

The FOOD MAGAZINE

Campaigning for safer, healthier food for all

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Animal feed may escape GM labelling

Government advisers are recommending that farmers should not be told when animal feed contains genetically modified ingredients.

In proposals that will deny information to farmers, food processors, retailers, caterers and consumers, the government's Advisory Committee on Animal Feed (ACAF) is proposing to limit GM animal feed labelling to a declaration of the *absence* of GM, rather than its *presence*, as is now required for human food. The ACAF has tagged this proposal for voluntary labelling onto its consultation on EU statutory requirements for imported animal feed ingredient labelling.

The Food Commission has joined other campaign groups including the Freeze Campaign and Greenpeace in calling for animal feed to be clearly labelled whenever it contains ingredients from GM crops — as is now required for all food sold to consumers. Although there is currently no requirement to label meat, eggs and dairy produce from animals reared on GM feed, a growing number of major retailers (including M&S, Tesco, Waitrose and Iceland) are now committed to removing GM animal feed (see page four). With the exception of products from these retailers and from organically certified

sources, all other meat and animal products consumed in the UK are likely to come from animals reared on GM feed.

Animal feed is the main use for GM soya and maize in Europe and it is probable that all compound feeds (unless guaranteed to be from non-GM sources) contain some GM material. Yet there is no legislation regulating the safety of GM ingredients used in animal feed, nor any labelling requirements. The Advisory Committee on Novel Foods and Products (ACNFP), which assesses GM crops for human food consumption, has not considered the safety of GM crops for animal feed.

The Ministry of Agriculture, Fisheries and Food (MAFF) acknowledges that GM crops not authorised in Europe are being imported and used as animal feed. GM varieties of cotton account for around 45% of the US cotton crop and although not authorised for import into Europe, some

cottonseed has been imported, and the meal or cake left after

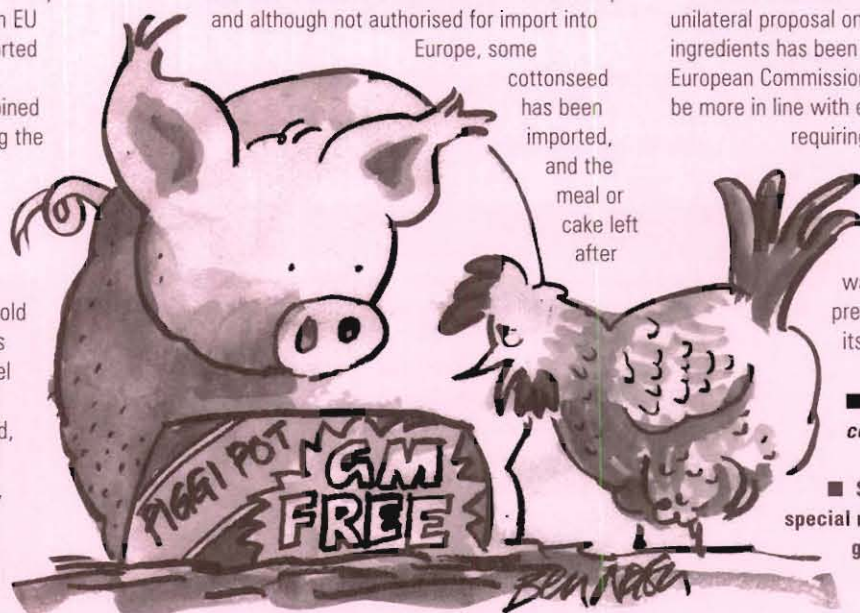
oil extraction used for animal feed. Neither MAFF nor ACAF appear to be taking any action to prevent these illegal imports.

The committee's recommendations run counter to government statements that '*animal feed should be labelled as it is a consumer's right to have traceability through the food chain*' (Nick Brown, 27/10/99) and the recent Agriculture Select Committee (07/03/00) report which recommends: '*a workable and transparent labelling regime for meat and dairy products derived from animal fed on GM materials and for labelling of the feed itself*'. Furthermore, the proposal runs counter to the prevailing trend among major retailers to require the elimination of GM crops from animal feed, based on suppliers knowing what they are feeding their animals.

What is curious is why the Committee's unilateral proposal on animal feed labelling of GM ingredients has been brought forward when European Commission proposals, anticipated to be more in line with existing EU legislation requiring positive labelling, are expected in coming months. It is hard not to conclude that the animal feed industry does not want to declare the positive presence of GM ingredients in its products.

■ See *What the food companies say* on page 4

■ See pages 17-19 for our special report on the next generation of GM foods.



"When they give you GM-free you know your days are numbered"

Get the facts with the Food Magazine

The *Food Magazine* is published quarterly by The Food Commission, a national non-profit organisation campaigning for the right to safe, wholesome food. We rely entirely on our supporters, allowing us to be completely independent, taking no subsidy from the government, the food industry or advertising.

We aim to provide independently researched information on the food we eat to ensure good quality food for all.

The Food Commission Research Charity aims to relieve ill health and advance public education through research, education and the promotion of better quality food.

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Food or farm produce?

The Ministry of Agriculture, Fisheries and Food is, according to press reports, to rename itself the Ministry of Agriculture, Fisheries and Farm Produce.

Farm Produce? What, pray is food, if not farm produce?

Actually, food is a lot more than farm produce, once it has suffered the indignities of processing and refining and lacing with additives. Perhaps MAFF (or MAFFP?) hopes that the new Food Standards Agency will look after those non-farm aspects of modern food, while MAFF focuses on the green and pleasant concept of 'farm produce'.

But what about salmonella? And antibiotic residues? These are 'farm produce' but, as food safety issues, the realm of the Agency as well as MAFF. This could be a recipe for confusion...

At the same time we hear that the Department of Health wants to retain some responsibility for nutrition. Yet getting nutrition into the Agency was a bitterly fought struggle, but a successful one with the Agency taking at least some responsibility for nutritional standards, nutritional labelling and the promotion of 'healthy eating'. What, then, does the DoH expect to do?

It is just these sort of difficulties that could tie the Agency up in knots. Passing the buck between departments, with each disclaiming responsibility, is a well-known Whitehall activity. Indeed, MAFF itself has been adept at the practice, as the forthcoming BSE Inquiry report will surely tell us.

To prevent such buck-passing behaviour the Agency is agreeing a set of 'concordats' which should define which government official is responsible for what aspect of food policy.

Meanwhile, we suspect that MAFF, in its final throws before the Agency took over this April, was setting up a couple of nasty pitfalls for the Agency to inherit. It launched a huge consultation exercise on food labelling, which raised all manner of expectations for the Agency to deal with — see our report on pages 7-9.

And MAFF advisers have suggested that animal feed should not declare the presence of any GM material — as we report on our front cover.

Is this stitching up the new Agency like a stuffed mullet, or what?

Tim Lobstein and Sue Dibb

STOP PRESS

The Food Commission was a runner-up in the first BBC Food Programme Awards, presented by Prince Charles at St. James Palace, April 3rd.

Our work in campaigning for better food labelling, more controls on misleading advertising and our educational and investigative research received special mention.

Award winners included Helen Browning, Henrietta Green, Neil's Yard, the Bristol Cancer Centre and the Scottish Diet Project. An award for bad practice — the Mouldy Pie Award — was given to the generic category of school vending machines.

Advertising Policy. The *Food Magazine* does not accept commercial advertising.

Loose inserts are accepted subject to approval — please contact Ian Tokelove at The Food Commission for details

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OUR WEB SITE

The Food Commission can now be visited on the internet at <http://www.foodcomm.org.uk> and your comments and suggestions are, as always, welcome. Many thanks to Gavin Dupee for helping to create our site.

130 reasons to breastfeed

Human milk contains significant quantities of carbohydrates other than lactose, in the form of oligosaccharides — soluble long-chain sugars. There are at least 130 different types of these carbohydrates in breastmilk, and together they outweigh the protein content.

Now researchers are suggesting that these complex sugars may play an important role in nerve cell transmission and brain function. They

appear able to enhance learning ability in test animals, and their value during brain formation lasts through to adulthood.

Cow's milk and infant formulas contain very low levels of the molecules — but elephant's milk is as rich as human milk. And they never forget!

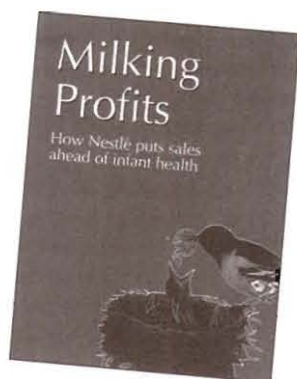
■ JB Miller and P McVeagh, *British Journal of Nutrition*, 82, 1999, pp333-335.

Shooting the messenger

Proof that Nestlé deliberately violates the *International Code of Marketing of Breastmilk Substitutes* is hard to obtain. Now a former employee of Nestlé in Pakistan has leaked documentary evidence claiming to show how the company

- bribes doctors with cash and gifts
- sets sales targets for marketing staff
- pays incentives to marketing staff
- provides free supplies of baby milks
- markets directly to mothers

All of these activities violate the Code and other measures adopted by the World Health Assembly to protect infant health. The employee, Syed Aamar Raza, served a legal notice on Nestlé to stop their activities, but claims that the



company responded with threats and offers of money to keep silent. Then during February, while Mr Raza was in the UK to bring greater attention to his evidence, gun shots were fired at his home. He and his family are now in hiding.

■ **Milking Profits: How Nestlé puts sales ahead of infant health**, The Network — Association for Rational Use of Medication in Pakistan, Islamabad, December 1999, and available from Baby Milk Action (tel 01223 464420) for £5.50 inc p&p.

Mother's milk cures infection

The *British Medical Journal* recounts that, in the 1920s and 1930s when few people could afford a doctor, alternative treatments were found. For 'pink eye' (conjunctivitis) a squirt of breastmilk was offered.

In the 1960s, mothers from the Caribbean living in West London frequently treated neonatal sticky eye with breastmilk.

■ GM Black and R Robinson, *British Medical Journal*, 320, 2000, p691.

Donations

The Food Magazine is produced by a committed team of staff and volunteers, but funds are desperately needed to continue our work. We take no grants from industry or government and accept no advertising in this magazine.

If you can offer any further support for our work, however small, please send a donation to The Food Commission, Freepost KE 7564, London N1 9BR, or phone us now with your credit card to hand.

Are your vitamin pills GM free?

Genetic Food Alert (GFA), the campaign within the wholefood trade to keep the industry GM-free, has turned its spotlight on vitamin and food supplements. GFA says there are over 180 nutritional supplement companies supplying UK shops, but only a few appear to have taken action to ensure that no ingredients come from GM sources or production methods.

Supplements may contain a number of ingredients from GM sources, only some of which are found in general food. These ingredients include vitamins such as riboflavin (vitamin B2) and amino acids made by genetically modified bacteria and yeasts. Enzymes used in processing may also be produced by GM means. Other ingredients, including oils, starches, sweetening agents, bulking agents, carriers and flavourings may come from GM soya or maize.

In 1989, over 37 people died and over 1,500 suffered permanent disabilities after consuming an amino acid supplement produced by the Showa Denko company. The L-tryptophan it contained had been

produced using genetically modified bacteria. It has never been clearly established whether the injuries and deaths were connected to the genetic modification of the bacteria, the relevant evidence was lost and the company does not accept this was the case. However, GFA says it highlights the need for caution over the safety of such production methods.

Genetic Food Alert now has the support of every wholefood wholesaler (except Nature's Store) and these have now agreed that from 1st November this year they will not stock or sell any nutritional supplement that may contain GM ingredients or derivatives, or any which may have been manufactured using GM enzymes or organisms.

The campaign is encouraging shoppers to write to their supplement manufacturers to encourage them to remove all GM ingredients and derivatives from their products.

■ For further information: Robert Vint, Genetic Food Alert. Tel: 01803 840221
Email: coordinator@geneticfoodalert.org.uk
Website: www.geneticfoodalert.org.uk



"We've engineered the fish oil to enhance reproductive potency"

What are the food companies doing about GM-animal feed?

A number of major retailers are committed to removing GM from animal feed, while others are considering their position.

Marks & Spencer, Waitrose and the **Co-op (CWS)** have already introduced a selected range of non-GM-fed animal products, while **Tesco, Iceland** and **ALDI** have recently announced that they aim to eliminate GM-fed animal products from their own brand goods. And Europe's largest retailer, **Carrefour**, has reportedly purchased 180,000 tonnes of non-genetically modified

soya beans from Brazil, in support of its policy to remove GM from its products, including animal feed.

The following companies have yet to announce similar commitments. Contact these companies directly if you would like to add your voice to encourage them to eliminate GM from animal feed.

