Soy & Health

JUNE 2004 ISSUE NUMBER 3

Last call for poster abstracts

The Soy & Health 2004 conference (7–8 October 2004) is fast approaching as well as your last chance to submit poster abstracts by 15 August 2004. We look forward to seeing you at one of the key events in the soy calendar that is designed to give you an up-to-date overview of the latest research into the health effects of soy foods and soybean constituents. Abstracts should be no more than 300 words and should include the title, complete name of author(s), organisation/institution, address and e-mail address. For more details about the conference and submitting abstracts see page 7 or visit <http://www.soyconference.com/>.

In this issue

FDA reviewing health claim petition on soy and reducing cancer risk

The US Food and Drug Administration (FDA) is reviewing a petition for a health claim that suggests that the consumption of soy protein-based foods may reduce the risk of certain types of cancer including breast, prostate, and colon cancer.

The petition was submitted by The Solae Company and is based on a meta-analysis of 58 studies. The researchers from Solae were responsible for spear-heading the research but several other external scientists from Harvard University, the University of California, University of Illinois, University of Arkansas, and Wake Forest University were also involved and supported the company's decision to file for a petition.

Approved health claims on labelling and packaging are a way of imparting important information to consumers to help them make informed choices about the food they eat. The American Cancer Society estimates that approximately 35% of cancer deaths in the US could be avoided through dietary modification.

For information about The Solae Company, visit their website at <http://www.solaeliving.com/>. For a copy of the petition visit <http://www.fda.gov/ohrms/dockets/dockets/04q0151/04q0151.htm>

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2 Soy food intake and risk of endometrial cancer in Chinese women

A population based case control study by Xu et al (British Medical Journal, 29 May 2004, 328:1285) attempts to evaluate the association of soy food intake with the risk of endometrial cancer. The researchers studied 832 cases of endometrial cancer in women aged 30 to 69 years diagnosed during 1997-2001 and identified from the Shanghai Cancer Registry and compared them with 846 control women frequency matched to cases on age and randomly selected from the Shanghai Residential Registry. The results showed that regular consumption of soy foods, measured as amount of either soy protein or soy isoflavones, was inversely associated with the risk of endometrial cancer. A similar inverse association was observed for soy isoflavones and soy fibre intake. The inverse association seemed to be more pronounced among women with high body mass index and waist:hip ratio, but the researchers concluded that this needs to be verified in future studies. Regular intake of soy foods, therefore, may be associated with a reduced risk of endometrial cancer, particularly among overweight women.

Soybean beta-conglycinin helps maintain healthy lipid levels in Japanese women

A recent Japanese study (Baba et al, Journal of Nutritional Science and Vitaminology, 2004;50(1):26-31) suggests that soybean beta-conglycinin may help to maintain a healthy body fat ratio and serum lipid levels in healthy women. The changes in body fat ratio and serum lipids induced by the ingestion of beta-conglycinin were examined in 41 healthy female university students. The trend of change in body fat ratio following ingestion of the beta-conglycinin differed between students with a baseline body fat ratio over 25% and those less than 25%. In the former group the beta-conglycinin suppressed the increase in body fat ratio and in the 6 subjects who had a high total cholesterol level (≥ 5.72 mmol/L) there was a tendency towards reduced levels of serum triglyceride, free fatty acid, total cholesterol and lipoprotein although those levels did not change significantly. The researchers concluded that if soybean beta-conglycinin is ingested continuously (5g daily), it will be effective in keeping body fat ratio and serum lipid levels normal and eliminating excessive lipids from the body.

Questions remain on soy as healthy food ingredient

A critical review by Drs Michael Uzzan and Ted Labuza (University of Minnesota) of the safety and efficacy of soy isoflavones used in foods or as dietary supplements has been published in the 23 March on-line edition of the Journal of Food Science (Vol 69, No 3 :CRH77-86). The authors discuss issues which should be considered in any R&D programme for novel isoflavone enriched foods or supplements and review 80 literature references covering bioavailability, thermal stability, sources, dosage and methods of analysis. The authors conclude that the scientific literature available is not sufficient to give a clear picture of either the health benefits or health risks of soy isoflavones. Thermal processing appears to have no impact on total isoflavones but lack of data on activity and bioavailability means that dosages cannot be determined. Aglucons were not found to be superior in bioavailability to conjugated isoflavones questioning the recent trend to develop aglucon-enriched products.

