

# The FOOD MAGAZINE

*Campaigning for safer, healthier food for all*

Published by The Food Commission. ISSN 0953-5047

Issue 82 ♦ July/September 2008 ♦ £4.95

## Superbugs and food

**T**he role of food in the spread of antibiotic resistant infections is a controversial area. It is generally accepted that farm antibiotic use contributes to the problem of antibiotic resistance in food poisoning bacteria, but its role in the development of the well known superbugs is much more controversial and few British scientists are willing to speak about this openly.

About half of all antibiotics used in the UK each year are given to farm animals, 80% mixed into their feed or water. A recent industry survey of UK consumers, however, found a low level of concern. Of 1,000 adults questioned, only 58% were aware that farm animals are treated with

medicines and 50% were unaware that animals are often given antibiotics and other drugs to prevent, rather than to treat disease.

Antibiotics are needed to save lives when infections are serious or immune systems are compromised. But, if we continue to use them unwisely in humans, farm animals or pets, the day will soon come when we are once again unable to treat many diseases and infections.

Richard Young, organic farmer and policy adviser to the Soil Association, takes a critical look at the role our food may play in the spread of antibiotic resistant infections.

■ See pages 4-5



**Meat production from intensive farming often requires regular use of antibiotics, a practice which is implicated in the spread of antibiotic resistant infections.**



## Plastic food waste chokes our seas

The sea occupies a curious position in our food system in that we both eat from it and use it as a bin.

Plastic waste from our food is killing marine wildlife and new research suggests that plastics could be contributing to the contamination of seafood such as shellfish. Campaigners say more needs to be done to promote reduction, reuse and recycling.

Anna Glayzer reports from a beach near Weston-super-Mare, where she joins Marine Conservation Society volunteers on a clean-up.

See pages 10-11

## Not an acceptable standard

**A** Norwegian fish farming expert came to visit our offices recently, and we got to discussing the standard of living while we walked through the local market to the tube station. Norway has become very rich from its oil wealth and he happened to mention that his countrymen are not impressed with the standard of life here in the UK. He was not being rude, it was more I detected a kind of pity sent our way. He then said what richer people often do – that a bit less in the way of material wealth might improve the character and mood of his nation folk. Yes, the old, 'money doesn't make you happy' line.

I looked around and tried to see my world through his eyes – a typical London street – dirty, crowded, loud, smelly and full of a boggling mix of all sorts of people. It is certainly a world I find enough to complain about, and one I want to change. There is no doubt these dirty streets do little to disguise a wealth and depth of poverty here in the UK – but somehow I do not think that is what he was talking about.

In the global game of ruling class lifestyle one-up-manship, perhaps Britain is falling behind. Ask yourself – could it be that your car is smaller than your Norwegian neighbour's, your garden smaller, your holidays less exotic, your neighbourhood more full of the great unwashed? Perhaps it is time to do something about this grievous state of affairs.

But where do we start? How about shifting our collective attentions to the other end of the lifestyle scale – and to an absolutely marvellous and essential piece of research from the Joseph Rowntree Foundation – *A minimum income standard for Britain*. The report attempts to answer the question for the UK, "What level of income is needed to allow a minimum acceptable standard of living?"

At the presentation of the research, the audience sat in stunned silence as the

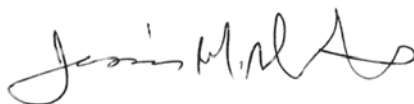
authors described the conditions of poverty in the UK. Researchers described in minute detail the work they had gone into, and the questions they had asked of ordinary citizens, to establish income standards for an acceptable life.

For food: Should people living in poverty be able to eat out occasionally? Should they be able to have one frying pan, or two? How often should they be able to have friends over for dinner? Must they buy only value brands? How often should they expect to replace forks, or knives? Presuming they wear socks when walking out to shop – what quality of sock should they be able to afford, how many pairs might they need at any one time? And, so on.

I hope you have joined the audience in silent disbelief – broken, in our case, when someone noted how unbelievable it is that we still need to ask such questions, and that, in a country as wealthy as ours, we have still not moved beyond this elucidation of the minimally acceptable. Are there really people who must live this way? Oh yes, millions of them, and this standard is a significant improvement.

I hope the research will silence the bleaters who say money does not make you happy – perhaps not, but it is a fairly reasonable place to start. Unless, perhaps, you think you got where you are out of pure merit alone?

Jessica Mitchell, Editor



■ Bradshaw, J. et al (2008), *A minimum income standard for Britain*, JRF. See page 3.



## Inside *The Food Magazine*

### News

Fewer than one in 100 eat healthily .....	1
Warning labels for coloured foods .....	1
EC to boost kids' fruit .....	1
Investing in local food .....	2
Campaigners say Nestlé hired spy .....	2
Salt levels fall, but industry must do more .....	2
Flora marketing using schools .....	3
UK poorest need higher incomes .....	3

### Features

Superbugs and food .....	4-5
Which fast food meals are healthiest?	
It is anyone's guess! .....	6-7
Let the buyer beware .....	8-9
Food security: leave it to the market? .....	9
Plastic food waste chokes our seas .....	10-11
Pesticides on a plate .....	12-13
FSA may weaken ban on kids' TV ads .....	14-15
Expanding the baby milk market .....	16-17
Healthier school meals .....	17

### Advertising

Healthy for life, Nestlé makes spurious	
'3-a-day' wholegrain claim, KFC cruelty ....	18

### Books

Eat your heart out, Student cookbook .....	19
--	----

### Research

Price rises mean poorer diets .....	20
-------------------------------------	----

<b>Letters</b> .....	21
----------------------	----

<b>Subscriptions</b> .....	21
----------------------------	----

<b>Backbites</b> .....	22
------------------------	----

### Contributors

Hannah Brinsden, Helen Crawley, Anna Glayzer, Jane Landon, Tim Lobstein, Jessica Mitchell, Nick Mole, Ian Tokelove, Richard Young, Bee Wilson

*The Food Magazine* is published quarterly by The Food Commission, a national, not-for-profit organisation campaigning for the right to safe, wholesome food. The magazine is totally funded by subscriptions and donations, allowing us to be completely independent, taking no subsidy from the food industry or advertising. We aim to provide independently researched information on the food we eat to ensure good quality food for all.

**Director/Editor:** Jessica Mitchell

**Communications Manager:** Ian Tokelove

**Subscriptions Manager:** Mel Nieuwenhuys

**Additives Project Coordinator:** Anna Glayzer

**Cartoons:** Ben Nash, Paul Lowe, Sam Findlay

### Food Commission websites

Food Commission: [www.foodcomm.org.uk](http://www.foodcomm.org.uk)

Action on Additives: [www.actiononadditives.com](http://www.actiononadditives.com)

Chew on this website: [www.chewonthis.org.uk](http://www.chewonthis.org.uk)

**Trustees and Advisors:** Joanna Blythman, Dr Eric Brunner, Peta Cottey, Prof Michael Crawford, Tim Finney, Robin Jenkins, Dr Mike Joffe, Peter Koenig, Jane Landon, Prof Tim Lang, Dr Tim Lobstein, Dr Alan Long, Jeanette Longfield, Diane McCrea, Prof Erik Millstone, James Postgate, Dr Mike Rayner, Prof Aubrey Sheiham, Hugh Warwick, Simon Wright.

■ Issue 82 of *The Food Magazine* July/September 2008. ISSN 0953-5047

■ Typesetting and design by Ian Tokelove of The Food Commission. Printed on recycled paper by RapSpiderweb, [www.rapspiderweb.com](http://www.rapspiderweb.com)

■ Retail distribution (sale or return) by Central Books, 99 Wallis Road, London E9 5LN. 0845 458 9911. [www.centralbooks.com](http://www.centralbooks.com)

■ Unless otherwise indicated all items are copyright © The Food Commission (UK) Ltd 2008 and are not to be reproduced without written permission.

■ The views expressed in this magazine are not necessarily those of The Food Commission.

**Advertising:** *The Food Magazine* does not accept commercial advertising. Loose inserts are accepted subject to approval – please contact Ian Tokelove at The Food Commission for details. Call 020 7837 2250 or email [ian@foodcomm.org.uk](mailto:ian@foodcomm.org.uk)

# Fewer than one in 100 eat healthily

First the good news: as the government has been keen to tell us, there have been significant gains in improving the nation's diet. The survey of adult diets undertaken at the turn of the millennium showed a decline in the numbers eating too much fat, a reduction in average salt intake, and more people consuming at least three portions of fruit and vegetables, compared with earlier surveys.

But, a new analysis of the same data shows that this rosy picture should be qualified by a more sobering fact. Just eight people per thousand were actually eating a healthy diet.

The figures, to be published in *Proceedings of the Nutrition Society* this summer, probe the more interesting question of how many people were eating diets that meet the recommended

targets – not one target at a time, but all of the targets simultaneously.

The answer is that four men in a thousand were meeting the five most commonly cited targets recommended by the World Health Organization (see table). Women were doing a little better, with twelve in every thousand meeting the five targets. Overall, a healthy diet was being eaten by fewer than eight per thousand adults, which is less than 1% of the population.

Children appear to be showing even lower figures for meeting the targets. A recent survey of the diets of 1,400 children in Scotland found only 10% of children were meeting the target for sugar, and fewer than 2% were meeting just two targets – for sugar and saturated fat – simultaneously.

## Proportion of UK adults eating healthy diets

	Recommended target	Men	Women
Non Milk Extrinsic sugars	less than 10% energy	32%	48%
Total fat	less than 30% energy	23%	28%
Saturated fat	less than 10% energy	17%	19%
Fruit and vegetables	more than 400g/day	10%	14%
Sodium	less than 2,000mg/day	8%	43%
All at once...		0.4%	1.2%

Source: NDNS 2000-2001, re-analysed in *Proceedings of the Nutrition Society*, 67 (3), 2008.

# Warning labels for coloured foods

On 8th July 2008, the European Parliament voted in favour of labelling foods containing any of the six food colours E110, E104, E122, E129, E102 and E124 with the words, "may have an adverse effect on activity and attention in children."

The provision was added following evidence generated by research commissioned by the UK Food Standards Agency, published in September 2007. The research, known as the 'Southampton Study' showed that a combination of six food colours and one preservative increased hyperactivity in a cross section of children, not just those who had been previously diagnosed with ADHD.

Foods sold in the EU, containing any of the six dyes, will have to carry the warning within eighteen months of the official publication of the law, expected within the next few months. Any food placed on the market before the eighteen month deadline will be allowed to stay on the shelf until the sell-by date has been reached.

The decision, which follows months of campaigning by The Food Commission and The Danish Consumer Council, can be viewed as

a gain for the consumer. It is likely that many manufacturers will be deterred from using these ingredients.

On the other hand, if there is enough evidence to issue a warning, why not take the burden off parents and simply ban these colours? As we have argued on numerous occasions, they serve no useful purpose in our food. There is a risk that the warning will be just one more thing parents are expected to look out for, and will do little to address the problem of foods eaten outside the home where no label is available to check.

Meanwhile, in the UK, the Food Standards Agency still intends to follow up on the voluntary ban that was agreed upon at their April 2008 Board Meeting. The FSA can officially issue only advice to the government, however, and at the time of going to press they were still awaiting ministerial clearance to go ahead with the voluntary ban. The Agency has not yet decided what form of action it will take to encourage food manufacturers to remove the six colours from food by the end of 2009.

# EC to boost kids' fruit

The European Commission has launched a scheme to provide 90 million Euro (about £75m) to help schools purchase and distribute fresh fruit and vegetables.

The Commission's Agriculture and Rural Development Directorate announced this July that it will stump up the cash – to be repeated annually – provided that governments provide equivalent matching funds.

The scheme marks a significant change of approach for the Commission, whose agriculture department has for many years resisted any acceptance that their policies may affect people's diets. The Common Agricultural Policy (CAP) has long been criticised by public health campaigners for its subsidy of meat, dairy, oil and sugar production (not to mention tobacco); its destruction of orchards and its payment to farmers to plough up unprofitable fruit and vegetable crops.

A previous fruit scheme for schools was dependent on offers of surplus fruit from growers, coinciding with schools being able to receive the produce in large pallet loads. It was part of CAP's disposal schemes for products which were not fetching good market prices and was matched by the disposal of surplus beef and butter in quantities that exceeded recommended saturated fat intakes for the unfortunate recipients.

Last year the CAP review indicated a change of heart and a new recognition of responsibilities for shaping the regions' food supplies and health. The review accepted the case for a School Fruit Scheme, and commissioner Mariann Fischer Bohl announced the new policy.

Now, the Commission's Agriculture Directorate has seen the value of linking their activities to healthy eating and to children, and their website gives no hint that there was ever any doubt of it.

■ For details, see [http://ec.europa.eu/agriculture/markets/fruitveg/sfs/index\\_en.htm](http://ec.europa.eu/agriculture/markets/fruitveg/sfs/index_en.htm)





# Investing in local food

Unicorn Grocery, in south Manchester, has raised £140,000 through selling loan stock to customers. The workers' cooperative, which sells organic wholefoods, is using the money to buy a plot of farm land to grow fruit and vegetables for sale from the shop. Recent winners of *The Observer* Food and Drink Awards 'Best Independent Local Shop,' Unicorn is something of a success story, growing from four staff members to fifty in twelve years of trading. Customers' cash will be paid back in five years, with interest paid in the meantime.

