

# SNIPPETS

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## IS RESVERATROL REALLY BEHIND THE FRENCH PARADOX?

Resveratrol, a powerful polyphenol and anti-fungal chemical, is often touted as the bioactive compound in grapes and red wine, and has particularly been associated with the so-called 'French Paradox'. The phrase, coined in 1992 by Dr Serge Renaud from Bordeaux University, describes the low incidence of heart disease and obesity among the French, despite their relatively high-fat diet and levels of wine consumption.

"Beginning in the early 1990s the word resveratrol started beeping on people's radar screens," said Bert Scwhitters, President of INC, a supplier of oligomeric proanthocyanidins (OPCs). *Read more at FOODnavigator.com (10 Sep. 2009).*

[http://www.foodnavigator.com/Publications/Food-Beverage-Nutrition/NutraIngredients-USA.com/Research/Science-Is-resveratrol-really-behind-the-French-Paradox/?c=XpHCAbTpBK1CeUBI3JrSXQ%3D%3D&utm\\_source=newsletter\\_daily&utm\\_medium=email&utm\\_campaign=Newsletter%2BDaily](http://www.foodnavigator.com/Publications/Food-Beverage-Nutrition/NutraIngredients-USA.com/Research/Science-Is-resveratrol-really-behind-the-French-Paradox/?c=XpHCAbTpBK1CeUBI3JrSXQ%3D%3D&utm_source=newsletter_daily&utm_medium=email&utm_campaign=Newsletter%2BDaily) (The experts are divided on this subject but lets have a Happy Christmas anyway. Ed.)

## HARDY NEW CORN LINES RESIST AFLATOXINS

Six new inbred maize lines with resistance to aflatoxin contamination have now been registered in the U.S. by the U.S. Dept. of Agriculture's Agricultural Research Service (ARS). ARS plant pathologist Robert Brown and colleague Abebe Menkir, with the Ibadan, Nigeria-based International Institute of Tropical Agriculture, developed the lines. Brown works at the Food and Feed Safety Research Unit in the ARS Southern Regional Research Center in New Orleans, La. *IFT Newsletter: 21 Oct. 2009*

## A NANO SENSOR TO DETECT SALMONELLA

A sensor has been developed which could enhance food safety and security, claims a team of scientists. Detection of this food contaminant is critical to control food safety, and while different methods have been employed to detect Salmonella, the biggest challenges in the various approaches have been speed and sensitivity.

According to the US Department of Agriculture's Research Service (ARS), collaboration between its engineers at the Quality and Safety Assessment Research unit and scientists at the University of Georgia has resulted in a nanorod-based biosensor that

enables rapid detection of the Salmonella pathogen with high sensitivity.

Lead researcher Bosoon Park explained that these new biosensors include fluorescent organic dye particles attached to Salmonella antibodies; the antibodies latch onto Salmonella bacteria and the dye lights up like a beacon, making the bacteria easier to see.

*FOODproductiondaily.com 6 Jan 2009.*

## EUROPE'S BAN ON GM BITING BACK

Addressing the European Parliament's Agriculture Committee, Fischer Boel called for action in the face of recurrent interruptions of soybean shipments, poor harvests in major growing regions, and rising feed supply fears in the EU's livestock sector (see FCN Aug. 17, Page 7).

Accepting the failures of the EU's "zero tolerance" policy for unauthorized transgenes, Fischer Boel told MEPs that 80% of soybeans produced around the world are transgenic, posing major problems if the EU is to continue sourcing its soy-based feed only from non-biotech crops and a handful of authorized biotech varieties. The bias of world soybean production toward transgenic varieties "is not going to change," she warned, spelling out that change would have to come in EU policy if major feed shortages are to be avoided. *Food Chemical News. September 01 2009*

## HUMAN HEALTH RISK FROM CERTAIN GM FISH - STUDY

The commercial breeding of certain species of GM fish should be approached with caution on fears they could pose a health risk to humans and threaten natural breeds, new research has said.

A study from the University of Gothenburg, in Sweden, cautioned that by giving some fish genes from other organisms – so-called transgenes – researchers have succeeded in producing species that are able grow considerably more quickly than non-GM fish and are more resistant to diseases. However, the robust nature of transgenic species means they can have a higher tolerance to toxins.

Fredrik Sundstrom, of the Department of Zoology, said the ability of transgenic fish to be more resistant to environmental toxins could entail the greater accumulation of toxins that "ultimately end up in consumers". He added that there were "misgivings that the higher level of growth hormone in the fish can affect people". *FOODnavigator.com 1 Sep 09 (US edition)*

## IUFoST FUNCTIONAL FOODS BULLETIN

The IUFoST Scientific Council has released the latest in its series of IUFoST Scientific Information Bulletins (SIBS). This one, on Functional Foods, was prepared by Academy Fellow Dr. Feridoon Shahidi. As Dr. Shahidi notes "Such products that contain bioactives offer considerable opportunities for reducing mounting health care costs for ailments such as heart disease, diabetes, cancer, immune and inflammatory disorders, mental and depression related diseases, together with the aging process and obesity." The benefits of these food types are tremendous. Dr. Shahidi offers definitions of functional foods, regulatory issues, describes different types and analyses sensory aspects

and health effects of the wide range of functional foods available.

