



Organic Food Quality & Health

Organic Food Quality News

January 2005

This monthly newsletter, edited by nutritionist and independent organic researcher Shane Heaton, is provided by the FQH association to keep researchers, the industry and other interested parties abreast of the latest news in organic food quality, research, health, diet and other relevant issues. Thank you to those who've completed the feedback questionnaire. If you haven't, please visit www.organicfqhresearch.org for a copy. Comments and contributions are welcome, or if you find an item of news that you think should be included, please email shane@dontjustsurvive.com

Quotes of the month:

“US academic institutions are being 'bought' (via funding) by biotechnology firms which exert a vice-like grip on the US government.” Scientist Ignacio Chapela in an interview with John Vidal in the UK Guardian newspaper. Chapela spoke at the Soil Association annual conference about the biotech industry's intimidation of scientists who publish negative GM research. Full interview below.

"Now that I've got kids, it's become really important for me on the health front to try to buy as much organic produce as possible. It seems to me that more people are getting ill and suffering from allergies, which no one can properly explain. So good, fresh, preferably organic, flavoursome food..." – UK celebrity chef Jamie Oliver in BBC Good Food magazine

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1. PESTICIDES

UK: Pesticide risk potential starting to be recognised

The government's independent scientific advisers are stepping up the pressure on Whitehall to investigate whether the widespread use of pesticides has increased risk of disease in humans. The Advisory Committee on Pesticides' demand for studies to show whether and how the chemicals may cause Parkinson's disease coincides with a separate call from the Department of Health's Committee on Carcinogenicity, for improved measures of exposure to pesticides, because of possible links with prostate cancer. The Advisory Committee on Pesticides said it would be "useful" to set up long-term health studies of workers making or using pesticides. They concluded in November that a review of the existing evidence indicated a correlation between pesticides and Parkinson's disease. Defra said that some studies had found no association between pesticide use and Parkinson's, but added, "A link between pesticides exposure and Parkinson's disease cannot be discounted based on the evidence currently available. That is why further research is required" The Pesticides Safety Directorate was investigating the best way forward. (The Guardian - 14 January)

Germany: Pesticide reduction program begins

The German government's reduction programme for chemical pesticides starts in January 2005. The environmental protection organization PAN Germany is accompanying the government's pesticide reduction programme with a campaign under the slogan "Pesticide Reduction - Pesticides Have no Place in Life". The Web site initially provides basic information on subjects like the pesticide residue situation in Germany and comments by PAN Germany on the government's programme. According to a study by the EU, 47 % of fruit and vegetable samples in Germany contained pesticide residues below the limits, 9 % above the limits and 44 % were free of residues.

<http://www.pestizidreduktion.de> and <http://www.pan-germany.org/english.htm>

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2. ADDITIVES

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3. ANTIBIOTICS/FOOD SAFETY

Germany: Organic foods lower health risks

Undesired substances and organisms in food can be the reason for allergies, but also cause serious diseases like cancer. Scientists from the research project "Food Turn-around" have now used a new procedure to rate these substances by comparison and have estimated the damage to society. The result: BSE and hormonal substances are among the biggest food risks to society, but genetically modified food, pesticides, bacteria, viruses and drugs are similarly damaging. The study shows that the risk potential is approximately halved by organic food. The

upshot is that organic food contains appreciably fewer health risks. The interim findings have now been published in the discussion paper "Food Risks - Identification of Key Actions".
http://www.ernaehrungswende.de/fr_ver.html

US: McDonald's lowers antibiotics in meat

McDonald's has taken the first steps to fulfil its 2003 promise to reduce the levels of antibiotics in the millions of pounds of chicken, pork and beef that it sells. All of the chicken suppliers with whom the company has a direct relationship have already eliminated the use of human antibiotics as growth promoters in the chickens. McDonald's has been working with Environmental Defense, an advocacy group, to bring about the change, which the company says has not increased the price of the chickens. (New York Times - 12 January)