Rob Alderson, who has been co-ordinating the land buying venture, describes the main purpose of the investment as, "ensuring a steady supply of local, organic produce for the long term. Fuel prices are rising, oil is now at \$140 dollars a barrel, we just don't know what will happen. We want to help ensure local food supplies and also increase the percentage of local produce on sale in our shop." Unicorn has had a bid accepted on a site just 14 miles away in Cheshire.

The land will be rented to a new organic growing business which will exclusively supply



**Customers at Unicorn Grocery are investing in a new project to buy local land to grow fruit and vegetables for the shop. Photo: Anna Glayzer.**

Unicorn. The grower selected will need to be an ethical trader, for example, ensuring the living wage for workers. Alderson says, "We have just started to advertise for a grower. We think it is quite an attractive prospect in an industry that's still hard to make money in."

■ **Unicorn is still trying to raise additional funds for the venture. If you are interested in buying loan stock, contact [kellie@unicorn-grocery.co.uk](mailto:kellie@unicorn-grocery.co.uk)**

## Salt levels fall, but industry needs to do more

Following work with industry, and consumers (including The Food Commission's 'Eat less salt' project), the Food Standards Agency (FSA) says that average, daily, salt consumption in the UK has fallen from 9.5 grams (g) to 8.6g since the year 2000. It is estimated that the reduction will save 6,000 lives a year, along with £2.7 billion in health costs.

But, the reduction still falls some way short of the government's target of a 6g daily maximum for adults. In response, the FSA has decided to review its work with industry – on getting manufacturers to reduce the levels of salt in products they make. It wants to set more challenging targets – to get faster and bigger reductions – and has opened this out to consultation through October.

The Salt Association has called the suggested new targets a, "nanny-state blanket approach," and questions the whole evidence-base on the negative effects of salt consumption and health. However, the FSA is clear that decreased consumption has beneficial effects.

The Food Commission would welcome tougher targets and would like to see naming and shaming of companies that lag behind in meeting these. We would like to see compulsory traffic light labelling on packaged foods, and clear information at point of sale for foods eaten out so consumers have the information they need to choose lower salt foods if they wish to.

## Campaigners say Nestlé hired spy

An anti-globalisation campaign group has lodged a complaint with Swiss authorities and asked them to investigate the Swiss food and drinks giant Nestlé for allegedly hiring a spy to infiltrate the group.

A Swiss section of the group Attac has filed the legal complaint in Vaud canton after learning that an employee of Securitas AG private security company joined Attac and attended private meetings in 2003 and 2004. The meetings were part of a research project that culminated in the publication of a book, *Attac against the Nestlé Empire*, which criticised the company's position on trade unions, genetic engineering and water privatisation.

Meanwhile, a row has broken out in the UK parliament over the close links between Nestlé and a Department of Health ministerial aide, MP Rosie Cooper. She has been awarded an 'Industry and Parliament Trust' fellowship – which means she can receive a number of perks from industry channelled through a charity and not declare them on the Parliamentary register of interests. Last February, Nestlé took Cooper on an all-expenses-paid trip to South Africa, worth some £7,500.

Mike Brady, campaigns and networking coordinator at Baby Milk Action, said, "Time and again we see Nestlé trying to ingratiate itself with health workers and policymakers through gifts, free trips, sponsorship and so-called partnerships. Surely the government should not look to companies to fund and organise trips such as this. If there is a legitimate public interest in fact-finding in South Africa, it should be publicly funded."

## Nestlé does its best to woo the media

*The Food Magazine* recently refused an invite from Nestlé to join them at the BBC Good Food Show for the finals of their Toque d'or catering competition. And, Dr. Miriam Stoppard took health journalists on an all expenses paid trip to Switzerland for a briefing from Nestlé in March.

## Healthy packed lunches

Fortunately for teachers, there is a way they can respond to education minister Ed Balls' call for schools to advise parents on the contents of their children's packed lunch boxes.

A website offering a programme for schools to follow to improve the nutritional quality of children's packed lunches launched recently. The highlight of the system allows schools to download healthy packed lunch leaflets straight from the web.

Schools make the leaflets their own, with the school's name, logo and pictures. They can also choose options to match their own school food policies, choose food types in keeping with their community, and finally, print the leaflets out in 16 (and soon to be more) different languages.

■ [www.healthylunch.org.uk](http://www.healthylunch.org.uk)



# Flora using schools as a marketing tool

Flora is targeting schools in its latest campaign to boost sales. Parents of school children are being recruited to collect tokens which can be exchanged for cooking equipment for use in children's lessons. Lesson plans and recipes are provided free by Flora, and whilst Flora assure us there is, "no branding anywhere in the school or that children can see," their 'Cooking with Schools' logo, along with a character called 'Seeds,' appear frequently on the materials which the children work with. Banners on the school gates also advertise Flora and the 'Cooking with Schools' campaign.

In the past, companies such as Cadbury and Walkers have been rightly criticised for running such 'token' schemes in schools and encouraging the excessive consumption of junk food. Whilst children (and adults) may have been easily persuaded to eat extra chocolate and crisps, they are not likely to be clamouring for an extra helping of Flora – but that is not the point of this campaign. Schools are encouraged to write to parents, telling them, "We hope you

are able to support us with our collection and if friends, neighbours, grandparents, uncles, aunts and carers were to help too, our funds would grow even bigger because there's no limit to the amount of equipment we can claim for the school." If so many people switch to purchasing Flora, the company's funds will certainly grow bigger, but what's really in it for the schools which take part?

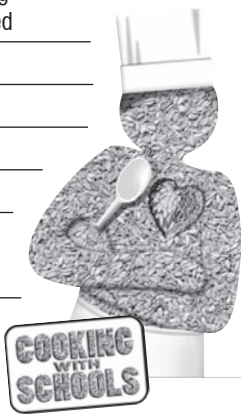
A typical 500g tub of spread has only two tokens available on it, which according to Flora are worth 40p. A quick look at the Flora website shows that an awful lot of Flora will have to be purchased if schools are to benefit from this scheme (see table below).

The government has actively encouraged industry to provide educational resources for our children and companies like Flora are quick to take advantage of the promotional opportunities. The company should make a handsome profit, as schools encourage parents to hassle their friends and relatives into buying Flora products.

## The price of Flora's 'Cooking with Schools' promotion

Equipment	High street cost*	Cost of purchasing Flora**	No of 500g tubs needed
Wooden spoon	£0.50	£2.23	1.5
Small mixing bowl	£2.99	£5.96	4
Whisk	£1.99	£17.13	11.5
Measuring jug	£2.49	£14.15	9.5
Rolling pin	£1.49	£22.35	15
Saucepan	£8.99	£30.54	20.5

\* Based on price of Sainsbury's cookware in London outlet. \*\* Based on purchase of regular, 500g packs of Flora at £1.49 each with two tokens. Note: Token values obtained from <http://cws.florahearts.co.uk/>, website does not give detailed information on specifications of kitchen equipment so price comparisons are estimates.



## Food Commission news

A fantastic thanks to all of you who made donations in response to our letter! We raised £3,000 from more than 100 donations, and some of you have set up direct debits so you can keep on giving. Your donations will be put to good use – we have already produced educational additives packs that we plan to make available to primary and secondary schools; we are planning workshops with a new generation of young, aspiring journalists and cartoonists and we are using some of the funds to undertake longer term investigations for *The Food Magazine*.

We owe a debt to all of our regular subscribers – your subs are the most essential part of our income. We know not all readers can make donations, but, every time you encourage someone to subscribe, you are doing us a huge service.

We have been in the news often lately – maybe you caught Anna Glayzer on GMTV's Breakfast Show talking about our successful 'Action on Additives' campaign or the news stories on our successful 'Eat less salt' project.

You will see from the magazine that we continue to tackle tough, investigative stories, and to run nationally successful campaigns. Check out page 1 for our latest 'Action on Additives' news and pages 6-7 for a new project we are working on that is challenging chain restaurants to post nutritional information on their menus. We have two new, exciting projects that we need to keep under wraps – but you will soon hear a lot more about these on our website and in *The Food Magazine*.

■ Every penny counts! If you can help keep our campaigns and investigations going, please get in touch with us at The Food Commission, FREEPOST KE 7564, London N1 9BR. Thank you.



## UK's poorest need higher incomes for a decent life

A single person in Britain today needs to earn at least £13,400 a year to afford a basic, but decent standard of living, including rent on a modest council home. That's according to a new report from the Joseph Rowntree Foundation (JRF). A couple with two children needs to spend £370 a week and a pensioner couple needs at least £201, not including rent or mortgage.

Unfortunately, millions of people in the UK do not reach such standards as benefit and minimum wage levels are set too low. Researchers say a single adult, working full time, needs to earn £6.88 an hour, as compared to the current minimum wage of £5.52. The minimum income figures were worked out by researchers after two years

of work – in which, "ordinary people (on a range of incomes)," worked with experts on deciding exactly what is needed to have an acceptable standard of life in today's society.

The research went into incredible detail, for example, working out exactly what items are needed in an acceptable kitchen (down to forks, whisks, pans) and how often items need to be replaced. Every aspect of life was examined, with a view to ensuring that the income levels worked out provide people not just with mere survival – an adequate diet and a basic shelter – but with the money necessary to take their rightful part in our society. As one participant noted, "Food and shelter keeps you alive, it doesn't make you live."

JRF researchers say that the necessary minimum income for nearly all household groups is higher than the official poverty line of 60% of median income. This means that nearly everyone currently officially classed as living in poverty has too low an income for an adequate life.

The problem has always been that benefit and minimum wage levels are political figures, government has not bothered to make sure they are set at levels that people can actually live on. Now it is time to make sure the government does something about the findings.

■ [www.jrf.org.uk](http://www.jrf.org.uk) 'A minimum income standard for Britain – what people think' Bradshaw J et al.

# Superbugs and

**What part does food play in the spread of antibiotic resistant infections? Richard Young, policy adviser to the Soil Association, takes a look at the issues.**

**F**ear of contracting a superbug in a UK hospital is a major motivation for many of the 100,000 Britains who now travel abroad each year for medical treatment. Over the last year, cases of methicillin resistant *Staphylococcus aureus* (MRSA), in the UK, have fallen by 30%, but the number of people infected by *Clostridium difficile* (CD) related conditions, including diarrhoea and colitis, has risen to over 140,000.

These so-called superbugs are basically bacterial infections that are resistant to treatment from antibiotics, making them hard for doctors to treat. Ironically though, it is our taste for both foreign travel and imported food that is helping to speed the global spread of antibiotic resistance problems as serious as these.

In 1998, a House of Lords' committee warned of a, "return to the bad old days of incurable diseases before antibiotics became available." For most people, however, ten years on, the main indications of this approaching Armageddon still come from the hospital superbug statistics. We go to the doctor, or we get the vet to treat one of our animals, and the antibiotics they prescribe work just as well as they always did. So where's the problem? Has an overuse of antibiotics encouraged new strains of bacteria to evolve?

## Antibiotic failure

One example of the bleaker landscape ahead can be glimpsed by considering the issue of urinary tract infections caused by the *E. coli* family of bacteria. Our colons become colonised by beneficial *E. coli* shortly after birth and we typically carry one to four strains. However, over 700 strains of *E. coli* have been identified and many of these are found in farm animals and on food we consume. Occasionally one of these strains displaces an existing strain in our intestines, often following the use of antibiotics, which can help one bug at the expense of another. Some strains also carry additional virulence and toxin genes. All these can pass between bacteria as easily as bacteria themselves pass between us. Antibiotics cannot be used against *E. coli* 0157 which causes food poisoning, but they can be essential to treat strains, like 026, which cause urinary tract and blood poisoning infections.

Over the last decade there has been a global spread of resistance genes known as ESBLs

(extended-spectrum beta-lactamases) which can pass between *E. coli*, *Salmonella* and *Klebsiella* bacteria making them resistant to almost every antibiotic available. Of the estimated 30,000 people in the UK (principally the elderly who are already ill for other reasons) who now get such resistant *E. coli* infections every year, about 4,000 of them die, partly at least, as a result. Very few effective drugs are left, and resistance to the preferred antibiotic group, the carbapenems, has recently been found in Turkey and some other countries, giving rise to concerns that it is only a matter of time before it arrives in the UK as an infection in someone travelling from abroad.

## Doctors, food and agriculture

These infections are typical of a growing trend towards antibiotic resistance problems arising in the community, which include community-acquired MRSA, and some cases of VRE (Vancomycin resistant enterococci) and CD. Some of those affected will end up being treated in hospital, but the resistance genes which make the infections hard to cure cannot always be blamed on the use of antibiotics in hospitals. So where have they come from?

## Doctors and antibiotics

Part of the problem is laid at the door of GPs, who prescribe 80% of all medical antibiotics and too many modern ones for minor ailments. Some doctors also still give in too easily to our uninformed demands for antibiotics. A survey of 7,120 people by the Department of Health found that almost one-third of people had taken a course of antibiotics within the last year and that over one third incorrectly believed antibiotics work on most coughs and colds and can kill viruses.

