



María Neira.

### Millennium Development Goals

The Plenary Lecture, given by Dr María Neira, was focused on the new sustainable development goals, such as the Millennium Development Goals.

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Luis Recalde.

### New association of Nutrition Schools and Faculties of Ibero-America

The association will help promote knowledge, facilitating exchanges between professors and students and harmonizing teaching programs.

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### Discussing the differences in the gut microbiota

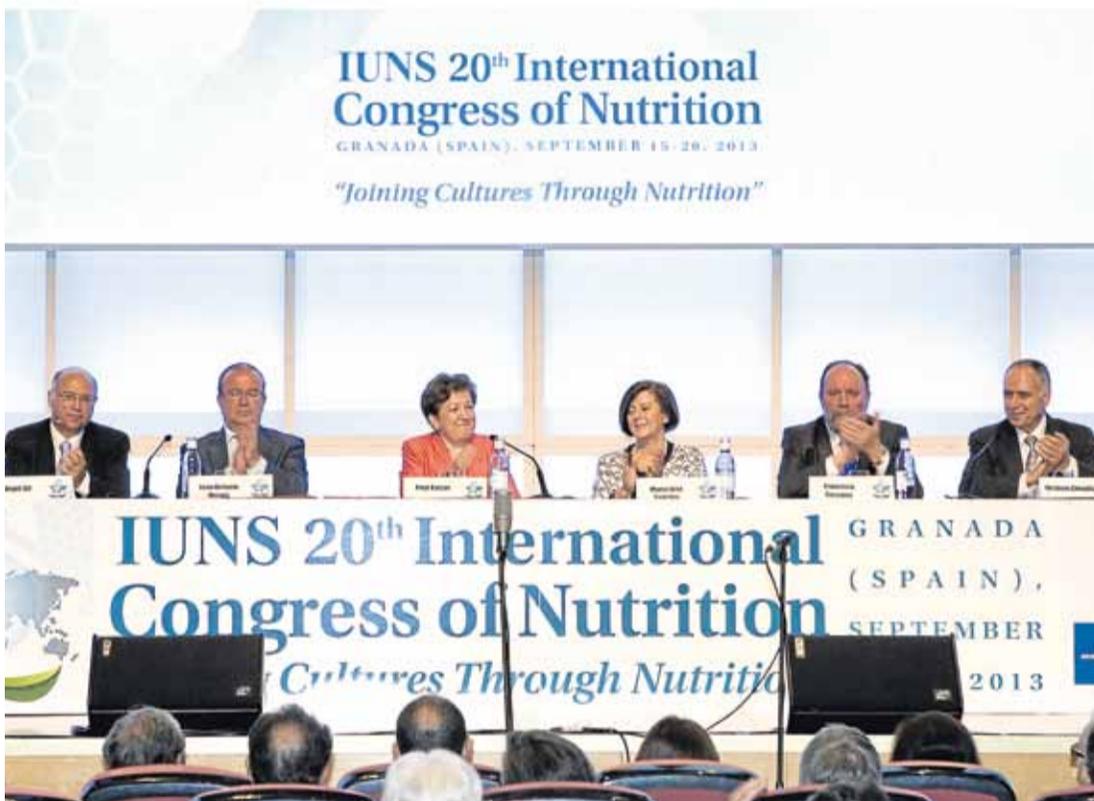
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### Angel Gil receives the Honorary Award from the UIB

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## Preventing obesity is the most important public health challenge

The opening session of the Congress highlighted the need to reverse the trend towards obesity



Pilar Farjas.



María José Sánchez.



Ibrahim Elmadfa.

### Fructose and its role in the development of metabolic diseases

There are several theories trying to explain the potential reasons of the increase of the prevalence of obesity and diabetes in the last century. One of them sets that sugars, or more specifically its fructose component, may play a role in the development of metabolic diseases and will be reviewed tomorrow by Luc Tappy, professor at the University of Lausanne (Switzerland) at the parallel symposium organized by the Eufic, European Food Information Council. **Page 8**

### How to prevent acute malnutrition?

The aim of the Satellite Symposium organized by The Food Aid Quality Review (FAQR) was to bring together members of the research, academic and policy communities working on interventions for the treatment and prevention of acute malnutrition. The meeting marks the public launch of Research Engagement on Food Innovation for Nutritional Effectiveness (REFINE). **Page 7**



Irwin H. Rosenberg.

