

The baby killer

A War on Want investigation into the promotion and sale of powdered baby milks in the Third World.

By Mike Muller

March 1974

Published and printed by
War on Want,
467 Caledonian Road,
London N7 9BE.

Copyright © 1974 by War on Want and Mike Muller

Thanks are due to *New Internationalist* magazine and their staff who first drew attention to the subject and encouraged War on Want to investigate further. Particularly to Hugh Geach who did the initial work for *New Internationalist* and made his material available to us.

Thanks also to the doctors and professionals in other fields who gave their time and advice, especially to Dr. David Morley of the Tropical Child Health Unit at London University's Institute of Child Health, who made many helpful suggestions as well as reading the draft of this report.

Certain of the companies involved have also been very patient in explaining their view of the situation. In particular, Dr. H. Müller and Mr. G. Fookes of Nestlé's Dietetics Division gave me a great deal of their time, as did Mr. I. Barter of *Unigate's* International Division. These gentlemen are policy makers in their organisations and where quotations are attributed simply to Nestlé or Cow and Gate they are from interviews with them.

War on Want is one of many Third World charities indebted to certain of the milk companies for donations of infant foods and other products for relief programmes. In disasters and other *abnormal* situations, these products can be extremely useful. We may be accused of "biting the hand that feeds" with this report, but our responsibility lies with the communities in which we work.



Baby D
2nd President.

FREE

DUMEX FEEDING BOTTLE

Buy two tins of
Dumex Baby Food
and get a FREE
Feeding bottle now!

Dear Dumex Mothers and Babies,

Buy two tins of Dumex Baby Food and send the paper discs from inside the tins to me and I will send you a 250 cc feeding bottle specially made for members of the Dumex Babies Union.

Join the Babies Union now by feeding your baby with Dumex Baby Food so baby will grow fat and strong.

Baby d
2nd President.



Issued by Dumex Limited.
Makers of
DUMEX BABY FOOD.

— cut along dotted line. —

DUMEX BABIES UNION.

Please send a FREE Dumex Babies Union Feeding Bottle for my baby. I enclose two paper discs from two Dumex Baby Food tins.

Offer closes 31st December 1972

Name:

Address:

Send this application to:

The Dumex Babies Union President,
P. O. Box 2104, Lagos.

Summary

Third World babies are dying because their mothers bottle feed them with western style infant milk. Many that do not die are drawn into a vicious cycle of malnutrition and disease that will leave them physically and intellectually stunted for life.

The frightening fact is that this suffering is avoidable. The remedy is available to all but the small minority of mothers who cannot breast feed. Because mothers' milk is accepted by all to be the best food for any baby under six months old.

Although even the baby food industry agrees that this is correct, more and more Third World mothers are turning to artificial foods during the first few months of their babies' lives. In the squalor and poverty of the new cities of Africa, Asia and Latin America the decision is often fatal.

The baby food industry stands accused of promoting their products in communities which cannot use them properly; of using advertising, sales girls dressed up in nurses uniforms, give away samples and free gift gimmicks that persuade mothers to give up breast feeding.

Even in Britain where standards of living are high and most families live in hygienic conditions, babies still suffer from infections passed on to them by feeding bottles — as hospital statistics show. In the *aldeamentos* of Latin America and the squalid squatter suburbs of Africa, these conditions are a dream that will be unattainable for generations.

Where there is no choice but squalor, the choice of an artificial substitute for breast milk is in reality a choice between health and disease.

Malnutrition is just a part of the cycle of poverty, squalor and infection. Malnourishment can weaken a child and render him more vulnerable to infection. Or an infection, unavoidable in squalid conditions will prevent a child from absorbing the nutrients in his food and lead to malnutrition.

The results can be seen in the clinics and hospitals, the slums and graveyards of the Third World. Children whose bodies have wasted away until all that is left is a big head on top of the shrivelled body of an old man. Children with the obscene bloated belly of kwashiorkor.

Why are mothers abandoning breast feeding in countries where it is part of the culture? Are we helping to promote the trend? What is the responsibility of the baby food industry? What are we doing to prevent avoidable malnutrition?

These questions are being raised by doctors and nutritionists throughout the Third World. War on Want believes that by opening the subject to public debate a solution may be found faster than through silence.

Introduction

The object of this report is not to prove that baby milks kill babies. In optimum conditions, with proper preparation and hygiene, they can be a perfectly adequate infant food.

The conditions in much of the Third World are, however, far from the optimum. And in communities where the standard of living is low, housing is poor and mothers do not have access to the basic facilities that most English housewives would take for granted, baby milks can be killers.

Despite this, there is in these communities a trend away from breast feeding, the safest, surest method of nourishing the young infant.

Again, it is not our object to prove that the baby food industry is exclusively responsible for this trend. Social change is a complex phenomenon and the trend towards artificial feeding is particularly marked in new urban communities.

People talk of "urbanisation" with awe. It is a process difficult to define and whose effects are not easy to quantify, although the product is often a terrible parody of so-called "civilised" ways of life. Urbanisation is a very convenient explanation for any puzzling social change.

It is easy to accept the view that city life is essentially different from country life and there is little that can be done to prevent each new generation of town dwellers from doing things in the town way.

But the alluring bright city lights which hold so much promise are merely advertising hoardings and neon signs. In the cultural maelstrom of the new city where traditional cultures face up to the cut-throat materialism of the "modern" way of life, new attitudes are easily moulded even by this crude commercialism.

So in this report we have focussed on one aspect of urbanisation and its effect on women's attitudes towards breast feeding: the role of the baby food industry and the commercial promotion that it employs.



THE PARAPHERNALIA necessary for successful artificial feeding. A shop window in London.

The bare bones of malnutrition: a perspective on the problem

Recent research (1) has shown that Chilean babies who were bottle fed during the first three months of their life suffered treble the mortality rate of their brothers and sisters who were exclusively breast fed. This stark fact highlights the problems of infection — and the malnutrition often associated with it — created by the early abandonment of breast feeding.

The relationship between early weaning onto breast milk substitutes and disease has been documented by detailed research in Jamaica (2), Jordan (3), India (4) and Arab communities in Israel. (5) It is being noted with concern by doctors in the field. The term "weanling diarrhoea" is now accepted as the most pertinent description of a broad spectrum of infant ailments in the developing world.

The link between infection and malnutrition is as clearly documented.

"There is abundant evidence that diarrhoea is more frequent and serious in malnourished than in well-nourished infants and children and that diarrhoea promotes malnutrition by reducing the intake and absorption of food. Protein-calorie malnutrition in its various forms is associated with acute or chronic diarrhoea" notes one of the definitive works on malnutrition. (6)

The form which malnutrition takes is also changing as the problem of early weaning in poor conditions grows. Kwashiorkor, the classic form of acute malnutrition, is usually found amongst children over a year old rather than amongst infants. It occurs mainly where there is a deficiency of protein in the diet, although it is also closely linked with infection.

A doctor describes the form of malnutrition which is normally found in the infant under 12 months old: (7) "The baby's weight gain stops and then starts sliding down, and he becomes increasingly like a little shrivelled up old man, a condition that we call marasmus. Now when the child's nutrition slips into this state he becomes increasingly susceptible to infection . . . you have got a vicious circle being set up in which the malnourished child is prone to get diarrhoeal disease from the infections he is exposed to and because of the diarrhoeal disease he is able to assimilate even less of the food that is given him because his tummy and intestines are not working properly; as a result, his nutritional status gets worse."

Nowadays, the medical profession is increasingly looking at kwashiorkor and marasmus as manifestations of the same Protein-Calorie Malnutrition (PCM). But it is the marasmus that affects the infant and it is this form that results from early weaning in poor conditions.

Marasmus is on the increase, according to many doctors, largely because of the growth of urbanisation and urban influences.

Poverty leads to another abuse of baby milk which has disastrous consequences. Poor mothers will often "stretch" the milk they buy to make it last longer. One doctor estimates that it is often diluted with as much as three times as much water as it ought to be.

The result is even more immediate than with infection. The young infant can only drink a certain amount of liquid each day so he cannot get enough protein or calories. The result is undernutrition leading rapidly to malnutrition.

In the long term

Malnutrition causes enough immediate suffering and death to be a priority for the national health programmes of most developing countries.

In the long-term, though, it causes what many believe to be irreparable damage physically and mentally.

Until a few years ago, there was no clear proof of the effects of early malnutrition on mature behaviour. But recently, evidence has been growing which points to irreversible mental effects of malnutrition in children under two years old.

The human brain grows to its adult size in a brief period, 80% of the growth occurring during the three months before birth and the first 18-24 months after. Malnutrition during this period does result in markedly smaller brain sizes, but the brain is a complex organ and no link has been shown between brain size and the conventional measures of brain performance.

The measurement of intelligence and the factors affecting it, is emotive and controversial ground. But in a recent study, Prof. Jack Tizard of the Institute of Education, London University produces evidence to show that children who have suffered from malnutrition lagged behind in language development and other indicators of intellectual performance. (9)

"This developmental delay could not be accounted for merely by the poverty of their material and social environment but was shown also to be related to their subsequent physical growth" (a good indicator of the effects of malnutrition) notes Prof. Tizard. (10)

He is careful to put the long-term effects of malnutrition into perspective and emphasises that the immediate effects measured in terms of health and happiness are as important.

This perspective is illustrated by a study which he describes. A group of children in a Mexican village were given supplementary foods from birth and compared with another group who received the normal village diet.

"The supplemented group grew faster and developed more quickly than did a control group. They slept less, spent more time out of their cots, talked and walked at a younger age and were more vigorous in play, and more likely to take the lead in games with their brothers and sisters and age mates. And because they were more precocious, healthy and lively, they became more interesting to their parents and more highly regarded by them. Hence they received more attention than did other children in the village and this in turn increased their behavioural competence.

