and 108).

*B. Weiner Knew or Should Have Known That the
Challenged Advertisements Were False, Misleading or
Deceptive*

125. Weiner specializes in health and education projects (CX 120B). Furthermore, Richard Weiner, the President and Chief Executive Officer (CX 130A) has a Master's Degree in genetics and has published in science journals (CX 120B). He has also been a consultant to the National Institutes of Health and other agencies (CX 120B-C).

Governmental and private health organizations, such as the National Heart and Lung Institute, the Inter-Society Commission for Heart Disease Resources, the American Medical Association and the American Heart Association, have publicly disseminated reports which recommended that the public lower its intake of dietary cholesterol and saturated fats because of existing scientific evidence showing the relationship between diet and risk of CHD (Findings 101-105, *supra*).

126. Weiner was aware of at least one of these health organization reports and the views of other medical professionals on the subject of the relationship of diet to CHD. In a memorandum to NCEN dated June 4, 1974, Jerome Gillman admitted he was aware of the report of the Inter-Society Commission for Heart Disease Resources, CX 18 (CX 166A). In the same memorandum, Mr. Gillman also admitted knowledge that some medical professionals urge that egg consumption be limited. Referring to articles by Dr. Lawrence Lamb, Gillman stated:

It will be useful to you for background information and to note that, while he's not as anti-egg as Mayer, he [Dr. Lamb] does conclude with "limit yolk consumption." He [Dr. Lamb] quotes the Inter-Society Commission's recommendations. But, you'll notice that he's [70] very much more on balance than Dr. Mayer, and Volume 1, No. 2, contains useful background information which, chosen carefully could be quoted. (I would not, however, have him appear in our behalf!!). (CX 166A.)

Moreover, Weiner was aware of the medical literature on the role of diet in CHD, since one of Weiner's functions is to survey the medical and scientific literature for the purpose of selecting out those studies which would be of interest to NCEN's Commissioners (Wentink, 1746; Hecht, 1700; Pickler, 1721).

127. NCEN was also aware that medical and scientific researchers recommend low cholesterol diets, in particular diets with limited egg consumption (Smith, 1517). NCEN was also aware of the conclusions and recommendations of the Inter-Society Commission for Heart Disease Resources, CX 18. The NCEN Commissioners testified that they engaged in reading continuously and widely both scientific and lay publications on CHD, and they talked with experts in the field (RPF 4, pp. 2-4; CX 166A, H-I; CX 106; Smith, 1516-17, 1657, 1660; Hecht, 1677). L. A. Wilhelm indicated in letters written in 1971 and 1974, respectively, that he had full knowledge of policy statements put forth by the American Heart Association (CX 21 is the most recent statement); and by the American Medical Association (CX 110A-B, 106). Moreover, NCEN knew that at least a substantial number of people, approximately 10 percent of the population, should not eat eggs, or should limit their egg consumption, due to metabolic and other problems associated with the ingestion of dietary cholesterol (RX 85, p. 43; CX 101C, 112B).

CONCLUSIONS

A. NCEN IS A CORPORATION WITHIN THE MEANING OF SECTION 4 OF THE FEDERAL TRADE COMMISSION ACT

NCEN argues that Section 4 of the Federal Trade Commission Act applies only to a corporation operated for its own profit, and that complaint counsel have not met this burden of establishing by a preponderance of reliable, probative and substantial evidence that NCEN is organized and operated "for the direct pecuniary benefit of its five members" (RM, p. 2).

[71] Section 4 of the Federal Trade Commission Act states:

"Corporation" shall be deemed to include any * * * association, incorporated or unincorporated, without shares of capital or capital stock or certificates of interest, except partnerships, which is organized to carry on business for its own profit or that of its members.

The parties agree on the significant case construing Section 4, *Community Blood Bank of the Kansas City Area v. F.T.C.*, 405 F.2d 1011 (8th Cir. 1969); however, there the agreement ends.

In *Community Blood Bank*, the Eighth Circuit Court of Appeals stated that the test to be applied in determining whether a corporation without shares of stock is exempt is whether "it engages in business for profit within the traditional and generally accepted meaning of that word" (*Id.* at 1017). The Court concluded that the Commission lacks jurisdiction over nonprofit corporations "* * * which are organized for and actually engaged in business for only charitable purposes, and do not derive any 'profit' for themselves or their members * * *," but is vested with jurisdiction over nonprofit corporations without shares of capital, such as trade associations, which "carry on business for [their] own profit or that of [their] members * * *" (*Id.* at 1022). The Court made it clear that Congress:

* * * did not intend to provide a blanket exclusion of all nonprofit corporations, for it was also aware that corporations ostensibly organized not-for-profit, such as trade associations, were merely vehicles through which a pecuniary profit could be realized for themselves as their members. (*Id.* at 1017.)

In a later proceeding, *Ohio Christian College, et al.*, Dkt. No. 8820 (May 19, 1972), 80 F.T.C. 815,⁴ the [72] Commission commented upon the facts in *Community Blood Bank* which led to the conclusion that the respondents in that case were exempt from Commission jurisdiction. The Commission pointed out that no part of the funds received by respondents had ever been distributed or inured to the benefit of any member, officer or director; all receipts were used strictly as authorized by law and their articles of incorporation; and all funds originated from gifts, loans and grants, replacement of blood donations and payment of fees. The officials in control of respondents were "public-spirited volunteers and derived no personal profit, benefit or advantages in their individual occupation as businessmen, lawyers, doctors, labor leaders or clergymen from their participation in the activities of the community-wide blood bank program. Their activities at all times were directed toward promoting a community-sponsored program in the public interest and at no time were infected with commercial interest." *Id.* at 845-846.

The Commission also stated in *Ohio Christian College* that "Section 4 operates as a shield for legitimate, bona fide eleemosynary institutions to protect them from unwarranted government interference." *Id.* at

⁴ In *Ohio Christian College*, the Commission determined that an individual respondent used the guise of a nonprofit corporation to further his own finance and comfort, and thus pierced the corporate veil. Failure to do so, the Commission reasoned, would elevate form over substance to an unreasonable degree, and lay the path to evasion of the Act wide open. 80 F.T.C. at 847, 849.

849. Respondents' activities in this proceeding must be closely scrutinized in light of the above controlling principles.

The undersigned has concluded that the purpose of NCEN is to further the financial interests of the egg industry. NCEN was created by the egg industry in response to anti-cholesterol attacks on eggs which had resulted in severe economic loss to the industry (Finding 20, *supra*). In a letter dated December 3, 1971, Dr. L. A. Wilhelm, NCEN's secretary-treasurer from its inception until his death in November 1974, stated that the egg industry was losing several million dollars per week due to anti-cholesterol attacks on eggs (CX 101A), and that "it is no wonder the egg industry, under this dire [economic] stress, created a National Commission on Egg Nutrition" (CX 101B).

Weiner, NCEN's advertising and public relations firm, recognized that the egg industry was "under severe attack and has a major problem and that a public information program on the health aspects of eggs was absolutely necessary" (CX 120A). Weiner therefore recommended a "quick and attention-getting approach," [73] with a booklet written for the layman as a first priority (CX 120A).

The minutes of the January 28, 1974 meeting of the American Egg Board's (AEB's) Board of Directors clearly show that it was believed that "[the] egg industry had attracted the attention it desired through NCEN action" (CX 198A).

NCEN, in an early press release, stated that the "Egg Industry [intends] To Strike Back At Cholesterol Opponents In Ad Campaign." The press release further stated:

Egg producers of the United States will strike back at those who have urged limited consumption of eggs because of their cholesterol content in an advertising and public relations campaign. (CX 142A.)

NCEN placed newspaper advertisements, distributed booklets, and hired a medical consultant to present the egg industry's point of view (Findings 22-30, *supra*). The advertisements and promotional materials carried clear messages that eggs are an excellent food product, are highly nutritious, are completely safe even when eaten in quantity, are needed by the body for normal functioning, and that it may even be hazardous to avoid eggs (Finding 21, *supra*).

The record fully and clearly shows that participants in NCEN are individuals and groups with a commercial interest in the egg industry. These groups directly influence the policies and activities of NCEN and virtually all of NCEN's funding comes from egg industry groups. Although NCEN's membership consists of a small, self-perpetuating board of directors (Commissioners) who serve in their individual capacity, the record is clear that these individuals represent five egg

industry trade associations: (1) American Egg Board (AEB); (2) Northeastern Poultry Producers Council (NEPPCO); (3) Pacific Egg and Poultry Association (PEPA); (4) Southeastern Poultry and Egg Association (SEPA); and (5) United Egg Producers (UEP). It is conceded that these organizations are each made up of individuals and firms engaged in commercial businesses relating to the egg industry, including associations of egg producers and distributors, as well as individual egg producers (Findings 4-5, *supra*).

[74] As representatives of the five member organizations, the Commissioners reported back matters concerning NCEN to their respective organizations, and the determinations and instructions of the member organizations were followed by their respective representatives (Findings 14, 18, *supra*).

Virtually all NCEN's funding, from its inception, has been provided by these member organizations. More specifically, a great preponderance of NCEN's funding has come from AEB, including substantially all of NCEN's 1974 and 1975 budgets. NCEN typically prepared itemized budgets which were submitted to and approved by AEB (Finding 15, *supra*). AEB also provided NCEN, without recompense, all of NCEN's staff, housing and other assistance of considerable value (Finding 16, *supra*). AEB also paid for specific NCEN advertising projects, as well as litigation expenses (Finding 17, *supra*).

NCEN contends the NCEN Commissioners served as individuals, and not trade group representatives, and the NCEN funding was without taint or obligation. It is further argued that the Commissioners joined NCEN to find out and disseminate the truth on the cholesterol question in response to humanitarian, social and religious feelings (RM, pp. 12-22). NCEN further argues that the Commissioners did not derive personal benefit from their NCEN activities, or engage in activities which carried a promise of personal gain (RM, pp. 22-28).

Notwithstanding NCEN's claim of good motives by its Commissioners and the lack of direct pecuniary benefits, the record is clear that NCEN was organized to carry on business for the benefit (profit) of its members — the egg industry — and not for the personal, eleemosynary purposes of the Commissioners. The contention that NCEN was established, financed and operated for the sole purpose of enabling five individuals to present their personal views on cholesterol and CHD taxes credulity.

NCEN contends that eggs are a generic, undifferentiated, unique product produced by a nearly perfectly competitive industry, and that this precludes commercial gain (RM, pp. 26-28). This contention is also without merit. NCEN's promotional activities were strongly pro-egg; they were designed to overcome consumer resistance to eggs and

increase consumption by dispelling the cholesterol "bugaboo" or "mystery" (CX 1). Generic advertising is quite common [75] and those who engage in such advertising expect a favorable impact on the advertised product (Finding 21, *supra*).

Further, as respondents' own witness stated, it is clear that the purpose of advertising is to sell products (Schrader, 2266), and people who pay for advertising of generic agricultural products intend on getting their money out of such advertisements in some fashion (Schrader, 2279-2280).

As observed by the Court in *Community Blood Bank, supra*, at 1017, Congress did not intend to provide a blanket exclusion for all nonprofit corporations, for it was aware that corporations ostensibly organized not-for-profit, such as trade associations, were mere vehicles through which a pecuniary profit could be realized for themselves or their members. In this proceeding, joint action was undertaken by the various segments of the egg industry to combat anti-egg publicity and reverse declining sales for the economic advantage of all. Thus, it is concluded that NCEN was organized for the profit of its members, within the traditional and generally accepted meaning of that word. To permit an industry to create a non-profit corporation as an alter ego or convenient vehicle for purposes of evading Commission jurisdiction would create a substantial loophole for law violators.

B. RESPONDENTS' ADVERTISEMENTS ARE FALSE, MISLEADING
AND DECEPTIVE

(1) *The Challenged Advertisements Are Part of a Promotional
Campaign To Promote the Sale of Eggs*

The advertisements challenged in this proceeding are part of a promotional campaign for the purpose of inducing the sale of eggs. The campaign was developed by NCEN and its agent, Weiner, to combat and strike back at adverse publicity concerning eggs caused in part by the statements of health organizations and the medical profession recommending decreased egg consumption because of cholesterol and its possible link to coronary heart disease, and by the advertising of companies which manufacture and sell products competitive to eggs, such as cholesterol-free egg substitutes and other breakfast foods. The egg industry believed that the anti-cholesterol and anti-egg [76] publicity has caused severe economic loss to the industry through a decline in sales and per capita consumption of eggs (Findings 19-30, 12-18, *supra*).

While the advertisements and booklets disseminated by respondents carried information concerning cholesterol, it is clear that the thrust of

the advertisements and booklets was to malign the existing medical recommendations concerning eggs and cholesterol and to promote the benefits and safety of eggs as a food product. The advertisement carried a consumer-oriented theme that eggs are both safe and necessary. The incompleteness and falsity of the cholesterol message lends support to this conclusion since it appears the materials were designed to convey a "quick and attention-getting approach" to the consumer (120A).

The promotional campaign included the dissemination of advertisements published in newspapers, CX 1-6, 171-173, 175-176; two versions of a booklet sent through the mail, CX 7-8; and an egg carton insert, CX 9. The advertisements were widely disseminated, including publication of CX 1-3, 6, 171-173 and 176 in such nationally distributed newspapers as *The New York Times*, *The Wall Street Journal* and the *Chicago Tribune*. At least 165,000 copies of the booklets, CX 7 and 8, were distributed as of September 1974. In addition to disseminating the challenged advertisements directly, NCEN and Weiner encouraged other members of the egg industry to reproduce the advertisements in local or regional newspapers to obtain additional advertising coverage (Findings 22-28, *supra*).

The promotional campaign fostered by NCEN and Weiner also included an egg industry medical spokesman, Dr. Kurt Oster, to promote the industry's views concerning the role of eggs in heart disease. The industry spokesman's activities included a ten-city tour, with appearances on local television and radio programs and interviews in local newspapers (Finding 29, *supra*).

(2) *The Representations Made by Respondents' Advertisements*

The net impression of most of the challenged advertisements in promoting the goodness and safety of eggs is that there is absolutely no scientific evidence [77] of any health hazard from eating eggs, or from dietary cholesterol, in regard to coronary heart disease. The advertisements not only claim that there is no evidence that eating eggs will contribute to heart disease, but that dietary cholesterol, such as that in eggs, is necessary for normal body functions and that avoiding cholesterol may be harmful. These overall claims concerning the safety and necessity of eggs are conveyed through a number of more specific representations. The overall impression conveyed by respondents' advertisements is important in determining the commercial purpose behind the promotional campaign. Each advertisement, however, has been considered separately in determining the net impression the advertisement is likely to have on the general populace, since the

advertisements appeared separately and were viewed separately by the public.

The basic claim, that there is no scientific evidence whatsoever that eating eggs, even in quantity, increases the risk of heart disease, is presented in all the advertisements, and respondents have admitted making this representation. Some of the advertisements, CX 1-3, 7, 171-173, and 175, expressly state that there is "no scientific evidence" or "no evidence" of such a proposition; others, CX 4-6, 8, and 176, use the term "no scientific proof." However, there is no substantive difference between the two terms "scientific evidence" and "scientific proof" as consumers lack sophistication about technical distinctions between the words "evidence" and "proof" and will interpret both to mean, in the context of the challenged advertisements, that there is no evidence of a relationship between eggs and heart disease (Findings 32-38, *supra*).

The fact that the advertisements do not expressly describe the evidence as "competent and reliable," as alleged in the complaint, does not mean that this representation is not made. Consumers will perceive in any discussion of purported scientific evidence that it is of a competent and reliable nature (Finding 32, *supra*). This is especially so where the claim of presence or absence of evidence is made in the context of references to specific studies or scientific opinions of well-known medical experts within the confines of the entire advertisement (CX 1, 2, 4, 5, 7-9, 171-173, 175-176).