The IUNS 20th International Congress of Nutrition was officially opened yesterday. The opening ceremony was chaired by Pilar Farjas, Secretary General for Health at the Spanish Ministry of Health, Social Services and Equality and President of the Spanish Agency for Food Safety and Nutrition (AESAN). The ceremony was also attended by María José Sánchez, Andalusia's Social Policies, Health and Equality Minister, Juan Antonio Mérida, Deputy-Mayor of Granada; Francisco González Lodeiro, Dean of the University of Granada; and Professors Ibrahim Elmadfa and Ángel Gil, Presidents of the IUNS and the IUNS-ICN congress, respectively. Pilar Farjas warned about the se-

riousness of non-communicable diseases, as "the new frontier in the fight to improve world health. Preventing obesity and reversing its upward trend is one of the most important public health challenges we face today". Juan Antonio Mérida stressed the value of the NAOS (Strategy for Nutrition, Physical Activity and Prevention of Obesity) for the prevention of obesity in children and adolescents. He also praised the initiatives introduced by the Department of Health. Ibrahim Elmadfa emphasized the importance of the central theme of the Congress which he said was perfectly reflected in the quality of the program for this week. He also highlighted the response.

"This Congress has broken the record for participants and communications".

### Several key elements to improve

For her part, María José Sánchez reviewed some key factors for improving public health, including universal public health care and education, firm support for breastfeeding and the promotion of balanced nutrition, physical activity and applied research to improve the quality of life. "Scientific associations on nutrition, food and dietetics also play a key role, as do nutrition faculties and schools both in terms of their influence on society and as bodies that support the IUNS", she said.

## ✧ Satellite Symposium

# Reaffirming the links between health and bread

The IUB Satellite Symposium, held yesterday, focused on bread and health. Ibrahim Elmadfa, from the University of Vienna and IUNS President, talked about the benefits of whole grain cereals and bread and Lluís Serra-Majem, from the University of Las Palmas, focused on bread and excess weight. As Elmadfa explained, cereals in general and bread have been a staple food for centuries. Their rich content in nutrients and their good storability make them a valuable source of energy. Recently, however, they have become less popular in the wealthy industrialised countries and are considered as contributors to weight gain by some consumers. There is however well-established scientific evidence of the beneficial health effects of whole grain cereals. “With their high complex carbohydrates content, whole grain cereals meet the requirements of nutritio-

nists and offer a counterbalance to foods high in protein and fat. They are rich in micronutrients (potassium, magnesium, zinc, manganese, fluoride, vitamins E and of the B group) concentrated in the germ and bran”, he said.

Whole grains are also among the best sources of dietary fibre whose intake is too low in most industrialised societies. In addition to large amounts of dietary fibre they also contain a wide variety, including beta-glucans and arabinoxylans. Moreover, of the different kinds of fibre, cereal fibre is the strongest contributor to the reduction of non-communicable diseases. “This is even more remarkable as in studies with isolated fibre, positive effects on blood lipids or glycaemia were most frequently observed with soluble fibre types and much less so with the insoluble types predominantly contained in cereals. The exact underlying mechanisms

remain unclear. Possible reasons include effects on gut hormones, the intestinal immune system, and gut microflora with the production of short chain fatty acids during fermentation in the gut and during sourdough fermentation”, Elmadfa added.

### Popular misconceptions

As Serra-Majem emphasized, there is a widely-held view amongst the general public that bread is fattening. “We therefore decided to review the articles published over the past 30 years which related dietary patterns that included refined and whole-grain bread to ponderal status and abdominal fat distribution. We selected 38 epidemiological studies that met the inclusion criteria”.

