

SNIPPETS

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CONGRATULATIONS TO:

Dr Rocco Basson (Heppo, Cape) who was awarded a Laureate Award at the recent IMRP 2008 conference in London in September 2008.

The award was in recognition of his life's work in the field of radiation processing, an important technology in sterilization of medical goods, packaging materials, pasteurizing of dried foods such as spices and more recently a technology that is being used internationally as a quarantine control method for fruit exports to the United States.

CHINESE MELAMINE SCARE MOVES TO EGGS

Some Chinese grocery stores such as Wal-Mart removed some eggs from store shelves after tests in Hong Kong detected melamine, the toxic chemical that has sickened thousands of babies.

Wal-Mart stores in China pulled the Select brand of eggs produced by China's Dalian Hanwei Enterprise Group. The company has issued a recall for the eggs.

Discovering melamine, a plasticizer that has been found in powdered infant formula and other products containing milk-based ingredients from China, in eggs raises concerns about how far the contamination has penetrated China's food chain. In Hong Kong, tests found melamine in eggs at nearly twice the legal limit for food. Based on these findings, Hong Kong officials have decided to begin testing Chinese meat imports as well. *IFT Weekly Newsletter Oct 29, 2008.*

DIOXIN THROUGH UNLICENCED OIL

The food recycling plant at the centre of the Irish pork scare did not have a licence to use the oil that caused the contamination. Inquiries by officials from the Department of Agriculture have found that the oil being used at Millstream Power Recycling was not suitable for use in the production of animal feed. Three beef farms have been caught up in the scare that has already devastated the country's pork industry. PCBs - or Polychlorinated Biphenyls - were found in 11 herds tested, Ireland's agriculture minister Brendan Smith has confirmed. But he has also insisted the public should not be worried - the levels of PCBs found in the beef were two to three times above safe limits, compared to 200 times for the pig meat. The meat became contaminated after unlicensed oil used in a burner, tainted breadcrumbs that were supplied to 56 farms in the Republic of Ireland and nine farms in Northern Ireland. *SAMIC Newsletter Nr 31 - 12/12/2008*

Snippets - contributions are welcome. Edited and produced by Dr. B Cole. - drcole@cybersmart.co.za / Fx 011 660 6444 with the help of the Northern Branch Committee.

GM CARROTS MAY HELP PREVENT OSTEOPOROSIS

A genetically modified carrot that provides more calcium has been developed by scientists at the Children's Nutrition Research Center in Houston, Texas. Kendal Hirschi and colleagues boosted calcium levels by inducing carrots to express increased levels of *sCAX1*, a gene from the model plant *Arabidopsis* that encodes a calcium transporter. Most plant-derived foods are not good providers of calcium, which is a key component for healthy bones. Inadequate dietary calcium is a global problem, particularly in regions that don't have access to dairy products or where large segments of the population are lactose intolerant. Insufficient intake of calcium may lead to osteoporosis.

The modified carrots contain elevated calcium levels, but can the body use it? To determine the bioavailability of the calcium in the GM carrots, 30 volunteers-15 females and 15 males of various ethnic backgrounds and in their early to late 20s-ate single meals containing regular or modified carrots, which were labeled with a stable calcium isotope. The researchers found that the calcium intake of volunteers who consumed the modified carrots for two weeks increased by 41 percent, compared to those who ate regular carrots.

Hirschi and colleagues hope that this will be the first in a new-generation of fruits and vegetables with enhanced calcium content. *CropBiotech Update 21 November 2008*

SAFETY ISSUES ASSOCIATED WITH ENERGY DRINKS

A review published in the Journal of the American Pharmacists Association has indicated that little evidence exists to support the claims made for the beneficial effects of energy drinks. They indicate that the claimed benefits are unlikely to be due to the amounts of guarana, taurine and ginseng found in the most popular drinks being far below those expected to deliver any benefit. They also indicate that the potential for serious adverse effects is also low for the same reason. They consider however that some energy drinks could present a safety issue due to the amounts of caffeine and sugar contained. Some drinks contained these substances in amounts known to cause a variety of adverse health effects including nervousness, headache, insomnia, tachycardia, weight gain and other health consequences such as diabetes. *RSSL Food e-News 417: 03 - 10 December 2008*

FALLING FOOD PRICES INDICATE BIOFUELS MAY NOT BE A DRIVER IN FOOD PRICE SURGES

<http://biopact.com/2008/10/world-food-prices-collapsing-were.html>

<http://www.guardian.co.uk/business/feedarticle/7914436>

The Biopact website reports that prices of food-based grains and oilseeds that are also used for biofuel production (i.e., corn, wheat, soybeans, and palm oil) are "collapsing." Specifically for the case of corn, the recent trend belies the original belief that the record surge in corn prices last June was a consequence of the heavy demand for corn as an ethanol feedstock. The recent price of corn has reportedly dropped to about 50% of its record price in June, even if its demand for biofuel production has remained the same. Soybean and canola

