

Role in Nutrition and Claims

Scientific Symposium on Food Safety, Nutrition and Nanotechnology

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SCIENCE

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CONTAMINANTS (CONTAM)

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FEED ADDITIVES (FEEDAP)

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GENETICALLY MODIFIED ORGANISMS (GMO)

S. Renckens

NUTRITION (NDA)

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PLANT PROTECTION PRODUCTS (PPR)

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PLANT HEALTH (PLH)

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SCIENTIFIC COOPERATION

Post Accepted

EMERGING RISKS

Post Accepted

(PRAPeR)

H. Bruno

DATA COLLECTION EXPOSURE

S. Fabiansson

ASSESSMENT METHODOLOGY

.........

ZOONOSES (Data Collection)

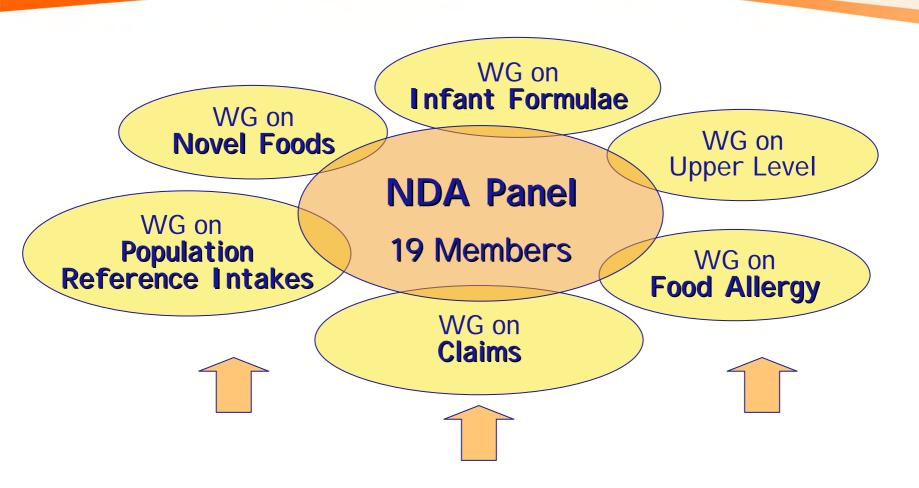
P. Makela

NDA Mandate:

Questions on human <u>n</u>utrition, <u>dietetic products</u> and food <u>allergy</u>, and other associated subjects such as novel foods.

NDA Panel & Working Groups (WG)





Supported by the EFSA Secretariat (NDA Unit)

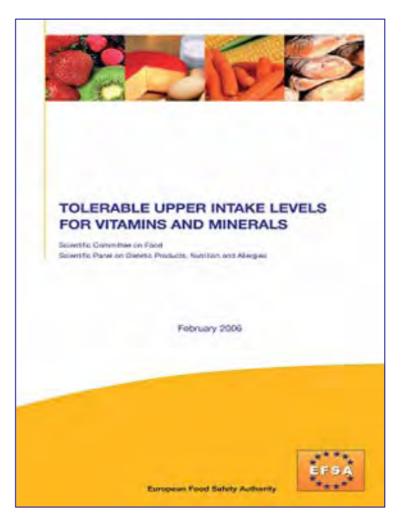
1. Tolerable Upper Intake Levels



... for Vitamins and Minerals

Tolerable upper intake level

...the maximum level of total chronic daily intake of a nutrient from all sources - judged to be unlikely to pose a risk of adverse health effects to humans.



