

Soy & Health

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US Report on the health effects of soy published

A report from the US Agency for Healthcare Research and Quality (AHRQ) has concluded that, despite the large number of trials that have been performed, much of the research carried out on soy is inconclusive.

'The Effects of Soy on Health Outcomes' is an evidence-based review prepared by a team of researchers at AHRQ's Tufts-New England Medical Center Evidence-based Practice Center in Boston who were asked to summarize the current evidence on the health effects of soy and its isoflavones on: menopausal symptoms, bone health, cancers, cardiovascular diseases, kidney diseases and cognitive function as well as safety issues and drug interactions. The report also summarizes the formulations of soy products and/or soy food used in clinical trials.

From the evidence, soy products appear to exert a small benefit on LDL cholesterol and triglycerides, but the authors suggest that these effects may be of small clinical effect in individuals, although possibly large enough to have a population-wide effect. The report also notes the inconsistent association between soy protein dose and effect, and the lack of association between soy isoflavone dose and effect, limiting possible determination of how much soy protein is needed for lipid reduction. The authors confirm, however, that soy products may reduce menopausal symptoms in post-menopausal women but not other effects. However, the available studies on the health impacts of soy were limited in number, of poor quality, or their duration was too short to lead to definite conclusions. The report acknowledges that evidence from human studies does not suggest any adverse events beyond mild gastrointestinal intolerance but suggests that conclusions were often limited due to small numbers of studies or heterogeneity across studies.

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The authors consider that many questions remain as to whether specific soy products in adequate doses may be of benefit in specific populations. They recommend further well-conducted studies to clarify the effect of soy dose on lipid parameters and to determine whether soy components other than protein or isoflavones may be responsible for the lipid effects seen.

In commenting on the report, AHRQ Director Carolyn M Clancy MD said, "This report shows us that there is a lot we don't know about soy, and that more research is needed to determine if soy has any impact on a number of health conditions. An important role for AHRQ's Evidence-based Practice Centers is to identify gaps in evidence and knowledge that can be used to develop future research agendas."

The report was requested and funded by the National Center for Complementary and Alternative Medicine and the Office of Dietary Supplements at the National Institutes of Health and can be downloaded at: <http://www.ahrq.gov/clinic/tp/soytp.htm>.

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Editorial enquiries should be addressed to the Editor, tel: +44 20 8940 9278, e-mail: Soy&Health@hypaine.easynet.co.uk.



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Soy protein may reduce risk of prostate cancer

According to research published in the International Journal of Cancer (published online June 2005) regular consumption of soy protein-containing foods may reduce the risk of prostate cancer in men by as much as 30%. The study, by Dr Lin Yan (Director of Cancer Research for The Solae Company) and Dr Edward Spitznagel (Professor of Mathematics at Washington University) is a meta-analysis of 8 population studies that investigated consumption of soy protein containing foods in relation to prostate cancer in men.

Five studies were carried out in the USA and Canada, while the remaining 3 were carried out in Asian countries. The meta analysis showed a dramatic 30% reduction in the risk of prostate cancer in men who regularly consumed soy protein containing foods. The findings are consistent with data from United Nations sources which show that, in 42 countries where data is available, soy consumption correlates to a significantly lower mortality rate from prostate cancer. The protection from soy is said to be at least four times greater than from any other dietary factor.

<http://www3.interscience.wiley.com/cgi-bin/abstract/110526639/ABSTRACT>.

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S-equol is the exclusive product of human intestinal bacterial synthesis

The discovery of equol more than 20 years ago and the finding that it is bacterially derived from daidzin, an isoflavone abundant in soy foods, has led to the current nutritional interest in soy foods. However, equol can occur in two distinct forms - the S and R enantiomers but until recently it has been unclear which enantiomer was present in humans. Researchers have now established S-equol as the exclusive product of human intestinal bacterial synthesis from soy iso-flavones. The research also shows that both enantiomers are bioavailable and that S-equol has a high affinity for estrogen receptor β whereas R-equol is relatively inactive.

Setchell et al, Am J of Clin Nut Vol 81, No 5, pp1072-1079, May 2005. <http://www.ajcn.org/cgi/content/abstract/81/5/1072>.

Soyfoods may lower blood pressure

Research at the Vanderbilt University Medical Center in the US and the Shanghai Cancer Institute in China indicates that soy foods, not only lower cholesterol levels, but could also benefit the heart by keeping blood pressure levels down. A new trial using 45,694 participants of the Shanghai Women's Health Study showed, that over 2 to 3 years, soy intake is inversely associated with both systolic and diastolic blood pressure after adjusting for age, body mass index, lifestyle and other factors. The effects were particularly noticeable among elderly women. In women who consumed at least 25g of soy protein every day the adjusted mean systolic and diastolic blood pressure was lower than in women consuming less than 2.5g per day.

