

EFSA's "Secret" Health Claims*

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Many health claims whose authorisation the food industry had hoped would not cause any problems, have found no grace before the European Food Safety Authority (EFSA). Amongst the different grounds for rejection, which are often inadequately explained, one stands out, namely "lack of precision" regarding the health relationship. Such claims that have been negatively evaluated by EFSA are not authorised by the European Commission. The authors present an option whereby these EFSA-assessed, unauthorised health claims can be used for the marketing of foods in practice, provided the relevant products contain vitamins or minerals or other substances for which health claims have been authorised.

I. Background and problems

The European Food Safety Authority (EFSA) has repeatedly advertised that it is convinced of the effectiveness of its operating methods as well as by its results. On 28 July 2011, after years of work, EFSA claimed to have reached a "major milestone in its evaluation of health claims".¹ This statement addressed the conclusion of the scientific assessment of approximately half of all general health claims to be evaluated pursuant to Art. 13 paras. 2 and 3 of Regulation (EC) No. 1924/2006 on nutrition and health claims (NHCR) which eventually led to Regulation (EU) No. 432/2012 establishing a partial list of such claims.²

However, while critics concede the magnitude of EFSA's effort, they do not view such effort as the accomplishment that the authority claims for itself. This is mainly because until today EFSA has always appeared largely resistant to criticism and deflects almost every argument against its success. Con-

fronted by justified objections against scientific evaluations that are often rejected without substantive debate, the authority sticks to its opinion. With this ex-cathedra attitude, however, EFSA threatens exactly the scientific credibility that it claims for itself. Evaluations according to the "basta"-principle, without a chance for dialogue, contradict scientific conventions.

Because EFSA often fails to provide the claims that come before it their "day in court", much is left to speculation, in particular, what standards the authority applies *in an individual case* and why its criteria vary case by case. Surely the small group of scientists has privately contributed to a fundamental change in the world of health claims since 14 December 2012³ when Regulation (EU) No. 432/2012 "establishing a list of permitted health claims made on foods, other than those referring to the reduction of disease risk and to children's development and health" came into effect.

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1 EFSA Press Release, 28.7.2011: "Scientists on the European Food Safety Authority's NDA Panel have reached a major milestone in their work on health claims by publishing evaluations of the last group of 'general function' claims, excluding those related to botanical substances", <<http://www.efsa.europa.eu/en/press/news/110728.htm>> (last accessed on 25 January 2013).

2 Cf. regarding this Regulation Teufer, GRURPRax 2012, 476; Hartwig/Memmler, StoffR 2012, 183, 184 as well as Hahn/Hagenmeyer, ZLR 2013, 4.

3 Cf. in this respect Hahn/Hagenmeyer, ZLR 2013, 4.

1. Authorised specific health claims

The new Regulation (EU) No. 432/2012 realises a core part of the NHCR, namely the establishment of a so-called "Article 13 list" of permitted general health claims. The Annex to Regulation (EU) No. 432/2012, however, only contains a "partial Community list" (or "partial Union list") because the authorisation proceedings pursuant to Art. 13 para. 3 NHCR were only concluded for the first part of the claims that the Member States had submitted to the Commission in accordance with Art. 13 para. 2 NHCR.⁴ When and if there will ever be a complete list remains uncertain. It is not even known when to expect a further part of the list. With respect to applications for health claims regarding plant or herbal substances ("botanicals") EFSA is currently unable to perform an evaluation.⁵ Several other claims have not been authorised so far in spite of positive EFSA assessments because the Member States criticise unclear conditions of use or because certain – scientifically substantiated – claims are denied their authorisation for political reasons.

There are also restrictions for the 222 health claims authorised pursuant to Art. 1 of Regulation (EU) No. 432/2012. Products may only use the health claims if the relevant conditions of use listed in the Annex to the Regulation are met and any other conditions or restrictions are taken into account or additional statements or warnings are labelled. The product label must also observe the general conditions for all nutrition and health claims pursuant to Art. 5 NHCR. Finally, there are several questions regarding how far a product's label may deviate from the statutorily prescribed wording of authorised claims and to use any additional explanations of claims consumers cannot understand.⁶

The situation is even more complicated with respect to claims that have not been authorised by Regulation (EU) No. 432/2012. In this respect, one must take a close look at the state of procedure of the respective claim. First of all, the new Regulation causes the transitional measures of Art. 28 para. 5 NHCR largely to expire; accordingly, most health claims "may be made from the date of entry into force of this Regulation until the adoption of the list referred to in Article 13 (3), under the responsibility of food business operators provided that they comply with this Regulation and with existing national provision applicable to them". Now, one could argue that the "Article 13 list" has not yet materialized since it is merely a partial list, and that the transitional measures are thus effective until the adoption of the "final list".⁷ However, this approach is problematic, especially since the list will never become final because Art. 13 para. 5 NHCR permits ongoing applications for the authorisation of new claims.

Accordingly, the transitional measures will only continue to apply partially because recital 11 of Regulation (EU) No. 432/2012 reads as follows: "Claims whose evaluation by the authority or whose consideration by the Commission has not yet been completed will be published on the website of the Commission and may continue to be used pursuant to Article 28 (5) and (6) of Regulation (EC) No. 1924/2006".⁸ Hence, the transitional measures remain applicable to these claims which have not been finally assessed and are listed by the Commission on its register-website⁹ under the caption "pending claims"¹⁰ (or "on-hold-claims") with their ID numbers. The pending claims essentially consist of claims about so-called "botanicals" as well as claims that, in the Commission's opinion, require a new evaluation by EFSA. Furthermore, the list on the website contains claims which have been assessed, "but due to other legitimate factors consideration

4 Cf. the Commission's press release of 27.9.2009: "The list of permitted claims will therefore be established in two steps.", http://europa.eu/rapid/press-release_IP-10-1176_en.htm, as well as *Meisterernst*, WRP 2012, 405, 407.

5 Cf. regarding this issue the "Discussion paper on health claims on botanicals used in foods" of the European Commission, Annex to BLL circular No. 413-2012 of 17.8.2012, as well as <http://www.efsa.europa.eu/en/topics/topic/botanicals.htm>.

6 Cf. in this respect in detail *Hahn/Hagenmeyer*, ZLR 2013, *** as well as *Teufer*, GRURPrax 2012, 476, 477; *Hartwig/Memmler*, StoffR 2012, 183, 185.

7 Regarding the transitional measures cf. *Seehafer*, Von der Missbrauchskontrolle zum generellen Verbot: Übergangsregelungen

der VO (EG) 1924/2006 über gesundheitsbezogene Angaben für Lebensmittel und ihre wettbewerbsrechtliche Bedeutung, Hamburg 2012.

8 This does not mean anything but the application of the present principle of abuse upon the basis of current national law; the permissibility of claims must then be judged pursuant to the relevant national implementations of Art. 2 para. 1 lit. a) of Labelling Directive 2000/13/EC; cf. also *Teufer*, GRURPrax 2012, 476, 478 as well as *Hartwig/Memmler*, StoffR 2012, 183, 186–187.

9 <<http://ec.europa.eu/nuhclaims>> (last accessed on 25 January 2013).