Mr Mike Coupe, Trading Director, ASDA Stores Ltd , ASDA House, Southbank, Great Wilson Street, Leeds, LS11 5AD Tel: 0113 243 5435 Fax: 0113 241 8666	'We are aware of moves within the industry, and are working with partners in the industry to see what the opportunities and implications are for removing GM in animal feed'. (25 November 1999)
Carlos Criado-Perez, CEO, Safeway Stores plc , 6 Millington Road, Hayes, Middx, UB3 4AY Tel: 020 8848 8744; Fax: 020 8848 1390	'We have also announced, our intention to provide further products specifically in relation to non-GM production although the means and timing of these, for commercial reasons, are subject to confidentiality.' (29 October 1999)
Sir Peter Davis, J Sainsbury plc , Stamford House, Stamford Street, London SE1 9LL. Tel: 020 7695 7584; Fax: 020 7695 7790.	'The elimination of GM ingredients from Sainsbury's own label products have been a considerable task involving a wide range of products. Now that this has been completed, it was inevitable that we should turn our attention to the presence of GM constituents in animal feedstuffs'. (27 October 1999)
Mr Stephen Ridge, Quality Assurance Manager, Somerfield Stores Ltd , Whitchurch Lane, Bristol, BS14 0TJ. Tel: 0117 935 6441; Fax: 0117 935 6015.	'...we are looking to see what options may be available....we believe it will be easier to make changes in some areas than others.. the poultry industry is vertically integrated and controlled by 6 or 7 large companies... and it would be possible, with the agreement of our competitors, to make changes to animal feedstuffs to avoid non genetically modified materials...' (4 November 1999)
Mr D J Joll, Managing Director, Bernard Matthews Foods Ltd , Great Witchingham Hall, Norwich, Norfolk NR9 5QD. Tel: 01603 871118; Fax: 01603 872 421.	'Our policy on GM soya is that technically we keep an open mind. From a market point of view however, ... we believe the tonnages of guaranteed GM soya free material at the moment are very limited...We are therefore of the opinion that we are unable to offer our customers guaranteed non-GM soya feed at this time. We are optimistic that this will change...' (29 October 1999).
Mr Mike Love, Vice President, McDonald's Restaurants Ltd , 11-59 High Road, East Finchley, London N2 8AW. Tel: 020 8700 7000, Fax: 020 8700 7068.	'In common with other Sun Valley customers we do not currently make a specification regarding GM feed to animals. We are keeping this policy under review.' (24 December 1999). <i>NB McDonald's are the main customer of poultry company Sun Valley. Sun Valley are a subsidiary of Cargill plc, who are one of the world's largest soya shipping and processing companies. Cargill own the UK's only soya crushing mill in Liverpool. Sun Valley were recently quoted in the media as being GM free.</i>
Mr John Banks, Quality Assurance Manager, Burger King Ltd , Charter Place, Vine Street, Uxbridge, Middx UB8 1BZ. Tel: 01895 206000; Fax: 01895 206026.	'There is currently no segregation of GM and non-GM soya and maize in the raw material supply chain for animal feeds world-wide, therefore Burger King are currently unable to specify the use of GM free animal feeds. (7 December 1999).
Ms Alison Ross, Kentucky Fried Chicken , 32 Goldsworth Road, Woking, Surrey, GU21 1JT. Tel: 01483 717000	No reply to a number of enquiries.
VJS Foods Ltd , Beverage Way, Hardnick Nose Ind Est, Kingslyn, Norfolk, PE30 4NB. Tel: 01553 771937.	Crown Danish Bacon distributors. The UK is Denmark's largest market for pig meat. Write to this company to support the campaign in Denmark to exclude GM animal feed from animal feed.

Source: Greenpeace

■ Copies of a briefing on Genetic Engineering in Animal Feed is available from: Five Year Freeze Campaign, 94 White Lion Street, London N1 9PF. Tel: 020 7837 0642 or from the Freeze website: <http://dspace.dial.pipex.com/gealliance>

■ For further information on GM animal feed contact Lindsey Keenan, Greenpeace. Tel: 020 7865 8295 or email Lindsey.Keenan@uk.greenpeace.org.

See pages 17-19 for our special report on the next generation of GM foods.

Food facts

Three more Food Facts are being published this spring. *Fat of the land* looks at our growing consumption of vegetable oils, asks why olive oil is so expensive, given the EU subsidies it gets, and shows how intensified agriculture is damaging the soil of olive groves. Meanwhile palm oil production in South East Asia has risen dramatically, but with a concomitant loss of endangered species in the region. And as third world countries become more wealthy, so their consumption of fats and oils rises at the expense of fruit and vegetables, raising the risk of obesity and chronic disease.

The Food Facts on oranges looks at the real costs of intensive production, a

recent government test of 66 oranges from nine countries found every one contained traces of pesticides. Fair trade alternatives are possible, and organic orange production is taking off in Israel. The report alerts consumers to the types of juice sold today: (i) **concentrates** which have been reconstituted and, depending on the level of pasteurisation, sold as long-life or chilled; (ii) **freshly squeezed**, which is squeezed from whole oranges in the UK and distributed within 24 hours; (iii) **NFC** (not from concentrate)

squeezed and pasteurised abroad; and (iv) **orange juice drinks and squashes** which may contain as little as 2% real juice.

Sugar, well known for its damaging effects on teeth, comes in many forms, with over twenty names and a variety of sources, including milk, fruit syrups, honey, malt and the familiar sugar beet and sugar cane. As part of their original

food (milk, fruit, cane) they appear to have little damaging effect, but extracted and added to other foods they undoubtedly do.



As shoppers, we are buying less and less packet sugar each year, but we are eating more in the form of sugar-rich processed foods — at least 80% of our sugar is now hidden in these processed products. For our health we should be eating less, yet the EC subsidises the over-production of sugar in the EU.

■ Food Facts cost £5 each and are available from Sustain, the alliance for better food and farming at 94 White Lion Street, London N1 9PF. Tel: 020 7837 1228 Fax: 020 7837 1141. Nine other Food Facts reports have been published — contact Sustain for details.

What's cooking?

Our round-up of government consultation papers. Remember: it is never too late to comment. Even after the deadline has passed, it is worth seeking out the draft and sending in your opinions.

Dietary supplements sold under food laws

Responsibility for regulation of dietary supplements will pass to the Food Standards Agency, in the Food Labelling and Standards Division under Rosemary Hignett, 020 7238 6281, e-mail r.hignett@jffsg.maff.gov.uk. Proposals for an EU-wide directive on supplements, referred to in the European Commission's White Paper on Food Safety, are to be discussed by member states this year before adoption in March 2001.

The Working Group on Phytoestrogens of the Committee on Toxicity is calling for submissions. ■ Further details from Dr Catherine Boyle, Food Standards Agency, Room 653C, Skipton House, 80 London Road, London SE1 6LW. Tel: 020 7972 5322. Email: Catherine.Boyle@foodstandards.gsi.gov.uk

European Commission White Paper on Food Safety

This paper includes proposals for the development of a European Food Standards Agency. Comments are required by an unspecified date. The paper can be found on the web at <http://europa.eu.int/com/dg24/library/pub/pub06en.pdf>.

Seed marketing regulations

Comments are required by 20 April 2000 on proposals to amend the seed marketing regulations in England and Wales to implement Council Directive 98/95/EC and 98/96/EC. ■ Contact George Saunders on 01223 342368.

Draft Commission proposal for amendments to the food additives 'framework' directive (89/107/EC)

The main amendments proposed to this directive relate to:

- the use of enzymes, both as additives and processing aids;
- an increase in the scope of food additives approval work;
- deletion of provisions covering temporary national authorisations;
- introduction of labelling requirements for additives from GM sources.

■ Contact Glynis Griffiths on 020 7238 6264.

Contaminants in food (amendment) regulations 1999 — the aflatoxins regulations: guidance for interested parties

This document aims to provide guidance for food authorities, the industry and any other interested parties. Comments were required by 14 March 2000. Discussions are continuing with the EC on harmonised controls for mycotoxins, and notes on the progress are available.

■ Contact Dr Jones on 020 7238 6222.

Proposals to revise codes of practice made under section 40 of the Food Safety Act 1990

Amendments have been to codes of practice concerned with the following areas:

- the use of improvement notices;
- prohibition procedures;
- sampling for analysis or examination;
- food standards inspections;
- food hygiene inspections;
- qualifications and experience of authorised officers and experts.

Comments were required by 17 March 2000.

■ Contact Bob Pilling on 020 7972 5141.

In brief...

Ginkgo biloba may help circulation

A review of tests on *Ginkgo biloba* has concluded that there is good scientific evidence that the food supplement can give some relief of the symptoms of poor circulation in the legs. Claudication, a limping associated with poor blood flow, shows a 'modest' response to treatment with Ginkgo, according to researchers at Exeter University. The German Federal Health Agency has accepted Ginkgo as a recognised treatment for claudication.

■ *American Journal of Medicine*, 108, 276-281 and 341-342, Feb 2000.

Weight loss helps obese asthmatics

For obese people with asthma, losing weight can improve lung function and asthma symptoms as well as overall health. Weight loss not only improves breathing by reducing the stress on breathing during exercise, but also can help lung functions during rest. Previous studies have found that reducing salt intake may also alleviate asthma.

■ *British Medical Journal*, 320, 827-832, March 2000.

Legal, decent, honest and true?

Not all companies follow the Advertising Standards Authority's code of practice, as our round-up of recent cases shows:

X **Seven Seas**, the food supplement manufacturer claimed their Multibionta, a vitamin and probiotic formulation, 'provides the missing nutrients in an unbalanced diet which can result from a hectic lifestyle. Multibionta helps your body cope with stressful days when the pressure's on.' The ASA (8/3/00) felt that the claim implied that the product provided a specific health benefit, rather than supplementing inadequate diets, and that this would be assumed to lie in the use of probiotics — yet the company could not provide evidence that probiotics help the body when stressed. Probiotics, the ASA agreed, may have a role in maintaining a healthy immune system but would not otherwise help the body cope with stress. The authority concluded that the claims made for the product had not been adequately substantiated, and should not be used in future advertising.

X An article in regional newspapers claimed that **Weight Watchers** had helped a woman lose weight from 17 stone to under 10 stone. The ASA (8/3/00) held that this breached the Code on the advertising of weight-loss methods, as it appeared to offer

a treatment for obesity — something which should not be advertised to the public unless under qualified supervision. Weight Watchers stated that the weight loss claims had not been made in an advertisement but in an editorial, but the ASA, having contacted the publishers, found that Weight Watchers had written the material and supplied to the publishers as 'advertorial'.

X Posters by **United Distillers** for a vodka drink boasted the phrases 'I slept on the sofa', 'I got way laid' and 'I'm sure it's just a rash'. The ASA (9/2/00) felt that the statements sounded like excuses by an adulterous partner. The implications were that the speaker had experienced unprotected sexual infidelity, and that it was socially irresponsible for the advertisers to link sexual activity and lying with alcohol consumption. Meanwhile the ASA (9/2/00) were more tolerant of an advert in a men's magazine showing a cartoon girl in a tank top, hotpants and roller skates with a bottle of **Virgin** cola inviting readers 'Anyone for a quick squirt?' The ASA considered this unlikely to cause serious offence or to condone the violation of children

Want to make a complaint?
The ASA is on 020 7580 5555, www.asa.org.uk, and for TV ads the ITC is on 020 7255 3000, www.itc.org.uk. Let us know how you get on.

In brief... Carotenes may reduce angina risk

A study of the links between nutrient levels in the blood and the development of angina pectoris found that although there appears no direct link with low levels of vitamins A, C, E or B12, there was a link to low levels of several different carotenes and to cryptoxanthin. The researchers, who

controlled for associated factors such as blood cholesterol and blood pressure, suggest that more research is needed on these compounds, which are found in fruits and vegetables but not usually in food supplements.

■ *Annals of Epidemiology*, 10, 106-116, Feb 2000.

Latest BSE news

One year delay on tonsil tests

Over 18 months ago it was shown that the tonsils may be able to reveal infection with Creutzfeldt-Jakob Disease (the human equivalent of Bovine Spongiform Encephalopathy) before overt clinical symptoms are apparent. A major survey of tonsils in order to assess the extent of hidden infection was proposed and funding from the MRC agreed.

But this March, over a year after the main trials were supposed to start, the Department of Health admitted that the committee giving ethical approval to the trials had not yet considered the matter. A spokesperson was unable to tell the *Food Magazine* how often the committee met or when it had first been asked for approval. Only after repeated pressure was put on the DoH by outside advisers did the department finally agree in mid-March, saying the trials could go ahead provided the tonsils were kept strictly anonymous. This makes it virtually impossible to validate any positive samples by following individuals through to see if and when they develop the disease.

Blood shows infectivity in animals

A series of experiments on sheep, deer and mice have all shown that traces of infectivity are detectable in the blood of spongiform encephalopathy sufferers within weeks of the disease being given to them, and many months before clinical signs of the disease start to show.

Although no such tests have been tried on humans, it must be assumed that infection is possible from the blood of humans carrying the disease. Measures to reduce the risk of transmission through blood have been introduced in the UK national blood transfusion service, principally by removing white blood cells. Meanwhile, the US, Canada, Australia, New Zealand and several other countries will exclude blood donations from any person who has lived in the UK for a cumulative total of six months or more in the period 1980-1996.