[78] Respondents also made the representation that there is competent and reliable scientific evidence that eating eggs does not increase the risk of heart disease (Findings 39-41, *supra*); that there is competent and reliable scientific evidence that dietary cholesterol, including that in eggs, decreases the risk of heart disease (Findings 42-43, *supra*); that there is competent and reliable scientific evidence that avoiding dietary cholesterol, including that in eggs, increases the risk of heart disease (Finding 44, *supra*); that eating eggs does not increase the blood cholesterol level of a normal person (Finding 45, *supra*); that a person's blood cholesterol level is prevented from being raised or lowered because the body increases its manufacture of cholesterol in an amount equal to a decrease in dietary cholesterol intake and eliminates the same amount of cholesterol as that eaten (Finding 46, *supra*); and that dietary cholesterol is needed by the body for building sex hormones, for transmitting nerve impulses, and for maintaining life in cells (Finding 47, *supra*).

In addition to the representations concerning the existence or absence of scientific evidence relating eggs to heart disease and the necessity for dietary cholesterol, the advertisements also make the underlying representations that respondents had a reasonable basis for

making the representations that eating eggs does not increase the risk of heart attacks or heart disease; that dietary cholesterol, including that in eggs, decreases the risk of heart attacks or heart disease; and that avoiding dietary cholesterol, including that in eggs, increases the risk of heart disease. These latter representations are necessarily implied because, in most NCEN advertisements, the aforesaid representations appear in conjunction with references to named medical experts and to medical articles (Finding 48, *supra*). Consumers would believe that scientific representations concerning a food product would not be made unless a reasonable basis for the representations existed at the time the representation was made.

The name, National Commission on Egg Nutrition, itself, is misleading in the context of respondents' advertisements, and it reinforces the representations made by respondents. By choosing a name which appears to describe an independent, impartial health organization and by making statements in some of the advertisements that NCEN is concerned with health and good nutrition, just like medical and nutritional authorities, NCEN and [79] Weiner have created an aura of reliability and impartiality in their advertisements which prevents consumers from realistically evaluating the advertising with knowledge that the sponsor is an organization of egg producers (Findings 49-50, *supra*).

(3) *Respondents' Representations Are False, Misleading and Deceptive*

There exists a substantial body of competent and reliable scientific evidence that eating eggs increases the risk of heart attacks or heart disease. The scientific evidence is from several disciplines, generally described as the clinical-pathological, the experimental and the epidemiological disciplines (Finding 58, *supra*). This evidence has been set forth in detail in the Findings of Fact (see Findings 60-100, *supra*). This evidence shows, among other things, that eating eggs directly affects the serum cholesterol levels of most people; that the serum cholesterol level is directly and clearly related to the risk of CHD; and that there is a direct relationship between the level of dietary cholesterol and saturated fat in diets and the development of CHD. This evidence is systematic, consistent, strong and congruent (see Blackburn, 246-247).

The above evidence is of a competent and reliable scientific nature (Findings 99-100, *supra*). The reliability, competency and strength of this evidence is endorsed by reputable governmental and private scientific organizations, such as the Inter-Society Commission for Heart Disease Resources, the National Heart and Lung Institute, the

American Medical Association, the American Heart Association, and the National Academy of Sciences — National Research Council. These organizations have reviewed the evidence concerning dietary cholesterol, saturated fat, serum cholesterol levels and coronary heart disease and have relied upon such evidence in making dietary recommendations to the public (Findings 100-105, *supra*). These recommendations all specify that, as a prudent preventive measure against coronary heart disease, Americans should substantially reduce their dietary cholesterol and saturated fat intake.⁵

[80] Respondents take the position that the government has not established the falsity of NCEN's statement that there is no scientific evidence that eating eggs increases the risk of heart disease since some experts believe that there is no such evidence (RPF 11; RM, p. 81). Respondents further contend that the issue to be resolved — the representation NCEN actually made — is whether there is scientific evidence that eating eggs actually causes heart disease (RM, pp. 84-85).

Respondents, in effect, are attempting to create a "straw" issue. Respondents' representation with which this proceeding is primarily concerned is that there is no reliable and competent scientific evidence that eating eggs, even in quantity, increases the risk of heart disease. The record in this proceeding is unequivocal; there exists a substantial body of competent and reliable scientific evidence from which scientific and medical experts have formulated a diet-heart hypothesis which would include the hypothesis that eating eggs increases the risk of heart disease. The fact that some scientists do not draw the same inferences from the existing scientific evidence does not negate the fact the evidence *exists*.

Evidence supporting the diet-heart hypothesis is not conclusive; it does not establish in fact that high cholesterol levels cause heart attacks (Finding 119, *supra*). This lack of conclusiveness of the evidence, however, is no defense to the complaint allegations. One seldom has the final answer in medicine. The final proof or answer is very often difficult, if not impossible, to obtain. The fact that the final answer on coronary heart disease is not yet established does not mean that medical science cannot base prudent judgments on the existing evidence.

Respondents' representations in this proceeding were not that some scientists do not believe the existing scientific evidence or that some scientists draw different conclusions from the evidence, or that such evidence is not conclusive; respondents have misrepresented the

⁵ The Report of the Advisory Panel of the Committee on Medical Aspects of Food Policy (Nutrition) on Diet in relation to Cardiovascular and Cerebrovascular Disease (1974), United Kingdom, recommended a reduction in saturated fat in the diet, although the Panel found no evidence which relates the number of eggs consumed to a risk of coronary heart disease (RX 112, pp. 15, 23).

existence of the evidence. This is a false and misleading representation based on the record of this proceeding.

[81] To the extent respondents argue that their representation is literally true because they are merely disseminating the view of scientists who do not believe the existing scientific evidence supports an inference that eating eggs increases the risk of heart disease (this is most definitely a minority view⁶), their representations are nevertheless false and misleading for failure to disclose to the public the material fact that a substantial body of scientific and medical experts support an opposite view. Since a substantial body of scientists and medical experts believe such evidence exists, respondents cannot truthfully represent none exists.

Respondents' other representations concerning the effects of eggs on heart disease and the body's need for cholesterol are likewise false and misleading. No competent and reliable scientific evidence exists to support such representations; in fact, the scientific evidence that does exist is opposite to respondents' representations (Findings 112-117, *supra*). Most of respondents' advertisements carry references to scientific articles, or to articles from publications by medical doctors or scientists. Complaint counsel's expert witnesses testified that the scientific studies referenced in respondents' advertisements were either not relevant to the diet-heart hypothesis, or did not in any way refer to or contradict the diet-heart hypothesis (Blackburn, 275-276; Connor, 565-569, 654Z18; Stamler, 850, 853; Stare, 1052-54; Cooper, 1239-1242). Complaint counsel's expert witnesses also made clear that articles or publications by medical doctors or scientists were mere expressions of opinion, sometimes quoted out of [82] context by respondents, and that such articles or publications did not constitute competent and reliable scientific evidence because they were not based on experiments or studies conducted with scientific methodology whose results were available for peer review and evaluation and possible repetition by others (Blackburn, 271-278; Connor, 564; Stamler, 850-854, 864, 926, 976; Stare, 1055-58; Cooper, 1253).

Further, respondents had no reasonable basis for making the representations challenged in Paragraph Seven of the complaint at the time such representations were first made (Findings 118-119, *supra*).

The making of an affirmative product claim without having and

⁶ Dr. Stare, a professor of nutrition and Chairman of the Department of Nutrition at Harvard University, and also a highly regarded researcher on the relationship of diet to coronary heart disease, testified there are "very few" reputable scientists who do not accept the diet-heart hypothesis. Dr. Connor, an outstanding research scientist and cardiologist called by complaint counsel, testified that "there are a few" scientists who do not accept the hypothesis (Connor, 601). Dr. Oliver, respondents' expert witness and likewise an outstanding research scientist and cardiologist, testified that he would "totally bar" eggs for patients having a lipid abnormality, and "would give general advice" to reduce egg intake along with the reduction of total saturated fat (Oliver, 2157). Highly respected governmental and private scientific bodies all support the diet-heart hypothesis (Findings 101-105, *supra*).

relying on a reasonable basis for that claim is an unfair act or practice in violation of the Federal Trade Commission Act. *Pfizer, Inc.*, 81 F.T.C. 23 at 62, 67 (1972); *The Firestone Tire & Rubber Co.*, 81 F.T.C. 398 at 463 (1972), *aff'd*, 481 F.2d 246 (6th Cir. 1973), *cert. denied*, 414 U.S. 1112 (1973); *In re National Dynamics Corporation, et al.*, 82 F.T.C. 488 at 549 (1973). The Commission, in *Pfizer* and *Firestone*, stated:

The precise formulation of the "reasonable basis" standard, however, is an issue to be determined at this time on a case-by-case basis. *Pfizer, supra* at 64; see also *Firestone, supra* at 463.

Given the facts of the present case the reasonable basis standard should be quite exacting since the claims directly speak to important health and safety issues. In matters concerning safety,

* * * the Commission has required scrupulous accuracy in advertising claims, for obvious reasons. If consumers are misled or uninformed as to the safety of a product, the consequences may not be limited to monetary loss but personal injury as well. *Firestone, supra* at 456.

Consumers are unable to critically analyze for themselves health and safety claims relating to an extremely complex area of medical science. Therefore, the facts of this case and the public interest demand an exacting [83] and rigorous reasonable basis standard. Based on this standard, there existed at the time of the first dissemination of the challenged advertisements, and there now exists, no reasonable basis for the claims.

Respondents' advertisements identified as CX 171-173 involve a quotation from *Diet And Coronary Heart Disease*, a Report of the Advisory Panel of the Committee on Medical Aspects of Food Policy (Nutrition) on Diet in relation to Cardiovascular and Cerebrovascular Disease (the entire report is in evidence as RX 112). The statements in these advertisements are basically true, although the bold caption of the advertisements restates the report's conclusion in a somewhat questionable manner. It can be argued, also, that the advertisements convey to the public the impression that there is no evidence relating egg ingestion to coronary heart disease, or that the British report is the only evidence or the most significant evidence on the subject of eggs and heart disease.

These advertisements, CX 171-173, do not carry the strong promotional message concerning eggs that the other challenged advertisements convey. The principal thrust of CX 171-173 is information concerning eggs and cholesterol, a matter of public concern. CX 175-176 also seem to fall in the category of advertisements concerned primarily with conveying a message on matters of public

concern, including comment on governmental action. CX 171-173 and CX 175-176 were disseminated subsequent to issuance of the complaint herein, and may warrant First Amendment protection (see discussion, *infra*, pp. 85-88). Accordingly, no finding of a violation of the Federal Trade Commission Act is predicated on these documents.

The authority of the Commission to draw its own inferences from challenged advertisements has been sanctioned repeatedly over the years. *Federal Trade Commission v. Colgate-Palmolive Co.*, 380 U.S. 374, 391-392 (1965); *Carter Products, Inc. v. Federal Trade Commission*, 323 F.2d 523, 528 (5th Cir. 1963); *Merck & Co. v. Federal Trade Commission*, 392 F.2d 921, 925 (6th Cir. 1968); *Kalwajtys v. Federal Trade Commission*, 237 F.2d 654, 656 (7th Cir. 1956), *cert. denied*, 352 U.S. 1025; *Exposition Press, Inc. v. Federal Trade Commission*, 295 F.2d 869, 872 (2d Cir. 1961), *cert. denied*, 370 U.S. 917 (1962); *E. F. Drew & Co. v. Federal Trade Commission*, 235 F.2d 735, 741 [84] (2d Cir. 1956), *cert. denied*, 352 U.S. 969.

The principle was reiterated recently in *Firestone*, Order of September 22, 1972, CCH Trade Reg. Rep., 1970-73 Transfer Binder, ¶20,112 [81 F.T.C. 398]. The Commission there stated:

The law is clear that the Commission's expertise is sufficient and that it need not resort to survey evidence or consumer testimony as to how an advertisement may be perceived by the public or whether they relied upon the ad to their detriment.

The administrative law judge likewise has this authority, subject to Commission review. *Walco Toy Company, Inc.*, Dkt. 8921 (Initial Decision, CCH Trade Reg. Rep. ¶20,511 (1974), Final Order, CCH Trade Reg. Rep. ¶20,654 (1974) [83 F.T.C. 1783].

It is also settled law that a tendency and capacity to deceive are all that is necessary to sustain a violation of Section 5; actual deception is not necessary. *Charles of the Ritz Dist. Corp. v. Federal Trade Commission*, 143 F.2d 676, 680 (2d Cir. 1944); *U.S. Retail Credit Ass'n v. Federal Trade Commission*, 300 F.2d 212, 221 (4th Cir. 1962). The important criterion is not what respondents intend the advertisements to mean, but what they are likely to represent to the public. *P. Lorillard Co. v. Federal Trade Commission*, 186 F.2d 52, 58 (4th Cir. 1950). In determining whether advertisements are or may be deceptive, the Commission must look to the gullible and credulous rather than to the cautious and knowledgeable. *Charles of the Ritz Dist. Corp.*, *supra*; *Exposition Press, Inc. v. Federal Trade Commission*, *supra*. Advertisements which are capable of two or more meanings, one of which is deceptive, are false and misleading. *Rhodes Pharmacal Co. v. Federal Trade Commission*, 208 F.2d 382, 387 (7th Cir. 1953), modified by restating the Commission's Order, 348 U.S. 940 (1955); *Giant Food, Inc.*

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v. *Federal Trade Commission*, 322 F.2d 977, 981 (D.C. Cir. 1963), cert. dismissed, 376 U.S. 967 (1964); *Continental War Corp. v. Federal Trade Commission*, 330 F.2d 475, 477 (2d Cir. 1964). Further evidence that consumers actually have been deceived is not required. *Federal Trade Commission v. Colgate-Palmolive Co.*, 380 U.S. 374, 391-392 (1965). It is likewise firmly settled law that statements that contain less than the whole truth can be deceptive — “To tell less than the whole truth [85] is a well known method of deception. * * *” *P. Lorillard Co. v. Federal Trade Commission*, 186 F.2d 52, 58 (1950); *Tashof v. Federal Trade Commission*, 437 F.2d 707, 714, fn. 37 (D.C. Cir. 1970).

Accordingly, it is concluded that respondents’ advertisements are false, misleading and deceptive.

C. RESPONDENTS’ ADVERTISEMENTS ARE NOT PROTECTED BY THE FIRST AMENDMENT

Respondents contend that, even if NCEN is determined to be within the Commission’s jurisdiction and that one or more of its publications are commercial, the First Amendment would nevertheless bar government regulation of its right to speak and publish (RM, pp. 33-35). Respondents place principal reliance on the recent Supreme Court decision in *Bigelow v. Virginia*, 43 L.W. 4734 (June 16, 1975).

The First Amendment is the cornerstone of the Bill of Rights, protecting against governmental abridgement of freedom of speech or of the press. While these “fundamental personal rights and liberties” and their exercise “lies at the foundation of free government by free men,” *Schneider v. Irvington*, 308 U.S. 147, 161 (1939), the Supreme Court has consistently held that in a proper case these rights may of necessity undergo some restriction where their exercise comes into conflict with other essential public interests of the community. *Adderly v. Florida*, 385 U.S. 39, 47 (1966); *Sheppard v. Maxwell*, 384 U.S. 333, 362-363 (1966); *Breard v. Alexandria*, 341 U.S. 622 (1951); *Pittsburgh Press Co. v. Pittsburgh Commission on Human Relations*, 413 U.S. 376 (1973); *Ginzburg v. United States*, 383 U.S. 463 (1966); *Valentine v. Chrestensen*, 316 U.S. 52 (1942).

