DRAFT SCIENTIFIC REPORT OF EFSA

Briefing document for stakeholders on the evaluation of Article 13.1, 13.5 and 14 health claims[1]

European Food Safety Authority[2, 3]

European Food Safety Authority (EFSA), Parma, Italy

INTRODUCTION

Regulation (EC) No 1924/2006[4] harmonises the provisions that relate to nutrition and health claims and establishes rules governing the Community authorisation of health claims made on foods.

As foreseen in the Regulation, the EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA) issued an opinion in 2007 providing scientific and technical guidance for the preparation and presentation of the application for authorisation of a health claim under Article 14 (applications related to claims referring to children's development and health and disease risk reduction claims)[5]. This opinion of the EFSA NDA Panel formed the basis for Commission Regulation (EC) No 353/2008[6] establishing implementing rules for applications for authorisation of health claims as provided for in Article 15 of Regulation (EC) No 1924/2006, which applies also to claims submitted under Article 13.5 of the health claims Regulation (health claim applications based on newly developed scientific evidence and/or proprietary data).

EFSA has also published guidance on administrative and procedural questions which applicants intending to submit applications for health claims authorisation may have[7].

The Standing Committee on the Food Chain and Animal Health at its meeting on the 14 December 2007 adopted guidance on the implementation of Regulation EC (No) 1924/2006 on

[1] On request from EFSA, Question No EFSA-Q-2010-00822 and EFSA-Q-2010-00821, issued for public consultation on 10 May 2010.

[2] Correspondence: nda@efsa.europa.eu.

[3] Acknowledgement: EFSA wishes to thank the members of the NDA Panel for their advice: Carlo Agostoni, Jean-Louis Bresson, Susan Fairweather-Tait, Albert Flynn, Ines Golly, Hannu Korhonen, Pagona Lagiou, Martinus Løvik, Rosangela Marchelli, Ambroise Martin, Bevan Moseley, Monika Neuhäuser-Berthold, Hildegard Przyrembel, Seppo Salminen, Yolanda Sanz, Sean (J.J.) Strain, Stephan Strobel, Inge Tetens, Daniel Tomé, Hendrik van Loveren and Hans Verhagen, and EFSA's staff member Juliane Kleiner for the support provided to this EFSA scientific output.

[4] 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. OJ L 404, 30.12.2006, p. 9–25.

[5] Opinion of the Panel on dietetic products, nutrition and allergies (NDA) on a request from the Commission related to scientific and technical guidance for the preparation and presentation of the application for authorisation of a health claim. The EFSA Journal (2007) 530, 1-44. http://www.efsa.europa.eu/EFSA/efsa_locale-1178620753812_1178623592448.htm

[6] Commission Regulation (EC) No 353/2008 of 18 April 2008 establishing implementing rules for applications for authorisation of health claims as provided for in Article 15 of Regulation (EC) No 1924/2006 of the European Parliament and of the Council. OJ L 109, 19.4.2008, p. 11–16.

[7] http://www.efsa.europa.eu/en/scdocs/doc/nda_pre_submission_guidance%20to%20applicants_rev%202_21.12.07.pdf

Suggested citation: European Food Safety Authority (EFSA); Briefing document for stakeholders on the evaluation of Article 13.1, 13.5 and 14 health claims (issued for public consultation). EFSA Journal 2010; x(xx):xxxx. [18 pp.]. doi:10.2903/j.efsa.xxxx.xxxx. Available online: www.efsa.europa.eu

nutrition and health claims made on foods[8] for (1) interaction with other Community legislation (relating to foodstuffs for particular nutritional uses, novel foods) (2) the use of comparative nutrition claims, and (3) classification of nutrition and health claims, including borderline cases between function claims and reduction of disease risk claims and between claims referring to children's development and health and other health claims.

In the context of Article 13.1 of the Regulation (EC) No 1924/2006, the European Commission requested EFSA in July 2008 to give a scientific opinion on the Community list of permitted health claims[9]. To this end, EFSA received from the European Commission the terms of reference and a consolidated list of claims submitted by Member States.

In the light of the experience gained with the health claims evaluations, EFSA provided in 2009 further advice and organised two meetings with various stakeholders. For health claim applications (Article 14 and 13.5 health claims) EFSA provided additional advice to applicants in the form of a frequently asked question document (FAQ). The draft FAQ was subjected to public consultation and discussed at a meeting with applicants in June 2009 before its finalisation and publication in September 2009[10]. In order to update Member States and the European Commission on the evaluation of Article 13.1 health claims, EFSA held a meeting with them in October 2009. To this end a draft briefing document was prepared and discussed at the meeting, which was updated after the meeting and published in December 2009[11].

As the NDA Panel is applying similar criteria for the evaluation of all health claims, these two documents have been combined into a single briefing document and updated taking into account the latest developments. This briefing document for stakeholders on the evaluation of Article 13.1, 13.5 and 14 health claims will serve as a basis for discussion at a technical meeting with stakeholders, which will be held on 1 June 2010. A revised version of this document, taking into account the discussion at the meeting, will be published after the meeting together with a summary report of the meeting.

This briefing document will be further updated as appropriate as additional issues are addressed.

[8] http://ec.europa.eu/food/food/labellingnutrition/claims/guidance_claim_14-12-07.pdf

[9] Art. 13 health claims, often referred to as general function claims, are health claims other than those referring to the reduction of disease risk and to children's development and health. Article 13 claims describe or refer to the role of a nutrient or other substance in the functions of the body, or to the psychological and behavioural functions, or to slimming or weight control or to a reduction in the sense of hunger or to an increase in the sense of satiety or to the reduction of the available energy from the diet.