CJD blood donors known

A 'small number' of people have received blood from donors who later developed CJD, according to Professor Robert Will, director of the Edinburgh-based CJD Surveillance Unit.

These recipients have been traced but have not been told about the blood they received. 'We do not want to cause them more harm than good by raising their anxiety when we have no evidence that they are actually in any danger,' said Dr Will. He was unable to say what would happen if these recipients themselves wished to donate blood or become an organ donor. They would have to be barred from making a donation, and presumably would want to know why.

UK cattle testing resisted

The UK is reluctant to introduce tests for BSE in animals entering the food chain, on the grounds that these are unnecessary given the ban on cattle over 30 months old, and the stringent removal of potentially contaminated offal from carcasses.

In other countries such testing is gaining favour as a means of assessing the hidden extent of the disease. Tests (from companies such as Prionics) can now reveal if an animal is carrying BSE before clinical symptoms are showing. Trials have been successfully run in abattoirs in Switzerland, and these found several infected animals that were about to enter the food chain.



"This cattle-cake reminds me of someone I once knew..."

Food labels: It's time for action

A Government initiative is putting food labels under the spotlight. MAFF (The Ministry of Agriculture, Fisheries and Food) says shoppers want better food labels (so do we). Could we eventually see an end to confusing, incomplete and missing information on food labels? We report on the changes we'd like to see.



Misleading:

This product is described as 'healthy', yet this is not a low fat food, containing 18% fat, of which most is saturated fat. Poorly defined words such as 'healthy', 'fresh', 'wholesome' and 'nutritious' have been condemned by government advisers.

The Food Commission has long campaigned for better food labelling. We believe that good labelling can play an important role in helping consumers to eat more healthily and to choose products that offer benefits in terms of food quality and safety, animal welfare, fair trade or environmental considerations.

However our research over the past 15 years has highlighted numerous concerns over food labelling, particularly the way in which labels may mislead, or provide inadequate, confusing or simply illegible information. In this special *Food Magazine* report we highlight many examples of poor, inadequate or misleading food labels and spell out our recommendations for improved food labelling.

Now we find that we have an ally — and one that might surprise many of our readers. Yes, the Ministry of Agriculture Fisheries and Food (MAFF) has finally acknowledged that there is significant room for improving food labels.

Earlier this year, MAFF launched a Food Labelling Initiative that invited consumers and consumer organisations to let MAFF know what they thought of food labels. This included a MAFF-funded survey of over 1,000 'representative' food shoppers which has found that consumers clearly want better food labels and more information that they can easily understand (see 'What MAFF found').

'Consumers particularly want to find out what products are made of, the level of nutrients they contain and how they were produced,' said MAFF's Minister for Food, Baroness Hayman, announcing the results of the survey in February. 'The demand for more information is clear but also many people find the information on labels difficult to use and some claims made on labels may confuse or mislead. I hope our current initiative to hear the public's views on food labelling will help us improve the situation in future.'

Cynics might say MAFF's 'consumer-friendly' approach comes a little too late as MAFF's responsibility for food labelling ended on March 31st. It will now be up to the new Food Standards Agency to decide how it wishes to take forward the results of MAFF's final (and some would say first) consultation which specifically asked



Meaningless:

This 'traditional' product with a rural image is made with some very non-traditional ingredients including four emulsifiers (E477, E471, E481, E322), two raising agents (E500, E541), a stabiliser (E466) and a preservative (E202), glycerine, whey powder and modified starch.

consumers what improvements they would like to see for food labels.

We anticipate that the Agency, which has pledged to put consumers' interests first, will want to make the kinds of improvements that consumers want to see. But even if there is a will, is there a way? Labelling legislation is now agreed at a European level, and requires the agreement of most, if not all member states. It also takes time. It took over 20 years, for example, for the EU to reach agreement on chocolate composition and labelling, and there is still no agreement over the labelling of ingredients for alcoholic drinks. And for harmonised areas of legislation, including food labelling, individual countries are not permitted to introduce their own differing national legislation.

In some cases there is room for manoeuvre over the UK's interpretation of the law. For example, we believe MAFF's interpretation of artificial sweetener labelling requirements (which currently allows companies to hide this information on the back of packs) is against the spirit of the original EU requirement.

However, we anticipate that any new approach may seek to rely on voluntary agreements or 'codes of practice' as a basis for change. Recent example of such an approach include the government's welcome recommendation that food companies should no longer use 'x% fat-free' claims (they can mislead) and the non-government Health Claims Code of Practice due to start operation later this year which seeks to outlaw misleading health claims. While we welcome any moves to improve food labelling, the Food Commission remains concerned that, without the backing of the law, food companies will be able to pick and choose which codes they follow and which they ignore — a situation which could further undermine consumer confidence and add to labelling confusion.

The changes we

The Food Commission submitted the following recommendations to MAFF's Labelling Initiative.

Labelling for a healthier diet:

Nutrition labelling should be mandatory and should be in a form that is more easily understood to assist shoppers to choose and compare products eg by using 'high', 'medium' and 'low' definitions for nutrients.

Nutrition information should include as a minimum: energy, protein, fat, saturated fat, carbohydrate, sugars, sodium and fibre.

The labelling of **trans fats** should be included in nutrition information.

Clear definitions, which consumers understand, for the use of nutrition claims e.g. low fat, high fibre, reduced fat.

Nutrition labelling should be clearly apparent prior to purchase.

Legal controls on the use of health claims i.e. a claim that a particular ingredient may be beneficial to health. This should include a requirement that such claims are independently assessed, are not used to claim a health benefit to 'junk food', do not mislead as to the nature of the food as a whole, and that products (and their advertisements) include advice/warnings on the use of the product.

An end to potentially misleading claims such as 'x% fat-free', 'no added sugar' (where foods contain other forms of sugars e.g. from fruit juices, syrups, honey etc).

Better ingredients labelling:

Quantitative ingredient declarations (QUID) should be extended to cover all major ingredients, (not just those which are used to describe or define the product) including water.

Additives should be listed by type and E number as a minimum e.g. colour: E102. Where the name of the additive is used (e.g. tartrazine) the E number should also be stated.

An end to the **confusing use of 'flavour'** (e.g. strawberry flavour to describe a product which does not need to contain any flavour from real strawberries) and 'flavoured' (which does) and 'flavouring' (which is ambiguous).

Alcoholic drinks and other foods currently exempt should be obliged to declare their ingredients.

Composite ingredients (e.g. salami in a pizza, sausages in a tin of sausages and baked beans) should declare their ingredients.

All products with **added water** should declare the full amount of added water e.g. some hams are currently exempt from having to declare the first 5% of water while other hams need not declare the percentage amount of added water.

Foods or drinks containing **added sweeteners** should be required to declare this information clearly on the front of packs/bottles in easily legible print.

Where foods are **sold in packs** (e.g. four yoghurts) the ingredients information should be clearly visible and legible

The inclusion of **common allergy causing foods**, or ingredients made from them, should be highlighted on packs and unlabelled foods.

Hidden information:

This multipack of individual portions gives ingredient information as it must by law. But the information is written on the sides of the tubs facing into the middle — it cannot be read without pulling the pack apart.



Showing production methods:

Labelling of **genetically modified ingredients** should be based on the source of the ingredients, not solely on whether the final product contains GM protein or DNA.

Production methods should be described e.g. battery hens, grown with pesticides, produced with the use of antibiotic growth promoters, colourings in animal feed etc.

Post-harvest treatment of fruits and veg. e.g. etables etc, with fungicides, anti-sprouting agents and other preservatives should be indicated on the label.

Confusing:

The picture of a raspberry on the front of this Raspberry Flavour Yogurt would lead you to believe it contains some raspberries. But only if it were described as 'Flavoured' would the flavour need to come from real raspberries. The difference between 'flavour' and 'flavoured' confuses many people. We say it's time to end this confusion.



Missing information:

Restaurants and takeaways do not have to declare the ingredients in their food. For many people this can be important — for example if you are allergic to nuts or intolerant of wheat gluten. Take away food may include dyes such as E102 (tartrazine) and E124 (ponceau) — but consumers are not told, and have no right to know.



want to see

No misleading claims:

Greater controls on the use of **potentially misleading labels** such as 'natural', 'pure', 'fresh', 'premium'.

An end to **meaningless terms** such as 'wholesome', 'farmhouse', 'special', 'selected'.

An end to the use of **'lite' claims** as this has no definition and is currently used by different producers to describe food which is 'reduced fat', 'reduced calorie', 'reduced alcohol', 'reduced sugar', or to the food's texture or colour.

Eggs should be labelled as 'laid by caged birds', 'intensively produced' or other agreed wording unless produced under 'free-range' or other higher standards.

Greater controls on **country of origin labelling** to ensure that consumers are not misled e.g. olive oil bottled in Italy from Tunisian olives, English butter made with imported milk, British bacon made from imported meat.

Products packaged in **modified atmosphere packaging** should be described as such, not as 'packed in a protective atmosphere' which is not well understood and can mislead.

The term **'diet'** i.e. 'diet drink' should not be permitted (renamed 'no' or 'low calorie') and no product should be allowed to claim that it can aid slimming or weight control, or refer to the amount or rate of weight loss. 'Reduced calorie' foods must offer at least 40% less calories than their regular counterparts (per 100g) and not just come in smaller portions.



Misleading:

Strawberries and kiwi fruit on the front of the pack, but none inside. The only fruit is a small squirt of apple, and the rest is unspecified 'flavourings'. Consumers would expect at least a fair proportion of the illustrated fruit to be in the product.

Labelling for food safety:

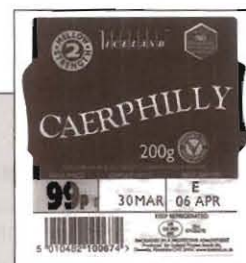
For foods which present a higher **risk of food poisoning** e.g. meat and meat products, eggs, microwaveable food etc, packs should carry warnings and clear cooking instructions to ensure safe use, storage and cooking.

'Use by', 'best before' and other date markings should be easily identified on packs and clearly legible.

Providing information:

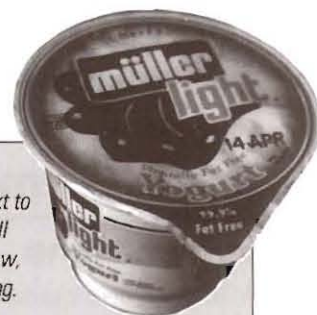
To be effective and well understood, labelling information and changes need to be communicated and consumers provided with additional information and educational material.

This kind of communication or material should not be used as a substitute for information presented on food labels.



Hidden information:

This cheese has good nutritional information — but you wouldn't know it until you get home and remove the cheese from the pack. The information is written on the reverse of the front label and is impossible to see when shopping. Consumers cannot compare products if they cannot read the information when they need it.



Hidden information:

Foods with artificial sweeteners are required to declare 'with sweeteners' next to the name of the product. The manufacturers often hide the declaration in small print away from the front of the pack. This is contrary to the intention of the law, which was supposed to help consumers make informed choices while shopping.

Consumer's views: what MAFF found

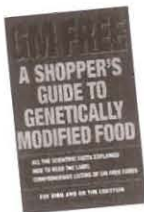
MAFF's survey was commissioned to find out how much food labels were used, what information people looked for and ways in which improvements could be made. The survey covered a representative sample of 1,081 people throughout Britain who were responsible for grocery shopping in their household. The survey found:

- Most food purchasers (68%) look at labels before buying food.
- Consumers are interested in the composition of the food: 45% say they look at ingredients and 42% look at nutrient content, particularly fat (39%).
- Shoppers are also interested in production methods and the origin of the food: 9% look for organic; 18% for origin.
- Just under a quarter (24%) of shoppers say they look at the date, sell by date or use by date on food.

- 75% of consumers find terms like 'fresh', 'natural' and 'pure' misleading.
- Shoppers said information was often hard to find: 69% said information about the presence of genetically modified ingredients was hard to locate; 48% said ingredient lists were often hard to find, particularly the presence of additives (43%).
- Over a third of shoppers (38%) said they found some labels misleading, including being difficult to understand.
- A similar number (38%) said that logos, such as healthy eating logos, vegetarian symbols were more likely to encourage them to buy the product.

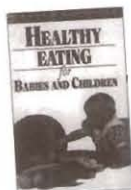
■ A copy of the research **'Consumers Attitudes to Food Labelling'** is available from the MAFF Library, Nobel House, 17 Smith Square, London SW1P 3JR Tel: 020 7238 6575.

marketplace



GM Free – A shopper's guide to genetically modified food

What we know, what we don't know – this clearly written book explains the potential benefits and risks of GM food and will help you to make the right choice for you and your family. £5.70 inc p&p



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Good food doesn't need irradiating yet the UK has legalised the process. This book explains the technology and the risks. Only a few copies left. £6.50 inc p&p.