10 <http://ec.europa.eu/nuhclaims/resources/docs/claims_pending.pdf> (last accessed on 25 January 2013).

[could not] be completed by the Commission at [that] time" according to recital 10 of Regulation (EU) No. 432/2012, especially because they are subject to political reservations. For example, claims about the health effects of caffeine fall into this category.

Health claims labelled as "non-authorised" in the EU register are banned for the relevant substances in the particular form listed. Almost all of the non-authorised claims have been negatively evaluated by EFSA and thus do not meet the requirements of Art. 6 para. 1 NHCR. Accordingly, in the opinion of the authority, such claims lack substantiation by "generally accepted scientific evidence" and were not authorised for that reason. This article shall partly focus on unauthorised claims even though they may appear of little interest since they do not meet the approval requirements. It shall be shown in this article what types of claims are rejected and how one can make sensible use of them in food marketing nonetheless by gaining entrance to the area of permitted claims by way of an NHCR "back-door". First, however, EFSA's scientific evaluations have to be considered in this context.

2. EFSA's scientific opinions on non-specific claims

In order for the Community to authorise a health claim pursuant to Art. 17 para. 1 NHCR, EFSA must first give it a positive scientific evaluation. The authority's opinions thus merit further consideration together with its method of scientific evaluation. It becomes apparent that the competent "NDA panel" works rather mechanically, and one can largely make the same observations when examin-

ing the "scientific" opinions. In evaluating applications for the authorisation of health claims, the authority regularly proceeds in three steps:¹¹

- 1) Initially, it looks at the nutrient or substance at issue and asks whether it is sufficiently characterised.
- 2) Then, it clarifies whether the health effect to be assessed is defined with sufficient precision and essentially whether it is positive, i.e. whether it is relevant to human health; in this context, the authority interprets the submitted claim from its perspective and whether it perceives the claimed health relationship as beneficial.
- 3) Finally, it examines the scientific substantiation of the claimed health effect upon the basis of the submitted documents, and determines whether, in its opinion, there is a causal relationship between the substance and effect.

Wherever these three hurdles are surmounted, EFSA comments on the proposed wording of the health claim as well as potential conditions of use and restrictions.¹² It follows from the step-by-step method that the evaluation terminates or leads to a negative result if either the first or second criterion is not met in the authority's view.¹³ As a consequence, only such claims are considered assessable which relate to a defined substance and its specific health effect. So, if a substance is insufficiently characterised from the perspective of EFSA or if the health relationship is unclear or not beneficial, the essential requirements of a permissible health claim are perceived to be lacking.¹⁴

In the context of step 2, the "NDA panel" has concluded in a number of opinions that the claimed effect is "general and non-specific".¹⁵ This verdict

11 Cf. only "General guidance for stakeholders on the evaluation of Article 13.1, 13.5 and 14 health claims", EFSA Journal 2011;9(4):2135, page 8, <<http://www.efsa.europa.eu/en/efsajournal/doc/2135.pdf>> (last accessed on 25 January 2013), as well as the instructive and by all means recommendable video on <<http://www.efsa.europa.eu/de/topics/topic/nutrition.htm>> (last accessed on 25 January 2013).

12 Statements by EFSA regarding steps 2) and 3) in several scientific opinions, which are worthy of criticism, shall not be dealt with in this article.

13 Cf. in this context by way of example <<http://www.efsa.europa.eu/en/efsajournal/doc/2024.pdf>> (last accessed on 25 January 2013); in this case EFSA had to assess a health claim regarding resistant starch. The health relationship "reduction of post-prandial glycaemic responses" (ID 681) was perceived as "may be a beneficial physiological effect", the claims "digestive health benefits" (ID 682) and "favours a normal colon metabolism", however, were evaluated as "general and non-specific,

and do[es] not refer to any specific health claim as required by Regulation (EC) No 1924/2006".

14 This also corresponds with the definition of a health claim in Art. 2 para. 2 No. 5 NCHR: "any claim that states, suggests or implies that a relationship exists between a food category, a food or one of its constituents and health". There can only be a (specific) health claim capable of authorisation if it is unambiguously clear *what has an effect on what*. Cf. in this context OLG Stuttgart, ZLR 2011, 352 – "So wichtig wie das tägliche Glas Milch" as well as BGH, ZLR 2011, 226 – "Gurktaler Kräuterkör"; cf. regarding this issue also *Meisterernst*, ZLR 2012, 652, 656–657.

15 Especially in the "Scientific opinion on the substantiation of health claims related to various food(s)/food constituent(s) and health relationships that are not sufficiently defined", EFSA Journal 2011;9(6):2228, page 2, <<http://www.efsa.europa.eu/de/efsajournal/doc/2228.pdf>> (last accessed on 25 January 2013).

has led to a negative opinion in each case so that the relevant health claims could not be authorised. In these cases, EFSA objects that the claims are not worded with sufficient precision or that the data does not substantiate a dose-effect-relationship because of "lack of precision regarding the health claim being made".¹⁶ So, these are clearly *not* claims in which the nutrients or other substances have no effect. It is rather the authority's opinion that the wordings or claims are too imprecise for scientific assessment at all,¹⁷ as the Commission's website mentions in the "claims" register.¹⁸

When EFSA classifies an individual claim as insufficiently defined or imprecise, it regularly explains its conclusion (in an opinion) in the same general way as when it perceives a health relationship to be sufficiently precise and beneficial to health.¹⁹ In its collective opinions, the authority has grouped several claims that it perceives – for different reasons – as incapable of evaluation or incapable of authorisation pursuant to the NHCR requirements, respectively.²⁰ These include, for example, claims that are eliminated because of the intended prevention or therapy of diseases,²¹ claims that are not or not generally perceived as positive/beneficial,²² and claims that do not relate to a specific function of the body.²³ Furthermore, the "NDA panel" lists a number of claims that it views as general and unspecific because they "do not refer to any specific health claims". In most negative cases, one may read this or similar wording: "The claimed effects are not sufficiently defined and no further details were provided in the proposed wordings for the clarifications provided by Member States. From the references provided it was not possible to establish the specific effect which is the target for the claim." In individual cases, one can find by way of

further explanation the following: "The Panel notes that different health outcomes were mentioned in the references provided and it was not possible to establish the specific effect which is the target for the claim ..."; "... or that the references provided did not contain original scientific data and it was therefore unclear how the health outcomes cited in the proposed wordings ... could be defined and assessed", or "... and that a specific effect related to the function of ... has not been identified." According to EFSA, the substance's specific effect on health is thus lacking.

That is to say, where EFSA could not detect a *specific* health relationship regarding a defined body function/structure in an application, and such relationship could not be drawn from the submitted data either, EFSA rejected the corresponding claim for mere formal reasons as non-specific and therefore insufficient. If such phrases are thus not specific health claims capable of authorisation pursuant to Art. 13 NHCR, one has to examine in each individual case whether they can be perceived as general health related "references" pursuant to Art. 10 para. 3 NHCR and may be used under the conditions stipulated therein.