[10] EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA); Frequently Asked Questions (FAQ) related to the assessment of Article 14 and 13.5 health claims applications on request of EFSA. EFSA Journal 2009; 7(9):1339. [18 pp.]. doi:10.2903/j.efsa.2009.1339.

[11] EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA); Briefing document for Member States and European Commission on the evaluation of Article 13.1 health claims on request of EFSA. EFSA Journal 2009; 7(11):1386. [10 pp.]. doi:10.2903/j.efsa.2009.1386.

The following topics are addressed in this briefing document:

1. **Overview of main issues addressed by the NDA Panel in evaluation of Article 13.1, 13.5 and 14 health claims**
2. **How does the NDA Panel decide whether a health claim is substantiated?**
3. **What is the totality of the available scientific data?**
4. **What are pertinent studies for substantiation of a health claim?**
5. **On what basis does the NDA Panel propose wordings of health claims?**
6. **To what extent should a food/constituent be characterised?**
7. **How should the claimed effect be shown to be beneficial?**
8. **What is a risk factor for the development of a human disease?**
9. **Compliance/eligibility issues for health claims**
10. **Procedural aspects for Article 13.5 and 14 health claims**
11. **Procedural aspects for Article 13.1 health claims**

1. Overview of main issues addressed by the NDA Panel in evaluation of Article 13.1, 13.5 and 14 health claims

The Terms of Reference (TOR) provided to EFSA for the Article 13.1 health claims list are consistent with the approach adopted by the NDA Panel in evaluation of claims under Articles 13.5 and 14 of the Regulation. Thus, the NDA Panel has adopted a similar approach to evaluation of Article 13.1 health claims, with some differences noted in the procedural section.

In assessing each specific food/health relationship that forms the basis of a health claim the NDA Panel considers the extent to which:

1. the food/constituent is defined and characterised;
2. the claimed effect is defined and is a beneficial physiological effect ("beneficial to human health");
3. a cause and effect relationship is established between the consumption of the food/constituent and the claimed effect (for the target group under the proposed conditions of use).

If a cause and effect relationship is considered to be established, the NDA Panel considers whether:

- the quantity of food/pattern of consumption required to obtain the claimed effect can reasonably be consumed within a balanced diet;
- the proposed wording reflects the scientific evidence;
- the proposed wording complies with the criteria for the use of claims specified in the Regulation;
- the proposed conditions/restrictions of use are appropriate;
- in the case of Article 13.5 and 14 claims, substantiation is dependent on data claimed as proprietary by the applicant.

Because health claims are assessed on a case by case basis, the detailed application of these steps may vary.

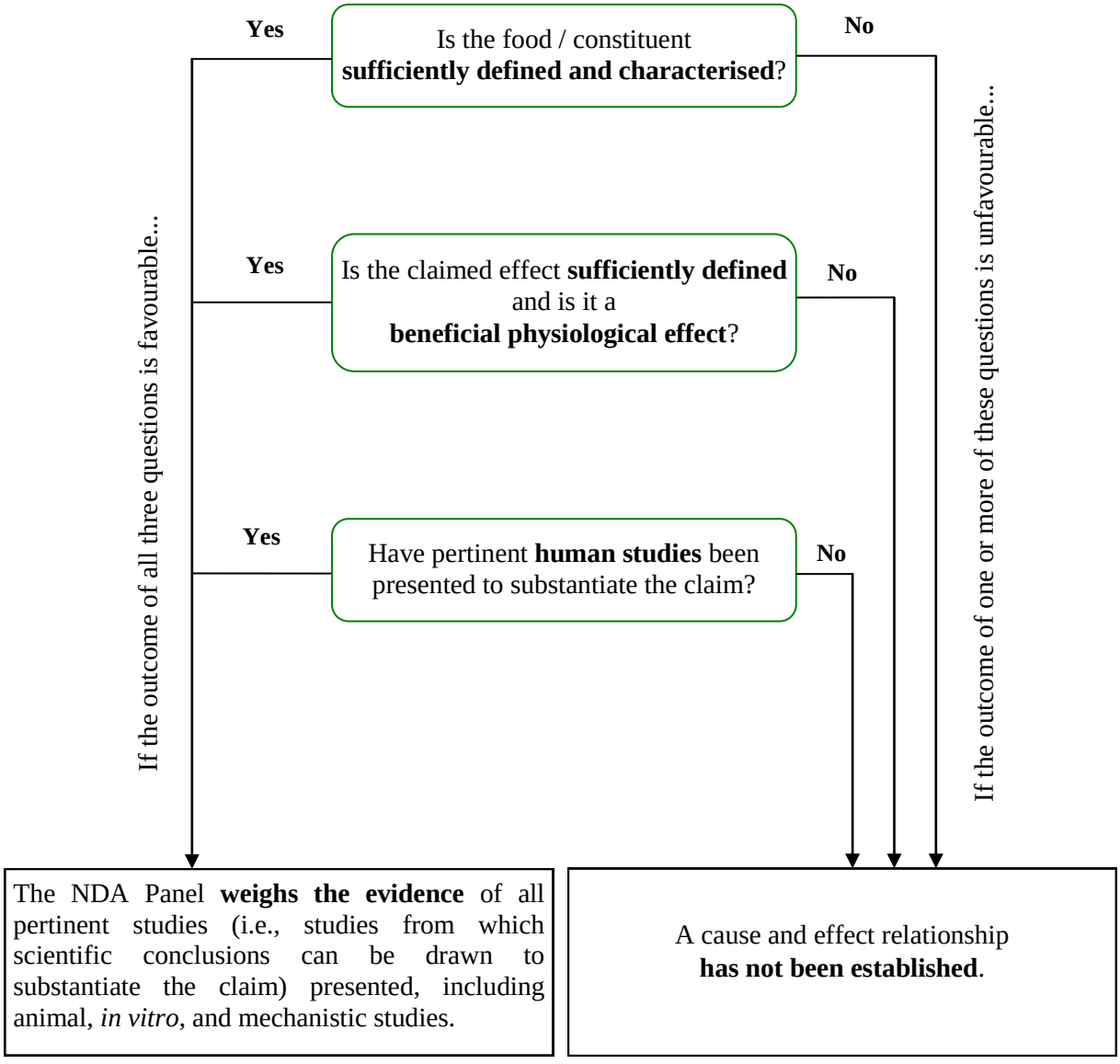
Substantiation of the claim is dependent on a favourable outcome of the assessment of 1, 2 and 3 above. Thus, a cause and effect relationship is considered not to be established if the outcome of any one of these assessments is unfavourable. Furthermore, if there are no human studies that are pertinent to the claim (i.e. studies using the food/constituent and with appropriate outcome measures in a group that is representative of the target group for the claim) the outcome of question 3 will be unfavourable (see flowchart).