Back issues of The Food Magazine

Back issues cost £3.50 or £30.00 for a full set of available issues (approx. 26 issues). Send for index of major news stories and features in past issues. Stocks are limited and some issues are already out-of-stock.



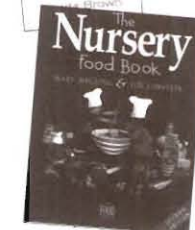
What the Label Doesn't Tell You

Food labels will only tell you so much. This no-nonsense consumers' guide will help you through the maze of food marketing hype, government hush-ups and media scare stories. £7.70 inc p&p.



The Shopper's Guide to Organic Food

Lynda Brown's great new book explains all that you need to know on organic food and farming, with an A-Z guide to organic foods. £8.99 inc p&p



The Nursery Food Book – 2nd edition

A lively and practical book exploring all issues relating to food, nutrition, hygiene and multicultural needs, with tips, recipes and sample menus along with cooking, gardening and educational activities involving food. Excellent handbook for nursery nurses and anyone caring for young children. £13.99 including p&p.



Poor Expectations

Written by The Maternity Alliance and NCH Action for Children. A devastating report on under-nutrition among pregnant women on low incomes, showing the poor diets being eaten at present and the difficulty of affording a healthy diet on Income Support. £5.50 inc p&p.



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CHECKOUT

Children's food — ten bad products for every good one

A huge range of foods are now specifically targeted at children. But a new Food Commission survey finds that most leading products are nutritional disasters.

If a company wanted to destroy our nation's health, what method would they choose, without breaking the law?

The answer must surely be to undermine our children's diets. Boost the sugar. Boost the fat and the salt and the additives. Over-process the food, remove the nutrients, remove the dietary fibre. In short, debase the diet as much as legally possible.

A forthcoming government report on school-age children's diets is expected to find high levels of fat and sugar consumption along with high levels of obesity and anaemia. A previous survey in 1983¹ found that children were eating a lot of fat, with three quarters of children exceeding government recommended maximum target levels for fat intake. Sugar, salt and fruit and vegetable intakes were not analysed, but the report did find that over half the girls were eating too little iron, and older girls were eating too little calcium and vitamin B2.

The Food Commission's full report, *Children's Food Examined: An analysis of 358 products targeted at children*, by Dr Karla Fitzhugh and Dr Tim Lobstein, is available price £105 inc p&p. Send order, cheque or credit card details to Publications, The Food Commission, 94 White Lion Street, London N1 9PF (tel: 020 7837 2250, fax: 020 7837 1141). Please allow 14 days delivery.

A fair selection

Why would children eat poor diets? And are manufacturers contributing to children's lack of good nutrition?

To find out what sort of food is being promoted as especially suitable for children we went shopping for food products with children in mind. We deliberately ignored all the soft drinks, all the crisps and other bag snacks, all confectionery and all birthday cakes, as these would be well known to parents as foods that are high in fat or sugar or additives. By deliberately excluding these products we were giving the manufacturers a fair chance to show that they could provide good nutrition.

As we went around the supermarkets we used the following criteria for selecting foods marketed for children. We looked for products which:

- Use words such as 'kids' or 'ideal children's snack' or 'perfect for school lunchboxes', or
- Show familiar cartoon characters, or
- Feature tie-ins with children's TV programmes or films, or
- Promote children's toys or give-aways for children, or
- Feature competitions, puzzles or games suitable for children, or
- Include fund-raising offers for school books, equipment or school sports clothing, or
- Include instructions for use that stated that parental help is recommended.

The result was a trolley-full of 358 food products targeted at children. They ranged from cheesy spreads to seedless raisins, from cocoa krispy cereals to Barbie doll cookies.

We took a look at their nutritional profiles using government guidelines (see Judging what is junk) — and were horrified at the results.



Fruit wrapped in cartoon-covered packaging is a great idea — except that Safeway has added fat (a whopping 30% of the final product) plus extra sugar and honey.

Judging what is junk

To judge the quality of children's foods we used the guidance on high and low levels of nutrients issued by MAFF in 1996.

Amount per 100g (or per serving if larger than 100g)

	This is a lot	This is a little
Total fat	20g	3g
Saturated fat	5g	1g
Sugars	10g	2g
Sodium	0.5g	0.1g

■ **Use Your Label** — Making sense of nutrition information, MAFF, 1996.

CHECKOUT

What we found

We examined 358 products for their levels of fat, saturated fat, sugar and salt. Some companies did not provide all the information we needed (see table 1) but of the products which did give nutritional information, we found a large proportion contained high level of fats, sugar or salt (table 2).

Table 1: Number of products with missing information

Total fat	11
Saturated fat	111
Sugars	112
Salt	115

The large majority showed poor nutrition, with over half of them high in sugar, nearly half of them high in salt, and nearly a third high in saturated fat. Overall more than three-quarters, 77% of products, were poor nutritionally, being high in saturated fat, sugar or salt.

Table 2: Proportion of products showing nutritional problems

High fat	16%
High saturated fat	30%
High sugar	57%
High salt	46%
One or more of the above	77%

In contrast, we found only four products — one percent of the total — that declared their nutritional content and which were low in fats, sugar and salt. These were frozen vegetables with children's cartoons on them.



The pig may be appropriate for this ASDA pack of sponge cakes, as the product is nearly one quarter pure fat. Unhelpfully, the label doesn't say how much sugar the product contains. What it does say, though, in capital letters, is that the product contains **NO FLAVOURINGS**, yet a careful look at the list of ingredients shows that flavourings are included in the product twice.

We also find a further 20-odd products which appeared to us to be healthy but which were poorly labelled, such as fresh and frozen fruits and vegetables. At most, we found 7%-8% of children's products to be excellent by our nutritional criteria.

With at least 77% of the products judged poor in one respect or another, and with less than 8% judged good, manufacturers have only themselves to blame if their food is dismissed as largely junk. Faced with a ratio of ten to one against, no wonder parents have a struggle.

The figures might be even worse if manufacturers were brave enough to label all their foods with full nutritional labelling. More than a third of products were not sufficiently well labelled to allow us to assess their nutritional status, and hence to allow shoppers to make comparisons. Many of these products appeared to be nutritionally poor, including processed meat products, processed cheese snacks, cake mixes and sweetened spreads. Better labelling practices were found on breakfast cereals and supermarket own-label products.

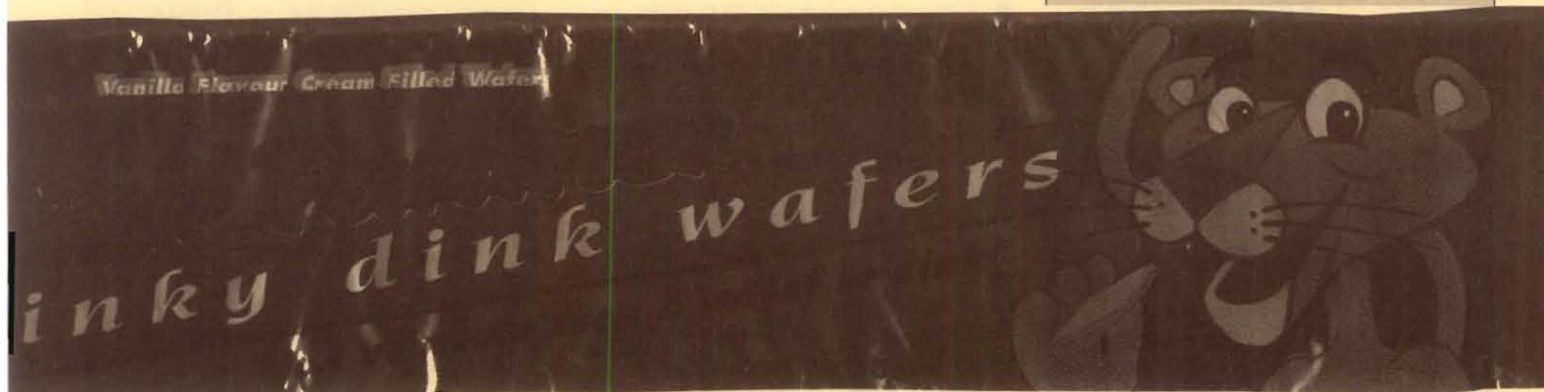
■ Research by Karla Fitzhugh

¹ COMA Report on Health and Social Subjects 36, *The Diets of British Schoolchildren* Dept of Health, 1989. (The report was published six years after the field work. It did not analyse diets for the saturated fat, sugar or salt intakes.)



Mr Men characters help to promote a wide range of foods to kids. This dish of meat and beans contains more water than any other ingredient. The meat and beans on the front of the pack constitute just 43% of the product, while the water, thickened with starch, modified starch, potato starch and rusk, bulks the rest of it out.

The nutrition labelling on these Pink Panther biscuits shows fat levels of 30% with 85% of the fat as saturated fat. Just two ounces of these biscuits would take a child over their recommended maximum saturated fat intake for the day. The pack doesn't admit the sugar content, which we estimate at over 20%. But the pack does boast 'Vegetarian Society approved' which, sadly, doesn't make the products any better nutritionally.



CHECKOUT

Added attractions

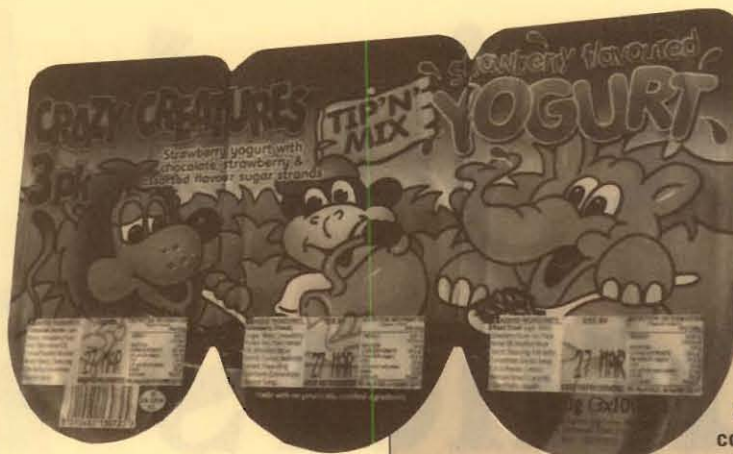
While looking at the nutritional information, we also examined the foods in our survey for the presence of additives. We were especially concerned to see if additives might be used to promote processed foods in place of fresh ones, so we examined the 'cosmetic' additives which have a principle purpose of boosting flavour and colour to enhance the apparent attractiveness of the food.

We found over two-thirds of the products used cosmetic additives:

Added colouring agents	38%
Added flavouring agents	57%
Colouring, flavouring or both	68%

Some manufacturers consider colouring to be essential in children's products. Food manufacturer Nestlé has said that 'without colouring many products would not exist' (see last issue of the *Food Magazine*). We found that, of the foods with added colouring, nearly a fifth (19%) contained five or more added colouring agents, and a few — such as children's desserts — contained seven, eight or, in one case, nine added colourings in one dessert.

Some products avoid full ingredients declarations by including compound ingredients that do not require further listing — for example some products showed 'cheese', 'bacon bites' or 'sausages' on the label, without giving further information as to the flavourings or colourings used in these ingredients. This is a loophole in the law that puts consumers at a further disadvantage when making choices.



Yeo Valley make organic fruit yogurts for general sale containing some 12% sugars (including the milk and fruit sugars). The same company make a 'Crazy Creatures' yogurt

for children, but with added sugar and sugary toppings that take the product to a whopping 25% sugar — five teaspoons of sugar in each pot.



How to turn a milk drink into something with much higher profit margins: pack it into tiny 50ml sachets, and thicken up the milk with sugar. Not just a little sugar, but a total of 56% of the product.

What we want to see

Food producers and retailers

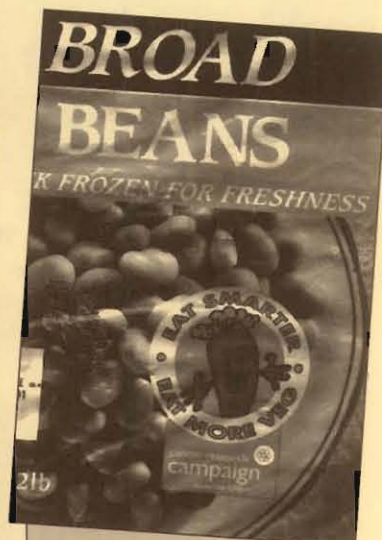
- Introduce full nutritional labelling with consistent nutrition details
- Introduce clear indications of high and low levels of fat, sugar and salt
- Increase the positive marketing of healthy products
- Reformulate products to improve nutritional content
- Introduce price incentives to encourage healthy choices
- Use the marketing tricks on good quality foods, not nutritional junk

Government

- Require mandatory nutrition labelling
- Introduce strict controls on advertising to children.
- Extend the controls on additives currently on baby foods to all foods marketed to children
- Introduce controls on health claims, with powers to penalise offenders
- Promote integrated school nutrition education and school food services
- Promote public service advertising of healthy foods

Parents

- Recognise the tricks of the trade that make products attractive to children
- Avoid taking children shopping. Avoid shops that display sweets at checkouts.
- When shopping with children, explain how companies boast about their products.
- Discuss with your child's teachers the need to educate on labels and advertising
- Let your politicians know that you don't like the lax laws on children's food
- Treat your kids to high quality food whenever you can



The exception: a rare example of vegetables being promoted with cartoon characters, thanks to a joint initiative between Iceland and the Cancer Research Campaign. Must health be sponsored by cash-strapped charities?