There were 22 cross-sectional, 11 prospective cohort and 5 intervention studies. The results indicated that dietary patterns that included wholemeal bread did not influence weight gain and may even benefit ponderal status. With respect to dietary patterns that included refined bread, the majority of cross-sectional studies did not indicate any effects but most well-designed cohort studies demonstrated a possible relationship with the distribution of abdominal fat. The results from experimental designs were not conclusive. ●

## ✧ Special Lecture

### Discussing the differences in the gut microbiota

One of today's special lectures will be focused on the impact of the gut microbiota on metabolic disorders associated with obesity. As Professor Delzenne will explain, experimental data in animals and observational studies in patients, suggest that the composition of the gut microbiota differs in obese versus lean individuals, in diabetic versus non diabetic patients, or patients with other diseases associated with obesity or nutritional dysbalance, such as non alcoholic steatohepatitis. Several observation studies in humans have revealed interesting bacterial targets, such as *Bifidobacterium spp.*, the abundance of which is inversely correlated to obesity and diabetes; *Faecalibacterium prausnitzii*, that may be involved in the control of diabetes-related inflammation, and *Akkermansia muciniphila*, involved in mucus layer regu-

lation, which has been shown to be inversely correlated with obesity. In an intervention study with fructan prebiotics versus placebo in obese women, Professor Delzenne's team have recently confirmed that, even if the increase in Bifidobacteria remains the major and common signature of the prebiotic approach, a complex modulation of gut microbial ecology – that can be studied through both bacterial genomic analysis and host fluids metabolomics – occurs upon prebiotic treatment in obese individuals. Some bacterial changes are clearly related to a decrease in inflammation, others to the improvement of fat mass and of metabolic alterations. ●



**Nathalie M. Delzenne**, Université Catholique de Louvain, Louvain. Drug Research Institute, Metabolism and Nutrition Research Group, Brussels.

## CALL FOR APPLICATIONS

# 2<sup>ND</sup> PREMIO DANIEL CARASSO\* FOR OUTSTANDING RESEARCH IN SUSTAINABLE FOOD AND DIETS FOR LONG-TERM HEALTH

\*AN INITIATIVE OF THE DANIEL AND NINA CARASSO FOUNDATION

The Premio Daniel Carasso is an international award named after the founder of Danone in France and Dannon Co. in the US. It recognizes and encourages outstanding research in the field of sustainable food and diets for long-term health. The first Premio Daniel Carasso was awarded in 2012 to Jessica Fanzo, an American scientist known for her expertise in nutrition and the promotion of biodiversity. The Premio Daniel Carasso also paid tribute to her unwavering commitment to addressing world hunger through research in sustainable development. The award winner receives an amount of €100,000.

Application conditions for the 2<sup>nd</sup> Premio Daniel Carasso will be available as of November 4<sup>th</sup>, 2013. For more information: [www.premiodanielcarasso.org](http://www.premiodanielcarasso.org).

>> Interview **PROFESSOR ANGEL GIL** *President of the IUNS 20th International Congress of Nutrition*

## “This Congress is the Olympic Games of Nutrition”

In the words of its President, the IUNS 20th International Congress of Nutrition, which started in Granada yesterday and continues until next Friday, is the most important congress on nutrition in the world

Professor Angel Gil described the event as follows: “It is the Olympic Games of nutrition and food and is organized by the International Union of Nutrition Sciences (IUNS), which has associated members from over 130 countries and hosted by the Spanish Society of Nutrition (SEN)”.

“The Congress tries to cover all the latest advances in food and nutrition, which have been made or are currently being made in very diverse fields ranging from basic nutrition to applied nutrition, clinical nutrition, nutrition through the life cycle, etc... And the nutritional intervention policies at a world level and also at the level of individual countries, in order to try to combat the most important plagues besetting mankind today: child malnutrition, which is unfortunately still a serious problem in many countries, but also and I would say this is perhaps even more important, to try to prevent non-transmissible chronic diseases, which are the leading cause of mortality in percentage terms throughout the world, in both developed and undeveloped countries: obesity, diabetes, cancer and a series of chronic diseases of an inflammatory nature such as COPD” the Professor added.