For Article 13.1 claims each relationship between a food/constituent and a claimed effect is assessed separately and individual assessments are combined, as appropriate, to form coherent opinions.

96

97

Key questions addressed by the EFSA NDA Panel in the scientific evaluation of health claims



2. How does the NDA Panel decide whether a health claim is substantiated?

In accordance with Regulation (EC) No 1924/2006, and with the Terms of Reference which were received from the European Commission in relation to Article 13.1 claims, the NDA Panel considers (for all health claims) whether the beneficial effect of the food on the function is substantiated by generally accepted scientific evidence by taking into account the totality of the available scientific data, and by weighing the evidence. In this context, the NDA Panel comments according to consistent criteria on the nature and quality of the totality of the evidence provided.

In assessing each specific food/health relationship that forms the basis of a claim, the NDA Panel makes a scientific judgement on the extent to which a cause and effect relationship is established between the consumption of the food/constituent and the claimed effect (for the target group under the proposed conditions of use). All the evidence from the pertinent studies (i.e., studies from which scientific conclusions can be drawn for the substantiation of the claim) is weighed with respect to its overall strength, consistency and biological plausibility, taking into account the quality of individual studies and with particular regard to the population group for which the claim is intended and to the conditions of use proposed for the claimed effect. A grade is not assigned to the evidence. While studies in animals or *in vitro* may provide supportive evidence, human data are central for the substantiation of the claim. This procedure is in agreement with the hierarchy of evidence as described in the EFSA guidance[12]. The NDA Panel considers the rationale/evidence on the biological plausibility of the claim based on the data provided by the applicant to support the substantiation of the claim.

Each relationship between a food/constituent and a claimed effect is assessed separately. There is no pre-established formula as to how many or what type of studies are needed to substantiate a claim. However, the NDA Panel considers what the accepted norms are in the relevant research fields and consults experts from various disciplines, as appropriate. Scientific requirements for substantiation of specific types of health claims (e.g. related to which claimed effects are considered beneficial physiological effects and which outcome measures are accepted for substantiation) are considered by the NDA Panel on an ongoing basis and are to be found in published opinions. EFSA will consolidate these scientific requirements to provide additional guidance to applicants.

Substantiation of reduction of disease risk claims requires evidence on the effect of the food/constituent on risk factors that are predictive of a reduced risk of disease.

The outcome of each assessment is one of three possible conclusions:

1. *A cause and effect relationship has been established between the consumption of the food/constituent and the claimed effect.*

This statement represents the best judgement of the NDA Panel on whether a cause and effect relationship is established between the consumption of the food/constituent and the claimed effect by the evidence provided (i.e. that the claim is substantiated by generally accepted scientific evidence).

2. *The evidence provided is insufficient to establish a cause and effect relationship between the consumption of the food/constituent and the claimed effect.*

This statement represents the best judgement of the NDA Panel that, although there is scientific evidence supporting a cause and effect relationship, the evidence is not conclusive (i.e. that the claim is not substantiated by generally accepted scientific evidence).

There are several possible reasons for reaching a conclusion that the evidence provided is insufficient to establish a cause and effect relationship between the consumption of the food/constituent and the

[12] http://www.efsa.europa.eu/en/scdocs/doc/530.pdf

claimed effect. For example, it could be owing to emerging evidence, conflicting evidence, etc. The reasons for such a conclusion are provided in the respective opinions.

3. A cause and effect relationship has not been established between the consumption of the food/constituent and the claimed effect.

The NDA Panel considers that there is no or, at most, limited scientific evidence supporting a cause and effect relationship and the claim is not substantiated by generally accepted scientific evidence.

3. What is the totality of the available scientific data?

The totality of data refers to all studies available to the NDA Panel that are considered pertinent (i.e., the studies from which scientific conclusions can be drawn for the substantiation of the claim), including those that support the relationship as well as studies showing no effect and/or opposing effects.

Article 13.1 health claims

The NDA Panel uses the references received from the Member States and references received directly from stakeholders. In the assessment the NDA Panel may use data which are not included in the references provided if they are considered pertinent to the claim. However, it is not required to search for additional references.

There are several limitations (including inaccurate or incomplete references, references to documents which are not readily accessible (e.g. published in Journals not readily available), and references to documents in languages other than English) regarding the availability of documents cited in the references provided.

The NDA Panel carries out the evaluation of claims with the data available to it, taking into account the availability of the documents cited in the references provided. The NDA Panel notes that it has no assurance that the references provided represent all data pertinent to the claim, i.e. that they include evidence of no effect and/or opposing effects as well as evidence that supports the relationship.

For claims for which there is well established consensus among scientific experts as to their substantiation by generally accepted scientific evidence, e.g. many of the functions of the essential nutrients, the NDA Panel may rely on such consensus as indicated by authoritative scientific sources. In such cases it may not be necessary to review the primary scientific studies on the claimed effect of the food/constituent. For claims for which there is no established consensus, as indicated by authoritative scientific sources, it is necessary to review the primary studies in order to assess whether such claims are substantiated.