"In other words, the children themselves brought about changes in the social environment which in turn contributed to their own development."

Breast versus bottle: the original convenience food

Breast milk is the original convenience food. No mixing, warming or sterilising needed; no dirty pots and bottles to wash up afterwards; always on tap from its specially designed unbreakable containers. And it is genuinely the most nutritious wholesome product on the market. A copy-writer's dream.

Yet despite all its advantages, breast milk is losing ground rapidly to inferior artificial substitutes in many developing countries. The trend is particularly marked in the cities, but is also being noted wherever the urban influence spreads.

In Chile where the fall has been most extreme, 95% of 1 year olds were being breast fed 20 years ago. Now, only 20% of infants are being breast fed at 2 months. (1) But the pattern is similar in many other parts of the world.

The uniqueness of human milk

The superiority of mother's milk over all the artificial substitutes has to be emphasised — although it is only to be expected of a product that has evolved, along with man, through thousands of years of evolution.

The milks of different animals are very different from one another. Human milk contains only 1.3% protein, cows milk 3.5%. Rabbits milk contains 14% but then rabbits grow fast!

If humans lived in icy Arctic waters, a woman's milk might have the high fat content of whales' milk. We don't, so it doesn't. Human milk has evolved to fill the needs of the human infant!

The proteins and fats in human milk differ considerably from those of cows' milk; differences which are important to the digestibility of milk by the human infant.

Infant milk manufacturers nowadays make "humanised" products, resembling mothers' milk as closely as possible. They admit, though, that their products are just approximations of the real thing. And many doctors believe that if the infant is to be artificially fed it might as well be with cheap, relatively unmodified cows milk as with one of the more sophisticated products of modern food technology.

Protection against infection

Human milk also protects the young infant against disease. The mechanism is still not clearly understood but is due to more than any initial dose of antibodies in the colostrum (the milk-like substance produced in the first few days after birth.)

"Those of us whose paediatric practice dates back many decades into the pre-antibiotic era will have no hesitation in testifying in favour of human milk as the best therapeutic diet for infants with severe (and usually fatal) acute staphylococcal infection (to cite only one example)", notes Prof. Paul Gyorgy of the University of Pennsylvania. (2)

The natural pill

There are long-term benefits from breast feeding which are as important. These will be emphasised in a World Health Organisation report (in the Technical Monograph series) due to be published in mid-1974.

Amongst these is the contribution that breast feeding

makes to child spacing — and thus the growth of population. In many traditional cultures a woman would not sleep with her husband until she had weaned her child completely. If she was breast feeding for two or three years, this would obviously have an effect on child spacing.

There may also be a direct physiological effect. It has been observed that women who allow their children to breast feed without restriction do not menstruate for up to two years. (3) The average in one Nigerian community was 16 months after the birth of a child. (4) This physical birth control is unreliable and may be due simply to maternal malnutrition and anaemia. But there are suggestions that the effect is more marked where breast feeding is "on demand" rather than the "token" breast feeding — as in Britain where children are fed on schedule. (5)

In societies where children seem to follow one another yearly in most families, the importance of a cultural practice that extends the gap to 2½ or 3 years need not be emphasised.

There are also complex links emerging between breast feeding and emotional and physical development. One early survey showed that breast-fed children learnt to walk significantly earlier than the bottle-fed, apparently because breast feeding is a more active process for the baby. (6) In the main, breast feeding is also associated with better emotional development although here again "token" breast feeding has different effects.

Why take to the bottle?

IN CHILE the total abandonment of breast feeding in the space of 20 years may, paradoxically, have been due to a misconceived social welfare policy. The government introduced a free milk scheme in the 1940s (on the lines of the British National Dried) which today reaches 85% of the population. Politely, a report from the United Nations Protein Advisory Group (PAG) (7) talks of the "displacement" effect on breast feeding of milk products distributed *ad lib* through the health services.

IN JAMAICA where there has been no such philanthropic action, there is still a trend from breast feeding. A survey of infant feeding around Kingston revealed that nearly 90% of mothers started bottle feeding before 6 months, (8) (the time at which most authorities agree it is necessary for the baby to have some additional foods).

Why did they begin bottle feeding? Fourteen per cent said that they had been told to start by a milk company nurse or been given a free sample and bottle when they were still satisfactorily breast feeding. Only 13% gave up breast feeding because they were working. The largest proportion, 43% said that they had insufficient milk.

"There is some doubt as to the validity of the reasons given by some mothers for beginning the bottle," writes Dr. McGregor who conducted the research. "Many mothers who said they had insufficient milk obviously had enough when questioned further."

It is interesting to note that milk company advertising stresses "when breast milk is not enough."

IN IBADAN, NIGERIA (9) a study of infant feeding practices revealed a similar situation. More than 70% of the mothers surveyed began bottle feeding their babies

before they were four months old. This in a country where breast feeding has traditionally continued for up to four years!

"The reasons given for mixed feeding largely involve the health and strength of the baby; bottle feeding was seen to hasten physical development. Concepts of "power and strength" popular in Nigerian culture and used frequently in food advertising were strongly associated with this method of feeding" says the report.

"Ninety-five per cent of the mothers who combine breast and bottle feeding believed they had been advised to do so by medical personnel, mainly midwives or nurses. Milk company representatives who give talks on feeding appear to be identified as hospital and clinic staff."

Social change

The move from traditional rural cultures to an urban way of life strongly influenced by the West is a major factor in the trend from breast feeding. As the social position of women changes and they go out to earn a wage, there are obvious pressures against breast feeding. Adoption of Western attitudes, like looking at the breast as a cosmetic sex symbol rather than a source of nourishment, reinforce the trend.

The cultural vacuum of newly urbanised communities makes them vulnerable to the adoption of new practices – which may be harmful.

But to move from breast feeding, the existence of an alternative is almost a pre-condition. And there is little

doubt that in the cultural maelstrom of Third World societies, in which traditional rural communities face up to the material promises of the consumer society the infant food companies have not hesitated to promote an awareness of their products. And the means they have used have often had serious effects on the well-being of the babies for whom they are intended.

Sales girls in nurses' uniforms

A paediatrician of international reputation gave this interpretation of the role of the milk industry at a workshop on "New Urban Families."

"The last two decades have been characterised by the expansion of the activities of infant food firms into less developed countries, with competitive advertising campaigns, so that unaffordable, high-status, processed milks have been thrust upon unprepared communities. These high-pressure advertising campaigns employ all available channels and media making use of modern techniques of motivation and persuasion. In some places firms employ "milk nurses" to make home visits and to attend clinics to promote sales further." (10)

The companies which use nurses (sometimes qualified, sometimes not) say that their function is "educational." They are supposed to give nutritional advice and instruction to mothers rather than just sell their company's product.

A new mother in a developing country, who happened to be married to a specialist in infant nutrition, took a



THE SUPERIORITY of mother's milk over all the artificial substitutes needs no emphasis with this mother from Guinea.
FAO photo by Marcel Ganzin.

professional interest in the sales pitch of a milk nurse who visited her unsolicited.

The nurse began by saying, in general terms, that breast feeding was best. She then went on to detail the supplementary foods that the breast-fed baby would need. Vitamin drops to be started at 3 or 4 weeks; cereals at 6-8 weeks; fruit juices, properly prepared, soon after. The nurse was implying that it was possible to start with a proprietary baby milk from birth which would avoid these unnecessary problems. (11)

The milk companies with whom we spoke emphasised the complexity of the social changes going on in the Third World of which early weaning is just a small part. Yet, as we show in a later section, they are unwilling to look at the more complex effects of their own advertising. We accept that the trend away from breast feeding is not all due to corporate promotion. But at the same time, examples like that above make us reluctant to take the effects of promotion at face value.

Those who can't ... probably could!

Cow and Gate regards the problem of the mother who cannot breast feed as a particularly important reason for staying on the market, promotion and all.

"Just think what the situation would be if we were to say, all right, we think these people are right," says Ian Barter of Cow and Gate. "Withdraw all consumer support; we won't have any nurses; we won't have any of this literature; we won't have tins on display at the chemists because this in itself is telling the mother that there is a substitute available. Take them all out and we'll just have a few in medical centres for her to go and get them from the hospital if the hospital will stock them in such circumstances.

"Well, what would the result be? It would be the death of thousands of children because there are tens of thousands of mothers in these countries who have got to have some substitute for their milk in order to feed their babies."

This conclusion does not necessarily follow, and we will deal with the alternatives later. But just how many mothers are there who cannot breast feed?

A survey conducted by Dr. David Morley in a rural Nigerian village found less than 1% of mothers with serious breast feeding problems. Between 2% and 3% had temporary trouble due to illness but still breast-fed for most of the first six months of their babies' lives. (12)

Even in developed countries where breast feeding is no longer a part of mainstream culture, physical "lactation failure" as the doctors term it, is not a very great problem. One Chelmsford hospital sends home 87% of its new mothers breast feeding their babies successfully. The 13% who don't are those who cannot and those who do not want to — with the latter possibly the larger group.

In the urban areas of the Third World, figures are hard to come by. Nestles estimate that perhaps 5% of mothers would have difficulty. Doctors confirm this as the likely maximum figure.

A confidence trick

Why can't mothers breast feed?

Except in the hard-core few per cent, who have direct physical problems, the reasons are emotional and psychological. The "let-down reflex" which controls the flow of milk to the mother's nipple is a nervous mechanism. And it is easily upset by emotional influences — fear, pain, uncertainty or embarrassment.

This is why one author described breast feeding as a confidence trick. (13)

Confidence is no problem in traditional societies. Dr. Morley describes how his attempt to study the amounts of milk that breast-fed babies in a village were getting, ended in dismal failure.

Although he and his fellow workers instructed all the mothers to bring their children to be weighed before and after breast feeding, the study had to be abandoned because many of the mothers just went ahead and fed their babies without having them weighed.