## Food and farming

But, what about food? About half of all antibiotics used each year are given to farm animals, 80% mixed in feed or water. A recent industry survey of UK consumers, however, found a low level of concern. Of a 1,000 adults questioned, only 58% were aware that farm animals are treated with medicines and 50% were unaware that animals are often given antibiotics and other drugs to prevent, rather than to treat disease.

The role of food in the spread of antibiotic-resistant infections is in fact the most controversial area of all. It is generally accepted that farm antibiotic use contributes to the problem of antibiotic resistance in food poisoning bacteria, but its role in the development of the well known superbugs is much more controversial and few British



**Pigs can receive as many as eight different antibiotics during their typical six-month lives. The routine use of antibiotics in pig feed has been implicated in the spread of farm animal MRSA in the Netherlands. Photo: Martin Usbourne/Compassion in World Farming**



# food



**The bad old days, before the discovery of antibiotics. First World War soldiers died from septic wound infections and women died shortly after childbirth from puerperal fever.**

scientists are willing to speak about this openly. One exception is Dr. Mark Enright from Imperial College who has stated, "The source of many important antibiotic resistance genes is unknown. For example, the *mecA* gene that makes an MRSA an MRSA has come from an as yet undiscovered source. It is perfectly plausible that the gut or stomach could be an important locus where important gene transfer events occur."

## MRSA and food

It is clear, however, that the MRSA infections which have increased so greatly in British hospitals over the last two decades have not come directly from farm animals, but have flourished and spread within the healthcare environment. But, just as hospital MRSA rates have started to decline we learn of a new threat from a type of MRSA that has arisen in farm animals but is now passing to humans. MRSA (ST398) is spreading rapidly across continental Europe and in some other countries, in part due the heavy use of antibiotics in pig feed.

In the Netherlands approximately 40% of pigs and some chickens, calves and dairy cows already carry this strain. The most immediate threat is to those who work with animals. 50% of Dutch pig farmers are already colonised and several dozen have been hospitalised due to serious MRSA infections. This MRSA strain has also been found at low levels in a high percentage of Dutch pork, poultry and beef.

No one yet knows whether it is also spreading to humans via food. Only three people (two babies and one adult) in the UK have so far been found with this strain of MRSA. None of these had any direct contact with farm animals, suggesting that food or some environmental spread could be involved.

## *E. coli* in chickens and beef cattle

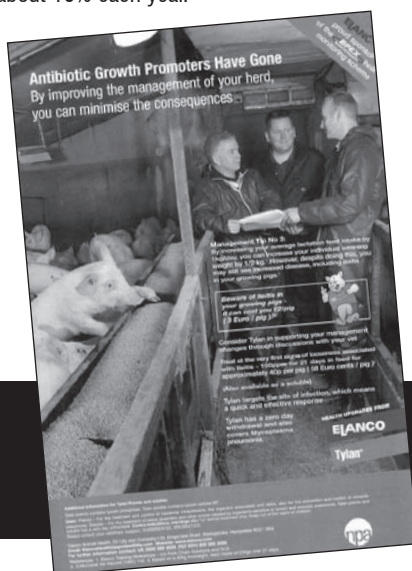
The Food Standards Agency knows that food may be spreading ESBL *E. coli* infections and both imported chicken and British cattle have been found carrying the resistance genes, but the precise link to infections in humans has not yet been proved conclusively and regulators appear reluctant to operate the precautionary principle for fear of sparking a new food crisis.

As a result, the veterinary antibiotics most widely implicated continue in unrestricted use on all but some organic farms and the government is still allowing cattle from the fifty or so UK farms now confirmed as affected to be sold on the open market, spreading the problem more widely.

## Food poisoning

Even quantifying the role of farm antibiotics in food poisoning bacteria is difficult. Recent research for the Food Standards Agency, which looked at just one type of resistance, in one type of bacteria, found that only 8% of quinolone resistance in campylobacter can be attributed to chicken (1.3% domestic, 6.7% imported), while 60% comes from foreign travel and 3.6% from family pets.

Antibiotic use in some countries is very poorly regulated, but, since campylobacter rarely passes between people, a high proportion of such cases contracted abroad may also have come from food eaten while on holiday. Fluoroquinolone antibiotics are one of only two front line groups of drugs in the treatment of rare life-threatening cases of campylobacter. In the USA their use in poultry production has been banned as a result. In the UK, however (with the exception of organic producers certified by the Soil Association), veterinary use continues unrestricted and is currently increasing by about 10% each year.



## Intensive farming

In contrast to the US, the so-called growth promoting antibiotics have been banned throughout the EU. This allows the government and the industry to reassure consumers that antibiotics are no longer used to promote growth in British farm animals, but what is rarely pointed out is that the use of some other antibiotics has risen significantly as a result, suggesting that the concept of growth promotion was essentially a ruse to bring in weak legislation allowing farmers ready access to cheap antibiotics that could be added to feed continuously.

These drugs made possible the super-intensification of the pig and poultry industry from the 1950s onwards because they helped to control the inevitable disease problems which arise when thousands of animals are crowded together indoors.

Conversely, many of the therapeutic antibiotics now being used instead are listed as growth promoters in other countries. In most cases the distinction between growth promotion and low level preventative use is a nonsense. Of 15 antibiotics still licensed for growth promotion in the US, only two are not also marketed for their therapeutic properties.

## A bleak future?

Antibiotic resistance is not new, it existed long before humans discovered antibiotics, but since their first use the development of new drugs has kept pace with the development of resistance. Now, because we have already exploited the easy candidates and because drug companies find it more profitable to develop drugs to alleviate chronic conditions where sales are higher, the development of genuinely new antibiotics has become very rare.

Both in human medicine and in farming we seem to have forgotten that evolution has equipped us with immune systems that will naturally fight many bacterial infections. Antibiotics are needed to save lives when infections are serious or immune systems are compromised. But, if we continue to use them unwisely in humans, farm animals or pets, the day will soon come when the 'return to the bad old days' predicted by the House of Lords is actually upon us.

**Tylosin - the growth promoter that will not go away?**  
Tylosin was banned from use as a growth promoter in 1999, but its routine use in pig-rearing is still permitted. Ads for veterinary drugs such as this appear regularly in the farming press.

# Which fast food meals Anyone's guess!

**When *The Food Magazine* asked nutrition specialists and members of the public which fast foods were most laden with fats or calories. The results were surprisingly poor.**

**T**he lack of clear labelling for fast food meals means that few people really know what they are ordering. We believe it is time to follow the example of cities such as New York and Seattle, and get the fatty facts publicly declared on menu boards.

We are eating out of the home more than ever before, but the food we eat is rarely labelled with nutrition details. In the supermarket, we can look at the labels and make a decision, but in McDonalds, Starbucks, Pizza Hut, KFC or Subway, the display boards show no nutritional information at all. We may find some facts available in leaflets, or on the containers or tray liners, but that information comes after we have made our choice, collected our meal and sat down to eat. All we can do then is say, "I wish I had known before I ordered."

Surveys show that meals eaten outside the home are frequently higher in calories and fats than food prepared and cooked at home. This means that caterers have as much responsibility as supermarkets to ensure we get the facts before we choose.

There are already moves in the USA to force better disclosure. The local health authorities for New York City and Seattle have enacted legislation requiring nutrition information to be available at the point of sale. Exemptions are made for small firms with few outlets, and for companies that have non-standard menus. The

fast food outlets are fighting back with legal challenges, but the signs are good that the laws will stick and customers will get the information they surely deserve to have. After all, what are companies trying to hide!



In Europe, no such laws are yet envisaged. The Food Standards Agency is promising to look into the issue in the next year or so, but we believe it is time to press forward now. The logic is clear: customers have a right to know what they are being sold. This is especially true for products that rely for their appeal on salt, fats and sugar to boost the flavours of mass-produced, long-life ingredients. It is not difficult to do in fast food chains as meals are made to standard set recipes.

We believe that fast food is designed to look appealing but can hide a large amount of fat or pack a big calorie punch. To check our beliefs, we went to the experts.

We visited the European Congress on Obesity, this spring, where some 3,000 nutritionists, obesity researchers and clinicians were gathered in Geneva to discuss the latest science on obesity research, the latest ideas

*Three chicken thighs and a large fries from KFC will give you about half your day's calories (over 940), half a day's salt (3 grams) and a whole day's fat (a whopping 57 grams). Or you could go for a Tower Burger, with over 600 calories and four grams of salt in the one item.*

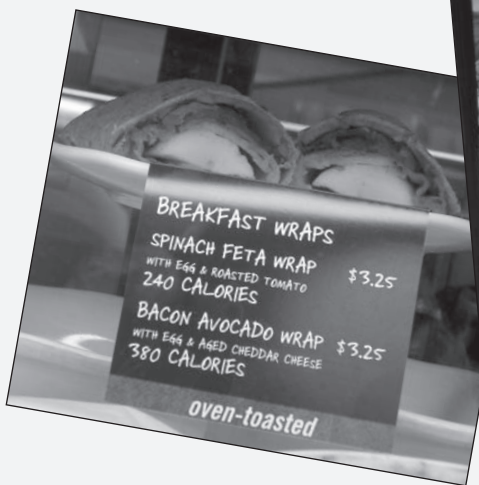


## The rules in Seattle and New York City

In Seattle, chain restaurants with more than ten national outlets and \$1m in annual sales must have menus displaying calories, saturated fat, trans fat, sodium and carbohydrate information.

If the restaurant uses a menu board, then this must include calories in each item, and the other nutrient information should be plainly visible at the point of ordering. Only items available on the menu for 60 days or more are required to be labelled.

In New York City chain restaurants with 15 or more national outlets must list the calorie content of standard items on menus, menu boards or display tags. The calorie information should be at least as prominent as the price information.



Cal	6" Sub	Cal	6" Sub
590 THE FEAST	5.29	DOUBLE Turkey Breast	4.99
520 BIG PHILLY CHEESESTEAK	5.29	DOUBLE Sweet Onion Chicken Teriyaki	5.49
580 PASTRAMI	5.29	DOUBLE Subway Club	5.29
		DOUBLE Italian B.M.T.	5.29
		Make Any Premium or DOUBLE STACKED sub	
		(660-1260 cal) A FOOTLONG Add	3.00

**Calorie labelling on display at fast food chains in New York City.**



# are healthiest?



for treatment and the policies needed to prevent people becoming overweight. We spoke to 66 of the experts as they looked at the scientific exhibitions, and we asked them to complete a simple questionnaire containing a set of just five questions about the fat and calorie content of fast food, each with four possible answers. For example we asked:

**Which item from McDonalds contains the most total fat?**

- a: Large French fries (170g portion)
- b: Double Cheeseburger (165g portion)
- c: Filet-O-Fish sandwich (143g portion)
- d: McChicken sandwich (147g portion)

Fewer than half the experts were able to identify the culprit here. Many thought it was the Double Cheeseburger, and several thought the Filet-O-Fish, but in fact the French fries come in at a whopping 30g fat. Then we asked:

**Which 15 centimetre (six inch) sub at Subway contains the most calories?**

- a: Tuna salad (250g portion)
- b: Steak and Cheese (278g portion)
- c: Italian (Salami, Ham, Pepperoni and Cheese) (243g portion)
- d: Cold Cut Combo (249g portion)

Most people said the Italian, and some said the Steak and Cheese, but in fact the Tuna salad packs in the energy at 530 calories. Only seven people got this right.

Out of the 66 specialists, not a single person gave five correct answers. Just five people gave four correct answers. The great majority – three-quarters of the experts – got only two, one or none of the correct answers – little better than pure guess work.

When they were shown the correct answers the experts were surprised, but admitted that if they had a problem making the right choice, then surely the average customer had little chance of guessing which foods were the healthiest.



## Testing the public

We did a similar survey with a further 220 people on the street, 172 of whom were regular fast food eaters. Again, we asked questions about the fat and calorie content of fast food. For instance:

**Which item from the KFC menu contains the most fat?**

- a: Large Coleslaw
- b: Regular Popcorn Chicken
- c: Large Fries
- d: Fillet Burger

Only 48 people guessed the correct answer, the coleslaw, which contains 22.4g of fat. Most people guessed Popcorn Chicken, which actually has 17.8g of fat.