As Professor Gil explains, the Congress is structured around eight main



Angel Gil.

tracks which are maintained permanently. “It is as if we were holding eight simultaneous congresses because each one has its own activities everyday”. The tracks focus on very diverse fields such as basic research and experimental research, nutrition during the life course, the epidemiology of nutrition, the role of nutrition in dealing with disease, nutritional status assessment, functional foods, food and diet in different parts of the planet and nutritional education and nutritional intervention policies. The President of the Congress wished to emphasize the question of physical activity as part of the life cycle hand-in-hand with nutrition. “Today” he said “we are becoming increasingly aware that physical activity is a fundamental part of health. And that the interaction with the right nutrition and the right environment is probably the most effective way of preventing disease and increasing the quality of life”. He also wished to emphasize that nutrition can help to prevent and at times cure diseases. “Nowadays clinical nutrition and hospital nu-

trition are fundamental in reducing the time patients spend in hospital. This is such that perhaps even more than the use of medicines, the use of the right nutrition is of fundamental importance for treating disease. Hippocrates once famously said ‘Let food be thy medicine and medicine be thy food’. This means that if we use foods correctly, they can be very powerful instruments for alleviating illness. To this end, we have scheduled a large number of lectures, many of which will deal with questions such as obesity and cardiovascular diseases, as well as cancer and inflammatory bowel diseases”.

### Functional foods

Another question which is going to be explored in depth and which Professor Gil believes is of great interest to the public is that of functional foods and the use of probiotics. “Recent advances show that the microbiota in all our body, but above all in the intestine, plays a very important role in keeping us healthy. There is a series of genetic tools which enable us to see increasingly clearly what the components of the microbiota are, and the selection of certain micro-organisms, even for making fermented products, may enable us to use this food better and perhaps also allow them to be used in the mitigation of illness, disease prevention and consequently to improve our health”.

### Scientific events

During the course of the six-day IUNS 20th ICN, more than **4,000 participants** from over **120 countries** will be actively engaging in the congress, and over **700 internationally renowned nutritional scientists, researchers and clinicians** will share the latest in the field of nutrition through **6 plenary lectures, 32 special lectures, 4 debates, 90 parallel symposia, 38 sponsored symposia and 16 satellite symposia**. “There will be a great deal of interaction between all those present. I hope it will be a success for everyone”, Gil concluded.

## UNILEVER SYMPOSIUM BEHAVIOUR CHANGE FOR BETTER HEALTH

Nutrition science has delivered recommendations for healthy intakes of nutrients.

The challenge addressed in this symposium is how to apply this knowledge in nutrition profiles of products, supported by communication that is relevant and motivating for people in different life stages, health conditions and economic situations.

Falla Auditorium, September 17<sup>th</sup>, 17.00 – 19.00

### Programme

<b>Changing behaviours throughout life</b>	<i>Chair: Dr Hans Zevenbergen (Unilever)</i>
<b>School meals for a brighter future</b> The importance of school meals for children’s nutrition and health	<i>Dr Ans Eilander (Unilever)</i>
Developing tasty, appealing and nutritious school meals – the chef’s perspective	<i>Janice Lazaga (Unilever Food Solutions, Philippines)</i>
Impact of improved school meals on nutrient intake – a case study from the Philippines	<i>Dr Imelda Agdeppa (FNRI, Philippines)</i>
<b>Partnering to speed up salt reduction</b> Global IUNS and Unilever partnership on salt reduction	<i>Professor Yang Yuexin (President Chinese Nutrition Society, National Institute of Nutrition and Food Safety, China)</i>
Global consumer perception from a multi-country study: “Salt reduction is fine but my intake is healthy”	<i>Dr Gerda Feunekes (Unilever)</i>

☆ Plenary Lecture

# The New Sustainable Development Goals and Nutrition: Health on Focus and Child Stunting

The aim now is to make the new goals relevant for countries at all stages of development

The Plenary Lecture, given by Dr María Neira, focused on new sustainable development goals, such as the Millennium Development Goals. These new goals are likely to influence global policy directions and focus attention on the targets that are set and other related indicators. “While the Millennium Development Goals were specifically aimed at developing countries, the aspiration is now to make the new sustainable development goals relevant for countries at all stages of development, so widening the population expected to be covered by these goals”, she explained. Health is central to the three dimensions of sustainable development. “Health is a beneficiary of and a contributor to development. More importantly, it is also a key indicator of what people-centred, rights-based, inclusive, and equitable development seeks to achieve”, remarked Neira. In



María Neira.

her opinion, development policies can either enhance or undermine the determinants of health. “It is therefore essential to consider the health implications of policies in all sectors, for example food, energy, water and transport among others”.

