01 | A WORD FROM THE EXECUTIVE DIRECTOR

Welcome to the Summer 2011 edition of our quarterly newsletter!

Since the last newsletter, we have started our 25th anniversary celebrations. The 25th anniversary symposium - held in March - was a great success in terms of the level and variety of attendees and the quality of the presentations. Under the theme “Science for Health - Beyond the Silver Anniversary”, the symposium covered a wide selection of topics with sessions on health benefits from food, food safety, risk assessment and toxicology, as well as outlooks for the future. This multidisciplinary event was of interest to scientists working in food safety, nutrition, toxicology and related areas, to regulators from industry and government, and to representatives of international organisations.

Our celebrations are not over yet, however. Later in 2011, we will publish our 25th anniversary brochure, which will take a look at some of our key achievements and milestones since we were established in 1986. This brochure will be available in print and posted on our website.

Another key event that will mark our anniversary will be our international symposium – on the ‘Health Benefits of Foods: From Emerging Science to Innovative Products’ (Prague, 5-7 October) organised by our Functional Foods Task Force. Don’t wait until it’s too late to register – it will be very popular, and we are expecting more than 300 attendees!

Last but not least, as you know, some of our activities are funded by the European Commission. From now on, to differentiate these two groups in the newsletter, we will highlight the EU-funded projects with a green background. Since 1995, ILSI Europe has coordinated 5 EU projects and has been involved in 10 others within the Fifth, Sixth and Seventh Framework Programmes. Currently, ILSI Europe is involved as coordinator or partner in BRAFO (Benefit-Risk Analysis of Foods), EURRECA (European micronutrient Recommendations Aligned) and COSMOS (Integrated In Silico Models for the Prediction of Human Repeated Dose Toxicity of Cosmetics to Optimise Safety).

I hope you enjoy the read!

Dr. Nico van Belzen
Executive Director
ILSI Europe

02 | ILSI EUROPE AT A GLANCE

In 2011, ILSI Europe will reach the symbolic number of 250 publications produced over the past 25 years, including peer-reviewed papers, black & white reports and concise monographs.

03 | WELCOME TO OUR NEW BOARD MEMBERS

During our 2011 General Assembly which was held on 24 March 2011, the retiring ILSI Europe Board Members Dr. Ib Knudsen (President), Prof. Peter van Bladeren (Treasurer), Prof. Paul Walter (Past-President) and Dr. Julio Boza Puerta were warmly thanked for their contributions over the years; and the newly elected Board Members Prof. Philip Calder, Dr. Mike Knowles, Prof. John O’Brien (Treasurer), Prof. Gerhard Reckhemmer, and Dr. Jørgen Schlundt were welcomed. We are delighted to announce that Prof. Gerhard Eisenbrand has become our new President.
**04 | ILSI EUROPE’S FOUR CLUSTERS**

The task forces at ILSI Europe are grouped in four specific clusters:

1. **Assessment of Benefits and Risks**: this includes ‘classical’ risk assessments, benefits of foods and benefit-risk comparisons.
2. **Societal Aspects**: an area that addresses the consumer perspective of food-related issues.
3. **Food Chain**: this addresses various stages of the route ‘from farm to fork’ including food processing and environment.
4. **Diet, Health and Disease**: this covers task forces that focus on a certain aspect of the relationships between nutrition, diet and health, and examine its determinants or risk factors.

**05 | NEW PUBLICATIONS FROM ILSI EUROPE**

Here are short summaries of some of the latest published articles from ILSI Europe. To read the full papers, click on the link at the end of each summary:

**Functional Foods Task Force**

*The biological relevance of direct antioxidant effects of polyphenols for cardiovascular health in humans is not established (article)*

Polyphenols are antioxidants that are naturally present in plant foods. The supposed health effects of antioxidants have attracted much attention from both consumers and the food industry, and polyphenols have received specific interest. An ILSI Europe working group addressed this question and explored the potential of antioxidant claims for polyphenols in relation to cardiovascular disease (CVD).

This supplement evaluates polyphenols in foods; evidence from human studies of the effects of polyphenols on CVD; antioxidant activity and oxidative damage and their relevance for CVD, and the substantiation of claims of antioxidant activity of polyphenols applying the PASSCLAIM criteria.

