# LIVING EARTH

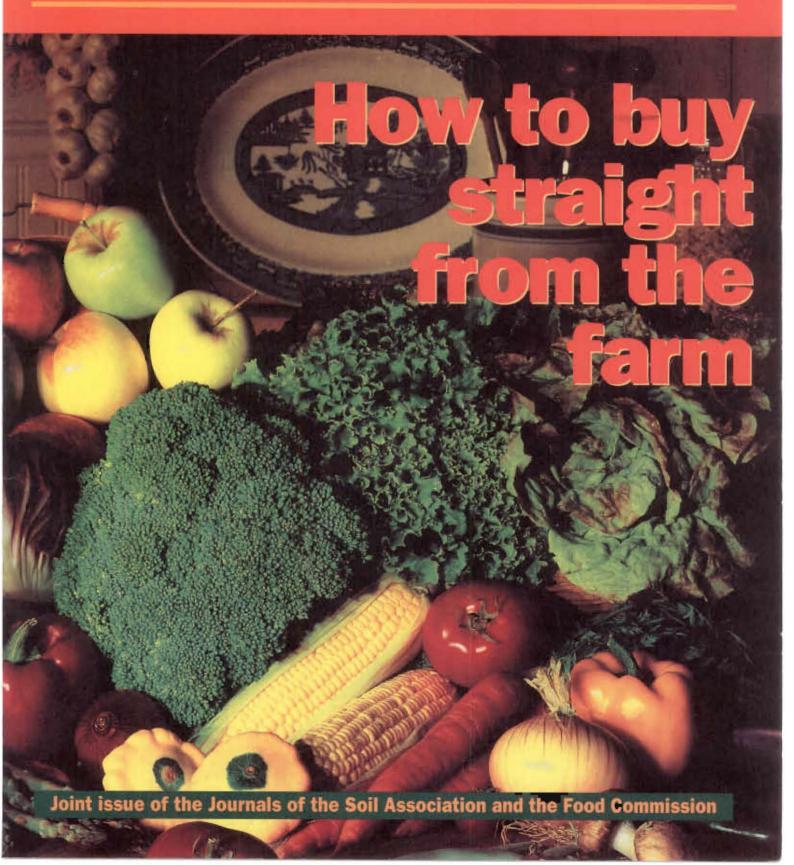


FOOD MAGAZINE

No. 181 • February 1994

23.50

Issue 24 Volume 3 • February 1994



The Soil Association exists 'to research, develop and promote sustainable relationships between the soil, plants, animals, people and the biosphere, in order to produce healthy food and other products while protecting and enhancing the environment'.

The Soil Association's Symbol Scheme is run by SAOMCo Ltd and licenses commercial lood production to the highest organic standards and acts as a consumer guarantee of organic quality.

#### Soil Association Officers

President George McRobie Secretary Francis Blake Chairman Charlotte Mitchell\* Treasurer Craig Sams\*

#### Soil Association Council

Helen Browning\*
James Burrows\*
Dougall Campbell
Tracey Clunies-Ross\*
Alan Debenham
Hennetta Green

Cindy Milburn David Marlow John Montague Hugh Raven\* Charlotte Russell Lizzie Varin

\* Management Committee

#### Staff

General Manager & Accountant Alison Ollis Policy Director Patrick Holden Membership Administrator Martine Bewhay CSA Education and Project Organiser Eric Booth Bookshop Manager Ann Cahill Administration Assistant Carol Dale Receptionist/Admin: Assistant Stephanie Jones Research/Development Consultant Or Mark Redman

#### SAOMCo Ltd

Cheirman Roger Cadbury
Symbol Director Francis Blake
Non-executive Director Helen Browning
Non-executive Director Dougall Campbell
Technical Director John Dalby
Forestry development Officer
Dr Dorothy Jackson
Forestry Officer Ian Rowland
Symbol Dept. Administrator Caroline
Fittiglibbons
Administration Assistant Lena Hedden
Symbol Dept. Administrator Sally Sonniex

FOOD COMMISSION

The Food Commission is Britain's leading consumer watchdog on food. We are independent of industry and government and rely on subscriptions, donations and grants for our funding. 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.

Co-directors Sue Dibb and Tim Lobsten Information and Admin Officer: Mary Whiting Subscriptions Manager: Ian Tokelove Food Irradiation Campaign officer and EECC network co-ordinator: Martine Drake

#### editorial

elcome to the first of four joint Food Commission/Soil
Association magazines which are to be published quarterly
during 1994.

Last October, Derek Cooper reminded a Soil Association conference how the move away from basic husbandry and simple food to a highly refined and heavily processed diet has taken its nutritional and environmental toll. On page 7 we include a shortened version of Derek's entertaining and provocative speech, followed by three pages looking at alternative models that shorten the food chain by forging closer links between farmers and consumers.

'Trans' fats, found in hydrogenated vegetable oils, have now been found to be as bad, or even worse, than saturated fats. On page 11-13 we look at the nutrition and labelling of processed foods, like margarines and spreads, which include this ubiquitous ingredient.

One major retailer, the Co-op has decided to come clean about genetically modified organisms used in their foods, by declaring their use on food labels (see page opposite and pages 16-17). Both the Soil Association, which is opposing an EC directive to allow genetically altered organic food, and the Food Commission congratulate the Co-op on their honesty and hope it will inspire other retailers and manufacturers to respond to consumers' desire for information about the food we eat.

The Soil Association's processing standards demonstrate its commitment to protecting food quality right through to the consumer and embodies the nutritional awareness that begins with the quality of the land on which food is produced, but certainly doesn't end there. Likewise the Food Commission has for many years highlighted that what happens during processing is crucial if the vitality and health-giving properties of the raw materials are to be maintained. Together we shall ensure this message is kept on the public agenda throughout 1994.

#### ADVERTISING POLICY

The promotion of commercial products in this magazine is done only by the Soil Association, not the Food Commission. For details on how to advertise, or comments on the advertisements, please contact Martine Bewhay 0272-290661.

Living Earth (formerly Mother Earth, the Journal of the Soil Association, and the Soil Association Quarterly Review) is published every three months by the Soil Association Ltd, 86-88 Colston Street, Bristol, Avon BS1 588, tet: 0272-290661, fax. 0272-252504. This edition February 1994, the 50th year of publication, issue no. 181.

The Food Magazine is published quarterly by The Food Commission (UK) Ltd, Third Floor, 5-11 Worship Street, London EC2A 28H, tel: 071-628 7774, fax: 071-628 0817. This edition February 1994, the 6th year of publication, issue no. 24. ISSN 0953-5047

■ This edition has been edited by Tim Lobstein and Sue Dibb. ■ Editorial advice from Charlotte Mitchell. ■ Typesetting and design by Sarah Dobinson of Artworkers, Ta Berry Place, Sebastian Street, London ECTV 0,JD. ■ Printed by Spider Web, 14-20 Sussex Way, London N7 6RS. ■ Inside pages printed on recycled paper, cover printed on conservation grade paper. ■ Retail distribution by Central Books, 99 Wallis Road, London E9 5LN. ■ Linless otherwise indicated all items are the joint copyright © the Soil Association Ltd and the Food Commission (UK) Ltd 1994 and are not to be reproduced without written permission from both bodies.

The views expressed in this magazine are not necessarily those of either the Food Commission or the Soil Association.

#### contents

BST hormone reprived	3
Biotechnology not organic	3
Co-op first to label GMOs	3
Sheep dips not to be banned	4
GATT deal faces attack	4
Baby milk codes to be law	5
People in the news	5
Scots to eat their greens	6
Farms and Society	
Derek Cooper on our diets	7
Supporting organic farmers ar	nd
How to buy direct	8-10
Checkout	
Hydrogenated oils	11
How to spot the 'trans'	12-13
Loopy labels	14
Children, ads, sugar and TV	15
Supermarket's policies on	
A STATE OF THE STA	
genetic labelling	16-17
Nutrition and women	
Nutrition and women	
Nutrition and women Caroline Walker Trust speech Shop organic	19-20
Nutrition and women Caroline Walker Trust speech	19-20
Nutrition and women Caroline Walker Trust speech Shop organic National Food Aliance	19-20 23 e 24
Nutrition and women Caroline Walker Trust speech Shop organic National Food Alianc News	19-20 23 e 24
Nutrition and women Caroline Walker Trust speech Shop organic National Food Alianc News Letter from Australia	19-20 23 e 24 25
Nutrition and women Caroline Walker Trust speech Shop organic National Food Alianc News Letter from Australia Books	19-20 23 e 24 25 26

■ Cover picture from 'Made in Nature' of California

# BST rises from the ashes

The European Commission proposal to ban the milk-boosting hormone Bovine Somatotropin (BST) (see News in our last issue) was partially reversed at the Council of Agriculture Ministers meeting in December, when a proposed seven-year ban was rejected in favour of a one-year ban.

Even this shorter ban may be abandoned. According to UK Minister of Agriculture, Gillian Shephard, when she met representatives of consumer organisations immediately before the meeting with her colleagues in Brussels, an EU ban on BST would be GATT-illegal now that BST has been licensed for use in the USA. The GATT is due to be ratified in April, after which date the BST ban can be challenged.

The US Food & Drugs

Administration (FDA) granted marketing approval for BST to Monsanto in November 93 and it will be on the market in the USA by March under the name of 'Posilac'. The FDA officially accepts that injecting cows with BST increases the incidence of mastitis (an infection of the mammary gland, which secretes pus into the milk) requiring treatment with antibiotics. However, the US officials do not consider this to be a threat to human health because it is illegal for farmers to sell milk heavily contaminated by mastitis and antibiotics. Despite these problems, and the fact that many people object to milk being produced by injecting cows with hormones, the US FDA states that it 'lacks a legal basis to require special labelling' of foods derived from BST milk

This gives some indication of the pressure being applied behind the scenes by the manufacturers of BST - Monsanto, Cvanamid, Eli Lilly and Upjohn. The FDA does, though, require Monsanto to record for two years the milk production, the incidence of mastitis, antibiotic residues and the quantity of milk discarded because of unacceptably high antibiotic residues in all BST herds in the 21 top milk-producing states in the USA. It is doubtful whether any of this information will ever be publicly available - and given Monsanto's past form on finessing statistics, it might be doubted whether it would provide an accurate picture.

The action will now shift to the US food industry. Manufacturers, retailers, caterers and restaurateurs will now have to decide whether it is in their interests to buy or sell BST milk or milk products. There is no obvious advantage to them. In fact it is likely to improve their image with consumers if they join the boycott that is rapidly gathering momentum over there.

And in Europe? Having carefully erected the fourth hurdle against BST, the EU Commission will now have to spend 1994 taking it down again.

Consumer groups, such as BST Concern, will have to review their campaigns. The lesson is clear. Lobbying in Westminster, Whitehall, Strasbourg or Brussels will have to be replaced with campaigning where consumer power lies — in the market. Campaigns will have to influence retailers, making it clear to them that we are capable of shifting shopping allegiances en masse if they try to lower standards. BST Concern will be co-ordinating just such a market boycott of BST during 1994.

■ Further information from: BST Concern, Third Floor, 5-11 Worship St, London EC2A 2BH. (Tel 071 638 0606)

# Soil Association lines up against genetic engineering

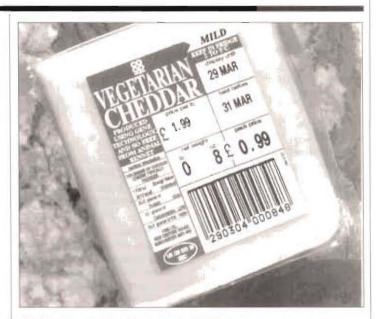
The Council of the Soil Association has instructed their Symbol Scheme inspectors to ban genetically modified organisms (GMOs) and their products from inclusion in organic foods by means of a specific amendment to its Standards for Organic Food and Farming.

The move follows the International Federation of Organic Agriculture Movements' meeting of its World Board, which issued a statement rejecting genetic engineering as having no part to play in organic food and farming. This in turn follows attempts by the European Commission to allow genetically modified food to bear an organic label (see Living Earth/Food Magazine spring 1993).

The European Commission argued that GMDs would not be used in organic foods unless specifically considered and accepted, and that organic food processing can take advantage of the advances in technology using by-products of GMOs.

There was no consultation with the organic movement over this issue. Even the MEPs of the European Parliament were taken by surprise, before they had properly debated the whole 'novel foods' issue, which is the subject of a special regulation of its own, currently going through the statutory process.

After some frenzied activity, the Parliament decided to take legal action against the Commission in the European Court of Justice to annul the Commission's proposals. This is an unprecedented step and brings out into the open some of the animosity between the Commission



Labelling biotechnology: The first food to be labelled for genetic engineering, thanks to the Co-op. For more details on supermarkets' views on biotech labelling see pages 15-16.

and the European Parliament.

For further details of the Soil
Association position, contact Francis

Blake, Soil Association, 86-88 Colston Street, Bristol BS1 5BB (Tel 0272-290661)

# MAFF refuses to ban OP sheep dips

Organophosphorus (OP) sheep dips are not to be banned, despite medical, environment and farming campaigns to have the chemicals phased out.

Over 500 farm workers have suffered severe symptoms after using the dips, according to the farmworkers' trade union RAAW\*. The chemicals are similar to those developed as nerve gases during the first world war.

Agriculture minister Gillian Shephard said there was no scientific justification for a ban, but set up a rnedical panel to study the dip's toxicity. In the meantime farmers may continue to use OP against parasitic attack by scab, blowfly, ticks and lice, but in future will have to show a certificate of competence before buying or using OP dips.

Advisors on the government's Veterinary Products Committee had judged that most cases of ill health among farmworkers arose through misuse and poor protective measures. They also believe that sheep health and welfare problems would increase if OP dips were banned.

Environmental and consumer groups campaigning for the ban were angered by the decision. 'The government cannot deny the link between OP dipping and farmworkers' ill health,' said a Soil Association spokesperson. 'It's decision not to ban OP dips is an absolute cop-out, fuelled one suspects, by vested interests and industry pressure. Safety

measures may reduce short-time high levels of exposure, but what about the long term effects of low levels of exposure?"

The government has promised to set up a medical panel to examine the toxic effects of OP dips. This is to be welcomed, but the Soil Association's position is clear,' said the spokesperson. 'Safe and effective alternatives to OP dips exist and all OP dips should be withdrawn immediately in the long term interests of farmers, livestock and the environment'

■ RAAW, the Bural, Agriultural and Alied Workers union, is collecting evidence on the health effects on farmworkers of using OP sheep dips. Please contact Barry Leathwood, TGWU, Transport House, Smith Square, London SW1P 3JB.

#### GATT deal faces renewed attack

Two new reports from the SAFE Alliance and the Parents for Safe Food GATT Project expose the problems and contradictions inherent in the GATT agreement.

The completion of the Uruguay Round of the General Agreement on Tariffs and Trade (GATT) in December will be followed by national ratification among all signatory states. Parliamentary discussions are expected to raise issues of the threat by GATT to environmental and health standards and to jobs. They should also expose the problems of loss of sovereignty that GATT implies, with many national laws and regulations having to be abandoned or amended to conform with the globalised standards-setting bodies, the International Standards Organisation and the Codex Alimentarius Commission

European farmers are also exposed to new threats, despite being well-protected under fast-minute deals agreed with the USA (the Blair House agreement). Smaller farmers are expected to lose out from

the production limitation mechanisms being implemented under the CAP, which includes such measures as set-aside schemes and arable compensation. According to the SAFE Alliance report, the effect of such compensatory measures will allow the richest grain farmers in the USA and Europe to produce grain at below world prices, leading to the export of subsidised grain without the use of explicit export subsidies (which are illegal under GATT).

