

# BIOMARKERS AND HEALTH CLAIMS ON FOOD BIOCLAIMS MEETING WITH STAKEHOLDERS

Palma de Mallorca, Spain 12-13 February 2015





#### Who has interest to attend?

Representatives of food industry companies SMEs in the field of food-health Policy regulators Marketing specialists on food Academics



#### Organizing committee:

Andreu Palou<sup>1,2,3</sup> (Coordinator)

Susanne Klaus<sup>4</sup> & Philip Calder<sup>5</sup>

(Chairs of BIOCLAMIS-WP7)

Ben van Ommen<sup>6</sup> (Chair of BIOCLAMIS-WP5)

M. Luisa Bonet<sup>1,2,3</sup>, Nuria Granados<sup>3</sup>, Paula Oliver<sup>1,2,3</sup>, Mariona Palou<sup>7</sup>, Pere Josep Pons<sup>1</sup>, Catalina Picó<sup>1,2,3</sup> & Joan Ribot<sup>1,2,3</sup> (Coordination team)

> Andreu Palou-March<sup>7</sup> (Technical Secretariat)

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 <sup>3</sup>, Centro de Investigación Biomédica en Red (Biomedical Research
 Center Network) Fisiopatología de la Obesidad y Nutrición (CIBEROBN)
 <sup>4</sup>, German Institute of Human Nutrition (DIfE), Potsdam, Germany
 <sup>5</sup>, Institute of Human Nutrition, School of Medicine,

 University of Southampton (USoton), UK.
 <sup>6</sup>, TNO Quality of Life, Zeist, The Netherlands

 <sup>7</sup>, Alimentómica SL (EBT n° 001 of the UIB), Palma de Mallorca, Spain



#### **BIOCLAIMS** partners:

Partner 1 (Coordinator): Andreu Palou

(University of the Balearic Islands and CIBERobn, SPAIN)

Partner 2: Jaap Keijer

(Wageningen University, THE NETHERLANDS)

Partner 3: Lluís Arola

(CTNS and Universitat Rovira i Virgili, Tarragona, SPAIN)

Partner 4: Jan Kopecky

(Academy of Sciences of the Czech Republic, Prague, CZECH REPUBLIC)

Partner 5: Susanne Klaus

(German Institute of Human Nutrition, Potsdam, GERMANY)

Partner 6: Aldona Dembinska-Kiec

(Jagiellonian University, Krakow, POLAND)

Partner 7: Brigitte Winklhofer-Roob

(Karl Franzens University of Graz, AUSTRIA)

Partner 8: Paul J. Thornalley

(University of Warwick, Coventry, UK)

Partner 9: Philip C. Calder

(University of Southampton, UK)

Partner 10: Johannes Roob

(Medical University of Graz, AUSTRIA)

Partner 11: Ben van Ommen

(TNO Quality of Life, Zeist, THE NETHERLANDS)

BIOCLAIMS is the first European large collaborative R+D project (Grant agreement no. 244995) addressing the search for new biomarkers as the basis for future health claims made on food, a main bottle neck for expanding the food-health development.

The food and health relationship focuses on maintenance of optimal health, both in terms of physiology and new European legislation (Regulation EC Nr. 1924/2006). Yet, most accepted biomarkers quantify disease endpoints or damage. This has led to major problems in demonstrating health benefits and establishing health claims, and blocks competitive economic and health developments in the food sector.

BIOCLAIMS develops new biomarkers by exploiting the new concept of "health biomarkers" and associated issues through quantification of the robustness of the homeostatic mechanisms involved in maintaining optimal health, based on the assumption that the ability to maintain homeostasis in a continuously challenged environment and changing physiology is key for healthy ageing. Mechanisms involved are investigated during a series of food interventions in animal models and humans using "predisposed" conditions. Human models of presumed impaired robustness in maintaining metabolic and vascular health (caloric restriction, obesity, a proinflammatory genotype, an impaired renal function, or a combination thereof) are employed to study the responses of established and novel biomarkers to the challenging of homeostasis. Both advanced analytical methodology including nutrigenomics tools and "whole body" physiological assessments are going to be exploited to derive a series of new biomarkers.

#### **PROGRAMME**

#### **Thursday 12th February 2015**

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08.45-09.00h Welcome and Inauguration

#### Session 1: BIOCLAIMS outcomes: biomarkers and biological plausibility

The session is devoted to the presentation of selected candidate biomarkers and related food-health mechanisms as central outcomes of the BIOCLAIMS project.