2. Dietetic Foods



= foods for particular nutritional use

EFSA: assessment of safety & suitability of

- <u>Fructooligosaccharides</u> for particular nutritional use by infants
- Goats' milk protein as protein source
- · Whey protein hydrolysate as protein source
- <u>"Fungal oil"</u> as a safe source for arachidonic acid



3. Allergenic Foods



Labeling Directive* Annex IIIa: Labeling requirement for a list of ingredients known to trigger allergic reactions or

intolerances:

- Cereals containing gluten
- Crustaceans
- Eggs
- Fish
- Peanuts
- Soybeans
- Milk (including lactose)
- Nuts
- Celery
- Mustard
- Sesame seeds
- Sulphites (>10 mg/kg)
- Molluscs
- Lupin

...and products therof

<u>DIRECTIVE</u>: provisions for granting labeling exemptions;

Applications from industry



EFSA: risk assessment & opinion

E.g. Finning of wine & beer





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4. Population Reference Intakes



Establishment of (nutrient) based recommendations for the European population: Population Reference Intakes (PRI) for energy, macronutrients, dietary fibre, water & micronutrients

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Guidance on translation of nutrient-based recommendations into food-Dased recommendations

Oils & Sweets dance Protein Dairy Foods Group Group Vegetable Fruit Group Group Bread, Cereal, Rice & Pasta Group

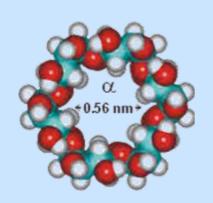
4. Novel Foods



Foods/food ingredients which have not been used for human consumption to a significant degree within the EU before 15 May 1997.

Novel Foods Regulation (EC) N° 258/97

α-Cyclodextrin



Noni juice / leaves



Lycopene: - Blakeslea trispora

- tomato oleoresin

- synthetic



Novel Foods



Application Procedure*

⇒ <u>EU Member State</u> (MS): Initial assessment (3 mon)

<u>IF Comments/objections from other MS</u> (60 d)



⇒ EFSA: safety assessment & scientific opinion



⇒ Commission & MS: Authorisation decision

6. Nutrition and Health Claims



Regulation (EC) No 1924/2006 of the European Parliament and of the Council

of 20 December 2006

on nutrition and health claims made on foods







How to give your kids more Omega 3, without them noticing.





The Need for the "Claim Regulation"



Consumer protection:

- Claims should be <u>scientifically substantiated</u> to avoid false or misleading information.

Food industry:

- Different national provisions; harmonizing rules required to facilitate <u>free movement</u> of goods within EU market.
- To promote innovation.

a) "Nutrition Claim"



= claim which states or suggests that a food has particular beneficial nutritional properties due to the content of energy, nutrient(s) or other substances

Art 8: only be permitted if they are listed in the Annex and are in conformity with this Regulation.





Art 28: Nutrition claims which are not included in the Annex shall be communicated by MS to the EC (31 Jan 08). EC/MS to decide. (EFSA consultation if appropriate).



b) "Function Claim" (Art. 13 Claims)



Calorie Reduction

...claims other than those referring to the reduction of disease risk and to children's development & health

- a) growth, development and the functions of the body
- b) <u>psychological and behavioral</u> functions
- c) claims related to slimming, bodyweight control



Art 13 (2) <u>List of claims</u> (31/01/2008) based on "generally accepted scientific evidence" Member States \Rightarrow EC \Rightarrow Consultation of EFSA \Rightarrow Final list by EC/MS (31/01/2010)

Art 13 (5) Any additions if based on <u>newly developed scientific</u> <u>evidence</u> and/or <u>proprietary data</u> (Art. 18) ⇒ Assessment by EFSA

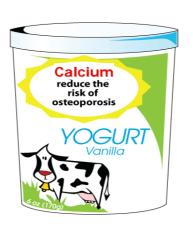
c) "Reduction of Disease Risk Claims" (Art. 14)



& claims on children's development & health

that state or imply that the consumption of a food category, a food or one of its constituents significantly reduces a risk factor in the development of a human disease





Applicant ⇒ **Member State**

- ⇒ EFSA: assessment + opinion
- ⇒ EC/MS ⇒ decision on authorization
- ⇒ community list of claims.



