Report on health claims used in marketing of foodstuffs in Finland
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CONTENTS

1. Summary ............................................................................................................................... 3
2. Introduction .......................................................................................................................... 4
3. Purpose of the project .......................................................................................................... 5
4. Implementation of the project ............................................................................................. 5
   4.1 Monitoring group ............................................................................................................. 5
   4.2 The structure and pre-testing of the health claim questionnaire ....................................... 5
   4.3 Announcement of the project and collection of material .................................................. 7
   4.4 The treatment of the material .......................................................................................... 7
5. Results of the project .......................................................................................................... 9
   5.1 A general description of the responses and classification of the claims ......................... 9
   5.2 Claims related to the Passclaim subject areas ................................................................. 11
      5.2.1 Cardiovascular ........................................................................................................... 11
      5.2.1.1 Cholesterol .......................................................................................................... 11
      5.2.1.2 Other blood lipid levels ...................................................................................... 12
      5.2.1.3 Blood pressure .................................................................................................... 13
      5.2.1.4 Other cardiovascular claims ............................................................................... 13
      5.2.2 Musculoskeletal system ........................................................................................... 14
      5.2.2.1 Bone health ......................................................................................................... 14
      5.2.2.2 Joints .................................................................................................................. 14
      5.2.3 Physical performance and condition ......................................................................... 15
      5.2.4 Weight control and insulin sensitivity ...................................................................... 15
      5.2.4.1 Weight control .................................................................................................... 15
      5.2.4.2 Carbohydrate metabolism and insulin sensitivity ............................................... 16
      5.2.5 Mental state and health ............................................................................................ 16
      5.2.6 Stomach and gut health and immunity .................................................................... 17
   5.3 Claims that do not come under the scope of the Passclaim subject areas .................... 18
      5.3.1 Tasks and interactions of nutrients .......................................................................... 18
      5.3.2 Mouth, teeth, saliva ................................................................................................. 18
      5.3.3 Eyes and ears ........................................................................................................... 18
      5.3.4 Respiratory passages ............................................................................................... 18
      5.3.5 Skin, hair, nails ....................................................................................................... 19
      5.3.6 Sex-specific claims .................................................................................................. 19
      5.3.7 General immunity .................................................................................................... 20
      5.3.8 Antioxidation .......................................................................................................... 20
      5.3.9 Others ..................................................................................................................... 21
   5.4 Nutritional value of products ......................................................................................... 21
6. Discussion .......................................................................................................................... 23
   6.1 The implementation of the project and functioning of the questionnaire ....................... 23
   6.2 Collected claims and their justification ........................................................................ 24
   6.3 Further processing of the results and challenges related to the compilation of national lists 25
7. References ........................................................................................................................ 27

APPENDICES
Appendix 1. The questionnaire and instructions for filling it out
Appendix 2. Constituent-/compound-specific list of claims
Appendix 3. Examples of medicinal claims
1. Summary

Regulation 1924/2006/EC of the European Parliament and of the Council on nutrition and health claims made on foods, which came into force on 19 January 2007 and will be applied as of 1 July 2007, will govern the usage of claims regarding foods in marketing. According to article 13 of the Regulation, Member States shall submit to the Commission a list of health claims other than those which refer to the reduction of disease risk or child development and health and which are based on generally accepted research data and well understood by the average consumer.

Many kinds of health claims are commonly used in Finland, but there is no comprehensive national list of them. Therefore, in 2006 the Finnish Food Safety Authority Evira, supported by the Ministry of Trade and Industry, surveyed the health claims used and their scientific justifications. A monitoring group with representatives from various areas of the food sector was also involved in the planning and implementation of the project.

Information on health claims was collected using a questionnaire posted on the website of the Finnish Food Safety Authority (Finnish Food Safety Authority Evira as of 1 May 2006) from 15 March to 4 August 2006 and from 2 October to 16 October 2006. A total of 625 responses were received by the deadline, pertaining to 269 substances or combinations of substances.

These health claim survey responses were worked into a preliminary report published on the Evira website on 8 December 2006. This draft was used as a background document at the health claim seminar organised for stakeholders on 11 December 2006. The purpose of the seminar was to present the results of the survey and to discuss what might constitute generally permitted health claims and on what conditions their use should be allowed. The operators had the opportunity to submit further information between 15 December 2006 and 8 January 2007.