UK: Antibiotic use in farm animals rises

Farmers' reliance on growth promoting antibiotics to fatten chickens and pigs rose by 33 per cent, from 27 to 36 tons, between 2002 and 2003, according to figures from the Veterinary Medicines Directorate (part of Defra) - despite the government's 1999 strategy to put curbs on their use, and despite their imminent EU ban. From January 2006, avilamycin, flavomycin and monensin will be banned across the EU due to fears that their excessive use has speeded up bacterial resistance to human medicines. The government's initiative to reduce use has so far been reliant on voluntary initiatives from farmers and the food industry. The Soil Association's antibiotics policy adviser Richard Young commented: 'We need a more hands-on approach from the government if we are ever to make progress.' (Guardian, Daily Mail)

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4. GMOs

UK: GM beet can benefit wildlife

GM beet designed to tolerate herbicides can help birds and other wildlife to thrive, says a study published in the journal, Proceedings B of the Royal Society. It shows conclusively how to use GM herbicide-tolerant sugar beet for environmental benefit, said Dr John Pidgeon, director of Broom's Barn, Dr Mike May and colleagues.

US: Will biotech feed the world?

A new article from the Nature Institute, "Will Biotech Feed the World? The Broader Context", describes the broader ecological, agricultural, and social context of feeding the hungry, with the often heard claim that biotechnology is needed to feed the world's growing population being revealed as more hype than reality.

Extract: "Feeding the world is not just a question of increasing yields. When we believe it is, we divert our attention from the much broader social, political, economic, and ecological issues influencing food production and hunger. If we continue to live under the illusion that we will find a technological solution to world hunger, and if we set our hopes on such solutions and channel our money and energy into their development, we can be pretty sure that world hunger will only grow.

What's needed is a shift in our way of viewing that can inspire and inform a different kind of practice. The shift means no longer thinking of the world's problems in terms of individual causes that can be manipulated or alleviated by single-target solutions. In the mode of thought

that leads to industrial agriculture and genetic engineering we isolate “causes” out of a whole ecology and try to affect changes by manipulating these causes.

An ecological view takes a different approach. The focus is not on individual causes but on orchestrating the whole system. The whole is embodied in its interactions and in the synergies that arise out of these interactions. We attend to the reciprocal relations within the context of the whole rather than isolating linear pathways and manipulating them as though the rest of the system didn't exist.”

For the full article visit http://www.natureinstitute.org/txt/ch/feed_the_world.htm

UK: Chapela interview in the Guardian newspaper

“Enemy of the state”

Ignacio Chapela was once the cream of the scientific core at Berkeley university, California. Now he is reviled. He tells John Vidal how US academic institutions are being 'bought' by biotechnology firms that are backed by the government. Eight years ago, Ignacio Chapela was a rising star of American academe; an assistant professor of microbial ecology at Berkeley university in California, sitting on high-level scientific committees and with the seemingly certain prospect of career advancement and a well-paid job for life. Chapela, a mushroom expert, had no problem with biotech crops. Indeed, he had worked for several years with the Swiss company Sandoz, which later became GM giant Novartis. But now Chapela has lost his job, is unemployable in any other top-ranking US university, and admits he is "extremely biased" against the industry. He is furious with the highest levels of Berkeley, believing that it and other major academic institutions have been "bought". The biotech industry, he says, exerts a vice-like grip on the US government and Chapela is preparing to spend years in the courts.