American Journal of Clinical Nutrition, Vol 81, No 5, pp1012-1017, May 2005. <http://www.ajcn.org/cgi/content/abstract/81/5/1012>.

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Lignan intake may be associated with better cognitive performance in older women

Research at the University of Utrecht suggests that higher dietary consumption of lignans appears to be associated with improved cognitive function in postmenopausal women. The researchers conducted a community-based survey among 394 postmenopausal women calculating isoflavone and lignan intake from a validated Food Frequency Questionnaire. Cognitive function was then evaluated using the Mini Mental State Examination (MMSE). The researchers found that after adjustment for cofounders, increasing dietary lignans intake was associated with better performance on the MMSE with the most pronounced effect on women who were 20-30 years postmenopausal. Isoflavone intake was not related to cognitive function.

OH Franco et al, Journal of Nutrition, Vol 135 No 5 pp1190-1195. <<http://www.nutrition.org/cgi/content/abstract/135/5/1190>>.



Soy may protect against colon cancer

Scientists in the US have found that soy isoflavones and saponins appear to protect against colon cancer in mouse experiments and in human colon tumour cell cultures. The goal of this research was to quantify isoflavone and saponin concentrations in elite soybean cultivars grown in different environments and to identify a naturally occurring high and low variety that could be used in animal studies of colon cancer.

The researchers observed significant environment-genotype interactions for the cultivars and selected 2 that provided the range of concentration for isoflavones and saponins. The influence of isoflavones and saponins on human colon tumour cells in culture, Caco-2, were also explored to determine potential mechanisms through which these compounds influence the carcinogenic process. The inhibition of Caco-2 cell proliferation by isoflavones and saponins suggested a protective effect of these compounds in colon cancer. No negative effects on mouse growth, organ weights, or intestinal morphology were observed when the diet contained up to 3% saponins by weight. Hence, the researchers concluded that soy isoflavones and saponins are likely to be protective of colon cancer and to be well tolerated. Further studies are underway to explore the cancer-protective effects of these compounds in animal models.

MacDonald et al, Journal of Nutrition, Vol 135 No 5, 2005 pp1239-1242. <<http://www.nutrition.org/cgi/content/abstract/135/5/1239>>.

October 30–November 2, 2005 Renaissance Chicago Hotel, Chicago, Illinois, USA

**6th International Symposium on
the Role of Soy in Preventing
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*Have new research on the health benefits
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H J Heinz acquires Amoy

H J Heinz Company has successfully completed its acquisition of the HP Food Group from Groupe Danone S.A. for approximately £470 million. The transaction includes leading brands such as Lea & Perrins Worcestershire Sauce, HP Sauces and a perpetual license to market the rapidly growing Amoy Asian sauce brands in Europe. The Amoy brand of Asian varieties is popular in more than 40 countries. The line, which was first created in China in 1908, continues to expand and includes soy and stir-fry sauces and noodles. The new deal includes three factories, two in the UK and one in the US. Website: <http://www.heinz.com/news>.

Half-day Seminar on Soybeans for the Food and Soyfood Industry

29 November 2005 at FI Europe, Parc des Exposition, Paris, France

ASA Europe is organizing a half-day seminar on the supply of Identity Preserved Soybeans to the soyfoods and soy ingredient industry in Europe. Speakers from Europe and the US will focus on market requirements, specialty soybean types and availability, IP systems and auditing, and the supply of variety, container and bulk shipments of specialty soybeans to Europe. Confirmed speakers will represent Schillinger Specialty Soybean Products; Soya Protein Association; AGP Specialty Soybeans; USB Specialty Soybean program; a major European soy protein ingredient producer.

For more information visit: <http://www.asa-europe.org/> or e-mail: asabru@asa-europe.org.

Please visit the ASA-USB booth at FI Europe in Paris #D88.20 B.

UK FSA consults on the use of the terms 'vegetarian' and 'vegan' in food labelling

The UK's Food Standards Agency is consulting on proposed Guidance on the Use of the Terms 'Vegetarian' and 'Vegan' in food labelling. The objective of the Guidance is to improve labelling practice, in catering, manufacturing and the retail sectors in relation to foods labelled as suitable for vegetarian and vegan diets and to improve consumer confidence in such labelling.