## Policy coherence and shared solutions

The achievement of health goals requires policy coherence and shared solutions across multiple sectors. Sustainable food and agriculture policies aim to improve the efficiency of agricultural production systems while, at the same time, preserving the diverse ecosystem services upon which the world’s food supply depends (for example agricultural lands, soil nutrients, forests and oceans, climate regulation, and biodiversity, etc.) These twin objectives are central to the health goals of

ending hunger/undernutrition and achieving long-term food and nutrition security for all.

“Moreover, multiple positive health improvements can be achieved by focusing/monitoring indicators on certain health determinants, such as overweight, obesity and a balanced diet. For example, the demand for balanced diets and access to healthy foods by households (as measured by household dietary diversity), and for better nutrition (overweight, stunting indicators) can provide signals and influence food systems (markets, trade) to become more sustainable, as excess saturated fat and animal protein consumption by some populations needs to be balanced with better access to animal protein by the under-nourished, and greater access to fruits, vegetables and nuts by all”, said Neira. Nutrition indicators should reflect both undernutrition and overweight

and progress towards sustainable patterns of food and nutrition security (i.e., equitable access for all people to high quality food rich in micronutrients and containing the minimum amount of additives and chemical residues, such as pesticides, fertilizers, hormones and antibiotics) that ensure optimum production without compromising human health.

“There are strong reasons to believe that stunting would be a robust health indicator for assessing achievement of the post-2015 sustainable development goals. Childhood stunting is not only an indicator of child health but also of the overall social and economic development of populations. Given the contribution of health to sustainable development and the critical importance of the multi-sector determinants of health, a “health-in-all-policies” approach should be adopted. This approach would ensure that health-related indicators are also included in other sector goals”, she emphasized.

From her point of view, the post-2015 Millennium Development Goals framework offers “an opportunity to generate a new global health architecture to better respond to countries’ needs and priorities and to play a fully effective role in achieving health for all”. ●

☆ In the framework of the activities of the 20th IUNS International Congress of Nutrition

## The “Driving your life” campaign will bring the population close to the keys to an active and healthy lifestyle

During the Congress, from the 16th to the 20th of September, a total of five marquees will be providing information on active and healthy lifestyles in the most important public squares in Granada.

With the objective of giving the population advice on an active and healthy lifestyle, the 20th IUNS International Congress of Nutrition, together with the Iberoamerican Nutrition Foundation (FINUT), the University of Granada and the collaboration of The Coca-Cola Company and Tanita, sets in motion the “Driving your life” campaign”. During the Congress, from the 16th to the 20th of September, a total of five marquees will be providing information on active and healthy lifestyles in various points in Granada (Plaza del Humilladero, Plaza Nueva, Plaza del Carmen, Palacio de Congresos and Puerta Real).

In these five points of the city of Granada surveys will be taken on the nutritional status of the attendees, blood pressure readings and

revisions levels of physical activity will be carried out; advice on active and healthy lifestyles will be given; and hydration points will be



provided for all those attending. This action is part of a combination of activities destined to transmit the basic principles of nutrition to a public that is not exclusively scientific. “With the installation of these marquees we want to raise awareness amongst the population to encourage healthy living habits”, explains Professor Ángel Gil, Congress President IUNS-ICN.

## Encouraging healthy living habits

The five marquees will be staffed by health professionals who will deal with the public and will be those responsible, via the Iberoamerican Nutrition Foundation (FINUT), for the various tests and/or surveys carried out. The circuit for those attending will be divided into five different areas:

1. A series of anthropometric measurements will be carried out and interpreted by a dietician-nutritionist.
2. They will then go to the area to have their blood pressure taken and oxygen saturation measu-

red, with the results being interpreted by doctors from the University of Granada.

3. Area staffed by holders of degrees in Physical Sciences and Sports where manual force and aerobic capacity will be measured, accompanied by advice on how to do physical activities that are rewarding.
4. The dietician-nutritionist will explain the pyramids for a healthier lifestyle, including the new pyramid designed by FINUT.
5. A hydration point will be available to all those attending where they will be provided with a drink.