Furthermore, the ban on beef imported from the USA, introduced on the grounds that the hormones used in beef production were not acc eptable in Europe, is likely to be challenged under GATT rules as an illegal barrier to trade.

- Capping GATT and Gatting CAP, a briefing paper on the way the USA and the EU have determined the future of agriculture, price £1 from the SAFE Alliance, 38 Ebury St, London SW1W 0LU (tel 071-823 5660).
- Concerns about Four Problems raised by the GATT Uruguay Round: Sovereignty, Environmental and Health Standards, World Development and Jobs, and European Jobs is GATT the answer? Price £1 each, from GATT Project, 3rd Floor, 5-11 Worship Street, London EC2A 2 BH (tel 071-628 2442).

# GATT increases animal cruelty

The transport of live animals is set to increase under the free trade agreements, and national governments will be unable to legislate to protect animal welfare if such legislation poses a barrier to trade, according to Compassion in World Farming.

Details: Phil Lymbery, 0730-264208.

# Chicken soup success

Following our feature on chicken soups in the last issue of this magazine we are delighted to learn from Osem Foods that their product labelling has now been revised to conform with the law and the new versions are on supermarket shelves.

#### MAFF snubs NFA over CODEX

The National Food Alliance, publisher of the investigative report into industry bias on Codex committees, was snubbed by MAFF minister Gillian Shephard when she selected members of a national Codex panel.

Codex, the joint FAO and WHO food standards-setting body, will largely replace national laws and regulations on food quality now that the GATT trade agreement has been signed. Its committees have long been weighted in favour of trade and industry representatives, and the National Food Alliance report last year\* exposed how far this 'agency capture' had progressed.

At Shephard's December meeting

with heads of consumer organisations there was wide-spread support for the NFA to be represented on the UK's National Codex Consultative Committee, alongside representatives from other consumer groups, industry and government. Not only was the request refused, but Shephard said the decision would not be reconsidered for another two years.

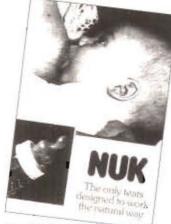
■ Cracking the Codex an analysis of who sets world food standards, April 1993, price £35.00/E7.50 from the National Food Alliance . 3rd Floor, 5-11 Worship Street, London EC2A 2BH (tel 071-628 7261).

# Baby milk codes become law

Restrictions on the promotion of bottle fed infant formulae, which have hitherto been contained in muchabused marketing codes, will be enshrined in British law this summer. The move follows an EC Directive harmonising marketing practices in the European Union.

The regulations are currently being circulated for consultation and are scheduled to come into effect in June. They include the banning of advertising of baby milks in health premises and the banning of free supplies to maternity wards However, according to Andrew Radford of Baby Milk Action, the proposals allow manufacturers to supply free milk to infants who 'from the choice of the mother have to be fed on infant formula'. This wording could allow manufacturers to give as much free milk as they like, he claims

The proposals will not include bottle-fed baby foods, other drinks, or the bottles and teats themselves, even though the original World Health Organisation code of marketing specifically included these items.



Campaigners want bottles and teats adverts banned, too.

Baby milk labels will not allow the 'idealisation' of bottle feeding or show pictures of babies and must carry warnings that breast feeding is better. However, claims such as 'sucrose free' are allowed, even though other sugars may be present. Manufacturers are also permitted to use partially hydrogenated vegetable oils (see the feature on trans fats, pages 11-13).

■ For further details on the proposed regulations, contact Nicola Mandale, Consumer Protection Division, MAFF (071-238 6272), Comments on the proposals are due in by 4 March 1994. Details of the amendments being called for by the Baby Milk Action campaign are available from Andrew Radford, 0223-464420.

# Caroline Walker awards

The 1993 Caroline Walker awards were won by Patrick Holden for British Organic Farmers in Organic Growers Association for the promotion of the organic movement, Suzi Leather for her work on the MAFF Consumer Panel, journalist Joanna Blythman for her contributions to the Independent and Scotland on Sunday, and Professor Anthony Diplock for his work on the science of anti-oxidants.

Dr Elsie Widdowson was given a special award for her contributions to the science of nutrition. The overall award was made to Jeanette Longfield for her work on the International Conference on Nutrition and her co-ordination of the National Food Alliance.

# Soil Association votes for grass roots

The Soil Association's AGM, held at the YHA Centre, Rotherhithe, London on December 6, voted to 'revitalise and develop grass roots membership' following a year of struggling to maintain membership levels.

The meeting also re-elected Charlotte Mitchell as Chairman of Council and Craig Sams as Treasurer. Helen Browning, Dougall Campbell, Henrietta Green, Cindy Milburn, Charlotte Hussell and Lizzie Vann stood for Council and were returned unopposed.

An organic buffet lunch was followed by a presentation on responsible forestry, including a showing of the video On the Edge of the Forest, the last film made by the Soil Association's late President, Fritz Schumacher.

SA MEMBERSHIP To support the work of the Soil Association, contact Martine Bewhay on 0272-290661



#### Tim Lang

Congratulations for being appointed Professor of Food Policy at the University of Thames Valley. His new address from March 1994 is School of Hospitality, Thames Valley University, St Mary's Road, Ealing, London W5 5RF.
Tel (081-579 5000)

#### Charlotte Mitchell

Congratulations for being elected Chairman of the Soil Association Council for the third year running. Charlotte is also the acting honorary director of the Soil Association.



#### Iceland boycotts Norway

Iceland Frozen Foods has cancelled a E1m order for Norwegian prawns following Norway's resumption of commercial whaling. The move comes after Greenpeace called for a consumer boycott of all Norwegian products.

'The decision was not an easy one, but we felt that it was the right thing to do' said Iceland's Chairman Malcolm Walker. 'We have had hundreds of positive letters from customers and even my children are talking about it.'

Safeways is also supporting the boycott and has announced cancellations of orders worth an estimated £5m.



Biotechnology is not in the interest of the animal; it cures symptoms but does not solve the problems caused by animal production; alternatives are possible and they must be investigated,' says an excellent booklet from the Dutch Society for the Protection of Animals, in the Hague.

Details (01031) 70 3 423 423 (tel),

(01031) 70 3 423 436 (fax).

#### in brief

# Scots urged to eat their greens

The Scots eat the worst diet in the western world according to a new report on the Scottish diet. In response the Scottish Office has promised to set up a Scottish Food Council to tackle the appallingly high rates of heart disease, stroke and cancer the Scots suffer.

The Council, which aims to include representatives from all interested parties, will look at ways to implement its ambitious targets for dietary improvements. These include increased consumption of fruit and vegetables, wholemeal and brown breads and breakfast cereals and a reduction in the Scots intake of fats, salt and sugar.

The report shows that in some parts of Scotland, particularly Glasgow, less than 10 per cent of children are breastfed. And children's diets are described in the report as 'the worst in the western world', with school meals of special concern. A high proportion of children eat neither green vegetables or fruit, while up to

one-fifth of men and one-eighth of women almost never eat green vegetables. In consequence the Scottish diet is characteristically low in antioxidant vitamins, A, C and betacarotene and in fibre.

However much more than persuasion will be needed to help change Scottish eating habits. The report, chaired by Professor Philip James of the Rowatt Research Institute, recognises that lack of money is a major barrier to change. Community bulk buying schemes and food co-ops which operate in some parts of Glasgow, can help provide a solution to high food prices and limited availability of healthy foods,

The report also recommends changes in the way food is produced, processed and sold and in particular the need for more useful nutritional information for consumers. One suggestion is that supermarket bar codes could be used to give shoppers a 'nutritional profile' of their supermarket trolley.

■ The Scottish Diet, Report of a Working Party to the Chief Medical Officer for Scotland, December 1993, published by the Scottish Office Home and Health Department.

#### Young cooks get cooking!

A newly launched Young Organic Cook of the Year Award, aiming to get parents, teachers and children involved in celebrating home cooking using natural, organic ingredients, is the latest initiative of the Get Cooking! project.

Entrants will be asked to devise or choose a recipe and cook it at home or at school and send details to Jackie Gear at the Henry Do ubleday Research Association by May 16. Awards will be made at the 1994 National Organic Food and Wine Fair on July 9.

Judges include Michael Barry of BBC's Food and Drink programme, top chef Shaun Hill and food writers Lynda Brown, Henrietta Green and Serah Jane Evans.

Details from Jackie Gear, tel 0203-303517.

#### Investing in children's health

A new report to be published on March 1 will show how children's diets can be improved. Currently UK children eat too much fat and sugar and are not getting enough fibre, iron, calcium and some vitamins. This report will look at the influences affecting childhood nutrition and will propose policies for government, health, education and catering organisations, covering food in schools, advertising and promotion and positive educational opportunities.

■ Diet and Schoolchildren will be available from the National Forum for Coronary Heart Disease Prevention, Hamilton House, Mabledon Place, London WC1H 9TX, price £5 (inc p8p).

#### Danes angry about additives

For the British the EC's latest directive on additives will make little difference to the food on our plates. We already have the longest list of permitted food additives in Europe, But the Danes are furious that the EC list will mean 69 new additives and the use of a further 200 extended beyond the foods currently permitted in Denmark. Major retailers, manufacturers and consumer groups are uniting to fight to defend Denmark's high food standards.

#### Adding life to years

Improving the nutrition of the elderly can add 'life to years' a Department of Health spokesperson told a conference in Birmingham last November. The conference was organised to follow up the 1992 COMA report on nutrition and elderly people which highlighted some of the nutritional problems elderly people face.

 For more information contact Bridget Ferry at the Department of Health 071-872 5108

#### New voice for school health educators

A new organisation has been set up to provide a voice for health education in schools. The Association of School Health Education Co-ordinators aims to create a national network of teachers and health educators in schools and will campaign to convince the government and media about the importance of appropriate and effective school-based education.

■ For more details contact ASHEC c/o 74 Balden Road, Harborne, Birmingham B32 2EH Tel: 021-428 2262.

#### Green fridges from Greenpeace

Greenpeace has produced a guide to green domestic fridges currently available in the UK. We buy well over 2 million fridges every year but the vast majority contain ozonedestroying CFC's.

The leaflet is available free of charge from Greenpeace, Canonbury Villas, London N1 2PN Tel: 071-354

#### Modified atmosphere packaging to be labelled

Much fresh meat, fish, vegetables and other foods such as fresh pasta often come sealed in modified atmosphere packaging. By replacing most of the oxygen inside the packaging with carbon dioxide and nitrogen, food looks, tastes and smells fresh for much longer. Now the EC is proposing that all foods packaged in this way should be labelled. So far the food industry has kept quiet about this technology which can mislead consumers about the freshness of their products.

#### US methyl bromide phase out

The US will phase out the ozonedepleting pesticide, methyl bromide by the year 2001. But the European Union is split and is only expected to cut consumption by 25 per cent. Greenpeace says it will publish the names of any European Environment Minister who votes to destroy the ozone layer and hold them personally accountable for the economic and health damage caused by UVB in the future.

### Farms & society

# Shopping for health

Derek Cooper outlines what is wrong with modern food production and puts forward his vision for a healthier attitude to food and farming.

ccording to the former Minister of Agriculture, Mr John Gummer, Britain's food has never been better nor safer; its distribution system is the envy of the world, we've never had so much choice and we're all living longer. Superficially, viewed from the back of a ministerial car it may well look like that.

Go into any supermarket in an affluent area and you will find fresh fruit and vegetables flown in from distant countries – paradoxically the same countries that often figure in the news because of their deprivation and hunger. And yet there is no shortage of food; there is enough for all.

Britain, it's supermarkets bulging with surpluses, has been described as the 'sick man of Europe'. It certainly has a history of diet-related disease which includes the highest rate of coronary heart disease in the European Community. This is not a sudden deterioration in public health but is a long-term symptom of the way in which we have, with every generation, moved away from hasic husbandry and simple food to a highly refined and heavily processed diet.

The decline of English cheese is one of the best examples of how commercial values have ruined good taste and discrimination.' Not my words, but words written in 1939 – over half a century ago – by that great campaigner for the land, H J Massingham. In the Depression days of the 1920s, Massingham was already speaking out against the destruction of Britain, as agri-business replaced sound husbandry. His targets were almost identical to those of present day Friends of the Earth. He wrote about alien conifers, ribbon development, the concreting of the countryside, motorways and what he called 'the speculators, the bungaloiders, signposters, petrol pumpers and river-polluters'. These words were written in 1929, the year of the hunger

march from Glasgow to Trafalgar Square. Above all he inveighed against the collapse of our rural culture, as crops began to be grown not for nourishment but for financial gain. Massingham died 40 years ago and did not live to see the excesses of monoculture, the yellowing of the land with unwanted rape and the burning of hedges to make way for the lucrative barley prairies.

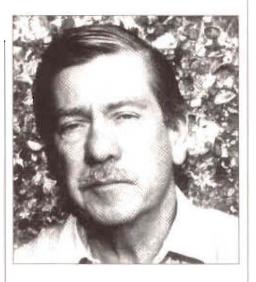
What would he have thought of feeding cows on the remains of dead sheep and the BSE that resulted? Or of BST which distorts lactation in the pursuit of increased milk yields, of the poisoning of the aquafers, of food irradiation, of Angel Dust, of the sophisticated techniques of degrading food and tarting up sub-standard produce and of bio-genetic engineering, the science of making hybrid plants and animals?

When Margaret Visser, the classical scholar and food anthropologist, was in London recently she told me she found it very revealing, as she contemplated what science was about to do to food and farming, and that the word 'hybrid' and the word 'hubris' have the same root. She feels that the geneticists who play God with nature display a textbook definition of hubris – the overwhelming arrogance that leads to disaster.

That is still to come. What do we have already that we'd rather not have? We have in the last two decades seen food subsumed into fashion. High Street multiples once happy to sell knickers and blouses have moved into gnocchi and mousses. Chemists which once sold surgical requisites and toilet sundries have moved into designer sandwiches and health foods, in the pursuit of high mark-ups. It used to be the possession of a television franchise that gave you a licence to print money. Now it's microwaveables and little bags of salad leaves.

Food has become a designer product and its success is judged not by quality but by sales. To keep sales buoyant there has to be continuous innovation – new snacks, new chocs, new cakes, new pot noodles, new desserts, new lines for kids. More money is spent annually oπ food technology and innovation than on medical research.

So deep has the gulf become between honest products and the rubbish that we have been forced to



accept that we have created 'two-tier' food values. Where else in the world do people talk about *real* ale, *real* cheese, *real* meat, *real* bread, *real* ice cream, *real* jam in order to distinguish it from the mass-produced stuff.

The concentration of power in the hands of the multiples has helped put paid to hundreds of small producers. Local traditions, food preferences, local distinctiveness has largely disappeared. In Lincolnshire the locals get their potatoes from Egypt or Cyprus, their calabrese from Andalucia. Kentish countrymen go to their supermarket and buy cherries from California and Italy - anywhere but Kent, which was once the garden of England.