What turned this once mild Mexican scientist into one of the world's leading defenders of academic freedom and one of the loudest critics of biotech? Chapela, in Britain to address the Soil Association annual meeting in Newcastle, says he gained "knowledge". Specifically, he questioned a "donation" to Berkeley by a GM giant and then discovered that GM maize was seriously polluting Mexico. In so doing, he has made powerful enemies. There were several radicalisation points, he says. "One was when I was asked to be part of a National Academy of Science [equivalent of a Royal Society] committee supposedly looking at the scientific foundation for the regulatory status of GM. We were being asked, I realised, to give a scientific excuse for deregulation. "'I have two questions,' I said. The first was about substantial equivalence [when a new food or food component is found to be substantially equivalent to an existing food or food component]; the second was whether we could review what happens if we lost control of the GM through, say, cross-pollination. For both, we had a big thumb's down from the top. We were told 'thou shalt not ask that'. A reasonable scientist should always react with suspicion to suppression." That was the point, he says, when he decided to go to Mexico and research the potential spread of GM maize, which was flooding over the border. He sent a colleague, who found widespread GM contamination, with grave implications for biodiversity. After rigorous testing, they compiled a paper for the British science journal Nature, but even before publication a powerful campaign was mounted against them, involving a Washington PR firm, industry-friendly scientists in Europe and the US, and the Mexican government. Six months after publication, Nature effectively withdrew its support for his article. It was accused of being lobbied by the friends of the industry, but denied it.

At the same time, Berkeley tried to stop Chapela getting his tenure (a job for life). Despite overwhelming support by his academic peers, up to and including the dean, he was denied it and he has now given his last lecture. "The support was extraordinary," he says. "At least 200

people, perhaps more, demonstrated for me." In itself, the Mexican research was probably not enough to lose him his job. But Chapela has "form". In 1997, when chair of a faculty committee, he questioned the ethics of an industry offer to Berkeley from his old company, and made many enemies. "One of the reasons I needed to be kicked out is that I opposed a \$50m [£27m] donation to the university by Novartis," he says. In return, the company was to fund a third of all the work in the department and get a first look at all the research papers. "I stood against it and dragged the university all the way to the senate of California. In the end, the donation [was reduced] to \$25m [£13m]. "They hate me," he says, but he cannot say exactly who because the individuals who insisted he was fired "are anonymous, not accountable, hold enormous power and act as a corporate body. One of these power sources is unquestionably the biotech industry". Chapela reckons that the industry has received more than \$200bn (£107bn) of US public money over the years and should be bankrupt by now. "It should have died three years ago," he insists. "Why is the industry still alive? It's bleeding like crazy. The answer is that the industry is in the national interests of the US. The state department handles it. It's not about economic value but government [strategy]. It is built into the rightwing agenda of the US at executive branch level."

But Chapela is baffled by the British government's support for agricultural biotech. "I can tell what is in it for the US. I can understand Bush [senior] and Dan Quayle thinking [in the 1990s] that it looked promising and taking the risk, but I have absolutely no idea what you guys [the British] are in it for." He says the vast amounts of money put into US universities by biotech firms is fundamentally altering the way biology is approached. No one, Chapela says, wants to pursue the kind of research he undertook in Mexico because they are afraid of the consequences. "But there is a growing understanding that universities have been hijacked and the whole science establishment has become vested in this project. Professors are now becoming entrepreneurs and students are becoming employees. Now you get asked how many patents you hold when you go for a job." Meanwhile, Chapela is preparing a court case against the university that he hopes will expose its relationship with biotech and other unaccountable industrial funders. He believes that the biotech industry wants it: "The industry needs to show the pain in standing up to it. It wants a case to show its chilling influence. We have no option but to keep challenging it."

The Guardian Wednesday January 19, 2005

EU: GM food splits European consumers

Genetically modified food encounters a widely varying response in Europe. Whereas the Austrians and French vigorously reject genetic food, the Poles and British show little interest in this topic. The Dutch have the least reservations about food with genetically modified components. These are some of the results of the GfK "European Consumer Study 2004", in which 9,400 consumers in eight EU countries were interviewed on topics such as their attitude to genetic food and healthy food. 59 per cent of all Austrian consumers and 51 per cent of all French consumers are currently not prepared to buy food with genetically modified components under any circumstances. The share of those who reject such modified products in Germany has meanwhile risen from slightly less than one-third in 2001 to 44 per cent. <http://www.gfk.de>

