

Soy & Health

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Real men eat soy: the truth about soy and sperm count

A study from Harvard School of Public Health was reported as suggesting adverse effects of soy on sperm count. Such reports, however, do not tell the whole story and other experts have questioned the findings. The study is based on recollected intake of soyfoods and not on specific diets containing soyfoods and, confounded by many issues, should be treated with caution. Most importantly the research did not find a negative relationship between soy and sperm mobility or sperm quality, which are both key factors to fertility. Also the study did not determine directly what other foods, medications, supplements, existing medical conditions, sexual activities or environmental factors may have affected the drop in sperm count. The Harvard study conflicts with other research in this area and the Harvard team themselves admit that many East Asian men consume more soy than in this study and do not develop fertility problems. They have speculated that they may have found a link between soy and low sperm count because many of the participants in their study were overweight or obese. Men with high levels of body fat produce more oestrogen than their slim counterparts. For more information visit: <http://www.soyfoods.org/pr/real-men-eat-soy-the-truth-about-soy-and-sperm-count>.

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Health claims research evidence free to all

From 2008, the peer reviewed journal, Food & Nutrition Research (currently the Scandinavian Journal of Food & Nutrition) will remove all subscription fees for accessing content online. This will mean that both academia, industry and consumers will have free access to the latest results from research on human nutrition, including support for health claims on foods and food supplements. In turn, the journal will receive wider distribution and provide greater impact for its authors.

Call for Poster Abstracts

5th International Conference on Soy & Health Het Pand, University of Ghent, Belgium, 2-3 June 2008

Soy Conference and the Soy & Health community encourage researchers to submit the results of the latest scientific research or clinical testing at the Soy & Health 2008 conference. A poster area near the exhibition hall will be open for direct visits throughout the Conference, and for meetings with the authors during the coffee, tea and lunch breaks.

Poster abstracts for Soy & Health 2008 can be submitted by e-mail to info@soyconference.com preferably in Word format. Abstracts should be no longer than 300 words, not including the Title, Author name(s) and affiliation. Please indicate which author will present the Poster during the Conference.

Deadline for submission: 12 April 2008

A confirmation of acceptance will be given in the shortest delay possible.

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

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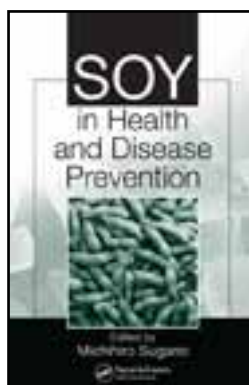
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Call to use the term 'soy milk' in EU

Following the publication this summer of an EC report on the use of the term milk which omitted to mention soy, MEPs and soy producers have called upon the EC to lift the 20 year ban on the use of the term soymilk on labels. Although the phrase is routinely used by consumers it is not permitted in the EU under a 20 year old Regulation (EEC 1989/87) restricting the use of the term milk to substances secreted from mammary glands. Exemptions have been made for coconut and almond milk which are both allowed under European law, but the exemption has not been extended to soymilk. The European Natural Soyfoods Association (ENSA) continues to lobby for the use of the term soymilk stating that the legislation is outdated and unacceptable. Visit: <http://www.ensa.eu-org/>.

Hain Celestial creates 65 new jobs in Norfolk, UK

The Hain Celestial Group Inc. is creating 65 new jobs at its Fakenham, Norwich facility doubling the number of production staff at the factory. The new positions will be focused within production at the factory which produces Linda McCartney meat-free meals, and will be available in both four and eight hour shifts, meaning a maximum of 130 new people can be recruited. The company has stated that the announcement is testament to the ongoing success of the re-launch of the Linda McCartney brand as Hain Celestial continues to develop the meat-free market in the UK. Visit: <http://www.hain-celestial.co.uk>.



New book - soy in health and disease prevention

Soy in Health and Disease Prevention (edited by Professor Michihiro Sugano, current Director of the Fuji Foundation and a prolific author in the field of functional foods) attempts to encompass all health aspects of the soybean and is aimed at researchers of functional foods and graduate students who want to have a fundamental knowledge of functional food research in Japan. The book tends to focus on Japanese research with only 5 contributors who are not Japanese including Cesare Sirtori, Stuart Johnson, Ann Kennedy, Melissa K Melby and David Kritchevsky.