The evaluation showed that the biological relevance of antioxidant effects of polyphenols for cardiovascular health is not established. Thus, health claims on direct antioxidant effects of polyphenols in relation to cardiovascular health could not be substantiated. The PASSCLAIM criteria proved to be valuable and useful in this process.

Read the full publication: *The Biological Relevance of Direct Antioxidant Effects of Polyphenols for Cardiovascular Health in Humans Is Not Established*

**Metabolic Imprinting Task Force**

*Obesity in pregnancy: implications for the mother and lifelong health of the child. A consensus statement (article)*

Obesity among pregnant women is becoming one of the most important women’s health issues, and is associated with increased risk of almost all pregnancy complications. Furthermore, evidence shows that being born to an obese mother may lead to lifelong health problems. In September 2009, ILSI Europe convened a workshop with multidisciplinary expertise to review practices and the science basis of the health and nutrition of obese pregnant women, with a focus on the long-term health of the child.

The consensus viewpoint of the workshop identified gaps and gave recommendations for future research on weight gain, diabetes, and research methodologies during pregnancy. Evidence currently favours actions directed at controlling pre-pregnancy weight and at preventing obesity in women of reproductive ages. More randomised controlled trials are needed to evaluate the effects of nutritional and behavioural interventions in pregnancy outcomes. Suggestions that maternal obesity may transfer obesity risk to the child require more long-term investigation with provision for long-term follow-up of the children.

Read the full publication: *Obesity in Pregnancy: Implications for the Mother and Lifelong Health of the Child. A Consensus Statement*
**EURRECA**
**A review of consumer awareness, understanding and use of food-based dietary guidelines**

Food-based dietary guidelines (FBDG) have been designed to encourage healthy, habitual food choices, decrease chronic disease risk and improve public health. However, despite the promotion of FBDG, minimal research has been conducted to evaluate whether FBDG are utilised by the public. This review uses a framework of awareness, understanding and use to summarise consumer evidence related to national FBDG and food guides.

A total of 28 studies were reviewed. These reviews were a mix of both qualitative methods such as interview and focus groups, and quantitative methods such as questionnaire surveys. A greater amount of evidence for consumer awareness and understanding was reported than for consumer use of FBDG – it appears that FBDG and food guides are minimally used by consumers. The review acknowledges that the reliability and validity of its findings may be limited and recommends that further research is required to evaluate the efficacy of FBDG as a public health promotion tool.

Read the full publication: A review of consumer awareness, understanding and use of food-based dietary guidelines

**EURRECA**
**Selenium in Human Health and Disease**

This review gathers current knowledge on the micronutrient selenium with a particular focus on human health and disease. The relationships between selenium intake/status and various health outcomes, in particular gastrointestinal and prostate cancer, cardiovascular disease, diabetes, and male fertility, are reviewed, and recent developments in genetics of selenoproteins are outlined.

The review shows that a great deal of research is needed to improve our understanding of selenium metabolism, which is currently rather limited compared with many other nutrients. For example, the mechanisms of absorption have not yet been identified, and various roles of selenium within the body are awaiting characterisation. Robust measures of status in relation to short and long-term exposure and biochemical, functional, and health outcomes need to be developed.

The relationships between selenium intake/status and health, or risk of disease, are complex but require elucidation to inform clinical practice and to refine dietary reference values and develop effective public health policies.

Read the full publication: Selenium in Human Health and Disease

Please note that this publication is not freely available

**Environment and Health Task Force**
**Evaluation of the risks posed in Europe by unintended mixing of food crops developed for food use and food crops developed for non-food uses**

Starch, sugars and oils derived from food crops have been used for non-food applications for centuries. Today, for example, oilseed rape, palm and soya oil are used for biodiesel production; and maize, cereal and sugar crops are widely used for bio-ethanol. With the increasing use and development of this practice, this report examines whether current procedures and control measures in the agricultural supply, food and feed industry are capable of addressing potential risks to consumers.

The report presents a number of scenarios, both real and theoretical, as case studies that evaluate the unintended mixing of conventional and non-food use of seed, crops, produce and by-products at different points in food and feed supply chains.