The information in both the Finnish report and the accompanying English summary is wholly based on information obtained from the respondents and has not been evaluated or examined. The purpose of the English summary is to give an overview of the project’s implementation and results. The text aims to portray the health claims used (and those which are planned to be used) in the marketing of foodstuffs in Finland and the ingredients to which these claims were linked. The English summary does not present scientific justifications or references to various claims, as the reliability of these justifications and references has not been evaluated. However, at the end of the summary there is a compilation of all the available references. Information on what types of products are used in the claims, and on the scientific justification on which the claims are based according to the respondents, can be found in the detailed Finnish report (Vaihia K, Sarlio-Lähteenkorva S: Selvitys Suomen elintarvikemarkkinoilla käytettävistä terveysväitteistä. Eviran julkaisuja 8/2007, 316 pages) available at www.evira.fi

Wherever possible, the claims are classified by their object using the Passclaim project classification of the International Life Science Institute (ILSI). The greatest number of claims were related to cardiovascular health, carbohydrate metabolism and weight control, and gut health and immunity.

The results of the project will later be used in the drafting of the list of claims required in the above Regulation. Proposals for permitted claims and their scientific justifications must be submitted to the Commission no later than 31 January 2008. The European Food Safety Authority (EFSA) will evaluate the scientific justifications submitted. The Commission will publish a list of permitted claims and the conditions for their use no later than 31 January 2010. After this list has been published, no nutrition and health claims may be made other than those on the list.
2. Introduction

Section 9 of the Food Act (23/2006) governs the information to be given about foodstuffs. In accordance with the Food Act, relating to the labelling, presentation, advertising or other marketing of foodstuffs:

1) information given about food must be truthful and sufficient in view of section 1(1)(1,3-4) of this Act;
2) information given about food may not be misleading;
3) food must not be presented as having properties related to the prevention, treatment or curing of human diseases or refer to such information, unless otherwise provided elsewhere by law.

In its wording, the provision corresponds to the corresponding regulation of Directive 2000/13/EC of the European Parliament and of the Council relating to the labelling of foodstuffs.

Because there was previously no community legislation on the conditions regarding claims used, the conditions regarding claims used in the marketing of foodstuffs in Finland were elucidated in the ‘Guide to health claims’, published in 1997 and updated in 2002 (Finnish National Food Acengy 2002). The guide discusses, among other things, claims related to vital functions, which as a type of claim corresponds closely to the claims in Article 13 of the nutrition and health claim regulation.

Usage with regard to claims is changing. In future, claims used in the marketing of foodstuffs will be governed by Regulation 1924/2006/EC of the European Parliament and of the Council on nutrition and health claims. This Regulation came into force on 19 January 2007 and will be applied as of 1 July 2007. The purpose of the Regulation is to create common rules and approval conventions for the usage of claims in all EU countries. It specifies under what conditions nutrition and health claims can be linked to products. There is already a list of nutrition claims in the Regulation which can be updated as needed. According to Article 13 of the Regulation on nutrition and health claims, Member States shall submit to the Commission a list of health claims other than those which refer to the reduction of disease risk or child development and health which are based on generally accepted scientific evidence and well understood by the average consumer.

In the Regulation on nutrition and health claims, ‘health claim’ is any claim which states, presents or implies that there is a relationship between a food category, food or one of its constituents and human health. The claim can also be a pictorial, symbolic or graphic representation.

The subject of the report is the claims portrayed in Article 13 of the proposed Regulation, which may refer to:

a) the role of a nutrient or other substance in growth, development and the functions of the body: or
b) psychological and behavioural functions; or
c) slimming, weight control or a reduction in the sense of hunger or an increase in the sense of satiety or to the reduction of the available energy from the diet.

These types of claims can be e.g. the following: ‘ingredient A of this product promotes bowel movement’, ‘compound V reinforces bone’, ‘raw material E refreshes’ and ‘raw material A of the product increases the sense of satiety and supports weight control’.

According to the Regulation on nutrition and health claims, other claims such as those which refer to the reduction of disease risk or child health or development may be approved in response to a special application. Such claims do not therefore fall within the scope of the present report.
Proposals for permitted claims and their scientific justifications must be submitted to the Commission by 31 January 2008. The European Food Safety Authority (EFSA) will evaluate the scientific justifications submitted. In compliance with the Regulatory Committee's procedure, the Commission will publish a list of permitted claims and the conditions for their use no later than 31 January 2010. The regulation will clarify the control of health claims, as in future only the permitted claims on the EU list may be used in the marketing of foodstuffs. All other claims will be prohibited.