3. The linking provision of Art. 10 para. 3 NHCR

The particular mechanism of Art. 10 para. 3 NHCR requires further explanation in this context. Pursuant to this provision, it is allowed in certain circumstances to make "reference to general, non-specific benefits of the nutrient of food for overall good health and health related well-being". These "references" have to be correctly categorised as health claims within the meaning of Art. 2 para. 2

16 EFSA Press Release, 28.7.2011, <<http://www.efsa.europa.eu/en/press/news/110728.htm>> (last accessed on 25 January 2013).

17 Cf. also Seehafer, Von der Missbrauchskontrolle zum generellen Verbot, 2012, 170–172.

18 One can read there under the caption "Reasons for non-authorisation": "Non-compliance with the Regulation because on the basis of the scientific evidence assessed, this claimed effect for this food is not sufficiently defined to be able to be assessed and the claim could not therefore be substantiated.", <<http://ec.europa.eu/nuhclaims/>>.

19 Regularly the authority only sets out: "The Panel considers that normal function of [...] is beneficial to human health"; cf. instead of many others <<http://www.efsa.europa.eu/en/efsajournal/doc/1213.pdf>> (last accessed on 25 January 2013).

20 "Scientific opinion on the substantiation of health claims related to various food(s)/food constituent(s) and health relationships

that are not sufficiently defined", EFSA Journal 2011;9(6):2228, <<http://www.efsa.europa.eu/de/efsajournal/doc/2228.pdf>> (last accessed on 25 January 2013).

21 For example, prevention and therapy of prostate cancer/diarrhoea and vomiting/acne/cellulites.

22 For example, reduction of stomach acid, increasing the number of gastro intestinal microorganisms, increasing the number of natural killer cells or reduction of alcohol absorption.

23 These are claims on skin, hair and nails that are grouped under the categories "skin health", "maintenance of normal structure and appearance of hair and nails" as well as "maintenance of normal structure and elasticity of the skin". Since these are thus not claims within the meaning of the NHCR, they may continue to be used in food advertising as long as they comply with the general ban on deception pursuant to Art. 2 para. 1 of Labelling Directive 2000/13/EC.

No. 5 NHCR,²⁴ which, however, are not capable of authorisation as specific health claims for lack of precision.²⁵ Typical examples of such claims are terms like "beneficial"²⁶ or "wholesome" in conjunction with a reference to "gentle acid",²⁷ but also "healthy" in general as well as any more or less imprecise health phrase. Art. 10 para. 3 NHCR apparently makes special provision for claims that meet two conditions: They have to a) show a health relationship beyond the general well-being, and they must b) not be specifically health-related. The classic example is "apples are healthy".

If a "reference", however, neither relates to health in general nor to the health-related well-being, it is not covered by the statutory provision of Art. 10 para. 3 NHCR and therefore does not need to meet any further conditions of the NHCR in principle. Parties have previously disputed the demarcation of claims that concern a general, but not a health related well-being, including, in particular, the term "wholesome" ("bekömmlich") on its own which was correctly classified as not health-related by German courts.²⁸ Also, the statement "as important as the daily glass of milk"²⁹ led to debates.

Pursuant to Art. 10 para. 3 NHCR, references to general, non-specific health advantages are admissible if they are "accompanied by a specific health claim". The text of the law does not clearly state whether this accompanying claim has to share a link with the non-specific reference.³⁰ However, if unspecific references are joined with health claims

to which there is no link, dangers of deception are unavoidable.³¹ For example, if an advertisement joins the non-specific advantages of a product for "hormonal balance" with the authorised claim "Vitamin B₆ contributes to the regulation of hormonal activity", there is a justified link. However, if a food advertisement claims the food is good for "skin health" and joins the authorised claim "Riboflavin contributes to the maintenance of normal red blood cells", it may create the false impression that red blood cells have an influence on healthy skin, which, however, can hardly be scientifically proven and will be misleading for this reason alone.³² The danger of deception becomes even clearer, by way of a further example, if an ad joins the unspecific reference "skin health" with the authorised specific claim "Lactulose contributes to an acceleration of intestinal transit".

Therefore, it should be recommended in practice to only join authorised health claims that have a *link as to its contents* with the relevant non-specific reference.³³ For this purpose, they must concern a specific function that can be justifiably grouped with the unspecific reference. The closer the link, the smaller the risk of deception. It is also advisable to label the authorised claim in the visible vicinity of the non-specific reference, since the statutory term "accompanied by" is unclear in this respect.³⁴ Compared to other food law provisions, e.g. Art. 10 para. 1 in conjunction with Annex III Food Information Regulation (FIR),³⁵ it follows, however, that

24 Cf. only *Meisterernst*, ZLR 2012, 652, 655–657 and *Meisterernst/Haber*, Nutrition & Health Claims, Art. 10 NHCR marginal 18 together with the cases cited there in footnote 1 as well as Art. 2 NHCR marginal 25; dissenting *Zipfel/Rathke*, Lebensmittelrecht, C 111, Art. 10 VNGA marginal 32 and Art. 2 NHCR marginal 46.

25 Thus, expressly *Meisterernst/Haber*, Nutrition & Health Claims, Art. 2 VNGA marginal 26 as well as Art. 10 NHCR marginal 22.

26 BGH, ZLR 2011, 226, 230 – "Gurktaler Kräuterlikör" with critical casenote *Sosnitza*.

27 ECJ, ZLR 2012, 602, 611–612 – "Deutsches Weintor" with critical casenote *Gorny/Meier*; cf. in this respect also *Meisterernst*, ZLR 2012, 652, 660.

28 Cf. BGH, ZLR 2011, 226, 229–230 – "Gurktaler Kräuterlikör" and OLG Düsseldorf, ZLR 2010, 366, 369 – "Wohlbefinden für den Magen" with consenting case note *Schwinge*; cf. also BVerwG, ZLR 2011, 103, 107–108 – "bekömmlich II" with consenting case note *Koch*.

29 Not health-related with considerable arguments pursuant to OLG Stuttgart, ZLR 2011, 352 – "So wichtig wie das tägliche Glas Milch" (following BGH, ZLR 2011, 226 – "Gurktaler Kräuterlikör"); in the meantime, health-related without further reasons pursuant to BGH, ZLR 2013, 4 – "Monsterbacke".

30 *Meisterernst/Haber*, Nutrition & Health Claims, Art. 10 NHCR marginal 25 demand such a link regarding nutrients, but not regarding food; however, they qualify this in marginal 26; cf. also *Meisterernst*, WRP 2012, 405, 411.

31 Cf. also *Loosen*, ZLR 2006, 521, 527–528 as well as *Melchor/Timmermanns*, EFFL 2010, 22, 26–27.

32 So far as one does not take the hardly convincing view that almost all body functions are connected to one another and there is thus at least an indirect relationship in (almost) every case.

33 The European Commission apparently also desires such a link: "The specific claims from the lists of permitted health claims should bear some relevance to the general reference. ... to avoid misleading consumers, food business operators have the responsibility to demonstrate the link between the reference to general, non-specific benefits of the food and the specific, accompanying, permitted health claim(s)", Draft of a Commission Implementing Decision "Guidelines for the implementation of specific conditions for health claims", Enclosure 4 to BLL circular 536–2012 of 8.11.2012; cf. also *Hartwig/Memmler*, StoffR 2012, 183, 185.