The industry already labels foods as suitable for vegetarians or vegans but the FSA believes that the criteria on which the labelling is based tend to vary and that consumer confidence in this type of labelling is low.

Currently there is no legal definition of the terms 'vegetarian' or 'vegan' and the Guidance puts forward suggested common definitions. The proposed Guidance would not be mandatory or legally binding but could be used in enforcement proceedings to aid interpretation. Responses to the consultation are requested by 5 October 2005. For more information visit the FSA website at: <http://www.food.gov.uk/foodindustry/Consultations/ukwideconsults/vegveganlabelconsult/>.



DATE FOR YOUR DIARY: 12-13 OCTOBER 2006

**4th International Conference Soy & Health 2006:
Clinical Evidence, Dietetic Applications, Dusseldorf, Germany.**

For more information visit: <http://www.soyconference.com/>

Copies of the 2004 Conference Proceedings can be ordered from the website price 45 Euros (postage & packing included).



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EFSA reviews opinion on phytosterols in foods

The European Commission has referred two scientific publications on aspects of elevated plant sterol consumption to the European Food Safety Authority (EFSA) for consideration as to whether the findings require a change to the 2002 Scientific Committee (SCF) on Food 'Opinion on the long-term effects of the intake of elevated levels of phytosterols from multiple dietary sources'. This review concluded that the efficacy of both plant sterols and plant stanols in reducing serum cholesterol levels was similar.

After reviewing the two new publications the Scientific Panel on Dietetic Products, Nutrition and Allergies (NDA) concluded that the principles raised by the publications have been dealt with adequately in the SCF review and that it is unnecessary at the present time to update the advice or to modify the conclusions. Website: http://www.efsa.eu.int/science/nda/nda_opinions/950_it.html.

New report on phytochemical health benefits

A new report on Phytochemical Functional Foods has been published which assesses the evidence for their health benefits and reviews the key issues involved in successful product development. Edited by two leading experts in the field the book reviews the research on the health benefits of phytochemicals and considers safety and quality issues in developing phytochemical products. For more information visit: <http://www.researchandmarkets.com/reports/c22984>.

Israel adopts precautionary principle on soya

The Israeli Health Ministry has recommended that consumption of soya products be limited in young children and avoided if possible in infants. They have also recommended that adults who eat soya products should do so only in moderation pending authoritative future studies. Although research showing a possible higher risk of cancer, male infertility, or other problems from soya is inconclusive and based on animal or retrospective human studies, the committee of 13 issued recommendations based on the precautionary principle. N.B. Soya consumption is high in Israel, and the use of soya based baby formula is among the world's highest per capita.

SHORT COURSE

SPECIALTY AND FUNCTIONAL OILS:

CONSUMER PERCEPTIONS, MARKET TRENDS AND HEALTH

"Het Pand", Ghent University, Ghent, Belgium, December 8 - 9, 2005

Organized by Ghent University, Filtration and Membrane World and ID&A.

The programme is targeted for both experienced and entry level staff including entrepreneurs, marketing staff, food formulators, engineers, chemists, ingredient manufacturers, dietitians and nutritionists.

For further details visit: <http://www.membraneworld.com/flipids.htm>

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Vegideli products from Redwood Foods

Redwood Foods in the UK have expanded their Vegi-deli range with the launch of two new products both containing soya. Thai Fish Style Cakes are completely fish-free made with chickpeas, onions and potato and flavoured with lemon-grass, coconut, galangal and lime. Vegideli Lincolnshire Style Sausages are meat-free and seasoned with herbs and spices for a traditional flavour; they can be eaten hot or cold.



All Redwood foods are free from animal ingredients and are suitable for vegetarians and vegans and people with special dietary needs including lactose intolerance. They are also free from cholesterol, hydrogenated fats, artificial colours and preservatives. For information about Redwood Foods visit:

<http://www.redwoodfoods.co.uk/>.

Yoplait and Solae to launch soy protein-fortified yogurt in France

The Solae Company and Yoplait, a General Mills brand, are jointly launching a soy protein-fortified yogurt in France. The new product, called Bioplait, will initially come in three flavours - Original, Peach, and Strawberry - and will be available at major grocery retailers throughout the country. The product is to be supported by a television and advertising campaign focusing on the additional health benefits of soy protein. Visit: <http://www.thesolaecompany.com/> or <http://www.yoplait.com/>.

New soy-based functional food product

The Powersoy Investments Company (Pty) Ltd in South Africa has launched a range of soy based functional food products using soya. Visit: <http://www.empowa.org/>.