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5. BSE

UK: Risk of vCJD epidemic small

As beef sales reach pre-mad cow disease levels scientists in the UK say the likelihood of a large vCJD epidemic remains small. According to research published in the Journal of the Royal Society Interface, researchers at Imperial College London believe there will be around 70 future cases of vCJD arising from the consumption of BSE-infected beef. At most this could rise to a total of around 600 deaths, although they suggest this is unlikely. BSE (bovine spongiform encephalopathy) is a transmissible, neurodegenerative, fatal brain disease of cattle linked to the human disease variant Creutzfeldt-Jakob disease (vCJD) that has struck more than 100 people in the UK alone. Work by the UK scientists follows on from a UK study in 2003 that looked at tissue from appendectomies (appendix removals). The researchers found a higher prevalence of vCJD than expected from clinical data alone, indicating that around 3,800 individuals in the UK could test positive. But since 2000 there has been a decline in the number of clinical cases reported. "One reason for the discrepancy between the high estimated number of positive tests and low number of actual recorded clinical cases could be that many infected individuals do not go on to develop clinical disease in their lifetime," said Dr Azra Ghani at Imperial College London.

There have been 148 deaths from new-variant Creutzfeldt-Jakob disease (vCJD) since the condition was first seen in 1995. Deaths have been declining from their peak of 28 in 2000 to nine last year. BSE ravaged the UK beef industry in the late 1980s and early 1990s and producers are only now starting to recover from the outbreak that at its peak saw 37,000 clinical cases of BSE and about 60,000 of the highest risk animals entering the food supply, compared with less than one a year today. Red meat consumption (beef, pork and lamb) in the UK has rebounded to pre-BSE levels with consumers eating 43.2 kilos per year, per head, or a total of 2.6 million tonnes. In 1996, at the height of the BSE crisis, consumption dipped to 2.3 million tonnes. In October last year Brussels committed €188 million to food safety issues in the Union linked to animal diseases, signing off the largest slice for eradication of mad cow disease. The majority of the budget, €98 million, will go towards tackling BSE. "Healthy animals are the key to safe food. Today's decision reflects our on-going commitment to supporting pro-active monitoring, preventative action, and disease eradication," said David Byrne, then EU commissioner for health and consumer protection. BSE cost the EU-15 more than €90 billion, a situation that Brussels is keen to avert a second time. The new budget, rising by some €41 million on 2004, for TSEs will aim to boost consumer confidence in Europe's beef industry to bring more revenue into the sector.

Foodnavigator.com 13/01/2005

France: 'Mad goat' found

A French goat has tested positive for mad cow disease - the first animal in the world other than a cow to have bovine spongiform encephalopathy (BSE). The European Commission says further testing will be done to see if the incidence is an isolated one. The animal, which was slaughtered in 2002, was initially thought to have scrapie, a similar brain-wasting condition sometimes seen in goats. But British scientists have now confirmed the disease was in fact BSE.

More than 100 people in the UK have died from vCJD (variant Creutzfeldt-Jakob Disease), the human form of BSE, after eating tainted beef. But the EC stressed on Friday that precautionary measures put in place in recent years to protect the human food chain from contaminated meats meant there was no need for alarm over the latest finding. Markos Kyprianou, EU Commissioner responsible for Health and Consumer Protection, said: "I want to reassure consumers that existing safety measures in the EU offer a very high level of protection. "This case was

discovered thanks to the EU testing system in place in France. "The testing programme has shown us that there is a very low incidence rate of TSEs (transmissible spongiform encephalopathies) in goats and allowed us to detect suspect animals so that they can be taken out of the food chain, as was done with this goat and its entire herd."