For connoisseurs there is no better asparagus in Europe than the spears grown in southern England. Yet last June when the asparagus season reached its peak, in the week that the Vale of Evesham was awash with asparagus, the supermarket which dominates Evesham itself was selling asparagus from Spain. When they could have had asparagus cut a few miles away and brought within half an hour to their vegetable shelves, they were locked into a commercial arrangement which involved trucking it 2,000 miles across Europe at great expense in terms of energy consumption and pollution.

This is the supermarket which describes itself as the company 'where good ideas come naturally'. Whose idea was it, when the best and freshest asparagus in Europe was growing on the doorstep, to bring something inferior from Spain? When I raised this daft idea with the supermarket's Head of Public Affairs she had two explanations. The first was that if people actually wanted Vale of Evesham asparagus there was plenty in other shops; the second was that English asparagus didn't come up to their specifications.

Growers will know all about specifications. What they all too often specify is a deal which gives the supermarkets maximum profits for minimum outlay. Perhaps the deal they made with the Spanish growers was more attractive than the deal they could have made, had they the inclination, with the growers of

#### Continued on next page

#### Farms & society

#### Continued from previous page

Evesham

What we are talking about is a lack of interest in regional foods, flavours, tastes and traditions, in the pursuit of rationalisation; what the accountants call economies of scale. Money can be put on a container of asparagus but lost on a dozen boxes. Answer: buy in bulk and if challenged, explain that local produce does not come up to scratch.

I have considerable reservations about the extent to which industry is prepared to play an active role in promoting a healthier attitude to food and farming. The motto all too often seems to be yes, you can have what you want if you pay over the odds for it. The Consumers Association recently found that far from making healthy food cheaper for its shoppers, supermarkets loaded a premium onto prices. Lean beef mince can cost you half as much again as standard mince; brown rice costs more than polished rice; olive oil is about four times the price of other vegetable oils; bran flakes cost up to 23 pence more than cornflakes; wholemeal bread, predictably is dearer than white sliced bread.

At the end of last year Safeway opened a glittering new supermarket on the outskirts of Edinburgh. Good news for motorists: it will have Scotland's largest ever petrol filling station, 34 checkouts designed to minimise stress and tension, 2,600 public car parking spaces and a stunning display of luxuries from all over the world. And just to prove that it does care about local food it will sell Aberdeen Angus beef, Farm Assured lamb from the Orkney Islands, Scottish oysters and mussels, Arbroath smokies, Scottish butters and cheeses and traditional Scottish breads. I have nothing but praise for that.

But in the same week that this new state-of-the-art shopping paradise opened in Edinburgh I spent two days in Glasgow in two of the most deprived housing estates in Britain – Drumchapel and Castlemilk. No Safeway there, precious few food shops of any kind. Few of the residents eat fruit or vegetables; most live on cheap processed foods. We should keep at the forefront of our minds that one in four households in Strathclyde live below the poverty line in a state of permanent malnourishment.

We can strive to protect our local food systems, create all manner of exciting new links between responsible farmers and supportive consumers but if we do not distribute the good things of the land in a way which benefits the whole community then we have not finished the job. No system of food production is morally justifiable if it ignores a significant proportion of the population.

■ Derek Cooper is a broadcaster and presenter of Radio 4's Food Programme and President of the Guild of Food Writers. This is an edited version of the keynote speech he gave at the Soil Association's conference on Food, Farming and Society — Towards a New Model.

# Linking farmers and consumers

Organic farming is more than the production of healthy food from healthy land. It is also about the health of society. Eric Booth of the Soil Association looks at the new links that are being formed by organic farmers and consumers based on local economies.

nvironmental issues have dropped low down the agenda of the media and politicians in the 90s, but they have not gone away. People are becoming aware of the importance of the local economy and the need for communities to become more self-reliant – an attitude that encourages stability, diversity and responsibility. Nowhere are the benefits of this approach clearer than in food.

We have never been so separated from the natural world which sustains us and we have never been so isolated from the consequences of our actions. It is against this background that the organic movement has been forging closer links between consumers and producers through a whole range of direct marketing schemes.

Direct marketing ideas have fallen on fertile ground. The interest in direct marketing is a creative attempt to meet demand with supply in a way that normal distribution routes currently find difficult. At the same time direct marketing schemes show a way towards a system based on more ecological principles.

Inspiration has come from thriving Japanese consumer co- operatives reaching hundreds of thousands of households, French marché biologiques (organic farmers' markets), and Community Supported Agriculture schemes in the USA. In the UK similar schemes fall into the following main types:

FARM SHOPS, STALLS AND MARKETS – Shops or stalls may be on the farm or in a town. They are easy to use and need no commitment from the consumer. Many farm shops buy in produce to supplement what they grow and a very large range is available. Regular customers are kept in touch with farm news through newsletters and there may also be open days and festivals.

CONSUMER GROUPS - These buy in bulk from farmers and growers and divide up the produce among their members. Schemes include dairy, meat and wholefoods as well as vegetables. Some larger schemes are organised around neighbourhood groups.

STANDARD VEGETABLE BOXES – Growers pack standard boxes of seasonal produce for members every week. Each contains at least eight kinds of seasonal produce for a set price and ten or more boxes are delivered to a neighbourhood drop off point where members collect them later. Growers plant between 40 and 50 varieties and harvest continually.

SUBSCRIPTION FARMING – The grower prepares a budget for the year, estimates how many 'shares' they can supply and produces a 'prospectus'. Subscribers pay for their share in advance or by instalments and are thus closely involved in both the risk and bounty of harvests. Some shares might be paid for in part with labour.

COMMUNITY FARMS – Decisions about the farm are made by both farmers and members of the community. The land is often owned by the supporting community, with farmers as equal partners or employees. These schemes emphasise that consumers do not pay for their food, instead they pay to support their farm, of which they become a part. The farm then supports them with the produce they need.

Perhaps the most significant aspect of links between farmers and consumers is that they enable greater communication and understanding. One grower operating a box system commented 'I work harder now but the rewards are greater. The only feedback I used to get from the wholesaler were complaints. Now people comment about what was in their box the previous week and are nearly always enthusiastic.'

Organic food is more than a simple commodity, it has a strong message attached. The complex ideas and practice of taking responibility for our environment are communicated best when the links in the

distribution chain are short.

A commonly used term is community supported agriculture, which has come from the US and Europe and describes schemes where a supporting group of consumers (the 'community') supports and shares risks with the farmers. What this term misses is that not only do communities support farms, but farms support communities.

The aim behind all schemes to link farmers and consumers is to overcome problems endemic in conventional food distribution, but also to re-establish a sense of rootedness and belonging in where we come from and what supports us – our land.

The Soil Association has been encouraging links between farmers and consumers – indeed the Symbol Scheme itself is such a link. Last October we organised a major conference in London called Food, Farming and Society - towards a new model' where 250 delegates from food, consumer, environment and agricultural organisations considered the issues. To promote direct links the Soil Association has an information pack, including a list of producers operating such schemes, and copies of some of the many press articles to which we have contributed. At present we are running a series of regional seminars on direct marketing and there are plans to extend these and to produce a handbook.

There is no doubt that direct marketing will play an increasing role in the organic food market. It provides a more stable market for many producers and gives more people access to fresh organic food at a price they can afford. It also spreads the message about the benefits of organic farming for us, for the countryside and for society, in a way that excites and rewards all involved.

#### More information

For those interested to find out more about community supported agriculture, the following publications are available from the Soil Association:

- Ancient Futures Helena Norberg-Hodge £8.99 (£2 p+p)
- Farms of Tomorrow Trauger Groh & Steven McFadden £7.95 (£2 p+p)
- Linking Farmers and Consumers £2.00 (50p p+p)
- Summary papers of Food, Farming and Society Conference £2.00
- Information pack and list of direct marketing producers £1.50
- Direct Marketing Seminars

The Soil Association is organising a number of direct marketing seminars around the country. Dates already fixed include Salisbury on 25 February and further seminars are planned for Liverpool, Yorkshire and Devon in April and May. For details contact Eric Booth on 0272 290661.

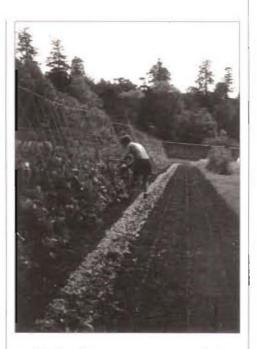
# Organic in Ayrshire

The walled garden of Sundrum
Castle in Ayrshire was bought by
Dave and Eileen Burlingham in 1981
and was worked as an organic
smallholding. In 1990 they were
joined by Carol Freireioh, an organic
farmer for many years, and John
Butterworth, an organic horticulturist. At the same time Ayrshire
Organic Growers was formed as a
workers' co-operative. Here these
organic practitioners explain how
the scheme operates.

Our aim was to maximise our ecological, economic and social objectives. Ecologically we intended not only growing to organic standards, but also minimising pollution from excessive transport and packaging. From an economic standpoint, by selling direct to the consumers, who agree to support us for a whole year, the bulk of the price is returned to Ayrshire Organic Growers. Socially, we serve our neighbours, who take part in planning meetings, should they wish, and attend open days. We use a walled garden, co-op members' individual land, and contract a local organic farmer to grow the main root crops. We sell shares, currently valued at one hundred and eighty pounds, for the entire season's output. A formal document is agreed between Ayrshire Organic Growers and each member for a twelve month period. We offer a range of about 50 fruits and vegetables suited to our climate, modified with unheated poly tunnels, and the volume and variety depends on the season.

We aim to enable as many people as possible to eat healthy food, so our produce is costed at the same price as non-organic supermarket produce and payment may be made in instalments. Members share an element of risk with us, but in a good year may receive well over their share value. We currently have 45 members (households). We deliver weekly (fortnightly from January to May), for a £20 annual payment to each drop-off point, which may serve up to eight members.

The working Co-op members are contracted to Ayrshire Organic Growers for a set number of hours each year, equivalent to one full-time worker in



Ayrshire Organic Growers are one example of subscription farming which is supplying produce to the local community who in return support the farm.

total. In addition we are rnembers of WWOOF (Working Weekends on Organic Farms), and get valuable help from this source at peak periods.

We consider the system to be generally sucessful within the scale in which we operate. Most of our members live within five miles of the walled garden, so transport is simple – and we are not limited by silly size restrictions or cosmetic standards. For many members, involvement extends beyond providing forward financial support and most attended our last open day in September. Some even offer direct help in the form of expertise, capital and labour. For example, an accountant provides help with the books, a water engineer with the irrigation system, and a retired member provides regular free labour.

For the future, we aim to increase the volume and range of products, to serve a larger number of members, and so produce a realistic farm income. We envisage expanding into a complete mixed farm, minimising our dependance on outside inputs.

We will therefore require more land, which we intend acquiring by means of a Trust. This will facilitate ecological farming unfettered by economic restrictions, develop further community involvement and establish the scheme in perpetuity.

#### Farms & society

# Where to find your local scheme

Direct links between producers and consumers bring a human dimension and trust back to the 'business' of food. This trust and mutual support ensure the quality of the food and of the whole production process. Such schemes recognise that communities depend on farms and that farms depend on communities.

This is part of the list of farms and groups who are already running direct marketing schemes. Please let the Soil Association know of new schemes or send £1.50 for the full list and information pack.

#### Type of scheme:

Subscription

Members pay for share of produce at start of year Grower delivers

Box scheme

standard boxes of seasonal produce

Consumer group Group places single

bulk order with grower Members place

Home Delivery

individual order with supplier

Farm Shop

The list of symbol holders from the SA provides a more complete list

#### EAST

**Graham Hughes** 

Pond Cottage Mangreen Swardeston Norwich Norfolk NR14 8DD TEL:0508 78710

Type: Box Scheme

**David Barker** 

Poppyland Organic Produce Old Hall Organic Garden Wood Lane Burgh Aylsham Norfolk NR11 6TB Type: Subscription

**Greg Bramford** 

Health Farm Themelthorpe Dereham Norfolk NR20 5PX TEL:036 284 689 Type: Box Scheme

#### MIDIANDS

Geoffrey Nicholls (Jar)

Ashfield Farm Chester High Road Neston South Wirral Cheshire L64 3RY TEL:051 336 4286 Type: Farm Shop

#### Jane Straker/Mike Gatiss

Greenlink 9 Graham Road Malvern Worcestershire WR14 2HR TEL:0684 576266

Type: Home delivery

Simon Cross

The Botanic Centre Ladgate Lane Acklam Middlesbrough Cleveland TS5 7HF TEL:0642 594895 Type: Subscription

#### lain & Katre Rogerson

The Village Bakery Melmerby Penrith Cumbria CA10 1HE TEL:0768 881515 Type: Farm Shop

#### **Betty Whitwell**

Wheelbarrow Group 3 Thorngarth Lane Barrow on Humber Humberside DN19 7AW TEL:0469 530721 Type: Consumer group

Alex Marsh

Goosemoorganics Goosemore Cottage Cowthorpe Wetherby Yorkshire LS22 5EU TEL:0423 358887 Type: Box Scheme



Box schemes supply a range of seasonal organic produce.

#### **SCOTLANO** Pauline McGowan

Harvest Moon Organic Produce West Edingarioch Farm Premnay Insch Aberdeenshire AB52 6PL TEL:0464 20388

Type: Home Delivery

Oave Burlingham

Ayrshire Organic Growers The Walled Garden Cushats Sundrum by Ayr Strathclyde KA6 5LA TEL:0292 570631 Type: Subscription

Anne Sandwith

La Marcherie Ruette Rabey St Martin's Guernsey, Channel Islands TEL:0481 37547 Type: Box Scheme

**Andrew Cross** 

Gold Hill Organic Farm Rivermead Farm Childe Okeford Blandford Dorset DT11 8HB TEL:0258 860293 Type: Box Scheme

Patsy & Hugh Chapman

Longmeadow Organic Veg Longmeadow Godmanston Dorchester, Dorset DTR2 7AE TEL:0300 341779 Type: Farm Shop

Alan Brockman

Perry Court Farm Petham Nr Canterbury Kent CT4 5RU TEL:0227 738449 Type: Subscription

#### **Andy and Rachel Keen**

A & R Veg Co-op 57 Cameford Court New Park Road London SW2 4LJ TEL:081 671 9944 Type: Box Scheme

John Casserly

The Organic Food Market Spitalfields Market London E1 TEL:071 404 4466 Type: Organic Market

Mrs Debbie Bennett

Carshalton Friends of Organic Farmers 62 Cambridge Road Carshalton Beeches Surrey SM5 30S TEL:081 395 5390 Type: Consumer Group

#### WEST

Tim Baines

Bath Local Organic Buyers 28 Ashley Avenue Avon BA1 3DS TEL:0225 312116 Type: Consumer Group

Jan & Tim Deane

Northwood Farm Vegetables Northwood Farm Cristow Exeter Devon EX6 7PG TEL:0647 52915 Type: Box Scheme

**David Martin** 

Oake Bridge Farm Oake Taunton Somerset TA4 1AY TEL:0823 461317 Type: Box Scheme The Food Commission's special supplement on food products

# CHECKOUT

In a special report by The Food Commission we look at new evidence against the fat found in hydrogenated vegetable oil

# Trans fats in transition

We've been led to believe that vegetable oils are healthier than animal fats. But hydrogenated vegetable oils, listed in the small print in thousands of processed foods, are now the target of health campaigns in the UK and USA. In a special report by the Food Commission, we examine the evidence and look at the most common source of these fats, in margarines and spreads, and the tricks manufacturers use to keep the fat facts off their labels.

he links between eating fatty foods, raised blood cholesterol levels and an increased risk of heart disease are now accepted by the scientific world. But the type of fat eaten is important.