The NDA Panel reviews the totality of scientific data provided, including handbooks and monographs, to see if they contain data from which scientific conclusions can be drawn (pertinent data) for the substantiation of the claim.

Article 13.5 and Article 14 health claims

For Article 13.5 and 14 applications it is the responsibility of the applicant to provide the totality of the available data. In its assessment the Panel may use data which are not included in the application if they are considered pertinent to the claimed effect.

4. What are pertinent studies for substantiation of a health claim?

In considering whether the studies identified by the references provided are pertinent (i.e. studies from which scientific conclusions can be drawn for the substantiation of the claim), the NDA Panel addresses the following questions:

- Have the studies been carried out with the food/constituent for which the claim is made? This requirement means that there should be sufficient definition of the food/constituent for which the claim is made and of the food/constituent that is the subject of the studies which have been provided for substantiation of the claim.
- Have the human studies used (an) appropriate outcome measure(s) of the claimed effect?
- How do the conditions under which the human studies were performed relate to the conditions of use (e.g. quantity and pattern of consumption of the food/constituent) proposed for the claim?
- Have the human studies been carried out in a study group representative of the population group for which the claim is intended? Can the results obtained in the studied population be extrapolated to the target population?
- To what extent can evidence derived from studies in animals/*in vitro* support the claimed effect in humans?

As human data are central for the substantiation of a health claim, particular attention is given to whether the human studies provided are pertinent to the claim. In addition, it is important that the human studies provided represent all available evidence pertinent to the claim, including evidence that supports the relationship as well as equivocal evidence and evidence of no effect and/or opposing effects.

If the claim is for a specific formulation or fixed combination of constituents, (as distinct from the individual constituents) the pertinent studies are those performed with this specific formulation or combination and not the studies performed with the individual constituents.

The NDA Panel gives a summary of the references provided to support a health claim (both numbers and nature of studies) and of the reasons for excluding studies which are not considered pertinent.

Extrapolation from studies in groups other than the target group

For studies in groups (e.g. subjects with a disease) other than the target group (e.g. general population) for a claim, the NDA Panel considers whether scientific conclusions can be drawn for the substantiation of the claim on a case by case basis. For example, for claims on reducing gastro-intestinal discomfort (in the general population) evidence in patients with irritable bowel syndrome may be accepted. However, for claims on maintenance of normal joints (in the general population), evidence is not accepted from studies with osteoarthritis patients. Based on the available evidence, osteoarthritis patients are not considered to be representative of the general population with regard to the status of their joint tissues, as normal cells and tissues are different from osteoarthritic cells and tissues and therefore may respond differently to intervention with exogenous substances. It is the responsibility of the applicant to provide the evidence that results from a study group other than the target population can be extrapolated to the target population.

5. On what basis does the NDA Panel propose wordings of health claims?

For claims for which a cause and effect relationship has been established, the NDA Panel considers whether the proposed wording reflects the scientific evidence and complies with the criteria laid down

in the Regulation (e.g. it should not refer only to general, non-specific health benefits of the food/constituent); if not, the NDA Panel may propose an appropriate wording.

It should be noted that the wording adopted by the Commission during authorisation may need to take into account aspects other than agreement with the scientific evidence, e.g. understanding by consumers. Any issues related to consumer understanding of the wording of a claim should be addressed to the Commission following publication of the opinion of the NDA Panel. EFSA liaises with the Commission, as appropriate, on scientific aspects of the wording of the claim.

For reduction of disease risk claims, the wording should refer to the specific risk factor for the disease, e.g. 'plant sterols/stanols have been shown to reduce blood cholesterol levels. High cholesterol levels are a risk factor in the development of coronary heart disease'.

6. To what extent should a food/constituent be characterised?

Health claims can be made on a food category, a food or a food constituent (e.g. a nutrient, or other substance, or a combination of nutrients/other substances) and these are covered under the term "food/constituent".

The NDA Panel considers whether the specific food/constituent is sufficiently defined and characterised to establish that the studies provided for substantiation of the claim were performed with the food/constituent for which the claim is made. (There should also be sufficient definition of the food/constituent used in the studies provided for substantiation of the claim.) Characterisation should also be sufficient to allow definition of appropriate conditions of use[13]. It is in the interest of the applicant to provide this information along with the information regarding manufacturing processes, where applicable, in order to show consistency in the final product for those characteristics considered pertinent to the claimed effect.

The NDA Panel considers whether the information provided includes those characteristics considered pertinent to the claimed effect, i.e. those that may influence the specific physiological effect that is the basis of the claim. It may be necessary to distinguish between a specific formulation, a specific constituent or combination of constituents and the following cases have been identified:

- If the claim is for an individual constituent, then substantiation of the claim is based on studies performed with this constituent.

- If the claim is for a specific formulation or a fixed combination of constituents, then studies are needed on this specific formulation or combination. If individual constituent(s) are identified as contributing to the claimed effect the NDA Panel considers whether sufficient information is provided to establish such a role for the constituent(s).

- For a food category (e.g. "wholegrain", "dairy"), the NDA Panel considers whether the information provided sufficiently addresses the variability between individual foods for those characteristics considered pertinent to the claimed effect.

- For plant products, the NDA Panel considers whether the information provided includes the scientific name, the part and the preparation used. The Panel also considers whether the food/constituent has been sufficiently characterised with respect to the claimed effect and the proposed conditions of use, taking into account information extracted from standard reference textbooks.

[13] Although not required for substantiation of a claim, characterisation should also be sufficient to allow control authorities to verify that the food/constituent which bears a claim is the same one that was the subject of a Community authorisation.

