

Maisons-Alfort, 10 January 2007

OPINION

of the French Food Safety Agency (Afssa) on guidelines for the constitution and assessment of dossiers concerning nutrition and health claims for foods

LA DIRECTRICE GÉNÉRALE

Pending the definitive vote and application of the European regulation on nutrition claims, Afssa issued a self mandate on 18 November 2004 to establish guidelines for compiling and assessing dossiers concerning nutrition and health claims for foods.

After consulting the Specialist Expert Committee (CES) “Human Nutrition” that met on 26 January and 23 March 2006, Afssa is issuing the following opinion:

This document has a twofold objective:

contribute to the standardisation and coherency of the assessment of nutrition and health claims by the CES “Human Nutrition” experts;
present manufacturers with a guide for compiling dossiers with a view to assessing nutrition and health claims.

These guidelines list a set of criteria deemed relevant by the CES “Human Nutrition” experts for the assessment of claims. These are grouped into 4 main themes:

- criteria for the definitive exclusion of the claim,
- assessment of the product bearing the claim,
- assessment of the claim
 - o information establishing a link between the nutrient and effect claimed
 - o relevance in terms of public health
- formulation of the claim and how well it is understood by consumers,

The definitive opinion issued as regards the scientific justification of the claim depends on the integration of all of these criteria.

These guidelines are in accordance with previous documents issued at the European level (Howlett & Shortt 2004; European Council 2001).

They complement those concerning the constitution of industrial dossiers submitted to the CES “Human Nutrition” (Afssa opinion of 19 April 2001) and should only be considered as an aid in scientific evaluation and demonstration as they present the main questions raised by the scientific justification of a claim and form the basis by which experts conduct their assessments of claims.

This guide is therefore a reference point for manufacturers who may consult it when necessary to ensure that the dossier submitted contains the elements deemed essential for assessment. It is likely to be expanded given the current national and European discussions on the establishment of future Community regulations concerning claims.

Lastly, these general guidelines do not cast doubt on the specific Afssa recommendations concerning the assessment of certain product categories: in particular, products bearing claims designed for children under 3 years old (Afssa opinion of 26 April 2006), products containing pro- or pre-biotics and bearing claims related to flora and immunity in adults (Afssa report, February 2005), plant-based products (Afssa report, February 2003), products containing omega 3 fatty acids and bearing claims related to the cardiovascular system (Afssa report, July 2003).

Product bearing the claim:	
Wording of the claim¹:	

1. CRITERIA FOR EXCLUDING THE CLAIM²

	Criterion	yes	no
1.1	Therapeutic claim, particularly as regards the prevention, treatment or cure of a disease		
1.2	Claim referring to the rhythm and amount of weight loss		
1.3	Claim referring to recommendations from healthcare professionals		
1.4	Claim referring to wellbeing in general		
1.5	Claim concerning drinks containing more than 1.2 % by volume of alcohol		

2. PRODUCT ASSESSMENT

	Criterion
2.1	Safety assessment of the product (Toxicological and microbiological assessment (see Guidelines for compiling industrial dossiers examined by the CES “Human Nutrition” and OECD and FDA guidelines)
2.2	Nutritional assessment of the product (see Guidelines for compiling industrial dossiers examined by the CES “Human Nutrition”) ³ Including Assessment of the overall nutritional profile of the food

3. ASSESSMENT OF THE CLAIM

3.1. PHYSIOLOGICAL AND NUTRITIONAL EPIDEMIOLOGY DATA

	Criterion
3.1.1	Exhaustivity of the bibliography provided to support the claim: do the studies provided give access to all quantitative and qualitative data on the subject? (original articles are preferable to reviews)
3.1.2	Bibliography provided by the petitioner to be graded on the basis of different types of studies: <ul style="list-style-type: none"> - epidemiological studies - <i>in vivo</i> studies on animals - <i>in vitro</i> studies - clinical studies Does the information provided report complementary approaches ?
3.1.3	Bibliography analysis <i>Establishment of the causality link between the food or substance and the effect claimed: use Hill's criteria</i> <ul style="list-style-type: none"> - Constancy of the association /coherency of results (number of corroborating studies) - Strength of the association: relative risk value and its significance - Dose-effect relationship (trend test) - Time link between exposure and effect <i>Biological plausibility</i>