The book is published by CRC Press (Taylor & Francis) <http://www.tandf.co.uk>.

Solbar announces management re-structure

Solbar Industries Ltd, Israel, has announced a management re-structure effective 1 January 2008 aimed at strengthening sales and business development. Major changes will include the appointment of Assaf Gadish as VP Sales and Supply Chain, and Gary Brenner as VP Marketing and Development.

For more information visit the Solbar website at <http://www.solbar.com>.

EUVEPRO celebrates 30 years championing vegetable and soy proteins

EUVEPRO, the European federation of vegetable protein producers and distributors, celebrated its 30th anniversary on 31 October 2007 at the FIE in London. With presentations from EUVEPRO's President, Yves Goemans (Solae) and Vice President, Steve Mott (ADM), the event provided an excellent networking opportunity for a variety of stakeholders involved in the production and promotion of vegetable and soy proteins. In addition, Henk Jan Buurman (Cargill Texturising Solutions), EUVEPRO's Treasurer summarised the latest developments in the EU Nutrition and Health Claims Regulation, and guest speaker, Gerard Klein Essink (ProSoy Research & Strategy) focused on recent product developments that have taken place since the introduction of the new health claims legislation. For more information about EUVEPRO visit:

<http://www.euvepro.eu>.



The Alpro Company

Alpro is the European pioneer in soybean products. A healthy series of Alpro soya and Provamel drinks, desserts and yoghurt is available in department stores and organic food shops in Europe. Alpro has production sites in Wevelgem (Belgium), Issenheim (France) and Kettering (UK) with over 500 employees.

The Alpro Products

Alpro has been successful in various different European markets for a number of years now.

Our consumers are extremely conscious, particular about choosing products that improve their diet and vitality.

Alpro means a conscious choice:

- for daily investment in health
- with the best ingredients
- for long-life vitality
- with no compromises in taste or convenience

All products are 100% vegetable, free from cow's milk protein, free from lactose and contain no cholesterol.

The Alpro Traceability System

Alpro soya uses a traceability system to ensure that our products and ingredients avoid contamination with genetically modified organisms (GMO's). The system is approved and monitored by independant auditors cert id.

The Alpro Innovation and Expertise

Based on in-depth consumer understanding, our R&D department works on the development of new products and on continuously upgrading our existing products, in order to meet the demand by health conscious consumers for products that taste delicious.

Our Science & Nutrition Department plays a key-role in providing information to the customer concerning product composition, nutritional value etc. The department closely follows all research on soy and its components in order to communicate the facts to medical groups and consumers.

Sustainable development

Alpro has a philosophy about food that travels deep into every aspect of our business. Not only do we take into account the impact of food on our health, we also consider our lifestyle and indeed our environment.

www.alprosoya.com

Alpro, Vlamingstraat 28, 8560 Wevelgem, Belgium, tel.: + 32.56.43.22.11



A healthy decision



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Japanese study suggests soy isoflavones may protect against prostate cancer

In a study of Japanese men, 200 patients and 200 matched controls were selected from 3 geographic regions of Japan and associations between nutritional and lifestyle factors were examined. The researchers found that BMI, physical activity, occupation, family history of prostate cancer, and medical history were not associated with prostate cancer risk, but isoflavones and their aglycones (genistein and daidzein) were significantly associated with decreased risk. In addition, PUFA (n-6) fatty acids and magnesium were significantly associated with decreased risk but not after adjustment for isoflavone intake. Isoflavone intake was correlated with the intake of PUFA (n-6) fatty acids and magnesium because soy products contain high levels of these nutrients. On the other hand, isoflavones significantly decreased the risk of prostate cancer regardless of adjustment of PUFA (n-6) fatty acids or magnesium. The researchers concluded that isoflavones might be an effective dietary protective factor against prostate cancer in Japanese men.

Y Nagata et al, Dietary isoflavones may protect against prostate cancer in Japanese men, *Journal of Nutrition*, 2007, 137(8), 1974-9. <http://jn.nutrition.org/cgi/content/abstract/137/8/1974>.