According to Professor Gil, “this health pyramid designed by FINUT is a new model of great scientific importance that takes in three binomials: diet and nutrition, for optimum growth and development; physical activity and rest, for corporal, physical and mental balance; and education and hygiene, all from a social perspective in a sustainable environment, to achieve a good quality of life”. ●

**TATE & LYLE**

# Developing innovative ingredients to meet nutrition, health and wellness needs



## Visit Tate & Lyle at Booth #51

Tate & Lyle, a global leader in health and wellness innovation, is committed to progressing scientific knowledge on the links between diet and health and delivering high quality, innovative ingredients to the food and beverage industry. Examples of ingredients and evolving science on important health benefits include:

**PROMITOR® Soluble Gluco Fibre\*** and **STA-LITE® Polydextrose**—dietary fibres that can help meet fibre recommendations and provide potential benefits for digestive health, calcium absorption and bone health, and reduced glycaemic response.

**SODA-LO™ Salt Microspheres**—a new salt-reduction ingredient that reduces the sodium content of foods by 25%-50% without sacrificing taste or quality.

Non-nutritive sweeteners like **PUREFRUIT™ Monk Fruit Extract**, **TASTEVA™ Stevia Sweetener**, and **SPLENDA® Sucralose** which can help reduce calorie and sugar levels in foods and beverages.

**Sponsored Symposium:**  
**Wednesday**  
**18 September 13**  
**Lorca Auditorium**  
**17.00-19.00h**

### *Nutrition and Health Benefits of Emerging Fibres*

This symposium will present a research overview on the health benefits of soluble gluco fibre, polydextrose, and soluble fibre dextrin on gut health, satiety, and potential impact on bone health via increased calcium absorption. Speakers include:

*Joanne Slavin, PhD, RD*  
 University of Minnesota

*Connie Weaver, PhD*  
 Purdue University

*James Hollis, PhD*  
 Iowa State University

To learn more about our science and products visit  
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► **Luis Recalde** *Previous Dean of the Faculty of Pharmacy of the University of Granada*



Luis Recalde.

## The Nutrition Schools and Faculties of Ibero-America form an association

The new association will help promote knowledge, facilitating exchanges between professors and students and harmonizing teaching programs

The Congress has served as a backdrop for the presentation of the Ibero-American Association of Nutrition Schools and Faculties (in Spanish Asociación Iberoamericana de Facultades y Escuelas de Nutrición or AIFEN). According to Luis Recalde, previous Dean of the Faculty of Pharmacy of the University of Granada, and chair of the satellite symposium held last Saturday in which the initiative was announced, “researchers in the different fields of human nutrition and dietetics have a large number of associations and specific congresses where they can present their work and exchange information with colleagues who are working on similar lines of research”.

However, in spite of the number, the age and tradition of the nutrition faculties in the Ibero-American world, until now they had not come together to form an association “that

enables us to get to know our colleagues in the other faculties, facilitates exchange schemes for both professors and students and allows us to work together to harmonize our teaching programs both at undergraduate and postgraduate levels. This will make it easier to carry out international projects and to find funding for them amongst other advantages”.

In his opinion, the fact that Spanish will be used as the common language will make all these objectives easier to achieve. AIFEN is being created under the auspices of the Conference of Deans of the Spanish Faculties in which students can study for degrees in Human Nutrition and Dietetics, and all 20 Faculties are joining the new association. “The project has also been received with great interest by faculties in Colombia (via their association ACOFANUD), Mexico and Chile”, added Recalde. ●

El Instituto de Estudios Documentales del Azúcar y la Remolacha-IEDAR (Spanish Sugar Institute) has brought together various experts in order to analyze in depth the different factors of scientific interest of the role of sugar on health and nutrition.

We look forward to your attendance at the Scientific Symposium Update on Sugars and Health, which will be held on **September 20th, 2013 at 4 pm. Machado meeting room.**



### AGENDA

#### Track 2: Nutrition and Management of Diseases

##### Satellite symposium: “Scientific Update on Sugars and Health”

Sponsor: Instituto de Estudios Documentales del Azúcar y la Remolacha- IEDAR (Spanish Sugar Institute)