As concerns commercial advertising, the Supreme Court, in the *Chrestensen* case, stated that “* * * the Constitution imposes no such restraint on government as respects purely commercial advertising.” *Id.* at 54. However, in the recent *Bigelow* case, the Court made it clear that *Chrestensen* “* * * obviously does not support any sweeping proposition that advertising is unprotected *per se*.” *Bigelow v. Virginia*, 43 L.W. 4737. The [86] Court further stated:

Advertising, like all public expression, may be subject to reasonable regulation that

serves a legitimate public interest (citations omitted). To the extent that commercial activity is subject to regulation, the relationship of speech to that activity may be one factor, among others, to be considered in weighing the First Amendment interest against the governmental interest alleged. Advertising is not thereby stripped of all First Amendment protection. * * *

* * * Regardless of the particular label asserted by the State — whether it calls speech “commercial” or “commercial advertising” or “solicitation” — a court may not escape the task of assessing the First Amendment interest at stake and weighing it against the public interest allegedly served by the regulation. The diverse motives, means, and messages of advertising may make speech “commercial” in widely varying degrees. *Id.* at 4739.

Therefore, the *Bigelow* decision presents no new First Amendment doctrine. It does represent what is perhaps a more distinct and unequivocal statement of the “balancing the interests” test (*Ibid.*) which the court has consistently applied in the past in weighing First Amendment rights. See, e.g., *Lehman v. City of Shaker Heights, et al.*, 418 U.S. 298, 303 (1974) and cases cited there. In past decisions, the court has given consideration to the rights of the speaker and the audience to impart and to receive information; and special weight is attached to religious speech, to speech protesting governmental action, to the publisher of speech as contrasted to the advertiser, whether the challenged activity is lawful or unlawful, the type of media involved (e.g., public conveyances or public airways), and whether the relief sought completely muzzles speech or merely regulates it.⁷

[87] Commercial “speech” has been consistently regulated in the past,⁸ and commercial advertising does not escape regulation “* * * because it has been dressed up as speech, or in other contexts might be recognized as speech.” *Ginzburg v. United States, supra* at 474, n. 17.

It has been concluded that respondents’ publications constitute commercial advertising. The challenged advertisements were developed to combat adverse publicity resulting in economic losses to the egg industry by presenting a “quick and attention-getting approach” ranging from “debunking the opposition to stressing a totally positive

⁷ In a recent decision by a three-judge district court, *Anderson, Clayton & Co., et al. v. Washington State Department of Agriculture, et al.* (D.C. W.D. Wash., October 29, 1975), the court, in weighing a challenge to a State statute prohibiting the use of dairy terms in the advertising of oleomargarine, held the statute unconstitutional since the proscriptions of the statute are more drastic and unreasonable than necessary to meet the legitimate interests of the State (Opinion of the Court, page 9).

⁸ *Valentine v. Christensen*, 316 U.S. 52 (1941); *Pittsburgh Press v. Pittsburgh Human Relations Commn.*, 413 U.S. 376 (1973); *Breard v. Alexandria*, 341 U.S. 622 (1951); *Murdock v. Pennsylvania*, 319 U.S. 105 (1943); *United States v. Bob Lawrence Realty, Inc.*, 474 F.2d 115 (5th Cir. 1973); *United States v. Hunter*, 459 F.2d 205 (4th Cir. 1972). See *Capital Broadcasting Co. v. Kleindienst*, 405 U.S. 1000 (1972), *aff’g Capital Broadcasting Co. v. Mitchell*, 333 F. Supp. 582 (D. D.C. 1971); *Banzhaf v. Federal Communications Commission*, 405 F.2d 1082 (D.C. Cir. 1968), *cert. denied*, 396 U.S. 842 (1969); *Gibony v. Empire Storage Co.*, 336 U.S. 490 (1949).

Numerous cases involving the Federal Trade Commission hold that there is no constitutional right to disseminate false advertisements. See, e.g., *S.S.S. Company v. Federal Trade Commission*, 416 F.2d 200, 231 (6th Cir. 1969); *Regina Corporation v. Federal Trade Commission*, 322 F.2d 765, 770 (3d Cir. 1963); *E. F. Drew and Company v. Federal Trade Commission*, 235 F.2d 735, 739-740 (2d Cir. 1956), *cert. denied*, 352 U.S. 959 (1957).

approach" to encourage egg consumption (CX 120A). The primary thrust of the promotional campaign was to convince consumers that it was not only completely safe to eat eggs in quantity, but that eggs are needed for normal body functions. It has also been concluded that the representations in respondents' advertising were false, misleading and deceptive.

It is also true that the advertisements carried information concerning dietary cholesterol, albeit false, in the context of the overall commercial message. However, it seems clear that the purpose behind the advertisements was commercial and the dominant theme [88] and likely effect of the advertisements was to sell eggs. The public messages regarding cholesterol were tailored as a selling device, not as an expression of fact, views or opinions. The stark falsity of the messages presents a persuasive argument of the commercial nature of the advertisements.

The Commission's mandate is to prohibit unfair and deceptive acts and practices. It is abundantly clear that pursuant to this mandate the Federal Trade Commission, on behalf of the public, has a substantial interest in regulating false, misleading, deceptive and unfair advertising. *Federal Trade Commission v. Algoma Lumber Co.*, 291 U.S. 67 (1934); *Federal Trade Commission v. Colgate-Palmolive Co.*, *supra* at 388-389; *Rhodes Pharmacal v. Federal Trade Commission*, 191 F.2d 744, 747 (7th Cir. 1951).

There is an even greater public interest in regulating advertising claims concerning food products, especially where health and safety problems may exist. *Firestone Tire & Rubber Co.*, 81 F.T.C. 398, 456 (1972), *aff'd* 481 F.2d 246 (6th Cir. 1973), *cert. denied*, 414 U.S. 1112 (1973). Serious health problems are implicated in respondents' advertisements, and particularly so with individuals afflicted with hypercholesterolemia (Findings 121, 127, *supra*).

In this proceeding, the advertisements are false, misleading and deceptive; the representations involve matters of health and safety; the dominant theme of the advertisements is commercial; the proceeding involves the advertiser and not a publisher; there is no speech concerning religious activity or protest of governmental action; and the proposed remedy will prohibit only false and deceptive speech. Further, the order has been tailored to protect the rights of the *individuals* involved when they speak as individuals. Thus, the "chilling" effect of this proceeding upon free speech is minimal.

It is therefore concluded that respondents' advertisements are not protected by the First Amendment.

D. *Richard Weiner, Inc. Is Liable for the Unlawful Acts and Practices*

To hold an advertising agency liable in a proceeding involving false advertising, the agency must have [89] "participated actively in the deception" and "must know or have reason to know of the falsity of the advertising." *Doherty, Clifford, Steers and Shenfield, Inc. v. Federal Trade Commission*, 392 F.2d 921, 928 (6th Cir. 1968); *Carter Products, Inc. v. Federal Trade Commission*, 323 F.2d 523, 534 (5th Cir. 1963); *ITT Continental Baking Co., Inc.*, Dkt. 8860 (Order and Opinion of Oct. 19, 1973, p. 28) [83 F.T.C. 865 at 947]. The acts and responsibilities specifically cited by the court in *Doherty, supra*, which may be considered in finding participation by any advertising agency, are (1) offering general marketing consultation, (2) formulating advertising plans, (3) preparing advertising layouts and copy, (4) originating advertising ideas, and (5) developing and putting the advertisements into final form. *Id.* at 928.

The record clearly shows that Weiner participated in every phase of the challenged advertising campaign and that the challenged advertisements are a joint product of both respondents. The record describes in detail Weiner's role (Findings 122-124, *supra*). Weiner made detailed recommendations to NCEN concerning general strategy as well as specific methods necessary to effectively strike back at the anti-cholesterol, anti-egg publicity, particularly that emanating from commercial competitors of eggs. Additionally, Weiner created, prepared and put into final form the copy and layout of NCEN's newspaper, booklet and display advertisements. Weiner also promoted NCEN's advertisements, and coordinated NCEN's campaign, by distributing press releases announcing the advertisements' dissemination and by disseminating NCEN's booklets to consumer newspaper editors across the country. Weiner's participation in NCEN's advertising campaign also involved the encouragement of egg industry groups around the country to place NCEN's advertisements in local newspapers, and Weiner coordinated this effort so as to achieve maximum dissemination. Weiner also planned appearances for Dr. Kurt Oster, NCEN's egg industry spokesman, and coached Dr. Oster to improve his public appearances and effectiveness.

Weiner played a dominant and highly influential role in NCEN's advertising campaign. The record shows frequent contact between Weiner and NCEN personnel concerning the advertising campaign in the form of extensive correspondence and meetings. In short, the record clearly establishes that Weiner participated in the creation and preparation of the challenged advertisements.

[90] The record also clearly supports the finding that Weiner knew or should have known that the challenged advertisements are false, misleading, deceptive and unfair (Findings 125-126, *supra*). The record shows Weiner to be a firm which specializes in health and education projects and that their president and chief executive officer has a Master's Degree in genetics, has published in science journals and was associated with the National Institutes of Health (CPF 266).

Specifically, Weiner knew or should have known that there is an abundance of scientific evidence that shows, among other things, that eating eggs increases the risk of heart attacks and heart disease. At least Weiner should have known that the prevailing scientific and medical viewpoint supported a limitation on egg and saturated fat ingestion. The record shows beyond dispute that the National Heart and Lung Institute of the National Institutes of Health, as well as several other reputable health organizations, have made recommendations to the public, based on the scientific evidence concerning diet and risk of CHD, that egg consumption be limited. Weiner knew or should have known of these recommendations since one of its functions as an advertising agency is to search the medical literature for the NCEN Commissioners. In fact, the record shows that Weiner was aware of at least one of these health organizations' reports and recommendations, as well as the views of other medical experts, concerning the relationship of diet to CHD.

Given Weiner's technical background in and association with medical and scientific matters, the broad dissemination of the literature detailing the relationship of diet, in particular cholesterol and saturated fats, to the risk of CHD and Weiner's actual knowledge of the import of such literature, it appears beyond doubt that Weiner knew or should have known that the challenged advertisements were false, misleading, deceptive and unfair to consumers. Accordingly, an appropriate order will be issued against Weiner.

E. THE REMEDY

The law is clear, and the courts have stated repeatedly that the Commission has wide discretion in determining the type of order necessary to bring an end to the unfair practices found to exist. *Federal Trade Commission v. [91] National Lead Co.*, 352 U.S. 419, 428 (1957); *Jacob Siegel Co. v. Federal Trade Commission*, 327 U.S. 608, 611 (1946); *Viviano Macaroni Co. v. Federal Trade Commission*, 411 F.2d 255, 260 (3d Cir. 1969). It is equally well settled that courts will not interfere except within the narrow issue of whether the remedy selected bears a reasonable relationship to the unlawful practices found to exist. *Federal Trade Commission v. Colgate-Palmolive Co.*, 380 U.S.

374, 394-395 (1965); *Federal Trade Commission v. National Lead Co.*, 352 U.S. at 429 (1957); *Federal Trade Commission v. Ruberoid Co.*, 343 U.S. 470, 475 (1952).

It is equally well settled that the Commission's power of fashioning an appropriate remedy extends beyond the mere banning of acts and practices found to be illegal to the imposition of affirmative action. *Federal Trade Commission v. National Lead Co.*, *supra*, 352 U.S. at 430; *Federal Trade Commission v. Ruberoid Co.*, *supra*, 343 U.S. at 473; *Windsor Distributing Co. v. Federal Trade Commission*, 437 F.2d 443, 444 (3d Cir. 1971). It is also established that the parameters of an order are not dictated by the specific violations which have occurred, but rather the Commission may "close all roads," fencing in respondents so that its orders cannot be circumvented easily. *Ruberoid*, *supra*, 343 U.S. at 473; *National Lead*, *supra*, 352 U.S. at 429; *Colgate*, *supra*, 380 U.S. at 394-395. The courts have consistently upheld orders which enjoin "like and related" practices in addition to the specific illegal practices found to exist. *Federal Trade Commission v. Mandel Bros., Inc.*, 359 U.S. 385, 393 (1959); *Niresk Industries v. Federal Trade Commission* 278 F.2d 337, 343 (7th Cir. 1960), *cert. denied*, 364 U.S. 883 (1960).

The order entered herewith is straight forward and is precisely related to the violations found. More specifically, the provisions in Part I, Paragraphs A(1-8) flow directly from the representations alleged in the complaint and proven to be false or misleading. Paragraph A(9) is a provision which was not in the original notice order; however, it, too, is warranted since the record demonstrates that the name "National Commission on Egg Nutrition" had the tendency and capacity to further the deception caused by respondents' advertisements (Findings 49, 50, *supra*).

[92] Paragraphs B(1-3) of Part I of the order are directly related to the specific allegations in Paragraphs Seven and Eight of the complaint, concerning respondents' lack of a reasonable basis for some of their representations. Paragraph B(4) is a broader prohibition, but clearly tied to the violations alleged. It is necessary to prevent the respondents' making other statements concerning the relationship between eggs, dietary cholesterol and CHD without possessing and relying on a reasonable basis in support.

Paragraph C of Part I of the order contains two broad fencing-in provisions which would prevent misrepresentation (1) of the existence, absence or quantum of scientific evidence concerning the relationship between diet and CHD, and (2) the physiological effects of consuming eggs or dietary cholesterol. This provision, which deals with the overall import of the messages in the challenged advertisements, is necessary

to prevent the respondents' evading the strictures of the order and continuing to convey, under a different guise, the same net impressions as the advertisements at hand. Advertising claims involving health and safety issues must be scrupulously accurate for the public's protection. "* * * [A]dvertisers are held to a high standard of care in making representations involving the safety of their products in order to assure to the greatest extent possible that their claims will not be misunderstood by the public." *Firestone Tire & Rubber Co.*, 81 F.T.C. 398, 456 (1972), *aff'd* 481 F.2d 246 (6th Cir. 1973), *cert. denied*, 414 U.S. 1112 (1973). The order provisions are necessary, therefore, to prevent continued deception in the respondents' advertising and to insure accurate representations in future advertising.

Part II of the order is necessary to assure that the substantive prohibitions in Part I are followed. Part II requires that NCEN send copies of the order to all its members and require that they consent to be bound by its prohibitions. This provision is necessary since NCEN is a trade association composed of various segments of the egg industry and, in such capacity, acts as an agent for its members. Hence, it is incumbent on the Commission to make any order issued against NCEN binding on its members since respondents provided the means by which members of the egg industry disseminated the challenged advertisements.

[93] Paragraph A(2) of complaint counsel's proposed order has been eliminated. Respondents contend this provision is "unenforceably vague" (RRB, pp. 22-23). This provision is vague, and it is also redundant in view of Paragraph C(2) of Part I of the order.

Paragraph D of Part I of the order has likewise been eliminated. This provision appears redundant, and unnecessary in any event. The order issued herewith forbids *any* advertisements containing the prohibited practices in connection with the advertising, offering for sale, sale or distribution of eggs. "Advertisements" as described in the foregoing initial decision would include those which are disseminated for the purpose of inducing or which are likely to induce, directly or indirectly, the purchase of eggs. The addition of the broader category of "any such product" is not only unclear, but no justification has been advanced for incorporating such a provision in the order.