Some fats are essential in the diet if we are to build and maintain healthy muscle, arteries and nerve cells. These essential fatty acids, the best-known of which are linoleic and alpha-linolenic acid, are found predominantly in nuts and seeds, green leafy vegetables and fish, and also in wild animal flesh, but less so in farmed livestock.

In contrast, other fats, especially

saturated fats, have been linked with the risk of heart disease. Saturated fats are found largly in animal and dairy products and some tropical vegetable oils.

However saturated fats, because they are generally hard at room temperature, have advantages for manufacturers. They are more suited to food processing, go rancid less quickly and are more stable so, for example, they can be used over and over again for deep fat frying.

Experiments in making margarine from fish oils earlier this century led to the development of a process called hydrogenation. This artificially saturates, or hardens, oils into solid

fat making them more suitable for food processing. This process is now used extensively with vegetable oils to make them more solid at room temperature and more suited for use in margarines and spreads, biscuits, bread and pastries and for other food processing uses.

Oil is hydrogenated by mixing it with fine particles of nickel (a catalyst), heating it to 180°C, and pumping hydrogen gas through the mix under high pressure. After filtering the nickel out again, the oil is bleached and deodorised. As it cools it turns into a waxy fat, which can be minced into pellets for blending into any recipes needing solid, 'dry' fat.

These harder fats produced by the hydrogenation process include a class of fats rarely found in nature called trans-fatty acids. These trans fats may account for 30-50 per cent of a hydrogenated oil.

## Facts against trans fats

Until recently nutritionists had not considered that trans fats posed a special health risk. Gradually, evidence has accumulated suggesting that trans fats acted in the body in a similar way to many saturated fats and can thus raise blood cholesterol levels (1).

The evidence was strengthened considerably when, last spring, The Lancet published a report (2) showing that trans fats increase the risk of coronary heart disease independently of saturated fat intake.

The study, which looked at the diets of over 85,000 nurses in the United States, showed a significantly increased risk of developing cardiovascular disease if the diet was rich in trans fats derived from hydrogenated vegetable oils. The increased risk was approximately 50 per cent, so that for every two people with a low consumption of trans fats who developed heart disease, three with a high consumption developed the disease. The study found that most of the trans fats came from margarine, bis-

Continued on next page

# **Trans fats** in transition

cuits and white bread in the nurses diets, and that all three gave an increased risk.

Small amounts of naturally-occurring trans fats may also be found in dairy and animal fats, but these are different compounds and have not been shown to raise the likelihood of heart disease.

The increased risk found in the nurses study was independent of other risk factors, meaning that it acted in addition to risks associated with saturated fats, smoking or a family history of heart disease. Despite suggestions by the butter industry that this spelled the end of the line for margarine, The Lancet study did not show that trans fats were a greater risk than saturated fats.

No-one should think that they will improve their health by swapping hydrogenated vegetable fat for lard, or hydrogenated margarine for butter. Ounce for ounce, the quantity of

#### Main sources of trans fat in the average UK adult diet

Butter, margarines	
and other spreads	30%
Milk, cheese and	
egg products	12%
Meat pies and other	
meat products	18%
Vegetable and potato produc	ts 6%
Biscuits, buns, cakes, pastrie	s 14%
Other bread and cereal	
products	3%
Puddings and ice cream	3%
Confectionery	3%
Source: The Dietary and Nutritional S	iurvey of
British Adults, OPCS, HMSO 1990.	

hydrogenated fat in margarine will be much less than the quantity of saturated fat in butter. Although the US nurses study found less risk from butter, a full assessment of the role of different types of fat on predicting heart disease has not been made. One estimate suggests that trans fats are twice as potent as saturated fats in raising the risk of heart disease (4). There is other evidence that different types of saturated fat affect the risk of heart disease unequally, with the saturates in dairy foods raising the risk more than those in tropical vegetable oils

# Trans spotting

The more you look for them, the more you will find. Hydrogenated vegetable fats have crept into a surprisingly wide range of foods on our supermarket shelves. We found them in breakfast cereals (e.g. Nestlé's Cheerios). in baby foods (powder sorts like Militim and Mainsms), in sliced bread (where it is called 'vegetable fat') and even in Linda McCartney's vegetarian sausages. Indeed, one American estimate (3) suggests that about 70 per cent of the vegetable oils used in a wide range of processed foods and fried foods are hydrogenated or partially hydrogenat-

In the UK, the main sources of trans fats in our diet are from margarines and spreads, pies, pastries and biscuits (see table). On average women eat about 4.0 grams/day, men about 5.6g/day, roughly the

same as our American counterparts. However, a third of the men were eating more than 6 g/day and a quarter of women more than 5 g/day. Over 20 per cent of younger men were eating more than 8 g/day.

It is easy to see how trans fat levels in the diet can creep up. A portion of chips fried in partially hydrogenated soya oil can have 6 or more grams of trans fat and a tablespoon of margarine can have over 3 grams trans fat.

In Britain, getting comparative figures on trans fats relies on manufacturer's declarations. The main published listing of food components (5) does not include trans fats. Data from the USA (see table) indicates just how easy it is to exceed 10 grams trans fat in one day, and according to researchers at Harvard Medical School (4) this intake of trans fat would effectively negate the healthy effects of cutting back on saturated fat by twice this amount ie eating 10g trans fat would undo all the good that would be done by achieving the government's Health of the Nation dietary targets for cutting saturated

### Labelling

There are two ways that consumers might spot the presence of trans fat in their food, first by looking at the ingredients list to see if the oils or fats have been hydrogenated, and second by looking at the nutritional data to see how much trans fat is present.

Easy? No there are plenty of ways manufacturers can avoid revealing the truth.

Labelling laws require that food ingredients should be listed on the pack but when it comes to spotting hydrogenated oils, manufacturers can use other, less helpful descriptions. If the manufacturers uses the word 'oil' and the oil has been hydrogenated then the ingredient list should say 'hydrogenated oil' — which is reasonable enough. But if the manufacturer has used the word 'fat', then even if the fat derives from a hydrogenated vegetable oil, the word 'hydrogenated' need not be used. As

most vegetable fats do in fact derive from hydrogenated oil, this is a common deception. Sometimes the word 'hardened' is used, and this will almost certainly mean hydrogenated.

Watch out for phrases like 'vegetable oil and fat' or vegetable shortening' or even 'vegetable margarine' in the list of ingredients as these are all likely to include hydrogenated oil.

When it comes to identifying trans fat in the nutritional data, forget it. Despite the COMA report on heart disease in 1984 recommending that trans fat should be counted as saturated fat, this was never made into a firm recommendation for labelling. Indeed, after a food-industry backed report from the British Nutrition Foundation argued in 1987 that trans fats did not appear to raise cholesterol, MAFF recommended that trans. fats should not be added to saturated fats on nutrition labels. Nonetheless, the idea was taken up by some manufacturers but not others, making comparisons between products diffi-

The chaotic labelling continues today (see table) but will soon be standardised. Manufacturers have resisted moves to declare trans fats, and have lobbied to ensure that legislation from the European Commission to standardise nutrition labelling from 1995 will exclude the declaration of

# Typical amounts of trans fats in common foods

(US data)

Product Trans fat	in	
(portion) a portion	a portion (g)	
Butter (15g)	0.3	
Hard margarine (15g)	2.0	
Soft margarine (15g)	0.9	
Low fat spread (15g)	0.6	
Very Low Fat spread (15g)	0.3	
Burger King french fries (large)	7.8	
McDonald french fries (large)	4.8	
Cake (1 piece)	1.1	
Doughnut (one, plain)	4.4	
Danish pastry (one)	3.0	
Corn crisps (small bag)	1.4	
Biscuits (3 assorted)	2.6	
Sources: references 4 and 8.		

trans fat from the list of declared nutrients. This has been enshrined in a Directive, and proposals for implementing the Directive in UK law are currently out for consultation.

# Changing labels

Given the importance of encouraging people to choose healthy diets, it is essential that manufacturers are put under pressure to improve their products. Switching away from fats which raise blood cholesterol will only come about when such fats are rejected by consumers, and for this to happen consumers need adequate information.

The Food Commission considers that it is now time for manufacturers to declare not only the amount of trans fats in their products, but to drop the arbitrary division of fats into saturated and unsaturated forms and instead focus on categorising their fat into 'cholesterol raising' and 'cholesterol lowering' fats. The prestigious New England Journal of Medicine

## Fast food in trans-ition

Five years ago McDonalds and Burger King were using beef fat for their deep fryers, and Kentucky Fried Chicken was using hydrogenated soya oil. In response to fears about saturated fats, beef fat has been swapped for vegetable oils – but do these include hydrogenated oils? We asked the companies what their current policies were

McDonalds: 'We use 100% vegetable oil, including hydrogenated oil. This may be changing soon.'

Burger King: 'We use 100% vegetable oil including partially hydrogenated oil.'

Kentucky Fried Chicken: 'We use pure rape-seed oil which is nonhydrogenated.'

Wimpy: "We use pure rape seed oil, and no hydrogenated oil" has called for a similar labelling change in the USA (7).

The Food Commission is also calling for changes in the labelling regulations to ensure that ingredient lists declare the presence of all hydrogenated fats and oils with the word 'hydrogenated'. This will ensure that consumers who have taken the effort to reduce their consumption of animal fats can also choose to reduce their consumption of artificially hardened vegetable fats.

#### ■ References

- Mensink and Katari (1990) Effect of dietary trans fatty acids on high-density and low-density lipoprotein cholesterol levels in he aithy subjects, *New Eng J Med*, 323, 439-45.
- Willett et al (1993) Intake of trans fatty acids and risk of coronary heart disease among women, The Lancet, 341, 581-5.
   Enig (1989) Fats and oils: understanding the functions and properties of partially hydrogenated fats and oils and their relation ship to unhydrogenated fats and oils, University of Maryland publication, Department of Chemistry and Biochemistry, June 1989.
- Litin and Sacks (1993) Trans fatty acid content of common foods, New Eng J Med. 329, 1969-70.
- McCance and Widdowson's The Composition of Foods, (5th edition) 1991, HMSO
- 6. Wootan and Liebman (1993) Tracking Trans, Nutrition Action Healthletter, 20,
- 11, Washington: CSPI
- Grundy (1990) Trans monounsaturated fatty acids and serum cholesterol levels, New Eng J Med. 323, 480-1, ??

#### m Research; Tim Lobstein, Rachal Harris, Gemma Snowden

St Michael the Confused: on the label the total fat equals the sum of the parts, yet Marks and Sparks said trans fats are added to the total figure only.

#### INGREDIENTS WATER + OLIVE OIL HYDROGENATED VEGETABLE OIL + VEGETABLE OIL + SALT + DRIED WHEY EMULSPIERS (6471, E322) TABILISER , E401) + PRESERVATIVE (E202) COLOUR (BETA CAROTENE) FLAVOURING WATER + OLIVE OIL NUTRITIONAL INFORMATION TYPICAL VALUES per 100g ENERGY 545 kcals PROTEIN 2240 M 0 2g 1 2g 1 2g 60.0g 10.0g 36.8g 13.2g 0.7g CARBOHYDRATE SUITABLE FOR HOME FREEZING of which sugars FREEZE ON DAY OF PURCHASE. DEFROST THOROUGHLY BEFORE USE. FROZEN USE WITHIN 2 MONTHS OF PURCHASE of which polyunisaturates of which monounsaturates of which saturates SODIUM DIETARY FIBRE

#### **Hiding the trans**

With EC directives requiring that trans fats should not be declared from 1995 onwards, and with some companies previously adding the trans fat figures to their saturated fat figures, we asked the main manufacturers of marganines and spreads how they currently declared their trans fats on their nutrition details.

Asda (own label): "Not declared on the label"

Co-op (own label): "Not declared on the label"

Haldane (Granose): "Added to saturated fat figure"

Kraft (Vitalite, Mellow, Golden Crown): "Treated as mono-unsaturates"

Marks and Spencer (St Michael): "Included in total fat only"

Pura Foods (Pura):

"Declared as part of saturated and mono-unsaturated figures"

Safeways (own label): "Not declared on the label"

Sainsbury (own label): "Added to saturated and total fat figures"

Saint Ivel (Gold, Shape): "Not declared on the label"

Suma (brands): "Not declared. Some products have no trans fat"

Tesco (own label): "Excluded from un-saturated and not declared as saturated." NB Their fats data differs on different size packs.

Van den Bergh (Flora, Krona, Echo, Stork, Summer County, Delight, Outline, Promise, Olivio, Blue Band, I Can't Believe It's Not Butter):

"Declaring trans fats is illegal"

Vitaquell (brands): "No trans fat in our products"

Waitrose (own label): "Not included in any figures"

Whole Earth Foods (SuperSpread): "No trans fat in our product"

# Trans fat put in baby milk

New regulations on the ingredients in baby milk formula allow the use of partially hydrogenated oils provided the trans fat does not exceed 8% of the total fat. The same applies to follow-on milks.

Weaning foods, especially dried ones, often include hydrogenated oils, and so do drinks such as Farley's Bed Timers.

The effects of trans fats on an infant's health in later life appear to be completely unknown.

# Loopy labels

Once more the Food Commission's eagleeyed correspondents have been mingling with innocent shoppers, hunting for those cheeky labels.



#### Lemon plus

Boots' healthy-looking Spring Water

with Lemon and Lime is actually a bit more than just that... and a bit less, too.

A careful look at the small print reveals a double

dose of artificial sweetener has been added, along with un-named flavourings. And the lime, whose picture is featured beside the lemon on the front, is actually lime flavouring.

We put this apparent deception to Boots, who assured us that the flavouring was genuine lime oil. Nonetheless, we believe that when a product emphasises a particular ingredient then the quantities of that ingredient should be declared on the label, as required by the food regulations. The quantity of lemon is given (6%) but not the quantity of lime.



#### **Fruity bars**

This so-called 'nutrition bar' says it is 'An oat, fruit and nut snack bar' yet a sharp-eyed reader noticed that the two largest ingredients are different forms of sugar (glucose syrup, fructose) and the third largest is milk chocolate. Fruit, in the form of raisins, is the seventh ingredient, oats ninth and nuts tenth.

We asked the makers, Sun
Nutritional, if they could tell us the
actual amounts of each ingredient,
but they refused. The statement 'oat,
fruit and nut' was, they said, intended
to describe the 'flavour, taste and
texture' of the bar. We beg to differ,

and also suggest that Sun Nutritional consult a reputable dentist about the likely cariogenicity of this snack food.

#### **Fruity bakers**

Remarkable contents to these buns: the list includes Ceremac (whatever that is), Bronze and Diamond. We



tried to contact Simpsons but no-one answered their phone. Perhaps not surprising if they sell jewellery for the price of a current bun.

#### **Turkey truth**

Congratulations to Birds Eye for honesty of labelling. The third largest ingredient in their newly-launched turkey burgers (after turkey and water) is 'turkey skin'. They must be hoping we never read the small print.



#### Seeing greens

A reader asks: 'Can you tell me what is in a packet of Crispy Seaweed, like the one I bought in Waitrose?'