"We soon came to understand that the decision to put the baby to the breast is made subconsciously by the mother while her attention is involved elsewhere," comments Dr. Morley. (14)

Somewhere between village and town an awareness of an alternative to this incredibly natural process creeps in. Somehow, mothers are deciding that a bottle is necessary in addition to the milk she provides.

Some mothers may even become so concerned about not having enough milk that they will not have enough.

A significant part of all company promotion that we have seen emphasises "when mother's milk is not enough, our product will help to make up the difference." In a Third World context, is that approach really ethical?

Third World context: the three stone kitchen

"Wash your hands thoroughly with soap each time you have to prepare a meal for baby," is how the instructions on bottle feeding begin in the Nestlé's Mother Book.

Sixty-six per cent of households in Malawi's capital have no washing facilities at all. Sixty per cent have no indoor kitchen. (1) Nestlé's sells milk for feeding babies in these communities.

"Place bottle and lid in a saucepan of water with sufficient water to cover them. Bring to the boil and allow to boil for 10 minutes," says *Cow and Gate's* Babycare Booklet for West Africa, showing a picture of a gleaming aluminum saucepan on an electric stove.

The vast majority of West African mothers have no electric stoves. They cook in a "three-stone" kitchen. That is, three stones to support a pot above a wood fire. The pot that must be used to sterilise baby's bottle also has to serve to cook the family meal — so sterilising and boiling of water will probably be forgotten. *Cow and Gate* milks are fed to babies in this kind of West African community.

Nestlé's are particularly anxious to emphasise to critics that all their infant feeding products have instruction leaflets in the main languages of the country where they are sold. On the leaflet are simple line drawings to illustrate the method of preparing the feed.

Most Third World mothers however, are illiterate, even in their native language. And the four simple line drawings, taken by themselves, are almost meaningless. Have Nestlé's undertaken any research to find out whether mothers' understanding can be improved? "We can't undertake work of that nature," say the policy makers of Nestlé's Dietetics (Infant Feeding) Division.

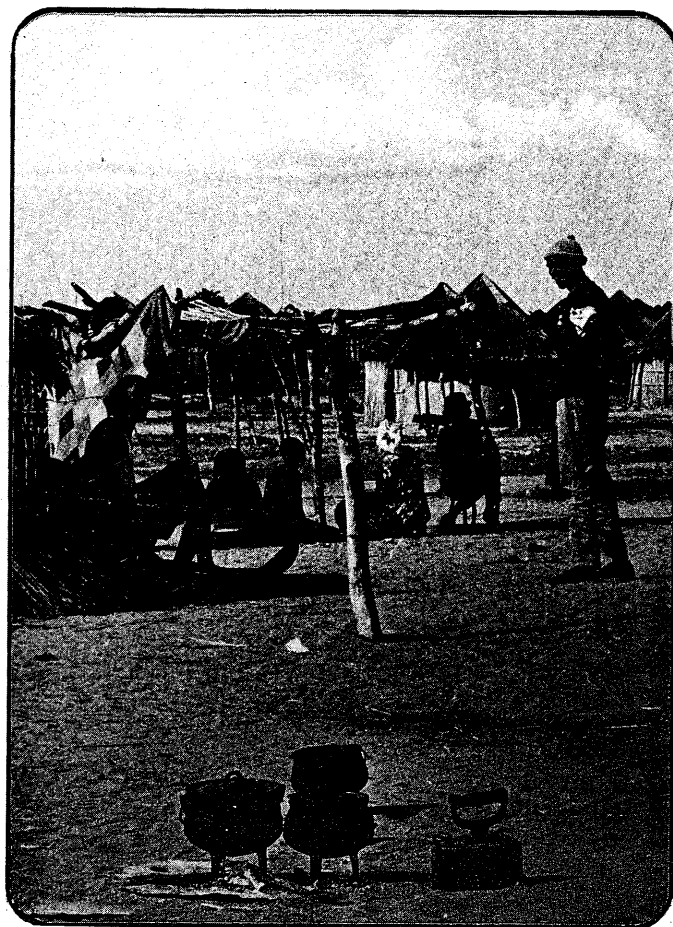
"*Cow and Gate* is a complete food for babies under six months and can be used as a substitute for breast feeding" says the *Cow and Gate* booklet.

In Nigeria, the cost of feeding a 3 month old infant is approximately 30% of the minimum urban wage. By the time that infant is 6 months, the cost will have risen to a crippling 47%. (2) In Nigeria, as in most developing countries, the minimum wage is what the majority earn. *Cow and Gate* products are sold throughout Nigeria.

The situation is similar in most developing countries. The Protein Advisory Group of the United Nations (PAG) published a table giving the cost of artificially feeding a baby as a percentage of the minimum wage in some of these countries (with Britain as a comparison).

Obviously, for the majority of mothers in these countries, bottle feeding is just not a viable alternative. For even if they can afford to buy enough milk, it is unlikely that they can fulfill the minimum requirements for giving it to the baby safely.

This is recognised by most authorities. "In the less technically developed areas of the world . . . immediate and serious basic difficulties attend attempts to artificially feed young infants on a cows' milk formula," (milk powder) says the PAG Manual on Feeding Infants and Young Children. "These include lack of sufficient money to buy adequate quantities, poor home hygiene (including water supply, fuel, feeding utensils, storage, etc.) and inadequate nutritional knowledge of the mother. Under these conditions, usual for the majority in less developed countries, artificial feeds mean the use of too diluted, highly contaminated solutions of cows' milk,



AN AFRICAN KITCHEN. Proper preparation and sterilisation of baby's milk is not likely here.

COST OF ARTIFICIAL FEEDING IN SOME COUNTRIES AND % OF MINIMUM WAGES

| Country | Minimum wage per week | Cost at 3 months per day | | Cost at 6 months per day | |
|----------------|--------------------------|-----------------------------|-----------|-----------------------------|-----------|
| | US \$ | US \$ | % of wage | US \$ | % of wage |
| United Kingdom | 39.20 | 0.84 | 2.1 | 1.30 | 3.3 |
| Burma | 5.01 | 0.53 | 10.6 | 0.81 | 16.2 |
| Peru | 5.60 | 0.84 | 15.0 | 1.30 | 23.2 |
| Philippines | 9.69 | 1.67 | 17.2 | 2.59 | 26.7 |
| Indonesia | 5.60 | 1.05 | 18.8 | 1.62 | 28.9 |
| Tanzania | 7.62 | 1.57 | 20.6 | 2.44 | 32.0 |
| India | 4.62 | 1.05 | 22.7 | 1.62 | 35.1 |
| Nigeria | 5.18 | 1.57 | 30.3 | 2.44 | 47.1 |
| Afghanistan | 2.80 | 1.05 | 37.5 | 1.62 | 57.9 |
| Pakistan | 5.18 | 2.09 | 40.3 | 3.23 | 62.4 |
| Egypt | 4.09 | 1.67 | 40.8 | 2.59 | 63.3 |

Accurate information on wages and costs of food is difficult to find. Here they are expressed at US\$ for comparative purposes. It is assumed here that the artificial food, a full-cream modified milk supplies the infant's total daily need for food.

The information in this table comes from a joint seminar held on March 24, 1970 at the London School of Hygiene and Tropical Medicine (UNICEF/WHO course for senior teachers of child health and students taking their post-graduate diploma in nutrition). Reprinted from the Protein Advisory Group Manual on Feeding Infants and Young Children, PAG Document 1.14/26, December 1971.

resulting in the best in undernutrition; at worst, in marasmus and diarrhoeal disease.” (3)

A doctor puts it in even more forceful terms: “It is clear to all but those who will not see that informed, adequate and relatively safe bottle feeding must follow, or at least accompany, but never precede, literacy, education, infection free water supplies, sanitation and a standard of living which permits the purchase of enough baby foods, equipment and the means of sterilisation” says Dr. James Farquhar, a Reader at the University of Edinburgh and consultant paediatrician at the Royal Infirmary of Edinburgh who has travelled and worked in Africa, Asia and the Americas.

The present trend away from breast feeding in the Third World's present circumstances can only have calamitous consequences. The PAG comments: (4) “The major overall need is to alert governments' health services, nutritionists and the food industry to the emergency situation likely to develop in urban areas in the near future. Its implications are not only the certainty of rising mortalities from almost epidemic marasmus and diarrhoea but also the economic burden of curative services and of obtaining breast milk substitutes on a large scale as well as the long term consequences of the effect of recovered cases of infantile malnutrition on the intellectual level of the community.”

In these circumstances, can the developing countries afford to have breast milk substitutes on the open market?

Dilemma of the doctors

The medical profession is all too often a part of the problem. Frequently, it is the professional classes in the developing countries who adopt “progressive” Western practices — like bottle feeding.

The majority of the present generation of doctors in Africa, Asia and Latin America learnt infant feeding according to the Western school — if not actually in the West. This meant, for the majority, an emphasis on the scientific possibilities of artificial feeding.

“It was like a chemistry class, or perhaps more like cookery,” says a Chilean doctor. “We used to spend all our time mixing up different kinds of artificial formulations in the laboratory. Our teachers were far more interested in this than in breast feeding.” (5)

A recent study of the curriculum in the Medical School at Kuala Lumpur, Malaysia, showed that medical students received no instruction about breast feeding. (6)

Largely because of the Western emphasis in their education, doctors are applying Western solutions to Third World situations with often disastrous consequences.

Details, like the routine bottle feeding of infants in maternity wards may be just an administrative convenience for the hospital staff. But viewed by the unsophisticated eyes in the ward bed, they constitute an endorsement of bottle feeding far greater than anything the milk companies would dare to claim in their advertising.

The medical profession is also a key channel through which milk companies promote their products.

