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$^{1,2,3}$
(Coordinator)

Susanne Klaus$^4$ & Philip Calder$^5$
(Chairs of BIOCLAMIS-WP7)

Ben van Ommen$^6$
(Chair of BIOCLAMIS-WP5)

M. Luisa Bonet$^{1,2,3}$, Nuria Granados$^3$, Paula Oliver$^{1,2,3}$, Mariona Palou$^7$, Pere Josep Pons$^1$, Catalina Pico$^{1,2,3}$ & Joan Ribot$^{1,2,3}$
(Coordination team)

Andreu Palou-March$^7$
(Technical Secretariat)

1, University of the Balearic Islands (UIB), Palma de Mallorca, Spain
2, Laboratory of Molecular Biology, Nutrition and Biotechnology of the UIB
3, Centro de Investigación Biomédica en Red (Biomedical Research Center Network) Fisiopatología de la Obesidad y Nutrición (CIBEROBN)
4, German Institute of Human Nutrition (DIfE), Potsdam, Germany
5, Institute of Human Nutrition, School of Medicine, University of Southampton (USoton), UK.
6, TNO Quality of Life, Zeist, The Netherlands
7, 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 pro-inflammatory 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.
Thursday 12th February 2015

08.15-08.45h  Registration

08.45-09.00h  Welcome and Inauguration

Andreu Palou (BIOCLAIMS Project Coordinator & Pending (.....University of the Balearic Islands, SPAIN)); & Pending (Govern CAIB).

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.

S1-Part I Chairs: Ben van Ommen (TNO, THE NETHERLANDS) & M. Luisa Bonet (University 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

Lluis Arola, Josep M. del Bas & Antoni Caimari (CTNS &
Programme

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
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)
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| 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)

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| 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 gene-nutrient 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**

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**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
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)

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

Speed dating (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*)
Programme

SPECIFIC SATELLITE SESSIONS
(Restricted to CIBEROBN and MARCASALUD Partners)

Friday 13th February 2015

Chairs:
Andreu Palou (University of the Balearic Islands, SPAIN),
Paula Oliver (University of the Balearic Islands, SPAIN)
& Xavier Remesar (University of Barcelona, SPAIN)

13.00-13.30h  CIBEROBN. Program on "New strategies and biomarkers in the prevention and treatment of obesity and eating disorders".

13.30-14.00h  MARCASALUD. Spanish Network of Excellence on Nutrigenomic Biomarkers and Health Claims.

With the collaboration of:

The Coca-Cola Company
Hidratando al Mundo desde 1886

LACTALIS
Puleva
Venue:

Auditorium Jaume Cladera i Cladera
Escola d’Hotelera 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)