- 4.00pm. Welcome and Opening of the Session.** Prof. Dr Angel Gil. President of the Congress. Department of Biochemistry and Molecular Biology II, Faculty of Pharmacy, University of Granada. Institute of Nutrition and Food Technology “José Mataix”, Biomedical Research Centre, University of Granada, Spain and Javier Fernández del Moral, Chairman of IEDAR
- 4.15pm. Basic Concepts on Sugars in Nutrition and Health**  
Dir. Janine Verheesen. Director, Knowledge Centre Sugar and Nutrition. The Netherlands
- 4.45pm. Sugars and Diabetes**  
Prof. Dr Alejandro Sanz, Endocrinology and Nutrition Service, Nutrition and Dietetics Department, University Hospital Miguel Servet of Zaragoza, Spain
- 5.15pm. Update on Sugars and Obesity**  
Prof. Dr Carmen Gómez-Candela, Nutrition Department, University Hospital La Paz, Institute for Health Research (IdiPAZ), Autonomous University of Madrid, Spain
- 5:45pm. Round Table and Debate**
- 6.00pm. Presentation of the new Supplement of “Nutrición Hospitalaria” and the “White Paper” on Sugars**  
Dr Ana Sastre Gallego. Doctor in Medicine. Academic Member of the Spanish Royal Academy.  
IEDAR Scientific Committee: Prof. Dr Carmen Gómez-Candela and Dr Samara Palma Milla, Nutrition Department. University Hospital La Paz, Institute for Health Research (IdiPAZ). Autonomous University of Madrid, Spain.
- 6:30pm. Closing Remarks.** Mrs. Isabel Vasserot, Director of IEDAR

[www.iedar.es](http://www.iedar.es)

For further information: Weber Shandwick  
+34 91 745 86 00 María González Nieto ([mgonzalez@webershandwick.com](mailto:mgonzalez@webershandwick.com)) / Alexandra Velázquez ([avelazquez@webershandwick.com](mailto:avelazquez@webershandwick.com))

## ✧ Food Aid Quality Review Symposium

# How to prevent acute malnutrition?

REFINE, a new information-sharing mechanism, launched

The Food Aid Quality Review (FAQR) 'What works in Prevention and Treatment of Moderate Acute Malnutrition: A systematic review of Meta-analyses' was dedicated in honour of Dr. Nevin Scrimshaw and organized by Tufts University, FAQR, the World Food Programme and the Nevin Scrimshaw International Nutrition Foundation with the support of USAID's Office of Food for Peace.

Irwin H Rosenberg, Senior Scientist and Interim Director of the Neuroscience and Aging Laboratory at Tufts University, remembers Dr. Scrimshaw "as an innovator in the realm of international nutrition. He leaves a lasting legacy including the founding of MIT's Department of Nutrition and Food Science, the founding of the Nevin Scrimshaw International Nutrition Foundation along with many other distinctions and honors".

The aim of this Satellite Symposium was to bring together members of the research, academic and policy communities working on interventions for the treatment and prevention of acute malnutrition (child wasting). The Symposium marks the public launch of Research Engagement on Food Innovation for Nutritional Effectiveness (REFINE). REFINE is a new information-sharing mechanism focused on enhancing the empirical knowledge base regarding food interventions that support enhanced nutrition.

"Tufts University (through its work on the Food Aid Quality Review), authors of the 2013 Lancet Series on Nutrition, and authors of a 2013 Cochrane Review each conducted a systematic



Irwin H Rosenberg.

analysis relating to the effectiveness of interventions for moderate malnutrition. These were each completed as separate efforts with different overarching purposes and approaches. We have discussed the current findings of three recent systematic reviews on

food aid for treatment or prevention of moderate acute malnutrition. We also have compared and contrasted the systematic reviews in order to identify policy and program implications and areas in which future research is needed", explained Rosenberg.

## ✧ Union Internationale de la Boulangerie

# Angel Gil receives the Honorary Award from the UIB

The UIB (Union Internationale de la Boulangerie et de la Boulangerie-Pâtisserie) is an association representing over 300,000 bakeries, which together provide work for over 4 million people in 45 countries in the five continents of the world. Each year the UIB presents the "World Baker of the Year" award to an exceptional baker at worldwide level. The prize has been awarded for the last three years (2010, 2011 and 2012) and the prize for this year was awarded yesterday in Granada. The UIB also presents an Honorary Award to an individual or institution that has done outstanding work in favour of bakers all over the world. This prize is not necessarily awarded every year and is only

given when in the opinion of the Presidium of the UIB someone has genuinely deserved it. Yesterday, for only the second time in its history, the UIB presented its Honorary Award to Ángel Gil. The only previous winner was the former EU Commissioner, John Dalli.