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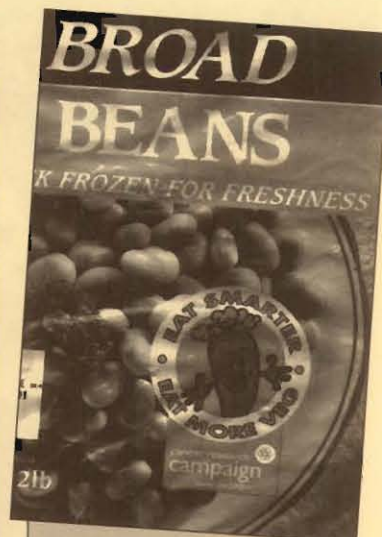
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CHECKOUT

The junk pushers

Advertising in trade magazines such as *The Grocer*, companies promote the good profit margins to be made from children's processed foods, particularly those using attractive character merchandising, using familiar images (see below).

Bernard Matthews' advert (see top right) openly acknowledges exploiting children's 'pester power' — the whining and sleeve-tugging of children trying to get their parents to buy an advertised product. We are concerned that the battle that should be taking place between

food manufacturers and public health experts is being played out between a susceptible child and an exhausted parent.

This advertisement to retailers (right) shows the support that Burton's Biscuits is giving to Jammie Dodgers. Activities include give-away games, a road show and a live Jammie Dodgerman handing out prizes, all designed to increase pester power, while day-time radio ads and multipack deals undermine parents' resistance.

WE HAVE THE POWER

Back in 1985, Bernard Matthews recognised the potential of shaped products for children with the launch of Golden Drummers.

Over the years we have continually innovated, successfully harnessing pester power to become the true market leader.

NEW

Bring Character to Your Cereal Fixture

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Bring fun and excitement to your cereal fixture with Thomas the Tank Engine Shaped Cereal.

Tearing the largest and strongest packet of the market.

Full of fun-pack activity throughout the year.

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JAMMIE DODGERS!

SLAMMING IN THE JAM!

Britain's No.1 Jammie Biscuit is planning to make Spring-time jam-time.

The £1/2 million Spring Jambaron will see Jammie Dodgers:

- Jamming the airwaves with more rib-tickling radio ads
- Hitting top family venues with its own 'Jammie' road-show
- Tempting youngsters with a fun-filled in-pack free offer
- Winning over mum's with a biggest value ever triple pack

Free Face Flippers

Injecting even more fun into Britain's No.1 children's biscuit brand (50% of Jammie Dodgers are eaten by youngsters under 10), is the 1st ever triple pack in-pack promotion - with free Face Flippers. Flipping the flaps creates a hilarious collection of 'Jammie' faces. With 5 different Flippers to collect, they'll go down a flipping treat.

99p Triple Pack

Jammie Dodgerman 'My little is jam-packed with delicious value. When mum and dad have heard about the massive 66% saving on the Jammie Dodger radio ads, and the kids have checked out the Face Flippers they'll all be having a profit building party - in the checkout!

'You Can't Get More Jammie Than a Jammie Dodger'

Back on national airwaves, the hit radio campaign that has helped lift volume sales by 20% year-on-year. With 8 new wacky commercials featuring Keith 'Chuggers' Chuggin - in a national FM radio campaign the will cover 45% of housewives with children and give 11 opportunities to hear.

Introducing - Jammie Dodgerman!

He's 'jammier' personified - and he's appearing live at 34 favourite family venues, from zoos to shopping centres, across the UK. He's Jammie Dodgerman, a real live entertainer who heads the cast in a nationwide Jammie Dodgers sampling tour from March to May. There'll be fun for all, with thousands of prizes for the 'jammie' winners.

Jammie Dodgers - the original and still the jammiest!

Waste not — want not?

Warning:
this article is not for
the squeamish!

Making animal feed out of animals' waste products is not new. Nor is the use of cattle hide and cattle bones for soap and soup, nor the recycling of vegetable oils, nor the use of limestone in flour. Truck driver Stanley Graham looks back over 40 years in the business.

I think I may have been very lucky in my choice of parents, for we are a long living family with an extremely varied ancestry. However, when I reach 100 years old and my children ask me what my secret is I shall tell them that it was most probably down to spending twenty five years of my working life as a trucker and industrial boiler repairer.

It gave me some clues as to what foods to avoid!

Forty years ago I used to wonder why I was carting bone meal, hoof and horn meal, bagged broiler house muck and greaves into animal feed manufacturers. ('Greaves' is the trade name for knacker yard meat meal which has been partially cooked and left to start putrefying as this makes it easier to process.)

I found out that they were all high in protein and were an economic way of improving the protein content of the end product — cattle cake — and allowing cheap bulking agents like chopped straw to be used as well.

During a long spell as a cattle wagon driver I asked the bloke I worked for why he always bought the more expensive 'coarse ration' instead of cattle cake.

He said it was better for the cattle and the reason it was so dear was because you could take a handful and see exactly what was in it. A handful of cattle cake tells you nothing.

Thirty years on I realised that what I had been looking at was the genesis of BSE in cattle and CJD in humans. The only reason it had been done was to raise profit margins. During the fifties and sixties I saw many more examples of this sort of adulteration.

Greaves were used regularly as raw material at fat and margarine refiners.

Skin oil, which is extracted from hides when they are processed, went to margarine and toilet soap manufacturers. (Large posters on the wall at the skin yard proclaimed 'BEWARE OF ANTHRAX!')

Lanolin, normally from sheep wool, was fat extracted from sewage works and went to the manufacturers of toiletries, particularly hand creams and lipstick.



Limestone flour which is very finely powdered limestone rock went into the large industrial bread bakeries to provide the added calcium.

I carried all these things and drew some conclusions from my knowledge.

You've guessed it, don't eat margarine, render your own dripping and avoid anything with lanolin in it! I began to realise that whilst simple economics was the root cause which drove these practices, there was another element, the use of waste which would otherwise have been a negative cost because it would have to be disposed of in some way.

What a brilliant business ploy. Convert waste which is a financial liability into a by-product that could be sold to enhance some other industry's profits!

Another job I had and enjoyed for years was carrying cattle for a very good and caring cattle dealer. Our trade was in high quality rearing calves for the dairy industry to Scotland and the best scotch heifers back down to Northern England for sale to dairy farmers, many of whom sold milk direct to the public through their own retail rounds in the surrounding towns.

The dealer got high profits, bought good beasts and looked after his business.

I loved the cattle and in all the time I drove for this man I never had a casualty except for one still-born calf. (I used to have to stop and calve a beast many a time as I was bringing them down the country.)

However, there was a trade going on in the cattle markets which puzzled me.

Many calves, particularly bull calves, are not worth rearing. One name for these is 'bobby calves', another, more accurate description is 'killers'. As soon as their navels were dry (if they were lucky) these calves were taken into the market and sold to specialised dealers.

I asked what they were used for and was told that the manufacturers of baby and geriatric foods bought them to render down for gravy.

I have to say that I never delivered any of these calves to their final destination but have no reason to believe that what I was told was untrue.

Only a couple of months ago I visited the dealer I used to work for and he told me that the killer trade was still active and that nowadays the dealers wanted calves with a little more age on them because 'the meat will have firmed up'. This signals to me that they are going for human consumption.

Later in my career I was working for a firm which repaired large industrial boilers.

Many people use the phrase 'Steam Age' as a pejorative term to describe something which is out-of-date or obsolete. Nothing could be further from the truth. Many industrial processes still require steam and one of the major users is the food industry.

When we went in to repair a boiler we were invisible, an essential part of the furniture, so the business of the plant went on as though we weren't there.

Because of this, in the course of my work over the last ten years I have seen further examples of the miracle which is turning waste into profit. I have worked on a plant where out-of-date cheese and butter was brought in from supermarkets.

The cheese was processed and emerged as mozzarella for pizza toppings.

The butter was combined with vegetable oil from EEC intervention stocks that was anywhere from ten to fifteen years old, no mistaking this, it was clearly labelled and dated. The resulting goo was processed, I think by hydrogenation, and emerged as 'baker's shortening' with a shelf life of six months.

I saw small vans coming into the same factory and unloading and enquired about them. They were providing a useful service to restaurants and chip shops by collecting their used cooking oil for free disposal.

Needless to say, this was not a charitable enterprise. I don't know what

was being done with it but I think I could hazard a good guess — animal feed, and maybe even processed food for humans.

I was talking to a man who knows about these things a few weeks ago and he told me that the service wouldn't be free for much longer as the trade had taken a knock. Some entrepreneur in Europe had decided that his profit margin could be boosted by augmenting his vegetable oil with used transformer oil!

The big problem with this is that, apart from the fact that it was mineral oil, he was introducing heavy metals into the mix. Evidently this ploy had been discovered and the result was a drop in profit in the industry due to better regulation.*

Another class of plant we worked in were the 'protein converters'. These are factories which take in abattoir and meat processor's offal and convert the waste into 'protein granules'.

Look on the side of a tin of pet food and you will find 'protein granules' or 'meat by-products' in the list of contents. What this really means is chicken heads, feet, feathers and guts and any other by-product from an abattoir.

These are not in prime condition when they arrive at the plant and you can imagine the smell. The miracle is that when you open the tin of pet food it smells good enough to eat!

I realise that some of my knowledge on this subject is forty years old by now and some things have changed. However, the lesson I have drawn from these experiences is fresher than the products of these 'miracle factories'.

It is quite simply that some essential

questions are not being asked in the debate on food safety. Food processors, manufacturers, retailers and restaurants should be made to account for their waste.

There should be a clear audit trail which allows verification of the means of disposal.

This regulatory framework should be tight enough to ensure that sub-standard food is not allowed re-entry into the food chain whether it be human or animal. It is blindingly obvious now that abattoir waste should never have been allowed entry to herbivorous animal feed.

The cost has far exceeded any savings that were made at the time.

My argument is that equally damaging practices are still current and that nobody can tell what the consequences will be. It is common sense that once food has deteriorated it should be destroyed and not re-processed. I have a fear for the young of this country.

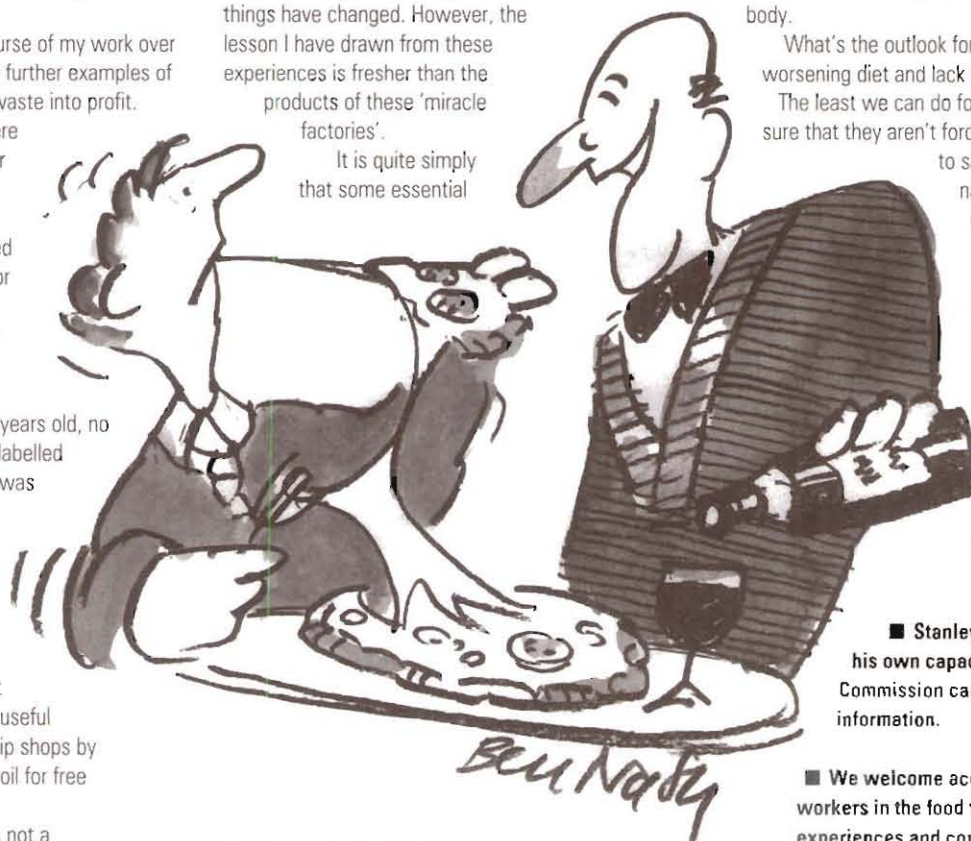
Talk to any medical person and ask them about the unexplained rise in things like wheezing after exercise, asthma, glue ear and food poisoning. We have no clear answers as to what is causing these disabilities.