To read more about Functional Foods, visit the Fi website at <http://www.ingredientsnetwork.com/home>. The article can be found in pdf format on the right hand side of their home page under the SIB title.

Ingredients Network logo. *IUFoST eNewslines No.4. 1 Sep 09* or [http://www.iufost.org/reports\\_resources/bulletins/](http://www.iufost.org/reports_resources/bulletins/)

#### TRANSPARENT GEL ADVANCE MAY GIVE 'EXCELLENT FOOD INGREDIENT'

According to findings published in *Food Hydrocolloids*, the novel hydrogel, which is non-toxic and transparent, colourless, thermostable and biocompatible also possessed antimicrobial and texture properties that make it "very promising" for food applications.

Simi and Abraham oxidized the xyloglucan, which they extracted from tamarind seed. This particular xyloglucan is already used as a thickener in the Japanese food industries, they said. While pure xyloglucan does not form a gel, when mixed with 1 per cent chitosan in 1 per cent acetic acid in water a self-assembled gel is produced. Results of texture analyses showed that the gel had "good springiness, hardness, and gumminess nature", said the researchers. No significant effects were observed when they added flavours like vanillin, sweeteners like sucrose, or salt. Furthermore, the gel displayed good thermal stability. Published online ahead of print, doi: 10.1016/j.foodhyd.2009.08.007 *FoodNavigator.com 01-Sep-2009*

#### REPORTABLE FOOD REGISTRY

The Reportable Food Registry (RFR or the Registry) is an electronic portal for Industry to report when there is reasonable probability that an article of food will cause serious adverse health consequences. The Registry helps the FDA better protect public health by tracking patterns and targeting inspections. The Food and Drug Administration Amendments Act of 2007 (Pub. L.110-085), section 1005 directs the FDA to establish a Reportable Food Registry for Industry.

The RFR applies to all FDA-regulated categories of food and feed, except dietary supplements and infant formula.

Who Should Use the Reportable Food Registry?

Registered Food Facilities that manufacture, process, pack, or hold food for human or animal consumption in the United States under section 415(a) of the FD&C Act (21 U.S.C. 350d) are required to report when there is a reasonable probability that the use of, or exposure to, an article of food will cause serious adverse health consequences or death to humans or animals.

Where Should Consumers, Food Retailers and Food Service Operators Report a Problem with Food?

More *at* <http://www.fda.gov/Food/FoodSafety/FoodSafetyPrograms/RFR/default.htm>

**I presume we can expect the same in SA in the not too distant future, so is this as a forewarning? Ed.**

#### NEW TEXTBOOK OF FOOD SCIENCE AND TECHNOLOGY

This new comprehensive text and reference book, edited by Geoffrey Campbell-Platt, Professor Emeritus of Food Technology at The University of Reading, UK and President, IUFoST, is designed to cover all the essential elements of food science and technology, including all core aspects of major food science and technology degree programmes being taught worldwide. This truly global collaboration is expertly written by eminent industry professionals, teachers and researchers from 10 different countries. All authors are recognised specialists in their respective fields and together represent some of the world's leading universities and international food science and technology organisations.

The book covers:

All the elements of food science and technology degree programmes globally

Food Chemistry, Food Biotechnology, Nutrition, Product Development, Food Marketing, Numerical Procedures and Food Engineering

For more information and to order a copy contact: John Wiley and Sons Ltd, email: [cs-books@wiley.co.uk](mailto:cs-books@wiley.co.uk), online at [www.wiley.com/go/campbell-platt](http://www.wiley.com/go/campbell-platt). *IUFoST eNewslines - No.5. Oct. 2009.*

#### RELIGIOUS SLAUGHTER DOES CAUSE ANIMALS PAIN

An article in *New Scientist* (17/10/09) features the work of Dr Craig Johnson, from Massey University in New Zealand, who recently received an award from the Humane Slaughter Association (HSA) for research investigating pain in cattle slaughtered without prior stunning.

Full details of Johnson and colleagues work were reported in a series of five articles in the *New Zealand Veterinary Journal* in April 2009. The research was funded by the UK's Department of the Environment Food and Rural Affairs (DEFRA) and the Ministry of Agriculture and Forestry of New Zealand. The DEFRA web site has more information on the welfare of animals at slaughter, including religious slaughter.

*RSSL Food enews. Edition 460: 14 - 21 October 2009*

#### SUGAR V/S LOW CALORIE SWEETNER -LCS

A study, which was reported by both the *LA Times* and the *Chicago Tribune*, studied brain activity of people who consumed both sugar-sweetened and LCS-sweetened beverages, and found that there is an unconscious calorie-sensing component of the brain separate from taste that LCS don't trigger, which could have an implication for weight gain. The *LA Times* article also discusses a study from earlier this year comparing the performance of cyclists who consumed a sugar-sweetened beverage compared to a LCS beverage, finding superior performance in the sugar-sweetened beverage consumers, which they tied back to the brain being able to sense the calories of the sugar-sweetened beverages: [www.latimes.com/features/health/la-he-sweet-brain31-2009aug31,0,2078819.story](http://www.latimes.com/features/health/la-he-sweet-brain31-2009aug31,0,2078819.story) *International Food Information Council (IFIC) 12 Sep 2009.*

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