# Senate Hearings on Infant Formula

On May 23, 1978, the U.S. Senate Health and Scientific Research Subcommittee held hearings on the use and promotion of artificial baby formulas in developing countries. Senator Edward M. Kennedy chaired the four-hour investigatory hearing, and he outlined its purpose with the question: "Can a product which requires clean water, good sanitation, adequate family income and a literate parent to follow printed instructions be properly and safely used in areas where water is contaminated, sewage runs in the streets, poverty is severe and illiteracy is high?"

The hearing was divided into panels of witnesses: Third World health professionals and critics, medical and marketing experts, and company representatives. The following are excerpts from witnesses' statements, selected by Leah Margulies, director of the infant formula campaign of the Interfaith Center on Corporate Responsibility; Douglas Johnson, national chairperson of the Infant Formula Action Coalition; and Gordon Pederson, staff of the INFACT Clearinghouse.

The following are some excerpts from the Senate Hearing. The full hearing record, "Marketing and Promotion of Infant Formula in the Developing Nations, 1978," (1,489 pages) is available on request from: Subcommittee on Health and Scientific Research, 42-30 Dirksen Senate Office Building, Washington, D.C. 20510, U.S.A.

# Senator Kennedy's Opening Remarks

Senator Edward M. Kennedy (Democrat, Massachusetts) chairs the Senate Sub-committee on Health and Scientific Research.

The Bengali poet Tagore wrote, "every child comes with the message that God is not yet discouraged of man". Yet in one nation in Latin America, 80 percent of all deaths are accounted

for by children under five years of age. Measles kills ten percent or more of all children born in Africa before they reach age five. Less than ten percent of the 80 million children born each year in the world receive immunisations against preventable disease. It is astonishing, and it is an enormous human tragedy, that one-fourth of the people on this earth - one billion men, women and children - have no access to any health care whatsoever. Another billion have only the most rudimentary and ineffective care.

And it is always the children who suffer most. Their suffering is the least excusable. They are the innocent victims. They are the victims of the negligence and unconcern - if not the outright unthinking inhumanity - of nations that could ease the burden, if only they understood the need.

Today, we will focus on one small element of their problems. We will focus on the use of a product intended to nourish life, to enable infants to thrive and grow, and see how it can have the unintended effects of fostering malnutrition and spreading disease. We will focus on the advertising, marketing, promotion and use of infant formula in developing nations.

Whose responsibility is it to see that the products are properly used - the manufacturer, the health professionals, or the government involved?

Whose responsibility is it to control the advertising, marketing and promotional activities which, in and of themselves, may create a market in spite of public health considerations?

When economic incentives are in conflict with public health requirements, how shall that conflict be resolved?

Is it enough to establish a code for product use and disown or turn away from the realities of product use?

Our purpose today is to learn what the problems are in this narrow area - the use of infant formula in developing nations; to explore the questions of responsibility for improving conditions; and for developing an understanding of these steps the Congress and the U.S. government can take to make things better.

#### Dr. Alan Jackson

Dr. Alan Jackson, M.D., heads the Tropical Metabolism Research Unit at the University of the West Indies in Kingston, Jamaica.

Studies that have been carried out (in Jamaica) over the last 12 years show that there is a consistent pattern of infant feeding. About 70 percent of the mothers start off by breastfeeding their children. But from a very early age, they introduce their children to bottle feeding, complementary feeding, usually with a milk formulation.

Initially, widespread advertising, free samples, and the use of milk nurses encouraged this type of feeding practice. The government has been fairly active in Jamaica, and they have attempted to limit the extent of the advertising and the accessibility of milk nurses to government institutions. But this has had little effect of the established pattern.

Furthermore, the influence of the advertising and the milk nurses has been so found to outlast the period of their physical presence, so that unless definitively and strongly advised otherwise, the mothers persist in a pattern of bottle feeding in subsequent pregnancies. And this is something that is associated, in fact, with the ambivalence itself of health professionals who, themselves, have been courted by milk companies, and help to promote an undesirable practice of feeding.