Suppose it was connected with re-cycling waste food? I'm all right, I eat butter, eggs, good local meat, cook for myself and bake my own bread. I've lived a hard life with lots of physical exercise so there's a good foundation to my body.

What's the outlook for the young, with a worsening diet and lack of physical work?

The least we can do for them is to make sure that they aren't forced to eat crap just to satisfy some multi-national's profit motive.

* The transformer oil also contained dioxins. The resulting cover-up created a crisis which brought down the Belgian government — ed.



"It's our speciality, sir. Recycled mozzarella"

■ Stanley Graham writes in his own capacity and the Food Commission cannot verify his information.

■ We welcome accounts from workers in the food trade giving their experiences and concerns.

Biotech — the next generation

In a bid to reverse its failing fortunes the biotechnology industry and its supporters are putting their faith in a 'second generation' of genetically modified crops. It is claimed that some of these will bring consumer benefits by offering foods with enhanced nutrition. A new report, *Biotech — the next generation*, from the Food Commission with GeneWatch UK, examines what is in the pipeline. Here the report's co-author Sue Dibb asks who is likely to benefit most from these developments?

'I have felt for some time that when biotechnology products from agriculture hit the market with attributes that, let's say, reduce cholesterol, increase disease resistance, grow hair, lower pesticide and herbicide use, and are truly recognized as products that create more specific public benefits, consumer acceptance will rise dramatically.' So spoke Dan Glickman, US Secretary of Agriculture, last summer at a time when the biotech companies were facing a crisis over consumer opposition to the products of genetic engineering.

The 'first generation' of genetically modified crops, including GM soya and maize, has largely offered traits such as herbicide tolerance or insect resistance, of potential benefit to farmers but which provide no direct benefits to consumers. Many of the environmental advantages claimed for herbicide and pest resistant crops are under dispute, while their market introduction has also raised questions about their safety and environmental impact as well as wider ethical issues. Furthermore, the biotech industry's enthusiasm for gene technology as essential to 'feed the world' is now largely considered to be overstated and exposed as a public relations strategy to promote the technology as a whole in a climate of hostile consumer reaction.

Against this background there is recognition that in order to win greater consumer acceptance, the image of biotechnology will need to change. *'In the end what is needed is a glamorous GM product that would change the image of biotechnology. We need a GM apple that will make you thin and wicked. I suspect that would do the trick,'* said the Government's Chief Scientist, Sir Robert May, in January this year.

While such apples are a pipedream rather than in the pipeline, the biotech industry is now talking in terms of a 'second generation' of GM products offering more tangible benefits. We are already hearing more about these claimed benefits, not only in an attempt to win over reluctant consumers, but also to reassure increasingly nervous investors that there is a sound future for the products of GM technology.

But what are these benefits and who will be the beneficiaries? And will such developments offer genuine solutions to genuine problems. Among

these benefits, it is claimed will be crops with enhanced nutritional qualities (so-called GM functional foods) which could be advantageous not only to consumers in the developed world but, perhaps more importantly, to those in developing countries who lack access to nutritionally adequate diets. But while such developments grab the headlines, the majority of genetic modifications to the nutritional composition of crops are intended to facilitate food or animal feed production or provide ingredients for other industrial uses, from cosmetics and personal healthcare products to biodegradable plastics and biofuels.

What's in the pipeline?

There are several areas where GM techniques are being applied to crops to produce altered nutritional profiles:

- increasing the content of vitamins, minerals and other micronutrients;
- modifying fats and oils;
- altering the starch and sugar content;
- altering protein/amino acid profile
- reducing levels of anti-nutritional/allergy factors;
- flavour enhancements.

Table 1 overleaf illustrates the research underway on genetically modifying the nutritional composition of crops and their potential uses. Much of this work is still at an early stage and no GM crop with an altered nutritional profile has yet been approved in Europe.

Closest to market development are crops with altered oil composition. In the US, an oilseed rape (developed by Monsanto) and a soybean (developed by DuPont), both with altered oil composition, have been approved under the less rigorous US approval system, although neither is currently being developed commercially.

Much recent publicity has been given to rice with enhanced levels of beta-carotene (a precursor of vitamin A). This so-called 'golden rice', being developed by Swiss researchers, has been promoted as a means of addressing the problems of vitamin A deficiency in developing countries. Whether this product will have a significant role to play in improving nutrition is unclear. Even assuming its regulatory and consumer acceptability, its availability

to farmers is thought to be at least ten years off. In the meantime, existing strategies such as improving dietary diversification, the use of supplementation and fortification, using traditional breeding methods to improve nutritional quality, together with better local food security, sanitation and education are likely to prove more beneficial in health terms overall (see page 19).

Other work to enhance micronutrient content through genetic modification is likely to be aimed at providing alternative sources of ingredient (e.g. beta-carotene, vitamin E) for the food and food supplements industries, primarily in developed countries.

Work to modify the oil composition of oilseed crops such as oilseed rape (canola) and soybean has largely focused on producing alternative sources of more stable oils to reduce the need for blending and processing, or alternative sources of speciality oils. Some of these novel oils are intended to substitute

for tropical oils (e.g. palm or coconut) or existing speciality oils (e.g. fish oils, evening primrose oil).

Industry benefits

Such developments are primarily intended to benefit food processors and producers or other industrial users, rather than consumers directly. Even those intended to eliminate the need for chemical hydrogenation processing (which results in the production of harmful trans-fats) are likely to offer no significant health benefit, as this is achieved by increasing the level of unhealthy saturated fats.

Similarly, work on sugar beet, potatoes and maize to modify starch content is primarily aimed at producing alternative sources of specialist starches for industry, although spin-off research claims that it could be possible to produce 'healthier' chips from

potatoes modified to have a higher starch content which absorb less fat.

It has been proposed that biotechnology could be used to improve the protein content of staple crops in developing countries. Some success has been reported for sweet potato, and future work may involve cassava, rice and plantain. Modifying protein composition is also being used to improve the dough-making characteristics of wheat of potential benefit to the baking industry. Proteins are also of interest to the pharmaceutical and infant formula markets. Biotechnology is being used to produce the human milk protein, lactoferrin, found in colostrum (the first breastmilk) which has antibacterial properties. Such products will increasingly blur the boundaries between food and therapeutic medicinal products. Despite obvious consumer benefits, only limited success has so far been achieved to remove allergens from allergy-triggering foods such as peanuts, rice and milk.

Table 1: Research underway on genetically modifying the nutritional composition of crops

Modification	Crops under research	Potential uses
Enhanced levels of vitamins, minerals and other micronutrients.	rice (beta-carotene, iron) oilseed rape, tomatoes, bananas, potatoes, lettuce (carotenoids) soya (phytochemicals, vit E); corn, oilseed rape(vit E).	GM 'functional foods'; Alternative sources of ingredients for food and food supplement manufacturers.
Altered fatty acid (oil) composition	oilseed rape (lauric, stearic, linolenic acid) soybean (oleic, linolenic acid) oil palm (oleic, stearic acid)	Food use: alternative sources of more stable oils for baking/frying/food manufacturing; substitute oils for confectionery, margarine, shortening, bakery products. Therapeutic: substitute for evening primrose/borage seed oils Animal feed Non food use: soaps, detergents, lubricants, cosmetics, personal care products, biodegradable plastics; biofuel.
Altered starch/sugar content	maize, potatoes, sugarbeet	Food use: Industrial starch production, low calorie sugar. Non-food: fructans for glues, textile coatings, polymers.
Altered protein/amino acids	Oilseed rape, soybean, wheat, sweet potato, cassava, rice, potato Lactoferrin from GM yeast	animal feed, baking industry, improving protein content Neutraceutical/infant formula
Removal of anti-nutritional factors	Rice/peanuts/milk (reduced allergens) Coffee (reduced caffeine) Rice/maize (reduced phytate) Soya (reduced phytoestrogens)	Reduced allergen foods Animal feed Infant formula
Flavour enhancements	Strawberries, cabbage, cauliflower (sweeter tasting)	Sweeter tasting crops; Alternative source of sweeteners for the food industry

■ Source: Dibb S & Mayer S, Biotech — The Next Generation, Food Commission/GeneWatch UK, 2000.

Safety issues

These 'second generation' GM crops pose new safety considerations. The production of nutritionally altered foods using genetic modification involves changing basic biochemical pathways. Researchers are finding that achieving the desired effect is more complex than anticipated and unintended consequences may arise from the genetic modifications. Desired characteristics may come at the expense of other factors of nutritional or agronomic significance, and such genetic alterations could produce unexpected toxins.

Regulatory agencies will face new challenges in determining appropriate approval mechanisms for such products, particularly if they are not 'substantially equivalent' and have no traditional counterparts. New techniques to detect unexpected changes in GM foods and assess their significance, need to be developed and introduced.

A number of safety issues also arise over altering the nutrient content of foods. For example, despite much ongoing research, there is still only limited understanding of the potential health benefits of increasing intakes of individual vitamins, minerals and other micronutrients over and above that required to relieve nutrient deficiencies. Furthermore some

micronutrients may pose risks, particularly to vulnerable groups, at higher levels of intake. Such uncertainties, and often conflicting evidence about the desirability of increasing intakes of individual micronutrients, has reinforced health recommendations in developed countries that diets are best optimised through increased consumption of fruit, vegetables and other foods rich in micronutrients.

Conclusions

The report, *Biotech — The Next Generation*, concludes that the claims made for GM nutritionally modified foods, and the consumer benefits they will bring, are overstated. Such foods are a long way from commercialisation and the majority of products are targeted at the needs of food and animal feed processors, and other non-food industrial users, rather than offering genuine nutritional advantages to consumers.

For developing countries, the report states that it is too early to say whether nutritionally-enhanced GM foods, such as vitamin A rice, could offer a significant benefit (see below). Furthermore GM oils that aim to substitute for palm and coconut oils may have a

negative impact on the economies of 'tropical' oil-producing countries.

In developed countries there is little evidence that food developed to have enhanced nutritional characteristics (functional foods) have a significant role to play in improving public health. Public policy initiatives and public expenditure need to be targeted at encouraging balanced diets and healthy lifestyles rather than supporting developments in the area of nutritionally altered GM foods. Furthermore there is no evidence that a market exists for GM functional foods in the UK and this is unlikely to change in the short to medium term.



■ Copies of *Biotech —*

The Next Generation, good for whose health? by Sue Dibb of the Food Commission and Dr Sue Mayer of GeneWatch UK are available from the Food Commission Publications, 94 White Lion Street, London N1 9PF. £40 (£10 individuals/non-profit organisations). Credit card orders: 020 7837 2250.

Does the world need GM vitamin A-enhanced rice?

For developing countries mineral and vitamin deficiencies are a serious problem and affect a greater number of people than protein-energy malnutrition. Vitamin A, iron and iodine deficiency is widely recognised and although deficiencies in other micronutrients such as zinc, vitamins C and D, folate, riboflavin, selenium and calcium may be similarly widespread. This general problem of poor dietary quality, which can lead to listlessness, poor eyesight, impaired cognitive development and physical growth as well as more severe bouts of illness sometimes leading to death, has been dubbed 'hidden hunger'.

Vitamin A deficiency (VAD) affects vision, immunity to disease, growth and normal development. The World Health Organization estimated that 230 million children are at risk of clinical/subclinical vitamin A deficiency and that over one million VAD-associated childhood deaths occur annually.

VAD is predominantly found in countries in south and southeast Asia where rice predominates in the diet and also in sub-Saharan Africa and South America. It is associated with poverty and an inadequate, unbalanced diet. Women and children are most at risk because of their increased physiological needs during pregnancy and growth. In part the situation has been

exacerbated by the Green Revolution because the high-yielding varieties of rice, maize and wheat are low in vitamins and minerals.

Existing strategies to relieve VAD are technically feasible, relatively cheap and available. These include:

Supplementation programmes — using high dose vitamin A capsules, ideally twice a year, are now extensive.

Fortification of foods — adding vitamin A to commonly eaten foods (often with iron and iodine) is effective and expanding.

Dietary diversification — encouraging a varied diet is likely to be a more sustainable approach in the long term. Home gardening the production and processing of locally grown carotene-rich foods, together with education, particularly of women, can improve long-term consumption of foods rich in vitamin A and beta-carotene.

Traditional plant breeding — increasing the content of beta-carotene in crops such as maize could make a significant, low-cost and sustainable contribution to reducing vitamin A deficiency in countries where maize is a staple.