Respondents strenuously object to the order provision requiring NCEN to identify itself as an organization of egg producers. NCEN argues that such compulsory disclosure is unrelated to NCEN's purpose and hence may be misleading or prejudicial, and would not accurately describe the organization, particularly if NCEN is broadened to include medical and consumer members (RRB, p. 24). It has been determined herein that NCEN is an organization of the egg industry, which answers

in part respondents' argument. If, in the future, an organization of the egg industry would not be an apt description of NCEN, relief from this provision can be sought and, if warranted, obtained from the Commission. *Federal Trade Commission v. Colgate-Palmolive Co.*, 380 U.S. 374, 394 (1965); *Vanity Fair Paper Mills, Inc. v. Federal Trade Commission*, 311 F.2d 480, 487-488 (2d Cir. 1962).

Respondents further object to Paragraph Two of Part II of the order requiring that present and future members of NCEN agree, as a condition of membership, to be bound by this order (RRB, p. 26). The Commission has previously utilized such a provision in cease and desist orders issued against trade associations. *Hollow Metal Door and Buck Assn.*, Dkt. C-2401, 82 F.T.C. 1404, 1423 (1973).

The order issued is appropriate relief based on the record of this proceeding. [94]

CONCLUSIONS OF LAW

1. The Federal Trade Commission has jurisdiction over respondents and the subject matter of this proceeding.

2. Respondent National Commission on Egg Nutrition is a not-for-profit corporation organized, existing and doing business under and by virtue of the laws of the State of Illinois. At all times relevant hereto, it has been engaged in commerce within the meaning of Section 5 of the Federal Trade Commission Act, has been engaged in the dissemination, and has caused the dissemination, of advertisements through the United States mail and by various means in commerce and has been, and now is, in substantial competition, in commerce, with corporations, firms and individuals in the sale of foods, including cholesterol-free egg substitutes and other breakfast foods.

3. Respondent Richard Weiner, Inc. is a corporation organized, existing and doing business under and by virtue of the laws of the State of New York. At all times relevant hereto, it has been engaged in commerce within the meaning of Section 5 of the Federal Trade Commission Act, has been engaged in the dissemination, and caused the dissemination, of advertisements through the United States mail or by various means in commerce and has been, and now is, in substantial competition, in commerce, with other advertising agencies and public relations firms.

4. The advertisements and the statements and representations of respondents challenged in this proceeding were, and are, false, misleading, deceptive and unfair.

5. The use by respondents of the aforesaid false, misleading, deceptive and unfair advertisements and the statements and representations in connection therewith had and now have the capacity and

tendency to mislead members of the public into the erroneous and mistaken belief that said advertisements and the statements and representations in connection therewith were and are true. Respondents' advertisements and the statements and representations in connection therewith were, and are, for the purpose of inducing and are likely to induce, directly or indirectly, the purchase of eggs by reason of said erroneous and mistaken beliefs.

[95] 6. The aforesaid acts and practices of respondents were, and are, all to the prejudice and injury of the public and of respondents' competitors and constituted and now constitute, unfair or deceptive acts or practices and unfair methods of competition in commerce in violation of Sections 5 and 12 of the Federal Trade Commission Act.

7. The order entered herewith is proper in scope and is reasonably related to the violations charged in the complaint.

ORDER

I

It is ordered, That respondents National Commission on Egg Nutrition and Richard Weiner, Inc., corporations, their successors and assigns, either jointly or individually, and respondents' officers, agents, representatives, and employees, directly or through any corporation, subsidiary, division or other device, in connection with the advertising, offering for sale, sale or distribution of eggs for human consumption do forthwith cease and desist from:

A. Disseminating or causing the dissemination of any advertisement by means of the United States mail or by any means in or affecting commerce, as "commerce" is defined in the Federal Trade Commission Act, which directly or indirectly

1. Represents that there is no scientific evidence that eating eggs, even in quantity, increases the risk of heart attacks, heart disease, atherosclerosis, arteriosclerosis, or any attendant condition;

2. Represents that there is scientific evidence that dietary cholesterol, [97] including that in eggs, decreases the risk of heart attacks, heart disease, atherosclerosis, arteriosclerosis, or any attendant condition;

3. Represents that there is scientific evidence that avoiding dietary cholesterol, including that in eggs, increases the risk of heart attacks, heart disease, atherosclerosis, arteriosclerosis, or any attendant condition;

4. Represents that eating eggs does not increase the blood cholesterol level in a normal person;

5. Represents that the blood cholesterol level is prevented from being raised or lowered by dietary cholesterol intake;

6. Represents that the human body increases its manufacture of cholesterol in an amount equal to a decrease in dietary cholesterol intake;

7. Represents that the average human body eliminates the same amount of cholesterol as that eaten; [98]

8. Represents that dietary cholesterol, including that in eggs, is needed by the body for building sex hormones, for transmitting nerve impulses and for maintaining life in cells; or

9. Utilizes the name National Commission on Egg Nutrition, unless it is clearly and conspicuously disclosed in immediate conjunction with the name that the National Commission on Egg Nutrition is composed of egg producers and other individuals and organizations of, or relating to, the egg industry.

B. Disseminating, or causing the dissemination of any advertisement by means of the United States mail or by any means in or affecting commerce, as "commerce" is defined in the Federal Trade Commission Act, which directly or indirectly

1. Represents that eating eggs does not increase the risk of heart attacks, heart disease, atherosclerosis, arteriosclerosis, or any attendant condition; [99]

2. Represents that dietary cholesterol, including that in eggs, decreases the risk of heart attacks, heart disease, atherosclerosis, arteriosclerosis, or any attendant condition;

3. Represents that avoiding dietary cholesterol, including that in eggs, increases the risk of heart attacks, heart disease, atherosclerosis, arteriosclerosis, or any attendant condition; or

4. Makes any representation concerning the relationship of dietary cholesterol, including that in eggs, to heart attacks, heart disease, atherosclerosis, arteriosclerosis, or any attendant condition; *unless*, at the time of such representation, respondents have and rely upon competent and reliable scientific evidence as a basis for such representation.

C. Disseminating, or causing the dissemination of, any advertisement by means of the United States mail or by any means in or affecting commerce, [100] as "commerce" is defined in the Federal Trade Commission Act, which misrepresents, in any manner

1. The existence, absence or quantum of scientific evidence or proof concerning the relationship between dietary cholesterol or eggs and heart attacks, heart disease, atherosclerosis, arteriosclerosis, or any attendant condition; or

2. The physiological effects of consuming dietary cholesterol or eggs.

II

It is further ordered, That respondents shall forthwith distribute a copy of this order to each of their operating divisions.

It is further ordered, That respondent National Commission on Egg Nutrition mail conformed copies of this order to all current and future members, and that said respondent require that members, as a condition of membership, observe the provisions of the order and consent to be bound by it.

It is further ordered, That each respondent notify the Commission at least thirty (30) days prior to any proposed change in the corporate respondent such as [101] dissolution, assignment or sale resulting in the emergence of a successor corporation, the creation or dissolution of subsidiaries or any other change in the corporation which may affect compliance obligations arising out of the order.

It is further ordered, That each respondent shall, within sixty (60) days after this order becomes final, file with the Commission a report, in writing, signed by respondent, setting forth in detail the manner and form of its compliance with the order to cease and desist.

OPINION OF THE COMMISSION

BY DIXON, *Commissioner*:

[1] Complaint in this matter was issued on July 23, 1974, charging respondents, the National Commission on Egg Nutrition (NCEN) and its advertising agency, Richard Weiner, Inc., with violations of Section 5 of the Federal Trade Commission Act (15 U.S.C. §45) in connection with their dissemination of certain publications pertaining to eggs and heart disease. In particular, the complaint alleged that respondents had directly or indirectly made the following claims, all alleged to be deceptive: (1) there is absolutely no competent and reliable scientific evidence that eating eggs, even in quantity, increases the risk of heart attacks or heart disease; (2) there is overwhelming competent and reliable scientific evidence that eating eggs does not increase the risk of heart attacks; (3) there is competent and reliable scientific evidence that dietary cholesterol (cholesterol contained in food), including that in eggs, decreases the risk of heart disease; (4) there is competent and reliable scientific evidence that avoiding dietary cholesterol, including that in eggs, increases the risk of heart disease; (5) eating eggs does not increase the blood cholesterol level (cholesterol contained in a person's blood stream) in a normal person; (6) a person's blood cholesterol level

is prevented from being [2] raised or lowered by dietary cholesterol intake because (a) the human body increases its manufacture of cholesterol in an amount equal to a decrease in dietary cholesterol intake and (b) the human body eliminates the same amount of cholesterol as that eaten; and (7) dietary cholesterol, including that in eggs, is needed by the body for building sex hormones, for transmitting nerve impulses and for maintaining life in cells.

The complaint further alleged that respondents had violated the law by making certain representations while lacking a "reasonable basis" for so doing. These included the claims that (1) eating eggs does not increase the risk of heart attacks and heart disease; (2) dietary cholesterol, including that in eggs, decreases the risk of heart attacks and heart disease, and (3) avoiding dietary cholesterol, including that in eggs, increases the risk of heart disease.

Hearings were held before Administrative Law Judge (ALJ) Ernest Barnes, who rendered an initial decision sustaining the allegations of the complaint, and recommended entry of an order to cease and desist.

At the time it issued its complaint, the Commission also sought a temporary injunction against certain claims made by respondent, pending resolution of the administrative proceeding, pursuant to the provisions of 15 U.S.C. §53. The District Court for the Northern District of Illinois denied the Commission's request, (*Federal Trade Commission v. National Commission on Egg Nutrition*, 1975-1 CCH Tr. Cases, Par. 60, 246) but the Court of Appeals for the Seventh Circuit reversed and ordered the District Court to enter an injunction in a form specified by the Court of Appeals. (517 F.2d 485, May 1975, *rehearing denied*, June, 1975). The District Court duly entered the injunction. Respondents filed a petition with the Supreme Court for a writ of certiorari, which petition the Court denied. 426 U.S. — (No. 75-405; June 7, 1976).

The instant matter is before the Commission on the appeal of respondents from the initial decision.

I. JURISDICTION

At the outset respondents contend that the Commission lacks jurisdiction over NCEN because it is not a "corporation" within the meaning of Section 4 of the Federal Trade Commission [3] Act, which defines a corporation for purposes of the Act as one "organized to carry on business for its own profit or that of its members." In *Community Blood Bank of Kansas City Area, Inc. v. FTC*, 405 F.2d 1011 (8th Cir. 1969), it was held that while the Commission properly exercises jurisdiction over such nonprofit corporations as trade associations which carry on business for the sake of their members, it may not

exercise jurisdiction over nonprofit corporations which are organized and actually engaged in business for purely charitable purposes. (405 F.2d at 222) NCEN argues that it falls within the exemption recognized in the *Blood Bank* case because it is a nonprofit corporation formed for the eleemosynary purposes of facilitating research by its "Commissioners" and expression of their individual views on the "cholesterol issue."

The administrative law judge concluded that NCEN was organized to carry on business for the benefit of its "members," the egg industry, that its activities were of a character designed to redound to the industry's pecuniary well-being, and that consequently NCEN is a corporation within the contemplation of Section Four. (I.D. p. 72)¹

As the law judge noted, NCEN was created by the egg industry, or segments thereof, in response to anti-cholesterol attacks on eggs which had resulted in steadily declining per capita egg consumption. (I.D. 2, CX 101 A,B) NCEN began operation in August 1971 (I.D. 3), its membership consisting of a small, self-perpetuating board of directors—Commissioners—who throughout these proceedings have been individuals with commercial interests in the egg industry. (I.D. 5, 13) From NCEN's inception five of its Commissioners were designated by each of five different egg industry trade associations, (I.D. 4, [4] CX 154d, 198B, 204a) whose commercial nature is clear (I.D. 5). Virtually all of NCEN's funding has been provided by commercial, egg-industry related organizations, (I.D. 15, CX 162A) in particular the American Egg Board, which furnished all of NCEN's staff, office space, and other assistance, and which received in advance of implementation itemized budgets of NCEN's operations. (I.D. 15) It further appears that member trade associations were intimately aware of NCEN's activities (CX 96-98, 105) and in at least certain documented instances NCEN Commissioners reported formally on NCEN's activities to their respective organizations and received organizational recommendations or instructions as to courses of action which NCEN should pursue. (I.D. 14, CX 199A, 200A, 198B).

Newspaper advertisements sponsored by NCEN, some bearing the

¹ The following abbreviations are used herein:

- I.D. — Initial Decision, Finding No.
- I.D. — Initial Decision, Finding No.
- I.D. p. — Initial Decision, Page No.
- CX — Complaint Counsel's Exhibit No.
- RX — Respondents' Exhibit No.
- Tr. — Transcript of Testimony, Page No.
- RB — Respondents' Appeal Brief to the Commission, Page No.
- CB — Complaint Counsel's Answer Brief to the Commission, Page No.
- RRB — Respondents' Reply Brief to the Commission, Page No.

notation "Number — in a series of messages from America's egg producers" (CX1), were directed to consumers, and touted the nutritive virtues of eggs as well as conveying the message that no increased risk of heart disease would result from egg consumption, even "in quantity." A more detailed recitation of NCEN's structure and relationship to the egg industry is contained in I.D. 1-6 and 12-18.

Respondents argue in their defense that the principal purpose of NCEN was "* * * To establish the true nutritional values of eggs, particularly in the light of the adverse publicity concerning cholesterol" (CX 150A), and thereafter to disseminate the individual views of NCEN Commissioners to the American public. NCEN Commissioners at trial denied that they served as "representatives" of the commercial groups of which they were simultaneously members, or were in any other way influenced by these commercial groups in the dissemination of their claims about eggs. (I.D. 18)

This Commission has no reason to doubt that the representations of NCEN generally reflect the honestly-held views of its Commissioners.² Nevertheless, our credulity, like that of the administrative law judge, is heavily if not confiscatorily taxed by the suggestion that NCEN was established, financed, and operated for the sole, or even for the principal, purpose of permitting several individuals to disseminate their opinions [5] to the American public. Rather, the evidence viewed as a whole preponderates overwhelmingly in favor of the conclusion that respondent NCEN is a corporation existing in substantial part for the pecuniary benefit of the egg industry, and is therefore, like the traditional trade associations which spawned and nurtured it, subject to Commission jurisdiction.

In reaching our conclusion we have looked to the evidence with respect to several facets of NCEN's operations: (1) *origin* (a response by the egg industry to economically harmful attacks on the safety of eggs); (2) *character of membership* (egg industry executives, initially chosen by trade associations); (3) *source of funding*; (4) *relationships with profit-oriented groups* (submission of budget to AEB; reporting to trade associations, and at least occasional instructions given by associations); (5) *nature of publications*; and (6) *stated purpose*. Except with respect to NCEN's officially stated purpose the record strongly suggests commercial goals and character. Even as to NCEN's officially stated purpose, an early version of its Articles of Incorporation lists as one organizational objective "to promote the general interests of the egg industry." (CX 136B) In any event, official characterizations of purpose, some of which appear to have been changed in suspicious proximity to

² We do believe, however, that respondents should have realized that certain of the statements used to convey NCEN's belief in the safety of eggs had the tendency and capacity to deceive, *infra.*, pp. 7-28.

developments in this litigation (CB 28-29) can be given little weight in the face of contradictory evidence as to the circumstances in which an organization is formed and the manner in which it actually functions. Similarly, we must agree with the law judge's skeptical assessment of the NCEN Commissioners' testimony, insofar as that testimony is both internally inconsistent and contradicted by contemporaneous documentary evidence. *See* I.D. 18.

While respondents contend that the factors cited by the ALJ "neither alone nor taken together" support a finding of jurisdiction (RB 7), their argument is at best persuasive only as to the first half of their conclusion. Obviously a determination of whether Commission jurisdiction is properly asserted over a nonprofit corporation or an individual engaged in activity which has the effect of promoting a product requires analysis of a large number of possible indicia of commercial purpose.³ The presence of one factor alone, such [6] as receipt of financial benefit from a commercial source that happens to favor the recipient's viewpoint may well be insufficient.