**How many calories are in a six inch individual pan pizza from Pizza Hut?**

- a: 508
- b: 608
- c: 708
- d: 808

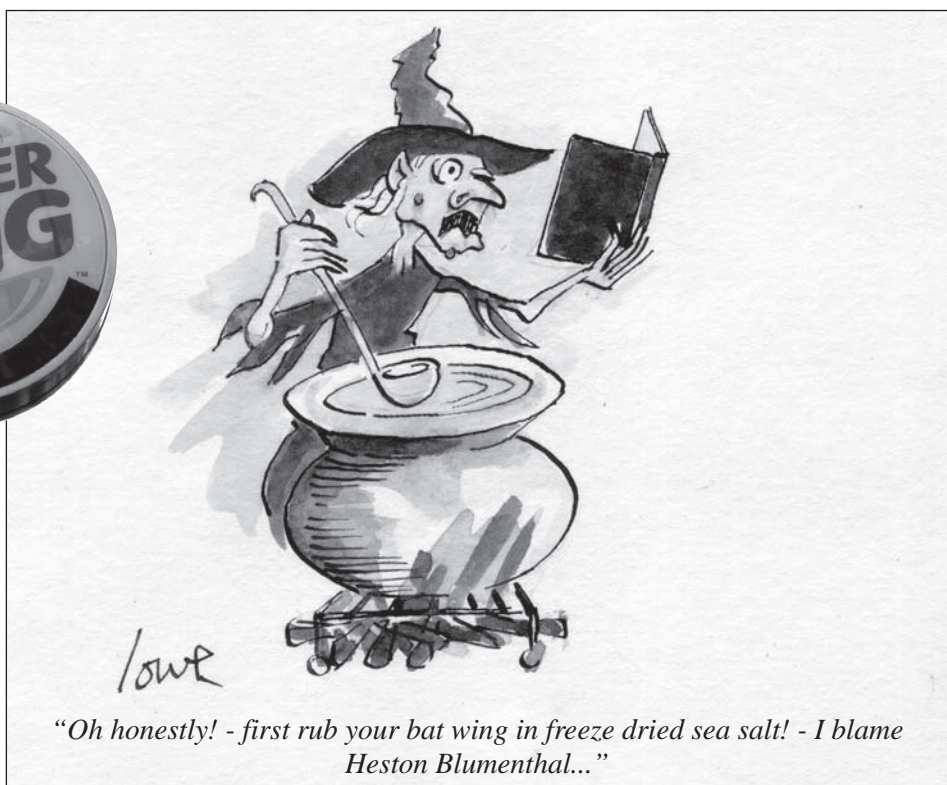
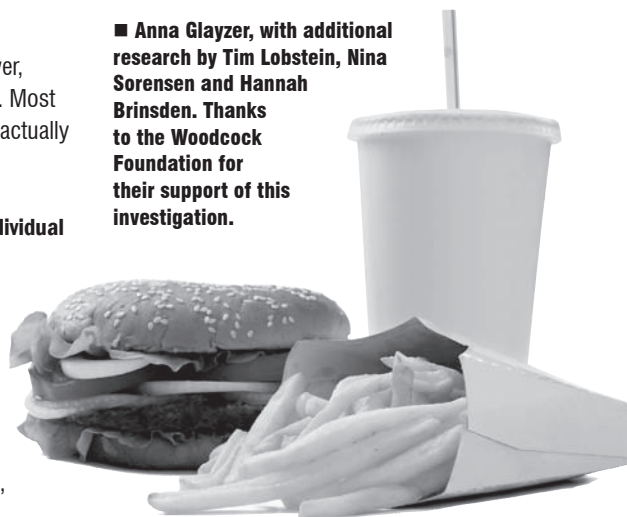
Most people thought the answer was 708 calories, as opposed to the truth that,

at 808 calories, one of these pizzas is just over 40% of the average daily recommended calorie total for a woman.

Out of the 220 people who took part in our street survey, only one person guessed all of the answers correctly. Again, most people only got one or two answers right.

It should not have to be guess work. We have the right to know what is in our food, and to have the information we need to make our choices before we buy.

■ Anna Glayzer, with additional research by Tim Lobstein, Nina Sorensen and Hannah Brinsden. Thanks to the Woodcock Foundation for their support of this investigation.



*"Oh honestly! - first rub your bat wing in freeze dried sea salt! - I blame Heston Blumenthal..."*

# Let the buyer beware

## Bee Wilson investigates the rich history of food fraud and swindles.

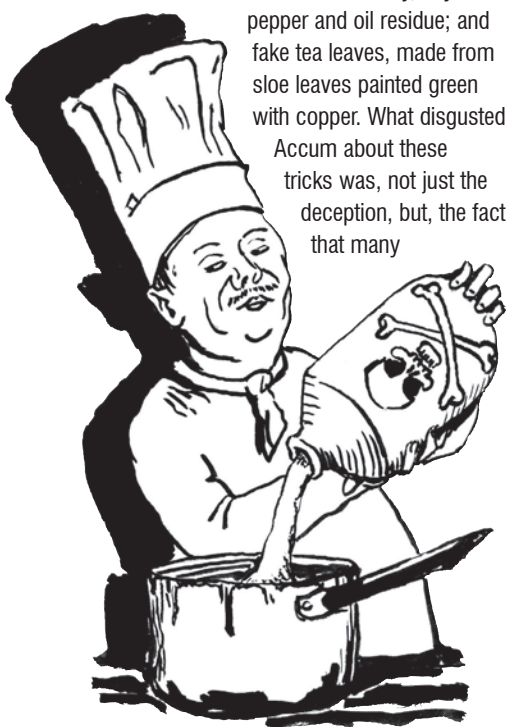
There's a *Punch* cartoon from 1855 showing a little girl walking into a grocer's shop. "If you please, sir," she asks the grocer, "Mother says will you let her have a quarter of a pound of your best tea to kill the rats with, and an ounce of chocolate as would get rid of the black beetles?" Behind the grocer's counter we see sacks containing, not flour and rice, but, sand, red lead and plaster of Paris.

### Demon grocers

Food fraud was a fact of life in nineteenth-century Britain. People joked about 'demon grocers' but they also felt genuinely powerless to secure honest and wholesome food for themselves and their families. This was a buyer beware culture, in which consumers had a great deal to beware of. In 1820, the German chemist Frederick Accum had published a bestselling book (*A Treatise on Adulterations of Food*) revealing that almost everything sold as food or drink in the markets of London was not what it seemed. 'THERE IS DEATH IN THE POT' was the biblical motto with which Accum's book began. The hyperbole was justified.

Accum exposed fake cream made from arrowroot mixed with bad milk; 'coffee' made from chicory and burnt peas; bread bleached white with alum, a chemical emetic; 'factitious peppercorns'

manufactured from clay, cayenne pepper and oil residue; and fake tea leaves, made from sloe leaves painted green with copper. What disgusted Accum about these tricks was, not just the deception, but, the fact that many



---

*Men stood up in Parliament and defended the rights of shopkeepers to sell chicory and label it coffee*

---

of the falsified foods were poisonous. Accum wrote of sellers so heartless that their thirst for money outweighed 'the possible sacrifice of a fellow creature's life' – as with the confectioners who sold children's sweets dyed red with lethal lead.

### All's fair in love and trade

Accum rightly saw this culture of universal adulteration as a failure of politics. As a German, raised in Westphalia, he found the laissez-faire attitude of the British government towards food quality, "really astonishing." He complained that, "The man who robs a fellow subject of a few shillings on the high-way is sentenced to death; while he who distributes a slow poison to a whole community escapes unpunished." This was not quite true: in 1820, highway robbery was no longer punishable by death. But, Accum was certainly right that British governments were deeply reluctant to intervene to stop the swindling. To do so, in the minds of many, was to meddle with the divine liberty of free trade. Men stood up in Parliament and defended the rights of shopkeepers to sell chicory and label it coffee. Buyer beware indeed.

### Government finally acts

By 1860, however, politicians could ignore the problem no longer. A series of groundbreaking articles in *The Lancet*, by Arthur Hill Hassall, had revealed just how universal food fraud really was. By putting food and drink under the microscope, Hassall uncovered Thames water teeming with bugs and sewage; fake cinnamon and ersatz mustard. Hassall showed that adulteration had become the rule rather than the exception.

Meanwhile, the food scandals were getting too extreme for Whitehall to ignore. In 1858, 200 people in Bradford were laid low and 20 were killed by a batch of lozenges adulterated with arsenic (the lozenge maker had intended to falsify his lozenges with plaster of Paris but bought arsenic by mistake).

This led to the 1860 Food Adulteration Act (improved by a second Act in 1875). At last, Britain had a comprehensive law to protect the quality of food. This entailed a huge shift of culture – from buyer beware to seller beware. From now on, the grocer who sold false weight or passed off chicory as coffee had to watch his back. The 1875 Act – still the basis of our food



law today – made it an offence to sell food which was not 'of the nature, substance or quality of the article demanded'.

### Swindling by any other name

For a while it seemed that the swindlers had lost the upper hand; certainly the most toxic adulterations with lead and copper finally ceased. But, history is never finished and the story of food quality in the twentieth century was played out in ways that Accum could scarcely have imagined. Accum knew that the best protection against fraudulent food was knowledge of the real stuff – how it should taste and smell as well as how it should behave in chemical experiments.

Already, in 1820, that knowledge was being lost as populations moved away from the land and into urban areas. Children were growing up who had never tasted real honey or known any bread but the inferior alum-bleached kind. But, enough people remained – like Accum himself – who knew a good loaf of wholemeal bread when they saw one, who recognised the fragrance of real strong coffee and the taste of thick, homemade, apricot jam.

Accum would surely have been bewildered by the food of Britain in the twentieth century, when wartime deprivation coupled with changes in food technology accustomed millions of people to eating processed and substitute foods and thinking of them as normal: instant coffee, packet sauces, sliced bread made by the Chorleywood process, strawberry 'flavour' milkshake unacquainted with strawberries. In Accum's day, to sell 'lemonade' made with citric acid was seen as a fraud. In our day, it has become the norm. It is lemonade made only with lemons which is unusual. Most of these changes have come about with the full blessing of the law. As Elizabeth David once commented, "we no longer have adulterants; we have additives."

The food legislators simply could not keep up with the ingenuity of postwar food manufacturers.



Labelling became the panacea which would take the place of real food standards. To establish legal standards for food, you have to determine what the real thing should be. The Food Standards Agency still does painstaking work policing the authenticity of individual ingredients – such as Basmati rice, frozen seafood and King Edward potatoes. But, when it comes to half the foodlike substances now on our shelves – extruded flavoured snacks, squirtable desserts, cheese-like strings – there simply is no authentic version to compare it against.

Much of what we eat is so debased it could scarcely be adulterated. What is even worse is that faced with this ersatz quasi-food, too many of us feel not the campaigning disgust of an Accum but a kind of apathy. Yes, it's bad; but that's just how things are. Non-food is just as much a fact of life for us as it was for the Victorians.

■ Bee Wilson is the author of *Swindled: From Poison Sweets to Counterfeit Coffee, the Dark History of the Food Cheats* (John Murray £16.99)



"I said you should have had the fish."

## Food security: leave it to the market?

**Tim Lang, Professor of Food Policy at City University, urges readers to take the current food crisis seriously.**

**F**or the last two years, alarm has risen about food supplies. With prices rocketing, riots and protests, some governments took drastic action – restricting exports and emergency buying on world markets. In June, over 130 governments came to Rome to discuss the crisis. The situation echoed the 1970s oil crisis and 1974 Rome World Food Conference.

Once more, there was talk of a neo-Malthusian 'perfect storm' hitting the food system: too many mouths, not enough food, new technology seeming to offer solutions. Then it was the green revolution's agrichemical-linked seeds and fertilisers; now it is genetic modification. But, by summer 2008, global grain and oil prices are dropping back. So is the crisis over? Most observers think not.

### Making progress?

The model of food progress pursued since the end of World War II is under strain. Building on 1930s science and the war experience, a 'new' approach had proposed a big state role in facilitating investment in agriculture. This would raise output, feed people and end farming's booms and slumps. It did. Output rose ahead of population but the model was endlessly revised, not least to fit neo-liberal goals, Structural Adjustment Programmes and the World Bank / IMF 'Washington Consensus' which promoted market-led growth.

Now that tortuous path of development is threatened by at least ten 'new fundamentals': oil-dependency; water shortages; eco-systems (biodiversity) support; climate change; the impact of changing diets and the resulting healthcare costs; competition for land use; urbanisation and de-ruralisation; labour shortages; geo-political uncertainties; and rapid corporate concentration and control coupled with weak government and financial controls. Financial speculation hasn't helped.

Some argue that paradigm shift is inevitable. I am not sure. A Chatham House (Royal Institute of International Affairs) research project has outlined at least four possible scenarios ahead: continued food inflation; 'blip' (return to business-as-usual); paradigm shift; and full-blown crisis. Each of these is possible and are much discussed in governments and boardrooms worldwide. Conferences on food security have proliferated.

Where does the UK fit into this? In July, Defra (the Department for Environment, Food and Rural Affairs) published a discussion paper, *Ensuring the UK's food security in a changing world*, with replies sought by September 15. This came hot on the heels of a Cabinet Office review of food. Its *Food Matters* report exceeded usual Strategy Unit format, making important policy statements of 'directions of travel' plus announcing an annual top-level review.

Defra suggests there are five key indicators for UK food security: global availability; diversity of supply; food chain resilience; affordability; and safety and confidence. UK food production is apparently not a big problem. We're rich; others

can feed us. The discussion document then asks some key questions about whether the indicators are appropriate, how to ensure food security, what food supply sectors can do and what to do if there is a problem.

One interpretation of this open policy thinking is that a central fault-line in policy is now exposed: on the one hand a continued belief in markets' capacity to feed people despite evidence that they often do not, and on the other hand a welcome, if belated, recognition that health, environmental and societal crises are reflected in the food system. Can the current food system tick all the boxes? Hmmm, I think not.