3 Traditional Japanese high fish and soy diet may protect against prostate cancer

Japanese researchers (Sonoda et al, Cancer Science 2004; 95(3):238-242) suggest that regular dietary intake of fish and soy products, such as natto and tofu, may protect against the development of prostate cancer. Age-adjusted incidence of prostate cancer is low in Japan and the researchers performed a case-controlled study on dietary factors to test the hypothesis that the traditional Japanese diet may play a protective role. Average daily intake of food from 5 years before the diagnosis was measured using a semi-quantitative food frequency questionnaire and the study compared 140 cases and 140 controls. Adjustments for confounding factors such as cigarette smoking and total energy intake were also taken into account.

The researchers found that consumption of fish, and soybean products (tofu and natto) were associated with decreased risk. Consumption of meat was significantly associated with increased risk. Consumption of milk, fruits, all vegetables, green-yellow vegetables and tomatoes showed no association. The authors conclude that their study supports the hypothesis that the traditional Japanese diet, which is rich in soybean products and fish, might be protective against prostate cancer.

Soy protein affects serum insulin and reduces fatty liver in rats

The purpose of research by Ascencio et al (Journal of Nutrition 2004; 134(3); 522-529) was to determine whether soy protein affects the synthesis of lipids in the liver. The researchers found that rats fed soy protein had significantly lower serum insulin concentrations than rats fed casein. The response was accompanied by a raised hepatic SREBP-1 mRNA that was 53% lower than in rats fed casein at day 10. Another study was then carried out to assess the long term effect of soy protein consumption for 150 days on hepatic SREBP-1 expression.

Results showed that long term consumption of soy protein maintained normal insulin concentrations compared with rats fed casein, which were hyperinsulinemic. Thus the rats fed soy protein had significantly lower expression of SREBP-1 mRNA than rats fed a casein diet. Soy protein also reduced the expression of fatty acid synthase and malic enzyme, leading to low hepatic lipid depots of triglycerides and cholesterol. The rats fed the casein diet developed fatty liver. The researchers concluded that soy protein regulates SREBP-1 expression by modulating serum insulin concentration and preventing the development of fatty liver.

Tofu-based supplement increases BMD in postmenopausal women

A double-blind randomised 12 month study (Yoles I, Menopause 10(6) 2003) has shown that the dietary supplement, Femarelle™, a tofu/linseed supplement available in the USA, can increase bone mineral density in postmenopausal women, without affecting more sensitive tissues, such as the breast and uterus. According to the study, after 12 months of using the supplement, bone mineral density increased in the study group by 3.6% in the lumbar spine and 2% in the femoral neck.

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news

4 New study launched in search of a healthy heart diet

The Food Standards Agency (FSA) in the UK is funding a large-scale study to find the best diet to prevent heart disease and type-2 diabetes. Led by the Medical Research Council (MRC) the study will cost £2.7million and will take four years to complete, involving scientists from the MRC's centre for Human Nutrition Research at Cambridge, Imperial College, London, King's College, Universiyt of London, the University of Reading, and the University of Surrey.

The research will focus on the types and amounts of fat and carbohydrate in the diet in relation to the risk of people developing heart disease or type-2 diabetes.

A total of 650 volunteers will have their diets modified and the results monitored. It is hoped that this will enable the Agency to recommend the sorts of diets that will reduce the likelihood of developing these health problems.

For information visit <http://www.food.gov.uk/>.

The Soy Daily™

http://www.thesoydaily.com/

Rich with stories, The Soy Daily™ promotes soy with news, interviews and press releases. Using a newspaper format, The Soy Daily™, reports on diet, health, financial, research, biodiesel, conventions, farming and products. Over 400 recipes are offered in a section called "The Best of Soy Cooking". Several pages are dedicated to information on soy statistics and history through a partnership with Soyfoods Center of Lafayette, California. These pages with the current news provide a vital connection to the vast picture of the development and current direction of the soy industry. Google and the other major search engines bring thousands of visitors into the site.

The news always prompts the response "Isn't that interesting?" Dr. Mark Messina, a top researcher in soy, talks on isoflavones and benefits for women in menopause and breast cancer and the benefits for men with prostate cancer.

The Soy Daily™ is news for everyone. So when The Soy Daily™ urges you to "Think Soy Daily" it means more than just eating a few soynuts and drinking soymilk for good health. It is a multi -billion dollar business with food and non-food products and research, a valuable commodity on the world market, and fuel for the economies of the world. Everyone deserves a soy choice™.

Order your Soya Protein Association information pack

The Soya Protein Association is the leading voice of the soya food industry in the UK and has developed an information pack which focuses on all the key issues concerning soya and health. With an extensive glossary the pack contains fact sheets on general nutrition aspects of soya as well as soya and cholesterol, soya and heart health, phyto-estrogens, and emerging research issues.