“I believe that the health professionals, including paediatricians, do not realise the effectiveness of what I term ‘endorsement by association’ or ‘manipulation by assistance.’ Both techniques are, of course, used widely, effectively and very economically by such firms,” Dr. J. B. Jelliffe one-time director of the Caribbean Food and Nutrition Institute and now head of the Division of Population, Family and International Health at the University of California told us.

Manipulation by assistance

The milk companies rely on promotion directed at the doctor and nurse to get their share of the market among the upper income mothers who will usually seek doctors' advice on artificial feeding. They employ nurses and representatives who visit doctors and explain the comparative “benefits” of their companies' milks. This is very similar to the approach used by pharmaceutical companies in promoting their drugs and it is interesting to note that the pharmaceutical industry is making big inroads into the baby-food business.

Companies like Abbotts, Glaxo and Wyeth can capitalise on their pharmaceutical reputations in their approach to doctors. They can also economise on the costs of promotion.

Cow and Gate and Nestles do not have the advantage of a direct link with the medical profession — so they create one. Nestles sponsors conferences on nutrition and allied fields and has helped to organise courses for paediatricians on nutrition either as a company or through the medium of the Nestles Foundation.

Just as doctors rely largely on the drug companies to keep them informed about advances in pharmaceuticals, so they are increasingly dependent on the milk companies for information about infant feeding.

Endorsement by association

The average poor Third World mother does not get medical advice from her doctor. Instead she spends a whole morning on “mother and baby day” at the local clinic waiting her turn to have the baby examined and weighed.

The clinic nurses know that the mothers have to wait a long time. They try to make the waiting area as cheerful and interesting as possible. But developing countries have little enough money for hospitals let



alone for decorating their clinics. So the nurses will gladly accept educational posters from a milk company representative.

Nestles, for instance, has just issued a new series of five. One on pre-natal care; another on cleaning and dressing the baby; one devoted to ways of preparing the baby's first solid foods; a fourth devoted to breast feeding. The last used to be incorporated with a guide to bottle feeding which has now been made into a separate poster.

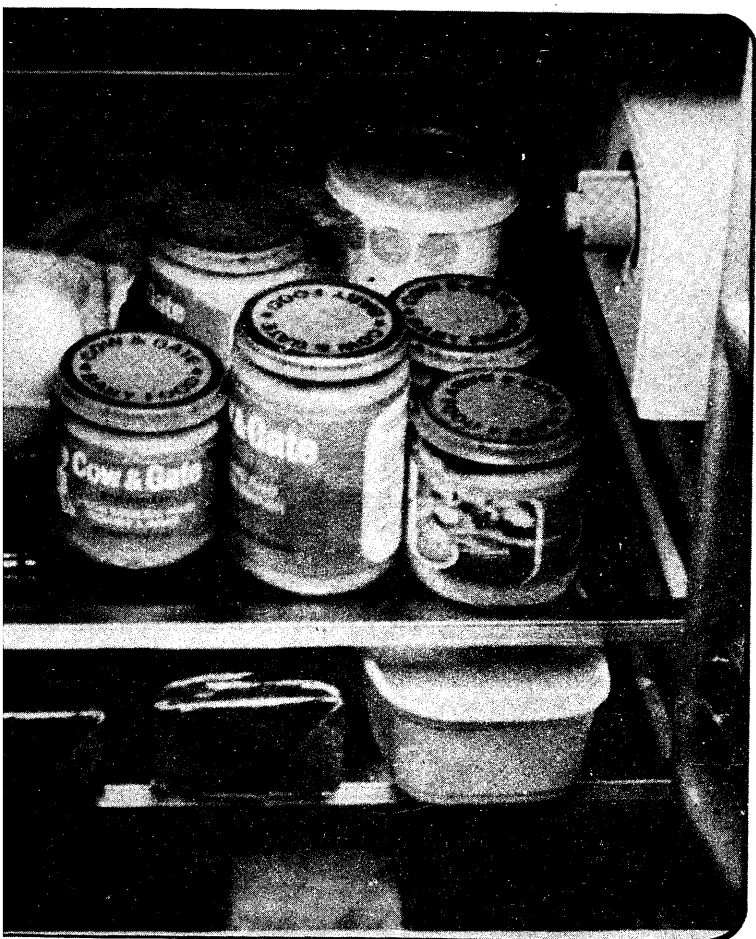
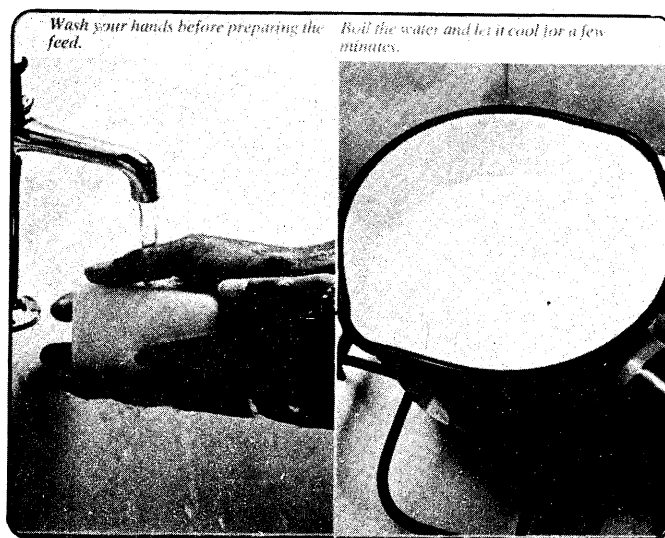
The only hint of commercialism in the posters is the Nestles feeding bottle illustrated and the mention of CERELAC, a Nestles product in the solid food poster. And of course the company logo in the upper right hand corner of each poster.

The illiterate mother will find them interesting. And though the bright modern household, the clean white baby clothes, the crib and the recommended foods are almost certainly out of her monetary reach, the feeding bottle is not. She might be given it free by a nurse. And if there are posters in the clinic about bottle feeding, there cannot be much wrong with it.

She might react the same way when she notices that her baby's clinic card has a picture of a tin of Lactogen baby milk. She does not know that the company gives the cards to the clinic. And she can almost certainly not read the English text inside which says "Breast feed your baby for as long as you can. Breast milk is best for baby and gives him the best start in life . . ."

But the health services operate on a tight budget, and this helps them to cut their running expenses.

Whether it is intended to or not, much of the promotional, or educational material used by the milk companies, will, to the illiterate, appear to endorse bottle feeding. And the association of this material with clinic or hospital can only reinforce this impression.



REALITY VERSUS UNREALITY: The Cow and Gate Babycare Booklet for Africa suggests that "if you have a refrigerator, it may be more convenient to make up the days' supply (of baby's milk) . . ." A Nestles booklet urges mothers to wash their hands and boil the water for feeding in a Western style kitchen. Top: The reality of the village tap in Africa.

Commerciogenic malnutrition: the role of industry

"The infant food firms have a totally benign image as far as governments and unthinking health professionals are concerned. They also have a benign self-image." Dr. D. B. Jelliffe. (1)

"We feel that if we carry on the way we are going it fits in with our own philosophy and our way of doing things here; and we feel it fits in with current medical opinion and that it is the right thing to do." Ian Barter, International Marketing Manager, *Unigate* (*Cow and Gate*)

Specific allegations were made against the infant food industry as early as 1968 when Professor Jelliffe described "commerciogenic malnutrition," the malnutrition caused by the ill-considered promotion of infant foods in developing countries. (2)

These allegations are still being made; many workers in the field believe that the infant food industry is not behaving responsibly in view of the enormous difficulties that any trend from breast feeding must cause.

War on Want went to the people responsible for marketing policy in *Unigate* and *Nestles* and asked for their viewpoint. Both companies are aware of the criticisms that have been made against them. Both believe that they are acting correctly.

What particular problems are likely to arise with the various methods of promotion? And what does industry think of its critics view?

Media

Both *Nestles* and *Cow and Gate* use press, TV and radio advertising in their Third World markets. Both deny that it plays a significant part in expanding their sales.

"In the markets where we do use it, it's used as a supporting promotion to try and keep confidence in a product and to generate enquiries because we know that a doctor is unlikely to recommend an old and tried product. He won't do that but at the same time, if the mother comes to him and says, 'Is brand X alright?', if you have done your promotional work to the doctor properly and your product is any good, he will say, 'yes, it's OK.' And that is the justification for using media," says *Nestles*.

Both companies say that their policy is to emphasise the importance of breast feeding. "If I take the radio scripts, every one starts 'the best thing for your baby is your own breast milk'. Then in our copy in the magazines we start off exactly the same," say *Unigate*.

(In fact, an advert by *Cow and Gate* in a Nigerian magazine - *Woman's World*, April 1973 - began "Choose *Cow and Gate* milk food for your baby and watch him thrive from the very first bottle" and contains no reference to breast feeding being best.)

The survey on infant feeding in Ibadan, Nigeria, threw some light on the effect of media advertising in that community. It showed that 38% of the 400 mothers recalled at least one advert for baby milks, a large number in a community in which only 14% read any newspaper or magazine and only 52% ever listen to the radio.

The information they recalled is equally interesting. Twelve per cent of all mothers remembered that, according to the advertising, *Lactogen* gives, or restores, babies' strength, energy and power. Far fewer recalled

that "it is good for babies if mother's breast is insufficient" and none had actually heard that mothers' milk was better than *Lactogen*!

"Hi, go make your pikin big pokopoko and make am strong poi," was another interesting phrase recalled about *Lactogen*.

Similarly, most of the 33 mothers who recalled anything of *Cow and Gate*'s adverts remembered that "*Cow and Gate* gives children energy, strength and power." One said it was the "best food for babies," a sentiment with which we hope *Cow and Gate* would not agree.