BSE had not previously been found under natural circumstances in ruminants other than cattle - although its presence in goats or other ruminants had been viewed as theoretically possible. Although some incidences of TSEs in animals such as cats and antelopes have looked very similar to the BSE strain, there is some debate over whether these really were mad cow. In 2001, a study in the UK was thought to have found BSE in sheep. It later transpired, however, that the scientists working on the research study were mistakenly looking at samples obtained from cow brains. The EC now wants to test 200,000 goats in the 25 EU member states over the next six months. The testing would concentrate on countries where cases of BSE have been reported in cattle in the past, including the UK. Current testing has already shown there is a low incidence of scrapie in goats. In the UK, for example, only two cases have been confirmed since 1997. In France, which has a far bigger goat population, just 19 positives were recorded among 21,000 animals tested in 2003. Across the EU bloc as a whole, there are believed to be more than 11.5 million goats. The French agriculture ministry said the goat came from the Ardeche region, in southeast France. It was kept in a flock of 300 animals which were all slaughtered and their carcasses destroyed. When French research was unable to distinguish the TSE found in the goat from the BSE strain, samples were sent to the Community Reference Laboratory (CRL) for TSEs in Weybridge, UK, for its expert opinion. It confirmed the presence of the BSE strain. *Story from BBC NEWS: <http://news.bbc.co.uk/go/pr/fr/-/2/hi/europe/4216431.stm> 2005/01/28 15:31:34 GMT*

Canada: BSE case gets Canada scrambling

Canada is moving quickly in its newest bovine spongiform encephalopathy investigation triggered by the Jan. 2 confirmation of the rare brain-wasting disease in an 8-year-old Holstein cow with a history of mobility problems. "Our understanding is the most likely source of infection is from cattle imported from the UK in the late 1980s that were rendered and entered the feed system," said Gary Little, a Canadian Food Inspection Service veterinarian who heads the investigation. BSE was first described in Britain in 1986. The tainted-feed theory developed as investigators tried to explain spread of the rare disease that took years before expressing itself in physical symptoms that farmers could recognize. The U.S. Department of Agriculture's estimates put the cost of the disease outbreak to European farmers and livestock handlers at \$107 billion since the onset nearly 20 years ago. The Bank of Montreal six weeks ago estimated the loss to Canadian livestock producers at \$4.2 billion in U.S. dollars since May 2003 when confirmation of the country's first native-born BSE cow slammed the door on beef and live cattle exports. Little said the most recent victim was born Oct. 5, 1996, on an Alberta dairy farm with fewer than 200 cows. The farm is quarantined, and a search is under way for calves that could have been exposed to the same feed supplements. Canada and the United States in the summer of 1997 banned ruminant-derived rendered proteins in cattle, sheep and goat feedstuffs as part of a worldwide effort to contain spread of BSE.

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6. NUTRIENT CONTENT

US: 50% more lycopene in organic ketchup

A team of U.S. Department of Agriculture scientists stationed at the Western Regional Research Center in Albany, California studied the lycopene content of 13 commercially available brands of ketchup – six major national brands, three organic brands, two store brands, and two brands sold in fast food restaurants and/or vending machines (Ishida and Chapman, 2004). They measured the micrograms of *trans*-lycopene per gram of ketchup. Lycopene helps protect against breast, pancreatic, prostate and intestinal cancer, especially when eaten with fatty foods. Also evidence that it can reduce the risk of heart attacks (New Scientist, 23.12.2000). The average level in the organic brands was by far the highest – 174.2 micrograms per gram of ketchup. The major national brands averaged 110.7 micrograms per gram, the store brands 112.3, and the fast food/vending brands, 102.5. So the average level in the organic brands was 57 percent higher than the national brands and 55 percent higher than the store brands.

The USDA scientists also measured total antioxidant capacity using the TEAC assay (Trolox Equivalent Antioxidant Capacity; for more details on this and other methods to measure total antioxidant capacity in foods, see the Center's antioxidant SSR). One of the organic ketchups had the highest level – 350 TEAC units, about double the level in the fast food/vending brands and about two-thirds higher than the major national brands. The authors note that ketchup is a major form of tomato consumption in the U.S. and offer an interesting observation: "Tomato ketchup is an excellent source of lycopene, carotenoids, and antioxidant compounds. A good estimate of lycopene content can be made by the dark red appearance of the product. The organic brands had a much deeper red color than the other brands examined."

Ishida BK & Chapman MH (2004) A Comparison of the Carotenoid Content and Total Antioxidant Activity in Catsup from Several Commercial Sources in the United States. Journal of Agricultural and Food Chemistry 52(26) December 29.