34 Cf. in this respect *Meisterernst/Haber*, Nutrition & Health Claims, Art. 1 NHCR marginal 79 and Art. 10 NHCR marginal 23.

35 Cf. in this respect *Hagenmeyer*, FIR Commentary, Berlin 2012, Art. 10 marginal 3.

neither an immediate conjunction of claim and reference nor the appearance of both items in the same field of vision is prescribed. In case of doubt, it is therefore sufficient to put an authorised claim on the back of a packaging in order to properly accompany a non-specific reference on the front of the pack.

In the meantime, the Commission itself has expressed its view, claiming as follows: *"Some claims submitted for authorisation, were judged during their scientific assessment, to be too general or non-specific for evaluation. These claims could not be authorised This does not exclude that these claims could benefit from the provisions laid down in Article 10(3) of the Regulation and can therefore be lawfully used when they are accompanied by a specific claim from the list of permitted health claims in accordance with that Article"*³⁶ In other words, according to the Commission, all health claims evaluated as general and non-specific by EFSA can be considered as references within the meaning of Art. 10 para. 3 NHCR. They can therefore be used as set out above under the conditions mentioned in that provision.

II. Use of general non-specific health references

Accordingly, one can conclude that a number of health claims that have been classified as non-specific by EFSA are therefore not capable of authorisation, and have not been authorised by the Commission. Furthermore, there is a statutory provision which expressly allows the use of non-specific references to health in general or health-related well-

being, provided such references are accompanied in each case by an authorised health claim which should, if possible, have a link as to its contents with the respective reference. Finally, there are 222 recently authorised health claims that may be used verbatim or with a wording that has the same meaning in accordance with recital 9 of Regulation (EU) No. 432/2012.³⁷ As such, what could be more obvious than considering useful links of authorised claims with fitting non-specific references? If EFSA, as the formally highest food scientific authority in Europe, classifies a claim as non-specific, this criterion cannot be the subject matter of serious discussions with authorities or competitors. Moreover, if the European Commission considers these non-specific claims as suitable to being linked pursuant to Art. 10 para. 3 NHCR, one cannot but discover them as EFSA's "secret" claims.

1. Linking non-specific references with specific health claims

The table of potential links below (2.) displays how one can use EFSA's non-specific health relationships in practice.³⁸ For this purpose, the first column contains several health-related references³⁹ that EFSA has expressly classified as general and non-specific.⁴⁰ These are joined with statutorily authorised health claims from Regulation (EU) No. 432/2012 in the second column that fit as regards their contents and are thus suitable for linking in principle.⁴¹

Claims were chosen as suitable for linking which have a scientifically substantiated relationship as to their contents with the relevant non-specific reference. Preferably, these are claims that show a direct

36 Draft of a Commission Implementing Decision "Guidelines for the implementation of specific conditions for health claims", Enclosure 4 to BLL circular 536-2012 of 8.11.2012.

37 Cf. in this respect in detail *Hahn/Hagenmeyer*, ZLR 2013, 4 as well as *Teufel*, GRURPrax 2012, 476, 477 and *Hartwig/Memmler*, StoffR 2012, 183, 185; cf. also *Loosen*, ZLR 2012, 401, 402.

38 These are, of course, only proposals, the suitability of which has to be examined in each individual case under all legal and scientific aspects. The question whether and to what extent the proposed possible links will endure before a court cannot be answered reliably at this stage.

39 The references have been grouped together.

40 Some claims were not included in the table since they are unclear even as non-specific claims (i.e. "membranes cell structure" or "rejuvenation") or refer to specific substances so that the link with the specific claim for a different substance might be perceived as deception (i.e. "consumption of bran

improves digestive function", "essential fatty acids to aid in digestive tract function", "immunomodulating agent due to EPA and DHA", "general tonic/vitamins and mineral supplementation from natural source", "all vitamins and minerals", "multivitamin supplementation to sustain vitality while aging"). At the same time, claims were eliminated which may be classified as disease-related (e.g. "immune defence against pathogens" or "antimicrobial/antiviral/innate host defence") as well as those where no fitting links could be identified ("kidneys"; "kidney health"; "supports/promotes the excretory function of the kidney"; "adrenal function" as well as "improves mechanical activity of gallbladder").

41 In principle, it is also possible to link the references with other authorised claims, i.e. such as those pursuant to Art. 13 para. 1 or 14 para. 1 NHCR that have been expressly authorised by the Commission in individual regulations. A detailed presentation shall not be made here; the procedure is the same as set out in this article.

and obvious connection. That is to say, other authorised claims might also correspond with the requirements of Art. 10 para. 3 NHCR. For example, the non-specific reference "women's health" could be presented in connection with any authorised claim in principle, as long as the conditions of use do not explicitly exclude women. Of course, the links could also differ in some places. Similar non-specific claims have been grouped to one category for better clarity.⁴²

All foods with ingredients that allow corresponding claims⁴³ may also be linked with the relevant references pursuant to Art. 10 para. 3 NHCR provided the references are accompanied by at least one authorised claim. Regarding the proposed links, it must also be taken into account that the authorised claims in accordance with Art. 1 in conjunction with the Annex to Regulation (EU) No. 432/2012 must always meet their individual requirements and have to comply especially with the pertinent specific conditions of use as well as the demands of Art. 5 of NHCR.⁴⁴ Finally, the third column lists the publication references that show that EFSA classifies the effects in the first column as general and non-specific.

The use of the table can be demonstrated with an example. Anyone wishing to use the non-specific reference "supports a healthy digestion" (first column) can do so, for instance, in conjunction with the authorised claim "Calcium contributes to the normal function of digested enzymes" (second col-

umn). Regarding vitamins and minerals, Regulation (EU) No. 432/2012 regularly demands that the advertised foods contain at least 15 % of the recommended daily amounts of the relevant nutrients pursuant to the Annex of Regulation (EC) No. 1000/2009;⁴⁵ the necessary amount of Calcium is 120 mg. It would also be possible to link the non-specific reference "supports a healthy digestion" with the authorised claim "Biotin contributes to the maintenance of normal mucous membrane"⁴⁶ because the gastro-intestinal tract has a functionally essential mucous membrane with a very large surface; normal digestion requires its maintenance. In this case, it would be sufficient to add 7.5 µg biotin to a portion of the food.

Finally, the condition of Art. 6 para. 3 NHCR has to be taken into account, in principle, with respect to the presented methods. Pursuant to this provision, competent food supervisory authorities of the Member States "may request a food business operator or a person placing a product on the market to produce all relevant elements and data establishing compliance with this Regulation". Accordingly, data should be available that is suitable to justify the link of an unspecific reference with one (or several) authorised specific health claim(s).