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	Ben van Ommen (TNO, THE NETHERLANDS) & M. Luisa y of the Balearic Islands, SPAIN)
09.00-09.10h	BIOCLAIMS project strategy: Nutrigenomic-based biomarkers Andreu Palou (University of the Balearic Islands & CIBERobn, SPAIN)
09.10-09.30h	Challenge tests, health and biomarkers  Jaap Keijer (Wageningen University, THE NETHERLANDS)
09.30-09.50h	Biomarkers of adipose tissue health and expandability and crosstalk with muscle  Susanne Klaus (German Institute of Human Nutrition, Potsdam, GERMANY)
09.50-10.10h	Acyl carnitines and amino acids as biomarkers of health  Jan Kopecky (Academy of Sciences of the Czech  Republic, Prague, CZECH REPUBLIC)
10.10-10.30h	Lysophospholipids as biomarkers of trends to dyslipidemia Lluís Arola, Josep M. del Bas & Antoni Caimari (CTNS & Universitat Rovira i Virgili, Tarragona, SPAIN)

#### 10.30-10.50h **Coffee break**

S1-Part II Chairs: Susanne Klaus (German Institute of Human Nutrition, GERMANY) & Alejandro Cifuentes (Institute of Food Science Research, CSIC-UAM, SPAIN)

10.50-11.10h Blood cell transcriptomic-based early biomarkers of adverse programming effects on obesity and related risk factors

Catalina Picó & Andreu Palou (University of the Balearic Islands & CIBERobn, SPAIN)

11.10-11.30h The key biomarkers of inflammation

Philip C. Calder (University of Southampton, UK)

11.30-12.05h Emergence of dicarbonyl stress as a key mediator of metabolic, vascular and renal health decline and related biomarkers revealed in BIOCLAIMS. New findings on Nrf2 regulation

Paul Thornalley & Naila Rabbani (University of Warwick, Coventry, UK)

12.05-12.30h The BIOCLAIMS cohort as a resource for biomarker discovery and validation

Brigitte Winklhofer-Roob & Johannes Roob (Karl Franzens University of Graz & Medical University of Graz , AUSTRIA)

12.30-12.50h Selected nutrient-sensitive biomarkers of metabolic syndrome

Beata Kieć-Wilk, Małgorzata Malczewska-Malec & Aldona Dembińska-Kieć (Jagiellonian University, Krakow, POLAND)

12.50-13.10h Knowledge and data driven development of nutrigenomics based biomarkers of robustness

Suzan Wopereis (TNO Quality of Life, Zeist, THE NETHERLANDS)

#### 13.10-13.30h RECAPITULATION AND DISCUSSION

Chairs: Ben van Ommen (TNO, THE NETHERLANDS) & Andreu Palou (University of the Balearic Islands, SPAIN)

#### Lunch time

#### Session 2. Industry challenges & Regulatory aspects

This session considers the novelties, pending regulatory topics and controversial issues in relation to health claims and biomarkers, together with the novel industry strategies to enter into the space of food and health, and combines invited speakers from administration EC/member states, industries, and other stakeholders.

S2-Part I Chairs: Andreu Palou (University of the Balearic Islands, SPAIN) & Manuel Portero-Otín (University of Lleida, SPAIN)

15.00-15.20h Authorised Claims in the EU: Status, claims on hold, harmonisation and next steps

Basil Mathioudakis (Head of the Commission's Nutrition, Food Composition & Information Unit. European Commission, Brussels, BELGIUM)

15.20-15.40h Botanicals. Harmonization? Alternative approaches on Health Claims bypassing the NHCR?

Jean Savigny (Senior Partner, Keller and Heckman, Brussels, BELGIUM)

15.40-16.00h Health Claims & Labelling: Law and Practice or how to combine both Regulations

Montserrat Prieto (Food Law Department Director of the Spanish Federation of Food and Drink Industries (FIAB), Madrid, SPAIN)

16.00-16.20h Labelling, advertising and presentation of foods.

Compliance and infringements

Vicente Rodríguez-Fuentes (Chair of European Food Law Association (EFLA), Legal Agrifood Abogados, Sevilla, SPAIN)

16.20-16.50h **DISCUSION** 

16.50-17.10h **Coffee break** 

### Session 3. Health claims and biomarkers in EFSA and beyond. Towards Health Claims for population subgroups and individuals

This session considers health claims and biomarkers for population subgroups or individuals and other potential tendencies

S3-Part I Chairs: Lluís Arola (CTNS, SPAIN) & Mariona Palou (Alimentómica, SPAIN)

17.10-17.30h Nutrition of Mothers and Young Children in the First 1000 days: Learning's from Human Milk and what to Apply?