¹ It is recommended to present the same number of grids as there are claims submitted for assessment

² According to the terms of the draft Regulation of the European Parliament and of the Council on nutrition and health claims made on foods, version of 16 October 2006

	- Agreement with animal and <i>in vitro</i> (mechanistic) studies (see below)
3.1.3.1	<p>Observation studies: Case-control and prospective</p> <p>Validity criteria:</p> <ul style="list-style-type: none"> - Number of subjects (varies depending on the incidence of the disease considered, type of study: (N) case-control>prospective, of the exposure measurement (N) questionnaire>biomarker to be discussed; depends on the questionnaire and biomarker types) - Certainty of the diagnosis - Representativeness of controls or of the cohort - Questionnaire quality (number of items, validation) - Statistical analysis (consideration of confounding factors)
3.1.3.2	<p>Intervention studies</p> <p>Validity criteria:</p> <ul style="list-style-type: none"> - Controlled double-blind study - Number of subjects (calculation of power) - Sample representativeness - Number of drop-outs - Markers of compliance with protocol - Relevance and validity of intermediate risk biomarkers (where applicable)
3.1.3.3	<p>Animal studies</p> <p>Validity criteria:</p> <ul style="list-style-type: none"> - Number of animals - Experimental design - Relevance of model (species, transgenic animal) - Relevance of use of model (substance administered, administration route, doses used, duration, bioavailability checked) - Relevance of biomarkers examined - Quality of results obtained: statistic tests; do the results concern the targeted function or intermediate biomarkers (of anatomical character, physiopathological constants)? - Are the results obtained easily transposable to humans? (do they have a nutritional relevance for humans?)
3.1.3.4	<p>Cellular testing</p> <p>Validity criteria</p> <ul style="list-style-type: none"> - Experimental design - Relevance of model (cellular type, strain) - Relevance of use of model (substance tested, doses used, duration, bioavailability checked) - Physiological relevance - Relevance of biomarkers examined - Quality of results obtained: statistical tests; do the results obtained have a nutritional relevance for humans?
3.1.3.5	Specific clinical study (ies) ** conducted with the product bearing the claim: in agreement with the biomedical provisions of the country where they were conducted; indication of the state of publication
3.1.4	Definition of the target population of the food: were the studies presented conducted on the final target of the food?
3.1.5	Characterisation of the quantity of food or nutrient responsible for the effect: were the studies conducted with comparable doses of the food and/or nutrient or substance to those recommended by the petitioner?
3.1.6	Bioavailability of the nutrient or substance: is there enough of the nutrient or substance present in the food to claim the effect? If its effect acts on the systemic level, is it under a sufficiently bioavailable form (quantitative and qualitative aspects)?
3.1.7	Does the effect claimed incorporate the influence of the food matrix ?
3.1.8	Were the available studies conducted under the normal consumption conditions of the target population? Is the food eaten as part of a usual diet?
3.1.9	Does the claimed effect emerge in a period compatible with the current consumption of the product? (when this is not the case, are validated intermediate biomarkers of the function improvement favourably adjusted?)

3.2. RELEVANCE IN HEALTH TERMS

	Criterion
3.2.1	Is the claim in line with current nutritional recommendations, particularly ANC (Recommended Nutritional Intakes), Programme national nutrition santé (PNNS) (National Nutrition and Health Programme), and more generally with public health objectives?
3.2.2	Does the claim concern a nutrient for which specific groups of the population present risks of inadequate intake?