Now, the average family income in Jamaica for a family of, say, five or six people is on the order of \$16 to \$20 a week. Now, to properly feed a four-month-old baby (with formula) - it is difficult to get an accurate figure, because they are having rising costs of living - but it is a minimum of \$7

a week out of total family income of, say, \$20 a week. Obviously, that is prohibitive.

Senator Kennedy. Just briefly, describe what a milk nurse is.

*Dr. Jackson.* A milk nurse is a qualified nurse who is employed by a company that manufactures, produces, and distributes an infant proprietary formula, to act as a sales representative on their behalf to promote the formula directly to the mothers and the whole professional community.

Senator Kennedy. Why were they [milk nurses] banned?

*Dr. Jackson.* Because it was felt that their presence in the hospitals, having an early effect on mothers, is likely to influence mothers to utilise bottle feeding at an early stage, which was considered undesirable.

Senator Kennedy. Why was advertising banned?

*Dr. Jackson.* The advertising was banned because it was felt that the advertising, in our situation within the whole socio-economic status of our country - bottle feeding presents apositive, dangerous threat to the health of our children.

#### Dr. Natividad Clavano

Dr. Natividad Clavano, M.D., is head of Pediatrics at Baguio Hospital in Luzon, Philippines.

Well, it has been widely known, and most of the health workers are aware of the havoc that bottle-feeding creates. I have here a working paper which is a four-year study that we have done in the Philippines. In this study, we were able to prove the beneficial effect of breastfeeding. We did not change anything, except that we brought the babies back to their mothers. In the two-year period of 1973-1974, the percentage of bottle-fed babies with us was quite high; I was the department head at the time. But, then, as I realised that we were committing some errors in that, we shifted and reversed the situation, wherein we had breastfeeding of 81 percent.

In the Philippines, it is common knowledge that we have very high malnutrition and high infant death, and we have a lot of economic problems. You see mothers diluting their formula, because the basic salary of a Filipino father is only around less than two dollars, and how much would a tin of feed cost? It costs more than what he earns, and that milk should be consumed for only three days.

[This] is a resume of the study, wherein we did not alter our method, except we just brought back the babies to their mothers two hours after their birth. So, this is a resume of a four-year study done at Baguio Genera Hospital, Philippines, that is from 1973-1976.

The result of this study is that in nearly 10,000 newborn babies, we were able to reduce our deaths by 47.2 percent, and our diseases by 58 percent. Now, diseases due to infection were reduced to 66 percent, and the diarrhoea was reduced 79 percent.

#### Ms. Fatima Patel

Ms. Fatima Patel is a Peruvian nurse with Canadian University Service Overseas.

I work mainly where there are Amazon tribes. The only way of getting into their area is with a small Cessna, or using the river, or walking on a footpath in the jungle. Now, the Cessna has brought modern ...

Senator Kennedy. They have got formula out there, too?

Ms. Patel. Yes, sir. Since the Cessna plane is going in and out, most of the younger generations go out to work as domestics. So, they will learn from the ladies they work for about formula, bottle feeding, make up; everything that is not right at the moment for them.

But in the jungle, we survive on the water that is contaminated in the river. I myself do that.

Senator Kennedy. It is contaminated in the river?

Ms. Patel. Yes. The river is used as a laundry, as a bathroom, as a toilet, and for drinking water. It is the only source of water we have. Now, you can tell the mother to boil the water, even if you are going to give it to them just as water - never mind mixing it with the formula.

But, to get the fuel to boil that water, she has to go into the jungle, chop a tree trunk with a machete, which is a huge knife, and carry it on her back. No mother is going to use that hard earned piece of wood to boil that water.

Senator Kennedy. Did you observe that the rate of diarrhoea and malnutrition was a serious problem for those infants?

Ms. Patel. The kinds of diseases are malnutrition and anemia, due to the parasites which we get from drinking the contaminated water. So, the babies are drinking the contaminated water, and the preparation of the formula is being done under very unhygienic conditions. Once [the baby] starts taking the formula, he has constant attacks of diarrhoea and vomiting. Naturally, the resistance is going down and his digestive tract has lost resistance against any other disease, too.