The recall of adverts in itself does not indicate that they drove the mother direct to the bottle. But it does show what is recalled from advertising are positive statements about bottle feeding rather than the important cautionary statements.

"Depth interviews brought out very clearly the mother's positive attitude towards bottle feeding," notes the survey (3)

Although not many detailed surveys like this have been carried out, health workers in a number of countries confirm this impression of the effect of media advertising.

What do the companies think of this interpretation of their role?

"What we spend on advertising is chicken feed compared to what others do," says *Unigate*.

Do *Nestles* feel that it is unjustified to say that mothers are responding positively to their advertising?

"Of course we hope that they do. Otherwise we would be wasting our money. What we are saying, though, is that it is only brand support."

Nurses

The milk nurse is an old figure in the infant food business. Dr. Cicely Williams, the paediatrician who first linked kwashiorkor with protein deficiency in Nigeria, has also described the damage that was done early this century by sales girl "nurses" who sold skimmed condensed milk to working class mothers in Britain.

Both *Nestles* and *Cow and Gate* today employ nurses for sales promotion. Their approach is different and the product they sell is technically better - although some would say that the damage they do is just as great as was done by the "milk nurses" selling vitamin and fat deficient skimmed milk.

It is worth recording the comments of the companies on their nurses.

"The nurse is the counterpart of what in the pharmaceutical industry is the detail man who visits doctors and health centres and informs them about our products. In the Far Eastern context and in the developing countries they also have a subsidiary role which is giving advice to mothers," say *Nestles*.

"In principle we want mothers to be contacted in health centres with the agreement of health centre personnel where you can address mothers on specific aspects of bottle feeding, the medical aspects, care and hygiene of bottles, the preparation and so on. The nurses would also give advice on general nutrition."

Would these be mothers who just happened to be at the

clinic on a particular day? Would there be an attempt to select a particular group, say new mothers, who doctors identified as having feeding problems?

"Oh no, that would be impossible. We don't have unlimited resources. A nurse has a certain itinerary and she turns up at a certain clinic on a certain day and talks to a group of mothers there."

In some markets, Nestles have been involved in different ways. In Malaysia, they were making home visits – officially to give advice on feeding at the request of doctors. This was discontinued when the nurses began to be used as general factotums. The Nairobi City Council has banned milk nurses from its clinics and in a number of countries, the nurses have to work outside of the clinics.

Cow and Gate nurses are told to emphasise the importance of breast feeding in the first months of life. "So far as our nurses are concerned, they are under strict instructions that they are not to try and switch a mother away from breast feeding a baby if she can breast feed it. If we get any evidence that a mother is being changed as a result of one of our nurses, that nurse will lose her job straight away."

Other companies to which we spoke also emphasised the educational role of their direct promotion.

Yet it is common knowledge that there are abuses by certain companies of this "educational" approach. And some practices which have been described to us are *unethical and immoral* in the context of the Third World.

- *Medically unqualified sales-girls are hired and dressed in nurses' uniforms to give their sales pitch in the guise of nutrition advice.

- *Mothers are encouraged to bottle feed their babies while they are breast feeding them satisfactorily and before there is any need for supplements.

- *Qualified nurses are paid on a sales-related basis belying their educational role.

"Some nurses will be paid a commission on sales results in their area. Sometimes they will also be given the added stick that if they don't meet those objectives they will be fired," an industry man told us.

Malpractices can be a direct result of commercial competition as Nestles pointed out to us. "Other people saw this (the use of nurses) going on and saw that it was a highly effective form of promotion. It gained goodwill – after all, infant food promotion is based on goodwill – so they said OK we will do the same. But once you get a competitive situation in this sort of thing, you generate all sorts of evils."

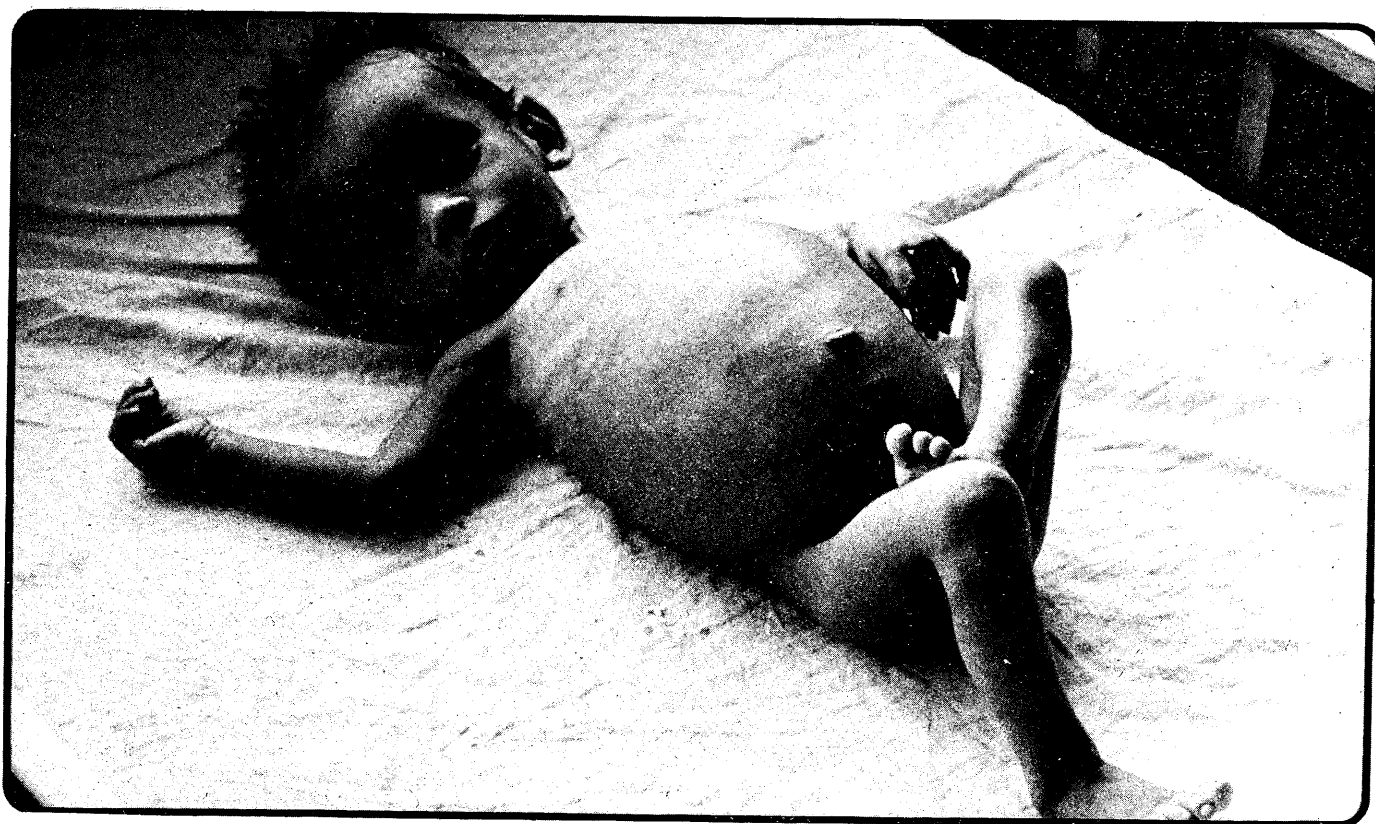
The effect of the nurses has also to be judged on their actual impact in the communities in which they operate. The Ibadan and Jamaican surveys showed that company nurses were an important reason given by mothers for starting to bottle feed. And the vast majority began bottle feeding long before it was necessary to give any additional food.

Samples

The Ibadan survey revealed that 9% of mothers had received samples, either at hospitals or through nurses – it could not be determined whether these were company nurses or "real" ones. The proportion of illiterate mothers who received samples as compared with the proportion of educated mothers was almost the same, indicating that there had not been an attempt to single out mothers who were affluent enough to be able to use the product.

In the Jamaica survey, the situation was far worse with a much larger proportion of mothers receiving samples. Some mothers were given as many as 3 different brands.

Nestles give samples in some of their markets. What is their rationale for this?



A CHILD suffering from malnutrition, This is the reality of the problem.
UNICEF photo by David Mangurian

"Where the local medical profession wants samples, we give them. Don't forget, hospitals are short of money; many have given up the habit of buying because milk is supplied free of charge by the companies. And if we don't come along with our product, we're out. We're out of that hospital because someone else is going to supply it. What should we do? Stop supplying and get kicked out of the market?"

The motive for giving samples is of course to encourage mothers to use the company's product. Again, Nestles think that this is a competitive situation that has got out of hand.

"A lot of companies think that if their product is being used in a clinic, automatically the mothers will keep on using it. Now we have some research on this from the Philippines — which was a particularly bad case of sampling where we were spending about 4 or 5% of turnover, absolutely incredible amounts. Our research showed that there were something like 50% of mothers who did not use the same milk when they came out of hospital. Many of them reverted to breast milk, and that was one of the justifications for direct advertising because you were catching the mother at 4 or 5 months when she was away from the influence of the doctor and saying "when breast milk is not enough, you should use a good safe powdered milk and ask your doctor for advice".

With the help of the medical profession, samples have helped to give a high social status to bottle feeding.

"In many clinics, if a sample is not being given out it is considered to be a very cheap and nasty place. It is part of the kicks."

What concerns many doctors is that free feeding bottles are being given away with samples. This is direct incitement to bottle feed, they say.

Educational literature and the bottle

For many practicing health workers in developing countries the feeding bottle is the focus of the problem. It is both the instrument which transmits infection and the symbol of the "modern" practice of bottle feeding.

"A poster has been discovered in a Mount Hagen shop showing a mother, a baby with a feeding bottle, and a tin of Lactogen," begins a circular from the Director of Public Health in Papua New Guinea. (4) "The Health Department will not tolerate any advertisement for feeding bottles.