4. ANALYSIS OF THE WORDING OF THE CLAIM

	Criterion	yes	no
5.1	Does the claim contain sufficiently precise terms, referring to specific, verifiable and justifiable benefits?		
5.2	Can the claim be understood by the “average consumer ³ ”?		
5.3	Does the claim contain adapted or scientifically validated terms, guaranteeing fair information for consumers?		
5.4	Are the properties suggested by the claim genuinely attributable to the food?		
5.5	Is the nutrient or substance responsible for the effect claimed clearly identifiable in the wording of the claim?		
5.6	Is the claim consistent with all the information issued by the petitioner, irrespective of the form and distribution method used?		
5.7	Is the claim unlikely to bring about or maintain a risky behaviour for consumers (changes in eating habits, excessive consumption of the product, other risky behaviours)		
5.8	Is there suggestion in the claim that the food may be replaced by a prescribed treatment?		

5. CONCLUSION

<p>Key elements related to the justification of the claim:</p>

³ The “average consumer” is the consumer with the normal amount of information and reasonably attentive and sensible (Draft Regulation of the European Parliament and of the Council concerning nutrition and health claims made on foods, version of 16 October 2006)

**** Suggestions for assessing a claimed health effect in humans for a food product**

1. Type of study

- open
- controlled
- drawing lots
- blinded
- duration

(Reference study: presence of a control group, with lot-drawing of the placebo treatment, conducted double-blind)

2. Type of treatment

- relevance as regards current eating habits
- appropriate timescale for expected effect
- assessment method of compliance (from return of the container to inclusion of a consumption marker)

2. Judgment criteria

- single, defined main criterion
- relevance and specific nature as regards the effect claimed
- representation as regards the effect claimed
- secondary criteria (*idem* for main criterion)

3. Methods for measuring the main and secondary criteria

- description of techniques
- precision, accuracy and specificity
- field of validity
- quality control of measures (Xplicates, standards, inter-laboratory control, etc.)

4. Population studied

- precision of inclusion and exclusion criteria
- relevance as regards the target population (age, gender, state of health, etc.)
- measures used to avoid confounding factors (exposure to banned foods or treatments, consumption analysis, etc.)

5. Data analysis strategy

- choice *a priori* of type of study
- justification of number of subjects (particularly, type 2 error)
- choice *a priori* of the data analysis method (e.g.: intermediary analysis, etc.)
- justification *a priori* of the method (transformation, non-parametric analysis, etc.)
- analysis with a view to treatment or "per protocol"
- analysis of confounding factor effects (covariance, etc.)

6. Interpretation of results

- conclusions compatible with results obtained or inference exceeding their scope
- relevance of conclusions as regards the effect claimed
- relevance as regards current eating habits

Key words:

Claims, guidelines, European regulation

Bibliographical references:

Howlett J & Shortt C European J. Nutr. (2004) 43, Suppl.II:174-183 Passclaim - Report on the second plenary meeting: review of a wider set of interim criteria for the scientific substantiation of health claims

Declaration of policy of the Council of Europe on nutrition, food safety and consumer health of 2001. Technical document concerning Guidelines on the scientific justification of health claims of functional foods, Strasbourg, Council of Europe.

http://www.coe.int/T/F/Coh%E9sion_sociale/socsp/DOC%20TECH%20LIGNES%20DIRECTRICES%20ALIMENTS%20FONCTIONNELS.pdf

Afssa- Opinion of 19 April 2001 on Guidelines for compiling industrial dossiers examined by the “Human nutrition” specialist expert committee

Afssa- Opinion of 26 April 2006 on Guidelines for compiling industrial dossiers on foods for newborns and infants.

Afssa- Process for assessing the safety, interest and claim of plant-based foods for human consumption. Report of February 2003

Afssa- Effects of probiotics and prebiotics on flora and immunity in adult men. Report of February 2005

Afssa- Omega 3 fatty acids and the cardiovascular system: nutritional interest and claims. Report of July 2003

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