2. Table of possible links of non-specific references with authorised specific health claims

Claimed effects that are general and non-specific	Specific claim according to Regulation (EU) No. 432/2012	EFSA Journal
<p>General health; general health/contribution to a healthy and balanced diet; self well-being; enhance general state of the organism/helps body to properly functioning</p> <p>Please note: The claim "enhance general state of the organism" bears the risk of misleading consumers. There needs to be sufficient proof. In case there is no scientific evidence, it is advisable to replace "enhance" by "support" or "contribute to".</p>	All authorised claims	2010;8(10):1738

42 These groups could also be slightly different in some instances, especially since some categories contain borderline claims. However, this is hardly avoidable for systematic reasons.

43 Cf. in this respect also *Teufer*, GRURPrax 2012, 476, 477.

44 Cf. also *Hahn/Hagenmeyer*, ZLR 2013, ***, *Hartwig/Memmler*, StoffR 2012, 183, 186 as well as *Teufer*, GRURPrax 2012, 476.

45 This follows from the references to the conditions for the nutrition claims "source of vitamin" and "source of mineral" within the meaning of the Annex to the NHCR, respectively, which in turn refer to "significant amounts" within the meaning of the Annex to Directive 90/496/EEC as amended by Regulation (EC) No. 100/2009; cf. also *Hagenmeyer/Hahn*, StoffR 2010, 261.

46 Alternatively, this claim can also be made for Niacin, Riboflavin (Vitamin B₂) or Vitamin A.

Claimed effects that are general and non-specific	Specific claim according to Regulation (EU) No. 432/2012	EFSA Journal
Basic requirement of all living things	All authorised claims relating to the "normal function" of the body and including the term "normal" in their wording and Calcium has a role in the process of cell division and specialisation; Folate / Iron / Magnesium / Vitamin B ₁₂ / Vitamin D has a role in the process of cell division; Vitamin B ₆ contributes to the regulation of hormonal activity	2011;9(4):2075
Function of the cell membrane ; cell membrane permeability	Copper / Manganese / Riboflavin / Selenium / Vitamin C / Vitamin E / Zinc contributes to the protection of cells from oxidative stress; Phosphorus contributes to normal function of cell membranes	2011;9(6):2228; 2011;9(6):2220; 2011;9(4):2059; 2010;8(10):1725
Cell growth/cell functioning and structure	Calcium has a role in the process of cell division and specialisation; Calcium is needed for the maintenance of normal bones; Copper contributes to maintenance of normal connective tissues; Copper / Manganese / Riboflavin / Selenium / Vitamin C / Vitamin E / Zinc contributes to the protection of cells from oxidative stress; Folate / Iron / Magnesium / Vitamin B ₁₂ / Vitamin D / Zinc has a role in the process of cell division; Folate contributes to maternal tissue growth during pregnancy; Iron contributes to normal formation of red blood cells and haemoglobin; Magnesium / Manganese / Phosphorus / Protein / Vitamin D / Vitamin K / Zinc contributes to the maintenance of normal bones; Manganese contributes to the normal formation of connective tissue; Phosphorus contributes to normal function of cell membranes; Riboflavin contributes to the maintenance of normal red blood cells; Selenium contributes to normal spermatogenesis; Selenium / Zinc contributes to the maintenance of normal nails; Vitamin A has a role in the process of cell specialization; Vitamin B ₁₂ / Vitamin B ₆ contributes to normal red blood cell formation; Vitamin C contributes to normal collagen formation for the normal function of blood vessels; Vitamin C contributes to normal collagen formation for the normal function of bones; Vitamin C contributes to normal collagen formation for the normal function of cartilage; Vitamin C contributes to normal collagen formation for the normal function of gums; Vitamin C contributes to normal collagen formation for the normal function of skin; Vitamin C contributes to normal collagen formation for the normal function of teeth; Walnuts contribute to the improvement of the elasticity of blood vessels	2011;9(6):2235; 2011;9(6):2220; 2011;9(4):2078; 2011;9(4):2050
Molecule precursors regulating cell functions	ALA contributes to the maintenance of normal blood cholesterol levels; DHA contributes to the maintenance of normal vision; EPA and DHA contribute to the normal function of the heart	2011;9(4):2050
Skin and digestive tract epithelial cells maintenance Please note: This claim should only be used if it is linked to authorised claims about skin as well as mucous membranes. Otherwise the claim would only be partially permitted.	Biotin / Iodine / Niacin / Riboflavin / Vitamin A / Zinc contributes to the maintenance of normal skin; Biotin / Niacin / Riboflavin / Vitamin A contributes to the maintenance of normal mucous membranes	2011;9(4):2078

Claimed effects that are general and non-specific	Specific claim according to Regulation (EU) No. 432/2012	EFSA Journal
<p>Powerful protectors of our gums; dental and oral health including gum and tooth protection and strength; mouth</p> <p>Please note: In case broad non-specific claims should be used, it is advisable to link them to several authorised claims that refer to separate functional areas.</p>	<p>Biotin / Niacin / Riboflavin / Vitamin A contributes to the maintenance of normal mucous membranes;</p> <p>Calcium is needed for the maintenance of normal teeth;</p> <p>Consumption of foods/drinks containing <name of sugar replacer> instead of sugar contributes to the maintenance of tooth mineralisation;</p> <p>Copper contributes to maintenance of normal connective tissues;</p> <p>Fluoride / Sugar-free chewing gum contributes to the maintenance of tooth mineralization;</p> <p>Magnesium / Phosphorus / Vitamin D contributes to the maintenance of normal teeth;</p> <p>Manganese contributes to the normal formation of connective tissue;</p> <p>Sugar-free chewing gum contributes to the neutralisation of plaque acids;</p> <p>Sugar-free chewing gum contributes to the reduction of oral dryness;</p> <p>Sugar-free chewing gum with carbamide neutralises plaque acids more effectively than sugar-free chewing gums without carbamide;</p> <p>Vitamin C contributes to normal collagen formation for the normal function of gums;</p> <p>Vitamin C contributes to normal collagen formation for the normal function of teeth</p>	<p>2011;9(6):2215; 2011;9(4):2055; 2009;7(9):1271</p>
<p>Heart health; activity of heart</p>	<p>ALA / Beta-glucans / Chitosan / Glucomannan / Guar gum / Hydroxypropyl methylcellulose / Linoleic acid / Monacolin K from red yeast rice / Pectins / Plant sterols/stanols contributes to the maintenance of normal blood cholesterol levels;</p> <p>Biotin / Calcium / Copper / Iodine / Iron / Magnesium / Manganese / Niacin / Pantothenic Acid / Phosphorus / Riboflavin / Thiamin / Vitamin B₁₂ / Vitamin B₆ / Vitamin C contributes to normal energy-yielding metabolism;</p> <p>Calcium / Magnesium / Potassium contributes to normal muscle function;</p> <p>EPA and DHA / Thiamine contribute(s) to the normal function of the heart;</p> <p>Magnesium contributes to electrolyte balance;</p> <p>Magnesium / Zinc contributes to normal protein synthesis;</p> <p>Potassium contributes to the maintenance of normal blood pressure;</p> <p>Reducing consumption of sodium contributes to the maintenance of normal blood pressure;</p> <p>Vitamin B₆ contributes to normal protein and glycogen metabolism</p>	<p>2011;9(6):2215; 2010;8(10):1740</p>
<p>Vascular health; cardiovascular health; cardiovascular system</p>	<p>Betaine / Choline / Folate / Vitamin B₁₂ / Vitamin B₆ contributes to normal homocysteine metabolism;</p> <p>Calcium / Vitamin K contributes to normal blood clotting;</p> <p>EPA and DHA / Thiamine contribute(s) to the normal function of the heart;</p> <p>Iron contributes to normal oxygen transport in the body;</p> <p>Olive oil polyphenols contribute to the protection of blood lipids from oxidative stress;</p> <p>Potassium contributes to the maintenance of normal blood pressure;</p> <p>Reducing consumption of sodium contributes to the maintenance of normal blood pressure;</p> <p>Replacing saturated fats with unsaturated fats in the diet contributes to the maintenance of normal blood cholesterol levels [MUFA and PUFA are unsaturated fats];</p> <p>Replacing saturated fats in the diet with unsaturated fats contributes to the maintenance of normal blood cholesterol levels. Oleic acid is an unsaturated fat;</p> <p>Reducing consumption of saturated fat contributes to the maintenance of normal blood cholesterol levels;</p> <p>Vitamin C contributes to normal collagen formation for the normal function of blood vessels;</p> <p>Vitamin D contributes to normal blood calcium levels</p> <p>Water contributes to the maintenance of normal physical and cognitive functions;</p> <p>Walnuts contribute to the improvement of the elasticity of blood vessels</p>	<p>2011;9(7):2264; 2011;9(6):2259; 2011;9(6):2228; 2011;9(4):2067; 2011;9(4):2055</p>