"Please inform headquarters of the name of the store, the origin of the poster and the company, and the product which is advertised on any posters showing feeding bottles.

"Although we have no authority to remove objectionable advertisements, health workers may use every effort to persuade store-keepers to give up such posters. Opportunity should be taken in talking with shop keepers to inform them about the danger of feeding bottles."

Clearly, in Papua, New Guinea, no milk company can afford to use promotional or educational material which shows anything about bottle feeding. But in other countries where the medical profession has not made such a firm stand, the companies seem to adopt a "wait and see" policy.

"Occasionally because a mother is ill, dies, or has only a little milk, the baby must be fed artificially. This should be by cup and spoon and not by feeding bottle. A bottle will be impossible for a peasant mother to keep clean and the baby will run the risk of severe gastro-enteritis," writes Prof. M. H. Hamza of Dar es Salaam University in a guide to the care of the newborn baby

for para-medical workers. (5)

Nestles "Mother Book" for East Africa illustrates only bottle feeding. It is difficult to relate the company's stated intention of cooperating with the medical profession with this discrepancy. No doubt, if the medical authorities were specifically to ask the company to change its literature, it would do so.

But at present the Nestles literature is in direct contradiction to the recommendations of local health workers. Does this contribute to education or to confusion, ask the critics.

Labels

At present, labels on baby milk tins give no indication of the number of days that a baby can be fed from the contents. Could this be done?

"It is going to be difficult because it does depend a lot on the age and size of the baby," say Unigate.

However, all tins of baby milk (and of products not strictly recommended for infant feeding) already indicate approximate feeding schedules. The numerate can easily calculate how long the package will last from this information. And to indicate this would be simply a matter of adding one line to the table of feeding schedules.

Would it be possible to indicate to mothers that a baby milk might be an alternative that is just too expensive for most mothers?

"If you say that this is a very expensive alternative, very often this is just about the best way that you can promote your product to the lower income groups because they think then that they are buying something that only the rich can afford."

The following is the text from a tin of Dawn powdered milk produced in Zambia:

BREAST FEED YOUR CHILD

The best food for your child is mother's milk. It is better than this or any other kind of artificial food.

Don't feed your children artificially unless you are sure that you have the money to buy enough milk. By the time that your child is four months old, he will want five pounds of milk powder each month. Are you sure you have enough money to buy this?

Feed your child with a cup and spoon and not with a feeding bottle.

Ask in the shop where you bought this tin for a paper telling you how to feed your child. (6)

The company that markets Dawn milk is nationalised. Presumably, it can afford, in the national interest, to care more about the way in which its product is used than can its multi-national competitors.

Free gift gimmicks

"Buy two tins of Dumex baby food and get a free feeding bottle now," ran an advert in *Spear*, a West African magazine. This sort of free give-away can make no pretence at being concerned with giving the mother correct advice on feeding her baby. Dumex milks are produced by a Danish company, the subsidiary of Det Ostasiatiske Kompagni (East Asiatic Company). This company has established trading partners throughout the developing world and promotes Dumex through them in the same way as any other commercial product. As a result, its appeal tends to go direct to the mother rather than through the medical profession.

The extreme end of the spectrum? Perhaps. But in

South East Asia, Nestles also ran a free-gift offer with one of their products.

The reason? Dumex had introduced a similar offer which was getting them a growing share of the market. So Nestles retaliated to maintain their share of the market. The question is, at whose expense?

Industry's responsibility

Should industry be responsible for the misuse of its products?

This, in part, is what Nestles have to say: "We have a milk on the market; naturally that milk is going to be available to the people. We do not deny that there is a trend to use that milk for feeding babies but we can say that there are good reasons for doing so in some cases. If the mother comes to a decision not to breast feed because she has to use an alternative for some reason, then this is not our promotion against breast feeding. *We make a product available on the market but the onus cannot be on us to stop mothers from taking such a product into consideration.*

"This problem of misuse of baby foods which causes gastroenteritis: we know the whole cycle, over-dilution, bad bottle hygiene and all that. Nobody is trying to deny that it happens and we deplore the fact that it does. It is a very bad advertisement for our product if it happens with our product. So we would like to be able to control the consumption to those people who can afford our product. It's good business to do so. Our problem is how do you stop that product getting to people who shouldn't be using it?

"The way we feel is the right way to do it, is to extend coverage to the infant health centres and by giving mothers lower cost foods through the health centres than they can obtain in the shops, and thereby getting guidance from the health centres. Now that action is criticised by people who say we are conducting commercial activities in the health centres to encourage more people to drop breast feeding."

Fatal social side-effects

Predictably the critics of the industry do not see the responsibility as being out of their hands. Dr. Farquhar believes that we should look at the use of baby milk in developing countries in the same way as we would at a drug which has possibly fatal side-effects.

"If baby milk were controlled in the same way as an antibiotic which had known dangerous side effects, it would only be obtainable under medical supervision and we would not have the problem of misuse."

It is valid to consider, especially for the pharmaceutical companies in the field, whether a proven fatal side-effect, albeit a social side effect, should not be as much cause for concern as it would with a drug.

Perhaps anticipating the growing criticism of powdered milk promotions, Nestles are now selling their products to doctors in developing countries as solutions to the problems of artificial feeding.

"Some mothers will follow instructions perfectly and give the correct supplementary foods at the right time and with the right quantity But lots of other mothers may over-dilute the formula to economise – or they may replace milk by weaning foods with an inadequate protein content.

"If you suspect that this will happen, you can safely recommend *Lactogen Full Protein* – with only 2 feeds, the daily protein requirements of a 6–12 months old infant are entirely covered."

By highlighting the problem of formula-stretching without mentioning poor sanitary conditions and ignorance – with which it is invariably associated – this kind of advertising performs a dubious educational function. Together with its associated promotion it might more aptly be called mis-education.

We're only in it for the money

It is easy to forget that the milk companies exist to make money for their shareholders. And it is commercial competition that creates many of the problems we have mentioned. The social conscience of the companies is dictated by the long-term interests of their shareholders.

The developing countries are an essential area of expansion for infant foods, as is made clear in Nestles most recent annual report: "Generally sales developed satisfactorily; although the continued decline in birth rate, particularly in countries with a high standard of living, retarded the growth of the market. This resulted in considerably increased competition and a far greater choice of products available to the consumer. In the developing countries our own products continue to sell well thanks to the growth of population and improved living standards." (7)

It is necessary to look at the question of food and nutrition in a wider context to understand the economic and social importance of the breast versus bottle debate.

NEW LACTOGEN FULL PROTEIN



**enriched
with 11
vitamins
and
iron**



At weaning time, there is place for a follow-up to breast milk. Lactogen "full protein" answers your need for a balanced formula readily accepted by mothers and babies.

Lactogen <full protein>

... such a comforting thought when breast milk alone is no longer sufficient.

The wider context

A minority of mankind, in the affluent countries, enjoy more than their daily protein needs; many of the world's people receive less than they need to sustain growth and health. Any trend from breast feeding must aggravate this 'World Protein Gap'.

Mothers produce the best and cheapest protein in the world — as far as infants are concerned. The cost of an adequate supplement to the diet of a breast feeding mother, to enable her to produce milk without harming her own health, is estimated at about 21p per week compared with 32p in foreign exchange for the cheapest kind of artificial feeding (suitably modified skimmed milk powder) or £1.15 using commercially available infant milks. (1)

So in purely economic terms, the best way to bridge the Protein Gap for the infant under six months is to breast feed him.

"On a community, national or global scale the economics of human milk production is, strangely, seldom considered in a world understandably striving for increased traditional and unconventional forms of protein, especially for feeding young children," notes Dr. Jelliffe. (2)

Kwashiorkor and the older infant

But what of the older infant and young child? It is in this older age group that the classical problem of kwashiorkor strikes as the infant slowly outgrows the supply of milk available to him from his mother. If he does not get sufficient protein from his other foods at this stage he will be vulnerable.

A major problem for nutrition educators in developing countries is to ensure that this age group can be catered for. And it is here that the milk companies, Nestlé's in particular, emphasise the role that they can play.

"There is a need to maintain adequate daily protein intake" is the line on which Nestlé's leads in its medical advertising in a number of markets. "Lactogen Full Protein will provide 8.1g of protein per 250cc feed. Two feeds will cover the daily requirements of a child up to 12 months"

Nestlé's aggressively contend that they offer a way around the problem that is not otherwise available. But the question whether mothers can afford their solution is avoided.

"What about the babies above the age of five or six months?" they asked us during our visit to Nestlé's headquarters in Vevey, "What weaning foods do you introduce then?"

The Protein Advisory Group, in their manual on feeding infants and young children, say this about weaning foods: "The only avenue open for the vast majority of children is to find better uses for the locally available staples for the preparation of nutritious weaning foods in the home." (3)

"We know the sort of people who are putting forward these arguments," says Nestlé's, "and these people are idealists. It's very nice to say that these countries should be self-sufficient and should produce their own weaning foods and so on but it is not a fact of life at the moment."

National nutrition strategies

After looking at the possibility of using commercial infant feeding products and even the new "low-cost protein rich local formulae" developed in a number of countries (often with the help of the food industry) the PAG manual concludes: "The great majority of the population in most developing countries will have to rely on 'home-made' baby foods for a long time."

The manual then goes on to detail for nutrition and health workers just how these foods can be prepared. There is a list of over 100 recipes, many of which are already in use. Where milk is recommended, it is invariably the cheap dried skimmed product to be mixed with solid foods and cooked.

Many developing countries have adopted, or are considering a food and nutrition policy based on this approach using locally available foods. This does not solve their nutrition problems "at a stroke." But the nutrition policies being developed and applied do not depend on the existence on the open market of Lactogen, Cow and Gate, Similac or any of the other products of modern food technology.