3. Purpose of the project

According to article 13 of the Regulation, Member States shall submit to the Commission a list of health claims other than those which refer to the reduction of disease risk or child development and health and which are based on generally accepted scientific evidence and are well understood by the average consumer. Many kinds of health claims are commonly used in the marketing of foodstuffs in Finland, but no national list is available. Supported by the Ministry of Trade and Industry, the objective of this project was to survey the health claims and the related scientific justifications used in the marketing of foodstuffs in Finland as listed in Article 13. The collection of claims was to be implemented such that all operators would have the opportunity to participate in the surveying of claims.

The purpose of the accompanying English summary, compiled on the basis of the Finnish report, is to give an overview of the project's implementation and results. The text aims to portray the health claims used (and those which are planned to be used) in the marketing of foodstuffs in Finland and the ingredients to which these claims were linked. The English summary does not contain scientific justification or references to various claims, since the reliability of these justifications and references has not been evaluated. However, at the end of the summary there is a compilation of all the available references. Information on what types of products are used in the claims and on the scientific justification on which the claims are based according to the respondents can be found in the detailed Finnish report (Vaihia K, Sarlio-Lähteenkorva S: Selvitys Suomen elintarvikemarkkinoilla käytettävistä terveysväitteistä. Eviran julkaisuja 8/2007, 316 pages) available at www.evira.fi.

The authorities will draw on the report’s results when compiling the list of claims deemed acceptable by the Finnish authorities for the Commission as required by the Regulation. In addition, information on the nutritional status and composition of products can, when required, be utilised when decisions are made at Community level about the types of products to which claims can be linked in future.

4. Implementation of the project

4.1 Monitoring group

The implementation of the health claim project also entailed the setting up of a monitoring group, to which the authorities, representatives of the food industry, the health food industry, commerce and research, and other experts in the field were invited.

4.2 The structure and pre-testing of the health claim questionnaire

The collection of claims was carried out with an electronic questionnaire, which was created with the Webropol program. The questionnaire aimed at clarifying central issues with regard to the Regulation on nutrition and health claims, and the questions were reviewed together with the monitoring group, after which the draft questionnaire was sent for pre-testing to a number of
operators suggested by the monitoring group. An attempt was made to choose operators who would represent the widest possible range of sectors of the foodstuff industry. Participating in the pre-testing were foodstuff companies, representatives of the health food sector, suppliers of raw materials and foodstuff industry consultants.

The comments received during pre-testing were taken into account as well as possible in the final production of the questionnaire. Unfortunately it was not possible to create a separate, simpler questionnaire for food supplements, as it was decided that one integrated questionnaire should be used in order to enable the elucidation of the largest possible amount of material. Although the operators expressed a wish for the collection of claims relating only to ingredients, it was decided that the questionnaire should be drawn up with a product-specific approach due to the fact that, in the Regulation on nutrition and health claims, the requirements for presenting a claim include the correct composition and nutritional value, which will be defined at a later stage.

The questions and instructions for filling out the questionnaire can be found in Appendix 1.

The questionnaire inquired about the food or food category about which a claim is made or will be made. The respondent had to note whether the claim about a food or food category best characterises:

1. the role of a nutrient or other substance in growth, development and/or functions of the body; or
2. psychological and behavioural functions; or
3. slimming, weight control, a reduction in the sense of hunger, an increase in the sense of satiety or a reduction of the available energy from the diet.

In the questionnaire, the respondent also had to state where (on the labelling, in presentations/advertising/Internet marketing aimed at consumers, in expert material, in other marketing material, where?) the claim is used or to be used, and state the claim itself. In addition, the questionnaire asked whether the product family includes foodstuffs whose product name, brand name or fancy name in itself contains the claim or which are advertised with symbols that can be interpreted as health claims.

In the questionnaire, the respondent had to disclose the nutrient/other substance or those nutrients/other substances of the food or food category on which the presented claim is based. The respondent also had to state the amount of the nutrient/other substance per 100 grams, edible portion or, in the case of food supplements, daily dose. In addition, the respondent was asked about possible factors (e.g. processing or other substances in the product), which could reduce the absorption or availability of the substance/substances on which the claim is based.