To date, the approaches adopted in the EU by both regulatory bodies and industry to control human and animal exposure to risks arising from use of food crops for non-food use have been shown to be effective. However, the growing interest in the use of plant-derived products is likely to accelerate developments in this sector, creating additional criteria that would need to be addressed.

Read the full publication: Evaluation of the risks posed in Europe by unintended mixing of food crops developed for food use and food crops developed for non-food uses
06 | UPCOMING SCIENTIFIC PAPERS

- Uncertainty Analysis of the Use of a Retailer Fidelity Card Scheme in the Assessment of Food Additive Intake (article)
- Application of the Threshold of Toxicological Concern (TTC) Concept to Unknown Substances Found in Analysis of Foods (article)
- Guidelines for the Design, Conduct and Reporting of Human Intervention Studies to Evaluate the Health Benefits of Foods (article)
- A Standardised Approach Towards Proving the Efficacy of Foods and Food Constituents for Health CLAIMs (PROCLAIM): Providing Guidance (article)
- Consumer Response to Novel Agri-Food Technologies: Implications for Predicting Consumer Acceptance of Emerging Food Technologies (article)
- Water Use of Oil Crops: Current Water Use and Future Outlooks (report)
- Frontiers in Food Allergy Risk Assessment (report)
- Nutrition and Immunity in Man (concise monograph)

07 | PAST EVENTS

ILSI Europe organises a variety of scientific events. These include workshops, symposia and sessions held as part of the programme of larger scientific and professional meetings. Some recent past events include:

- Emerging Microbiological Issues Task Force
  Kick-off meeting on Assessing The Safety Of Water Used in the Production of Fresh and Minimally Processed Produce
  BRUSSELS, BELGIUM, 29–30 MARCH, 2011
  READ MORE

- Novel Foods and Nanotechnology Task Force
  Workshop on the safety assessment of nanomaterials in food
  READ MORE

- Risk Analysis in Food Microbiology Task Force
  Workshop on Microbiological Risk Assessment (MRA) – Application of Omics Technology
  EDE, THE NETHERLANDS, 17 MAY, 2011
  READ MORE

- Multiple Task Forces
  Pre-Congress Session at the 18th European Congress on Obesity (ECO)
  ISTANBUL, TURKEY, 25 MAY, 2011
  READ MORE

- Threshold of Toxicological Concern Task Force
  Workshop on the Threshold of Toxicological Concern: Scientific Challenges and Approaches
  BRUSSELS, BELGIUM, 8–10 JUNE, 2011
  READ MORE
EURRECA Workshop on Critical Micronutrients in Pregnancy, Lactation and Infancy
TUTZING, GERMANY, 14-16 JUNE, 2011

Supplementation with iron, folate and vitamin D in the perinatal period is still a highly controversial issue in many countries. This workshop aims to bring together a number of outstanding experts and researchers in this area to discuss new issues and questions on the need for supplementation for pregnant and lactating women and infants. The workshop is co-organised by the EURRECA Network of Excellence and by the Early Nutrition Academy (ENA).

READ MORE

EURRECA 5th Integrating Meeting
BUDAPEST, HUNGARY, 20-23 JUNE 2011

On 20-23 June 2011 in Budapest, Hungary, the EURRECA Network’s Leaders will present the current state of EURRECA research and integrating activities. Partners will discuss the progress of their activities and establish detailed plans to achieve the expected outcomes by the end of the project.

Two workshops will take place on 23 June, a half-day workshop will be organised in collaboration with the Micronutrient Genome Project (MGP) as part of EURRECA’s sustainability plans; another full-day workshop will cover the activities on EURRECA’s consumer science and policy.

READ MORE

Multiple Task Forces
Session at Eurotox 2011
PARIS, FRANCE, 28-31 AUGUST, 2011

A session on ILSI Europe toxicology programme: Current Work on the Risk Assessment of Genotoxic Carcinogens and the Threshold Of Toxicological Concern (TTC)’ will take place at Eurotox 2011. The session will provide an overview on our current activities in the fields of the Benchmark Dose (BMD) modelling of genotoxic and carcinogenic substances; the application of the TTC concept to unknown substances found in the analysis of foods; the risk assessment of engineered nanomaterials in food applications. The outcomes of the workshop on TTC (8-10 June, Brussels) will also be presented.