Clearly, however, this case presents far more than the example of an industry choosing to accord a measure of financial support to an otherwise unrelated third party whose views, when published, inure to the industry's benefit. Rather, respondent NCEN was founded and almost entirely funded by the egg industry, with the obvious expectation that it would help counteract economically damaging publicity. It is staffed by egg industry executives, originally required to be from specified egg industry trade associations and, predictably enough, its publications, whether they represent the "industry" viewpoint or not, are of a sort which, if believed, would encourage the consumption of eggs. While the assertion of particular viewpoints may not be a contractual prerequisite to NCEN's receipt of funds, it is reasonable to doubt that NCEN could continue to exist if its Commissioners were somehow to reach and publicize the conclusion that consumption of eggs in quantity may possibly increase the risk of heart disease, just as it is doubtful that any egg industry trade group would continue to exist if it ceased to promote the interests of those whose funds are its predominant source of support. We believe these considerations taken together warrant the conclusion that NCEN is a nonprofit corporation which exists in principal part for the benefit of the egg industry, and hence, is subject to Commission jurisdiction.

Respondents contend that whatever may have been NCEN's status at the time of the complaint, it has as of the present time amended its by-

³ We do agree with respondents (RB 15) that what the ALJ termed the "stark falsity" of their representations (I.D. p. 88) is not a relevant factor to be considered on the issue of jurisdiction, assuming *arguendo* that the ALJ considered it so to be.

laws so as to state explicitly that NCEN Commissioners shall "serve solely as individuals and shall not, with respect to NCEN activities, directly or indirectly serve as agents for, or otherwise represent any trade association, business or commercial enterprise." We find no reason in the record of this case to conclude that this change in the wording of the by-laws can in any significant respect alter the commercial character of NCEN, given its origin, the manner in which it has operated heretofore, and its continued domination by egg industry members, whether or not they are officially called egg industry "representatives" during that portion of the day they devote to the affairs of NCEN.

[7] This is simply not the case respondents seek to make it in which an organization engaged primarily in the noncommercial activity of disseminating for their own sake its members' views on a subject of scientific importance incidentally performs a function valuable to commercial interests. On the contrary, the evidence most strongly suggests that NCEN is an organization created and operated to benefit the egg industry through the incidental medium of what is termed its Commissioners' expression of their personal viewpoints. If respondents' argument as to jurisdiction is to be accepted under these circumstances, there is no company or industry in the Nation which could not obtain a ready exemption from laws prohibiting deceptive advertising merely by agreeing to fund the efforts of a group of its members or employees who decide that they wish to establish their own "National Commission" to do research and publicize their honestly held beliefs in the virtues of the product they have spent a lifetime selling. We do not believe the arm of the law was meant to be avoided so easily as this.

"To defend the place of the egg in the American diet by every legal means"—as NCEN on one occasion characterized its goal (RX 139)—is, in sum, not an endeavor which entitles a group of egg industry executives funded by egg industry trade groups to a blanket exemption from the scrutiny of a statute designed to prevent the deceptive promotion of products, including eggs. Having concluded that jurisdiction over respondents is properly asserted, we shall proceed to review the allegedly deceptive representations challenged in this proceeding.⁴

⁴ Respondents also argue that in addition to establishing jurisdiction generally over NCEN, the Commission must establish jurisdiction over each challenged publication. We take this point to be a variant of respondents' claim that their publications concerning the virtues of eggs are not commercial advertisements and are shielded from Commission scrutiny by the First Amendment, an argument we discuss in Part III of this opinion. Respondent Weiner does not challenge the ALJ's finding of jurisdiction as to it.

II. CHALLENGED REPRESENTATIONS

A. *"There is no evidence? ? ?"*

The principal representation challenged in this proceeding is respondents' claim, made with slight variations of wording in numerous instances, that there is absolutely no scientific evidence that eating eggs, even in quantity, increases the risk of heart attacks or heart disease. (I.D. 32) The administrative law judge concluded that this representation was false and misleading. (I.D. pp. 79-81)

[8] An evaluation of the law judge's determination requires some discussion of the state of medical opinion with respect to the relationship between "dietary cholesterol"⁵ and "coronary heart disease."⁶ A matter of such considerable complexity does not lend itself readily to simple formulations, and the statements made herein must be qualified in light of the far more extensive discussion of the underlying issues contained in the initial decision and in the record as a whole.

It is apparent from the record of this case that many well-qualified medical science experts subscribe, with varying degrees of conviction, to the view that ingestion of cholesterol and "saturated fats"⁷ in the human diet is positively related to the incidence or risk of coronary heart disease, in the sense that, for many people, increased consumption of dietary cholesterol and saturated fats will result in an increased risk of heart disease, and decreased consumption will lower that risk. For ease of reference we shall, like the ALJ, refer to this view as the "diet/heart disease" hypothesis, although this generic term obviously subsumes a wide variety of particular approaches.⁸

[9] Egg yolks are the major source of readily assimilated cholesterol in the American diet, with one yolk providing around one-third of average daily intake of approximately 600-800 mg. Egg yolk has

⁵ Cholesterol is a fat-like waxy alcohol, with a sturdy and durable ring chemical structure that cannot be broken down. (I.D. 57) "Dietary cholesterol" is that cholesterol contained in food. Cholesterol is also produced by the body.

⁶ "Coronary heart disease" is generally defined as an affliction of the heart muscle and its functions due to inadequate blood supply to the heart. See I.D. 51-54.

⁷ Saturated fats are described in I.D. 57. Fat is a nutrient, and saturated fats occur in certain foods of plant origin as well as in many foods of animal origin.

⁸ For example, proponents of the diet/heart disease hypothesis differ among themselves with respect to the relative importance of reducing consumption of dietary cholesterol as opposed to saturated fat. Further, it should be observed that some experts believe that the presence or absence of various dietary constituents other than cholesterol and saturated fat may be related to the risk of heart disease. (Tr. 1378, 1987) This proceeding does not deal with these views. Also, it is generally believed that coronary heart disease is multifactorial (I.D. 54), and those who advocate dietary modification as a means of lessening its likelihood of occurrence generally recommend other preventive measures as well, examples of which might include certain sorts of exercise and elimination of cigarette smoking.

substantially more cholesterol than any other commonly eaten food (I.D. 55), and contains roughly four grams of saturated fat. (I.D. 56)⁹

The diet/heart disease hypothesis proceeds from several underlying propositions. These are, in outline, that (1) the amount of dietary cholesterol and saturated fat in the diet directly affects the level of cholesterol in the bloodstream ("serum cholesterol" or "blood cholesterol") of many people; (2) higher levels of cholesterol in the bloodstream are statistically associated with higher levels of risk of coronary heart disease in sample populations; and (3) serum cholesterol is "causally implicated" in the formation of the atherosclerotic lesions (I.D. 51) which precipitate heart disease.¹⁰

The initial decision reviews at great length the results of a large body of clinical-pathological, experimental, and epidemiological studies upon which scientists have relied in formulating the propositions described in the preceding paragraph, and from there the diet/heart disease hypothesis itself. (I.D. 60-98) The ALJ concluded that:

The studies discussed in Findings 60-98 *supra*, constitute competent and reliable scientific evidence. They were conducted using scientific methodologies, were performed by competent and highly regarded investigators, have been reported in recognized scientific journals after peer review, and have been generally accepted by experts in the field and by the scientific community. Moreover, reputable [10] governmental and private scientific organizations have reviewed the evidence and relied on it in making recommendations to the medical profession and to the public for the treatment and prevention of [coronary heart disease]. Finally, complaint counsel's own witnesses relied on the evidence to form expert opinions regarding the relationship of diet to [coronary heart disease] and as to the effect of adding an egg per day to the average American diet (Findings 100-105 *infra*). [I.D. 99]

Respondents do not deny that well-qualified experts have relied upon competent and reliable scientific studies in hypothesizing a relationship between dietary cholesterol and heart disease. Respondents argue, however, that these experts have improperly interpreted the existing studies, that such studies lend little or no support to the diet/heart disease hypothesis, and that the studies consequently do not rise to the level of "evidence that eating eggs will increase the risk of heart disease." In support of their position respondents cite the testimony of certain of their own experts who, when asked at trial whether in their opinion there is any evidence that eating eggs will cause or increase the risk of heart disease, responded in the negative.

⁹ Average daily intake of fat in the American diet is over 100 grams. (Tr. 2039) While some who counsel a reduction in saturated fat intake would include limitation of egg consumption as a partial means of accomplishing this (*e.g.* Tr. 2157), eggs are primarily cited as a contributor to the risk of heart disease by virtue of their cholesterol content, which was the principal focus of the proceeding before the law judge.

¹⁰ In the words of the "Report of Inter-Society Commission for Heart Disease Resources," a causal relationship between serum cholesterol and heart disease is "biologically plausible in terms of reasonable pathogenetic mechanisms and concepts of multifactorial etiology relating apparent cause and disease. Alternative hypotheses to account for the associations do not fit the majority of observations to date." (CX 18-Z9)

Respondents would have the Commission conclude from this that the question of whether there is evidence to incriminate eggs as a factor in the risk of heart disease is, like the question of whether eggs actually do increase the risk, a subject of heated controversy upon which the Commission can and should make no pronouncement.

It is certainly not the Commission's intention to determine in this proceeding whose interpretation of a difficult and incomplete body of scientific literature is superior. It is, however, the Commission's statutory duty to ensure that commercial advertisements intended to convince the public of the safety of a product are not deceptive, and that oversimplified expressions of opinion are not taken out of context and presented as fact in order to misrepresent the nature of a complex scientific issue and thereby promote misleadingly the consumption of eggs.

It is manifest that "scientific evidence" as the term is commonly understood, may exist in support of a proposition whose truth is contested or, for that matter, in support of a theory which is ultimately determined by general agreement not to be true at all. "Scientific evidence for a proposition" as that phrase is reasonably understood, means precisely those competent and reliable scientific studies of the sort summarized by the ALJ which, in the view of a body of well-qualified experts would lend support to the proposition. To assert flatly and [11] without qualification that "there is no evidence for this hypothesis" if what one means is really that "we, along with one segment of the relevant expert community, do not believe that the existing evidence supports this hypothesis" is misleading in the extreme.

We have reviewed with care the testimony of those experts and sources cited by respondents. In rendering their testimony respondents' witnesses did not dispute the fact that many experts, in the exercise of reasonable, albeit disputed, scientific judgment, have relied upon a large body of scientific studies in formulating the diet/heart disease hypothesis. Respondents' sources appear to believe, however, that such studies provide so little warrant for the hypothesis that they should not be described as "evidence" for it.

Complaint counsel suggest that respondents' experts merely used "no evidence" in the sense of "no conclusive evidence" or "no direct experimental evidence." (For example, there appears to be no good study relating actual limitation of cholesterol intake by a sample group to a decline in expected incidence of heart disease.) Dr. Stare, who testified for complaint counsel, may have used "evidence" in the foregoing senses when he initially testified that he knew of no evidence "per se" that eggs increased the risk of heart disease. His testimony

was subsequently qualified. (Tr. 1036ff) At least some of those witnesses who testified for respondents, however, appear to have used "no evidence" in the somewhat stronger sense described in the preceding paragraph. (Tr. 2051, 2140, 2150, 1485-86)

It seems fair to say, nevertheless, that the difference between the "evidence" and "no evidence" positions is one of degree rather than of kind. As respondents' witness Dr. Oliver noted in prefacing his account of the "no evidence" statement of the British Advisory Panel¹¹, "evidence in this context would be an aggregate of probability* * *" (Tr. 2136) In Dr. Oliver's view, presumably, the existing research lends so little (if any) weight to the view that increased consumption of eggs will [12] increase the risk of heart disease that he cannot consider such research as "evidence" for the proposition. However, Dr. Oliver did acknowledge that reduction of serum cholesterol was one part of a regimen which might *in toto* reduce the risk of heart disease (Tr. 2125), and he also noted that he recommended a reduction in egg consumption for his patients as part of a plan to reduce saturated fat intake and thereby help reduce the risk of heart disease. (Tr. 2157) In common with other witnesses, Dr. Oliver further noted that his conclusions as to the potential harm from dietary cholesterol and as to the existence of evidence with respect thereto did not apply to those suffering from gross abnormalities in the metabolism of lipids, a small fraction of the population but nonetheless a substantial number of people. (Tr. 2140-2144)

The testimony of Dr. Yudkin, like Dr. Oliver an eminently well-qualified medical expert, is similarly diffuse. Asked his understanding of the "no evidence" statement in the British Panel report (which he and Dr. Oliver helped prepare), Dr. Yudkin replied:

My understanding of this sentence is that I did not find that there was anything in the literature, either directly saying that a population's experience of heart disease goes parallel with the number of eggs consumed in that population—that is, that there is no direct evidence, nor was there indirect evidence that would be convincing that the consumption of eggs raises the concentration of blood cholesterol and that this rise in blood cholesterol would increase the chances of getting a heart attack. (Tr. 1428)

Asked to interpret the term "evidence" Dr. Yudkin responded:

I would say that I would interpret this word as meaning that I could convince anybody, by showing them the same facts, to come to the same conclusion, that is if

¹¹ "In certain animal species a diet rich in cholesterol induces the appearance of arterial lesions which have some similarity to those seen in human subjects, and comparative studies of different human populations show that those which have a diet rich in cholesterol have a higher death rate from [coronary heart disease.] However, a diet rich in cholesterol is usually one which is rich also in saturated fatty acids. Most of the dietary cholesterol in western communities is derived from eggs, but we have found no evidence which relates the numbers of eggs consumed to a risk of [coronary heart disease.]" (RX 112; Report issued by Britain's Department of Health and Social Security)

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it were positive evidence, that the facts would demonstrate that the number of eggs does increase, the number of eggs consumed does increase the numbers of ischemic [coronary] heart disease. This I would consider evidence. Or conversely, and this is how I meant the negative here, that the information, the data I could provide, would not convince anybody that the number of eggs consumed does increase the risk of ischemic heart disease. (Tr. 1429)

[13] A later portion of Dr. Yudkin's direct testimony similarly reflects the fine line between "no evidence" and "the evidence does not persuade me":

Question. * * * Based on the data, results of that research as evidenced by those reports, based further upon your own personal expertise, results of your own experimentation and study, debate, based on your contacts with your fellow scientists, medical doctors throughout the world, I ask you, do you have an opinion, based upon a reasonable degree of medical certainty, whether or not there is any evidence that eating eggs causes [coronary heart disease]?

Answer. No.

Q. The answer to my question is yes or no, do you have an opinion?

A. Yes, I have an opinion.

Q. And what is that opinion?

A. That all these studies were taken into consideration by me and my fellow members of this Panel when we wrote that report in which we said we did not have, there is not sufficient evidence to say that eating eggs causes heart disease.

Q. And do you have an opinion as to whether or not based on that same factual presentation, whether or not there is scientific evidence that eating eggs increases the risk of [coronary heart disease]? You can answer that question yes or no, do you have an opinion?

A. Yes.

Q. And what is that opinion?

A. My opinion is that this evidence does not demonstrate that eating eggs increases the risk of heart disease. (Tr. 1444-45)

A similar theme emerges in the following exchange on recross examination between Dr. Yudkin and complaint counsel: [14]

Q. Doctor, just to pick up again on the point raised by Mr. Fox on his redirect, the studies, the line of studies which we have been talking about which you assumed in your hypothetical when you say that these studies are not evidence as to the cause of heart disease, do you mean that they do not conclusively establish the cause, or that they are not evidence in support of the hypothesis or theory that dietary cholesterol is related to and serum cholesterol and saturated fat is related to the increased risk of heart disease?