For Defra not to have indicators on energy/carbon use, biodiversity, water, health, social equality of access, for instance, in its food security strategy is strange, if not illogical. The assumption that the current level of UK food production is acceptable is also questionable.

I think it is immoral that a rich country which could grow more food and use its land wisely is even thinking of buying on world markets which could feed those whose lands do not feed them. We're not talking about forced greenhouse growing of mangoes, just sensible land use.

■ Please respond to the Defra consultation by September 15th! For more information see [www.defra.gov.uk/foodrin/foodstrategy/security.htm](http://www.defra.gov.uk/foodrin/foodstrategy/security.htm) and send your responses to [foodmatters.security@defra.gsi.gov.uk](mailto:foodmatters.security@defra.gsi.gov.uk). The direction of UK food policy is in our hands.

■ Tim Lang is Professor of Food Policy at City University and is a Commissioner on the Sustainable Development Commission.



# Plastic food waste

**Anna Glayzer investigates how discarded plastic food packaging can harm the health of people and animals.**

**F**loating between the coasts of Hawaii and Japan and reportedly occupying an area twice the size of the continental United States is the 'great Pacific garbage patch'. It has been described as a plastic soup of waste, made up partly of junk thrown from ships, but with four fifths of it coming from the land. It is held together by underwater currents.

About 90% of the rubbish that floats in our seas is believed to be plastic. Seafaring plastic waste is not confined to floating between coasts. Plastics constitute the majority of debris found on sea beds and on beaches around the UK and much of the rest of the world. Even on the shores of the remote islands of the Southern hemisphere, research has shown that plastic accounts for between 47% and 100% of items found.

## Beach cleaning

I met up with Dr Sue Kinsey, 'Adopt a Beach' officer for the Marine Conservation Society



**A marine turtle that has choked to death on plastic wrapping. Sea creatures can mistake floating plastic for food, with devastating consequences. Photo: R Hosking, BBC**

(MCS), and a team of volunteers at Sand Bay, a very windswept beach near Weston-super-Mare, for their regular beach clean and rubbish survey. Clad in bright tabards we fanned out across the sand and started picking up rubbish, whilst recording what we found. At first glance, Sand Bay looks like a clean beach, but once you start looking closely it becomes apparent just how much litter is mixed in with the sand, and how much of it is plastic. We found bottle tops,

sweet wrappers, lumps of unidentifiable plastic and drink containers.

Why are our oceans bursting at the seams with plastic? One major reason is that plastic takes years to break down, despite the fact that most of it has fulfilled its use within six months. According to the Government's Waste and Resources Action Programme (WRAP), in the UK, we use a total of 5m tonnes of plastic per year in packaging, construction and automotive markets. It has been estimated that 10% of total plastics may be discarded at sea.

A vast amount of plastic waste in the marine environment comes from the food system. According to WRAP, we use about 1.5m tonnes of plastic packaging per year in the UK domestic stream. A large percentage of this is for food and drinks. This is no real surprise given the extent to which we rely on plastics to preserve, to protect and to transport food efficiently.

## Plastic bags

Despite the argument that carrier bags represent a relatively small aspect of overall waste, they are a particular problem in the marine environment because of their lightweight nature. They are carried out of litterbins and landfill sites by the wind, and find their way into the sea. The Marine Conservation Society (MCS) monitors litter on beaches around the UK through their 'Beachwatch' surveys. From 1994 to 2007 they recorded averages of 29 - 46 carrier bags per kilometre surveyed. Besides food



**Marine Conservation Society volunteers at Sand Bay, near Weston-super-Mare, take part in a regular clean-up. As part of the clean-up they survey the types of litter they find.**

# chokes our seas

packaging, we also use plastics to catch our food, with fishing related debris common on our beaches.

## Animal deaths

There is a depressing abundance of evidence on the direct impact that plastic objects have on marine birds and animals, either through ingestion or becoming entangled. Turtles, whales, dolphins and albatrosses are among the many species that have been found to have plastic objects in their stomachs after death. In one example, in 2002, a dead Minke Whale washed up on the Normandy coast with nearly 1kg of plastic bags and packaging, including two English supermarket bags, in its stomach.

## Toxicity and people

Less is known about the impacts of plastic toxicity on marine life and those species, including us, who feed on it. Dr Richard Thompson, reader in marine ecology at the University of Plymouth, has been researching the impacts of the tiniest fragments of plastic on the marine environment. Using archived plankton samples, collected since the 1960s by specially designed tows attached to the back of merchant vessels, Thompson has been able to establish an increase in the levels of toxins.

## Carrier bags in numbers

**13 billion:** Number of carrier bags issued per year in the UK.

**0.5%** Fraction of those 13 billion that are recycled.

**400** Number of years some plastic bags take to break down.

**25** Average number of metres you have to walk to find a carrier bag on a UK beach.

**9%** Percentage of dead animals found in one recent survey that were entangled in plastic bags.

**94%** The reduction in use of plastic bags in Republic of Ireland in 2003 following the introduction of a bag tax.



In 2001, Japanese research showed how plastic debris in the sea attracts contaminants which are repelled by water. The plastic thus contains highly concentrated levels of these contaminants. Thompson's subsequent work modelling the conditions of the guts of a lugworm suggests that, when they ingest microscopic plastic particles, filter feeders such as mussels, barnacles and lugworms can absorb the toxins and thus potentially pass them up the food chain.

The first question that springs to mind is why so little is known about this? Thompson has found a surprising lack of appetite amongst UK research councils for funding more research. He says, "What we are still lacking is fundamental research to underpin any policy decisions."

As I left Sand Bay I could not help thinking how inadequate the often touted phrase "from farm to fork" is. For our beaches and seas, so much of the story continues after the bin, and it may be affecting what later ends up on our fork in more ways than we realise. The energy and commitment of people like Sue Kinsey, the Marine Conservation Society and the army of volunteers who help them is inspiring. As Kinsey says, "Last September 3,911 people gave up part of their weekend to take part in the 2007 Beachwatch clean-up event. It is genuinely reassuring to know that so many people care."

■ See [www.mcsuk.org](http://www.mcsuk.org) to find out about getting involved with Beachwatch 2008 this September.

## Is plastic bad?

In the meantime, no one could dispute the wisdom in trying to reduce the amount of plastic that ends up in the sea. An obvious answer would be to reduce use of plastics and recycle more. Thompson is keen to point out that he is not anti-plastic. "Plastic has the capacity to reduce mankind's footprint on the earth. It is lighter to transport than other materials. The problem is the dispensability."

At present, according to WRAP, we only recycle about 15% of the plastic we use. Dr Kinsey suggests that the problem lies in the sheer range of plastics that are used in different types of packaging. "If manufacturers worked together to stick to clear plastic rather than coloured, and to use the same polymer when producing for example, drinks bottles, then we'd be able to recycle a lot more."

## Top five types of litter found on UK beaches in MCS 2007 Beachwatch Survey

1. Plastic pieces 1-50cm
2. Plastic pieces under 1cm
3. Plastic rope
4. Plastic caps / lids
5. Crisp / sweet / lolly wrappers



Polyethylene Terephthalate and High Density Polyethylene are just two of the many plastic types used for food packaging. The incredible variety of types seriously complicates recycling. If your local council accepts plastic recycling, the chances are high that it will recycle these two types of plastic.



# Pesticides on

## Nick Mole of the Pesticide Action Network UK investigates pesticide residues in our food.

**P**esticides in our food are all pervasive; there is no getting away from them and no avoiding them, unless you eat a wholly organic diet, which the vast majority of us do not. The scale of the problem is potentially huge, with the Pesticide Residues Committee (PRC), the UK government body designated to monitor pesticide residues in the food we eat, regularly reporting an average of 30 – 40% of food to be contaminated with pesticide residues. However, the residues you find depend upon the type of analysis you undertake; as an example, a pesticide residues laboratory in Stuttgart has found that 80-90% of fruit and veg sampled contained pesticide residues.

### Pesticides are poisons

Pesticides are unique in being the only chemicals that when used as designed will kill living organisms. The Pesticide Action Network UK (PAN UK) recently published *Pesticides on a Plate*, a free, consumer guide that looks at pesticide issues all along the food chain from grower to consumer. But, why should we be concerned about pesticide residues in our food when the UK government, in the guise of the PRC and the Food Standards Agency (FSA), claims that there are no associated health risks?

Many of the older, and in some cases now obsolete, pesticides work on the same chemistry as substances used for chemical warfare in WWI, they

are nerve agents. There is also substantial evidence that many of the chemicals used are carcinogens, endocrine disruptors and mutagens, which can cause illnesses ranging from cancer to Parkinson's.

### Cocktail effect

Another issue of serious concern for PAN UK is the potential for a 'cocktail' effect following the ingestion of multiple residues. Little research has been done on the cocktail effect, but it is worrying that many of the fruit and vegetables sampled contain more than one pesticide residue. If this exposure is added to the already high numbers of chemicals that we come into contact with each day, it means that residues in the food we eat could add significantly to our daily toxic load.

### Supermarkets doing enough?

An important area of our work is engaging with UK supermarket chains to assist and persuade them to develop residue reduction programmes. PAN UK believes that supermarket chains have a vital part to play in eliminating pesticide residues in our food. Over the last few years, European supermarkets have started to look very closely at safety aspects of the food they sell, including pesticide residues. This is particularly so in the UK, where the British government was the first to name and shame specific retail companies



Photo: Anna Glayzer

**Avoid pesticide residues by growing your own organic fruit and vegetables. You do not need a garden, a window box can grow a crop of salad and a small patio can accommodate pots of tomatoes.**

exceeding permitted levels of residues in food. The details of the name and shame can be found on the PRC website and in its annual reports, although they only name those that have exceeded legal residue levels rather than those that consistently sell produce with high, though legal, residue levels.

Many, but not all, retailers are now taking active steps to at least keep residue levels below legal limits, but not all are making progress on reducing pesticide use in their supply chain.

Several UK supermarkets recently decided to prohibit some of the most hazardous pesticides throughout their supply chain, and to restrict the use of others, or phase these out over time. PAN UK's 'Hidden Extras' web pages provide links to some of the top UK retail chains and their actions and policy on pesticides. Apart from organic produce, there are some other consumer labelling schemes for specific certified crops or farm standards that include measures to reduce pesticide use.

However, supermarkets are only one link in our food supply chain. People also buy food from markets, corner shops and convenience stores, and, increasingly, eat outside the home in restaurants, takeaways, and cafes. Pesticide residue and use reduction programmes need to be developed in these other sectors of food supply; in particular PAN UK would like to see a focus on



**Over 22,000 metric tons of pesticides were used in the UK in 2006, the last year for which Defra holds statistics. According to the Pesticide Residues Committee, 30-40% of our food can be contaminated with pesticide residues.**



# a plate

*There is some debate on whether you can cook out pesticide residues, but PAN UK believe that it is unlikely. As an example, chips were tested a while ago and found to contain the same level of residues as raw potatoes, this is after washing, peeling, and double frying.*

procurement of food in hospitals, schools and care homes for older people. These are all vulnerable groups who should be provided with residue free food as a matter of course.

## Minimising the risk

If you are concerned about pesticide residues in your food, and PAN UK believes that you should be, what can you do to minimise the risk?

- **Firstly, do not stop eating fruit and vegetables! Eating the recommended five a day is important to good nutrition.** Consider, however, what foods you and your family eat most frequently. If you are unable to switch to a completely organic diet, start with buying organic produce for those foods which you eat most often or which are most likely to contain pesticide residues.
- Wash non-organic fruit and vegetables well. Do not eat the peel of non-organic citrus fruit – that is where the highest concentration of residues is.
- Buy fruit and vegetables that are not cosmetically perfect! Many pesticides' sole function is to produce the perfect fruit/vegetable. Only when consumers show that they are willing to buy blemished produce will supermarkets and growers stop hiding behind the argument that, "it's what customers want," when asked about their pesticide policies.
- Farmers' markets are increasingly available across the UK. You can take advantage of direct contact with farmers to ask them about their pesticide practice. [www.farmersmarkets.net](http://www.farmersmarkets.net)
- Visit the PAN UK [www.pan-uk.org](http://www.pan-uk.org) and PAN Europe [www.paneurope.info](http://www.paneurope.info) websites for free organic gardening tips, your copy of *Pesticides on a Plate*, and for information on how to get active by contacting your MP, MEPS, and your local supermarkets.

## Pesticides in your food

This table shows the 'worst five' each of fruit, veg and other foods - those that have contained the highest levels of pesticide residues in sampling done over approximately six years to 2006.



Product	Number of samples	% with residues
<b>Fruit</b>		
Soft citrus e.g. mandarins	167	100%
Citrus	512	91%
Pears	1066	73%
Bananas	205	71%
Strawberries	283	70%
<b>Vegetables</b>		
Speciality beans	70	76%
Salads	70	74%
Celery	137	69%
Herbs	51	53%
Potato chips (crisps)	48	48%
<b>Other food items</b>		
Barley, pearl	4	100%
Bran	107	98%
Rye	34	91%
Oats	34	85%
Wheat grain	137	82%



# FSA may weaken the ban on kids' TV ads

**The Food Magazine investigates a proposed change to the rules that could make some sweet and fatty food easier to get under the bar on junk food advertising.**

**T**he Food Standards Agency (FSA) is considering weakening its nutrient profiling model one year after it was introduced to control food and drink advertising during children's TV programmes. An expert review panel commissioned by the FSA is recommending removing the 'protein cap' which limits the ability of junk food manufacturers to use added protein as a means of improving a food's nutritional profile. The panel argues that this change simplifies the model – while admitting that the model at present is 'robust and fit for purpose' So what is going on?