These policies take into account the economic situation of the majority of people in the Third World – something which the milk companies cannot do. And this in itself casts doubts on their claims to be performing a useful service through their "educational" ventures into clinics and hospitals.

If national health workers teach their approach to better nutrition, while the promotion efforts of the milk companies are teaching something quite different, confusion must result. In the rich world we can afford the calculated consumer confusion created by a multiplicity of choice. All we stand to lose is a few pence.

In the developing countries, confusion about infant feeding can be measured in dead babies.

New role for industry

A viable alternative, at present being formulated by nutritionists, calls for the limitation of the distribution of milk infant foods to the health services on the lines of the British National Dried Milk. With the important provision that milk would only be for mothers who could not breast feed.

The concept is outlined in part in a PAG document which goes considerably further than the later compromise suggestions produced by a joint PAG/Industry meeting. It is worth quoting at length.

"In order to ensure that these products will be beneficial and not cause harm, certain pre-requisites have to be fulfilled:

"a) The mothers and their babies must be under constant supervision and carefully informed as to how to use the product, not only with respect to preparation but also in the way of feeding including proper cleanliness.

"b) Access to the product should be determined not by the economic standards of the parents but by the true need of the infant. Ideally, the product should be provided only to infants who fail to gain weight due to inadequate mother's milk supply. In these cases, the product should be given free of charge and in limited amounts at a time covering the need for a week at the most. It is obvious that a programme of this kind can be carried out only by economic support from the government or the community and/or relief organisations.

**WITH
NESTLÉ
YOU CAN
CHOOSE
THE
PRODUCT
BEST
SUITED
FOR BABY**



Some mothers will follow instructions perfectly, and give the correct supplementary foods at the right time and with the right quantity. For their babies, the balanced and proven formula of NAN is perfect.



But lots of other mothers may over-dilute the formula to economise – or they may replace milk by weaning foods with an inadequate protein content. If you suspect that this will happen, you can safely recommend LACTOGEN – "full protein" with only 2 feeds, the daily protein requirements of a 6 to 12 months old infant are entirely covered.



Weaning Time
CERELAC – balanced cereal milk food – is ideal to make the transition from milk feeding to solid foods around the age of 4 months.

NESTLÉ

Cerelac, Lactogen "full protein" and Nan are enriched with Vitamins and Iron in accordance with the latest Recommendations.

Furthermore, the distribution of the product should be through channels and services which can exert health supervision of the child (Mother and Child health centres, health centres, hospitals, under the supervision of home economists, etc.)." (4)

Clearly, a programme of this kind could only be carried out with the support of individual governments. But the support of the food industry is also necessary if any such approach can be formulated to be put to Third World governments through the international agencies.

Industry has been unwilling to do more than talk about some of the more glaring promotional malpractices — although the companies emphasise the industry/expert consultations held under the auspices of the PAG.

The extent of the industry's cooperation can be gauged from the vague and timid recommendations that were produced by the last joint consultation between the PAG, paediatricians and industry. (5)

Action how?

Where can the initiative for action come from? For there is surely a need for action!

National governments would appear to be an obvious channel. But an intangible problem is the relation of the milk companies to the governments of many of the developing countries. Many countries are heavily dependent on unprocessed agricultural exports for their foreign currency. Any government with an economy dependent on cocoa, coffee, tea, sugar and similar crops is clearly in no position to dictate terms to organisations like Nestles, and Wyeth whose parent company is one of the USA's big food corporations.

Industry's resources are far greater than those of many developing countries. Nestles annual turnover (8% of it in infant foods, 25% in other milk products) exceeds the Gross National Product of Kenya by nearly £500 million. (6)

Many of the less developed countries are also heavily dependent on advice from international agencies when it comes to formulating policy on specialised aspects of health.

Slow progress

The heavy wheels of the international organisations have begun to turn. The WHO is producing its Technical Monograph which will emphasise the importance of breast feeding. UNICEF's Executive Board heard suggestions last year "that ways of encouraging breast feeding should be studied and that UNICEF should play a more active role in its promotion as part of its support for child nutrition." (7)

The FAO "will shortly seek the financial support of member countries in an effort to stimulate programmes to halt the decline in breast feeding in some developing countries." (8)

The FAO/WHO Codex Alimentarius Commission, set up to establish food standards for the world, is considering standards for infant foods at the moment. But in its structure it has been unable to consider more than the constituents and labelling of infant milks. An attempt by the International Organisation of Consumer Unions to include standards for the promotion of these products was unsuccessful. (9) It was ruled to fall outside the Codex's terms of reference.

The Protein Advisory Group has repeatedly raised the problems of the abuse of infant food products. But the PAG cannot impose its policies on industry. As with most international organisations, it can choose between

a consensus for inaction or an ineffectual commitment to action.

In this situation, external pressures can exert a useful influence. The baby food industry is extremely image-conscious. Publicity in home markets linking baby milks with malnourishment and death is likely to have a far greater impact on industry's willingness to cooperate than any behind the scenes debate. (10)

In the interim

Whatever the decisions on long-term strategies, there is urgent need for action now.

In Sweden, where infant mortality is the lowest in the world, an agreement was reached between the baby food industry and the government which states in part: "Advertisements for breast milk substitutes should in no form be aimed directly toward the public or to individual families. Special discount offers directed to the consumer should not be made with regard to products of this type." (11)

(Advertising in this context includes all media advertising, notices in stores, booklets on infant foods, free distributions, etc.)

These controls, coming as they do from a country with a distinguished record in infant care, would appear to offer guidelines for interim action in the developing countries. It is difficult to see how a company like Nestles can implement them in Sweden yet not in countries where the consequences of the abuse of artificial feeding are infinitely more serious.

Even in Britain

"It is necessary to examine carefully the statements made on labels and advertisements; to observe how far such statements are accurate or misleading and how far they tend to encourage an undesirable or even dangerous practice."

These words, not without relevance to the present discussion appear in a report on the use of condensed milk as infant food in Britain in 1911. (1)

The problem was with sweetened skimmed condensed milk which could never be considered a satisfactory infant food regardless of the conditions in which it was used. But then, as now, the identification of the problem was only a first step along the path towards solving it.

The patenting of a condensed milk by American Gail Borden in 1856 opened a new era of artificial feeding. In 19th century Britain, high infant mortality rates were an inevitable result of artificial feeding necessary in communities where the mother had to work.

Condensed milk appeared to have a role to play as an infant food. But as early as 1872, doctors were sounding a note of caution. Writing to the *Lancet* in that year, Drs. Platt and Daly commented on the poor performance of infants fed on this product and warned against its use. (2) Despite this, the practice of using condensed milk, usually skimmed, spread.

By 1894, there was no doubt in professional circles that the use of skimmed condensed milk for infants was a one-way ticket to stunting and death. Doctors identified the absence of fat in skimmed milk as the reason for this.

A Parliamentary Select Committee set up in 1894 to investigate the weighty problem of butter adulteration with the new "margarine," looked incidentally at the problems being caused by the sale and misuse of condensed milk.

They were told of a "memorial" signed by "a large number of gentlemen whose names would carry considerable weight." These gentlemen, mainly doctors, said that skimmed condensed milk was being bought by people unaware of its true nature. There should, they said, be a clear statement on the label to the effect that the product was made from skim milk.

"There were very strong representations made . . . as to the injury that was being done by the sale of condensed milk containing nothing but separated milk." (3)

In the legislation that resulted from the Select Committee's deliberations on butter and margarine a new labelling requirement was enforced. (4)

All condensed milk products made from skim milk were to bear in bold type the legend "SKIMMED CONDENSED MILK" or "MACHINE SKIMMED CONDENSED MILK." And that was to be the end of the problem.

But in 1911, Dr. F. J. H. Coutts reported that, contrary to popular belief, the problem of babies being fed on skimmed milk products had not been solved by the labelling regulations.

"I found that the practice had by no means ceased; on the contrary, the evidence I have obtained leads me to conclude that in certain districts a really considerable proportion of babies are fed almost exclusively on this diet." (1)

He noted that many mothers were confused by the existence of a number of varieties of the same brand of milk and would use the cheapest — invariably skimmed. "Amongst the poor, the name of a well-known brand of

full-cream milk is synonymous with condensed milk."

"I found that some women were under the impression that all condensed milks were of the same composition, all consisting of pure whole milk and sugar. They never realised that the words "machine-skimmed" implied impoverishment."

Coutts also discovered cases in which women were apparently intentionally misled. Skimmed condensed milk, sold as "Goat brand," had a large picture of a goat on the tin and the word GOAT in bold print. Many women bought this milk especially for feeding babies because they thought it was really goat's milk, popularly believed to be the best breast-milk substitute. This use of pictorial advertising in 20th century Britain throws an interesting light on the problems of advertising and literacy in the Third World.

Coutts called for a bold statement "UNFIT FOR INFANTS" on each tin of skimmed condensed milk. "A clear declaration could not fail to have some effect in educating mothers . . . it would also assist the efforts of medical men, nurses, health visitors and others in impressing upon mothers the dangers of such foods."

This suggestion was adopted — even today, all skimmed milk products have Coutts' legend on the tin; in Britain, that is.

Forty years passed between the recognition of the problem and action being taken to deal effectively with it. Between 1872 and 1911 mothers continued to feed their babies on a product that was positively dangerous. The situation would probably have continued even longer had it not been for the embarrassing discovery at the time of the Boer War that fully 50% of Britain's young men were unfit for medical service. The 1904 Committee set up to examine the "national physical deterioration" played a large part in highlighting this and other public health problems. (5)

Today's toll

Today, the misuse of baby foods often takes the form of over-feeding. The baby-show image of a pretty, chubby infant is being linked with adult obesity and all the associated ills.

But even in post-war Britain, artificial feeding has been shown to be more hazardous than breast feeding, highlighting the stringent requirements for successful artificial feeding.