If you would like to receive a copy of this publication please e-mail Lucy Lofthouse at lucy.lofthouse@fdf.org.uk.

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5

Monsanto breeds low fat oils

Scientists at the Monsanto Company are using conventional breeding and biotechnology to develop soybeans that will produce oils containing less trans and less saturated fats. One area of research is on soybeans that are low in linolenic acid. During hydrogenation, the amount of linolenic acid in soy oil is reduced creating trans fatty acids and so the new soybean would reduce the need for hydrogenation and, therefore, the level of trans fats in the final product. The new soybeans are currently being tested and should be available in limited quantities in time to meet the US government's 2006 labelling guidelines for trans fats in foods.

Conventional breeding methods are also being used to produce a soybean that is high in oleic acid. This soybean will also be low in linolenic acid and would produce a soy oil with high levels of monounsaturated fat. Biotechnology techniques are being used to develop a soybean that will produce an oil that can be claimed to be saturated fat-free. For more information visit the Monsanto website at <http://www.monsanto.com/monsanto/layout/default.asp>.

SPA hosts parliamentary reception

The UK Soya Protein Association hosted a Parliamentary Reception at the House of Commons on 5th May to focus on the important contribution that soy foods can make to a healthy diet. The Keynote lecture on the latest developments in soy health research was given to an audience of journalists and key opinion leaders by Professor Mark Messina, PhD, Department of Nutrition Loma Linda University, USA, one of the world's leading experts on soy.

Hain Celestial Group expands frozen and children foods categories

The Hain Celestial Group, one of the US' leading natural and organic food companies, has announced agreements to expand its presence in frozen foods and children's foods, by acquiring the Ethnic Gourmet brand of natural ethnic frozen meals and the Rosetto brand of frozen Italian products from HJ Heinz Company.

Hain Celestial have also announced that they have reached an agreement with Sesame Workshop, the non-profit educational organisation behind Sesame Street, to create co-branded natural food products for children, including cereals, snacks, cookies and crackers, under the Earth's Best brand using Sesame Street characters.

EU Commission permits 4 manufacturers to use phytosterols and phytostanols in novel foods

Four decisions of the European Commission authorize the use of phytosterols and phytostanols in certain products including yellow fat spreads, milk type products, yogurt type products, cheese type products, milk-based fruit drinks, salad dressings, fermented milk type products, soy drinks, and spicy sauces. The decisions are addressed to four separate companies, Pharmaconsult Oy Ltd, Unilever, Teriaka Ltd, and the Archer Daniel Midland Company, and specify specific uses in specific products.

Please keep us informed about your company or product news, publications, websites and events by adding us your mailing list or e-mail us at Soy&Health@hypaine.easynet.co.uk

products

New line of Tofurky Deli Slices introduced

US based company, Turtle Foods have announced the launch of three new Tofurky Deli Slices to their existing range. The new flavours are 'Italian Deli with Sun Dried Tomato and Basil', 'Tofurky with Cranberry & Stuffing', and "Philly Style" Steak.

All varieties are made with organic tofu and are low carbohydrate (3-5gm net carbo-hydrates) and low fat (3gm fat per serving) and are aimed at the carbohydrate conscious consumer looking for vegetarian options. For more information visit <http://www.tofurky.com/>.

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Flax & Soy bars and cereals

Flax & Soy bars and granola cereals are a US product from Zoe Foods. The products are wheat-free, dairy-free and contain no hydrogenated oils. All products are a good source of protein, omega 3 fatty acids and fibre. The bars come in 4 varieties apple crisp, chocolate, peanut butter and lemon, while the Granola Cereals are available in cranberries currants, almonds oats, and apple cinnamon varieties. Both ranges are non-GMO and the granola cereals are Kosher certified. For more information visit <http://www.zoefoods.com/>.

Natto, pine bark supplement shown to reduce risk of DVT

A product called Flite Tabs™ has been launched which is claimed to reduce the incidence of deep and superficial thrombosis and swelling of the extremities in high risk individuals on long haul airplane flights. The product is based on Pinokinase™ and was developed by Aidan Products, LLC and is a patent pending combination of an extract of pine bark and the traditional Japanese soy food, natto. The product is backed by a clinical trial which was published in the medical journal 'Angiology' in November 2003. For more information about Flite Tabs visit: http://www.flitetabs.com/.