## Judging which ads to ban

Nutrient profile based definitions are used as a tool to categorise different foods, based on agreed thresholds for one or more priority nutrients such as fat, sugar and salt. The model used for controlling what can be advertised on children's TV gives bad marks for the levels of saturated fat, sugar, salt and energy per 100g, but deducts marks for fruit and vegetables, nuts, dietary fibre and protein. The overall balance must be three or fewer bad marks if the product is to be advertised. But, to be sure that some high fat and high sugar foods do not creep in due to high levels of 'good' protein, there is a further rule that if the sugar or fat exceeds a certain level then the protein is not counted at all.

The model was developed by the Food Standards Agency for use by the broadcast regulator, Ofcom, and came into force last year. Unsurprisingly, the model has been heavily attacked by the food industry, anxious to continue advertising salty, fatty and sugary foods to children. *The Grocer* magazine has run a full-blooded campaign since January 2007 to send the model back to the drawing board. Cheese, Marmite, honey and olive oil – which all get more than three bad marks

– were highlighted by *The Grocer's* 'Weigh it Up!' campaign as apparently healthy products falling foul of the advertising ban. But the truth is, honey is a high sugar product, and most cheese products are high in fat.

## Under attack from industry

Despite intensive lobbying activity, big food companies have not persuaded the expert review panel that the nutrient profiling model should be dropped or seriously changed. On the contrary, the panel finds that the model is, "robust," and, "fit for purpose."

However, it has been an open secret that the members of the panel have been lobbied by the food companies, with cereal companies such as Kellogg's sending members packs of cereal and letters claiming that their healthy products are being banned from TV ads.

The cereal companies claim that some of their products are falling foul of the rules because of the dried fruit content – which bump up sugar levels. The crisp companies want to advertise low-salt versions of their snacks. But, the truth is, if these foods did not have a nutritional profile that concerned health experts, they would not have been banned in the first place.

## Banned for now

Examples of products that are banned under current guidelines because they are not deemed healthy. These could be advertised on children's TV without any changes to their ingredients if rules about protein levels are changed.

### Breakfast cereals

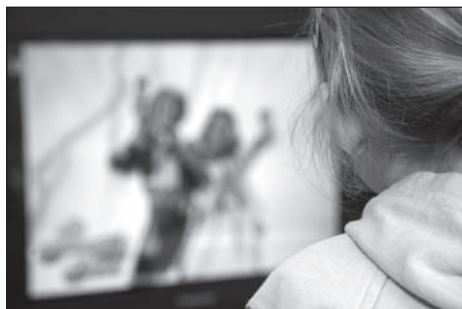
Nestlé Shreddies (15% sugar)  
Disney Pirates (17% sugar)  
Weetabix Weetos (23% sugar)  
Weetabix Oatflake With Fruit (29% sugar)  
Kellogg's Special K Sustain

### Savoury snacks

Kettle Lightly Salted Crisps  
Walker's Lights, Simply Salted



**TV is a powerful tool for advertising junk foods. Industry is keen to undermine new rules controlling ads on children's TV.**



## A bit of protein does not make junk food healthy

To put a healthy gloss to the proposed change, a workshop about the issue, in February, declared that modification of the protein cap would, “act as an incentive for the reformulation of others.” What they meant was that other products might reduce their sugar and salt to meet the easier challenge of passing under the bar. The expert review panel discounted the idea that the companies might also tweak the protein levels to get the products under the bar, and so bring about the very problem the protein cap was designed to prevent.

## Adding protein

Adding protein is not so difficult to do. A sprinkle of skimmed milk powder (35% protein) soy flour (50% protein) or soy protein isolate (80% protein) would easily add the necessary one or two grams per 100 grams. A small tweak to the sugar or salt levels – desirable but nothing like as much as is needed for a public health benefit – and hey presto! The pack is on kids' TV.

## Chipping away at portion rule

We do not believe that getting the FSA to remove the protein cap will be the end of the story. We can be sure that food companies will continue their efforts to chip away at the profiling model. The industry have already indicated that they want to remove the 100g rule, and replace it with a ‘per portion’ rule. This would immediately allow a large range of products access to kids' TV. And, who is to say what size is a portion?

The cereal guys have another trick up their sleeves. They want to change the rule about cereal so that it is not ‘per 100g’ or even ‘per portion’ alone, but ‘as served with milk’. Adding a cupful of milk could make even the most highly sugared cereal look fairly healthy – as the companies well know.

It is important that the nutrient profiling model gives food manufacturers an incentive to reduce the fat, sugar or salt in their products. But, removing the protein cap is unlikely to make a

significant difference to the quality of the food while it will potentially allow adverts for some very sweet and fatty foods back onto children's programming.

## Keep the protein cap

We believe that the nutrient profiling model is performing very well and does not need tampering with. None of the products in our table (left) are essential for children's health and do not need to be promoted on kids' TV. The argument that the model should be simplified is about as sensible as arguing that Olympic drug testing should be simplified to allow more athletes to get away with abuse, or the driving test should be simplified so that incompetent drivers can be allowed on the roads.

The companies want to weaken the model, and this is the only first step. It must be resisted. The protein cap serves a valuable purpose and the model works. We say: Leave it alone!



“You awkward little sod - don't tell me you've gone off ants now!”

## Foods that could get on kids' TV with just a tweak

Examples of fatty or sugary foods that would need only a tweak in their ingredients to be advertised on children's TV if the protein cap is lifted. Products which score 3 or less can be advertised. If the cap remains, much more significant reductions in salt, sugar and saturated fat (sat fat) levels would be necessary.

Product	Score now, with protein cap	Score with no protein cap	Tweak needed to get on kids' TV*
Quaker Sugar Puffs 35% sugar	7	4	Add 3g soy flour or cut 4g sugar
Nestlé Coco Shreddies 29% sugar	8	4	Add 1g soy flour or cut 2g sugar
Nestlé Shreddies, frosted 29% sugar	8	4	Add 2g soy flour or cut 2g sugar
Kellogg's Chocolate Wheats 20% sugar	9	4	Reduce 2g sugar
Nestlé Cheerios 21% sugar, 500mg sodium	9	4	Cut 4g sugar or 50mg sodium
Sainsbury's Choco Hooplas 32% sugar	9	5	Add 1g soya flour and cut 2g sugar
Walker's cheese & onion crisps 33% fat, 2% sat fat, 1.3% salt	9	5	Add 2g milk powder and cut 0.2% salt
McDonald's Cheeseburger 10% fat, 5% sat fat, 1.3% salt	10	5	Cut 0.2% salt and 1% sat fat
Wimpy Quarterpounder 15% fat, 5% sat fat, 1.1% salt	10	5	Cut 0.2% salt and 1% sat fat

\* based on standard 100g portion





# Expanding the baby milk

**Helen Crawley, public health nutritionist, investigates new formula milks that claim to help send your baby to sleep.**

**R**eading the message boards on baby milk websites you might be mistaken for thinking that modern parents have finally found the sure fire solution to a full night of sleep in their child's first year. Since the beginning of 2008, Cow and Gate 'Good Night Milk', which contains potato starch and rice flakes to thicken the milk, has promised parents that their follow-on milk product will offer their baby, "a nutritionally tailored milk ...thicker than regular follow-on milk, but gentle on your baby's tummy ...to provide a warm, contented and satisfying end to the day."

Hipp 'Good Night Milk Drink' is sold as a milk based bedtime meal made from organic follow-on milk and organic cereals. This is given an equally enthusiastic thumbs up on its own parental talk board. "Hi, Just wanted to say how Fab the Good Night Milk Drink is... I give this to my 8 month old son Leo at bedtime, and as soon as he has finished his bottle, he is sound asleep till the morning, very content!"

## Hard sell

In March 2008, as part of a £1m campaign of advertising, advertorials in the parenting press and online marketing, many parents received £1 off vouchers for Cow and Gate 'Good Night Milk' with 'do not disturb' door hangers to reinforce the somnambulant properties of the milk. This prompted debates on a number of parental websites on the merits of various infant formula milks, follow-on formula and these new alternatives. There is clearly a lot of confusion amongst parents over the best milks to use and how to use them safely.

Parental talk boards also highlight the considerable brand loyalty built up over the early years of infant milk use which makes parents eager to hear testimonials for new

products before they try them. There is certainly no shortage of information and debate for the net-savvy parents of the babies of the new millennium. Even in the chat room forums of Emma's Diary, a web site endorsed by the Royal College of General Practitioners, which is supportive of breastfeeding, the success of good night milks are being shared and mothers look to each other for advice on when and how to use the products on offer.

## Marketing might

Most readers will be familiar with the controversies surrounding the marketing of infant formula, as *The Food Magazine* has reported on these regularly. The multi-million pound juggernaut that is the worldwide infant feeding market shows no sign of slowing down. The baby milk market in the UK, in 2007, was worth some £203m. Numico, the parent company of Nutricia, saw an 11.5% rise in profits from their baby food sales during 2007.

Rising profits are partly due to newly formulated and more expensive baby milks with added nutritional elements such as omega-3 fatty acids and prebiotics. Persuading parents of the superiority of products in terms of their similarity to breastmilk and their health and practical benefits is big business.

## Marketing restrictions

Confusion often arises over different types of baby milks, the claims that can be made for them and how they can be advertised.

Tougher restrictions relating to the marketing and promotion of infant formula have now been agreed that will prevent infant formula being advertised directly to parents or allowing the use of text or images relating to pregnancy, pictures of children under six months of age or images inciting a comparison to breastmilk on promotional material.

An industry body representing infant formula manufacturers such as Nutricia, SMA, Heinz, Farley and Nestlé attempted

a judicial review on the introduction of these new regulations, which has now been rejected, but, as often happens, it is likely that concerns over restrictions in marketing may well lead to new product developments that circumvent restrictions.

Good night milk drinks occupy an uncertain market position. Confusion over these milks, as some combination of food and milk, requiring bottles with large holes in the teat to allow the thicker formula to flow through, have raised concerns among health professionals, for whom adding cereal to milk has always been heavily discouraged. Despite no scientific evidence to support a role for adding cereal to milk to make a baby sleep, anecdotal evidence shared by parents suggests this is a widely held belief.

## Unnecessary and worrying

Whilst the good night milk manufacturers clearly state that these products are for babies over six months of age, sleep deprived parents may well be tempted to use them for younger children or to use them more frequently than the 'once before bed' recommended by the manufacturers. Some parents may be misled by the presentation of these formulas to think they are legitimate substitutes for infant or follow-on formula at other times of the day. The other main objections to adding cereal to milk drinks are that :

- Younger infants might have a poorer swallow for anything other than liquids and could potentially choke on thickened formula or inhale it into the lungs.
- 'Feeding babies to sleep' could lead to a dependence on feeling full before bed and this could lead to later sleep problems.

**'Good night' milks are versions of follow-on milk, but with added cereals. These products are promoted to parents with babies age six months plus as part of a weaning diet. The campaign group, Baby Milk Action, maintains that follow-on products were invented by the industry to circumvent the stricter controls on the marketing of formula to younger babies. Basically, the confusing definitions and blurring of boundaries means an overall positive impression is promoted for these artificial products – thereby undermining breastmilk.**



# market

- Milk containing carbohydrates given at bedtime, or during the night, could contribute to dental decay or bottle caries.
- Adding cereal to milk interferes with a baby's natural ability to know how much food she needs, learnt through the volume she drinks in the early years, and interfering with this mechanism could contribute to overeating in childhood and later life.

## A calorie rich product

Most worryingly, perhaps, is the birth of a whole new genre of baby milks on to the market, that fall between stools as far as regulations are concerned and that blur the line between drinks and foods. In Germany, a whole range of 'drink meals' are already available offering up to 110kcal/100ml compared to the maximum 70kcal/100ml allowed in follow-on formula. This market is already estimated to be worth

25m Euros a year in Germany alone and is strong in other European countries such as France and Spain.

Could it be that as regulations on formula milks tighten, to strengthen the promotion of breastfeeding, new products that fall outside the scope of these regulations will increasingly appear to confuse consumers in an emotive and complex market?

It is not always easy being a parent, and developing a bedtime routine is one of the big challenges. But, a bedtime breastfeed or breastmilk in a bottle from dad – along with a story – is tried, tested, and is excellent for the well being of your baby. Sadly, it seems that for our most vulnerable population group this simple advice may well get lost in a sea of marketing and anecdotal hyperbole based on no more evidence than an old wives' tale.



## Healthier school meals, but why aren't they free for all?

**T**he government's School Food Trust (SFT) has just published figures showing that the take up of school meals has gone up more than 2% in primary schools, whilst declining only slightly in secondary schools. Average national take-up hovers around 45%, a figure not much changed in more than 20 years.