(both biodiesel feedstocks) also have similar trends in price reduction (about 55%). Major agricultural food commodities are also experiencing major price drops. Biopact further reports that the present trend has settled “for now”, the “food versus debate” and that “biofuels have played [no part], or at best, a marginal role in the sudden rise in global food prices.” Experts point out the “smart” and “sustainable” biofuel programs can actually help reduce food prices, and fight rural hunger/poverty. *CropBiotech Update • Biofuels Supplement (November 7, 2008)*

BEAT THE BLUES WITH A CAFFEIN HIT

Results published in the Journal of Human Psychopharmacology by researchers at Cardiff University UK showed that people who had about one-and-a-half espressos a day halved their risk of depression. They also found that it also offered some protection against memory loss and dementia. *Daily Mail 8/12/2008*. <http://www.dailymail.co.uk/health/article-1092982/Latest-health-news-round-Caffeine-saliva-probiotics-.html>

THE BUZZ ABOUT VANISHING BEES

As honeybees continue to die off, researchers are promoting ways for people to help save bees from colony collapse disorder.

The phenomenon where honeybee colonies disappear usually affects non-native bees, so scientists are educating people to tend diverse gardens that attract native bees to help offset the epidemic. The *Danville News* highlights the problem that’s endangering a \$15 billion industry.

Researchers don’t know what causes colony collapse disorder. But by planting a diverse range of plants and flowers in colors that are attractive to bees, such as purple, yellow, pink and blue, the average person can help. Eliminating pesticides is another way gardeners can make a difference. Building or buying “bee blocks” where native, non-colony bees lay eggs is another way to assist in preservation efforts.

Pollinating insects affect 75 percent of crops, the article notes. Since bees are the biggest pollinators, everything from coffee to strawberries is at risk. For the full article, visit

http://www.dailyitem.com/0100_news/local_story_31501_0017.html?keyword=topstory *IFT Weekly Newsletter Nov. 12, 2008*.

A HIERARCHY OF HAZARDS FROM PORK

Foodborne zoonoses are diseases and/or infections naturally transmissible indirectly between animals and humans through food. In industrialised countries, up to 10% of the human population may suffer each year from foodborne zoonoses. The management of biological hazards transmitted to humans through food consumption is therefore of major health importance.

Hazards with high risk scores have the highest non-control ratios. *Listeria monocytogenes*, *Clostridium botulinum* and *Mycobacterium* spp. had the highest severity scores, while the three main high-risk hazards involved in foodborne infections, *Yersinia enterocolitica*, *Salmonella enterica* and *Campylobacter* spp. were characterised by high non-control ratios and cannot be detected by macroscopic examination of carcasses.

Fosse, J; Seegers, H; Magras, C (2007). Foodborne zoonoses due to meat: a quantitative approach for a comparative risk assessment applied to pig slaughtering in Europe. *Veterinary Research* **39** (1) 1-16.

FoodInfo Online FSTA Reports 14 November 2008

TROPICAL FUNGUS CONVERTS CELLULOSE TO FUEL-BASED HYDROCARBONS

Scientists from Montana State University (United States) have reported a study of a fungus which produces volatile hydrocarbons and hydrocarbons that are commonly found in diesel fuel. The organism, called *Gliocladium roseum*, has been described as a “genetically atypical” fungus which can produce “a wide range of hydrocarbons under conditions of limited oxygen on both oatmeal agar and a pure cellulose-based agar.” The researchers reported that some compounds in the hydrocarbon profile of the fungus are normally associated with diesel fuel, and they dubbed the volatiles of this fungus as “myco-diesel”. According to Professor Gary Strobel, of the Department of Plant Sciences (Montana State University), “This is the only organism that has ever been shown to produce such an important combination of fuel substances. The fungus can even make these diesel compounds from cellulose, which would make it a better source of biofuel than anything we use at the moment”.

<http://biopact.com/2008/11/unique-rainforest-fungus-makes-bio.html>

ISAAA Biofuels Supplement 21 Nov. 2008

FOUR-STEP PLAN FOR SPOTTING EMERGING RISKS PROPOSED

A simple four-part plan may lead to better early identification of emerging food safety issues, according to researchers involved in a EU-wide project.

A holistic approach, using data from within and beyond the food production chain, is necessary in the anticipation of emerging risks, according to scientists at Wageningen University and Research Centre’s Institute of Food Safety, and Britain’s Institute of Food Research.

The Dutch and English scientists used the Delphi survey method for collecting opinion and feedback in rounds to canvass opinion from relevant stakeholders from within the EU and from outside the EU.

“Existing early warning systems rely on the detection of a hazard in monitoring programs and therefore by definition are reactive,” wrote the authors, led by Hans Marvin. “Delphi participants indicated that more proactive system would be desirable, if feasible, since the potential risk may be prevented by issuing proper counter-actions.” *FOODnavigator.com 19 Nov. 2008*.

COCO SUGAR

A high demand for coconut sugar is expected, as now it is used by millions of people suffering from diabetes. It is made from coconut sap and it has been shown that diabetics who use coco sugar are able to stabilize their blood sugar levels, due to the low GI of 35 which is required for slow glucose release. Coco sugar is also rich in nutrients like potassium, phosphorus, manganese, calcium and vitamin C. *Indian Coconut Journal. 51(3)*. (To find more about coconut products try <http://www.dessertcomesfirst.com/?p=475> Ed)