Probiotics may increase isoflavone profile of soymilk

New research from Australia has implications for using soy isoflavones as functional ingredients. Researchers from Victoria University found that the addition of probiotic bacteria to soymilk leads to the conversion of isoflavones from the less bioavailable glycoside form to the aglycone form. The study tested the efficacy of two probiotic bacteria strains, *Bifidobacterium animalis* A and B, to transform soy isoflavone glycosides, the predominant form in unfermented natural soymilk made from soy protein isolate, to the aglycone form in the presence of skim milk powder. The probiotics were also added to soymilk with no skim milk powder added and reconstituted skim milk powder. During fermentation isoflavones change from the glycoside form to the aglycone form. The unsupplemented soymilk isoflavones were found to undergo a 74% and 73% transformation of *B. animalis* A and B respectively. When skim milk powder was added to the probiotic-containing soymilk, the biotransformation was increased to 84% and 85% respectively. The authors conclude that the biotransformation of isoflavone glycosides in soymilk supplemented with skim milk was significantly increased by 10% by both *B. animalis* A and B. The researchers also reported that the addition of skim milk powder to soymilk appeared to stimulate the growth of both strains of bacteria as well as the biotransformation of isoflavone glycosides to aglycones.

TT Pham & NP Shah, Biotransformation of isoflavone glycosides by *Bifidobacterium animalis* in soymilk supplemented with skim milk powder, *Journal of Food Science* - published online ahead of print at <http://www.blackwell-synergy.com/doi/abs/10.1111/j.1750-3841.2007.00547.x>.

Genistin may inhibit rotavirus susceptibility in infants

According to researchers at the University of Illinois, USA, the soy isoflavone, genistin, at concentrations present in soy infant formula, may reduce a baby's susceptibility to rotavirus infections by as much as 74%. In the study, cells in culture were exposed to rotavirus in the absence or presence of soy isoflavones. All forms of isoflavones were tested including the complete mixture as present in soy infant formula. The researchers found that genistin and the mixture significantly reduced rotavirus infectivity by 33 to 74%, but when genistin was taken out of the mixture, antirotavirus activity was lost, suggesting that genistin is the active component. Inhibition held up across a 16-fold range of rotavirus exposure and even at the highest exposure, genistin or the mixture of isoflavones was effective. The researchers suggest that genistin appears to diminish infectivity by inhibiting binding of the virus to the tissue culture cells. The next stage is to carry out research in neonatal piglets to see if the same results are obtained with young animals.

S Donovan et al, Isoflavones at Concentrations Present in Soy Infant Formula Inhibit Rotavirus Infection in Vitro, *Journal of Nutrition* 137:2068-2073, September 2007, <http://jn.nutrition.org/cgi/content/abstract/137/9/2068>.



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Soy isoflavones and vascular endothelial function

Researchers at the University of Hong Kong and Vanderbilt University School of Medicine in Nashville, USA, interested in the relation between intake of isoflavone and endothelial function, studied 126 consecutive patients at high risk of cardiovascular events. A validated food frequency questionnaire was used to estimate their dietary intake after they achieved a stable dietary pattern for 3 months. The researchers investigated the effects of various dietary soy isoflavone intakes on brachial artery flow-mediated dilation and mean maximum carotid intima-media thickness. The median intakes of isoflavone and soy protein were 5.5 (range 2.2-13.3) mg/d and 1.2 (range 0.4-2.8) g/d respectively. The results showed that those in the 4th quartile of daily isoflavone intake had significantly greater flow-mediated dilation, but not mean maximum carotid intima-media thickness, than those in the lower quartiles. After adjustment of potential confounders, a higher isoflavone intake in the 4th than in the 1st quartile (<13.3 mg/d) but not a higher intake of soy protein, predicted an absolute 2.71% increase in flow-mediated dilation. The authors concluded that in people at high risk of cardiovascular events, a greater isoflavone intake is associated with better vascular endothelial function and lower carotid atherosclerotic burden.