According to the SFT's chief executive Judy Hargadon, "while today scotches the myth that children will not eat healthy school meals nobody should be fooled about the scale of the challenges ahead. Many teenagers still need a great deal of convincing and with rising food costs putting strain on the service this is a corner that needs to be turned as soon as possible."

*The Food Magazine* has visited several schools recently, to ask about changes to school meals. The kitchen staff we spoke to were clear that they found their jobs more rewarding, that children are beginning to welcome healthier meals, but that they expected changes to take many years to really settle in.

The schools we visited also mentioned worries over the cost of meals – with many fearing that the price will soon rise to £2 for lunch. Children from families living on benefits receive lunches free, but those living on low incomes still have to pay the full cost.

As a healthy packed lunch can be produced for half that price, poorer families hardly have an incentive to opt in. Schools still lack the cash to redesign dining halls that can currently seat only a fraction of their student population.

Sadly, the UK government has failed so far to put forward a free school meals for all policy, and a successful experiment in Hull (*The Food Magazine* 79) was scrapped when Labour lost control of the city council. Such a direction by government would help to make the service more financially viable, would improve the health of the poorest in our community and thereby save the NHS money in the long run.



**Mark Bourne has been the catering manager at Elizabeth Garrett Anderson secondary school, in London, for years. Although Bourne is a firm believer that the school meals service should be a public one – much like the NHS – he says that recent changes have, "definitely been a big improvement for food quality."**

**Bourne says that each year the new students coming from primary school are more open to trying out healthier dishes. The problem remains that the school has approximately 1,200 students, with dining hall seating for just around 150.**

**Challenges remain, Bourne notes, "We used to sell £600 a day worth of crisps and confectionery, these are now banned, and we make about £250 on healthier snacks. But, this is going up. I think there is a sea change, but we have to give it time."**



# Legal, decent, honest and true?

**Misleading food and drink advertisements are supposed to be regulated by the Advertising Standards Authority. Here we report on recent and upcoming adjudications.**

## X Healthy for Life

As we reported in the last *Food Magazine*, the food supplements industry is hugely lucrative, and it is unsurprising that some companies are prepared to flout the advertising guidelines in order to line their own pockets. The ASA has taken the unusual step of asking the Committee of Advertising Practice (CAP) to issue an alert to its members (the media owners who accept advertising) regarding a brochure published by a company called Healthy for Life, which was filled with the kind of claims that might seriously undermine your health, rather than enhance it.

We do not have space to reproduce the many questionable claims that Healthy for Life made for its products (and which it continues to make via its website), but here are some of the more outrageous product descriptions:

- “Essiac - For All Your Cancer Concerns ... It helps boost the spirit, ease pain and in most cases reduce or eliminate tumours ...”
- “... DHEA supplementation ...inhibits the development of tumours of the breast, lung, colon, skin, lymphatic and other tissue ... linked with a 48% reduction in death from heart diseases and a 36% reduction in death from other causes.”
- “Melatonin... can prevent the changes that lead to hypertension and heart attacks, as well as reducing the risk of certain types of cancer ...”

When investigating this brochure the ASA asked Healthy for Life to back up their claims but received no reply. Healthy for Life will be well aware that the ASA is unable to levy fines or take direct legal action against them, so simply ignored them.

## X Nestlé makes spurious ‘3-a-day’ wholegrain claim

Nestlé had their corporate fingers rapped by the ASA for claiming, “Experts say you need three servings of wholegrain a day,” in a recent TV advert. The ad then extolled the apparent virtues of Nestlé breakfast cereals with the words, “All of these Nestlé cereals have wholegrain guaranteed. Not all cereals do ... Look for three a day on Nestlé cereals ... On your way to three a day.” On-screen text also stated “ON YOUR WAY TO 3-A-DAY.”

On-the-ball viewers questioned whether it was true that “Experts say you need three servings of wholegrain a day.”

When appraising the ad the ASA took advice from the Food Standards Agency (FSA), who said there was no specific UK Government recommendation on the amount of wholegrain foods that should be eaten. They said the advice to, “choose wholegrain varieties where possible” related to the need for consumers to increase their intake of fibre, from the current average of 13.8g per day to 18g per day, but that fibre was found in a range of foods - fruit, vegetables,

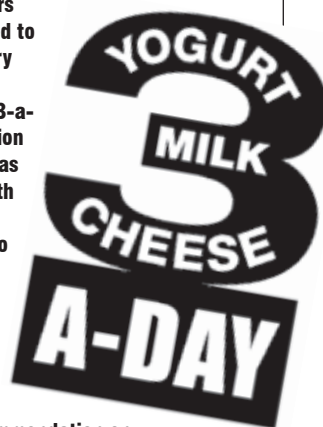
cereals and barley - and was not exclusive to wholegrain foods.

The ASA acknowledged that it might be preferable for consumers to get fibre from sources such as fruit and vegetables, rather than from specific wholegrain foods that might contain other, less beneficial, ingredients, and stated that the similarity between the ‘3-a-day’ phrase used in the ad and the Government’s ‘5-a-day’ recommendation for fruit and vegetables could also cause confusion among viewers.

Cereal Partners (the company which makes Nestlé cereals) argued that the ad was not making a nutritional claim because the ad referred to wholegrain as an ingredient, but the ASA disagreed and said that viewers were likely to interpret the claims made in the ad as nutritional, i.e. that there were recognised health benefits to be gained by consuming three portions of wholegrain a day.

The ASA found the ad misleading, inaccurate and based on insufficient evidence and said the ad must not be broadcast again in its current form. However, Nestlé continue to make the claim on packets of cereal, as illustrated below.

Meanwhile, readers might be interested to learn that the Dairy Council has been running a similar 3-a-day recommendation since 2002, and has just teamed up with ASDA to take the milky message into schools, targeting 10,000 school children, aged between eight and 11. As with wholegrain, there is no official recommendation on consuming three portions of dairy in a day, but if you have a product to sell, then a 3-a-day claim makes a great marketing message.



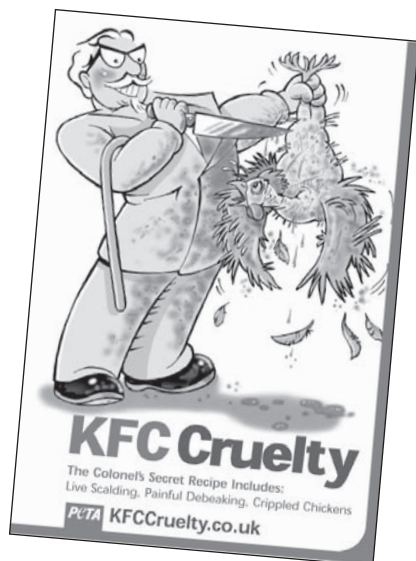
**Good to know...**

Whole grain cereals are an important part of a balanced diet. Scientists recommend that we eat at least 3 portions of whole grain a day (equivalent to 48g). All Nestlé cereals are made using whole grain. The whole grain button shows you how much whole grain a bowl of this cereal contributes towards your daily whole grain needs. Any questions? Email: [nutrition@nestlecereals.co.uk](mailto:nutrition@nestlecereals.co.uk)

## X KFC cruelty

Pressure group People for the Ethical Treatment of Animals (PETA) have run a long-running campaign against the suffering of animals during food production. One of their targets is the fast food chain KFC, which PETA has targeted with a hard-hitting leaflet. The leaflet shows a caricature of KFC frontman Colonel Sanders, grinning maniacally whilst holding a chicken by the legs in one hand and a kitchen knife pointing directly at it in the other. The chicken appears to be in distress and has many feathers missing. The knife is dripping blood and the Colonel’s clothes are covered in blood splatters. The text states, “KFC Cruelty: The Colonel’s Secret Recipe Includes: Live Scalding, Painful Debeaking, Crippled Chickens”.





The leaflet drew a complaint when a copy landed on the doormat of a person who challenged whether it was offensive, irresponsible and unsuitable for untargeted delivery. The complainant was particularly concerned about its effect on children as it had caused distress to a child in her care who had picked it up.

PETA defended the leaflet, explaining that the leaflet was intended to highlight their views on KFC and animal welfare. They believed KFC's treatment of chickens to be abusive and upsetting and, in their opinion, consumers should be made aware of it. They pointed out that a recent consumer poll demonstrated that 21% of responders ranked animal welfare as their top concern and as an animal protection group it was their responsibility to share information about animal abuse with the public.

The pressure group also said that disturbing facts should not be censored simply because they made some people feel uncomfortable, and explained that they did not encourage the distribution of the leaflet through letter boxes or any form of untargeted delivery and pointed out their website specifically stated, "Don't drop leaflets into mailboxes." They added that, since 2003, tens of thousands of the leaflets had been distributed without prompting any complaints.

The ASA accepted PETA's defence and found that, in this instance, the leaflet did not breach any of the industry's advertising codes. KFC themselves were not consulted about the leaflet, but a spokesperson was quoted as saying, "We are committed to animal welfare, do not own or operate any poultry farms in the UK and use the same suppliers as many of the UK's leading supermarkets and restaurants, ensuring that they meet or exceed all relevant UK and EU welfare legislation." The spokesperson added that the company, "strongly resent(s) the ongoing misleading allegations Peta makes about our business in the UK." However, a spokeswoman for KFC told us that the company would not be complaining to the ASA itself.

■ See the leaflet at [www.peta.org.uk/pdfs/kfc%20leaflet.pdf](http://www.peta.org.uk/pdfs/kfc%20leaflet.pdf). For more info: [www.peta.org.uk](http://www.peta.org.uk) and [www.kfc.co.uk](http://www.kfc.co.uk)

## Eat your heart out: Why the food business is bad for the planet and your health.

Felicity Lawrence, 2008. Penguin £8.99, ISBN 978-0-141-02601-5. [www.penguin.com](http://www.penguin.com).

"Mummy – where does milk come from?" The answer, shown lucidly in this startling exposé of the food industry by award winning journalist Felicity Lawrence, is that milk comes from a machine.

"When I arrived, cow 777 was nudged from the holding yard by an automatic gat into a rapid-exit batch milking system. A signal from the transponder clipped to her foreleg identified her and logged her in while she filed past the milking machines. By entering the empty berth at the end of the line she opened the bar for the cow behind her and so the herring bone row of stalls filled up without the need for human intervention.

In the pit below, just three Eastern European workers moved quietly up the lines, attaching milking teats to thirty-six sets of udders at a time. As a vacuum sucked 777's milk down the pipes through an underground meter to record her output, information from a pedometer, also attached to her foreleg, was analysed to calculate how far she had moved since her last milking. When she comes into season she walks more than usual, and the computer will mark her down for artificial insemination. If she walks less than usual she may

have an udder infection, or a foot infection, and the computer marks her down for antibiotic treatment."

So this admirable book continues, with whole chapters devoted to breakfast cereals, to sugar, to fish and to pigs. Above all, it raises the author's mixed sense of reverence and alarm – that such things are possible is wondrous indeed, but surely they push the boundaries of nature further than is good?

And, so she shows. Mustering the voices of scientists, campaigners, environmentalists, animal rights groups and public health experts, Lawrence argues that regulators and standards-setting bodies are hopelessly limited in their narrow view of what is needed, with their zeal to make food safe and their fearful reluctance to address nutritional quality or production methods, labour conditions or environmental degradation.

The result is, increasingly safe, but, nutritionally poor food put cheaply on our plates. It may be argued that good quality food is for those with the education to see it and the money to buy it, while sweet and fatty food comforts the rest of us. But, Lawrence shows us how much the products we are sold have been shaped by the needs of investment banks, the availability of new technology and the operation of persuasive marketing methods.

*Eat Your Heart Out* is a gem. Highly recommended.

■ Tim Lobstein

## Student cookbook: healthy eating. The essential guide.

Ester Davies, 2008. Need2Know books. £8.99, ISBN 978-1-86144-061-7. [www.need2knowbooks.co.uk](http://www.need2knowbooks.co.uk)

Here is a student cookbook with a difference. Rather than just focusing on basic recipes, it explores a wide range of meals, aimed at people of all cooking abilities and interests. In line with current media attention on a healthier nation, this cookbook gives information on healthier eating and provides nutritional information for each of the recipes. The general tone is a healthier way of life, even for those notorious fast food lovers – students.

While the content of this book is good, the layout has let it down and I have been left confused about who would actually use this book. As a student myself, I would not pick it up. The plain looking black and white pages, which give the appearance of a text book, put me straight off. When I cook, it is as a break from work, so I do not want an educational cookbook which makes me feel I am doing even

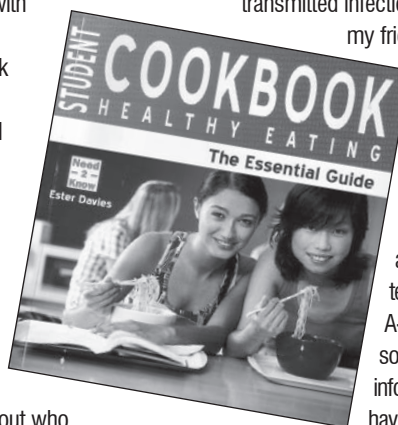
more work! Even my mum, who buys cookbooks at any given opportunity, grimaced at the sight of the dull pages, lack of pictures and the presence of tables. Yes, tables!