The respondent was also asked whether there is scientific justification or other justification supporting the claim presented on a food or food category. These justifications were divided into various groups: clinical trials carried out with the own product, \textit{in vitro} or animal experiments carried out with the own product, clinical trials carried out with another similar product, \textit{in vitro} or animal experiments carried out with another similar product, other scientific justifications (e.g. research carried out with ingredients), generally available information (e.g. from textbooks), other justifications, and no information available. The respondents were asked to enter at most ten studies or references of central importance on which the claim was based. Additionally, the respondents were asked to note what kind of research was involved (e.g. an epidemiological study, review article, etc.).

The questionnaire also inquired after the nutritional content of the food or food category.
4.3 Announcement of the project and collection of material

Efforts were made to inform operators of the project as widely as possible: the first notification was made available on the Finnish Food Safety Authority’s Internet pages on 15 March 2006, the second on the Finnish Food Safety Authority Evira’s Internet pages on 5 June 2006, and the third on 2 October 2006. All notifications were also translated into Swedish and English. Members of the monitoring group and those of the health claim expert network disseminated information about the project to the interest groups they cooperate with. In addition, the project was a topic in various events, in the press, in radio and TV interviews, and on Evira’s Internet pages.

The health claim questionnaire and the instructions for filling it out (Appendix 1) were published on the Internet pages of the Finnish Food Safety Authority on 15 March 2006. The questionnaire could be filled out by all those interested, including foodstuff companies, suppliers of raw materials, experts, representatives of patient organisations, authorities, etc. The initial latest reply date (15 July 2006) was extended to 4 August 2006 due to requests from the operators. In addition, on the basis of these contacts it was decided to give the operators the opportunity to report missing claims later in the autumn.

Additional information on the responses obtained during the first stage of the health claim survey, on the possibility of reporting missing claims from 2 to 10 October 2006, and instructions for registering for the December health claim seminar, were published on the Evira website on 2 October 2006. The Internet pages were updated on 17 November 2006 with regard to the claims obtained.

A preliminary report on the survey results was published on the Evira website on 8 December 2006. The operators had the opportunity to submit further information between 15 December 2006 and 8 January 2007. Instructions for such additions were published on 15 December on the Evira website. All additions had to be communicated in writing. The operator could make the changes directly in the text section in the report or, alternatively, use a special Word-based form. In total, 29 operators made use of the possibility to submit further information for the report. With these additions, about half of the shortcomings in the draft report could be corrected.

A seminar on the responses obtained in the health claim survey was organised on 11 December 2006, with 164 participants. In the seminar, the present state of the Regulation on nutrition and health claims was presented, the health claim survey and the responses were presented, and there was a discussion on what might constitute generally permitted health claims and in what conditions their use should be allowable. Representatives of the foodstuff industry, the health food industry, the research establishment, consumers, consumer research, the National Agency for Medicines and municipal food quality inspection delivered addresses during the seminar.

4.4 The treatment of the material

During the first stage of the project (15 March – 4 August 2006) a total of 575 responses to the health claim survey were obtained. During the second stage of the survey (2 – 16 October 2006) another 50 forms were filled out, thereby raising the total number of forms filled out to 625. After the survey date had ended a small number of new claims and information on their scientific justification was sent to Evira. It was not possible to include these new claims in this report, but the information sent by the operators has been conveyed to the Ministry of Trade and Industry for follow-up work.
Those forms (3 in total), which were clearly outside the scope of the study, were discarded from the received material in the early stages. Because the Regulation on nutrition and health claims applies to claims about foodstuffs for humans only, claims linked to animal food remained outside the scope of the study. Of the responses received, two forms were filled out by individual consumers, who expressed their concerns about the marketing of certain products, which they considered misleading.

Claims referring to children’s development and health were also discarded, as changes made to the proposed European Parliament Regulation in May 2006 require that a special proceeding initiated upon petition be applied to claims referring to child development and health. In so far as the operator has presented claims referring to child development and health they will be altered as far as possible, for example in the following way: ‘Xylitol is good for both adults’ and children’s teeth. → Xylitol is good for your teeth’. Claims that referred to an embryo’s health were also considered to refer to child development and health. Claims which did not contain specific claims referring to child health or development but which were, for example, only linked to baby food were also discarded.

An attempt was made to eliminate all claims which, as independent claims, could be considered to be clearly medicinal or which referred to the prevention, treatment or curing of diseases. In accordance with the Food Act (23/2006, Article 9), such claims are prohibited in the marketing of foodstuffs and as such do not fall within the scope of this survey. In addition, claims which by themselves are not necessarily medicinal, but which together give the impression of being medicinal can also be considered medicinal claims. With regard to claims referring to mental health in particular, there were cases where the aggregate of claims presented clearly formed a medical image, but of the independent claims some were borderline cases. In such cases, however, the claims were not discarded.