Y-H Chan et al, Isoflavone intake in persons at high risk of cardiovascular events: implications for vascular endothelial function and the carotid atherosclerotic burden, *The American Journal of Clinical Nutrition* Vol 86, No 4, 938-945, October 2007.
<http://www.ajcn.org/cgi/content/abstract/86/4/938?etoc>.



Phytoestrogens may protect against prostate cancer in Scottish men

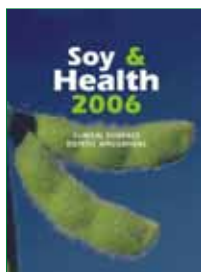
More evidence to support a protective effect from phytoestrogens on prostate cancer has been published by researchers from Edinburgh University, Scotland. A population-based case-controlled study of diet, inherited susceptibility and prostate cancer was undertaken in the lowlands and central belt of Scotland to investigate the effect of phytoestrogen intake and serum concentrations on prostate cancer risk. A total of 433 cases and 483 controls aged 50-74 years were asked to complete a validated food frequency questionnaire and provide a non-fasting blood sample. Multivariate logistic regression analysis found significant inverse associations with increased serum concentrations of enterolactone and with the consumption of soyfoods. However, no significant associations were observed for isoflavone intake or serum genistein, daidzein and equol. The researchers concluded that the study supports the hypotheses that soyfoods and enterolactone metabolised from dietary lignins protect against prostate cancer in Scottish men.

CL Heald et al, Phytoestrogens and risk of prostate cancer in Scottish men, *British Journal of Nutrition*, 2007, 99(2), 388-96.
<http://www.journals.cambridge.org/action/displayIssue?jid=BJN&volumeId=98&issueId=02>.

Soyfoods consumption and breast cancer

Findings from the Japan Collaborative Cohort (JACC) Study have been published suggesting that the consumption of soyfoods has no protective effect against breast cancer. The researchers analysed the data from the JACC study. From 1988 to 1990, over 30,000 women, aged 40-79 years, completed a questionnaire on diet and other lifestyle features. Hazard ratios were computed to examine the association between soy intake and the risk of breast cancer. During the mean follow-up of 7.6 years, 145 cases of breast cancer were documented. The researchers found no significant association between the risk of breast cancer and consumption of tofu, boiled beans and miso soup. The researchers concluded that further large-scale investigations eliciting genetic factors may clarify different roles of various soybean ingredient foods on the risk of breast cancer.

K Nishio et al, Consumption of soyfoods and the risk of breast cancer; findings from the JACC study, *Cancer, Causes and Control* 2007, 18(8), 801-8. <http://www.springerlink.com/content/8788875k1q316804/?p=0e0c093478a54acbb94c1e807ddc3470&pi=1>.



Soy & Health 2006 Conference proceedings now available

The proceedings from the Soy & Health 2006 Conference are now available and will be shipped in the coming weeks. They can be ordered, price of 45 EUR (6% VAT included; advance payment is necessary) from the Soy Conference website http://www.soyconference.com/health_proceedingOrder.asp.



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On 25 September 2007, eighty participants attended the **2nd Interactive Workshop Nutrition & Health Claims Europe** held at the Radisson SAS Royal Hotel in Brussels, Belgium. The morning session was devoted to reviewing the EC Nutrition & Health Claims Regulation (No 1924/2006, 20 Dec 2006) which came into force on 1 July 2007. *Patrick Coppens (EAS)* gave an in-depth review of how the regulation is being applied in consecutive steps with specific transition periods, and with guidelines and procedures in full development. *Andreas Kadi (Coca Cola Europe)* focused on nutrient profiles, a concept established in Article 4 of the Regulation. EFSA should provide scientific advice by early 2008 which will then be established through comitology and introduced around 2011. The issue of nutrient profiles has a strong political component, and will become a competitive issue. This and other procedures laid out in the Regulation could severely damage the drive for product innovation.

Neville Craddock (Neville Craddock Associates) reviewed the EFSA Guidelines on Health Claims on Foods (EFSA Journal 530, 2007, 1-44) which apply to Article 14, and, to some extent, Article 13 claims. The guidelines explain how claims should be scientifically substantiated and how applications should be made and will be reviewed with consumer understanding of the claims a key element. *Jean Savigny (Keller and Heckman)* ended the session with an update of the legal challenges surrounding the implementation of the regulation, starting with claims classification. The transition of existing claims under Article 13, new claims applications under Article 14, and nutrient profiles with the requirement for consumer understanding remain major hurdles.