Claimed effects that are general and non-specific	Specific claim according to Regulation (EU) No. 432/2012	EFSA Journal
Vein health; venous system; blood flow/vascular function	Betaine / Choline / Folate / Vitamin B ₁₂ / Vitamin B ₆ contributes to normal homocysteine metabolism; Calcium / Vitamin K contributes to normal blood clotting; Potassium contributes to the maintenance of normal blood pressure; Reducing consumption of sodium contributes to the maintenance of normal blood pressure; Vitamin C contributes to normal collagen formation for the normal function of blood vessels; Walnuts contribute to the improvement of the elasticity of blood vessels	2011;9(6):2228
Blood health	Calcium / Vitamin K contributes to normal blood clotting; Folate contributes to normal blood formation; Iron contributes to normal formation of red blood cells and haemoglobin; Riboflavin contributes to the maintenance of normal red blood cells; Vitamin B ₁₂ / Vitamin B ₆ contributes to normal red blood cell formation	2010;8(10):1742; 2010;8(10):1733
Hormonal balance; hormonal health	Iodine contributes to the normal production of thyroid hormones and normal thyroid function; Selenium contributes to the normal thyroid function; Vitamin B ₆ contributes to the regulation of hormonal activity; Zinc contributes to the maintenance of normal testosterone levels in the blood	2011;9(6):2228; 2010;8(10):1807
Sexual organs and/or hormone activity	Selenium contributes to normal spermatogenesis; Zinc contributes to normal fertility and reproduction; Zinc contributes to the maintenance of normal testosterone levels in the blood	2011;9(6):2228
Maternal health; pregnancy and nursing	Folate contributes to maternal tissue growth during pregnancy; Vitamin B ₆ contributes to the regulation of hormonal activity and all claims referring to the "normal function" which is also essential for mothers and during pregnancy and nursing	2011;9(4):2078
Women's health	Folate contributes to maternal tissue growth during pregnancy; Glucomannan in the context of an energy restricted diet contributes to weight loss; Iodine contributes to the normal production of thyroid hormones and normal thyroid function; Substituting one daily meal of an energy restricted diet with a meal replacement contributes to the maintenance of weight after weight loss; Substituting two daily meals of an energy restricted diet with meal replacements contributes to weight loss; Selenium contributes to the normal thyroid function; Vitamin B ₆ contributes to the regulation of hormonal activity; Water contributes to the maintenance of normal physical and cognitive functions; Zinc contributes to normal acid-base metabolism; Zinc contributes to normal carbohydrate metabolism; Zinc contributes to normal fertility and reproduction	2011;9(6):2228
Menstrual health	Vitamin B ₆ contributes to the regulation of hormonal activity	2011;9(6):2228
Absorption of nutrients	Meat or fish contributes to the improvement of iron absorption when eaten with other foods containing iron; Vitamin C increases iron absorption; Vitamin D contributes to normal absorption/utilisation of calcium and phosphorus	2011;9(6):2228

Claimed effects that are general and non-specific	Specific claim according to Regulation (EU) No. 432/2012	EFSA Journal
Digestive system; digestive health benefits; digestive function; joue un rôle dans le processus digestif; naturally boost your digestive system; digestion (stimulation); gastro-intestinal support; digestion; healthy and balanced digestive system; gastro-intestinal health; can help to maintain a normal function of gastrointestinal tract	Activated charcoal contributes to reducing excessive flatulence after eating; Barley grain fibre / Oat grain fibre / Wheat bran fibre contributes to an increase in faecal bulk; Biotin / Niacin / Riboflavin / Vitamin A contributes to the maintenance of normal mucous membranes; Calcium contributes to the normal function of digestive enzymes; Chloride contributes to normal digestion by production of hydrochloric acid in the stomach; Lactase enzyme improves lactose digestion in individuals who have difficulty digesting lactose; Lactulose / Wheat bran fibre contributes to an acceleration of intestinal transit; Live cultures in yoghurt or fermented milk improve lactose digestion of the product in individuals who have difficulty digesting; Rye fibre contributes to normal bowel function	2011;9(6):2233; 2011;9(6):2228; 2011;9(6):2207; 2011;9(4):2033; 2011;9(4):2024; 2010;8(10):1767; 2010;8(10):1762
Gut health; intestinal health; intestinal flora; function of the intestinal tract	Activated charcoal contributes to reducing excessive flatulence after eating; Barley grain fibre / Oat grain fibre / Wheat bran fibre contributes to an increase in faecal bulk; Biotin / Niacin / Riboflavin / Vitamin A contributes to the maintenance of normal mucous membranes; Lactase enzyme improves lactose digestion in individuals who have difficulty digesting lactose; Lactulose / Wheat bran fibre contributes to an acceleration of intestinal transit; Live cultures in yoghurt or fermented milk improve lactose digestion of the product in individuals who have difficulty digesting; Rye fibre contributes to normal bowel function	2011;9(6):2228; 2011;9(4):2051
Favours a normal colon metabolism	Activated charcoal contributes to reducing excessive flatulence after eating; Lactulose / Wheat bran fibre contributes to an acceleration of intestinal transit; Rye fibre contributes to normal bowel function	2011;9(4):2024
Stomach health; powerful protectors of the stomach	Biotin / Niacin / Riboflavin / Vitamin A contributes to the maintenance of normal mucous membranes; Chloride contributes to normal digestion by production of hydrochloric acid in the stomach	2011;9(6):2228
Liver; liver health; activity of liver	Choline contributes to the maintenance of normal liver function; Vitamin B ₆ contributes to normal protein and glycogen metabolism	2011;9(6):2228; 2011;9(4):2067; 2010;8(10):1740
Nervous system function; système nerveux	Biotin / Copper / Iodine / Magnesium / Niacin / Potassium / Riboflavin / Thiamin / Vitamin B ₁₂ / Vitamin B ₆ / Vitamin C contributes to normal functioning of the nervous system; Biotin / Folate / Magnesium / Niacin / Thiamin / Vitamin B ₁₂ / Vitamin B ₆ / Vitamin C contributes to normal psychological function; Calcium contributes to normal neurotransmission; DHA contributes to maintenance of normal brain function	2011;9(6):2228; 2011;9(4):2051
Mental energy; mental state and performance	Biotin / Folate / Magnesium / Niacin / Thiamin / Vitamin B ₁₂ / Vitamin B ₆ / Vitamin C contributes to normal psychological function; DHA contributes to maintenance of normal brain function; Folate / Iron / Magnesium / Niacin / Pantothenic Acid / Riboflavin / Vitamin B ₁₂ / Vitamin B ₆ / Vitamin C contributes to the reduction of tiredness and fatigue; Iodine / Iron / Zinc contributes to normal cognitive function; Melatonin contributes to the alleviation of subjective feelings of jet lag; Melatonin contributes to the reduction of time taken to fall asleep; Pantothenic acid contributes to normal mental performance; Vitamin B ₆ contributes to the regulation of hormonal activity; Water contributes to the maintenance of normal physical and cognitive functions	2011;9(6):2228; 2011;9(4):2067