The UIB has existed in its current form since 1931. It is formed by the National Associations of Bakers that meet the standards set out in Article 1 of its Articles of Association and which have been admitted as members. Today, 40 countries (28 full members and 12 Observers) from the five continents have joined the UIB. It represents over 300,000 bakeries, employing over 4 million people.



# HEALTHY CHOICES MADE EASY!



Choices International Foundation invites you to:

## FRONT-OF-PACK LABELLING: PROMISES AND ACTIONS

19 September, 17:00 – 19:00, Albeniz Room

[www.choicesprogramme.org](http://www.choicesprogramme.org)

## ✦ Parallel Symposium

# Does fructose play a role in the development of metabolic diseases?

New insights of the potential reasons of the increase of the prevalence of obesity and diabetes in the last 100 years

There are several theories trying to explain the potential reasons of the increase of the prevalence of obesity and diabetes in the last century. One of them sets that sugars, or more specifically its fructose component, may play a role in the development of metabolic diseases and will be reviewed tomorrow by Luc Tappy, professor at the University of Lausanne (Switzerland) at the parallel symposium organized by the Eufic, European Food Information Council.

Some specific features of fructose metabolism may potentially account for adverse metabolic effects. Unless glucose, fructose is extensively metabolized by the gut and the liver, where it is converted into glucose, glycogen, and lactate; Tappy explains. It can also be converted into fatty acids, although this is a minor pathway, which are then either stored as intrahepatic fat or released as VLDL-triglycerides. "This may secondarily favour ectopic lipid deposition in skeletal muscle and

cause insulin resistance through lipotoxic mechanisms. Ingestion of large amount of fructose also increases the uric acid production, which could increase the risk of gout, and also contribute to metabolic deregulation", remarks the expert.

### Role of fructose still debated

In animals, adding fructose -either as sucrose or as pure fructose- to rat's diet makes them become obese and diabetic, and increases their liver and muscle fat content. Tappy emphasizes that "similar observations are made when rats are fed a high-fat diet, however, the relative role of fructose vs excess energy intake is still debated". In humans, fructose increases plasma triglyceride concentrations and impairs hepatic insulin sensitivity, but these effects are observed with large daily fructose intake, exceeding that of the average population. Hypercaloric fructose intake also increases plasma uric acid concentrations and intrahepatic fat

content, and there is concern that it may lead to the development of muscle insulin resistance and diabetes in the long term. The effects of isocaloric fructose intake on these parameters remains to be assessed. Another concern is that fructose may favour the development of obesity by increasing food intake. "The physiological mechanisms relating

Some specific features of fructose metabolism may potentially account for adverse metabolic effects

fructose intake to inadequate satiety responses are still controversial and further studies are required to assess whether fructose specifically impairs food intake control, or is just consumed in excess as a constituent of energy-dense palatable foods", professor Tappy concludes. ●



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Monday, September 16th

Connecting people through nutrition



**Airin Rosita, Indonesia**

"I'll like to meet many experts in nutrition as well as to learn a lot of nutrition science"



**Karen Cordovil, Brazil**

"I present here posters of my research and I'm very interested in nutrigenomics"



**Ana Carla Cepeda, Mexico**

"This is an opportunity to meet our friends; they're working in different places of the world"

**Martin Ndegwa Mwandu, Kenia**

"My main objective is to expand my knowledge in my area of research, listen to the ideas and broaden my scientific horizon"

twitter

#20icn



Ellen Piwoz  
@EllenPiwoz

Seguir

By understanding the cost of national plans, we can align skills and resources to help drive nutrition progress @SUN\_Movement #ICN20



Saskia Osendarp  
@OsendarpNutrition

Seguir

Need for stronger investments in programs and research for maternal nutrition #ICN20



Bruce Cogill  
@CogillNutrition

Seguir

Understanding to feed the whole planet with 1.5 planets needed in terms of resources according to WWF at Carasso #sustdiets #ICN20 #20ICN



Roxanne Portolesi  
@DrRoxP

Seguir

Never seen soo many nutritionists in one room! Truly is the 'Olympics' of nutrition science #ICN20



Jessica Raneri  
@jcka\_

Seguir

E.Frison: Biodiversity key role to play in ecosystem services to provide food sustainably #sustdiets #nutrition #ag4dev #FoodSecurity #20ICN