Bernd Stahl (Director Human Milk Research. Danone Nutricia Research, Utrecht, THE NETHERLANDS)

17.30-17.50h Health claims which might arise in relation to riboflavin use in the lowering of high blood pressure: a novel genenutrient interaction

Sean Strain (Northern Ireland Centre for Food and Health and University of Ulster, UK; Chair of the Working Group on Health Claims, EFSA-NDA Panel)

17.50-18.10h Health claims and probiotics: what and how?

Yolanda Sanz (Spanish National Research Council (CSIC) and University of Valencia, SPAIN; Vice-chair of the EFSA-NDA Panel)

18.10-18.30h Strategies and challenges in fat related health claims //
Driving Innovation and Value based on health and sustainability

Diana Roig (Nutrition and Health Manager, Unilever, SPAIN)

18.30-19.00h **DISCUSSION** 

#### Friday 13th February 2015

#### Session 4. Further interaction and beyond

This session will try a) first to introduce future trends, and an open-mind perspective on new topics combining health claims with other values and consumer needs and expectations; b) Multiple direct short interactions (Speed dating) between stakeholders will be propitiated

S4-Part I Chairs: Alfredo Martínez (University of Navarra, SPAIN) & Josep Mercader (Alimentómica, SPAIN)

09.00-09.20h Health Claims: Collaborative Industrial Research

Jose Antonio Moreno (R&D Project Manager, Grupo

ORDESA, SPAIN)

09.20-09.40h Smart-foods and targeted food supplements

Francisca Serra (R+D Director, Alimentómica SL, SPAIN)

09.40-10.00h New strategies on health claims. Replacing food

components as basis for health claims

Eric Grande (Regulatory Affairs Director-Directeur des Affaires Réglementaires, Groupe Lactalis, FRANCE)

#### 10.00-10.20h **DISCUSSION**

S4-Part II (RESEARCH AND COMMUNICATION FACILITIES): Chairs: Brigitte Winklhofer-Roob (Karl Franzens University of Graz, AUSTRIA) & Rosa María Lamuela (University of Barcelona, SPAIN)

10.20-10.40h CIBER: a new consortium for human biomedical research studies in Spain. Multicenter facilities

Luzma García-Piqueres (Technology-Transfer Manager at Centro de Investigación Biomédica en Red, Madrid, SPAIN)

#### Programme

10.40-11.00h AECOSAN as national EFSA focal point an interface for scientific cooperation

Ana Canals (Advisor of the Spanish Agency for Consumer, Food Safety and Nutrition, AECOSAN)

11.00-11.20h Beyond claims on health: "Life style, food, health, beauty

and happiness. How to combine all with science in a single message?"

Miguel Mira (Director of Communication and External Relations of the Coca Cola Company in Iberia, Madrid. SPAIN)

11.20-11.30h **Short break** 

11.30-12.30h Speed Dating & Poster Party

Chairs:

Naila Rabbani (University of Warwick, UK)

Jaap Keijer (Wageningen University, THE NETHERLANDS)

Martin Rossmeisl (ASCR, CZECH REPUBLIC)

Federico Lara (Lactalis-Puleva, SPAIN)

Rafael Urrialde (Coca Cola Company, SPAIN)

M. Luisa Bonet (University of the Balearic Islands, SPAIN)

Ana M. Rodríguez (University of the Balearic Islands, SPAIN)

<u>Posters:</u> The abstracts explaining a range of varied issues (industry presentations, scientific outputs, regulatory aspects, stimulating collaboration, etc.) will be exposed (posters) and discussed <u>in small groups</u>.

<u>Speed dating</u> (multiple single persons meeting one-on-one in around 5 minutes timed sessions so that singles can assess further whether to have subsequent appointments) will be arranged, combined with the poster exhibition.

**GOOD-BYE** 

12.30-13.00h BIOCLAIMS internal recapitulation meeting

(Restricted to BIOCLAIMS Partners)



## Supporting health claims on food



This project has received funding from the European Union's Seventh Framework Programme for research, technological development and demonstration under agreement nº 2449%



















#### Venue:

Auditorium Jaume Cladera i Cladera Escola d'Hoteleria de les Illes Balears

Building Arxiduc Lluís Salvador **University Campus** Cra. Valldemossa, km 7.5 Palma de Mallorca, Spain



#### **Technical Secretariat:**

www.alimentomica.com/Bioclaims (information) www.alimentomica.com/BioclaimsMeeting/register.php (registration)