Claimed effects that are general and non-specific	Specific claim according to Regulation (EU) No. 432/2012	EFSA Journal
Physical and mental health; mental health	Folate / Iron / Magnesium / Niacin / Pantothenic Acid / Riboflavin / Vitamin B ₁₂ / Vitamin B ₆ / Vitamin C contributes to the reduction of tiredness and fatigue; Alternative: Link with at least one authorised claim about physical and mental health	2011;9(6):2228
Physical performance and condition; physical performance; physical well-being	Calcium / Potassium / Magnesium contributes to normal muscle function; Calcium is needed for the maintenance of normal bones; Carbohydrate-electrolyte solutions contribute to the maintenance of endurance performance during prolonged endurance exercise; Choline contributes to the maintenance of normal liver function; Copper contributes to maintenance of normal connective tissues; Creatine increases physical performance in successive bursts of short-term, high intensity exercise; DHA / Riboflavin / Vitamin A / Zinc contributes to the maintenance of normal vision; EPA and DHA / Thiamin contribute(s) to the normal function of the heart; Folate / Iron / Magnesium / Niacin / Pantothenic Acid / Riboflavin / Vitamin B ₁₂ / Vitamin B ₆ / Vitamin C contributes to the reduction of tiredness and fatigue; Magnesium contributes to electrolyte balance; Magnesium / Manganese / Phosphorus / Protein / Vitamin D / Vitamin K / Zinc contributes to the maintenance of normal bones; Melatonin contributes to the alleviation of subjective feelings of jet lag; Protein contributes to a growth in muscle mass; Protein contributes to the maintenance of muscle mass; Vitamin B ₆ contributes to the regulation of hormonal activity; Vitamin C contributes to maintain the normal function of the immune system during and after intense physical exercise; Vitamin C contributes to normal collagen formation for the normal function of bones; Vitamin C contributes to normal collagen formation for the normal function of cartilage; Vitamin D contributes to the maintenance of normal muscle function; Water contributes to the maintenance of normal physical and cognitive functions; Water contributes to the maintenance of normal regulation of the body's temperature; Zinc contributes to normal acid-base metabolism; Zinc contributes to normal fertility and reproduction	2011;9(6):2228; 2011;9(4):2051
Overtraining and effort prevention	Carbohydrate-electrolyte solutions contribute to the maintenance of endurance performance during prolonged endurance exercise; Carbohydrate-electrolyte solutions enhance the absorption of water during physical exercise; Creatine increases physical performance in successive bursts of short-term, high intensity exercise; Folate / Iron / Magnesium / Niacin / Pantothenic Acid / Riboflavin / Vitamin B ₁₂ / Vitamin B ₆ / Vitamin C contributes to the reduction of tiredness and fatigue; Vitamin C contributes to maintain the normal function of the immune system during and after intense physical exercise; Water contributes to the maintenance of normal regulation of the body's temperature	2011;9(6):2228

Claimed effects that are general and non-specific	Specific claim according to Regulation (EU) No. 432/2012	EFSA Journal
<p>Skin; skin health; skin care</p> <p>Similar: "Skin and digestive tract epithelial cells maintenance", EFSA Journal 2011;9(4):2078</p>	<p>Biotin / Iodine / Niacin / Riboflavin / Vitamin A / Zinc contributes to the maintenance of normal skin;</p> <p>Copper contributes to normal skin pigmentation;</p> <p>Copper / Manganese / Riboflavin / Selenium / Vitamin C / Vitamin E / Zinc contributes to the protection of cells from oxidative stress;</p> <p>Vitamin C contributes to normal collagen formation for the normal function of skin</p>	<p>2011;9(6):2228;</p> <p>2011;9(4):2038;</p> <p>2011;9(4):2026</p>
Mucous membranes	Biotin / Niacin / Riboflavin / Vitamin A contributes to the maintenance of normal mucous membranes	2011;9(6):2228
<p>Immune system; immune health; essential for the balanced body functions, with special regards to the immune system; stimulation of the immune system; immune system function; immunity; immune function; immune system protection; natural immune function; effects on immune system</p>	<p>Calcium has a role in the process of cell division and specialisation;</p> <p>Copper / Folate / Iron / Selenium / Vitamin A / Vitamin B₁₂ / Vitamin B₆ / Vitamin C / Vitamin D / Zinc contributes to the normal function of the immune system;</p> <p>Folate / Iron / Magnesium / Vitamin B₁₂ / Vitamin D has a role in the process of cell division;</p> <p>Vitamin C contributes to maintain the normal function of the immune system during and after intense physical exercise</p>	<p>2011;9(6):2228;</p> <p>2011;9(6):2206;</p> <p>2011;9(4):2061;</p> <p>2011;9(4):2055;</p> <p>2011;9(4):2051;</p> <p>2011;9(4):2047;</p> <p>2011;9(4):2035;</p> <p>2011;9(4):2028;</p> <p>2011;9(4):2026;</p> <p>2010;8(10):1799;</p> <p>2010;8(10):1753</p>
Natural defence; contributes to body defences against external agents	<p>Copper / Folate / Iron / Selenium / Vitamin A / Vitamin B₁₂ / Vitamin B₆ / Vitamin C / Vitamin D / Zinc contributes to the normal function of the immune system;</p> <p>Vitamin C contributes to maintain the normal function of the immune system during and after intense physical exercise</p>	<p>2011;9(4):2061;</p> <p>2011;9(4):2033;</p> <p>2011;9(4):2028;</p> <p>2011;9(4):2026;</p> <p>2010;8(10):1805;</p> <p>2010;8(10):1799</p>
Muscle function; maintenance of normal muscle function; activity of muscles	<p>Biotin / Calcium / Copper / Iodine / Iron / Magnesium / Manganese / Niacin / Pantothenic Acid / Phosphorus / Riboflavin / Thiamin / Vitamin B₁₂ / Vitamin B₆ / Vitamin C contributes to normal energy-yielding metabolism;</p> <p>Calcium / Magnesium / Potassium contributes to normal muscle function;</p> <p>EPA and DHA / Thiamin contribute(s) to the normal function of the heart;</p> <p>Magnesium contributes to normal muscle function;</p> <p>Magnesium contributes to electrolyte balance;</p> <p>Magnesium / Zinc contributes to normal protein synthesis;</p> <p>Protein contributes to a growth in muscle mass;</p> <p>Protein contributes to the maintenance of muscle mass;</p> <p>Vitamin B₆ contributes to normal protein and glycogen metabolism;</p> <p>Vitamin D contributes to the maintenance of normal muscle function</p>	<p>2011;9(6):2206;</p> <p>2011;9(4):2035;</p> <p>2010;8(10):1740</p>
Energy metabolism	<p>Biotin / Calcium / Copper / Iodine / Iron / Magnesium / Manganese / Niacin / Pantothenic Acid / Phosphorus / Riboflavin / Thiamin / Vitamin B₁₂ / Vitamin B₆ / Vitamin C contributes to normal energy-yielding metabolism;</p> <p>Biotin / Chromium / Zinc contributes to normal macronutrient metabolism;</p> <p>Choline contributes to normal lipid metabolism;</p> <p>Vitamin B₆ contributes to normal protein and glycogen metabolism;</p> <p>Zinc contributes to normal carbohydrate metabolism</p>	2011;9(6):2212
Metabolism processes; metabolic benefits	All authorised claims	<p>2011;9(4):2035;</p> <p>2010;8(10):1738</p>