- For microorganisms (e.g. bacteria, yeast), the NDA Panel considers whether, in addition to species identification, sufficient information is provided for the characterisation (genetic typing) at strain level by internationally accepted molecular methods and naming of strains according to the International Code of Nomenclature. (There should also be sufficient definition of the strain(s) used in the studies provided for substantiation of the claim.). Although not required for the substantiation of a claim, it is also desirable that strains are deposited in an internationally recognised culture collection (with access number) for control purposes. In case of combination of two or more microorganisms, the Panel considers that if one microorganism used in the combination is not sufficiently characterised, the combination proposed is not sufficiently characterised.

- For manufacturing processes, information should be provided to show consistency in the final product for those characteristics considered pertinent to the claimed effect.

For the evaluation procedure of Article 13.1 claims, the characterisation of a food constituent that is a microorganism is based on evaluation of available references up to end December 2008, including the following:

- The information provided by the Member States in the consolidated list of Article 13 health claims and references that EFSA has received from Member States or directly from stakeholders;

- Generally available data obtained by searching Gene databases, Pubmed and Web of Science databases by using the strain name as search term.

During the scientific evaluation of the Article 13.1 health claims, the NDA Panel considered that the information provided was not sufficient to characterise a number of foods/constituents with respect to the claimed effects (including some, but not all, 'probiotic' bacteria) and that the foods/constituents did not comply with a key criterion in the Terms of Reference for evaluation of these claims. In these cases, the claims could not be substantiated because the food/constituent was not sufficiently characterised and it could not be established that the scientific studies that were submitted in support of the claim were performed with the same food/constituent as was proposed for the claim.

It should be noted also that in the Article 13 list of health claims, some foods/constituents are classified only on the basis of the claimed effect, i.e. the name of the food/constituent contains a description or indication of a beneficial effect on a function (e.g. non-cariogenic, low GI, antioxidants). Claims on such foods/constituents cannot be substantiated because these foods/constituents cannot be sufficiently characterised.

7. How should the claimed effect be shown to be beneficial?

According to Regulation (EC) No 1924/2006, the use of health claims shall only be permitted if the food/constituent, for which the claim is made, has been shown to have a beneficial physiological effect.

In assessing each claim, the NDA Panel makes a scientific judgement on whether the claimed effect is considered to be a beneficial physiological effect in the context of the specific claim as described in the information provided.

For function claims, a beneficial effect may relate to maintenance or improvement of a function.

For reduction of disease risk claims, 'beneficial' refers to whether the claimed effect relates to the reduction of a risk factor for the development of a human disease.

The NDA Panel considers whether the claimed effect is sufficiently defined to establish that the studies identified for substantiation of the claim were performed with (an) appropriate outcome measure(s) of that claimed effect. Thus, it may be necessary to distinguish between different possible effects or interpretations.

For health claim applications, one application should be prepared for each individual health claim; this means that only a relationship between a food/constituent and a single claimed effect can be the subject of each application.

The NDA Panel considers whether the claimed effect refers to a specific health claim (and is not general and non-specific) as required by Regulation (EC) No 1924/2006. The claimed effect needs to be specific enough to be testable and measurable by generally accepted methods. For example, "gut health" is too general (unclear what measure can be used) but "transit time" is specific (measurable by generally accepted methods).

For claims for which the information in the Article 13 list is unclear as to the definition of the claimed effect, the NDA Panel will use its best judgement to identify the claimed effect, e.g. by reference to the proposed wordings as well as the health relationship. The NDA Panel will also use its best judgement to identify the appropriate target group for the claim where this information is not provided. In its evaluation, the NDA Panel considers that where a health claim relates to a function that may be associated with a disease, subjects with the disease are not the target for the claim.

In the preparation of an application, a rationale/evidence should be provided that the claimed effect is beneficial in the context of the specific claim.

8. What is a risk factor for the development of a human disease?

Regulation (EC) No 1924/2006 defines reduction of disease risk claims as 'significantly reduces a risk factor in the development of a human disease'. Thus, for reduction of disease risk claims, the beneficial physiological effect (which the Regulation requires to be shown for the claim to be permitted) is the reduction (or beneficial alteration) of a risk factor for the development of a human disease (not reduction of the risk of disease).

For the purpose of classifying disease, the World Health Organizations (WHO) International Statistical Classification of Diseases and Related Health[14] should be used.

A risk factor is a factor associated with the risk of a disease that may serve as a predictor of development of that disease. To date, the NDA Panel has considered a limited number of disease risk factors, all of them physiological factors that (potentially) may be beneficially altered by diet. Dietary behaviour (e.g. diets with low content of a specific category of foods) would not be acceptable as a risk factor in this context as the beneficial alteration of the risk factor (increased consumption of a specific category of foods) is not a beneficial physiological effect as required by the Regulation.

Whether or not the alteration of a risk factor is considered to be beneficial in the context of a reduction of disease risk claim, depends on the extent to which it is established that:

- The risk factor is an independent predictor of disease risk (such a predictor may be established from intervention and/or observational studies);
- The relationship of the risk factor to the development of the disease is biologically plausible.

[14] http://www.who.int/classifications/icd/en /

For some risk factors, there is strong evidence that they meet both criteria. For example, elevated serum LDL-cholesterol concentrations are a risk factor for coronary heart disease (CHD) for which there is strong evidence for the biological basis through which it can contribute to the development of atherosclerosis (one pathway to CHD). There is also strong evidence that there is an independent association between the risk factor and the incidence of CHD, including evidence that a reduction in the risk factor (by dietary modification and drugs) generally reduces the risk of development of CHD. Reduction in serum LDL-cholesterol concentrations, therefore, may be considered beneficial in the context of a reduction of disease risk claim for CHD.