The 'Need to Know' books are a series of information books on topics from sexually transmitted infections to divorce to teenage pregnancies. And, I think that is where another problem lies – who wants a cookbook which comes from the same series as a book about sexually transmitted infections?! I certainly would not want my friends to know I was cooking for them out of a book like that!

I have come to the conclusion that this book should best remain in a learning environment – a food technology classroom for instance – to act as an educational book to assist teachers and pupils with GCSE and A-level projects. After all, it does have some good recipe ideas and healthy information contained. It just would not have a place in a typical student house.

This book is the latest addition to the 'Need to Know' series – a group of books tackling a range of health issues.

■ Review by Hannah Brinsden, 3rd year student at the University of Reading



# Price rises mean poorer diets

**Rising prices for basic commodities will not mean we eat less, but rather that our diets will deteriorate even further, argues Tim Lobstein.**

Headlines that herald the end of cheap food have been covering the fronts of newspapers for nearly a year, with the blame for this crisis variously apportioned to the competing interests of biofuel production, the rise in demand from emerging economies such as China and India, the failures in crop production in Australia and Russia, and a lack of vision from Gordon Brown.

Among the many viewpoints, it has been suggested that – given that decades of falling costs of food have been associated with rising levels of obesity – the recent rise in food costs should see a return to less food consumption and healthier diets.

If only! The argument does not take into account the relative shifts in the costs of different types of food. The trends in the last half century have been towards reduced prices for long-shelf-life commodities that can be stored, processed and shipped around the globe. Sugar, corn, vegetable oils and fats, have shown a remarkable, relative decline in cost, while perishable foods,

**Table 1: Costs of food (per 100 kcal) showing the cheaper sources of calories tend to be the least healthy**

Item	Typical cost per 100 kcal
Vegetable oil	1.3p
Frozen chips	2.0p
Granulated sugar	2.2p
Frozen pork sausages	3.8p
Value mince	4.8p
Fruit flavoured squash	5.0p
Potatoes	7.6p
Value burger	8.3p
Whole milk	10.9p
Orange	11.5p
Half-fat pork sausages	13.1p
Breaded/battered whitefish	16.6p
1% skimmed milk	20.6p
Carrots	21.8p
Lean mince	22.8p
Frozen white fish	32.5p
Fresh orange juice	38.4p
Broccoli	50.8p

Source: [www.mysupermarket.co.uk](http://www.mysupermarket.co.uk) Tesco prices, 4th and 5th July 2008.

such as fresh fruit and vegetables, fresh fish and meat, have increased. Highly intensive practices in animal production have successfully kept prices of, for example, milk and chicken, remarkably low, but these low process are partly dependent on cheap fuel and animal feed, and cannot remain low for long.

The pattern of change in future will be to widen the differences between the cheaper foods and the more expensive perishables. Processed foods themselves will be further extended – with added starches, water and air, puffed up with emulsifiers and gels – so that manufacturers can make a little go further. Foods that have little or no agricultural input, such as artificially sweetened soft drinks, will be promoted more heavily.

Cheaper foods remain the unhealthier ones in terms of what we need to get through the day (Table 1). Buying the average daily requirement of 2,000 calories by focusing on fruit, veg, fish and lean meat will set you back more than the minimum wage affords, and a lot more than Income Support will provide.

## Bulk buying cheaper

The problem gets worse if you are living alone, or are a low-income couple or a single parent. Buying small quantities is far more expensive than buying in larger quantities, even for simple basics like bread, milk or eggs. In a price check, at Sainsbury's supermarket in Wandsworth on May 25th, we looked at around 20 products that make up a basic shopping basket. We compared the unit price for bulk purchase offers

(and larger sizes) with the unit price of the same items, but in smaller quantities. We found bulk discounts ranging from 2% on vegetable oil to 45% on baked beans. See table 2.

Bulk buying also assumes that you have the cash or a credit card that can pay for the bulk bargain, that you have a means of transporting it home, and that you have the storage facilities to ensure the bulk purchase is actually used and not thrown away. For home deliveries a credit card is essential – not something many low income people have access to.

Blaming China, India or the US biofuel crop for these problems is easy. Blaming our government makes more sense, as it is our politicians who have been responsible for food and agriculture policy, and for the distribution of our country's wealth.

### Bulk beans

A 200g tin of baked beans costs 45p (22.5 pence per 100g), whereas a four pack of 415g tins, cost £1.99, or about 12p per 100g. That is a discount of about 45%.



**Table 2: Examples of differential pricing per unit of food in different sizes**

Food item	Weight/volume	Price	Price per unit	Bulk discount
Milk	1 pint	42p	42p (per pint)	
	6 pint	£2.12	35.3p (per pint)	16%
Eggs 'basics'	6	88p	14.7p (per egg)	
	15	£1.50	10p (per egg)	32%
Pasta	500g	79p	15.8p (per 100g)	
	1kg	£1.24	12.4p (per 100g)	21%
Sugar	500g	45p	9.0p (per 100g)	
	5kg	£3.59	7.2p (per 100g)	20%
White sliced bread	400g	69p	17.3 p(per 100g)	
	800g	£1.14	14.3p (per 100g)	17%
Vegetable oil	1 litre	£1.19	£1.19 (per litre)	
	3 litres	£3.49	£1.16 (per litre)	2%
Carrots	loose kg	74p	74p (per kg)	
	'Basics' 2kg	73p	36.5p (per kg)	51%
Oranges	1	26p	26p (per item)	
	12	£2.00	16.7p (per item)	36%

Source: Sainsbury supermarket Wandsworth 25 May 2008.



# Readers' letters

We welcome letters from our readers, but we do sometimes have to edit them for publication (our apologies to the authors). Write to The Editor, *The Food Magazine*, 94 White Lion Street, London N1 9PF or email to [letters@foodcomm.org.uk](mailto:letters@foodcomm.org.uk)

## Meat pie?

I recently bought a Ginsters Cornish Pasty which contained a fair amount of chewy, gristly bits which I have enclosed. This does not seem to match up with the picture of the beefy pie on the front of the packaging, is this allowed?

**R Braga, Essex.**

The pasty you have sent us contains 14% beef, so not all that much, but it does meet legal minimum guidelines. It has beef fat listed separately as an ingredient. Pasties made with beef can legally contain up to a set percentage of connective tissue and still have this included as meat content – so that is likely to be the chewy bits you describe. If fat or connective tissue content goes over a certain limit, the excess must be deducted from the meat content and declared separately. So, it looks as if your pasty is following labelling guidance in terms of its ingredients.

Packaging images are not allowed to mislead consumers, but, the trading standards officer we spoke to says this packaging is acceptable and noted that this is quite a difficult area to monitor. Packaging is more easily judged misleading if it shows, for example, a chicken in a field on a pack of eggs from caged hens, or six meatballs on a pack that contains four.

At *The Food Magazine* we would like to see all products labelled with traffic lights – which would give clear information on saturated fat, salt and sugar content of processed products. We also suggest you steer clear of processed foods as much as possible – we know that is not easy – but they are so often nothing at all like the homemade version.

## Why are you so tough on Tesco and food supplements?

I am writing to cancel my subscription because the criticism in the magazine seems to be getting a bit one-sided. For example, Tesco does a lot for the health of the nation and, with regard to vitamins and mineral supplements you tell us to see a doctor before believing what we read in supplement catalogues. Well, the NHS is no use to me but naturopaths are very knowledgeable.

**Ex-reader (name withheld)**

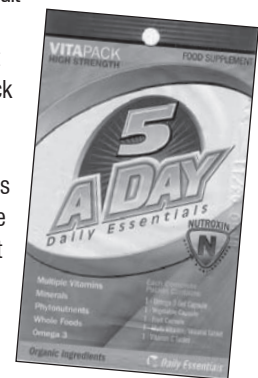
We are sorry to lose you as a reader, but make no apology for our criticisms of the big supermarket chains and supplement catalogues. We think our pieces are tough, but well balanced. *The Food Magazine* is an independent, critical voice in a world in which cheque book and PR journalism is all too

frequent. We run many positive stories about the interesting work of people and organisations all over the world – who do not have their own, huge PR machines and advertising budgets to promote their messages.

In recent weeks, we have had a terrifically worried farmer and his family on the phone – he had spoken to us very critically about supermarkets he sold to – he told us he would lose his business if we named him. We did not name him, but gave a voice to his criticisms. Recently, we have been invited to a raft of Christmas showcases and other PR events – an easy source of stories for other magazines – but not for this one. We do not base the contents of our magazine on promoting what companies wish to sell.

And, we have found another supplement we do not like – on sale in a London shop, sent in by another reader – 5 a day Vitapack – selling at a pound a pack – and a direct challenge to the genuinely important 5 a day fruit and veg message.

We hope our readers want us to push the boundaries back – to challenge those with the power and money in our food system, and to sing the praises of those we need to hear more about – and do not hear about elsewhere.



## Subscribe to *The Food Magazine* (cut out, or photocopy, and post to the address below)

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Postcode: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

### Subscribe / renew

- ☐ Individuals, schools, public libraries – £25.00 (Overseas £32.00)
  - ☐ Organisations, companies – £50.00 (Overseas £59.00)
  - ☐ Please tick if this is a renewal payment. ☐ Extra issue(s) to the same UK address for £10.00 each.
- The Food Magazine* is published four times a year. Your subscription will start with the next issue.

### Donations

- ☐ I enclose a donation of £ \_\_\_\_\_ to support The Food Commission's work.

### Payments

- ☐ I enclose a cheque for £ \_\_\_\_\_ made payable to The Food Commission (UK) Ltd.
- ☐ I enclose an official order form. Please send an invoice to my company or organisation.
- ☐ Please debit my Visa, Mastercard, Maestro, Switch or Solo card (see right).

Please return to: **The Food Commission, FREEPOST KE 7564, London N1 9BR** (no stamp required if posted in UK)

Email: [sales@foodcomm.org.uk](mailto:sales@foodcomm.org.uk)

If paying by Credit or Debit Card please fill in information below, or telephone on 020 7837 2250 (overseas +44 20 7837 2250)

Card number: \_\_\_\_\_

Expiry date: \_\_\_\_\_

Start date if shown: \_\_\_\_\_

Issue No. if shown: \_\_\_\_\_

3 digit security No: \_\_\_\_\_

Signature: \_\_\_\_\_



## Eat now

We received a sample of these rather alarming stickers in the post. The company – Special Products – recommends the use of 50 labels a month, at £9. It suggests placing them on food items we need to use as soon as possible, helping us to reduce waste. We feel perturbed and vaguely alarmed every time we look at them. They have increased our collective determination to shop for less, more often, and to apply those old familiar testers of edibility – our senses.



## Crinchy snacks

Apparently the cracker and snack market in the USA is in the doldrums, and the endlessly inventive folk at manufacturer National Starch think that crinchy snacks could be a stepping stone back to the giddy heights. They have now identified 18 factors that go into crispy and crinchy, including crinchy, apparently an – ‘in between’ texture; crinchy-shattering; and crunch-snapping. The company hope ‘food formulators’ – whoever these people are – will be able to create products with these textures to tempt jaded tastebuds.

The devil makes work for idle hands they say – an aphorism that could be applied quite aptly to almost of all the whole of the food manufacturing industry.

## Burger King bypass

You might expect that hospitals would take a responsible approach to nutrition throughout their operations. But, a colleague visited Southampton General Hospital, this spring, to see her father after his heart bypass operation brought on by furring of the arteries. She was surprised to find that the WH Smiths in the foyer had a special offer of £1 for 300g bars of Cadbury's chocolate. When challenged, staff said simply, “Chocolate's not as bad as burgers.”

They might be right, but the cardiac ward in the same hospital also has a Burger King near the entrance. Presumably, many family members visiting heart and cancer patients may be predisposed to medical conditions that could be greatly improved by good diet. Southampton hospital's only nod to this understanding is, that beside the Burger King, there is a dusty 1996 poster from the old Ministry of Agriculture, Fisheries and Food (MAFF) reminding patients that they should avoid eating too many fatty and sugary foods to avoid heart disease.



## Ice cream vans and public parks

Readers have written in to complain that their local parks are patrolled by ice cream vans that take up residence right next to paddling pools and playgrounds. This van spent the afternoon next to a play area, driving one dad to distraction due to nagging from his children who demanded cones with the packed lunch he had brought. “I expected to spend the afternoon being nagged with ‘push me, swing me, pull me’ – but thought I might get a rest from demands for sweets, why aren't these vans banned from parks?” Quite.



## Mega mark up for fish oil

An omega 3 industry man – hailing from northern Norway, and a veteran of the production of the popular capsules and tablets – tells us that the expected net profit – from fish oil to capsule – is 30,000%. We have been staggered by this, but he swears it is so.



## My darling, my duck

We have acquired some copies of a cookery magazine from the 1960s, the *Cordon bleu cookery course*, and have been enjoying features such as ‘career girl hostess’ (with tips for men, temporarily coping with the family cooking, apparently to be offered in a future issue). But, we love this photo the most – did you smile at your own newborn so sweetly, or hold the infant so close?