The session is co-sponsored by the Threshold of Toxicological Concern, the Risk Assessment of Genotoxic Carcinogens and the Novel Foods and Nanotechnology Task Forces.

Functional Foods Task Force
International Symposium on “Health Benefits of Foods - From Emerging Science to Innovative Products”
PRAGUE, CZECH REPUBLIC, 5-7 OCTOBER, 2011

The field of functional foods continues to grow in importance in the food industry. Consumers want ‘healthier’ foods, but how to define and establish beneficial health effects of foods above basic nutrition?

ILSI Europe is welcoming you to its third symposium in the series on functional foods with the aim to bring together more than 300 key international experts from academia, industry and public bodies on a shared platform to review and debate recent advances in substantiation methodology of health benefits of foods. In addition, the symposium aims to discuss new approaches to investigating the biological functions of beneficial components in the diet - resulting in a better understanding of the relationship between food, nutrition and health.

Click here to register.
READ MORE
Metabolic Imprinting Task Force

Workshop on Maternal Obesity, Diet, and Developmental Programming - Aligning Mother-Child Studies
BRUSSELS, BELGIUM, 10-11 OCTOBER, 2011

The workshop organised by the Metabolic Imprinting Task Force aims to identify the key outstanding questions in the area of ‘Early life nutritional determinants of offspring obesity and its metabolic complications’ and to define the optimal methodological approaches to answer these questions. This workshop will focus on how to assess maternal dietary habits and status; maternal body weight, composition, and lifestyle; as well as infant growth, body weight regulation and early risk factors.

The outcome of the discussion will be collated in a scientific paper addressing how to improve mother-child study designs and make the best use of existing data.

EURRECA

Session at the International Society of Trace Element Research in Humans (ISTERH) conference
ANTALYA, TURKEY, 16-21 OCTOBER, 2011

The EURRECA Network of Excellence is organising a session entitled “EURRECA: Variations in European Micronutrient Recommendations” where partners will illustrate some of the latest activities of the Network. This session will first address the bioavailability of micronutrients in the context of setting micronutrient requirements. The second part will provide an overview of the inter-relationships between dietary zinc intakes, status and health outcomes in various populations groups. The session will end on a systems biology approach to personalised trace element recommendations, showing that by combining omics analysis and network biology, personalised requirements of multiple trace elements can be derived.

Multiple Task Forces

Sessions at the 11th European Nutrition Conference (FENS - Federation of European Nutrition Societies)
MADRID, SPAIN, 26-29 OCTOBER, 2011

Session on Food Consumption and Public Health
27 OCTOBER, 11.00 - 13.00

The session will start by addressing scientific considerations of the benefits of satiety to consumers before looking at the determinants of obesity and the metabolic syndrome, topics of work realised by ILSI Europe. Finally a benefit risk analysis of macronutrients replacement will be covered. At the end of the session there will be room to discuss potential directions for further research in the covered topics.

This session will be co-organised by the task forces on Appetite Regulation, Weight Management in Public Health, Metabolic Syndrome & Diabetes and Risk Assessment of Chemicals in Food.

Session on European Recommendations Aligned, How Do We (EURRECA) Realise This?
28 OCTOBER, 11.00 - 13.00

The aim of the EURRECA session is to provide an in-depth overview of the EURRECA methodology for deriving requirements. Two commonly used approaches will be discussed, namely the association approach using systematic reviews and meta-analyses, and the factorial approach covering bioavailability and factorial estimates for infants and children.
Packaging Materials Task Force

5th International Symposium on Food Packaging – Scientific Developments Supporting Safety and Innovation
BERLIN, GERMANY, 14-16 NOVEMBER, 2012

The International Symposium on Food Packaging is held every four years and is internationally recognised as a scientific forum to discuss the science that ensures the safety and quality of food packaging. The upcoming 5th symposium will emphasise innovations and participants will have the opportunity to review and debate recent advances in the science which supports the safety and quality of food packaging. The dissemination of results of on-going research will be combined with examining the implications for the future of controlling packaging for foodstuffs.