Claimed effects that are general and non-specific	Specific claim according to Regulation (EU) No. 432/2012	EFSA Journal
Metabolism of foreign substances, elimination and detox; favours toxin elimination, purifying/detoxifying	Choline contributes to the maintenance of normal liver function	2010;8(10):1740; 2010;8(10):1733
Invigoration of the body	Carbohydrate-electrolyte solutions contribute to the maintenance of endurance performance during prolonged endurance exercise; Creatine increases physical performance in successive bursts of short-term, high intensity exercise; Folate / Iron / Magnesium / Niacin / Pantothenic Acid / Riboflavin / Vitamin B ₁₂ / Vitamin B ₆ / Vitamin C contributes to the reduction of tiredness and fatigue; Vitamin C contributes to maintain the normal function of the immune system during and after intense physical exercise	2011;9(4):2055; 2010;8(10):1738
Nutrient tasks and interactions	Carbohydrate-electrolyte solutions enhance the absorption of water during physical exercise; Meat or fish contributes to the improvement of iron absorption when eaten with other foods containing iron; Vitamin C increases iron absorption	2011;9(4):2050
Energy; energy and vitality; vitalizing	Biotin / Calcium / Copper / Iodine / Iron / Magnesium / Manganese / Niacin / Pantothenic Acid / Phosphorus / Riboflavin / Thiamin / Vitamin B ₁₂ / Vitamin B ₆ / Vitamin C contributes to normal energy-yielding metabolism; Folate / Iron / Magnesium / Niacin / Pantothenic Acid / Riboflavin / Vitamin B ₁₂ / Vitamin B ₆ / Vitamin C contributes to the reduction of tiredness and fatigue	2010;8(10):1738
Tonic; tonic for the support of physical capacities; tonic for the support of mental and well-being; reconstituent and tonic N.b: Danger of deception!	Carbohydrate-electrolyte solutions contribute to the maintenance of endurance performance during prolonged endurance exercise; Creatine increases physical performance in successive bursts of short-term, high intensity exercise; Folate / Iron / Magnesium / Niacin / Pantothenic Acid / Riboflavin / Vitamin B ₁₂ / Vitamin B ₆ / Vitamin C contributes to the reduction of tiredness and fatigue; Vitamin C contributes to maintain the normal function of the immune system during and after intense physical exercise	2010;8(10):1738
Stimulant; general stimulating effects	Folate / Iron / Magnesium / Niacin / Pantothenic Acid / Riboflavin / Vitamin B ₁₂ / Vitamin B ₆ / Vitamin C contributes to the reduction of tiredness and fatigue	2010;8(10):1738
Purification; elimination; cleansing; depurative, detoxificant; detoxification; supports the natural mechanism for body's purification	Barley grain fibre / Oat grain fibre / Wheat bran fibre contributes to an increase in faecal bulk; Choline contributes to the maintenance of normal liver function; Rye fibre contributes to normal bowel function	2010;8(10):1733
Antioxidant properties	Copper / Manganese / Riboflavin / Selenium / Vitamin C / Vitamin E / Zinc contributes to the protection of cells from oxidative stress; Vitamin C contributes to the regeneration of the reduced form of vitamin E	2010;8(10):1750
Urinary health; bladder health; health of lower urinary tract; elimination; urinary system benefits; maintenance of urinary tract; urinary tract maintenance; urinary elimination	Biotin / Niacin / Riboflavin / Vitamin A contributes to the maintenance of normal mucous membranes	2011;9(6):2228; 2010;8(10):1742; 2010;8(10):1733

Claimed effects that are general and non-specific	Specific claim according to Regulation (EU) No. 432/2012	EFSA Journal
Contributes to the upper respiratory tract health	Biotin / Niacin / Riboflavin / Vitamin A contributes to the maintenance of normal mucous membranes	2011;9(7):2264; 2011;9(4):2033
Anti-aging properties; protection of cells from premature aging	Copper / Manganese / Riboflavin / Selenium / Vitamin C / Vitamin E / Zinc contributes to the protection of cells from oxidative stress Please note: Link scientifically disputed; risk of consumers being misled pursuant to Sec. 11(1) No. 2 of the German Food and Feed Code	2011;9(6):2228; 2010;8(10):1750; 2010;8(10):1762; 2010;8(10):1752; 2010;8(2):1489

III. Conclusion and outlook

EFSA's scientific opinions have led to a lot of incomprehension and annoyance in the past. The criticism was and is often justified, and the reasons are well known. However, the authority's opinions also paved new paths for health-related food marketing because a non-specific health reference can almost always be used with a link pursuant to Art. 10 para. 3 NHCR. Health claims that have been deemed insufficiently precise and thus not capable of authorisation pursuant to the NHCR can be used after all, as explained in this article. The alternative use went unrecognized in the past because negative EFSA opinions seemed to signify that the relevant claim was no longer of any use.

However, this assumption appears to be wrong upon closer examination. It is in fact possible through Art. 10 para. 3 NHCR to market food not only with specific health claims but also to make use of several non-specific health relations in their marketing. By way of non-specific references, an advertisement can clarify the relevant health effect. Thus, food business operators can present their products' benefits to consumers in a more general, striking and possibly also more understandable and plausible manner. One is almost inclined to give thanks to EFSA – for allowing the discovery of its "secret" claims!