EFSA's Tasks on Claims



- 1) SCIENTIFIC AND TECHNICAL GUIDANCE for applications
- 2) SCIENTIFIC EVLUATION of submitted claim dossiers
- 3) "NUTRIENT PROFILES": to provide scientific advise

Scientific and Technical Guidance



...for the PREPARATION and PRESENTATION of the application for authorisation of a health claim (Art. 14 Claims)

Objectives:

To indicate a <u>common format</u> for a well-structured application and to give advice on:

- -type of data which should be included in the application
- -hierarchy of different study designs
- -aspects related to design, outcome & quality of the study
- -to indicate other key issues to substantiate a health claim

General Principles



- All pertinent scientific data in favour + not in favour to substantiate the claim by the totality of the scientific data and by weighing the evidence.
- Information on the <u>characteristics of the food:</u> manufacturing, composition, physical/chemical charactisation, stability...
- Claimed effect of the food shall be relevant for human health.
- <u>Causal relationship</u> food consumption health outcome in humans; quantity & pattern of consumption required to obtain the claimed effect can <u>reasonably be achieved</u> as part of a balanced diet.
- <u>Animals & in vitro models</u> cannot substitute for human data, but may be included only as supporting evidence, e.g. to explain the mechanism underlying the claimed effect of the food/constituent.
- Study group(s) must be representative for the target population.

Nutrient Profiles (Art. 4)



Nutrient Profiling: "science of categorizing foods according to their nutritional composition" (Rayner et al., 2004).
... for specific purposes (Tetens et al., 2007).

<u>Claim Regulation</u>: The nutrient profiles shall be based on **scientific knowledge** (human nutrition).

Application of nutrient profiles should avoid that health claims **mask** the overall nutritional status of a food product and **mislead** consumers when trying to make healthy choices.

Profiles should also allow for product **innovation** and should take into account the variability of dietary habits and traditions.



EFSA's Task on Nutrient Profiles



2) the choice and balance of nutrients

1) Application across the board and/or for categories of food

3) Reference quantity/basis (per energy, weight or volume of the foods; per portions

5) feasibility & testing of a proposed system

4) approach to the calculation of profiles

EFSA NDA in the Spot Light



....now and in the next future



Claims: EFSA Opinions on claim dossiers such as on antioxidants, prebiotics/probiotics, food supplements & botanicals and others; 'Nanoclaims' ?

Novel Foods:

- -new production process (e.g. synthetic lycopene), Nano(Novel)food?
- -world trade will introduce more 'new' foods such as tropical fruits, nuts, oils (e.g. Allanblackia oil), teas (e.g. Noni tea), botanicals -Revision of the Novel Food Regul. (Guidance Document by EFSA)

<u>Polulation Reference Intake:</u> Opinions consider endpoints of lifestyle related chronic disease such as obesity, diabetes, cardiovascular diseases, metabolic sysndrom, (colon) cancers, osteoporosis, other dieseases.

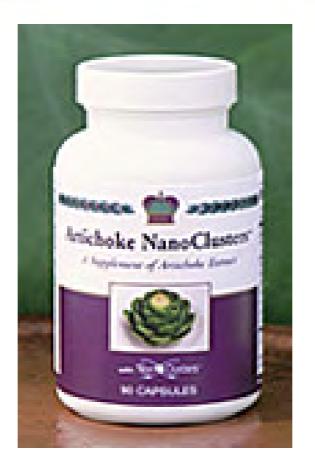
Further tasks on the <u>safety of allergenic and dietetic foods</u> ...and other questions related to human diet and nutrition.

"Nano-Claims" in the Future?



NEW Nano Cal/Mag supplement begins to be absorbed directly into the bodies cells the moment it enters your mouth. This allows for fast effective absorption and high utilization...





Nanotea "Prepared with nano-technology, Nano-tea can boost the adsorption of free radicals, cholesterol and blood fat: annihilation of viruses through penetration; a good supplement of selenium can achieved and the selenium function can be increased by 10 times."

Artichoke Nanoclusters Internal cleansing and detoxing with Artichoke NanoClusters promotes proper liver function and radiant skin. Powerful bioflavonoids known for their detoxifying properties work to cleanse your liver...