Similarly, reduction in systolic blood pressure may be considered beneficial in the context of a reduction of disease risk claim for CHD or stroke.

For other risk factors, the evidence may not be as strong. For example, increased dental plaque level is a risk factor for dental caries for which there is strong evidence for the biological basis through which it can contribute to the development of dental caries. However, while there is evidence that there is an independent association between dental plaque and the incidence of dental caries, it is not generally established that lowering plaque level can lower the risk of development of the disease. Nevertheless, if there is evidence that decreasing plaque by a specific dietary intervention is accompanied by reduced incidence of dental caries, then such a reduction in dental plaque might be considered beneficial in the context of a reduction of a disease risk claim for dental caries for that specific dietary intervention.

Except for well established risk factors (e.g. elevated LDL-cholesterol concentrations for CHD), the extent to which the reduction of a risk factor is beneficial in the context of a reduction of disease risk claim needs to be considered on a case-by-case basis.

9. Compliance/eligibility issues for health claims

Compliance with the criteria laid down in the Regulation

EFSA is requested to consider the claimed effect on the function, and provide advice on the extent to which the wording used to express the claimed effect complies with the criteria laid down in the Regulation.

Such criteria include:

- General, non-specific claims - reference to general, non-specific benefits of the nutrient or food for overall good health or health-related well-being may only be made if accompanied by a specific health claim included in the lists provided for in Article 13 or 14 (Article 10.3).

- Claims that encourage excess consumption of a food – the use of health claims shall not encourage or condone excess consumption of a food (Article 3c and Recital 18).

- The claimed effect must be beneficial - the use of health claims shall only be permitted if the food/constituent for which the claim is made has been shown to have a beneficial physiological effect (Article 5.1(a)).

- Claims on foods/constituents with no independent role in the claimed effect - the use of health claims shall only be permitted if the presence, absence or reduced content of a nutrient or other substance in a food or category of food, in respect of which the claim is made, has been shown to have a beneficial physiological effect (Article 5.1(a)). The NDA Panel considers whether the presence, absence or reduced content of a nutrient or other substance in a food or category of food, in respect of which the claim is made, has an independent role in the claimed effect or whether its role is based on the inclusion or replacement (i.e., substitution) of other substances.

Borderline issues

Maintenance claims on risk factors - In the Article 13 list, there are some claims that refer to the maintenance of a function but the scientific evidence is based on a reduction of a (well established) risk factor for disease (e.g. maintenance of normal blood cholesterol levels, based on evidence of reduction of LDL-cholesterol concentrations). The NDA Panel notes the Commission guidance on the implementation of Regulation (EC) No 1924/2006, of December 2007[15]: 'when the claim mentions a disease risk factor generally recognised by scientific evidence, it should be considered as an Article 14 claim only when a reduction of this risk factor is stated, suggested or implied' and 'when a claim refers to a risk factor of a disease, without stating, suggesting or implying its reduction it is considered an Article 13 claim'.

The NDA Panel has evaluated claims for the maintenance of normal blood cholesterol concentrations under Article 13 even when the evidence for substantiation of the claimed effect is based on studies showing a reduction of blood cholesterol concentrations. Such evaluations have also been done for claims related to the maintenance of normal blood pressure.

Claims related to children's health and development - In accordance with the Commission guidance on the implementation of Regulation (EC) No 1924/2006, of December 2007, claims which the NDA Panel considers would only be scientifically justified for children are considered as Article 14 and are not evaluated in the context of the Article 13 claims list.

Comparative claims – EFSA has received a number of claims based on effects of a food/constituent when used in substitution of another food/constituent, e.g., effects of monounsaturated fats when replacing saturated fats, claims on low-fermentable carbohydrates and dental health or 'non-cariogenic' (all compared to a reference carbohydrate), some claims on satiety (improved compared to a reference food). The Commission guidance addressed comparative nutrition claims but did not consider comparative health claims.

In the absence of further guidance on comparative health claims, the NDA Panel considers whether the presence, absence or reduced content of a nutrient or other substance in a food or category of food, in respect of which the claim is made, has an independent role in the claimed effect. For example linoleic acid reduces cholesterol concentrations when compared to carbohydrates which have a neutral effect on cholesterol concentrations and, therefore, linoleic acid has an independent role in the claimed effect. On the other hand, the saturated fatty acid, stearic acid, only lowers cholesterol concentrations when compared with other saturated fatty acids (which increase cholesterol concentrations) but not when compared with carbohydrates which have a neutral effect on cholesterol concentrations. - therefore stearic acid has no independent role in the claimed effect.

The beneficial effect of the absence or reduced content of a nutrient or other substance in a food or category of food implies that the presence of the substance has an adverse effect, e.g. sugar absence/reduction may help to maintain tooth enamel when compared to sugar presence/higher level.

Target group - The NDA Panel considers that the population group for which health claims are intended is the general (healthy) population or specific subgroups thereof, e.g. elderly people, sports people, pregnant women. In its evaluation, the NDA Panel considers that where a health claim relates to a function/effect that may be associated with a disease, subjects with the disease are not the target population for the claim, e.g. joint health and osteoarthritis patients. Applications for claims that specify target groups other than the general (healthy) population are the subject of ongoing discussions with the Commission and Member States with regard to their admissibility.

[15] http://ec.europa.eu/food/food/labellingnutrition/claims/index_en.htm

10. Procedural aspects for Article 13.5 and 14 health claims

Procedural aspects for authorisation of Article 13.5 and Article 14 claims are laid down in Articles 15-18 of the health claims Regulation (Regulation (EC) No 1924/2006) and in Commission Regulation (EC) No 353/2008 establishing implementing rules for applications for authorisation of health claims.