In total, seven substances or combinations of substances were completely removed from the material because only medicinal claims were linked to them. Elimination due to medicinal claims only applied to actual claims. If the operator gave information e.g. about the folk medicinal use of the product in other background information of the product, such as in the justification of the claims, the justification in question remained in the text.

Claims pertaining to the reduction of the risk of diseases will be approved pursuant to article 14 of the Regulation on nutrition and health claims and therefore do not fall within the scope of this survey. Claims which clearly state the disease whose risk the product aims to reduce, e.g. ‘compound X reduces the risk of heart disease’ were removed from the material. Other possible claims pertaining to the reduction of the risk of disease, e.g. simple references to disease risk factors, have so far not been removed.

A number of operators had reported claims, which were deemed to be nutrition claims, as health claims. Claims of this type were e.g. ‘contains soluble fibre/flavonoids/polyunsaturated fatty acids’. Such claims are not entered as health claims in the report. However, the information in the claim was, if possible, incorporated in the background information of the product. If in the same claim both a nutrition claim as well as a health claim was presented, the health claim was included in the report in e.g. the following way: ‘The product is rich in polyunsaturated fatty acids, which are good for your heart’ → Health claim: ‘Are good for your heart’, Background information: ‘The product is rich in polyunsaturated fatty acids’.

The claims were retained in their original form if at all possible. A number of claims were slightly simplified by removing certain words, as in the following example: ‘According to research, compound X is good for the bowels’ → ‘Compound X is good for the bowels’.
5. Results of the project

5.1 A general description of the responses and classification of the claims

A total of 625 responses were received and the respondents presented claims pertaining to 281 substances or combinations of substances. After certain eliminations, 269 substances or combinations of substances remained, pertaining to which claims were presented.

Appendix 2 consists of the claims obtained from the responses, and shows the claim types and substances or combinations of substances on which the claims are based. The claims are grouped in a table according to substance and in alphabetical order. If the claim was linked to the compound of more than one substance, the compound was entered in the alphabetical list under the first nutrient or other substance declared by the respondent. The table only contains examples of claims or claim types, so that not all wordings of claims presented (e.g. ‘heart-friendly’, ‘good for your heart’, ‘for your hearth’s health’, ‘improves the health of your heart’) necessarily appear in the table.

About half of the foodstuffs declared were food supplements and about half were conventional foodstuffs. Nearly 90% of respondents stated that the claim described the role of a nutrient in growth, development and/or the functions of the body (Table 1).

Table 1. Which of the alternatives below best describes the claim pertaining to a food or food category? The number in the column on the right indicates the number of respondents. The respondents could only choose one of the alternatives.

| The role of a nutrient or other substance in growth, development and/or the functions of the body | 88.2% 551 |
| Psychological and behavioural functions | 4.8% 30 |
| Slimming, weight control, a reduction in the sense of hunger, an increase in the sense of satiety, or a reduction of the available energy from the diet | 7.0% 44 |

Nearly all respondents stated that they used the claim in the labelling and/or in the brochures, advertisements or Internet marketing directed at consumers (Table 2.). Approximately 85% of the respondents stated that the claim is also used in expert material. About half of the respondents also mentioned other marketing channels, such as advertising on fairs or in product presentations.

Table 2. Where is the claim used or where will it be used? The number in the column on the right indicates the number of respondents.

| Labelling | 96.0% 600 |
| Brochures/advertisements/Internet marketing directed at consumers | 99.7% 623 |
| Expert documentation | 86.2% 539 |
| Other form of marketing, where? | 53.9% 337 |
In the survey form, the operators were also asked to specify what kind of justification supporting the claim for the food or food category could be submitted. About one fifth of the respondents indicated clinical trials carried out with the own product and/or in vitro and/or animal experiments (Table 3.). About half the respondents referred to clinical trials with another corresponding product and about 40% in vitro and/or animal experiments with another corresponding product. Some 65% of the respondents stated that the claim made with respect to foods or food categories was supported by evidence other than studies carried out with ingredients. About half of the respondents stated that the claim was also, or only, supported by information from textbooks or which is generally available.