Lactasoy Light and Lactasoy Plus Green Tea

Lactasoy Light is the lighter version of Lactasoy Original with lower sugar and fat content. Lactasoy Plus Green Tea is based on Lactasoy natural soymilk with a touch of green tea powder providing the benefits of soy nutrition and green tea in one product. For more information visit the Lactasoy website: <http://www.lactasoy.com/>.

Silken tofu with added fibre

Morinaga Nutritional Foods in the US has introduced an Enriched Silken Tofu with more fibre and calcium than the Original or Light tofu varieties. One serving of Mori-Nu Enriched Silken Tofu provides six grams of protein, and 10 percent of the US recommended daily allowance for fibre and calcium. Visit: <http://www.morinu.com/>.

SOYA DRINKS & DESSERTS
CONFERENCE, 6-7 OCTOBER 2005



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Join this first European conference in Cologne (Germany) and combine it with a visit to the ANUGA food show, 8-12 October! Associate conference companies are The Solae Company, APV, AVEBE, Danisco, DSM Food Specialties, Lipofoods, Sensus and The Soy Daily. Registrations can be made on the website at <http://www.prosoy.org/>, by e-mail to info@prosoy.org, or by telephone +31 (30) 2252060.

Learn more about the fast moving soy-based drinks & desserts market through the recently published research "Soyfoods: The European Market 2005" by PROSOY, which covers 8 different European countries. For more information visit: <http://www.prosoy.org/>.



24–25 September

2nd Nutrition and Health Show, Olympia Exhibition Centre, London, UK, website: <http://www.nutritionandhealthshow.co.uk/>.

29 September--2 October

Childhood Obesity: New Insights and Consequences, Vienna, Austria. Contact: European Childhood Obesity Group, e-mail: congress@mondial.at, website: <http://www.maw.co.at/>.

6–7 October 2005

Soya Drinks & Desserts Conference, Cologne, Germany, tel: +31 30 225 2060, e-mail: nthalen@prosoy.org, website: <http://www.prosoy.org/>.

8–12 October 2005

ANUGA Trade Fair 2005, Koelnmesse, Cologne, Germany, tel: +49 221 821 2700, website: <http://www.anuga.com/>.

16 October 2005

Symposium on Products & Ingredient Formulations for Weight Management and Wellness, Anaheim, California, USA, tel: +1 979 694 7031, e-mail: nutra@worldnutra.com, website: <http://www.worldnutra.com/>.

16–19 October 2005

World Nutra 2005 - 6th International Conference & Exhibition on Nutraceuticals and Functional Foods, Anaheim, California, USA, tel: +1 979 694 7031, e-mail: nutra@worldnutra.com, website: <http://www.worldnutra.com/>.

19–20 October 2005

Healthy Foods European Summit, Hotel Le Plaza, Brussels, tel: +32 2 779 5960, e-mail: valerie@iceo.be, website: <http://www.healthyfoodssummit.com/>.

28 October – 2 November

6th International Symposium on the Role of Soy in Preventing and Treating Chronic Disease, Chicago, Illinois, USA. Including a one day workshop on 'Effects of Soy on Growth and Development: How much do we know?' Tel: +1 217 359 2344, website: <http://www.aocs.org/meetings/soy/>.

2–4 November

EuroLipids International Trade Fair for Fats and Oils and Related Technologies, Frankfurt, Germany, tel: +49 69 7917345, e-mail: info@eurofedlipid.org, website: <http://www.eurolipids.com/>.

25-26 November 2005

6th National Nutrition & Health Conference, London, UK, e-mail: admin@nutritionandhealth.co.uk, website: <http://www.nutritionandhealth.co.uk/>.

29 November 2005

Soybeans for the Food and Soyfood Industry. Half day seminar organised by the American Soybean Association at FIE, Parc des Exposition, Paris, France. website: <http://www.asa-europe.org/>, e-mail: asabru@asa-europe.org.

29 November – 1 December

Food Ingredients Europe, Paris, France, tel +31 346 559444, e-mail: Fi@cmpinformation.com, website: <http://www.fi-events.com/>.

8–9 December 2005

Practical Short Course - Speciality and Functional Oils: Consumer Perceptions, Market Trends and Health, "Het Pand" Ghent University, Ghent, Belgium, tel: +32 (0)51 31 12 74, fax: +32 (0)51 31 56 75, e-mail: flipids@pro.tiscali.be, website: <http://membraneworld.com/flipids.htm/>.

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