New Eden® organic soybean oil

Eden Foods has expanded its line of unrefined vegetable oils with an Organic Soybean Oil. The new all-purpose cooking oil has a high phyto-sterol content and smoke point that makes it suitable for high temperature cooking. Made from certified organic, non-GMO soybeans, the manufacturers claim that it is 100% unrefined oil, chemical free, and cholesterol free. Its naturally occurring vitamin E acts as a preservative helping to extend shelf life. It is also a source of omega 3, omega 6, and omega 9 essential fatty acids (EFAs).

Eden Organic Soybean Oil is bottled in amber glass and nitrogen flushed to displace the oxygen at the top of the bottle before capping. Both factors prevent oxidation and help to preserve the oil and protect the nutrients, flavour, aroma and colour from the deleterious effect of light on phytonutrients and fat. For more information visit <http://www.edenfoods.com/>.

Soy & Health

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THURSDAY & FRIDAY, 7– 8 OCTOBER 2004

VENUE "OUD SINT JAN", BRUGES, BELGIUM

The third international conference "Soy & Health 2004 - Clinical Evidence - Dietetic Applications" will provide medical doctors, dietitians, nutritionists, nurses and other health care professionals with an up-to-date overview of the most recent findings about the health effects of soyfoods and soybean constituents. The conference will especially focus on clinical studies and practical information on how to incorporate soy into the diet. Topics include:

Soy, heart disease and diabetes
Hormonal effects and osteoporosis
Equol
Lignans
Soy & cancer
Anti-inflammatory effects
Early exposure to soy
Cognitive function
Dietary applications & future of soy

All this will be presented by an international selection of eminent speakers and key research people you shouldn't miss. The conference will be an excellent opportunity to share ideas and to participate in discussions with leading experts.

Full details of the conference programme are now available on the website

<http://www.soyconference.com/>

CALL FOR POSTER ABSTRACTS

Researchers are invited to submit abstracts for poster presentation. Deadline for submitting abstracts is August 15, 2004. Abstracts must be limited to 300 words.

Contact info@soyconference.com or visit <http://www.soyconference.com/>

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8

July 12–16
Institute of Food Technologists' Annual Meeting and Food Expo, Las Vagas, USA.
Contact: info@ift.org or visit the website <http://www.ift.org/>.

July 16–18
67th Annual Natural Products Convention and Trade Show, Las Vagas, USA. Contact: National Nutritional Foods Association, +1 800/966 6632, website: <http://www.nnfa.org/tradeshow/>.

September 5–8
3rd EuroFed Lipid Congress, Fats and Oils in a Changing World, Edinburgh, Scotland.
Contact: EuroFed, website: <http://www.eurofedlipid.org/meetings/edinburgh/>.
e-mail: amoneit@eurofedlipid.org.

September 25-26
Nutrition and Health Show, Olympia Exhibition Centre, London, UK. Contact: +44 (0)208 4556570,
email: info@nutritionandhealthshow.co.uk.

September 26–October 1
6th Annual Practical Short Course on Texturized Vegetable Protein and Other Soy Products, Texas A&M University, USA. Contact: Dr Mian Riaz +1 979/845 2774, e-mail: mnriaz@tamu.edu, website:<http://www.tamu.edu/extrusion/>.

October 7–8
3rd International Conference on Soy & Health 2004 - Clinical Evidence; Dietetic Applications, Bruges, Belgium.
Contact: info@soyconference.com or visit <http://www.soyconference.com/>.

October 11–14
Industrial Applications of Fats & Oils, Chicago, USA. Contact: AOCS, +1 217/359 2344, e-mail: meetings@aocs.org,
website: <http://www.aocs.org/meetings/>.

October 14–17
Natural Products Expo East 2004, Washington Convention Centre, Washington DC, USA. Contact: New Hope Communications, website: <http://www.naturalproductexpo.com/>.

October 14–17
Organic Products Expo - Bio Fach America, Washington Convention Centre, Washington DC, USA.
Contact: New Hope Communications, +1 303/3390 1776, website: <http://expoeast.com/organic.cfm/>,
e-mail: tradeshows@newhope.com.

October 17–21
SIAL 2004, Parc des Exposition, Villepinte, Paris, France. Website: <http://www.sial.fr/>.

November 16–18
Health Ingredients Europe (HiE), The Netherlands. Contact FIE, website: <http://www.hi-events.com/>,
e-mail: ahagenstein@cmpinformation.com.

December 1–3
Natural Products Expo Asia, Hong Kong Convention & Exhibition Centre. Contact: Penton Media,
e-mail: info@pentonasia.com, website: <http://www.naturalproductsasia.com/>.

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