Not seaweed, that's for sure!
Waitrose told us that the contents
were shredded spring greens, deep
fried and seasoned. You can pay £1
per ounce, if you wish.

## Loopy laws

Research by the Co-op confirms what most people know already – that nutrition labelling is gobbledy-gook to most people. Of 262 shoppers shown standard nutritional labels, less than half had the slightest idea which foods were highest or lowest in sugar, fat and calones.

Now the Co-op hopes to persuade the government to adopt a simplified approach to labelling, which the survey said consumers wanted. Based on a banding scheme developed by the Coronary Prevention Group, the Co-op provides supplementary information indicating whether a nutrient is high, medium or low.

Great news for shoppers and a model to be followed by other retailers — except that it is technically illegall EC legislation currently permits nutrition information to be presented only in a standard format. While MAFF has asked trading standards not to prosecute, the situation remains confused and is likely to deter other retailers or manufacturers from following suit.

nutrition information

#### 100 GRAMS OF THIS PRODUCT (PEFLED) TYPICALLY PROVIDES

(PEELED) TYPICALLY PROVID	DES
152 kj Energy (36 kcal) (Ca	Value lories)
0.6 grams of Protein	LOW
7.7 grams of Carbohydrate (7.2 grams of which are Sugars)	HIGH HIGH
0.3 grams of Fat (Trace of which are Saturates)	LOW
2.4 grams of Fibre	HIGH
Trace of Sodium	LOW

At the same time the retail trade magazine, Supermarketing, has been running its own Make Sense of Labelling Campaign. This calls on MAFF to insist that all products should carry at least basic nutritional information (nutrition declarations are currently voluntary) and for supplementary graphic labelling which helps consumers interpret the information. The Coronary Prevention Group are also pressing for progress towards graphic labelling.

Supermarketing remains convinced that clearer nutrition labelling would lead to more confident consumers and increased purchases. While some food companies support the idea of supplementary graphic information, others no doubt fear that if we really knew how much fat and sugar some of their products contained, we might leave them on the supermarket shelf.

## Tesco chucks sweets off the checkout

Tesco has removed sweets from all the aisles alongside checkouts in its 416 stores. Tesco's decision is the latest success in Action and Information on Sugars (AIS) campaign to get retailers to remove sweets which encourage children, particularly, to help themselves and pester parents into confectionery purchases

Sainsburys and Waitrose have not sold sweets at the checkout for many years. Safeway has announced it will make every other aisle sweet-free, though campaigners say this will be of limited use as children can reach through.

ASDA's approach has been to make one-third of checkouts sweetfree in blocks that are clearly identified. Marks and Spencer has decided to provide two sweet-free checkouts In each store - and says it will identify them prominently.

Other supermarkets and chemists have only responded unsystematically or not at all according to AIS.

For details: AIS Chuck sweets off the checkout campaign, PO Box 190, Walton on Thames, Surrey, KT12 2YN.

#### **Sugar and Sport**

Images of sport are increasingly used to sell sweet foods, yet the nutritional role that sugar plays in an athlete's diet is limited. These were just some of the facts explored by Action and Information on Sugars at a 1992 Conference.

Now AIS has published the proceedings. Sugar and Sport Explored is available from Action and Information on Sugars, PO Box 190, Walton on Thames, Surrey KT12 2YN. Price £8.00 inc pap.

# complaints

Later this February, the Advertising Standards Authority is expected to report on ad complaints by Action and Information on Sugars and the Food Commission

In the first, Action and Information on Sugars complained that Ribena Sugar Free Blackcurrent Juice Drink was not in fact 'sugar-free' as it contains sugar - 3.2g per 100g. Ribena's advert, according to AIS, was 'the most blatant example of untruthful advertising which AIS has ever encountered in all its years of monitoring sweet food promotions."

The ASA is also due to report on a complaint from the Food Commission about Metaboost 94 Weightloss tablets. The advert, which appeared in a number of popular newspapers, claimed '... a revolutionary new concept in easy and effortless slimming. Metaboost is designed to improve metabolism, decrease bodyfat, build lean tissue, improve energy, lessen appetite, and make the body firmer and leaner... without starvation and exercise."

The Food Commission complained that the ad clearly breached the ASA's code by making unsustainable claims. Furthermore, the advert also promised 'free' tablets but the Food Commission found that these were only 'free' once an initial outlay of at least £15 had been made.

The ASA has previously admonished the same company, Jacaranda, over similar misleading adverts, the last time saying it was 'extremely concerned that... the advertisers continued to prepare advertisements in blatant breach of the Code'

The Food Commission is recommending that the ASA should refer the company, as a persistent offender, for prosecution by the Office of Fair Trading. In addition it should take sanctions against the publishers of such adverts. It would appear that the kind of admonishments the ASA has been making to date are insufficient to deter publishers from accepting adverts like these, which clearly breach the ASA code of practice.

# Adverts face TV makes kids fat

Watching television can slow children's metabolic rates by as much as 13 per cent, down to a lower level than when they're doing nothing at all, according to a study published last year in the American Journal of Paediatrics.

The study which is the first to indicate a physiological link between obesity and TV viewing - monitored the energy expenditure of 31 preadolescent girls while they were watching episodes of 'The Wonder Years'. When their eyes were on the screen all the children experienced

significantly lowered average metabolic rates. The rates of those that were obese fell by more than their non-obese counterparts.

This finding - coupled with the fact that children who watch a lot of TV spend less time outside playing and expending energy and more time having their taste buds teased by advertisements for high fat, high-sugar snack foods - gives more weight to the long-held belief that too much television is bad for kids' health. /From Choice, December 1993, Australian Consumers Association)

### German children shun sweets for fruit snacks

German children choose healthier snacks than their British counterparts according to researchers at Nottingham University. When given a free choice of a variety of snacks, English children found a Mars bar their most popular choice whereas German children chose an apple or a satsuma (see table).

The snack food consumption of two hundred children aged 9 to 11 from Nottinghamshire and Cloppenburg in north west Germany was monitored and related to social class and cultural differences.

The most striking difference was that German children do not consume as much chocolate as their UK counterparts. Although overall levels of chocolate consumption are similar for the two countries, the German children in the study were eating less chocolate than the English children, with the greatest difference in the lower social classes. English children from lower social class families were eating over eight chocolate bars a week (accounting for up to 25 per cent of their daily energy intake), whereas German children from the same background were eating only three or four a week.

Children from lower social class English families ate five times more chocolate than English children from higher class families, though in Germany the class difference was far less significant. The researchers suggest that one reason for the differences between the countries may be the tighter control of food advertising on German television during children's peak viewing times and the greater concern of both parents and teachers over the problems of tooth decay and obesity in children.

#### Ton five enack food choices

tah use suger toon em	Hees
English children	German children
1. Mars bar	Apple
2. Twix	Satsuma
3. Apple	Milchschnitte (chocolate)
4. Carton of fruit juice	Banana
5 White bread sandwich	Yogurt

■ Inga Kortzinger, R J Neale & C H Tilston, Crosscultural studies of food awareness and snack food consumption behaviour in primary school children in England and Germany (submitted for publication in the British Food Journal).

For further information contact Dr Roger Neale on 0602 516128.

# Co-op breaks ranks on labelling biotech foods

The Co-operative
Wholesale Society,
one of the UK's top
six supermarket and
food retailing chains,
has announced plans
to label all genetically
modified foods,
despite other retailers' reluctance to
entertain such a move

ast November the
Government announced
its proposals for the
labelling of foods produced using genetically
modified organisms (GMOs). The
policy states that a genetically modified food must be labelled if:

(a) it contains a gene originally derived from a human being

(b) it contains a gene originally derived from an animal which is the subject of religious dietary restrictions

 (c) it is a plant or microbial material that contains a gene originally derived from an animal

However, under the government's proposals, if the inserted gene has been destroyed by processing and is not present in the food, it would not require labelling.

Legislation to deal with novel foods, including genetically modified foods, is currently under discussion within the European Commission and the European Parliament. The government states that it will seek amendments to the EC Novel Foods Regulation to incorporate its labelling policy. However, the current position of the Commission is that the Regulation should not require any form of labelling, despite the fact that the European Parliament has already argued for a labelling policy more comprehensive than that suggested by MAFF. It is thus by no means certain that the Government's view will prevail in Brussels.

The Government's suggested labelling scheme is in any case highly restrictive and contains some old inconsistencies. For instance, a cow containing a pig gene or a pig containing a cow gene would be labelled because pigs are subject to the religious restrictions of Muslims and Jews, whilst cows are subject to the religious dietary restrictions of Hindus. However, a cow containing a horse gene would not be labelled, because although most people in the UK object to eating horse meat, the objection is not based in any religion.

The same argument would apply to the use of genes from rats, mice, cats and dogs.

All of the major supermarket chains keep a watching brief on genetically engineered foods. Indeed, one of the members of the MAFF Food Advisory Committee that proposed the labelling policy is the Quality Assurance Manager from Safeways. However, GMO-derived food is not the only genetic issue facing the supermarkets they will also have to take a position on BST milk before long.

## Supermarkets getting rattled

We asked the leading supermarkets what plans they had for labelling GMO-derived foods. This is what they said:

#### MARKS & SPENCER

MARKS & SPENCER considers the Government's labelling proposals sufficiently comprehensive at this stage. The only genetically engineered food sold by M&S is cheese made with GE-chymosin, which is not labelled because it is not excluded by the government's proposals.

'Marks & Spencer has always maintained an open and sometimes forthright attitude in those areas which can cause very real concern for our customers. In any event, we would only accept any novel food if there is some clear cut advantage to the customer in terms of quality. Cost alone is unlikely to be sufficient justification and, of course, safety must be assured. M&S will not sell any product made with human genes."

M&S has already complained to MAFF about the secrecy of the BST trials. They see no consumer advantage in BST milk and do not propose to sell it.

#### SAFEWAY

SAFEWAY says that they do not market any genetically engineered foods but they do sell cheese made with GE-chymosin, a genetically engineered enzyme. This is a confusing technicality. The cheese does not contain the enzyme because it is converted during the process of manufacture. However, some consumers may be just as interested in whether genetically engineered ingredients have been used in the process as whether they are contained in the final product. Safeway thinks that the Government's current labelling proposals are sufficiently comprehensive.

We support the development of sensible and selective genetic techniques where there are demonstrable benefits to the consumer and where the end product is entirely safe.

Safeway does not propose to sell BST milk because there is no demonstrable consumer benefit.

#### ASDA

ASDA sells cheese made with GEchymosin, but they follow the same semantic philosophy as Safeway.

'ASDA looks at every aspect of food and its quality of preparation with the food chain and at any new developments. The Government has just published a report on the labelling of genetically engineered foods, which ASDA would follow for any products which fell in those categories. However at the present time we do not have any ASDA brand

products within our stores that would qualify to be identified as being genetically engineered."

Regarding BST milk, ASDA thinks that it should be labelled so that consumers have a choice, and they would require their suppliers to give them this information.

#### WAITROSE

WAITROSE said 'Labelling genetically engineered foods is the responsibility of the Government and Waitrose will follow all Government requirements:

#### gateway

GATEWAY said 'I'm not commenting.'

## TESCO

TESCO said 'The Polkinghorne Committee and the Food Advisory Committee have devoted a considerable amount of time and effort, in consultation with relevant experts, to arrive at their recommendations. In particular, they have recognised that the use of term 'genetically engineered foods' is unhelpful. There are clear differences between foods which do not contain any modified genetic material but which may use ingredients derived from such technology (e.g. cheese and chymosin) and those which may well contain copy genes from other animal or vegetable species. Your questions ought to recognise this if you want a meaningful response."

#### SAINSBURY'S

SAINSBURYS sells cheese made with GE-chymosin\*, but they follow the same semantic philosophy as Safeway. Because the chymosin is not in the end product, they see no need to label it. However, Sainsburys is now reviewing all aspects of its food labelling and will be introducing a comprehensive new policy in May. In the meantime Sainsburys say that they will not stock foods derived from transgenic animals and they are still discussing policy on the use of human genes in food.

Sainsburys state that they will not sell BST milk even if it is legalised because of the animal welfare implications and the fact that there is no economic need for the overproduction of milk.



THE CO-OP is the first food retailer, worldwide, to respond to the consumer demand for the labelling of

genetically engineered foods.

'All Co-op brand products known to contain modified genetic material from non-related species will be labelled — particularly in the cases where there are known to be religious or ethical concerns. One of the few foods currently available made using gene technology is vegetarian cheese. Cheese has been traditionally made using rennet from calves' stomachs but vegetarian cheese is made using a rennet derived from genetically modified organisms.

Co-op vegetarian cheese will now carry the words:

'Produced using gene-technology and so free from animal rennet.'

The Co-op has also announced that it will not sell any food containing modified human genetic material, or any vegetable or fruit containing modified animal genetic material. It is also opposed to the production and sale of BST milk.

Research: Robin Jenkins

#### Chymosin in cheese making.

Cheese can be made using a number of different enzymes:

- Rennet extracted from the stomachs of slaughtered suckling calves.
- Vegetable enzymes, traditionally extracted from stinging nettles, butterwort and a number of other plants.
- Mucor meihei, a mould which produces an enzyme suitable for cheesemaking
- Chymosin, genetically engineered in three different ways, starting with rennet and then producing the enzyme from a culture of bacte ria.

Cheese labelled as 'Vegetarian' or 'suitable for vegetarians' can be made by all methods except the first, so such labels are not particularly informative. At present, the Co-op is the only supermarket chain that provides vegetarians with sufficient information to make an informed choice.

The Food Commission thinks that this confusion can only be ended by stating which enzyme is used in a list of ingredients. Since most cheese does not carry a list of ingredients there is sufficient space on the label.



# Copy cop-out

The notion of a 'copy gene' (see Tesco statement) was dreamed up by the Polkinhome Committee as a defence against the charge of cannibalism when human genes are inserted into foods. The argument is that genes are removed from donors, copied in hosts (often bacteria) and only then transferred to the final recipient. The likelihood of the actual gene taken from the

donor ending up in the recipient is thus infinitesimally small. However, the 'copy gene' approach misses the point. What is important is not the physical transfer of genes, but the transfer of the genetic information contained in those genes. It is quite irrelevant whether the gene is a copy or not. At a recent meeting on genetically engineered foods, one of the participants drew an

appropriate analogy:

'Someone goes into their local library and finds a copy of Mein Kampf on the shelves. Thinking that this is encouraging racial hatred in a multicultural society, they go to the desk to protest. The librarian cannot see what the fuss is about because it is not Hitler's original manuscript on the shelf but a printed copy.' (Dave King 7.1.94)

#### market place

#### The Nursery Food Book

A lively and practical book exploring all issues relating to food, nutrition, hygiene and multicultural needs, with tips, recipes an d sample menus along with cooking, gardening and educational activities involving food. Excellent handbook for nursery nurses and a nyone caring for young children. £9,99 including p@p.

#### **Food Adulteration**

A penetrating expose of the shocking state of food quality in Britain, revealing the facts on additives, pesticides, food poisoning and irradiation. £5.95 inc pap.

#### Children's Food

Teething rusks sweeter than a doughnut? Fish fingers less than half fish? Beef burgers made with pork? A book packed with trade s ecrets and sound advice. £4.75 inc p8p.