A. This is a little bit like asking me whether I have stopped beating my mother,

because I wanted to say something slightly different. I think that the information as you asked me, by excluding other possibilities, gave me no opportunity than to say other than they are a part of the evidence. But I would say, for instance, that the seven countries study ["Coronary Heart Disease in Seven Countries," CX 76] can be used not only as evidence towards establishing the hypothesis that dietary fat or dietary cholesterol, as the case may be, may be involved in causing heart disease but equally could be used to support the hypothesis that dietary sucrose and several other factors between the seven countries and the level of cholesterol is just as great as with others.

Q. Could a competent scientist, including yourself as a competent scientist* * *use those studies to say that these studies constitute evidence supporting the theory that the factor, in your case dietary sucrose, is related to or contributes to the development of heart disease?

A. Yes. If it is understood that in order to establish the hypothesis one would need not only this but lots of other sorts of evidence. (Tr. 1488-89)

[15] In the context of their testimony, subject as it was to extensive qualification of the sort described in the preceding pages, we do not dispute respondents' experts' use of the term "no evidence" to characterize the evidence relied upon by proponents of the diet/heart disease hypothesis. It is an entirely different matter, however, for respondents to make the claim "no evidence" in a setting totally devoid of any mention of the substantial scientific controversy, the extensive scientific literature, and the fact that many well-qualified scientists believe that such literature incriminates dietary cholesterol, including that in eggs, as a contributor to the risk of heart disease.

Respondents argue, in essence, that the claim "there is no evidence" should be treated, and would be recognized by readers merely as a statement of opinion, *i.e.*, "in our opinion and that of certain experts on whom we rely, the existing scientific studies pertaining to dietary cholesterol, eggs and heart disease lend no support to the hypothesis that eating eggs increases the risk of heart disease." Unfortunately, however, the phrase "there is no evidence" is also, and perhaps more reasonably subject to the interpretation that "there do not exist competent and reliable scientific studies from which well-qualified experts could reasonably hypothesize that eating eggs increases the risk of heart disease." This latter message is patently false and misleading.

It is well established, and critical to the notion of preventing false advertising, that where an advertisement conveys more than one meaning, one of which is false, the advertiser is liable for the misleading variation. *Murray Space Shoe Corp. v. FTC*, 304 F. 2d 270, 272 (2d Cir. 1963); *Rhodes Pharmacal Co. v. Federal Trade Commission*, 208 F. 2d 383, 387 (7th Cir. 1953), modified by restating the Commission's order, 348 U.S. 940 (1953). Nor does our application of

that principle in this instance rest upon some mere semantic quibble or strained interpretation of words, since that meaning of respondents' claim which deceives is one which is likely to be understood, and reasonably so, by many consumers. A more appropriate statement of the principle in this case might thus be that an otherwise false advertisement is not rendered acceptable merely because one possible interpretation of it is not untrue.

Respondents ask whether the ALJ (and presumably now the Commission) "take NCEN or the public for fools in asking them to believe that it is the existence of evidence itself and not a particular interpretation thereof that NCEN has denied?" (RB 29) We take neither NCEN nor the public for fools, but quite clearly many members of the public are not so well acquainted with the diet/heart disease controversy as is NCEN [16] or this Commission. Some consumers may indeed view the claim "No evidence" and realize, in light of their prior reading or consultation with a physician, that it is merely intended to state respondents' opinion as to the way in which the existing evidence should be interpreted. Others, however, without substantial knowledge of the subject area, may well conclude that the claim means that those who would identify eggs as a possible contributor to heart disease have not based their indictment on a massive body of competent and reliable scientific studies, because such evidence does not exist.

After all, hardly a day passes on which one may not read in a newspaper or magazine of charges levelled by some self-appointed nutrition expert against the safety of some food product. How many substances remain that one can eat freely without, in the view of someone, increasing the risk of cancer or some other dread affliction? For certain of these charges the rejoinder "there is absolutely no evidence" may be an appropriate response. There is no scientific evidence. There are no competent and reliable scientific studies which could lead a body of well-qualified experts to subscribe to the charges. "No evidence," is, however, in the eyes of many people, strong language, indeed the strongest possible means of dismissing another's position. It may do literal and figurative justice when applied to the claims of quacks. It is not, however, standing by itself, an accurate way to characterize the position of those who hypothesize that consumption of dietary cholesterol, including that in eggs, increases the risk of heart disease.

The harm in this representation is, moreover, readily apparent. No consumer who wishes to make well-informed dietary selections should ignore the existing literature (or a physician's evaluation of it) with respect to the relationship between dietary cholesterol and heart disease. To be sure, well-informed consumers, like well-qualified

scientists, are likely to draw different conclusions from their studies. As the record shows, eggs are a "complete food," with many nutritive virtues. (I.D. 56) A reasonable person might well decide that the current state of learning and opinion with respect to dietary cholesterol does not warrant limitation of egg consumption to any degree. On the other hand, a reasonable person might equally well conclude that the existing evidence is sufficiently troublesome to [17] render some limitation or reduction in consumption of dietary cholesterol (including that in eggs) a prudent measure, as many experts now recommend. In either event, the decision is one which a consumer should make after a review of all available information. By representing that "there is no evidence that eating eggs will increase the risk of heart disease" respondents discourage that review and represent that there is no need for the consumer to go beyond their advertisement, because in this case there is simply "no evidence" to warrant further inquiry.

For the foregoing reasons we conclude as did the ALJ that respondents' principal representation is deceptive.¹² [18]

B. *Other Misrepresentations*

Respondents were also charged with making certain other deceptive representations to bolster their message that eating eggs, even in quantity, is not harmful, and in fact, positively desirable. Respondents do not contest that the alleged claims are misleading, but deny having made them. Our brief review of these issues follows:

(1) There is competent and reliable scientific evidence that dietary cholesterol, including that in eggs, is needed by the body for building sex hormones, for transmitting nerve impulses, and for maintaining life in cells.

* * * * *

Respondents did not make this claim in so few words, but it is clearly implied by advertisements such as CX 3 which states in relevant part:

* * * there are those who misguidedly advocate cutting down on eggs because of their cholesterol content. So we thought we'd offer a few facts in evidence about what you're being asked to give up "now."

1. Cholesterol is the building block of sex hormones.

¹² We also agree with the ALJ's conclusion that substitution of the word "proof" in certain publications (i.e. "There is absolutely no scientific proof that eating eggs, even in quantity, will increase the risk of heart disease" does not cure the misrepresentation, because some people will read "proof" in the sense of "evidence," see e.g. *Webster's Third New International Dictionary*, p. 1817, I.D. 37). It should be apparent from the discussion herein that our finding in this matter cannot be taken in any measure as sanction for the representation that "The FTC has determined that there is evidence that dietary cholesterol may increase the risk of heart disease." Such a statement standing unqualified may be no less misleading to some than respondents' flat assertion that there is no evidence. What we have determined is simply that while medical experts disagree, many believe that the existing evidence indicates that increased consumption of dietary cholesterol may increase the risk of heart disease.

2. Cholesterol is needed for your nerves to transmit their impulses throughout your body.
3. Cholesterol is essential for life for every cell in your body* * *.

The clear purport of the foregoing is that the consumer is being asked to "give up" a substance which is necessary for important bodily functions. In fact, as respondents acknowledge, dietary cholesterol, including that in eggs, is not needed for the foregoing functions (since the body produces its own), (I.D. 117) and the impression conveyed by their claim is thus deceptive. The deception is heightened by the context in which it appears, which is directed towards explaining why the cholesterol contained in eggs should not lead one to avoid [19] them. The fact that cholesterol made by the *body* is indispensable is obviously of no relevance to whether one should or should not eat eggs. We affirm I.D. 47 which discusses this issue at greater length.

(2) there is competent and reliable scientific evidence that dietary cholesterol, including that in eggs, decreases the risk of heart disease; and that avoiding dietary cholesterol increases the risk of heart disease.

* * * * *

CX 2 represented:

There is absolutely no scientific evidence that eating eggs, even in quantity, will increase the risk of a heart attack. There is, in fact, preliminary evidence that the opposite is true, which has led Dr. Roger Williams to write, "Anyone who deliberately avoids cholesterol in his diet may inadvertently be courting heart disease."* In one recent study, four hundred obese, mostly middle-aged policemen were placed on a diet that included two or more eggs each day, by Dr. Sam S. Berman, a Boston physician. After eight years, there has not been a single heart attack reported in the group.

(The asterisk refers to a citation of the book "Nutrition Against Disease" by Dr. Roger J. Williams.)

The manifest implication of the above-quoted representation is that there exists scientific evidence, albeit "preliminary," that eating dietary cholesterol, including that in eggs, is helpful in preventing the risk of heart disease. None of the experts who appeared for either side in this proceeding was willing to offer any support for that proposition. (I.D. 113) The quotation by Dr. Williams cited in the advertisement is part of a larger selection from which it is clear that the author meant only that by avoiding dietary cholesterol, one might inadvertently deprive himself or herself of other valuable nutrients, and the resulting state of malnutrition could increase the risk of heart disease. We affirm I.D. 42-44, 48, 113, and 114 which discuss these issues at greater length. [20]

(3) There is competent and reliable scientific evidence that eating eggs does not increase the blood cholesterol in a normal person.

There is competent and reliable scientific evidence that a person's blood cholesterol level is prevented from being raised or lowered by dietary cholesterol intake because (a) the human body increases its manufacture of cholesterol intake and (b) the human body eliminates the same amount of cholesterol as that eaten.

* * * * *

Respondents do not deny making the first claim, (RB 46) since CX 1 states that "Eggs contain cholesterol—as do all foods of animal origin—but eating eggs does not increase the blood cholesterol in a normal person."

The judge concluded that the foregoing assertion was unsupported, and that the evidence of record led to the opposite conclusion. (I.D. 115) It is clear that scientists do disagree as to the extent to which a reduction in cholesterol consumption will affect levels of blood cholesterol. Moreover, it appears that for some people, increases in dietary cholesterol do not necessarily translate into increases in serum cholesterol. However, for other people, it is equally apparent that increases in consumption of dietary cholesterol including that in eggs, will have an impact on serum cholesterol. (I.D. 115) It is obviously misleading, therefore, for respondents to claim, without qualification, that eating eggs will not increase the blood cholesterol level in a normal person.

With respect to the claims that the body's mechanisms operate to compensate for increases and decreases in dietary cholesterol intake, respondents claim that they merely represented that the body would produce or excrete "just about" as much cholesterol as was deducted from or added to the diet. While the "just about" language does occur in some of the challenged advertisements, we agree with the ALJ's conclusion in I.D. 46 that the implication of the claim in the context in which it is made is that the body's mechanisms operate to prevent an increase or lowering of serum cholesterol in response to dietary modification. We affirm I.D. 45-46 and 115-116. [21]

C. Corporate Name

The ALJ concluded that the name "National Commission on Egg Nutrition" has the tendency and capacity to mislead the public into believing that the corporation is an impartial, independent, quasi-governmental health commission, when in fact it is an association of persons engaged in the egg industry. (I.D. 49) The judge reasoned that the words "National Commission" in particular would tend to enhance, misleadingly, the authority of NCEN's pronouncements in the eyes of

the public. He therefore recommended that respondent NCEN be required to disclose in close proximity to its name the fact that it is an organization composed of egg producers and others of, or relating to, the egg industry. While a few of NCEN's advertisements did acknowledge that "We're egg people" or words to similar effect, none included this revelation in close proximity to the corporate name, and many advertisements contain no disclosure of corporate composition whatsoever. (I.D. 49)

NCEN recognized the importance of "what's in a name" when it chose its present title to replace the somewhat more accurate (perhaps too accurate) "Egg Industry Cholesterol Commission." (I.D. 50) The name "National Commission on Egg Nutrition," unmodified, is likely to mislead readers as to the nature of the organization, given the number of "National Commissions" in the United States which are, in fact, independent, quasi-governmental bodies, see, *e.g.* Sullivan and Kruzas, *Encyclopedia of Governmental Advisory Organizations*, pp. 620-21, 619 (2d ed. 1975).

The deception is, moreover, highly material. Some people will view with skepticism the claims of industry members as to the virtues of that industry's products, especially if they are aware that the subject is a matter of some controversy. They are less likely to be mistrustful of the pronouncements of a "National Commission" which publishes lengthy excerpts from scientific studies "in the public interest" (CX 176) and assures its audience that it follows such matters very closely because "we're vitally concerned with health and good, natural nutrition." (CX 5) While excision of a misleading corporate or trade name is at times an appropriate remedy, *e.g.* *United States Naval Weekly, Inc. v. Federal Trade Commission*, 207 F. 2d 17 (D.C. Cir. 1953); *Federal Trade Commission v. Army and Navy Trading Co.*, 88 F. 2d 776 (D.C. Cir. 1937), we believe that the clarifying disclosure proposed by the ALJ is an entirely suitable and less drastic means of curing the deception here, and we shall include such a requirement in our order. [22]

*D. Reasonable Basis Claims; "There is (Overwhelming)
Evidence that Eating Eggs Does Not Increase the Risk of
Heart Disease"*

The order of the law judge would require that respondents desist from the following representations unless they possess "a reasonable basis" for them, consisting of competent and reliable scientific evidence upon which they rely for making their claim:

1. eating eggs does not increase the risk of heart attacks, heart disease* * *or any attendant condition.

* * * * *

4. * * *any representation concerning the relationship of dietary cholesterol, including that in eggs, to heart attacks* * * or any attendant condition.¹³

It is settled law that an advertiser in rendering an affirmative claim for a product must have a "reasonable basis" therefor, consisting of such evidence as is appropriate to provide substantiation for the type of claim being made. *Pfizer Corp.*, 81 F.T.C. 23 (1972); *National Dynamics Corp.*, 82 F.T.C. 488 (1973), *aff'd*, 492 F. 2d 1333 (2d Cir. 1974), *cert. denied*, 419 U.S. 993 (1974); *Firestone Tire & Rubber Co.*, 81 F.T.C. 398 (1973), *aff'd*, 481 F. 2d 246 (6th Cir. 1973), *cert. denied*, 414 U.S. 1112 (1973). The justification for such a requirement is apparent. Many consumers are likely to assume that when a product claim is advanced which is in theory subject to objective verification, the party making it possesses a reasonable basis for so doing, and that the assertion does not constitute mere surmise or wishful thinking on the advertiser's part. As a result, the rendition of a claim based upon inadequate or nonexistent substantiation [23] violates Section 5 for failure to state a highly material fact, whose omission is deceptive.¹⁴

With respect to respondents' representation that eating eggs, even in quantity, does not increase the risk of heart attacks and heart disease, the ALJ concluded:

Respondents had no reasonable basis for making the representation* * *at the time the representation was first made. [Citations omitted] The substantiation necessary to form a reasonable basis for the representation would be the existence of a consistent body of competent and reliable scientific evidence indicating that eating eggs does not increase the risk of CHD [coronary heart disease]. Such evidence should come from each of the various disciplines of medical science and be of the same caliber of design, analysis, and interpretation as the substantial existing body of evidence which supports the opposite conclusion- that eating eggs does increase the serum cholesterol level of most people and that the serum cholesterol level is related to an increase in risk of CHD. The

¹³ Par. I(B)(2) and (3) of the ALJ's order would also prohibit respondents from representing without a reasonable basis that dietary cholesterol, including that in eggs, decreases the risk of heart attacks, heart disease, or any attendant condition and that avoiding dietary cholesterol, including that in eggs, increases the risk of heart attacks* * *or any attendant condition. Since Par. I(A) of the order contradictorily forbids outright the claim that there is scientific evidence for these propositions, and since respondents concede there is no scientific evidence to support the claims (and indeed deny having made them), we shall omit the ALJ's paragraphs I(B)(2) and (3) from our order.