US: Review confirms organic foods have elevated levels of antioxidants

January 26, 2005 — The Organic Center's second State of Science Review (SSR) concludes that organic farming methods have the potential to elevate average antioxidant levels, especially in fresh produce. Charles Benbrook, Ph.D., compiled and analyzed existing scientific information for his report, *Elevating Antioxidant Levels Through Organic Farming and Food Processing*. The report reveals that on average, antioxidant levels were about 30 percent higher in organic food compared to conventional food grown under the same conditions. An executive summary and the entire report can be found at: <http://www.organic-center.org/science.htm?articleid=54>. The report's findings are particularly useful for consumers who wish to consume higher levels of antioxidants in fresh fruits and vegetables, without additional caloric intake. The USDA is currently recommending higher daily intake of fruits and vegetables, especially those that are antioxidant rich. The report's tables include rankings of common foods according to their total antioxidant capacity per calorie and per typical serving. Consumers who seek out foods high in antioxidant content can meet recommended antioxidant intake levels with less than 10 percent of their daily caloric intake.

"Because of the many potential health benefits associated with antioxidant consumption, increasing average daily antioxidant intake through the diet has emerged as an important health goal," says Benbrook. "This goal was a major factor shaping the new USDA Dietary Guidelines for Americans, which increase the average recommended intake of fruits and vegetables to at least nine servings per day from the original five*. By generating higher concentrations of

antioxidants in fresh produce and other organic foods, organic farming can help people increase their daily consumption of antioxidants without a proportional increase in calories.”

This report reviews, among other data, 15 quantitative comparisons of antioxidant levels in organic versus conventional fruit and vegetables. Organically grown produce had higher levels in 13 out of 15 cases. On average, the organic crops contained about one-third higher antioxidant and/or phenolic content than comparable conventional produce. Several studies found levels of specific vitamins, flavonoids or antioxidants in organic foods to be two or three times the level found in matched samples of conventional foods. In studies making direct comparisons of levels of antioxidants in organic versus conventional produce, higher levels are often found in organic produce but the converse is rarely true.

Though there is much more to learn, the current state of science supports the conclusion that organic farming methods can and often do result in higher antioxidant levels in fruits and vegetables. This health benefit for consumers joins the list of other well-documented reasons to buy organic, including the reduction of farm worker and consumer exposures to pesticides, the impacts of pesticides on the environment, and the prevention of problems associated with hormone and antibiotic use in livestock farming. Many consumers report that they enjoy the richer flavors in organic food and instinctively sense that organic foods are better for them; this SSR confirms that there are good reasons to focus additional scientific resources on gaining a more comprehensive understanding of the taste and health-oriented benefits associated with elevating average antioxidant levels in food.

Research on antioxidant levels in organically grown food is among the Organic Center’s top research priorities. The Center has initiated and funded three new research projects in 2004 focused on the impact of organic farming methods and food processing technologies on the antioxidant content of food. Detailed information about the Center’s antioxidant-related projects can be found at

www.organic-center.org/stateofscience.htm.

For more information, contact Charles Benbrook, Chief Scientist, Organic Center (208) 263-5236; cbenbrook@organic-center.org

UK: Organic milk higher in vitamins and antioxidants than non-organic milk

Organic milk has higher levels of Vitamin E, antioxidants and omega 3 essential fatty acids, according to new research released today at the Soil Association's annual conference, held in conjunction with the University of Newcastle's Quality Low Impact Food (QLIF) Congress in Newcastle. Organically reared cows, which eat high levels of fresh grass, clover pasture and grass clover silage, produced milk which is on average 50% higher in Vitamin E (alpha tocopherol), 75% higher in beta carotene (which our bodies convert to Vitamin A) and two to three times higher in the antioxidants lutein and zeaxanthine than non-organic milk. The data supports the higher antioxidant levels reported by an Italian Research Council Study. In addition, the research team found higher levels of omega 3 essential fatty acids, confirming earlier research into raised omega 3 levels by the University of Aberdeen and the Institute of Grassland and Environmental Research.