In the jungle, we have measles which is very virulent; it is called Black Measles. I only wish that all these agents sending these formulas could see this. Within a week, we can lose - can any father imagine losing three or four children in the same family within a week due to measles, which is becoming an epidemic because of malnutrition?

#### Dr. Derrick B. Jelliffe

Dr. Derrick B. Jelliffe, M.D., is a professor of public health and pediatrics and head of the Division of Population, Family and International Health at the University of California at Los Angeles, U.S.A. He is the author of "Human Milk in the Modern World" (1978) and was formerly director of the Caribbean Food and Nutrition Institute in Jamaica.

The infections that have been mentioned, I think, are very important, because human breastmilk is an active anti-infective biological system, which cannot be duplicated in any way whatsoever by a formula.

Early miasmas and diarrhoea are the major public health problem. We have calculated that if breastfeeding could be reinstituted in developing countries, very probably - and this, of course, is based on figures, but partly a guestimate - some ten million babies could be saved from diarrheal disease and marasmus each year.

Also, I regret to say that the promotion - and it is not just advertising - through the health services has been a very large part in this story. The free samples, the glossy brochures, the assistance, the gifts, the advertising in professional journals, and so forth, have been and still are a very important part of this whole complex.

Recent changes have occurred, I think, because of the pressure brought to bear on infant formula companies, and these have been in some modification of practices, especially direct advertising to the public. How much of this is cosmetic, how much of this is going to continue, time will tell. At the same time, there is no sign whatsoever of there being any substantial change in the promotion, in the persuasion, in the manipulation, in the "courting", as Dr. Jackson called it, of the health profession.

The codes of ethics that have been introduced are certainly a step in the right direction, but at the present moment, these, in fact, are really very feeble, flabby documents which are full of holes, full of inconsistencies, and also, at the same time, the chances of them being carried out in the periphery, where the man on the spot is judged by the sales that he makes, are very slight indeed, in my opinion.

# Dr. Manuel Carballo

Dr. Manuel Carballo, M.D., is with the Maternal and Child Health Division of the World Health Organization in Geneva, Switzerland.

The position of the World Health Organization on the question of infant feeding has always been, and continues to be, that breastfeeding is ideally suited to the overall health and well-being of the young infant, and that breastmilk is the food of choice during early infancy.

In 1974, the World Health Assembly, the highest governing body of the Organization, voiced concern for the general decline in breastfeeding as one of the factors contributing to high rates of infant mortality and malnutrition.

In response to this, the World Health Organization initiated a number of studies in nine countries.

The objective of these studies was to measure the proportion of mothers breastfeeding, how long they breastfeed for, and to identify factors associated with the patterns of breastfeeding in order to define and direct intervention measures designed to promote and maintain breastfeeding.

The lowest percentage of mothers initiating breastfeeding was found in the Philippines and Guatemala. Our data show, for example, that one-third of all mothers in the area sampled coming from economically advantaged backgrounds never attempted to initiate breastfeeding, and in the urban poor community, one-sixth of all the mothers interviewed indicated again never having breastfed. If one compares the situation of the Philippines with that of Hungary, ten times as many Filipino mothers coming from mainly economically advantaged background did not breastfeed, and in the case of the urban poor, five times as many did not breastfeed.

Our data also indicate that the exposure of mothers to industrially processed and commercially marketed infant foods was extensive. Knowledge of brand names was almost universal throughout the economically advantaged populations in all nine countries. This was also true of the urban poor and rural communities of Chile, Guatemala and the Philippines. In the case of the Philippines, for example, all the mothers in the urban poor and rural communities knew products by their name, and in Nigeria, 72 percent of the urban poor mothers also knew products by their brand name.

The data on the subject of marketing and distribution of infant foods were collected and analysed for WHO by Professor Bo Wickstrom, Professor of Marketing and Business Administration at the University of Gothenberg in Sweden. Four countries, Ethiopia, Nigeria, the Philippines and India, were covered in this survey. In these four countries altogether, 42 transnational companies representing 13 countries were operating. In the case of Ethiopia, Nigeria and the Philippines, the infant food market was almost totally supported by imported products. In India, there was a significant national production.