Additional procedural aspects for EFSA concern:

Communication with applicants

All communication between EFSA and the applicant is through the staff of the NDA Unit (not the Panel experts). There are five points during the procedure where direct or indirect communication between EFSA and the applicant may occur.

1. Indirect - during the admissibility check carried out by the Member State through which the application is submitted. EFSA staff liaise with the Member State regarding whether the application fulfils the criteria for the health claim classification under which it was submitted (i.e. Article 14 for claims related to children's development and health or the reduction of disease risk, or Article 13.5. newly developed science/proprietary data).

2. Direct - before EFSA considers the application complete, EFSA staff communicate with the applicant regarding completeness of the application and compliance with administrative procedures. Completeness checking includes administrative completeness checking, clear identification of the food/constituent for which the claim is made (consistency throughout application), clear definition of the claimed effect (a defined claimed effect including identification of endpoint(s) and methods of measurement, identification of (a) risk factor(s) for disease risk reduction claims), and definition of conditions of use. Identification of the food/constituent, the claimed effect and the conditions of use are key decision points for the evaluation.

3. During evaluation - EFSA may request the applicant to provide supplementary information on the application ('stop the clock' procedure). Requests from EFSA staff to applicants for supplementary information are made based on a case–by-case judgement by the NDA Panel experts. In addition to requests for clarification of aspects of data presented in the application, EFSA uses the 'stop the clock' procedure to request, when the NDA experts consider appropriate, supplementary information from applicants related to the definition of the claim, e.g. the proposed food/constituent, the claimed effect, risk factors for disease, and conditions of use. The experience of the NDA Panel has shown that issues relating to the definition of these elements of claims that become apparent only during assessment of the application can have a significant bearing on the evaluation. Therefore, EFSA considers that this communication procedure is helpful both to applicants and the NDA Panel.

If the applicant fails to provide the supplementary information within a time limit as specified by EFSA, the NDA Panel will issue an opinion based on the data provided in the application.

4. Notification - before publication of the adopted opinion EFSA sends applicants a copy of the adopted opinion in advance of publication for their information and to give the possibility to the applicant to indicate any errors and to check that no confidential data are disclosed unnecessarily. No re-opening of the scientific evaluation is foreseen at this step.

5. Indirect - after publication of the opinion, EFSA replies to requests from the Commission in relation to scientific comments on the opinion submitted during the public comment period (30 days following publication of the opinion) provided for in Regulation (EC) No 1924/2006. Such comments may be from applicants (among others). In addition, as appropriate, EFSA may be asked by the Commission for additional advice, e.g. in relation to conditions of use of the claim, or scientific aspects of the wording of the claim.

Use of proprietary data

Where evidence for substantiation includes a request for the protection of proprietary data, the NDA Panel only considers whether the claim could not have been substantiated without the data claimed proprietary by the applicant. In such cases, applicants should ensure that in addition to all proprietary also all non-proprietary data pertinent to the claimed effect are included in the application.

The decision on the protection of proprietary data, as appropriate, falls within the responsibility of the European Commission.

Use of confidential data

The applicant should keep the designation of confidential information to a minimum.

For transparency reasons, those data and information, which are considered essential for the scientific assessment are released in the opinion, e.g. broad description of the study and main outcome.

11. Procedural aspects for Article 13.1 health claims

The Article 13 list of health claims

The updated consolidated database of Article 13.1 health claims published in May 2010 contains the 4,637 main health claim entries submitted to EFSA for evaluation[16]. Around 10,500 similar health claims / health relationships have been clustered within these main health claim entries. These health claims/relationships describe similar effects of a substance on the body and include the conditions of use and literature that EFSA will have to take into account in its scientific evaluation.

The list can be found at: http://www.efsa.europa.eu/panels/nda/claims/article13.htm.

This list incorporates amendments to the earlier version of the Access database published on the EFSA website in January 2009 and which were requested by the European Commission and Member States, including:

- re-allocation of a number of similar health claims which had been accidentally placed under a wrong main health claim entry (misplaced claims).
- a number of similar health claims identified by Member States which were not submitted to EFSA with the original list ("missing claims") and which were added to the database under the appropriate main health claim entry.

[16] Lists of Article 13 health claims received by EFSA from the Commission:

July 2008: draft list with 2870 main entries and about 7000 similar health relationships in 9 separate Access files including 885 botanicals). This was a consolidated list of Article 13 claims submitted by Member States to the European Commission (about 44,000 claims in total, accompanied by the conditions of use and by references for the scientific substantiation).

November 2008: list with 3,138 main entries and over 8,000 similar health relationships in 9 separate Access files (health claims for botanicals not included). This was a revision of the draft list received in July 2008.

December 2008: list of health claims (mainly for botanicals) with 4,185 main entries and about 10,000 similar health relationships in 9 separate Access files. This was a revision of the draft list received in July 2008.

March 2010: addendum to the list with 452 main entry claims (single entries with no additional similar health relationships). This was an addition to the list received in July, November and December 2008.

Detailed information on each claim, including evaluation status, question number and proposed deadline for completion of evaluation is also available through the EFSA Register of Questions[17].

The list of Article 13 health claims published on the EFSA website constitutes an EFSA working document for internal use. This list is not, and cannot be interpreted as being, representative of the final Community list of permitted health claims to be adopted by the European Commission in accordance with Article 13(3) of Regulation (EC) No 1924/2006.

EFSA is not accountable for the content of the list as the content lies solely within the responsibility of the European Commission/Member States. Therefore questions related to this (updated) list should be directed to the respective National Competent Authority or the European Commission.

Screening of claims

EFSA has screened all health claims contained in the original consolidated list of Article 13 health claims which was received by EFSA in 2008 using six criteria established by the NDA Panel to identify claims for which EFSA considered sufficient information had been provided for evaluation and those for which more information or clarification was needed before evaluation could be carried out[18].