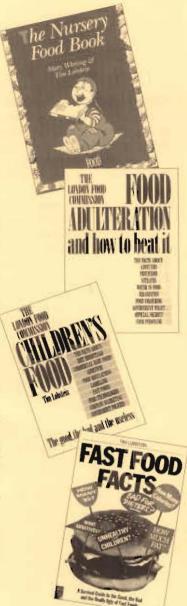
#### **Fast Food Facts**

Full of useful tables of nutrients and additives, along with a unique look into the secretive world of fast foods. £5.95 inc p8p.

BACK ISSUES OF THE FOOD MAGAZINE now at reduced price only £2 inc p&p.

Send for comprehensive index of the news and features for all back issues..

Cheques payable to 'The Food Commission'. Send your order to Publications,
The Food Commission, 3rd Floor, 5-11 Worship Street, London EC2A 2BH.



#### Additives - Your Complete Survival Guide

Still the best reference book with comprehensive tables and summaries of the evidence on the safety of each additive. Special price only £3.50 inc p&p.

#### **Food Irradiation**

Good food doesn't need irradiating yet the UK has now legalised the process. £6.50 inc pap.

#### Food for Health or Wealth

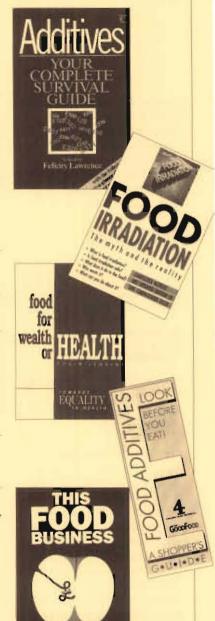
The acclaimed report from the Socialist Health Association, £4,50 inc pap.

#### **Additives chart**

published by Channel 4 £2 inc p&p.

#### **This Food Business**

usually £2 but yours **free** with every order.



SUBSCRIBE to the Food Magazine and support the work of the Food Commission. Full details from the Publications dept, address below.

#### order form

TO: The Food Commission, 3rd Floor, 5-11 Worship Street, London EC2A 2BH.  PLEASE SEND ME	Name Address:
I enclose £	☐ please also send me my free copy of This Food Business
Cheques payable to 'The Food Commission'.  Overseas purchasers should send payment in £ sterling, and add £1.00 per book for airmail delivery.	please send me subscription details for The Food Magazine  please send me details for donating to the registered charity The Food

# No nation can rise above the level of its women



Veteran campaigners for healthier diets, Margaret and Arthur Wynn, were the invited speakers at the Caroline Walker Awards last October. A shortened version of their provocative lecture is reproduced here.

ccording to the World Health Organisation, some 20 million low birth weight babies are born every year, and they account for a high proportion of infant mortality. If they survive they suffer from higher rates of childhood illness and disabling conditions such as mental retardation, behavioural disorders, cerebral palsy and impairment of vision and deafness.

Evidence presented to the US
Congress has shown that heart disease
(a major cause of death in middle age)
and brain disorders (the most costly of
all disorders affecting adults) can be
traced back to childhood and even
shown to be present at birth. Poor
maternal nutrition is linked to low
birthweight, but when does a poor diet
have its greatest effect on the growth
and development of the next generation?

## Iodine and birth defects

Take the single element iodine. A diet lacking in iodine has been linked to the retarding of foetal brain development and to neurological defects including deaf mutism, mental retardation and spastic diplegia. The damage can be done in very early pregnancy and even before conception: experiments with rats have shown that thyroid hormone deficiency, a consequence of iodine deficiency, when induced up to 43 days before mating can lead to multiple congenital defects. But if it is induced as little as 2 days after mating, no such defects occur.

The OPCS survey on British diets found that one in 40 women had a daily iodine intake below 53 mcg, yet the recommended level is 140 mcg/day, with a risk of thyroid problems at levels below 70 mcg/day.

# Slimming and menstruation

That nutrition affects other hormones besides that of the thyroid gland is well known. Restricted nutrition, such as slimming diets, leads to a marked decline in the sex hormones oestradiol and progesterone. Irregular menstrual periods are commonly linked to a histo-

ry of weight loss, usually caused by voluntary dietary restriction.

If 26 to 28 days is a healthy length of a cycle, what does a long cycle indicate? The first phase of the cycle, which for women in good health lasts about 14 days, is the follicular phase, during which time the ovum is maturing before ovulation. Slower maturation and delayed ovulation are linked to retarded foetal growth and a risk of babies born with malformations. During the follicular phase, and possibly up to 65 days before ovulation, the ovum is increasingly susceptible to external influences, including maternal nut rition. The mother's endocrine system is itself responding to the developing ovum, and poor nutrition may lead to a less-than-satis factory response, with hormone levels inadequate to stimulate growth as the follicle and the ovum it contains both mature.

Animal experimentation has shown that there are optimal protein intakes during the period before mating, with abnormal ova produced as a result of insufficient protein prior to conception.

There are no satisfactory studies of the effect of protein consumption on women's hormone levels. In a study of mothers of low birt hweight babies in Hackney, London, there was a highly significant correlation between birthweight (and head size) and protein consumption. Nearly all the mothers of low birthweight babies not only had low protein intakes, but low intakes of many other nutrients, including zinc and thiamin, known to be important for pregnancy outcome.

Folic acid deficiency has been known for more than 30 years to be mutagenic (to damage the genetic material of an organism) and to cause rats to be born with malformations. That it can cause neural tube defects such as spina bifida in humans has now been fully recognised.

Satisfactory hormone levels are not sufficient in themselves to ensure healthy reproduction; the hormones have to have magnesium which increases their effectiveness ten-fold. In fact they also need other divalent metals for special purposes, including calcium, manganese and zinc. Zinc deficiency is mutagenic and can adversely affect the development of the brain and nervous system. Maternal

zinc intake was highly correlated with birthweight and head circumference in the Hackney study.

Anti-mutagens

More than half of miscarried embryos have chromosomal aberrations. About 20 per cent of reported pregnancies miscarry, and we may infer that mutations of an apparently damaging character in women's germ cells before conception (causing miscarriage) are not rare events. On the contrary, they are all too common. Only the most lethal mutations cause miscarriages, while many others are compatible with survival. The preconceptual diets of women who miscarry are poorer than those of women who progress to livebirths.

During the 1980s it was shown that many essential nutrients are anti-mutagenic: these include some of the B vitamins - for example riboflavin - vitamins A, C and E and the minerals zinc and selenium. In excess, some of these are harmful or mutagenic, including vitamin A, zinc and selenium.

Monounsaturated and polyunsaturated fats are also anti-mutagenic and play an important role in inactivating mutagens in the digestive tract. There are other components of the diet which are anti-mutagenic but

Table 1
Suggested standard of nutrition for women of reproductive age. Amounts are given per 1000 kcal (the 'nutrient density') to aid caterers.

Nutrient	Amount per 1000 kca
protein	36.9g
total fat	38.1g
saturated fat	13.1g
monounsaturated fat	13.3g
polyunsaturated fat	9.1g
fibre	13.49
vitamin A (retinol eq)	574mg
thiamin B1	0.8mg
niacin eq B3	14mg
pyridoxine B6	0.8mg
folate B9	132mg
vitamin C	32mg
vitamin D	2mcg_
vitamin E	5mg
calcium	464mg
iodine	85mcg
iron	6.5mg
magnesium	180mg
selenium	24mcg
zinc	7mg

are not essential nutrients such as carotene, the catechins in tea, and chlorophyll.

Nearly all edible plant juices are anti-mutagenic to different degrees but the anti-mutagenicity is generally destroyed by cooking.

Cooking may also lead to the creation of the most important mutagens in the diet: over-heated proteins. Eating fried beef, for example, results in a major increase in mutagens in blood and urine over the following six to 12 hours. To avoid the mutagens, meat should be boiled, steamed or braised, or cooked in a microwave oven without browning.

#### A diet for women

Although good nutrition before pregnancy provides no guarantees, it reduces risks. A diet aimed at prevention must begin before pregnancy, preferably provided to girls throughout their adolescence. Although it should continue through pregnancy, too, the foetus is highly protected during the latter months by the placenta which can extract and concentrate vitamins from the mother's blood stream. The foetus is protected by the placenta – but before the formation of the placenta the developing ovum and embryo are more directly dependent on the nutrients and hormones in the maternal circulation.

A new and important standard, the modest-butadequate family food budget, has been defined by the Family Budget Unit centred on the University of York. We have taken their food budget and adapted it in the light of the Hackney survey of mothers' diets and French,

Swedish and Japanese recommendations, and drawn up a list of the required nutrients for women of child-bearing age (see table 1).

Getting women to eat such a diet is another mat-

ter. Food choice is influenced by a variety of factors, and it may be possible to improve the foods without asking women to change their food preferences. We would like to encourage the Caroline Walker Trust, and ot her food researchers, to look at the foods women choose which are poor in vitamins and minerals, and see if improvements couldn't be made.

#### Better biscuits

We suggest biscuits as the first target. The Trust could espouse the Better British Biscuit. Biscuits have an honourable ancestry in the oalcake, barley cake and other cereal cakes for the huntsman, farmer, traveller and school child. Some 80 per cent of women eat biscuits, and so do the great majority of children. But they are the end product of that degradation of natural foodstuffs which Caroline Walker so passionately and eloquently condemned. From the natural raw ingredients through to the biscuits in the packet the processing reduces the concentration of every one of the twelve nutrients we have seen to be important in maternal diets (see table 2), in some cases to very low levels.

Better biscuits may seem a small step in the grand cause of improving the nutrition of one generation in order to improve the health of the next. But progress is made by a long series of such small steps.

■ The complete text of No Nation Can Rise Above the Level of its Women – New Thoughts on Maternal Nutrition by Margaret Wynn and Arthur Wynn has been published by the Caroline Walker Trust (ISBN 1897820 01 1) price £7.50, available by post from the Trust, c/o 6 Aldrich Road Villas, London W11 1BP. Cheques to be made payable to the Caroline Walker Trust.

Table 2
Wheat products as a source of nutrients in maternal diets most related to birthweight.
Nutrient amounts per 100g of each food

	Wheatgerm	wholemeal bread	white bread	digestive biscuits
magnesium (mg)	270	76	24	23
iron (mg)	8.5	2.7	1.6	3.2
phosphorus (mg)	1050	200	91	88
zinc (mg)	17	1,8	0.6	0.5
potassium (mg)	950	230	110	170
thiamin (mg)	2.0	0.3	0.2	0.1
niacin (mg)	4.5	4.1	1.7	1.1
pantothenic acid (mg)	1.9	0.6	0.3	-
riboflavin (mcg)	720	90	60	110
folic acid (mcg)	331	39	29	13
pyridoxine (mcg)	3300	120	70	90
biotin (mcg)	25	6	1	-

#### **WORKING FOR ORGANIC GROWERS**

WWOOF is a countrywide exchange network where bed and board and practical experience are given in return for work on organic farms and smallholdings. Midweek, long term and overseas stays are also available. WWOOF provides excellent opportunities for organic training or changing to a rural life.

For further details please send SAE to: WWOOF 19 Bradford Road Lewes East Sussex BN7 1RB



#### Organic Food & Farming Public Relations Officer

Based in Bristol, the Soil Association is the best-known and longest-established UK organisation promoting organic food and farming. We are seeking to appoint a full-time Public Relations Officer who will be responsible for managing the events programme and for ensuring that the policies and profile of the Association reach a wider public. The successful applicant will have media relations experience, good communication skills and a committed interest in environmental issues. Salary in the range £17-20k according to age and experience.

For an application form phone Stephanie Jones, 0272 290661. Closing date for receipt of completed forms 28 February 1994.



Burbage, Nr Marlborough, Wiltshire SN8 3AY. Tel: 0672 810206 "the special little hotel in the country"

A Victorian, family-run hotel. Easy 1hr 15 from London. Harpers and Queen magazine described our organic food and wine as 'really excellent'. Spring Breaks from £20 pp b&b. Log fires, forest and canal walks, mountain bike hire. Valentine's and Easter packages now available.

#### SIMNEL CAKE

200g (Saz) plain wholemeal 150g (6gz) butter, 150g (6gz) sugar, 3 eggs, 1 tsp mixed spice, 500g (1/b) dried fruit,



50g (2oz) chooped glace chemies, 50g (2oz) mixed peel Apricot jam, 500g (1lb) marzi-

1 Cream together butter and sugar, 2 Beat in eggs and spice, 3 Fold in flour and all fruits, 4 Oil and line a 19cm (17") cake tin, 5 Pour half the modure into tin. 6 Roll out half the marzipan, 7 Cut 19cm circle and place in tin, 8 Pour remaining mixture on top, 9 Bake at 150°C, 300°F, Mk 2 for 2 1/2 hours, 10 Remove from tin and cool, 11 Brush top with apricot jam, 12 Roll marzipan into 19cm circle, 13



Place on cake top, 14 Decarate with marzipan balls. 15 Brown cake under grill for

BAKE ORGANIC



RG17 ORF tel 0488 684880

#### SOIL ASSOCIATION ORGANIC PRODUCT OF THE YEAR **AWARD 1993**

#### **Organic Flour By Post**

Organic Stone Ground Flour milled the traditional way. Small Cumbrian Watermill offers a wide range of organic flours to Soil Association Symbol Standard. Also cereal products.

All delivered to your door! Order by telephone, pay by credit card. Write or phone for our mail order catalogue now!

#### Flour Power From Waterpower

The Watermill, Little Salkeld, Penrith, Cumbria CA10 1NN Tel: 0768 881 523



#### MULTI-PURPOSE POTTING COMPOST

STILL AT 1992 PRICES

Offer Closes 1st April 1994

FREE SAMPLE & INFORMATION LARGE 70 LITRE BAGS Price per bag (including delivery - no P&P):-

2 bags (min) ......... £8.50 3-10 bags ......£7.99 10+ bags ......£7.00





Fertility Fibre (SA), Field Farm, Knighton on Teme, Tenbury Wells, Worcs, WR15 8LT Tel: 058 479 575



Global & Ethical

#### ARE YOU CONCERNED ABOUT THE ENVIRONMENT? THE ARMS TRADE? HUMAN RIGHTS? THE **TOBACCO INDUSTRY?**

We can help you or your organisation review your pension, savings or investments using companies who combine top performance with ethical criteria

Contact: BRIGID BENSON ON (061) 434 4681

WORK

INDEPENDENT, ETHICAL



(FIMBRA)

& GREEN FUND ADVICE SINCE 1989

GAEIA, 13a Heatong Road, Manchester, M20 4PX

#### WHOLEFOOD EXPRESS

home deliveries throughout London

Fresh organic produce, wholefoods & eco-friendly products delivered to your door.

For new and committed greens, for convenience, special needs etc.

> Order from our special catalogue of over 1000 best selling lines. 071 354 4923 95 Southgate Road, London N1 6JS

Est 5 years

Bulk ans Soil Association discounts

# Buy a tube. It's got nothing in it.



Unlike many toothpastes, Kingfisher isn't packed full of chemicals, artificial whiteners, sweeteners and preservatives.

Just ingredients from natural sources.

Kingfisher is approved by the British Dental Health

Foundation and helps keep teeth and gums clean and healthy.

Kingfisher comes in two delicious flavours, mint with lemon or fennel, and is available now from leading supermarkets and health food shops.

#### **Soil Association Symbol Products**

# Shop organic

This issue sees the start of a new feature celebrating the rich spread of products available with the Soil Association symbol. Shop Organic is part of the Soil Association's organic food marketing campaign to be run throughout 1994, aimed at educating the public and increasing the sales of organic foods.