In the specific case of infant formulae, again the

range of products varied. In India, eight products were identified; in Ethiopia, there were 23; in Nigeria, 20; and in the Philippines, 24. The total amount of infant formulae alone - that is to say not other milk powders - sold in these four countries during the one-year period that was covered by study was estimated at 40,000 tons, with a sales value of \$125 million.

While no attempt has been made in this study to correlate patterns of breastfeeding with the type and degree of marketing of industrially processed infant foods, it appears significant that in settings where mothers were provided with free samples of milk, there was also a marked low incidence of breastfeeding. Similarly, the extent to which knowledge about brand products has extended into urban poor and rural communities, and the diverse network of distribution channels utilised in the marketing and distribution of infant foods, would also seem significant. The possible association of these practices with patterns of breastfeeding cannot and should not be overlooked.

### Professor James E. Post

Dr. James E. Post is professor of management at Boston University.

Data relating to the infant formula industry is difficult to acquire. Most information on sales volume, profits, market share of manufacturers, and even the manner in which they do business, is regularly denied researchers because of its proprietary nature. Published information is very limited in the United States, and even more scarce in the developing world.

Food companies prefer to use consumer advertising; pharmaceutical companies prefer to use medical promotion. What we see in the industrialised nations, in the United States, for example, is a preference for one of these two alternatives. What we see in the developing nations are both. So, we have both consumer promotion and medical promotion.

This promotion to both consumers and medical personnel has positioned the industry to take advantage of other development-related trends. Concentration of population in urban areas pays dividends for a radio advertising program; growth

in medical services, hospitals, and live births in health clinics coincide with medical promotion and endorsement policies; and market presence in developing nations where births are rising is opportune when birth rates in industrialised nations are stable or falling. It is true, as the manufacturers assert, that many trends contribute to increases in women bottle feeding their babies, but it is naive to believe that these firms have not deliberately positioned themselves to take advantage of such social change.

The current world market for infant formula products is approximately \$1.5 billion. The nations of Latin America, Africa, the Middle East, and Southern Asia may account for as much at 40-50 percent of that amount. Using conservative projections of population growth, I have estimated that before 1980, the developing world will be spending more that \$1 billion per year for infant formula. That is more than the World Bank loaned to all the nations of the Caribbean and Latin America in 1974 or to all African nations south of the Sahara in 1977.

The competitive marketing of infant formula produces no inherent benefits for the population of a developing nation. Price competition is rarely vigorous in less developed nation markets, creating little of the consumer benefit economists normally attribute to market competition. In the past, the industry has argued that freedom of consumer choice was reason enough to allow its products to be sold, and that they were not responsible for the lack of pure water, the poverty, or the illiteracy of the population. But that argument cannot legitimise a product whose misuse is predictable and calculable.

In our research in Colombia, it was learned that only 29 percent of rural populations and 72 percent of urban populations have the potable water required for mixing with powdered infant formula. And yet, formula was available to consumers and promoted to health personnel throughout that nation. No manager familiar with this issue could authorise distribution and marketing in Colombia without also knowing that there was a high probability of misuse by as much as 71 percent of the rural population and 28 percent of the urban population.

Senator Kennedy. Well, is that really not the crux of the problem? How do you justify the promotion of a product when you know that 28 percent of the urban population do not have the potable water to be able to mix it with the infant formula, and yet there is the promotion for that particular formula? Is that not really the issue in terms of what the corporate responsibility is?

Dr. Post. For eight years, the industry's critics have borne the burden of providing that there was a connection between commercial marketing practices and the infant malnutrition and morbidity which have been discussed this morning. These hearings seem to me to signal a turning point, because from this time forward, the sellers will have to bear the burden of proving that their products are not only desired, but actually serve a public purpose in the developing world.

#### Dr. Oswaldo Ballarin

Dr. Oswaldo Ballarin, Ph.D., is chairman and president of Nestle Brazil, the Nestle Company.

Senator Kennedy. Let us take rural Colombia, with 72 percent poor water. What are you distributing down there? Do you think you should be distributing down there?