In the afternoon session *Dr Nino Binns (NMB Consulting)* focused on how nutrition claims on current product labels must be reviewed to determine their acceptability: absence or presence of certain compounds; comparative nutrition claims and implied nutrition claims. A detailed comparison with existing legislation is needed or with existing country-specific systems. Nutrition claims are now only permitted if listed in the Annex to the Regulation and must comply with specific provisions based on consumer understanding. *Dr Alwine Kardinaal (TNO)* explained which studies and scientific data will be needed for substantiating health claims under Articles 13 and 14: description of food/constituent, a specific health relationship and the intended claims; identification of the totality of the evidence; evaluation of individual studies; weighing the evidence and deriving conclusions. The hierarchy of the clinical and medical studies used is well established in the EFSA Guidelines, giving human intervention studies priority over human observational studies. Mechanistic model studies and non-human data will have a much lower weight in the decision making process.

Melanie Ruffell focused on how existing health claims are moving at the European level. During the transition period remaining national rules will take priority but this will end as soon as the transition of existing claims in the Article 13 system and the introduction of nutrient profiles are established. Several deadlines exist depending on the specific system. After each deadline more transition periods are available to allow industry to adapt packaging and promotional materials. *Dr Janice Harland (HarlandHall Associates)* reviewed the opportunities and hurdles in developing foods with health claims - starting with optimising and updating existing product packaging and communication materials. The task will be even more important as soon as nutrient profiles and new claims are established. The role of individual health care professionals in product and claim communication remains problematic and will need review. However, at this time the auditing of labels and communication materials is the first task to be done by the European food & drinks industry.

More information on how nutrition and health claims will be communicated to consumers was given by *Truus Huisman (Unilever Europe)*. Nutrition and health claims communication is based on clear statements understandable by the average consumer and should be part of a bigger communication framework by indicating the importance of a varied and balanced diet, a healthy lifestyle, and the quantity of food and pattern of consumption required to obtain the claimed benefit. An appropriate warning should be given for products that are likely to present a health risk if consumed in excess. Communication includes everything from the product label to advertising in press and other media, printed brochures as well as press articles and web communication. The Regulation will, therefore, impact marketing of brands and trade marks and may add considerable costs to marketing and advertising. *Yves Goemans (Solae, Geneva)* closed with a review of how the soy protein health claim (an Article 13 health claim) was successfully introduced in the US and the UK leading to growing sales after introduction. Health claims are the result of a consecutive screening process where scientific evidence, regulatory and marketing follow one another. The final test is the acceptance and success in communicating the message to the consumer. Media, product understanding, and health care professional backing are critical factors in creating consumer interest and belief in the benefit offered by the product. Only the combination of these success factors can lead to a successful health claim.

For more information consult the workshop website at <http://www.healthclaims.eu>. Registered users will automatically receive information on upcoming events.

Soy & Health

June 2-3, 2008

Het Pand, University of Ghent, Ghent, Belgium



1st International Symposium Soy & Strategic Marketing

Joins up with the 5th International Conference
Soy & Health

The 1st International Symposium on Soy & Strategic Marketing is designed for marketing & sales people active in the soyfood and soy ingredient industry or entering this market. The programme will explore how to strengthen market position and bring new insights into ways to further develop the market.

The 5th International Conference Soy & Health is aimed at those with a nutrition or dietetic background, food research and development and marketing staff, clinical researchers, government representatives, as well as senior executives from the soyfood, food ingredient and supplement businesses. International top scientists will bring you the latest developments in the field of soy & health research as well as educative overview presentations.