#### Silbury breakfast cereals

Organic breakfast cereals, with the added bonus that the packaging is recycled and chlorine-free. Three products are being promoted: cocoa Silbies, wheat and oats Honey Hoops



and crunchy rice Cereal Crisps. the Cereal Crisps are salt, sucrose and cluten free.

Available in health and wholefood

#### **Pencarreg Blue Cheese**

An addition to the Original Pencarreg cheese (dubbed the Welsh Brie), this is the first organic soft blue cheese. Welsh Organic Foods' Dougal Campbell, with five years experience of cheese-making in the Alps, has developed this mould ripened blue, which can be eaten young or allowed to ripen for a stronger flavour. On sale in Safewat and Sainsbury.

Contact 0570 422772 for details of prices and mail order.

#### Somerset Cheddar

Two organic dairy farmers in Somerset have linked up with cheesemaker John Alvis at Lyecross Farm to make a mature organic cheddar, to be marketed as Farmers Dairy Company mature farmhouse cheddar.

Available through Waitrose, some Safeways and some wholefood shops.

#### Wholemeal bread

Hobbs House Bakery, of Chipping Sodbury, Bristol have been baking wholemeal loaves for many years and have now been awarded the Soil Association Symbol. Available from wholefood stores in the area, including their own store at 39 High Street, Chipping Sodbury.

#### Mushrooming growth!

Sales of Browncap mushrooms supplied by Chesswood Produce showed a 25% increase over the last year, worth almost £1m. This must be an organic sales growth record!

#### **Danish Dairies**

Marketed under the brand name Cornflower, a range of traditional Danish dairy products (hard cheese, soft blue-veined cheese, brie a nd butter) have the approval of the Soil Association. Some lines are available in some Gateway and Safeway stores and some wholefoo d stores. Details from Nordex Food (UK) Ltd, 0453-542475.

#### Greek bread from Cumbria

The Village Bakery in Melmerby, Penrith, Cumbria uses a retained-heat method of baking in wood-fired brick ovens. Their new special ity breads, Italian Tomato Bread and Greek Olive Bread can be sampled in their shop or restaurant.

Details of mail order supplies from 0768-881515.

#### Baby Organix baby food

Fully organic baby food has been a high-cost import from Germany until recently. Now Dorset-based Organix are marketing Banana Porridge and



Carrot & Coriander for weaning babies at 4 months, and Apple Muesli, Tomato & Basil and Potato & Chive for older babies. No added sugars, milk powder or additives and at least 95% organic ingredients.

Available in many supermarkets. Details from Baby Organix, FREEPOST BH 1336, Poole, Dorset, BH14 8BR

#### **Breakfast cereals**

Two new products from Daves Farm, wholegrain Corn Flakes and whole grain Raisin Bran with added organic bran and sun-dried raisins, and now available from wholefood stores and supermarkets.

#### Also new:

Flour and bran, Bacheldre Watermill, Powys, tel 0588-620489. Cider, Castlings Heath Cottage Cider, Suffolk, tel 0787-210899. Bread, E E Brown, Surrey (sold in

Waitrose), tel 081-688 5310. Flour and cereals, Golspie Mill, Highlands, tel 0408-633278.

Cereals, John Hogarth Ltd, Roxburghshire, tel 0573-224224. Milk, Manor Farm, Dorset, sold as Farmers Dairy Company, tel 0300-341415 or 0342-313778.

Flour and cereals, Muncaster Water Mill, Cumbria, tel 0229-717232. Milk, Rew Valley dairies, Isle of Wight, tel 0983-865555.

#### Farm shops list

A new Farm Shops list, including all Soil Association farmers and growers selling organic produce through their own farm shops, pick -your-own, box schemes, direct delivery, markets and mail order, is now being compiled by the Soil Association.

Send a large (C4) stamped (36p) selfaddressed envelope to the Symbol Department, 86 Colston Street, Bristol BS1 5BB.

Flour, Swaffham Prior Windmill, Cambridgeshire, tel 0638-741009. Bread and baked products, The Breadstore, Bristol, tel 0272-421654.

#### New retailers

Canterbury Wholefoods, Canterbury, Kent, tel 0227-464623. Corner Farm farm shop, Oxfordshire, tel 0865-351736. Drop in the Ocean Retail Ltd. Coventry, tel 0203-225273. Eaglesfield Wholefoods, Norwich, tel 0603-620931. Garlands Organic Farms Shop, Berkshire, tel 0491-671556. Greenlink Organic Foods, Malvern, Worcestershire, tel 0684-576266. Mid-Wales Wholefoods Ltd. Newtown, Powys. tel 0686-624170. Naturally Best Foods, Hampshire, tel 0703-871408. Totnes Health Shop, Devon, tel 0803-862526.

To be featured in Shop Organic, send your product details and press release to Caroline Fitzgibbons, Symbol Department, 86 Colston Street, Bristof BS1 5BB.

## National Food Alliance news

# Two steps forward with the Task Force?

It's not often that public interest organisations get the feeling that the Government actually listens to their comments on a consultation document. It seems, though, that the Nutrition Task Force has incorporated several ideas from the voluntary sector into its future plans.

In responding to the autumn consultation by the Nutrition Task Force (NTF), the NFA was not alone in recommending that the problems of eating healthily on a low income should be given a high priority. Many public interest organisations mentioned this in their replies to the NTF and regular Food Magazine readers will know that these are just some of the problems faced by people with restricted budgets when trying to eat a healthy diet.

- lack of cash for cheaper bulk buys;
- transport problems (no car, and expensive, irregular bus service) for getting heavy shopping have
- no fridge and/or freezer for storing perishable food and cheap, frozen food;
- no microwave or decent cooker;
- few large supermarkets nearby, so less choice from smaller stores;
- higher prices for some 'healthier' versions of standard food.

It's not clear yet exactly what the NTF will be doing to tackle these problems, but the fact that it has acknowledged them, and proposes to set up a small team to tackle the low income issue is very welcome indeed

Another successful proposal by the NFA and others was the need for quantified dietary goals. The 'more fibre' message, for example, is known by almost everyone but does this mean four slices of bread or six?

There are now plans to ask the Committee on the Medical Aspects of Food Policy (COMA) if they can develop precise food targets like these. Unfortunately, until they do, the UK will not see successful campaigns like Australia's 'Five and two are good for you' (five vegetables, two fruits) or America's 'Five (vegetables and fruits) a Day'.

Nutrition labelling is also in limbo. Although the NTF's recognition of its importance is helpful, it seem that little more will be done until the Food Advisory Committee has reported on its investigation into graphic nutrition labelling (ie words, stars, bar charts etc.)

It is also very disappointing, given its recognition of the low income issue, that food pricing has been ignored by the NTF. Why can't whole-meal loaves be on special offer for 29p? Why can't organic vegetables be cheaper than ones with pesticide residues? When will fatty meat have to carry the price premium?

Perhaps it's just too early to expect radical changes like these. In the meanwhile, well over a dozen project teams to tackle each of the priority policies in the NTF's programme are either already working or are in the planning stage.

Although the programme won't be published, officially, until later in the spring, its contents now have the approval of both Virginia Bottomley and Gillian Shephard.

The NFA is delighted to note that a review of food advertising to children remains a priority, along with

- nutrition education in schools,
- guidelines for health education materials.
- guidelines for healthy catering in schools and elsewhere.
- training for caterers.
- reducing fat in meat and other food products.
- promoting vegetables, fruit and starchy foods, and
- integrating nutrition into the NHS.

It is clear that 1994 is going to be a busy year...

#### **New members**

Another two organisations have recently joined the NFA and we welcome them warmly.

The British Heart
Foundation is one of the country's best known charities and leads the field in heart disease research.

# The National Association of Teachers of Home Economics and

**Technology** empowers its members to deliver a quality curriculum to the nation's schoolchildren and students.

National Food Alliance 3rd Floor, 5-11 Worship Street London EC2A 2BH Tel: 071 628 7261

#### Officers

Co-ordinator)

Professor Philip James (President) Geoffrey Cannon (Chairman) Jack Winkler (Treasurer) Jeanette Longfield (Secretary & Co-ordinator) Rachel Townsend (Assistant

This page has been contributed by the National Food Alliance

#### Alms and membership of the NFA

The National Food Alliance is an association of voluntary, professional, health, consumer and other public interest organisations. Its purpose is to develop food and agricusture policy in order to improve the health of the general public, increase knowledge and appreciation of the way in which food is produced and distributed and the effect this can have on human health and the environment.

#### Members of the NFA include:

Action and Information on Sugars
Baby Milk Action
British Dental Association
British Dental Association
British Organic Farmers
Campaign for Beal Ale
Caroline Walker Trust
Children's Society
Christian Aid
Committee on Biotechnology and Food
Common Ground
Community Nutrition Group
Coronary Prevention Group
Council for the Protection of
Rural England
Elm Farm Research Centre
Food Additives Campaign Team

Rural England
Elm Farm Research Centre
Food Additives Campaign Team
Food Commission
Friends of the Earth
Genetics Forum
GMB (Britain's General Union)
Green Network
Henry Doubleday Research Assoc
Institute for European Environmental

Policy, London
McCarrison Society
Maternity Alliance
Netional Association of Teachers of Home
Economics and Technology
National Farmers' Union
National Federation of City Farms
National Federation of Consumer Groups
National Federation of

Women's Institutes
National Forum for Coronary
Heart Disease Prevention
Parents for Safe Food
Pesticides Trust
flural, Agricultural and Albed
Workers' Union (TGWU)
Soil Association
Vegetarian Society
Women's Farming Union
World Cancer Research Fund

#### Observers of the NFA include

British Dietetic Association
British Medical Association
Consumers' Association
Guild of Food Writers
Health Education Authority
Institute of Trading Standards
Administration
National Consumer Council
Royal Society of
Medicine Food and Health Forum
SAFE Aliance
Scottish Consumer Council

Welsh Consumer Council

#### Global news

In the first of a new series of reports from around the world, Tony Webb looks at the food scandals that have been hitting Australia.



# Letter from Australia

t seems that governments only want to learn the lesson one way - the hard way. One would have thought that the UK experience; salmonella in eggs, mad cow disease, listeria and all, would have taught governments that relaxing controls on the food industry is a recipe for disaster. Unfortunately Australia hasn't learnt that lesson and seems headed for a series of food scandals that will hurt even more than in the UK. Over 50 per cent of Australian food is sold overseas, earning some 25 per cent of the country's export revenue.

In the 1980s, pesticide residue contamination in meat caused a near collapse of overseas confidence. This, and a royal commission report which found corruption on a massive scale in the industry, led to a strengthening of food inspection. Since then complacency has returned and the past four years has seen a 30 per cent cut in the number of inspection staff.

In 1992, as if to set itself up for a real crash, the government announced a national programme for marketing its food exports, to Asia in particular as 'clean and green'. The same year saw a barely concealed scandal with meat returned from Korea and Mexico with 'bone taint' — a result of failure to control temperatures, so that meat close to the bone goes off before the meat is frozen. In 1993 a further 30 per cent cut in

inspection services was announced and a major scandal over contaminated beef broke

All over Australia there are cattle and sheep dip sites — areas where, in the past, stock owners would have dug a trench, filled it with water and DDT and run the stock through to prevent ticks and other parasites. The result is contaminated soil and an area where stock should not be grazed. Unfortunately many of these sites are poorly identified. The latest scandal arose because a feedlot at Calliope in Queensland was built over one of these dip sites.

Meat is supposed to be tested for DDT residues at the abattoirs but in July 1993 this testing was handed over to the industry. One abattoir found levels of DDT 12 times the permitted limit but ignored the result and sent samples for further lab analysis. In the meantime it boned and cartoned the meat and divided the potentially contaminated cartons among shipments going to Korea, Taiwan and the USA. It also released some meat to the Australian domestic market. Four days later when the second set of tests came back from the lab confirming the excessive DDT levels, the government inspection service was called in to help recover the meat before it reached the export markets. Nothing was done to locate or recover the meat from the domestic market.

The government reaction to this scandal was also in the classic mode: first deny there is a problem. State health Ministers made statements to the media such as 'hell you can drink DDT and it won't hurt you'. 'the limits are not safety levels', etc. Then under media pressure, the mandatory testing controls were re- established, but only for the export market. Testing for residues in meat for the domestic market remains 'voluntary'. Unfortunately, at least two other abattoirs have been buying meat from the same feedlot, one since February 1993, and had released large quantities onto the domestic market

This is not the only scandal. The Australian growth hormone testing programme was introduced with great fanfare to reassure European consumers that any meat from Australia will comply with the EC (now EU) ban on these hormones. So great was the fanfare that environmental groups in Australia, the USA and presumably Europe, actually thought that Australia had banned growth hormones. Not so. There are nine different hormones permitted. No actual residue testing is done to ensure EC export meat is hormone free. Of the nine hormones, eight cannot be detected by the government inspectors by palpation and the one that can will only be detected if it is inserted behind the cow's ear. What we have is an 'honour' system run by an industry with a history of corruption that provides no confidence the rules will be observed.

The government is pushing the idea of 'quality assurance' where industry takes over almost all the inspection functions. In the second 'trial' of this system the company was allowed to rewrite the regulations governing hat water sterilization temperatures. Then it failed to meet even these lower temperature standards but was nevertheless 'approved' by the government inspection service management running the trial.

Still to come are cases involving the abattoir where some 300 lambs were slaughtered but around 15,000 carcasses were branded out as 'lamb'; and the case where domestic meat was sold in export cartons. Scandals outside the meat area are

also brewing with leaks about failures to adequately sterilise baby food, grease in canned fruit, and unacceptable hygiene controls in the dairy industry.

> hat we have here is a crude and simple case of a government

deregulation policy moving to give industry what it is demanding - the complete privatisation of food inspection services. The result will be more food scandals, which could increase in frequency and seriousness as workers in the industry challenge the iob blackmail that encourages them to cover-up, turn a blind eye and keep the production line rolling. Workers and their families are consumers too and more and more are starting to blow the whistle on unacceptable practices. The mainstream consumer organisations are also asking hard questions about the blatant double standards, with one set of rules for the export food industry and much lower standards and even less enforcement for the domestic market.

Opposing these deregulatory trends has emerged an interesting alliance of consumer, farmer and trade union organisations calling for a comprehensive national food inspection system. This will integrate the activities of the Commonwealth, state and local governments and ensure enforcement of common standards for all food, whether for the export market or domestic consumption. The Alliance also argues for a national policy of setting and enforcing the highest practicable standards. The end result of these emerging problems may well be a cleaner and greener Australian food industry. The crucial question is how much damage will be done in the short term before the government does the necessary U-turn and puts back the controls and the independent professional inspection service which is needed.

■ Tony Webb is the Coordinator of the Australian Food Policy Alliance which has the backing of the ACTU and major Australian food industry unions; several state, national and growers organisations and the Australian Consumers Association.

#### Cultivating knowledge – genetic diversity, farmer experimentation and crop research

Kojo Amanor and others, Intermediate Technology Publications, 103 Southampton Row, London WC1B 4HH. 1993, ISBN 1 85339 2049, £22.50 hardback £8.95 paperback

For 99 per cent of the time that we have practised agriculture there were no specialised plant breeders. They are a modern phenomen on, and although they have been credited with hoge increases in productivity, it is increasingly recognised that the costs in terms of loss of variety, loss of resistance to pests and diseases, and loss of hardiness to climatic variations is so high that most current plant breeding programmes are not sustainable.