This multi-disciplinary meeting will be of interest to those active in issues associated with the safety and quality of food packaging, particularly food scientists, chemists, mathematicians, physicists, packaging specialists, control authorities, regulators and risk assessors.

The first announcement is available here
READ MORE

09 | NEW TASK FORCE ACTIVITIES

Task forces are the working groups that initiate, undertake, develop and manage all projects. They are grouped into ILSI Europe’s four clusters. Task forces reach their goals and address their issues through activities such as expert groups, workshops, symposia, literature reviews and publications. They are composed of interested company representatives and non-industry experts as required.

Recently started or upcoming task force activities include:

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<td>Metabolic syndrome and diabetes</td>
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10 | UPCOMING TASK FORCE MEETINGS

JUNE 2011

- 10 Nutrient Requirements Task Force
- 10 Addition of Nutrients to Food Task Force
- 29 Probiotics Task Force

OCTOBER 2011

- 05 Risk Analysis in Food Microbiology Task Force
- 07 Functional Foods Task Force

If your company is not yet a member of ILSI Europe or if, as a Member, you are considering joining a new task force, you may attend one of the above-mentioned meetings as an observer. If you are interested, please contact info@ilsieurope.be

For more information on ILSI Europe task forces, click here
11 | WHAT PEOPLE SAY ABOUT ILSI EUROPE

"ILSI Europe has gained considerable reputation as a neutral forum and I am delighted to be the new ILSI Europe President. ILSI Europe’s dedicated task forces and expert groups have brought about a great series of highly regarded peer-reviewed scientific publications. I am confident that we will continue to take a proactive science-based role in addressing issues of nutrition and food safety to improve public health."

Prof. Dr. Gerhard Eisenbrand, University of Kaiserslautern

"The great strength of ILSI is that it represents a unique scientific environment in which scientists from all sectors can address today’s food safety and nutrition-related issues together. Having worked with ILSI Europe at various times in my career as an academic, regulator and industry scientist, I appreciate the importance for ILSI Europe to insist on high scientific standards and to focus on long-term needs."

Prof. Dr. John O’Brien, Nestlé

12 | ILSI EUROPE HORIZONTAL INITIATIVES

Identification and validation of markers

The lack of consensus markers in nutrition research makes the comparison of results from different studies difficult and jeopardises the future development of evidence-based nutrition. Recently ILSI Europe started a 3-year horizontal initiative to identify consensus criteria for validation of markers, based on scientific literature and use in practice, and to identify consensus markers in nutrition research.

A workshop is planned for mid-2012 to draw up these consensus criteria for validation of markers. Several publications are also expected in 2012. Task forces involved in the initiative include: Addition of Nutrients to Food, Appetite Regulation, Dietary Carbohydrates, Metabolic Imprinting, Nutrient Requirements, Nutrition and Immunity, and Probiotics.

25 Years of ILSI Europe

Highlighting the key achievements of ILSI Europe over the last quarter century.

Initiatives on markers

The coordination of initiatives on markers by ILSI Europe started with the EU-concerted action FUFOSE from 1995-97, which established definitions and basic concepts for scientific substantiation of health benefits of foods. Building upon FUFOSE’s achievements, a second EU-project, PASSCLAIM (2001-05), aimed at developing proper ways to design effective study and at identifying valid markers to explore the effects of diet on health. More recently, the EU-funded project BRAFO (2007-10) developed a framework allowing quantitative comparison of human health risks and benefits of foods and food compounds based on a common scale of measurement, where markers were used as one example of measurements. Moreover, the EURRECA Network of Excellence (2007-11) has created best practice guidelines on markers of micronutrient status. In parallel with these projects and throughout the years, many ILSI Europe task forces have also commissioned work on markers in different areas. Currently, ILSI Europe has launched a new horizontal activity on the identification and validation on markers.
13 | ABOUT ILSI EUROPE

The International Life Sciences Institute Europe (ILSI Europe) is part of a non-profit, worldwide foundation established in 1978 to advance the understanding of scientific issues relating to nutrition, food safety, toxicology, risk assessment, and the environment. ILSI Europe brings together scientists from industry, academia and government to jointly provide the best available fact-based, objective science on key public health issues.

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