¹⁴ Compare "Our product is safe" with "We think our product is safe, but we really have only the most inconclusive evidence upon which to base this statement." The latter formulation obviously cures the omission of fact but it is likely to induce considerably fewer consumers to buy the product. The Commission has also held that failure to possess a reasonable basis is unfair within the meaning of Section 5, *Pfizer, Inc., supra*. Under either theory, however, the source of illegality is the same—the abuse of legitimately held consumer expectations that advertising claims couched in objective terms are not merely statements of unsubstantiated opinion.

substantiating data would also have to offer some rational explanation for the discrepancy of results between the claimed substantiating evidence and the existing body of evidence. [Citations omitted] (I.D. 118)

It is not entirely clear from respondents' brief on appeal whether or not they challenge this finding of the law judge. They do, in their brief, take exception to the ALJ's [24] finding that they represented that there was "overwhelming evidence" that eating eggs does not increase the risk of heart disease,¹⁵ though they apparently do not object to the findings that they represented that there is "evidence" that eating eggs does not increase the risk of heart disease, and represented implicitly that they possessed a reasonable basis for their statement. (I.D. p. 78)¹⁶

[25] Respondents object strenuously, however, to that portion of the law judge's proposed order [Par. I(B)(1)] which requires that they possess a reasonable basis, consisting of competent and reliable scientific studies, for any claim that eating eggs will not increase the risk of heart disease. They contend that the difficulty of determining what constitutes adequate substantiation for the claim will prevent them from making any assertions on this subject whatsoever. Respondents object similarly to proposed Par. I(B)(4) [RB 48].

In an ordinary case we would have little sympathy for respondents' contention. Parties making claims about the attributes of products—and particularly about the safety of products—owe to the public a high degree of precision and care. Where there is doubt, not merely as to the truth, but as to the substantiability of a claim, the public is seriously disserved by a presentation which implies that no doubt exists. Claims involving scientific judgments necessitate careful scientific evaluation before they may be made, and the difficulty and possible uncertainty involved in making such judgments should normally be no bar to requiring them.¹⁷

In the instant case, however, we believe a different approach is

¹⁵ It is clear to us, however, that respondents did make the "overwhelming evidence" claim. CX 1 states, for instance, "there is absolutely no scientific evidence that eating eggs in any way increases the risk of heart attack. Yet the cholesterol bugaboo persists. The mystery is why. Why, in the face of overwhelming evidence to the contrary, do some people fear eggs, cholesterol, heart attacks?" See also I.D. 39-41 which we affirm.

¹⁶ Note should be taken of the difference between denying the existence of evidence implicating eggs and affirming the existence of evidence exonerating them. While respondents' experts may conclude that the evidence cited against eggs does not warrant the hypothesis that their consumption increases the risk of heart disease, this does not necessarily mean that such evidence supports the affirmative conclusion that eggs do not increase the risk. The evidence may in the view of these experts simply be supportive of no conclusion on the subject.

Of course, a conclusion that there does not exist affirmative evidence to exonerate eggs does not mean that there cannot be a sensible basis for declining to limit one's egg consumption. As noted before, it is obvious from the record that some experts believe the existing evidence is not sufficient to warrant a reduction in egg consumption. It is deceptive, however, to buttress this conclusion with the suggestion that it is supported by affirmative evidence of eggs' harmlessness if such does not exist.

¹⁷ As the Commission noted in its *Pfizer* decision,

"[t]he question of what constitutes a reasonable basis is essentially a factual issue which will be affected by the interplay of overlapping considerations such as (1) the type and specificity of the claim made—*e.g.* safety, efficacy, dietary, health, medical; (2) the type of product—*e.g.* food, drug, potentially hazardous consumer product, other consumer product; (3) the possible consequences of a false claim—*e.g.* personal injury, property

warranted. It is apparent that there is very little which respondents might claim or wish to claim in their publications that would not be construed by consumers as stating or implying that eating eggs, even in quantity, will [26] not increase the risk of heart disease. To insist upon a "reasonable basis" for such assertions in the face of an evolving body of scientific opinion would inevitably place the Commission in the position of having to resolve an issue as to which the record in this case warns that competent, well qualified experts are peculiarly likely to evince sharp disagreement.

The foregoing does not mean, of course, that merely because a scientific question is the subject of intense controversy an advertiser thereby achieves the right to represent unqualifiedly that truth resides on one particular side, with no warning to consumers whatsoever that a controversy exists and that substantial reputable authority takes the opposite view. Clearly it is deceptive for respondents to characterize the other side as armed with "no evidence" and themselves as in possession of "overwhelming evidence." Similarly it is patently deceptive for respondents to assert or imply unqualifiedly that egg consumption, even in quantity, will not increase the risk of heart disease and selectively cite authorities to this effect when, in fact, a substantial body of scientific opinion holds to the contrary.

The simple solution to this deception, we believe, is for respondents to indicate clearly and conspicuously in their advertising that the claim they seek to make for eggs is subject to substantial disagreement by qualified experts within the scientific community. This was basically the approach adopted by the Seventh Circuit Court of Appeals in granting an injunction against respondents' advertising. Complaint counsel in their brief to the Commission suggest a similar approach, (CB 54) although they would also retain reasonable basis provisions. Once it is made clear that respondents' claims are the subject of controversy, and that well-qualified reputable experts disagree, we think that the deception which may result from respondents' assertions of eggs' safety should be eliminated. Consumers, including those who lack extensive prior acquaintance with the cholesterol controversy, will recognize that respondents are merely stating their side of a complex, unresolved scientific debate, and treat such statements accordingly.

We believe that this remedial approach to the problem presented here is preferable from both the standpoint of respondents and consumers. On the one hand, were the Commission [27] to maintain a narrow view of what constitutes a "reasonable basis" for respondents'

damage; (4) the degree of reliance by consumers on the claims; (5) the type, and accessibility, of evidence adequate to form a reasonable basis for making the particular claims." (*Pfizer, Inc. supra.* at p. 61)

position and require that as a condition for its expression, it might indeed come at the expense of respondents' ability to publicize new developments in the field. On the other hand, were the Commission to adopt a more expansive view of "reasonable basis," it would be granting *carte blanche* to respondents to assure consumers directly or by implication that egg consumption is safe, without mention of the substantial contrary opinion. A similar right to deceive could, under the circumstances, hardly be denied those seeking to promote various low-cholesterol food products with the unqualified claim that eating eggs or other high cholesterol foods will increase one's risk of heart disease.

Respondents argue that a requirement of affirmative disclosure is inappropriate because it forces them to make a statement with which they disagree [RRB 17], namely (in the case of the Seventh Circuit's proposed disclosure and that of complaint counsel) the statement that there is evidence that eating eggs may increase the risk of heart disease. While we do not agree that respondents raise a valid objection, we believe it is possible to accommodate their concern by requiring merely that they indicate in their advertisements that many medical experts believe that existing evidence indicates that consumption of dietary cholesterol, including that in eggs, may increase the risk of heart disease. It appears from the record of this case that respondents would not disagree with the foregoing formulation, nor need it occupy an inordinately large share of the extensive prose which respondents have of necessity been devoting to this very complex issue.

For the foregoing reasons we have omitted Sections I(B) (1) and I(B)(4) of the ALJ's proposed order. Paragraph I(B) of the order we have entered will permit respondents to make representations concerning the existence of scientific evidence or expert opinion supporting the view that eating eggs does not increase the risk of heart disease, or to describe such evidence, provided that respondents also disclose clearly and conspicuously in conjunction therewith the fact that many medical experts believe that existing evidence indicates [28] that increased consumption of dietary cholesterol, including that in eggs, may increase the risk of heart disease.¹⁸

Respondents also object to Paragraph I(C)(1) of the order proposed by the administrative law judge, which would prohibit misrepresentations of the existence, absence, or quantum of scientific evidence or proof concerning the relationship between eggs and heart disease. Respondents contend that the provision is unduly vague, and will thus prevent them from advertising. Whether or not this claim is valid, the

¹⁸ The Commission's authority to require affirmative disclosure in advertising is well-established, e.g. *J.B. Williams Company v. FTC*, 381 F.2d 884 (6th Cir. 1967); *Keele Hair & Scalp Specialists, Inc. v. FTC*, 275 F.2d 18 (5th Cir., 1960); *Ward Laboratories, Inc. v. FTC*, 276 F.2d 952 (2d Cir. 1960), cert. denied, 364 U.S. 827 (1960); *Waltham Precision Instrument Co. v. FTC*, 327 F.2d 427 (7th Cir. 1964), cert. denied, 377 U.S. 982 (1964).

Commission has determined to modify Paragraph I(C)(1) in slight measure in order to clarify its purpose, without diminishing the necessary protections against deception which it is designed to provide. Paragraph I(C)(1) entered herein parallels both Paragraph I(A)(2) of the notice order and the second operative paragraph of the injunction entered by the Seventh Circuit, prohibiting representations that the evidence that consumption of eggs will not increase the risk of heart disease is insignificant, and misrepresentations of the amount of evidence that consumption of eggs will not increase the risk, or that such evidence is "overwhelming."

We respect respondents' desire to discuss what they view as the deficient character of the scientific case heretofore made against eggs. It would be misleading for the reasons discussed earlier, however, for them to do so by claiming that "no evidence" exists against eggs. The same effect would be achieved were respondents able to dismiss the quantum of existing evidence (and by implication the extent of existing contrary authority) as insignificant, and hence not worth considering. Paragraph I(C)(1), like the injunctive provision on which it is modelled, will prevent this, without foreclosing respondents from expressing their views as to the nature and quality of the scientific case against eggs. [29]

III. FIRST AMENDMENT DEFENSE

Respondents contend that even if the Commission has jurisdiction over NCEN, its pronouncements on the subject of eggs and cholesterol are protected from regulation by the First Amendment. Respondents aver that they do not claim a right to make false statements on matters of health (RRB 1) but they appear to maintain that the controversial nature of their subject matter and its status as a subject of public debate render their speech immune from regulation except perhaps insofar as it contains provable falsehoods.¹⁹

In its recent opinion in *Virginia State Board of Pharmacy v. Virginia Citizens Consumer Council, Inc.*, No. 74-895, 44 U.S.L.W. 4686 (May 24, 1976) [96 S.Ct. 1817] the Supreme Court dispelled what doubts may have lingered that speech does not lose all constitutional protection merely because it is designed to offer something for sale or convince the public of a product's virtues. At the same time, the Court reiterated

¹⁹ Of course, whether or not a statement is "provably false" depends in the first instance on what it means. Respondents themselves do not deny the falsity of the claims discussed at pp. 18-20, for example, but deny that their statements conveyed such claims. Similarly, respondents would presumably not deny the falsity of the message which we believe is clearly conveyed by their "no evidence" advertisements, although they would deny that such message is actually conveyed by their words. For these reasons we take respondents' First Amendment argument to be, in some measure, that the nature of their speech is such that the Commission must refrain entirely from evaluating it pursuant to the standards of Section Five, even if such evaluation would lead the Commission to conclude that it is false.

that commercial speech is not “wholly undifferentiable” from other forms, and that the indulgence of deception which may be necessary for certain forms of expression to flourish is not essential in the commercial arena. As the court noted, “Obviously, much commercial speech is not provably false, or even wholly false, but only deceptive or misleading. We foresee no obstacle to a state’s dealing effectively with this problem.” (44 U.S.L.W. 4693, n. 24) Similarly, the Court recognized that the nature of commercial speech may make it “appropriate to require that a commercial message appear in such a form, or include such additional information, warnings and disclaimer, as are necessary to prevent its being deceptive.” (*Id.*)

[30] There is, to be sure, enormous public interest in the vigorous dissemination of accurate product information to consumers by commercial organizations. That interest, which the Supreme Court perceived in the First Amendment, is no less at the heart of Section Five, whose goal of promoting competition is advanced in a climate of useful consumer information. Neither the objectives of the First Amendment, nor of the FTC Act are well-served, however, by commercial speech which is deceptive—which relies upon outright falsehoods or misleadingly oversimplified statements of complex issues to induce consumer beliefs and behavior that might differ considerably if greater precision were employed. As Justice Stewart noted in concurring with the majority in *Virginia Pharmacy Board*, “* * *the elimination of false and deceptive claims serves to promote the one facet of commercial price and product advertising that warrants First Amendment protection—its contribution to the flow of accurate and reliable information relevant to public and private decisionmaking.” (44 U.S.L.W. 4695-96)

Although *Virginia State Board of Pharmacy* had not been decided at the time this matter was argued before the Commission, we think it evident from respondents’ briefs that they do not view their representations as properly subject to the requirement of non-deceptiveness which the Court emphasized could appropriately be imposed upon commercial speech. Respondents argue in their briefs that their speech, far from being commercial, is rather akin to social or political advocacy, and that the Commission, therefore, may not interfere to any degree in their expression of “viewpoint.” Alternatively they seem to suggest that the Supreme Court’s decision in *Bigelow v. Virginia*, 421 U.S. 809 (1975) requires a “balancing” of interests before even misleading commercial speech may be regulated, and that such

balancing weighs here in favor of regulatory abstinence. We cannot agree.²⁰

[31] While there are no doubt aspects of the cholesterol controversy which impinge upon politics and governmental policy, those are not the focus of respondents' publications, all of which are directed toward conveying, by varying techniques, the message that eggs are entirely safe to eat, even in quantity, because consumption of dietary cholesterol will not increase the risk of heart disease, or at least has not been implicated by scientific evidence. Respondents' early publications (CX 1ff.) convey the message in a conventionally commercial format (e.g., "The Sexy Egg"). Later publications make the same point by means of excerpts from a small and not particularly representative sample of the scientific literature, accompanied by appropriate commentary and professions of charitable intent, e.g. "the public has the right to know."

There are significant differences, we believe, between scientific health claims made about a product by a commercial organization and commentary on genuine political or social issues, differences which warrant their well-recognized disparity in legal treatment. Arguments directed to social and political issues, whether made by individuals or corporations, are likely to be recognized by the public as expressions of opinion, by their very nature subject to controversy and substantial reputable disagreement. Even interspersed "factual" statements are likely to be viewed with the skepticism reserved for an advocate's expression of a disputed point of view. We do not think that consumers, or at least a substantial segment of consumers, necessarily reserve the same skepticism in viewing what purport to be largely or entirely factual scientific recitations of the health and nutritive virtues of a food product by a party presumptively in possession of all information relevant thereto, cf. *Virginia State Board of Pharmacy, supra*, p. 4693, n. 24. While few might still agree that "advertisements contain the only truths to be relied on in a newspaper" (Thomas Jefferson, "Letter to Nathaniel Macon"), they are clearly an important source of decision-guiding data for consumers.

Perhaps this is not the way it should be. Perhaps when consumers read that "there is absolutely no scientific evidence that eating eggs, even in quantity, will increase the risk of heart disease" they should all recognize this as merely the advertiser's interpretation of a controversial body of evidence, and view it with the appropriate skepticism. But

²⁰ We do not wish to mischaracterize respondents' position. They do maintain, of course, that their representations are neither false nor misleading. On the other hand they are apparently unwilling to concede that resolution of this lawsuit depends solely on whether or not the deciding tribunal agrees on that point. For this reason we understand them to be asserting as defense that the First Amendment does exempt their statements from liability, even if they are misleading by the standards customarily applied by the Commission in analyzing product claims.

would respondents also desire, and would it truly be in the public interest, if consumers were to accord the same intense degree of skepticism to statements which occur a few sentences earlier in their advertisement: "* * * eggs have fewer calories per gram of protein than any other natural food* * *. Eggs are an important source of vitamins A,B,D, and E and are a preferred source of iron." (CX 2)

[32] To the contrary, we believe that some consumers do, and have a right to place substantial faith in nutrition and health claims made by commercial organizations. If an advertiser assures them that the product being touted contains plentiful quantities of a vitamin, or abundant amounts of protein, they have a right to assume that these statements would compel the assent of all or nearly all experts within the relevant scientific community. Similarly, when an advertiser, (or a "National Commission on Egg Nutrition") which presumably knows everything there is to know about the product being discussed, assures the public that the product is safe, or that there is "No evidence" that it is unsafe, the public will, and we think has a right to assume that the advertiser is doing more than expressing an opinion that would at best obtain the qualified assent of a mere fraction of those professionally competent to evaluate it.