Drinking a pint of organic milk a day provides 17.5% of the required intake of Vitamin E (alpha tocopherol) for women and 14% of that for men, and as much beta carotene as a portion of some vegetables such as Brussels Sprouts. Although there are no dietary reference values for beta carotene, lutein or zeaxanthine, they are recognised as an important part of a healthy diet, particularly as consuming these antioxidants in supplement form has been shown to be less effective than from foods. Fruit and vegetables are the major dietary source, but the research shows that organic milk can also provide a useful additional source. The enhanced nutritional

benefits of organic milk are due to the more natural diets of organic cows. Such diets are derived from strict legal standards, subject to independent certification, and laid down in European law. The less intensive organic systems (compared to conventional) ensure a diet high in forage, fresh grass and clover. In addition, stocking rates on organic farms are lower, giving organic cows access to more fresh pasture. In contrast, non-organic farmers are allowed to provide a cheaper diet which can be high in energy rich concentrates to increase milk yields. Non-organic farmers are also allowed to use GM cattlefeed, urea and solvent extracted feeds and waste from food factories, all of which are banned in organic diets. No additional nutritional benefits were found in the milk of non-organic cows. Professor Carlo Leifert, QLIF project leader commented at the conference; "Clearly to convince the scientific community as a whole we need further evidence and the EU Quality Low Input Food project is very much focused on confirming and explaining the differences in milk composition shown in these studies. However, the evidence already available convinces me to pay a little extra for organic milk".

Ed: I'd be interested to hear others' opinions on this research into the nutritional value of organic milk. I concede that if you must drink milk, organic is a better option, but as a clinical nutritionist I do not advocate milk consumption and can't help feeling that all this organic milk research is just tinkering at the edges of the overall nutritional value of milk as a food. Milk consumption is linked with allergies and intolerances, mineral imbalances, cardiovascular disease, prostate and other cancers, childhood diabetes, and more. The recent ONUK health survey of 37000 people identified dairy products as among those foods worst for health (see last issue), while researchers in the November issue of the American Journal of Clinical Nutrition, Vol. 80, No. 5, 1353-1357 conclude "Our data indicate that high intakes of lactose and dairy products, particularly milk, are associated with an increased risk of serous ovarian cancer but not of other subtypes of ovarian cancer.". See the article 'What's Wrong with Milk' by my colleague Patrick Holford at www.patrickholford.com/content.asp?id_Content=1232 In my opinion the omega 3 research on milk is nutritionally meaningless. Milk is a hopeless source of omega 3 fats in the diet and should be reduced if you need more omega 3 so the omega 6 arachadonic acid (rich in milk) doesn't interfere with it's absorption and bio-availability from real sources like oily fish and seeds. Please send all comments to the editor at shane@dontjustsurvive.com

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7. HEALTH & DIET

Netherlands: Good diet just as good as medication for longer life

Consumers should forget about taking medication to help them stay healthy longer and change their diet instead, suggest scientists writing in this week's British Medical Journal. Regularly eating fish, wine, dark chocolate, fruits and vegetables, garlic and almonds could extend the life expectancy of men by 6.6 years and women by 4.8 years, says the team from Erasmus University in Rotterdam. The regime has been dubbed a 'polymeal' in reference to a report in the same journal last year that described the potential benefits of a 'polypill'. The pill, combining aspirin, folic acid and cholesterol-lowering and blood pressure drugs, could reduce risk of heart disease - the leading cause of mortality and morbidity in Western populations ?by more than 80 per cent, according to the advocates. But the Rotterdam researchers say that the polymeal would achieve roughly the same effect at lower costs and with less risk of side effects.