Dr. Ballarin. It is almost philosophical, with your permission, because if we do not distribute the product where we suppose the water is no good, also persons who have the possibility of having good water will not have access to this product.

Senator Kennedy. Well, you can obviously make a judgement about the numbers of people that are going to be able to have decent water, even within those general kinds of areas, now, versus the great numbers of people who are not going to have it.

Well, I am just wondering what you think your corporation ought to be doing in terms of reviewing, to the extent that it is being used in those areas.

Dr. Ballarin. Well, of course, we can study and we can review.

Senator Kennedy. Well, are you going to do that?

*Dr. Ballarin*. Not yet, we cannot review that; from that standpoint, to be very frank, we cannot do it for the time being.

### Mr. Frank A. Sprole

Mr. Frank A. Sprole is a vice chairman of the board of directors of Bristol-Myers Company.

Mr. Sprole. We believe breastmilk is best for the infant, but where it is not appropriate or sufficient, we believe our products are among the finest substitutes or supplements for breastmilk anywhere. We endeavor to promote and market our infant formula products overseas according to very stringent and strictly enforced guidelines.

We promote our products through the medical and nursing professions. The decision to breastfeed or not rests with the medical professional and the mother alone. Although many doctors have praised "mothercraft" nursing services as a valuable adjunct to their work - and we have statements from about 60 doctors attached as exhibits and furnished to the Committee - there has been criticism that these nurses may not always have followed our policies and practices. In 1977, our management decided to embark on a programme to discontinue mothercraft nurses in an orderly business fashion. The first such service was discontinued in December 1977, and at this time, all of our mothercraft nursing services have been discontinued.

# Mr. John R. Stafford

Mr. John R. Stafford is senior vice president of American Home Products Corporation.

Mr. Stafford. We export from the United States only about 17 percent of the infant formulas which we supply in developing countries. The remaining 83 percent are made locally themselves or supplied from our other international production facilities.

During recent years, manufacturers of infant formula products who market in underdeveloped countries have come under attack from groups in the United States and certain European countries. These groups assert that the use of infant formula products by the poor or non-literate mothers leads to malnutrition and death.

We are aware of these problems, and we help to prevent them by emphasising the importance of breastfeeding in our promotion to physicians, in instructional materials provided to professionals to be given to new mothers, and in the additional materials which we furnish. With prior professional consent, we do the same for new mothers through contacts by our professional service representatives, sometimes called mother-craft personnel.

We do not want our product used by women improperly.

Senator Kennedy. Do you do anything to prevent it or what do you do?

Mr. Stafford. We do not want it. As a matter of business practice, our customers tend to be - as defined by our foreign managers, tend to be the middle-class of those customers, and the abject poverty in the world environment is not the customers that we target. They are ones that cannot afford the product.

Senator Kennedy. You do not target, but do you know what goes into the poor people?

Mr. Stafford. Yes, the product is available in the stores now.

# Mr. David O. Cox

Mr. David O. Cox is president of the Ross Division of Abbott Laboratories, Columbus, Ohio.

Mr. Cox. We understand that infants under one year of age are vulnerable to rather narrow limits

of nutritional stress, and that all parents are not aware of or able to cope with that fact. Consequently, we have evolved two central marketing principles:

- The selection and use of a formula should involve the intervention of a health care professional.
- Our promotion should not be directed to the parent.

Consistent with these principles, we have published formal marketing guidelines specifically for developing countries which reject the use of mass media advertising - radio, TV, newspapers - and which confine the promotion of our products to the health care profession. We will continue to follow up diligently on any alleged infraction of our Code which may be uncovered and correct those infractions promptly if validated. We will also continue to list carefully to all responsible concerned groups.

However, I do not wish to leave a false impression that we agree with or accept many of the accusations or charges made against the industry. Many of these charges are circumstantial, anecdotal, exaggerated or biased, although very effective in stimulating controversy.

Senator Kennedy. I gather... that you did not do any sort of a post-market surveillance to find out how your product is used?

*Mr. Cox.* Other than our own observations, and listening and cooperating with our critics.