While rice genetically modified to contain increased levels of beta-carotene may have a role to play in alleviating VAD, encouraging the growing and consumption of more fruit and vegetables and animal products such as eggs and cheese would have wider nutritional benefits than GM rice alone can offer. There are also questions about the ability of GM rice to reach the poorest and most in need. Although the technology has been developed outside the commercial sector, costs will be incurred in the production and distribution of GM crops. Further research will be needed to establish the bioavailability of the beta-carotene, the crops' agronomic performance and their environmental and human safety.

Crucially, it has not been the absence of solutions to VAD, or other micronutrient deficiencies, that has obstructed progress in tackling 'hidden hunger', but political, economic, cultural and social factors. These will not vanish with the introduction of a GM crop and a focus on GM could divert resources inappropriately. Therefore, the importance of GM solutions should not be overplayed.

Social exclusion through second class food?

More than 8 million meals are given away each year by charitable bodies, and thousands of tonnes of fruit and vegetables distributed by the Intervention Board. But, asks a new report, is this the way we should feed disadvantaged people?

That there should be waste in our food supply system is virtually inevitable. Choice for consumers means some products will not get chosen before they reach the end of their shelf-lives.

But as a product approaches its terminal date, it becomes less attractive to shoppers. These products, and foods that are past their 'best before' dates but still edible, are destined to be dumped in landfill sites — unless it goes as charity to those that could not afford to buy it at its full cost.

What is variously called food 'surplus', 'redistributed food' or 'recovered food' is finding a growing use in Britain, following the lead of US food banks and other charitable distribution schemes that hand out food to low income people. Such

schemes, along with the distribution of 'surplus' fruit and vegetables under EU intervention schemes' form the basis of a new report from the Food Poverty Project run by Sustain.*

The report shows that, in the UK, more than 500 charities are distributing over 3,000 tonnes of food each year, equivalent to around 164,000 meals a week, 8.5 million meals a year. The main schemes are Crisis FairShare, which collects food from supermarkets and sandwich stores and distributes it to homeless people, and Grocery Aid (formerly known as Provision), a scheme run by retailers to take long shelf-life food to people in need.

Smaller schemes include the Portsmouth-based FoodDelivery scheme, and the Skelmersdale-based South and West Lancashire Food Bank. Finally there is food distributed under an EU scheme by the Intervention Board, which distributes agricultural produce withdrawn from the market to maintain market prices.

There are also a large number of arrangements between individual stores and local charities, such as Marks and Spencer donations to the Salvation Army, children's homes and homeless centres.

Figures from the US suggest that the UK schemes are barely touching on the potential for massive food redistribution. There, an estimated 30 million people receive a total of over 550,000 tonnes of food — over a quarter of all food produced, given to one in seven families in the country.

But questions are being raised in the US and the UK over whether such food distribution schemes are the best way to help low income families. Supporters of the schemes see them as win-win situations, which feed those in need while saving waste. Critics say that food insecurity — where families have not got access to adequate food for whatever reason — is not an issue of waste disposal.

Surplus food distribution may be seen as a stop-gap 'band aid' solution by most of those that work in the schemes, says the report. It suffers the danger that it will help to keep the problem hidden by alleviating its worst aspects, but the organisations feel they have a role to play not only in distributing food but also in raising awareness of the problems faced by people who use their services.

Giving food away as handouts has echoes of food aid given to third world countries — the use of food for emergency relief is widely accepted, but the use of food in the long term is criticised for undermining local food production and for creating dependency among the recipients. Similar arguments can be used for UK food aid for low income families, which might be of value in an emergency but creates social exclusion and dependency in the longer term. Food handouts can become institutionalised, and become a private sector subsidy for the state's benefit system.

Manufacturers claim they are making significant gains in reducing their surplus food. With landfill charges rising rapidly in recent years, retailers have an economic incentive to find other outlets for their waste, and handing the food to charities can give the retailers a cheap way out as well as a benevolent image.

The report makes the case that surplus distribution is not an adequate response to the problems faced by those suffering poverty and lack of food security. Nor is it a sensible way of dealing with surplus food production, or waste within the distribution system.

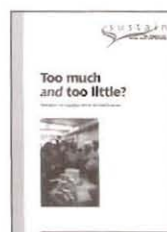
However, before advocating the closure of the current schemes, other means of ensuring good food security for all potential recipients have to be set in place. Improving food security needs to be debated by all those involved, including producers, retailers, charities and above all the recipients of food under the current system.

The report calls for government action to set minimum income standards, with provision in the standards for the purchase of a healthy acceptable diet. Intervention Board distribution schemes need to be re-examined in the light of a more sustainable Common Agricultural Policy.

The debate on food distribution for low income families brings into focus the need for more integrated food production and distribution policies, and the importance of holding local, national and European activities to account.



Searching for something edible amongst discarded produce on Chapel Street Market, North London.



■ **Too much and too little?**
Debates on surplus food redistribution, by Corinna Hawkes and Jacqui Webster, published by Sustain: the alliance for better food and farming, 36 pages, ISBN 1-903060-04-4, price £5, tel 020 7837 1228, fax 020 7837 1141.

UN to end malnutrition?

A plan to end malnutrition and prevent nearly 2 billion children worldwide being underweight has been presented to the United Nations Sub-Committee on Nutrition.

The plan calls for national nutrition councils to be established, which would assert the primacy of nutritional policies over food production and distribution policies, and co-ordinate the reduction of inequalities in food security. The figures for reducing childhood malnutrition are based on a successful programme in Thailand which showed dramatic reductions in the numbers of underweight children over a ten-year period.

The report urges the UN to focus on maternal and child health as the keys to the health of the next generation, including the prevention of

degenerative diseases such as heart disease and cancers, which have their origin partly in childhood (and foetal) undernutrition. Degenerative diseases are rapidly overtaking infectious diseases as the main causes of death among adults in developing countries.

■ **Ending Malnutrition by 2020: an Agenda for Change in the Millennium, final report to the UN ACC/SCN by the Commission on the Nutrition Challenges of the 21st Century, United Nations, February 2000 (see www.unsystem.org/accscn/Publications/UN_Report.pdf).**

The cost of food

Cheaper calories come from the least healthy foods. A new analysis of food prices analysed per calorie confirms the findings of previous studies undertaken by the Food Commission showing why avoiding hunger on a tight budget means going for less healthy foods, especially foods rich in fat.

Priced by weight — the way most food is sold — healthy foods may look the better bargain. Fruit and vegetables are relatively cheap compared with fatty foods such as burgers, biscuits or chocolates. Potatoes are cheaper than chips.

But viewed in terms of the calories they supply, and hence the ability to keep hunger pangs at bay, fruit and vegetables may not be such a bargain. As the table shows, the healthier version of many foods are likely to supply many less calories, and on a pennies per calorie basis be a poor deal for a cash-strapped shopper.

The cheapest calorie bargains are very similar to a true Victorian poverty diet of bread and dripping: they are white bread and hard margarine, and a snack of biscuits and sweet tea.

We are not suggesting that calorie content is the only reason why unhealthy foods might be bought in preference to healthy ones. Other factors play a role. Food has comfort value, it has social status and meaning in families. Problems with cooking, fuel bills, convenience, time and skill are also relevant. So is access to the shops that sell the better products.

But the cheap ingredients used so frequently in processed foods — fat and sugar — gratify our immediate needs. The industry enhances the attraction of these ingredients with salt, flavourings, flavour boosters, colourings and fancy packaging. Soft drinks, snacks, sweetened cereals and fatty meat products become a staple diet: cheap calories at the cost of good health.

■ **Research: Lindy Sharpe**

	Price per 100 kcal
Fresh pork chops	26.5p
Pork sausages	9.4p
Potatoes	4.1p
Frozen chips	4.9p
Carrots	16.4p
Cabbage	30.0p
Lettuce	45.0p
Fresh tomatoes	£1.00
Ready-washed leaves	£8.25
Rye crispbread	7.8p
Wholemeal bread	5.1p
White sliced bread	3.0p
Low-fat margarine	
Hard margarine	1.5p
Full fat milk	6.2p
Skimmed milk	12.1p
Apple	23.5p
Orange	28.4p
Banana	12.7p
Strawberry jam	8.7p
Ice cream	11.4p
Milk chocolate	8.8p
Custard cream biscuit	2.4p
White sugar	1.1p
Fruit juice	19.3
Cola drink	16.5
Sweet tea	11.0p

■ **Source: Food Commission, based on Sainsbury's regular prices, 23.3.00.**

Correction

The table given in the last issue of the *Food Magazine* showing changes in prices of foods over the last 15 years had an error in one entry. As attentive readers might have noticed, the claim that changes in prices encouraged people on tight budgets to switch away from healthier foods towards less healthy foods was contradicted by the data for bread showing wholemeal bread getting cheaper compared with white. This was an error, and the correct figures are given below.

Changes in food prices 1984-1998

	price increase
All foods	56%
fruit (oranges, apples)	64%
veg. (cabbage, frozen peas)	61%
sugar	47%
margarine	19%
vegetable oils	14%
white sliced bread	18%
wholemeal bread	30%
fresh white fish fillet	116%
frozen fish products	69%
broiler chicken	95%
beef sausages	38%
rice	188%
fresh potatoes	120%
frozen chips	26%

■ **Source: Food Commission using data in National Food Surveys 1984 and 1998, MAFF.**

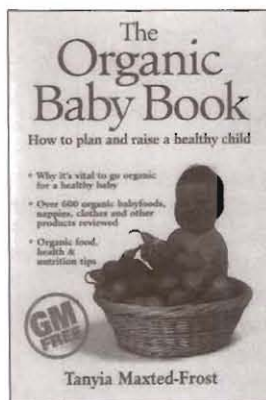
Tackling food poverty — in practice

Tackling poverty means empowerment at local level as well as changes in national policies, according to a series of seminars held in the UK during 1999 and now reported in a publication from Sustain: the alliance for better food and farming.

The lessons of the local initiatives already underway show that better links between the statutory, voluntary and commercial sectors need to be forged, with more integrated local authority policies and better funding for community initiatives.

Developing Local Networks to Tackle Food Poverty, report of the seminar series, from Sustain, 94 White Lion Street, London N1 9PF (tel 020 7837 1228) price £10 (£5 to Food Poverty Network members).





The Organic Baby Book

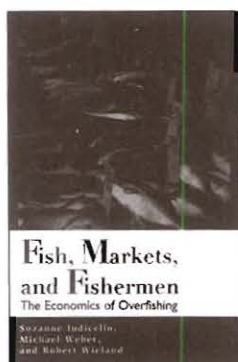
Tanya Maxted-Frost, Green Books, Foxhole, Dartington, Totnes, Devon TQ9 6EB, 1999, £7.95, ISBN 1-870098-79-X.

Subtitled *How to plan and raise a healthy child* the book is less a guide to child-rearing and more, much more, a promotion vehicle for all things organic and beyond. Indeed, half the book is a catalogue of goods and services which could support an organically-minded parent (and parent-to-be).

But first comes the text. Chapter one launches with '22 good reasons to go organic for a healthy baby' having first reminded us about the amount of pesticides that we may be consuming in our daily diet. This is followed by a chapter urging organic foods during pre-conception, pregnancy and breast-feeding. The third chapter considers parents' and children's needs, often citing alternative practitioners and their proponents as sources of advice. We are urged to avoid buying foods wrapped in aluminium foil and to sprinkle a teaspoon of freshly home-ground sesame, sunflower, pumpkin, flax and hemp seed on our baby's food each day. This isn't bad advice — although there should have been a strong allergy warning — but it may be unrealistic for many parents.

The catalogue takes us through organic baby foods and milks, organic cotton nappies and a listing of skin and body treatments, food supplements, herbal remedies, alternative publications, organisations and so forth. Huge amounts of information — perhaps so much that it was impossible to draft an index, for none is provided.

The book is bouncing full of enthusiasm. It may be preaching to the converted, but it will bring them up to date with products available.



Fish Markets and Fishermen: The economics of overfishing

S Iudicello, M Weber and R Wieland, Earthscan Publications, 120 Pentonville Road, London N1 9JN, 1999, £14.95, ISBN 1-85383-651-6.

A sensible and highly readable account of the problems with the world's fishing industry, this is a second edition of a book from 1992, but now far better able to justify its main message in favour of quotas.

The main tenet of the book is that overfishing is a rational response for fishermen in an unrestricted sea. If you don't catch a fish today, someone else may catch it tomorrow — so take it while you can. The text focuses on the need for incentives that ensure fishermen are secure in their work but not encouraged to overfish, which leads logically to a quota system. This is a system with which Europe has struggled for a decade, although in Europe we have been subsidising fleet construction while simultaneously subsidising decommissioning of boats, and sending our boats further afield, to the waters of Africa. The EC has also been supporting high fish prices by removing edible fish from the market.