For the foregoing reasons we must reject respondents' contention that their publications are, like true political commentary, constitutionally immunized from the necessity to adhere to the standards of Section Five of the Federal Trade Commission Act. Similarly, we doubt that the *Bigelow* case compels the application of a balancing of interests test in each particular case before any regulation whatsoever may be applied to *misleading* commercial speech. That balance has already been struck on a categorical basis, a fact recognized by the Supreme Court in *Virginia Board of Pharmacy* if not in *Bigelow* itself. Assuming, however, *arguendo* that such balancing is appropriate, we conclude that it weighs heavily here in favor of regulation for the following reasons:

There is scant public benefit, and considerable actual and potential public harm (I.D. 109-110, 127) in advertising which assures all members of the public that there is no reason to doubt that they may eat as many eggs as they wish without any increase in the risk of heart disease, without a mention that a major segment, perhaps a substantial majority, of the relevant expert community strongly disagrees.

Respondents claim that their advertising serves the worthy purpose of firing debate in an area marked by misinformation and misconception. To be sure, the exhibits introduced by respondents demonstrate that they have no monopoly on the dissemination of misinformation concerning the relationship [33] between dietary cholesterol and heart

disease, although their advertisements are probably more likely to catch the eye than the nutrition articles to which they object. Nevertheless, assuming *arguendo* that respondents' publications may indeed provoke valuable consumer debate, there is no reason to conclude that such debate could not and will not be equally well encouraged, without deleterious side effects, by advertising that is not misleading. As the Supreme Court noted in *Virginia Board of Pharmacy*, "[s]ince advertising is the *sine qua non* of commercial profits, there is little likelihood of its being chilled by proper regulation and foregone entirely." 44 U.S.L.W. 4693, n. 24.

In addition to the public debate, respondents suggest that regulation of their publications will chill "independent thought and variance from government orthodoxy by those who can contribute to the science of the matter." (RB 36) We agree, of course, that the First Amendment exists to foster the search for truth as well as the expression of opinion, and that search may entail societal sufferance of many deceptions, real and imagined, along the way. This consideration weighs overwhelmingly in favor of the right of scientists to disseminate their views free of scrutiny, or of journalists and publishers to report upon or promote scientific works, despite an incidental commercial effect, *e.g. Scientific Manufacturing Co. v. FTC*, 124 F. 2d 640 (3rd Cir. 1944).

The foregoing consideration is far less compelling, however, in the case of those who would simply use, or misuse, the works of scientists for the purpose of convincing the public of a scientific proposition in order to promote the sale of a commercial product, *e.g. Perma-Maid Co. v. FTC*, 121 F. 2d 282 (6th Cir. 1941); *Koch, et al. v. FTC*, 206 F. 2d 311 (6th Cir. 1953). It should be apparent that the Commission in its decision has expressed no view as to the merits of the diet/ heart disease hypothesis, and the Commission's opinion, like that of the ALJ, simply cannot be taken as an endorsement of anyone's orthodoxy except perhaps by those scientists who, in most unscientific fashion, choose to draw conclusions about a document without reading it. For these reasons we cannot take seriously respondents' suggestion that those who would do research in this area will in any way be deterred by a Commission decision adverse to NCEN, and we must similarly conclude that no reason exists in this case to warrant the Commission's departure from its statutory duty to proscribe false and misleading advertising.

[34] The foregoing is not to say, as should by now be clear, that we view the issues raised by respondent and the peculiar nature of this case to be wholly irrelevant to our decision and particularly the question of appropriate relief herein. As noted in the preceding discussion of "reasonable basis," [Part II(D)] we do believe that the

nature of the dispute here in issue warrants a somewhat different order from that which might ordinarily be appropriate. We believe that the order we have entered herein should adequately accommodate those interests which respondents claim warrant complete regulatory exemption. Paragraph I(A) of the order will prohibit certain precisely defined and demonstrated falsehoods which may be used to convince people of eggs' safety and nutritive virtue. It will also require respondents to disclose that NCEN is an organization of egg industry people. At the same time, the order will not prevent respondents from presenting to consumers their point of view regarding the safety of eggs, provided they make it clear that their assertions are subject to substantial expert disagreement. Substitution of affirmative disclosure for the requirement of "reasonable basis" is intended to maximize the certainty with which respondents may advertise, since inclusion of the disclosure in conjunction with a representation described in Par. II(B) will suffice to immunize the representation from liability under the order.

Respondents also object to the order on grounds that while it purports to be applicable only to "advertisements" it gives inadequate guidance as to what publications fall under that term. Complaint counsel suggest a two-part test: (1) is the publication used in connection with the sale or promotion of a product, and (2) does it have a tendency or capacity to induce the sale of, or to affect any other commercial behavior toward, the product? *Cf. Koch, et al. v. FTC, supra* at 318 (6th Cir. 1953). In view of the nature of respondent NCEN, described in part I of this opinion, it is obvious that any publication disseminated by it in mass media to the lay public, and satisfying the second criterion, also satisfies the first. We think the traditional standard of whether or not a publication has the tendency or capacity to induce the sale of a product is also not unduly vague. Publications designed to convey the point that consumption of a particular product, will not increase the risk of heart disease, are clearly likely to induce the purchase of that [35] product. The fact that the message is conveyed by means of selected quotations from the works of scientists and popular writers does not alter the commercial character of the publication. Nor is it altered by self-serving professions of eleemosynary intent, *e.g.* "Brought to you in the public interest." If anything the misleading effect of respondents' advertisements is enhanced by casting them in the guise of a "public service message" presented by an unidentified "National Commission".²¹

The term "advertisement" is one which has generally been thought

²¹ In this regard we must reject the suggestion attributed to the ALJ (RR 21ff.) that CX 171-173 and 175-176 are necessarily not commercial publications, although they do not form the basis for our finding of liability in this matter.

sufficiently clear by courts applying it in Section Five orders, including the Seventh Circuit which used the term in issuing an injunction in this matter.(517 F. 2d 485, 491.)We think it is sufficiently clear in this case. We do not doubt that if respondents wish, after entry of an order, to continue the misrepresentations prohibited therein, their ingenious efforts to create a "non-advertisement" in which to do so may raise close questions of interpretation. That, however, can be no reason in this, or in any other case, for withholding entry of an order to prohibit the recurrence of what are clearly misleading advertisements.

For the foregoing reasons the initial decision of the administrative law judge is affirmed, except to the extent modified herein.²² An appropriate order is appended.²³ [36]

APPENDIX

The findings of fact and conclusions of Law set forth in the initial decision of the administrative law judge are adopted by the Commission, except to the extent they are qualified in the Commission's opinion and in this appendix:

- | | |
|-----------------|--|
| I.D. 14, p. 9, | add to the end of line 3, "in at least certain documented instances" |
| I.D. 21, p. 12, | delete "(Smith, 1635-36)"
[Although the conclusion of the ALJ for which this citation is given in support is correct and apparent from the face of the advertisements, the citation is inapposite.] |
| I.D. 59, p. 32, | delete "and most authoratative [sic]" |

²² In addition to modifications described in the text, we have reviewed the initial decision and respondents' objections to it at RB 1a-6a, and have made certain changes in the initial decision findings adopted by the Commission. These are recited in the Appendix to this opinion.

²³ We have modified a paragraph proposed by the ALJ which would have required NCEN to require its members to sign an agreement to abide by terms of the order as a condition of membership. The order entered will simply require that NCEN members be provided with copies of the order. To the extent that NCEN acts through its members, or that its members act on its behalf the corporation will be liable. While the signature provision is clearly a necessary remedy in certain cases, we can perceive no need for it here.

- I.D. 106, p. 57, change "Their qualifications as experts on CHD are unchallenged" to "They are well-qualified as experts on CHD"
- I.D. 110, p. 59, add at end of finding, "Of course, Dr. Blackburn's estimate must be qualified in light of his acknowledgment that he cannot be certain that increases in serum cholesterol levels would in fact result in increases in the rate of CHD. Tr. 377-79"
- I.D. 120, p. 65, amend final sentence on this page to read: "Rather, the proper conclusion with respect to the viewpoint of those experts quoted hereinabove is approximated by this statement by the Inter-Society Commission for Heart Disease Resources (Finding 102 *supra*):"
- I.D. 120, p. 66, delete sentence beginning "The testimony relied upon* * *"
[This subject is more fully discussed in Part I of this opinion.]

FINAL ORDER

[1] This matter having been heard by the Commission upon the appeal of respondent from the initial decision, and upon briefs and oral argument in support thereof and opposition thereto, and the Commission for the reasons stated in the accompanying opinion having determined to sustain the initial decision with certain modifications:

It is ordered, That the initial decision of the administrative law judge, pages 1-95, be adopted as the Findings of Fact and Conclusions of Law of the Commission, except to the extent indicated in the accompanying opinion.

Other Findings of Fact and Conclusions of Law of the Commission are contained in the accompanying opinion.

It is further ordered, That the following order to cease and desist be, and it hereby is, entered:

ORDER

I

It is ordered, That respondents National Commission on Egg Nutrition and Richard Weiner, Inc., corporations, their successors and assigns, either jointly or individually, and [2] respondents' officers, agents, representatives, and employees, directly or through any corporation, subsidiary, division or other device, in connection with the advertising, offering for sale, sale or distribution of eggs for human consumption do forthwith cease and desist from:

A. Disseminating or causing the dissemination of any advertisement by means of the United States mail or by any means in or affecting commerce, as "commerce" is defined in the Federal Trade Commission Act, which directly or indirectly

1. Represents that there is no scientific evidence that eating eggs increases the risk of heart attacks, heart disease, atherosclerosis, arteriosclerosis, or any attendant condition;

2. Represents that there is scientific evidence that dietary cholesterol, including that in eggs, decreases the risk of heart attacks, heart disease, atherosclerosis, arteriosclerosis, or any attendant condition;

3. Represents that there is scientific evidence that avoiding dietary cholesterol, including that in eggs, increases the risk of heart attacks, heart disease, atherosclerosis, arteriosclerosis, or any attendant condition;

4. Represents that eating eggs does not increase the blood cholesterol level in a normal person;

5. Represents that the blood cholesterol level is prevented from being raised or lowered by dietary cholesterol intake;

6. Represents that the human body increases its manufacture of cholesterol in an amount equal to a decrease in dietary cholesterol intake;

7. Represents that the average human body eliminates the same amount of cholesterol as that eaten;

[3] 8. Represents that dietary cholesterol, including that in eggs, is needed by the body for building sex hormones, for transmitting nerve impulses and for maintaining life in cells; or

9. Utilizes the name "National Commission on Egg Nutrition" unless it is clearly and conspicuously disclosed in immediate conjunction with the name that the National Commission on Egg Nutrition is

composed of egg producers and other individuals and organizations of, or relating to, the egg industry.

B. Disseminating, or causing the dissemination of any advertisement by means of the United States mail or by any means in or affecting commerce, as "commerce" is defined in the Federal Trade Commission Act which directly or indirectly

1. Represents that eating eggs does not increase the risk of heart attacks, heart disease, atherosclerosis, arteriosclerosis, or any attendant condition or represents that there exists, or describes scientific evidence which supports the theory that consumption of dietary cholesterol, including that in eggs, does not increase the risk of heart attacks, heart disease, atherosclerosis, arteriosclerosis, or any attendant condition or

2. Makes any representation concerning the relationship of dietary cholesterol, including that in eggs, to heart attacks, heart disease, atherosclerosis, arteriosclerosis, or any attendant condition *unless* it is clearly and conspicuously disclosed in immediate conjunction therewith that many medical experts believe that existing evidence indicates that increased consumption of dietary cholesterol, including that in eggs, may increase the risk of heart disease.

[4] C. Disseminating, or causing the dissemination of, any advertisement by means of the United States mail or by any means in or affecting commerce, as "commerce" is defined in the Federal Trade Commission Act, which directly or indirectly

1. Represents as insignificant the available scientific evidence that the consumption of dietary cholesterol, including that in eggs, may increase the risk of heart attacks, heart disease, atherosclerosis, arteriosclerosis, or any attendant condition, or represents that there is overwhelming scientific evidence or otherwise misrepresents the amount of scientific evidence that eating eggs does not increase the risk of heart attacks, heart disease, atherosclerosis, arteriosclerosis, or any attendant condition.

2. Misrepresents in any manner the physiological effects of consuming dietary cholesterol or eggs.

II

It is further ordered, That respondents shall forthwith distribute a copy of this order to each of their operating divisions, and to all current and future members of respondent National Commission on Egg Nutrition.

It is further ordered, That each respondent notify the Commission at least thirty (30) days prior to any proposed change in its corporate structure such as dissolution, assignment or sale resulting in the emergence of a successor corporation, the creation or dissolution of subsidiaries or any other change in the corporation which may affect compliance obligations arising out of the order.

It is further ordered, That each respondent shall, within sixty (60) days after this order becomes final, file with the Commission a report, in writing, signed by respondent, setting forth in detail the manner and form of its compliance with the order to cease and desist.

Order

88 F.T.C.

IN THE MATTER OF
RSR CORPORATION

Docket 8959. Order, July 28, 1976

Order to show cause and order granting temporary *in camera* treatment.

Appearances

For the Commission: K. Keith Thurman, James C. Egan and Annthalia Lingos.

For the respondent: Robert L. Wald, Wald, Harkrader & Ross, Washington, D. C. Merrill L. Hartman, Hewett, Johnson, Swanson & Barbee, Dallas, Tex.

ORDER TO SHOW CAUSE AND ORDER GRANTING TEMPORARY
In Camera TREATMENT

On July 22, 1976, respondent filed a document styled "Motion to Strike Pages 19 through 25 of 'Complaint Counsel's Reply Brief.'" Respondent requested expedited treatment of its motion, alleging that the pages sought to be expunged contained information contained in *in camera* portions of the record in this proceeding.

The Commission has not as yet determined what disposition it will make of respondent's motion. However, pending a determination as to the alleged *in camera* status of the information contained in complaint counsel's brief it will order that this brief be maintained in the *in camera* portion of the docket of this case. The Commission notes, however, that *in camera* treatment should be granted sparingly. If respondent's allegation of *in camera* status is meant seriously as a separate claim from its motion to strike, respondent should specify within 15 days precisely those portions of pp. 19-25 which it believes should be maintained *in camera*, in the event that the motion to strike is not granted.

In addition, the Commission notes that the *in camera* findings of the administrative law judge filed in this matter contain information pertaining to market shares of RSR and Quemetco in 1971 and 1972 (I.D. 246-248, 256-258) and pertaining to the distances to which various plants of RSR and Quemetco shipped lead in those same years. (I.D. 217-218, 223) There is an obvious and substantial public interest in having decisions of the Commission contain, for public inspection and review, all information relevant to the Commission's determination. In light of this public interest, and in light of the fact that the information contained *in camera* is four to five years old, the Commission will order the parties within 15 days to show cause as to why the information