A striking survey by Dr. Margaret Robinson in Liverpool in 1946 found that breast fed babies suffered a mortality rate of only 10.2 per 1000 in their first year of life while their bottle fed counterparts died at the rate of 57.3 per 1000. The stunning difference cannot be attributed solely to artificial feeding since the 3,266 babies in the study came from a wide range of social backgrounds which also had an influence. But the link with artificial feeding cannot be discounted either. (6)

Gastroenteritis, closely related to artificial feeding, is still a problem in Britain.

"Gastroenteritis in infancy is still common in Great Britain accounting for about 400 deaths in 1967 in those aged less than two years," says a recent survey. "Each year some 10,000 cases of infantile gastroenteritis are admitted to hospitals and it is estimated that only 10% of the cases seen in general practice are referred to hospital." (7)

The authors found, in a survey of 339 infants admitted to a hospital in Manchester suffering from gastroenteritis, that 79% were under 12 months of age. Of these, only one was being breast fed at the time he contracted the disease.

War on Want's recommendations

Industry

1. The serious problems caused by early weaning onto breast milk substitutes demands a serious response. Companies should follow the Swedish example and refrain from all consumer promotion of breast milk substitutes in high risk communities.
2. The companies should cooperate *constructively* with the international organisations working on the problems of infant and child nutrition in the developing countries.
3. Companies should abandon promotions to the medical profession which may perform the miseducational function of suggesting that particular brands of milk can overcome the problems of misuse.

Government of developing countries

1. Governments should take note of the recommendations of the Protein Advisory Group for national nutrition strategies.
2. Where social and economic conditions are such that proprietary infant foods can make little useful contribution, serious consideration should be given to the curtailment of their importation, distribution and/or promotion.
3. Governments should ensure that supplies are made available first to those in need – babies whose mothers cannot breast feed, twins, orphans, etc. – rather than to an economic elite, a danger noted by the PAG.

British Government

1. The British Government should exercise a constructive influence in the current debate.
2. The Government should insist that British companies such as Unigate and Glaxo set a high standard of behaviour and it should be prepared to enforce a similar standard on multi-nationals like Wyeth who export to developing country markets from Britain.
3. The British representative on the Codex Alimentarius Commission should urge the Commission to consider all aspects of the promotion of infant foods. If necessary, structural alterations should be proposed to set up a sub-committee to consider broader aspects of promotion to enable the Commission to fulfil its stated aims of protecting the consumer interest.

Medical profession

There is a need in the medical profession for a greater awareness of the problems caused by artificial feeding of infants and of the role of the medical profession in encouraging the trend away from breast feeding.

Other channels

Practicing health workers in the Third World have achieved startling, if limited, response by writing to local medical journals and the press about any promotional malpractices they see and sending copies of their complaints to the companies involved. This could be done by volunteers and others not in the medical profession but in contact with the problem in the field.

In Britain, student unions at a number of universities and polytechnics decided to ban the use of all Nestle's products where they had control of catering following the initial exposé by the *New Internationalist* magazine. Without any clear objective, or coordination, this kind of action is unlikely to have much effect. However, if the companies involved continue to be intransigent in the face of the dangerous situation developing in the Third World, a more broadly based campaign involving many national organisations may be the result. At the very least, trade unions, women's organisations, consumer groups and other interested parties need to be made aware of the present dangers.

There is also a clear need to examine on a community scale, how infant feeding practices are determined in Britain today. There is a long history of commercial persuasion, and artificial feeding is now well entrenched.

As has been shown, there are still risks inherent in bottle feeding even in Britain. The available evidence suggests that both mother and child may do better physically and emotionally by breast feeding. An examination of our own irrational social practices can help the Third World to throw a light on theirs.

References:

THE BARE BONES OF MALNUTRITION:

1. Plank and Milanesti, "Infant Feeding and Infant Mortality in rural Chile" Bull. Wld. Hlth. Org. 1973, 48, 203.
2. Grantham-McGregor and Back, "Breast Feeding in Kingston, Jamaica", Arch. Dis. in Childh. 1970, 45, 404.
3. Kimmance, "Failure to Thrive and Lactation Failure in Jordanian Villages in 1970", Jnl. Trop. Ped. & Env. Ch. Hlth., 1972, 18, 313.
4. Kanaaneh, "Relationship of Bottle Feeding to Malnutrition and Gastroenteritis in a pre-industrial setting," Jnl. Trop. Ped. & Env. Ch. Hlth., 1972, 18, 302.
5. Gordon et. al., "Weanling Diarrhoea," Am. Jnl. Med. Sci., 1963, 245, 129.
6. "Conquest of Deficiency Diseases," FAO, 24, 1970, ch.6.
7. Hendrikse, New Internationalist, 7, 1973.
8. Dobbing, "The Later Development of the Central Nervous System and Its Vulnerability," Heinemann, 1973.
9. Tizard in PAHO "Nutrition, the Nervous System and Behaviour. Proc. of the Seminar on malnutrition in early life and subsequent mental development," Mona, Jamaica, 1972.
10. Tizard, Nutrition and Mental Development, World Health, to be published.

BREAST VERSUS BOTTLE:

1. Monckeberg, "Infant feeding and Weaning Practice: The Problem as it Exists in Developing Countries," Proc. Int. Paed. Assoc. Aug. 1971 in Austral. Paed. Jnl. Supp. No. 2, p.48.
2. Gyorgy, "Biochemical Aspects of Human Milk," Am. Jnl. Clin. Nutr. 1971, 24, 970.
3. Newton, "Psychological Differences between Breast and Bottle Feeding," Am. Jnl. Clin. Nutr., 1971, 24, 993.
4. Matthews, "Ethological and Medical Significance of Breast Feeding with Special Reference to the Yorubas of Nigeria," Jnl. Trop. Ped., 1955, 1, 9.
See also Morley, forthcoming book on Paediatric Priorities in the Tropics.
5. Newton, op. cit.
6. Hoeffer and Hardy, "Later Development of Breast Fed and Artificially Fed Infants," Jnl. Am. Med. Assoc. 1929, 92, 615.
7. UNPAG, 1.14/5 Report on the Ad-hoc Committee on Feeding the Pre-school Child, 1971
8. Grantham-McGregor, op. cit.
9. Social Policy Research, "Infant Feeding and Child Health in Ibadan," 1973.
10. Monckeberg, op. cit.
11. Heywood, Cajanus, Kingston, April 1973.
12. Unpublished material.
13. Jelliffe, D. B., Caribbean Food and Nutrition Institute, Kingston, Jamaica.
14. Morley, Forthcoming book on Paediatric Priorities in Tropical Countries.

THIRD WORLD CONTEXT:

1. Malawi National Statistical Office, Digest of Statistics, 1972.
2. Cameron and Hofvander, "Manual on Feeding Infants and Young Children," PAG Document 1.14/26, 1971.
3. UNPAG report; op. cit.
4. Who has asked not to be named,
5. Personal communication.

COMMERCIOTIC MALNUTRITION:

1. Personal communication.
2. Jelliffe, "Commerciogenic Malnutrition," Food Technology, 1971, 25, 55.
3. Social Policy Research, op. cit.
4. Copy provided by a health worker in that country.
5. Hamza and Segall, "Care of the Newborn Baby in Tanzania," E. Africa Publishing Hse., 1973.
6. Morley, op. cit.

THE WIDER CONTEXT:

1. McKigney, "Economic Aspect of Human Milk," Am. Jnl. Cl. Nutr., 1971, 24, 1005. (These figures apply to Jamaica; in Africa, the differential between local foods and imported milks would probably be greater.)
2. Jelliffe, "The Uniqueness of Human Milk," Am. Jnl. Cl. Nutr., 1971, 24, 1013.
3. PAG Manual, op. cit.
4. PAG 1.14/5, op. cit.
5. PAG statement no. 23, 1972 as revised 28.11.1973.
6. Berg, "Industry's Struggle with World Malnutrition," Harv. Bus. Rev., 1972, 50, 140. Berg makes this interesting comparison between 25 top food corporations and 25 developing countries to demonstrate the corporations' potential for dealing with nutrition problems.
7. Report of the UNICEF Executive Board, 1973 E/5317, E/ICEF/629.
8. M. Ganzin, Director, Food Policy and Nutrition Division, FAO, 16.11.73, in a letter to New Internationalist Magazine.
9. International Organisation of Consumer Unions Newsletter No. 16, 1972, "Draft Code of Practice for Advertising of infant foods," submitted to the Codex sub-committee on labelling.
10. Berg, op. cit. Berg found that in the companies he surveyed, "corporate image" was the main motivation for involvement in the often costly business of developing low-cost, high nutrition food products in developing countries.
11. Vahlquist, Prof. B., personal communication.

EVEN IN BRITAIN:

1. Coutts, "Report to the Local Govt. Board on Condensed Milks with Special Reference to their Use as Infant Foods," New Series, No. 56, 1911.
2. Lancet, 1872, 2, 653 & 695.
3. Select Committee on Food Adulteration, 1894 report and evidence, para. 387.
4. Sale of Food and Drugs Act 1899 (secs. I and XI).
5. Report of the Interdepartmental Committee on Physical Deterioration, 1904.
6. Robinson, "Infant Mortality and Morbidity," Lancet, 1951, 1, 788. (In the most recent study, conducted in South East England, a statistically significant link could not be shown between the mortality and morbidity rates of breast and bottle fed infants. But the survey was of a relatively small sample, it included a very wide definition of "breast fed" infants and it was carried out in the most affluent part of the country so no firm conclusions can be drawn from it. Practitioner, 1972, 209, 356.
7. Ironside et. al., Brit. Med. Jnl., 1970, 3, 20.



Printed by War on Want, 467 Caledonian Road, London N7 9BE.