Table 3. Is there any research or other evidence available to substantiate the claim made on the foodstuff or group of foodstuffs? The number in the column on the right indicates the number of respondents.

<table>
<thead>
<tr>
<th>Research Evidence</th>
<th>Percentage</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, clinical trials conducted on this product</td>
<td>22%</td>
<td>138</td>
</tr>
<tr>
<td>Yes, in vitro and/or animal tests conducted on this product</td>
<td>6%</td>
<td>38</td>
</tr>
<tr>
<td>Yes, clinical trials conducted on a corresponding product</td>
<td>53%</td>
<td>328</td>
</tr>
<tr>
<td>Yes, in vitro and/or animal tests conducted on a corresponding product</td>
<td>36%</td>
<td>224</td>
</tr>
<tr>
<td>Yes, other research evidence, e.g. research carried out on the ingredient in question</td>
<td>65%</td>
<td>409</td>
</tr>
<tr>
<td>Yes, information publicly available e.g. in textbooks</td>
<td>48%</td>
<td>298</td>
</tr>
<tr>
<td>Yes, other evidence, what?</td>
<td>3%</td>
<td>17</td>
</tr>
<tr>
<td>There is no information on any research</td>
<td>0.6%</td>
<td>4</td>
</tr>
</tbody>
</table>

The classification of the claims

The claims are classified using the Passclaim project classification of the International Life Science Institute (ILSI) wherever possible. In the Passclaim project the claims are classified into the following subject areas:

1. Diet-related cardiovascular disease
2. Bone health and osteoporosis
3. Physical performance and fitness
4. Body weight regulation, insulin sensitivity and diabetes risk
5. Diet-related cancer
6. Mental state and performance
7. Gut health and immunity

The claims classified according to the Passclaim subject areas are treated in section 5.2 of the report. It should be noted, however, that in addition to health claims the Passclaim subject areas include nutrition claims and medicinal claims (such as references to osteoporosis), which are not covered by the scope of this report. Where it was not possible to find a suitable Passclaim subject area, a separate grouping has been used. Such claims are treated in section 5.3.

The greatest number of claims was related to cardiovascular health, especially to cholesterol and blood pressure. Many claims were also linked to carbohydrate metabolism and weight control, the musculoskeletal system, mental health, gut health and immunity and general immunity (Table 4).
Several were also related to antioxidation. Most typically, claims related to antioxidation were presented as only one factor among other principal claims. For example, claims made on foods may be clearly linked to cardiovascular health, but in addition the respondent stated that the substance in question was also an antioxidant. For this reason, claims related to antioxidation are not specified in table 4, but are in the section, ‘others’. Other, less frequently mentioned objects included physical performance, oral and dental health, skin, hair and nail health, and eye health.

Table 4. The division of the claims obtained in the health claim survey by subject

5.2 Claims related to the Passclaim subject areas

5.2.1 Cardiovascular

The cardiovascular claims in the health claim survey were directed at cholesterol and blood pressure in particular. In addition, other claims were presented linked to other fat values in the blood, the circulation, the vascular system and blood clotting, homocysteine metabolism, as well as general cardiovascular health.

5.2.1.1 Cholesterol

The claims linked to cholesterol can be divided into two main groups: claims which refer to the control of cholesterol and claims which refer to the reduction of cholesterol.
The control of cholesterol
Claims relating to the control of cholesterol were presented with regard to 16 substances or combinations of substances. These claims were related to a combination of artichoke leaf, milk thistle seed and dandelion sprouts and roots; beta-glucan; dandelion root extract; flour-like nutritive preparations; garlic; food supplements containing fibre from oat bran, flax grain, psyllium and inulin; omega-3 fatty acids; pectin in natural berries; psyllium seed husk; rape seed oil and cheese-like preparations containing rape seed oil; a combination of red yeast rice, vitamin B6, vitamin B12 and folic acid; rye fibre; soft unsaturated fat; soy protein; sugar beet fibre.

