

# SNIPPETS

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## HOLY COW! THIS ANIMAL IS NEW TARGET IN WAR ON GLOBAL WARMING

Efforts to curb global-warming pollution are taking aim at an unlikely new target: the cow. Scientists have long known that cattle and other livestock are a major contributor to climate change worldwide, and although researchers, regulators and activists have devoted most of their attention to other culprits -- such as cars and coal-fired power plants -- that is starting to change. As dairy and beef cows chew and re-chew their feed, their belches and other, er, gastric eruptions produce enormous quantities of methane, a greenhouse gas 23 times more potent than carbon dioxide. All that cow flatulence is bad enough, but clearing forests for pastures and the manufacturing of fertilizers to grow cattle feed produce even more greenhouse gases. When those sources are considered, the UN estimates that the world's livestock system is a bigger part of the problem than transportation. *SAMIC Newsletter #20, 08/08/08* (Maybe Global Warming will be the solution to the problem of Global Warming! Ed.)

## FOOD RECYCLING PROGRAM HIGHLIGHTS WASTE

An Irish initiative to recycle kitchen scraps in Belfast shows that households are wasting about 4 kg of food every week; about one third of their food purchases! The program collected more than 40 tons of food waste from 7,000 homes over a six week period. People were allowed to recycle food leftovers such as meat and fish, dairy products, fruit and vegetables, bread, rice and beans, and tea and coffee grounds. While it helped the city achieve its highest recycling rates ever, it also raised concern about how much food gets thrown out without being consumed. *IFT Weekly Newsletter 13 Aug. 2008.*

## EFSA SETS NEW INTAKE LEVEL FOR ALUMINIUM IN FOOD

Scientists at EFSA have assessed the safety of aluminium in food and established a Tolerable Weekly Intake (TWI) of one milligram of aluminium per kilogram of body weight.

Aluminium is present in a range of everyday foods which play an important role in a healthy diet such as cereals and vegetables.

The EFSA opinion was requested by the European Commission in light of a similar evaluation by the Joint FAO/WHO Expert Committee on Food Additives (JECFA) in June 2006 which re-evaluated the health effects from aluminium via dietary intake and

subsequently lowered the tolerable weekly intake from seven mg/kg body weight to one mg/kg bodyweight. EFSA's panel on additives, flavourings, processing aids and materials in contact with food (AFC) has reached a similar conclusion to JECFA on the TWI intake but found that large individual variations in dietary intake can occur and some highly exposed consumers may exceed the TWI by up to two times.

"It would be undesirable for an individual to regularly exceed the TWI; however, the margin of safety included in the guideline of one mg/kg bodyweight per week is high enough to ensure that occasional exceedance of it does not present an immediate risk to health," said an EFSA spokesperson. *NUTRAingredients.com 16/07/08*

## NATURAL SOLUTIONS TO FOODBORNE ILLNESS

The cure for foodborne illness outbreaks may be growing in the common garden. New studies pitching natural spice oils against pathogens like *E. coli* may prove promising in the fight against food contamination.

Research conducted by Mendel Friedman, a chemist with the Agricultural Research Service (A.R.S.) branch of the U.S. Department of Agriculture (U.S.D.A.), found that oils and extracts from spices and herbs, such as oregano, thyme, cinnamon and clove, have antimicrobial properties that were strong enough to kill *E. coli*, *Salmonella enterica* and *Listeria monocytogenes*.

The results of Mr. Friedman's initial research, conducted in 2002, are being applied to new studies on edible films designed to promote food safety. The films are based on food ingredients, and measure only five-thousandths of an inch thick. The edible films currently being studied are made from pureed spinach and apples that are infused with oils like carvacrol, a compound found in oregano.

An edible apple film with carvacrol was found to kill *E. coli* in an A.R.S. study, which now is exploring the film's potential for use in bagged leafy greens.

The team's most recent work was published in the *Journal of Agriculture and Food Chemistry*. Visit the ARS site to learn more. *MEATPOULTRY.com, July 14, 2008*

## FUNCTIONAL INGREDIENTS - THE QUESTIONS MANUFACTURERS NEED TO ASK

The metabolic syndrome, also known as syndrome X, which increases an individual's risk of developing heart disease and type 2 diabetes, is becoming a global epidemic. It is characterised by abdominal obesity and any two of the following conditions: high levels of HLD-cholesterol, glucose intolerance, hypertension and lipid problems. *F&B Reporter Vol. 107, 9 July 08.* [http://www.developotechnology.co.za/web/index.php?option=com\\_content&task=view&id=20955&Itemid=1](http://www.developotechnology.co.za/web/index.php?option=com_content&task=view&id=20955&Itemid=1) (A must read for everyone in food product development. Ed.)