The thrust of the book is in favour of individual transferable fishing quotas, giving fishermen a right to catch a set quantity of fish under a quota which they can use, lease or sell. The proposals are similar to our milk quota system, which may have helped control European milk supplies but has not prevented drastic cuts in milk prices earned by dairy farmers. Fishermen, too, will remain exposed to market forces. Furthermore, their quotas may be transferred to larger companies with more industrial fishing methods, so environmental controls may still be necessary.

Stolen Harvest: The hijacking of the global food supply

Vandana Shiva, South End Press, Cambridge, Mass (www.lbbs.org/sep/sep.htm), 2000, \$14, ISBN 089608-607-0.

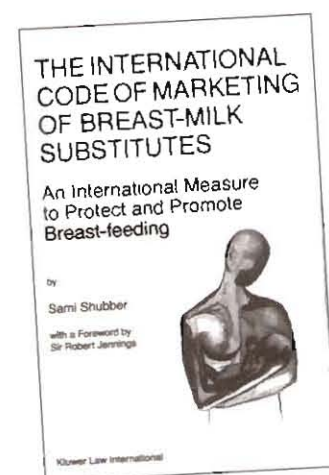
Vandana Shiva is a seasoned campaigner in India and around the world on the damage done to farming, farmers and the environment by the uncritical acceptance of western models of food production. Her latest book is a highly readable account of the Indian experience in its global setting: the imperialism of the soya bean; the destruction of the turtle — a cultural icon — through overfishing; the McDonaldisation of Indian cuisine; the loss of local, small-scale food processors whose practices were clearly visible and accountable; the piracy of stolen genetic material and its patenting by multinational corporations.

She also writes briefly on the struggle to resist these destructive forces, and the book finishes with a post-Seattle afterword. The WTO, she says, 'institutionalises forced trade, not free trade'. Following Seattle, she says, the challenge now

'is to change the global trade rules and the national food and agriculture policies so that ecological agriculture, which protects small farmers and peasant livelihoods, and produces safe food, is not marginalized and criminalized. The time has come to reclaim the stolen harvest and celebrate the growing and giving of good food as the highest gift and the most revolutionary act.'



The International Code of Marketing of Breast-Milk Substitutes



Sami Shubber, Kluwer Law International, P O Box 322, 3300 AH Dordrecht, The Netherlands, (tel 00 31 70 308 1552), 1998, 200 Guider (£68), ISBN 90-411-1100-X.

This is a 300-page detailed review of the Code, of its definitions, of its legal status, of the companies that have broken the code, and overall a huge amount of information presented in a dry, legal text with extensive footnotes. It is primarily a lawyer's book, but none the worse for that.

The Foreword suggests this book will interest medical and social workers concerned to get a healthy balance between breast-feeding and the use of manufactured substances. It won't. The book is far too detailed for that — and too expensive. The Foreword also suggests the book will interest scholars of international law and relations. It may — for the story of the Code is one of the great legends of the 20th Century and an exemplary tale of the battle of poorly resourced public health concerns against giant food companies.

Being primarily a legal text, the book does not present a view or pose an argument, but is more a record of activities, decisions and definitions. If you are involved in the struggle — on either side — the book is a valuable resource, but if you are new to the field then start with easier reading.

Paying for water

Have you compared the 'extra moist' dried fruit we are now being offered, with the regular version? A look at the nutrient list for Sun Maid raisins shows you get 10% less protein, fibre, etc in the 'moist' version, implying that they have added about 10% of water. Yet they charge more for the moist ones — £1.37 per 500g instead of £1.05.

The combination of less fruit and a higher price means, by my calculations, that Sun Maid are charging £10.26 per litre of water. What do you think of that?

Mr S Eaton, Stevenage, Herts

More water

I purchased five fresh bacon rashers in our village shop, but when I fried them a large amount of white liquid flowed out. I put this in a cup, and it came to 50g weight, out of bacon weighing 218g. Allowing for some loss, this means the bacon was at least 25% water.

I paid £1.31 for the product, so the salty water cost me 33 pence. As I had already removed the rind and some fat, this didn't seem a very good deal for me.

I have asked the village shop to stock dry-cured bacon in future.

D Church, Ashford, Kent

Milk-boosted products

Dairy farmers in the EU cannot use milk-boosting hormones for milk production but I understand that milk produced elsewhere is so produced and imported for use in cheese and yoghurt etc, which I resent.

Anne Fowler, Llanbedr, Gwynedd

The main users of BST milk-boosting hormones are US dairy farmers. Some milk and milk products do find their way to Europe and can be legally sold here. Our call for better labelling (see pages 7-9) includes showing the country of origin of ingredients like milk and meat in processed foods — eds.

The Regulation of Borderline Medicinal Products

Gabrielle Turner, Monitor Press, Suffolk House, Church Field Road, Sudbury, Suffolk CO10 2YA, October 1999, £219, ISBN 1-871241-57-X.

This book is aimed squarely at manufacturers who need to know:

When are food supplements medicinal? When are herbal remedies foods and when are they medicines? What about cosmetics? And what can a manufacturer state on the label to attract a customer?

Claims on food products to enhance or maintain your good health are often dubious and sometimes illegal. The difference between health maintenance claims and ill-health prevention claims is not obvious to the public although crucial in law. The latter is illegal without a medicinal product licence. But even health-maintenance claims, although generally legal, must not mislead or exaggerate.

So there is a minefield. The new Joint Health Claims Initiative (JHCI) is a voluntary measure being established to bring some discipline to the field, but it has been suffering problems before it has started. Rows between the principle participants in setting up the Initiative have not helped, and the proposed legislation from Europe to permit foods for special medical purposes (see last issue of the *Food Magazine*) could blow a further hole in the leaky ship.

This guide to borderline products might not be fully up to date, but what it does it does well, with good summaries of the prevailing legislation (in mid-1999) and a CD accompanying the book which contains a selection of EU Directives, UK legislation, codes of practice and court cases. The CD does not include the JHCI Code, although a summary is given in the book. And neither the book nor the CD includes the relevant directives and draft UK legislation on foods for medical purposes, which came later in 1999.

Eating Disorders: A Parent's Guide

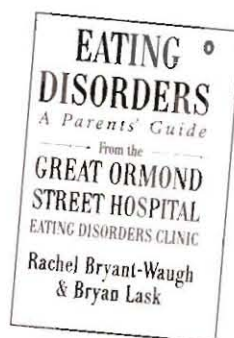
Rachel Bryant-Waugh and Bryan Lask, Penguin Books, 27 Wright's Lane, London W8 5TZ, 1999, £7.99, ISBN 0-14-026371-3.

The authors are, says the book, from the Great Ormond Street Hospital Eating Disorders Clinic, and while writing this book were also editing a professional tome on the same subject. So they should know what they write about.

And yet at first reading it appears overly-oriented towards clinical treatment of the child rather than looking at the family dynamics more squarely. The chapter on the causes of eating disorders focuses on the child's personality, on the child's biological make up, on 'socio-cultural factors', on stresses in puberty and finally on the family dynamics that might be maintaining the problem after it has become manifest.

There is too little discussion on the role of the family as the cause of eating disorders. Meals are a potent arena for battles. So is shopping. Parents and children struggle with each other, and a parent's provision of food and control of their child's eating habits is vested with huge significance in family dynamics, but the book barely touches upon it.

Perhaps there is a reason. The book is written for parents, and there is no point putting them off buying the book and understanding the illness if they are made to feel overly guilty in the first chapter. Instead, the book moves gradually towards the parents' role in helping treat the child — and here the implicit criticisms of family life are found. The book suggests, several times, the importance of parents' working together as a team. It also advises parents not to blame their child or make him or her feel accountable for the disorder. And it urges parents to help their child express painful and negative feelings without recrimination. Perhaps these are, after all, gentle hints showing that many eating disorders do not emerge out of the blue but are, at least in part, an expression of psychological processes within the family.



The text is easy to read, being packed with case histories to make the authors' case. If you want to see the problem from the professionals' end, try this book.

Diet, Lipoproteins and Coronary Heart Disease: A biochemical perspective

E H Mangiavane and A M Salter, Nottingham University Press, Manor Farm, Main Street, Thrumpton, NG11 0AX, 1999, £20.00, ISBN 1-897676-81-6.

It is always valuable to bring different disciplines to bear on a problem, for the light they might cast on each others' theories and assumptions. This book brings biochemists into the nutritional debate on the causes of heart disease.

It isn't clear, though, how much light these particular authors can cast. In terms of the big nutritional issues such as the role of n-3 fatty acids and the role of trans fats, very little is said. For the n-3s, we are told that a review in 1989 found that there was little effect on blood lipids. Perhaps this is the latest thing to say on the matter, but it begs the question of the breadth of references — and the answer is that the references are actually quite few: one per page on average.

But this is primarily a student text, introducing and exploring the topic with some good illustrations.





South Seas Delight

Following our story of Procter & Gamble's link-up with the American Health Foundation to promote Sunny Delight as a nutritious beverage (see *Food Magazine* 48), we were sad to hear that the United Nations children's body UNICEF had also joined up with Procter & Gamble.

This time, it seems, Sunny Delight is to become NutriDelight, which will form part of the work of UNICEF to improve nutrition among malnourished and underweight

children in Asia. NutriDelight will be an orange flavoured powder to be made up into a drink using local water supplies. The powder includes iron, iodine and vitamin A, and will be packaged to look like Sunny Delight, with a similar logo and typeface. It appears that it will be promoted by UNICEF as an alternative to a nutritious diet. What will they think of next — fortified sugar?

The illustrations here come from the animal rights group *Uncaged Campaigns* (www.uncaged.co.uk).

'NUTRITION' INFORMATION	
Ingredients:	
Only 5% fruit juice	
95% water, sugar, chemicals and additives	
A 500ml bottle will give a child more than the average daily recommended maximum intake of sugar	
Warning:	
may be unsuitable for children under 3 years (under investigation by Trading Standards)	

In bed with me Big Mac

Swiss branches of McDonald's have decided they want to diversify. Food alone is not enough, they say, and so they are opening the first of what they expect to be a chain of McDonald's hotels.

This breaks one of the golden rules of the trade. When Ray Kroc designed the McDonald's experience he was very clear about the seating: keep it hard. The idea is that for the first ten minutes your feet feel relief from being able to sit down. Soon the hard chairs will make you get up and leave. He didn't want 'phone booths or juke boxes or cigarette machines either, in case they encouraged people to stay more than it needed to finish their burgers.

But soon, it seems, we will be encouraged to stay the night.

To C or not to C

We were sent an interesting looking book last month, in which the Director of Cardiovascular Research at the Linus Pauling Institute, California, advocates high vitamin intakes, especially vitamin C, to prevent heart attacks.

Dr Matthias Rath's book, *Why Animals Don't Get Heart Attacks But People Do*, lists 30 vitamins, minerals and amino acids which he dispenses as food supplements to people seeking his help. The supplements provide high doses — in the case of vitamin C this is 3,000mg per day, which is officially enough for seventy five adults.

Just as we sat down to review the book along came a report, also from the USA, saying that high levels of vitamin C, taken as supplements, actually increase the hardening of arteries, and raise the risk of cardiovascular disease. A daily dose of 500mg showed artery thickening at more than double the normal rate. In smokers, the effect was even stronger with the same dose giving a five-fold increase in artery thickening.

Most public health bodies, including the American Heart Association, take the view that antioxidants such as vitamin C should be consumed as food — such as fruit and vegetables — rather than as supplements, especially as there may be many undiscovered valuable factors present in plants. Dr Rath, who promotes himself on www.drath.com, may disagree, as it would mean eating 60-70 oranges a day.

Royal Milk

Another international product that caught our roving eye is this extraordinary offering from Japan, the land that took tea drinking to its ultimate ceremonial refinement.

Oddly, the Japanese don't have a royal family, they have emperors, but presumably could not bring themselves to call this product Imperial Milk Tea. Nor do the Japanese like drinking milk, and their tea is normally served without it.

But that hasn't stopped their technological whiz kids developing tea in a can, not only with milk, and not only with a dose of sugar already included, but also *hot!* A can of hot sweet tea from a vending machine.

The top of the can has a seal saying 'British style', which is pushing its luck a bit. The product is pure Japanese, and the company is pure American: Coca Cola.



McDonaldisation

If you want to know what the world is coming to, take a look at these hair bobble ornaments.



One could write a *Pseudo Corner* piece on the semiological significance of the permanently smiling faces on pieces of plastic, but we prefer the old fashioned ironies. These bobbles are made in China, packaged for a company called Choice and Joy, of Ontario, Canada, sold in the UK, and feature French fries (which are based, of course, on a South American vegetable). The nationality of the smiling faces is unknown, but — hey — this is global culture.

Tea time in Seattle

As if knowing that the World Trade Organization will create their market for them, this pack of chocolate cakes carries ingredients lists in eight languages and are produced 'in the EU' by a company based in the Netherlands.

The company calls itself Global Bakery Products. The cakes are not strictly global but round, like, er, a cake.