"The Polymeal promises to be an effective, non-pharmacological, safe and tasty alternative [to the Polypill] for reducing cardiovascular morbidity and increasing life expectancy in the general population," write Oscar H Franco and colleagues. Heart disease kills nearly one in three people in the world each year, according to the World Health Organisation, and although more

Organic food quality and health research newsletter: news@dontjustsurvive.com

is known about how to prevent the disease, it is limited by high costs and low compliance. But research into natural food components that can protect the heart from the fatal disease is increasing and has triggered consumer interest in functional foods. Foods designed to tackle heart health are set to grow 7.6 per cent in the UK market, according to Datamonitor, to reach sales of ?45 million in the UK alone by 2007. This market will be further boosted by the new BMJ report. Dr Franco's team searched medical literature to find foods that have been proven to lower the risk of heart disease. They found that drinking 150ml of wine a day cuts the risk by 32 per cent, while fish consumed four times a week reduces it by 14 per cent. A daily intake of 100g of dark chocolate and 400g of fruit and vegetables lower blood pressure, further cutting the risk of heart disease. Garlic and almonds both lower cholesterol levels. "Combining all the ingredients of the Polymeal resulted in cardiovascular disease being reduced by 76 per cent," they wrote.

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8. RESEARCH

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9. PROMOTION

UK: Trust in farmers needed

British agriculture must try to gain the trust of the of the public rather than trying to reshape the public image of farmers, the Soil Association's policy director, Peter Melchett, has told Farmers Weekly. "In the organic sector, we need to make sure that consumers are confident that what we say corresponds with what we do. Agriculture as a whole hides things. We hide abattoirs. We hide information about chemicals. All this must stop if British farming is to gain the trust that is needed."

World: Organic demand still increasing

In snapshots:

AUSTRALIA: The demand for organic products in Australia rose by 20-30 % last year, but the organic share of the total market is only 0.3 %.

GERMANY: The organic retail food trade in Germany grew by almost 11 % in 2004, according to the magazine BioHandel. Figures achieved in the last quarter: farm shops +12 %, small and medium-size organic food stores + 4 % and organic supermarkets + 10 %. "In many firms, December 2004 produced the highest monthly sales figures since their existence," says Klaus Braun, who conducted the study.

UK: Organic food sales in the UK have increased by more than 10 per cent in the last year, according to the Soil Association. Research shows that around three-quarters of households in the UK now buy some organic food during the year with total retail sales worth 1.12 billion pounds (1.6 bn EUR). This makes the UK market the third largest in the world.

Although sales of organic food have increased, the number of producers has fallen for the first time since 1997. The total amount of organically managed land in the UK has fallen for the second year running from 726,000 hectares in 2003 to 688,000 hectares in 2004. In addition, the amount of land in conversion has fallen dramatically from 313,000 hectares in 2001 to

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197,000 ha in 2003 and just 58,000 hectares in 2004. While partly reflecting that farmers are completing the conversion period, it also highlights the number of farmers who have taken land out of organic management.

The number of registered organic producers in the UK is now also starting to decline, with last year's figure of 4,104 falling to 3,995 in 2004. The Soil Association singles out the price wars between supermarkets as responsible for the decline, which now threatens the Government's target for 70 per cent of organic food consumed in the UK to be produced here by 2010. The level of imports of organic food into the UK is estimated at 56 per cent.

ITALY: The number of open-air organic markets in Italy rose from 154 to 174 in 2004. Most of these were in Lombardy with 32, Veneto with 28 and Tuscany with 26. There are practically no organic markets in the south of Italy. These markets are held regularly once a week or once a month, but also on special occasions, reports Bio Web. The products range from regionally produced fruit and vegetables, bread and baked products, juices and tinned foods, wine and oil, cheese, corn, honey and Fair Trade products.

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10. POLITICS

Indonesia: Monsanto's tactics revealed

The US agrochemical giant Monsanto has agreed to pay a \$1.5m (£799,000) fine for bribing an Indonesian official. Monsanto admitted one of its employees paid the senior official two years ago in a bid to avoid environmental impact studies being conducted on its cotton. In addition to the penalty, Monsanto also agreed to three years' close monitoring of its business practices by the American authorities. It said it accepted full responsibility for what it called improper activities. Monsanto also has admitted to paying bribes to a number of other high-ranking officials between 1997 and 2002. (<http://news.bbc.co.uk/go/pr/fr/-/1/hi/business/4153635.stm>)

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