## ALL EYES ON FOREST MONITORING

Deforestation is a growing global concern, and with it comes the loss of carbon stored in forests. Earlier this year, many countries and the Food and Agriculture

Organization (FAO) reconfirmed their commitment to jointly prepare the next Global Forest Resources Assessment (FRA), a comprehensive data collection on the state of the world's forests which is scheduled for release in 2010. FRA 2010 will strengthen the capacity of all countries to monitor their own forests. "Deforestation continues at an alarming rate of about 13 million hectares annually at the global level" says Jan Heino FAO Assistant Director-General for Forestry. *CropBiotech Update 18 July 2008*. [knowledge.center@ISAAA.ORG](mailto:knowledge.center@ISAAA.ORG)

#### HIGH COURT JUDGEMENT MAKES A SCAPEGOAT OF CHEMISTRY

The chief executive of the Royal Society of Chemistry has criticised a High Court ruling that bans a 'suspected terrorist' in the UK from studying chemistry.

Dr Richard Pike said: "There's a vitally important principle in this issue which must not be overlooked, which is the need to avoid depicting, wrongly, school chemistry as a starting point for attempts by potential young terrorists to produce explosives.

"There is nothing on the AS Level chemistry course that cannot be found easily on the web and through other means. *Royal Society of Chemistry - [www.rsc.org](http://www.rsc.org) - 24 July 2008 Press Release.*

#### GM SCIENTISTS ENGINEER MEAL TO MAKE YOUR DAY

Scientists say they have genetically engineered fruit and vegetables capable of providing most of a day's nutrients in a single meal.

Heading towards the market are potatoes with 33 per cent more protein content, modified tomatoes that could be capable of protecting against cancer and peanuts without the chemicals that cause deadly nut allergies.

Such foods, the first genetic modifications offering nutritional benefits to consumers, would be in marked contrast to the GM crops marketed to date. These were designed to boost the profits made by farmers and seed firms by raising yields or cutting costs.

Their attempted introduction to Europe in the late 1990s provoked a backlash from consumers suspicious at being asked to consume plants whose DNA had been "contaminated" but which offered them no benefit.

Plant scientists hope the new plants will reverse such fears. *Daily Food & Beverage Innovator 7/7/2008* <http://www.theaustralian.news.com.au/story/0,25197,23977967-23289,00.html>

#### BAOBAB - NEWEST KID ON THE NOVEL FOODS BLOCK

Africa farmers could be set to tap into a billion dollar industry with baobab, as the baobab fruit pulp obtained novel foods approval yesterday, FoodNavigator.com can report.

The news could see a rush in demand for this novel fruit, which has been building since initial reports a couple of years ago. "We do anticipate a rising level of demand for baobab," Dr Lucy Welford from PhytoTrade Africa, the southern Africa natural products trade association that represents companies

wishing to export their dried baobab fruit, told [FOODnavigator.com](http://FOODnavigator.com).

The fruit pulp of the baobab is said to have an antioxidant activity about four times that of kiwi or apple pulp. The main nutrients include vitamin C, riboflavin, niacin, pectin and citric, malic and succinic acids, while the oil also contains the vitamins A, D and E.

A study from Italian researchers last year reported that the baobab pulp had an Integral Antioxidant Capacity (IAC) 10 times that of orange pulp (*Food Chemistry*, Vol. 102, pp 1352-1356).

The pulp is also reported to be prebiotic and stimulate the intestinal microflora.

If successful, the application will further underline the growing popularity of exotic ingredients derived from Africa. *FOODnavigator.com 01/07/2008*

#### LOW-FAT DAIRY AGAIN LINKED TO HEALTHIER HEARTS

A healthy lifestyle should include low-fat dairy products to lower the risk of cardiovascular disease (CVD) associated with poor kidney function, suggests new research from the US.

The study, published in the July 2008 issue of the *American Journal of Clinical Nutrition*, adds to an ever growing body of evidence of the contribution of low-fat dairy to an overall healthy diet.

According to results of the Multi-Ethnic Study of Atherosclerosis (MESA), the researchers stated that a 'healthy diet' should consist of low-fat dairy, whole grains, fish, fruit and vegetables, and nuts.

"The theoretical advantage of studying a dietary pattern characterized by fewer food groups is that it more readily lends itself to application across populations," wrote lead author Judith Nettleton from the University of Minnesota. *NUTRAingredients.com 15/07/2008*

#### PREVENTING C. BOTULINUM GROWTH IN CHILLED FOODS

The UK Food Standards Agency (FSA) has published guidance notes and a fact-sheet to help minimise the risk of *Clostridium botulinum* contamination in vacuum packed (VP) and modified atmosphere packed (MAP) chilled foods. The guidance includes heat treatment, pH and salt levels, that should be implemented if food businesses are setting chilled products with a shelf-life of more than ten days. The guidance has been published to assist small businesses and local authority environmental health officers to assess the risks.

<http://www.rssl.com/OurServices/FoodENews/NewsLetter.aspx?ENewsletterID=271#2> *RSSL Food e-news: Edition 398: 23 - 30 July 2008*

#### BRITISH GUILTIEST IN SURVEY OF WESTERN EUROPEAN SHOWER HABITS

Water-wasting and uncaring about gels, shampoos and soap going down the plughole: that's how the British emerge from a survey on showering habits of western Europeans.

Women in Britain are particularly guilty of wasting shower water and not caring about contaminants, says the report for the Royal Society of Chemistry. [www.rsc.org](http://www.rsc.org) *Press release 14 July 2008*

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