Approximately 2,000 main health claims entries were referred back to the European Commission/Member States in January 2009 for further information or clarification. The outcome of this screening is indicated for each claim (main entry) on the list. The European Commission had agreed to coordinate with Member States the provision of the information or clarification needed by the NDA Panel in order to carry out the evaluation of these claims. For the remaining claims, the NDA Panel proceeded with the evaluation.

This screening was based on the information provided on the list, i.e. the name of the food, the proposed health relationship, the proposed conditions of use and examples of wordings. Screening was applied to all claims in the same way. For example, 94 claims (main entries) were considered to require more information or clarification with respect to criterion 4 'foods which are not sufficiently characterised or conditions of use are not sufficiently specified'. This procedure was undertaken because the screening step showed that the information provided on the list (the name of the food and/or the proposed conditions of use) for the food/constituent was not properly identified for the assessment purposes (e.g. 'dairy products' or 'soups'). Therefore scientific evaluation of the claim was not started and the claim was referred back to the Commission for more information or clarification with regard to criterion 4.

Many claims (main entries) were considered to require more information or clarification with respect to criterion 2 'general well-being claims where the health relationship is not clear' and 3 'claims which are too vague (claimed effect not specified/measurable)'. This means that based on the screening of the information provided on the list (the proposed health relationship and examples of

[17] http://registerofquestions.efsa.europa.eu/roqFrontend/questionsListLoader?panel=ALL

[18] **Screening criteria**

1. Claims where clarification on legal scope is needed (e.g. claims referring to risk reduction or referring to children's development and health, or medicinal claims)
2. General well-being claims where the health relationship is not clear, e.g. "Compound X supplementation to sustain vitality while aging"
3. Claims which are too vague (claimed effect not specified/measurable), e.g. Compound X and "energy and vitality". Proposed wording: Compound X is "necessary to maintain energy and general vitality"
4. Foods which are not sufficiently characterised or conditions of use are not sufficiently specified
5. Combination constituents that are not sufficiently defined
6. Claims in languages other than English (to be returned for translation). If EFSA is asked to carry out the translations, EFSA will send translated claims back to Member States for validation of the translation.

wordings), a specific claim could not be identified owing to lack of definition of the claim or that the only claims defined were of a general, non-specific nature (e.g. 'sustain vitality while ageing'). Therefore, evaluation of the claim was not started and the claim was referred back to the Commission for more information or clarification with regard to criterion 2 or 3. Claims were not referred back to the Commission under criterion 2 or 3 if any specific claim could be identified from either the health relationship or the proposed wordings.

In June 2009 EFSA also referred back to the Commission/Member States a number of so-called product specific claims and comparative claims for consideration of their eligibility. In its letter of 9 November 2009 the Commission indicated that the assessment of comparative claims should proceed.

As product specific claims are not eligible under the Article 13 claims procedure, EFSA received back in March 2010 only those claims which could be transferred into a generic food/food constituent.

References

The references provided by Member States were either included in the Access database or were submitted in separate files. In addition, full-text copies of references were provided directly to EFSA from some stakeholders. The deadline for submission of full-text copies of references was at the end of 2008. In some instances, references provided to EFSA referred to papers which were submitted for publication. In the case of subsequent publication in the public domain, EFSA has endeavoured to include the correct citation in the list of references and this inclusion may result in some references carrying a 2009 publication date.

A compilation of the references for around 2,200 claims is already published on the EFSA website, which correspond to around 40,000 individual references[19].

This compilation includes also all submitted references for main health claim entries for which EFSA has already published an opinion. EFSA is continuing to compile the references for the remaining claims and will update the documents containing the list of references.

Some issues related to the references provided are covered in section 3.

Schedule of adoption and publication of opinions

In total EFSA has received 4,637 health claims. Out of these, 937 health claims have been already evaluated and published by EFSA in respective opinions. In addition, EFSA has registered as withdrawn by 22 March 2010 a total of 297 claims, which were still in progress at the level of EFSA at the time of withdrawal. This leaves EFSA with 3,403 claims still to be evaluated based on the information received. The NDA Panel will continue to evaluate the remaining claims on the list, by taking into account the clarification EFSA has received from the European Commission via its correspondence of 9 November 2009 (SANCO/E4/LK/lb (2009)D/540731) and the information received from the Commission in the correspondence of 12 March 2010 in relation to those claims in the consolidated list for which EFSA had asked for further information in January 2009 and June 2009. The correspondence between EFSA and the European Commission on the Article 13 claims list can be found in the EFSA Register of Questions at the bottom of the section related to the specific mandate (Mandate number: M-2008-1061).

Taking into account the high number of claims to be evaluated and in order to comply with requirements for transparency[20] and to keep the workload manageable, the NDA Panel and EFSA will

[19] http://www.efsa.europa.eu/panels/nda/claims/article13.htm

[20] Regulation (EC) No 178/2002 requires EFSA to make public without delay the opinions of the Scientific Panels

572 continue to adopt and publish claims opinions in series. In this context, EFSA is trying to be as
573 efficient as possible in combining claims into series of opinions to be published.

574 EFSA envisages completing its work on the remaining 3,403 health claims by 31 December 2011, but
575 this overall timeframe may need to be reconsidered in case new priorities emerge for the evaluation of
576 Article 13 health claims, in particular in the context of a possible resubmission of those Article 13
577 health claims for which the Panel already issued an opinion and concluded that there is insufficient
578 substantiation or that the food/food constituent was not sufficiently characterised.

579 ***EFSA's contact point for further clarification on claims***

580 Based on the Regulation (EC) No 1924/2006, the list of claims has been submitted to EFSA from
581 Member States via the European Commission. Therefore, the EFSA's contact point for any issues
582 related to the Article 13 list is the European Commission/Member States.