In their blinkered dash for short term productivity and profit, our 'advanced' plant breeders have managed to lose vital chunks of our genetic inheritance on the way. This has recently resulted in frantic searches for the lost genes in those traditional varieties that still survive mainly in the third world. Thus the future of our staple crops, such as wheat, maize and potatoes, is dependent on introducing genetic material that has been conserved by the intelligent and far-sighted practices of poor peasants. Of course the 'advanced' seed breeders - most of whom are now transnational corporations - have no intention of paying third world peasants for this genetic material that is so vital to the future of our major crops. Both Gatt and the Biodiversity Convention were careful to define peasant varieties as a free resource for the taking, whilst at the same time privatising anything produced by 'advanced' seed breeders and protecting it with legislation on 'intellectual property rights'

Peasant farmers have sometimes bred seeds for their own use but mainly they have separately harvested their best plants to use as seed the next year. This had the effect of accelerating the process of natural selection so that there were always far more varieties of cultivated plants than of wild plants. Annual Seed Fairs were a traditional method of exchanging varieties; farmers with similar land and conditions would swap varieties and use their new accessions to increase the diversity in their crops.

The history of seed breeding follows the fable of the tortoise and the hare. Because third world peasants have managed not only to sustain but to increase the biodiversity of their crops, whilst agribusiness has managed to lose so much of its biodiversity that it has become genetically unsustainable, there is now a newfound interest in the farming practices of supposedly 'simple peasants'. However, it requires a certain humility, and a willingness to acknowledge past arrogance in order to learn things from peasants.

This book with contributions from 30 authors shows that changing our traditional imperialist attitudes does not come easily. Some of the chapters are by bumptious first world academics who clearly need to learn a thing or two, but insist instead on pontificating.

They thus make themselves at best ridiculous, at worse unwitting criminals. A guarter of the book is about 'building linkages' between Northern 'scientific' seed breeders and Southern peasants, when all the evidence suggests that one is the aggressor and the other is the victim. These academics seem unable to understand that peasants explain their practices in terms of local traditions, handed down orally. Although they do not give rational, scientific reasons for what they do, it is in fact a subtle distillation of generations of trial and error. What can be more scientific than that?

One of the best chapters is by Andrew Mushita on the work he is doing with peasant farmers on marginal land in Zimbabwe. There they are conserving traditional grain varieties despite constant official pressure to sow modern varieties that actually perform worse under such conditions.

Monica Opole contributes a fine chapter on sustaining varieties in Kenya, though I think that she is too kind to agricultural science, which, she claims, 'still operates within a top down or trickle down approach where a few specialists are custodians who control and own the scientific knowledge and use intermediaries such as extension workers to pass on information to targeted end-users'.

The last chapter comes, appropriately enough, from Pat Mooney, who started the modern debate on biodiversity with his Seeds of the Earth back in 1979. He writes that Third World farmers could and should take pride in their contribution to global agriculture. In principle, there is no reason why the North should not benefit. The problem arises when the commercial value flowing North is both not acknowledged and not compensated. The situation is seriously aggravated when Northern governments allow the patenting of material wholly or partially derived from farmers' varieties. As private companies move into the third World seed markets, farmers are finding themselves paying for the end-product of their own genius. The North is becoming a huge "klepto-monopoly", taking freely-given germ plasm from the South and winning patenting monopolies in the North.

**Robin Jenkins** 

## Food legislation of the UK – a concise guide

D J Jukes Butterworth-Heinemann. Linacre House, Jordan Hill, Oxford OX2 8DP. 1993, ISBN 0-7506-1175-8, £18.95 paperback.

Lancashire cheese can be 40 per cent water. Orange and barley squash can have as little as 1.5 per cent fruit content. Tomato ketchup has dropped off the list of standards – it need no longer have even a minimum of six per cent tomatoes.

This one book, in its earlier editions, has been the one that always goes missing from the Food Commission's library. It offers in a single, well-organised volume the complete UK technical and legislative controls concerning food and food processing.

Or nearly complete. The problem is that the rules keep changing, with UK regulations and European directives, in draft and final forms, filling up whole filing cabinets. Jukes should be congratulated, but the shelf-life of the book needs to be reviewed. Perhaps a loose-leaf version, with replaceable and upgradeable parts would offer a better service.

Or perhaps the whole enterprise should shortly be abandoned. With the signing of GATT the standards that the UK holds dear can be declared an illegal barrier to trade. Any product which is permitted elsewhere in the world can be freely imported here, making our 'local' rules irrelevant. Until that day, though, Jukes is well worth having on one's shelf.

Tim Lobstein

#### Biodynamic agriculture – Rudolf Steiner's ideas in practice

Willy Schilthuis, (Floris Books 15 Harrison Gardens, Edinburgh EH11 1SH) ISBN 0-86315-178-7, £4.99.

A concise and fully illustrated introduction to the principles and practice of biodynamic agriculture, an approach in which the farmer or gardener respects and works with the earth. The earth is seen as a living organism and biodynamic growing is a holistic approach working in harmony with the environment.

#### The ethical consumer guide to everyday shopping

(Ethical Consumer Books, 16 Nicholas Street, Manchester M1 4EJ) ISBN 1-898179-00-X, £7.99.

What do you buy when there is no organic alternative? This is a useful book, however deep or broad your ethical conscience. Once you have got to grips with the format, which is the same as the Ethical Consumer magazine, it will enable you to shop positively.

#### How to escape the rat race

Robert Vernon (Mountain Publishing, Ardgay, Sutherland IV24 3DJ) ISBN 0-9520885-0-9, £8.95.

Many people dream of getting away from it all but too often it remains just a dream. In Robert Vernon's words 'We had reached a point where it needed more courage to face the prospect of continuing in the rat race than to quietly slip away.' This book looks at the options, the pros and cons and will help to define the possible and impossible. Full of practical advice and useful addresses.

#### Farming in nature's image

Judith Soule and Jon Piper (Island Press, Suite 300, 1718 Connecticut Avenue NW, Washington DC 20009) ISBN 0-933280-88-2, £15-95.

From the pioneering work of the nation's foremost sustainable agriculture research organisation (the Land Institute of America) comes a bold new strategy ... an innovative agricultural model in which farms mimic ecosystems. With research results and case studies , the authors address the growing need and varied applications for ecologically sustainable farming. With a foreword by Wes Jackson.

#### From the ground up – rethinking industrial agriculture

Peter Goering, Helena Norberg-Hodge and John Page Zed Press. 57 Caledonian Road, London N1 9BU. 1993, ISBN 1 85649 224 9, £29.95 hardback £10.95 paperback,

A succinct summary of all that is wrong with industrial agriculture. The major issues are addressed and a wealth of literature summarised.

Women in Agriculture 1994 International Conference – the first ever to focus on women and land. To be held July 1 to July 3 in Melbourne, Australia. Details (051) 47 1533 (tel). (051) 47 3078 (fax).

Ecosystem Health and Medicine 1st International Symposium, June 19-23, Ottawa, Ontario, Canada. Details (519) 767-5000 (tel), (519) 767-0758 (fax).

#### LOCAL EVENTS

Local groups are not only gardeners swapping stories about comfrey extract and slug traps, but are beekeepers, bottle recyclers and holistic life-stylers too! Their meetings are keenly recommended. Annabel Milln, the Soils Association local groups organiser, picks a selection of the events not far from you...

West Norfolk Feb 24: joint meeting with Friends of the Earth. Talk by Steve Jenkins of borough council environment department on recycling and compost schemes. September: proposed fungi hunt towards the end of the month.

Suffolk-Ipswich March 24: a talk on keeping chickens in the garden (AGM first). May 24: a talk on permaculture. Avon Organic Group March 16: identifying insects with Nick Fowler, entomologist from Bath University. Bath Organic Group March 24: beekeeping and honey, to include honey tasting and sales table.

West Somerset Organic Group June 15: the garden pond.

Liverpool Organic Gardeners March 15: work of the Lancashire Wildlife Trust. May 17: Recycling on Merseyside.

Wirral Organic Group May 3: remedial therapy. June 7: wildflower walk.

September 6: bees and wasps.

West Yorkshire and Kirklees

West Yorkshire and Kirklees September 3: Fifth Annual Organic Show.

Horsham Organic Growers May 5: uses of herbs, by Tina Stapley, the author of Herbwise Naturally.

Chilterns and Oxfordshire Organic Group February 15: a talk on Tambota Nature Reserve, Peru. March 10: wine making. March 15: talk on sustainable agriculture in Thailand.

To contact a local group phone the Soil Association. ASSISTANT Secretary/Fundraiser required NOW. Suit non-smoker, energetic person with flexible nature, sense of humour, genuine interest in sustainable lifestyles. S/he could live locally or 'live in' with other staff. Would be required to start fundraising programme for educational charitable trust teaching organic small-holding and related skills. Modest remuneration available. Hours nego tiable. Contact: Sarah Macdairmid, The Yarner Trust, Well Farm, Welcombe, Bideford, Devon EX39 6HG. Tel 0288 331270.

FOREST OF DEAN, cosy cottage sleeps 4-6. Open fire, Rayburn, TV. Pub and RSPB reserve adjacent. Beautiful forest walks and cycling. Contact: Martine 0272 556095 evenings.

DERELICT organic smallholding for sale, East Yorkshire. Lots of buildings. Planning permission for 4-bedroom house. Three acres land. Further details: 0904-640949 evenings. £50,000 o.n.o.

FRUIT CROPS, nut crops, tree crops: read Agroforestry News, £16 (£12 unwaged) for 4 issues. Many other publications available. Agroforestry Research Trust, 17 Arden Drive, Chelston, Torquay, Devon TQ2 6DZ.

EXCITING NEW organic horticultural project, experimenting with new methods aimed at real sustainability and minimum disturbance of nature, needs another full-time worker. We are a workers' co-op. If you are interested, please write to: 'Growing Green', Low Walworth Market Garden, Walworth, Darlington, Co. Durham, D12 2NA.

FOR SALE: 28 acre smallholding near Cenarth, Cardigan. Modern 4 bedroom house, extensive range of buildings and barns. Highly productive organically managed pasture, 4 acres woodland, stream, quarry. Beautiful situation in rain shadow, sea view. Suckler cows and friendly sheep available if required. Ring 0239 710020 for details.

WWOOF (Working Weekends on Organic Farms), 22 years a shoestring organisation, is looking for a rural base with some land. All arrangements considered. Write 19 Bradford Road, Lewes, East Sussex, BN7 1RB. Tel: 0273 476286.

GLASTONBURY PERMACULTURE CAMP. April 6-10, Design/construct/maintain ponds, ditches, willow house, compost loos, raised beds, forest garden etc. £80. Contact Sam Hermitage, Box 344, London SE19 1EQ, 0836-337 245.

SUNNY Haute-Provence. Comfortable cottages/Bed & Breakfast. Organic cuisine available. All the year round. Oruithology. J-C Genin, 'Chante l'Oiseau', Sigonce, 04300 Forcalquier, France. Tel 92-75-24-35.

FARM TO LET or possibly for sale, Leicestershire. 300 acres Grade 3 land, at present farmed conventionally arable/grass. Traditional 5 bedroom farmhouse and buildings. Would need to convert to organic system & this could be reflected in the rent. Joanna Herbert-Stepney 0252 850 253.

SOWING AND PLANTING Calendar. Working with the Stars 1994' by Maria Thun (19th ed.) Day-to-day advice for farmers/gardeners/beekeepers. New research reports. £3.90 plus 80p P&P (UK) from Soil Association or Lanthorn Press, Peredur, East Grinstead, Sussex. Also Work on the Land and the Constellations', practical guide for the application of her research results (same price).

MARKETING MANAGER wanted to expand established organic foods outlet. Enthusiasm, commitment and drive needed. Excellent potential. Lovely area. Accommodation available. Contact Di Shouls, 0949 20196.

#### backbites

#### **Bottle battles**

Toddlers' teeth, badly affected by drinking sweet liquids from a haby bottle, have been the subject of food campaigners from before the days when Esther Rantzen's That's Life first did the dirty on Defrosa.

Since then, parents in both the UK and Germany have been taking the makers of baby drinks to court to win compensation for their tiny tots. Ribena have settled out of court, although further cases are in the pipeline. Milupa lost a case in Germany and have increased the size of the warnings on their drinks. They have also withdrawn all their plastic bottles in Germany and only sell glass ones (on the grounds that the weight ensures the bottle falls out the mouth when the baby sleeps). Furthermore, the bottles are painted with warnings not to use sweetened liquids.

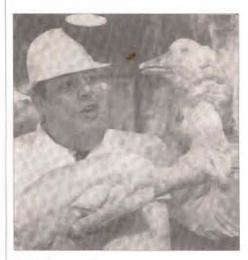
Contrast this with the USA. Action and Information on Sugars spokesperson Jack Winkler popped into a New York drug store to find that advertising space was being sold on baby bottles. Who had their logo prominently engraved? Pensi-

#### Soames on sex

Food Minister Nicholas Soames was invited to speak at the Laurent-Perrier awards event for wild game conservation at the height of his government's discomfort over their Back to Basics moral message.

'I'll tell you exactly what Back to Basics means,' he boomed. 'It's that wonderful combination champagne, shooting and conservat ion. If we had a bit more of those and a bit less of the other we would all be in better shape.

Some Tory MPs might get into better shape, but it's unlikely Soames would. Or does getting too much of 'the other' explain Soames' unusually striking figure? Someone should tell the tabloid press.



Nicholas Soames and Christmas goose (right)

#### Soapy cheese

First came programme sponsors, now successful series are spawning their own brands. Last autumn Golden Wonder launched a really responsible product - Big Breakfast crisps - with Coca Cola Schweppes following hot on their heels with the Gladiators range of soft drinks. Now Dairy Crest has launched Emmerdale cheese - named after that mythical part of Yorkshire Television studios. The Emmerdale name carries a gentle, rural imagery which suggests health, vitality and fitness,' says a Dairy Crest marketing man.





#### Turning mutton into lamb

SCOTS CHALLENGE Soames is not the only minister

Carmyllie is reputed to enjoy a high calorie intake,

and to have demanded an ash tray for his desk in a

non-smoking department. His job? Launching the new healthy eating initiatives as Scottish Minister

for Health

Office the Right Honourable the Lord Fraser of

with a challenging body-mass index. At the Scottish

The meat trades press is suddenly full of adverts for machines which tenderise meat. Why?

Traditionally, quality meat is hung but it's expensive, partly because of the weight loss due to drip. And injecting animals before slaughter with meat tenderising enzymes has now been outlawed because of its cruelty. Now tenderising machines, which cut the connective tissue and sinews of meat with closely s paced blades, offer butchers a legal and cheap way of improving the 'quality' of meat. And importantly for the butcher it leaves no tell tale signs so unsuspecting customers will be happy to pay over the odds.

#### One bull short

Red faces at MAFF when beef farmers complained about their suckler premium payments being less than expected. It turned out that the forms to claim the premium asked farmers to number their cattle from 1-40 on the first page and 40-50 on the next. Beef farmers couldn't work out why their list kept falling one short of their actual stock number till the error was spotted.

Watching TV lowers your metabolic rate (see page 15). Interesting possibilities here, thought a way at the Australian Consumers Association . . .