5th International Conference Soy & Health 2008

Programme Framework

- Role of soy isoflavones & protein on cardiovascular disease
- Impact of soy on osteoporosis
- Is equol the key for the effects of isoflavones?
- Role of dietary soy protein in metabolic syndrome & obesity
- Impact of soy on diabetes
- Epigenetic changes through soy consumption: relevance for cancer prevention
- Cancer preventive components of soy
- Effects of soy on cognitive function

1st International Symposium Soy & Strategic Marketing 2008

Programme Framework

- Innovation: which new science offers new opportunities?
- Innovation: new products or upgrading existing products?
- How to brand ingredients?
- Innovative soy drinks: commercial and technical requirements
- Consumer understanding of the label
- Consumer segmentation: consequences for branding
- Do I need a health claim to raise my sales?
- Communication challenges in a health conscious environment

Visit <http://www.soyconference.com/> or e-mail info@soyconference.com for further details.

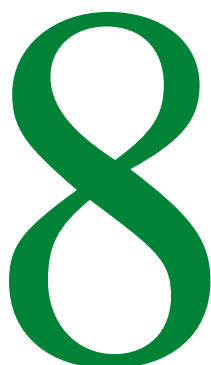


New look soyconference.com website

As organiser of the Soy & Health conference series and publisher of Soy & Health e-newsletter, Soy Conference THV has relaunched its website. With a new design and improved functionality the new website provides the latest conference details and access to current and past issues of the newsletter.

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





31 January - 1 February 2008

2nd Healthy and Nutritional Bars Conference, Cologne, Germany. Contact: Suzanne van Oostveen at svanoostveen@prosoy.org or visit: <http://www.prosoy.biz/>.

24–29 February 2008

Practical Short Course on Snack Food Processing (Extruded Snacks, and Tortilla Chips), Texas A&M Campus, College Station, USA. Visit: <http://www.tamu.edu/extrusion> or e-mail mnriaz@tamu.edu.

4–6 March 2008

International Congress on Vegetarian Nutrition, Loma Linda University, California, USA. Contact vbrown@llu.edu (registration) and srajaram@llu.edu (programme). Visit <http://www.vegetariannutrition.org> for online registration and abstract submission.

13–16 March 2008

Natural Products Expo West, Anaheim Convention Center, Anaheim, California, USA. Visit: <http://expowest.com/> or e-mail tradeshows@newhope.com.

17–18 April 2008

14th Soy Symposium - Soy: New Horizons, Chicago, Illinois, USA. Held in conjunction with Processing and Marketing of Soybeans for Meat, Dairy, and Baking Products at the University of Illinois at Urbana-Champaign, Illinois from April 21 to 25, 2008. Visit: <http://www.soyfoods.org/2008-soy-symposium/>.

21–28 April 2008 (extended 1 May 2008)

Intsoy Short Course: Processing and Marketing of Soybeans for Meat, Dairy and Baking Applications, University of Illinois, USA. Visit: http://intsoy.nsr.uiuc.edu/courses/processing_marketing/.

22–24 April 2008

Food Ingredients Eastern & Central Europe, Warsaw, Poland. Visit: <http://cee2008.fi-events.com/content/default.aspx> or e-mail: Ficee@cmpi.biz.

24 April 2008

3rd Roundtable Conference on Responsible Soy, Buenos Aires, Argentina. Visit: <http://www.responsiblesoy.org>.

6–8 May 2008

Vitafoods International, Geneva, Switzerland. Visit: <http://www.vitafoods.eu.com/>.

18 May 2008

99th AOCs Annual Meeting & Expo, Washington State Convention & Trade Center, Seattle, USA. Visit: <http://www.aocs.org> or e-mail: meetings@aocs.org.

2–3 June 2008

5th International Conference Soy & Health 2008, Ghent, Belgium. Visit: <http://www.soyconference.com/> or e-mail info@soyconference.com. See page 7 for more details.

2–3 June 2008

1st International Symposium on Soy & Strategic Marketing, Ghent, Belgium. Visit <http://www.soyconference.com/> or e-mail info@soyconference.com. See page 7 for more details.

5–6 June 2008

ILPS Short Course, Phospholipid & Lecithin in Healthy Emulsions, University of Ghent, Belgium. Info: lecithin@lecipro.nl or visit: <http://www.ilps.org>.

17 June 2008

Interactive Workshop, Supplement Claims, Brussels. Info at e-mail: info@supplementclaims.eu.