The following types of claims were presented:
- Helps to control cholesterol
- For the control of cholesterol
- Positive effect on cholesterol metabolism

Cholesterol reduction and the HDL/LDL cholesterol ratio
Claims related to cholesterol reduction were presented with regard to 26 substances or combinations of substances. The claims were made with respect to alfalfa; artichoke leaf; beta-glucan; beta-glucan and bacteria; betasitosterol; blackcurrant seed oil and vitamin E; flavonoids; flax grains and seeds; flax seed oil; flour-like nutritive preparations; garlic; green tea; green tea extract; linolenic acid in sea buckthorn berries; food supplements containing fibre from oat bran, flax grain, psyllium and inulin; oat, barley, wheat and rye fibre and wholegrain; omega-3 fatty acids / alpha-linolenic acid; phospholipids; plant stanols and sterols; plant sterol and plant stanol compounds; a combination of red yeast rice, vitamin B6, vitamin B12 and folic acid; soluble plant and berry fibre; soy protein; soy protein and rye and/or flax lignans; sugar beet fibre; sugar cane extract.

The following types of claims were presented:
- Reduces cholesterol
- Helps to reduce cholesterol/LDL cholesterol
- May help to reduce cholesterol/LDL cholesterol
- Reduces increased cholesterol

5.2.1.2 Other blood lipid levels
Claims related to triglycerides and/or general blood lipid levels were made with respect to citrus bioflavonoids; garlic; niacin; flax seed oil; omega-3 fatty acids; and the following compounds: anthocyanidins and proanthocyanidins; artichoke leaf, milk thistle seed and dandelion sprout and root; blackcurrant seed oil and vitamin E; momordica fruit and cinnamon.

The following types of claims were presented:
- Reduces blood triglycerides
- Balances lipid values
- Helps to reduce blood lipid values
- Has a positive effect on lipid metabolism
5.2.1.3 Blood pressure

Claims related to blood pressure were made with respect to EPA and DHA fatty acid compounds; flavonoids; calcium; low-salt breads; magnesium; mineral salt; a combination of peptide, ascorbic acid and calcium; plants and fruits; olive leaf extract; omega-3 fatty acids; peptides from milk preparations; sodium from natural berries; a combination of tripotassium citrate, magnesium sulphate/potassium chloride and magnesium sulphate. The presented claims referred to the control and reduction of blood pressure.

The following types of claims were presented:

- Helps to control blood pressure
- Reduces blood pressure
- Helps to reduce increased blood pressure
- Helps to reduce blood pressure
- May help to reduce blood pressure

5.2.1.4 Other cardiovascular claims

Vascular system, circulation and blood clotting

Claims related to the vascular system, circulation and/or blood clotting were made with respect to anthocyanides and proanthocyanides; a combination of bilberry and pine bark; a combination of blackcurrant seed oil and vitamin E; bromelain; citrus bioflavonoids; folic acid; garlic; ginkgo extract; omega-3 fatty acids; rape seed oil; silicon; vitamin B6; vitamin B12. The following types of claims were presented:

- Good for the circulation/for the health of the vascular system
- Promotes the circulation/peripheral circulation
- Beneficial effect on the arteries
- For the health of the veins
- Beneficial effect on the fluidity of the blood
- Reduces blood clotting factors
- Reduces platelet coagulation

Homocysteine metabolism

Claims related to homocysteine metabolism were made with respect to folic acid, vitamins B6 and B12. The following types of claims were presented:

- Reduces the formation of homocysteine in the body
- Helps to reduce homocysteine
- Reduces the level of homocysteine in the blood

General cardiovascular claims

A large number of claims were obtained in the health claim survey with regard to the health of the cardiovascular system. Claims were made with respect to alfalfa; sea buckthorn berry oil; fish fats; flax seed husk extract; flax seed oil; garlic; green tea and green tea extract; L-carnitine; L-carnosine; lycopene; magnesium; mineral salt; olive leaf extract; omega-3 fatty acids; quercetin; hawthorn; resveratrol; selenium; soft unsaturated fat; soy protein; sugarcane extract; ubiquinone; vitamin C; vitamin E; yerba mate extract; and combinations of the following substances:
Report on health claims used in marketing of foodstuffs in Finland

anthocyanidin and proanthocyanidin; blackcurrant seed oil and vitamin E; sea buckthorn oil and vitamin E; EPA and DHA fatty acids; oat bran, flax grain, psyllium and inulin; omega-3 fatty acid, folic acid, vitamin B6 and vitamin B12; red yeast rice, vitamin B6, vitamin B12 and folic acid; soy protein, flax and/or rye lignan. The general cardiovascular claims presented were broadly the following:

- Heart-friendly
- Is good for the heart
- Promotes the health of the heart
- Protects the heart and blood vessels
- Helps to maintain the health of the heart and blood vessels
- For the health of the heart and blood vessels

5.2.2 Musculoskeletal system

In addition to claims related to bone health, the following section will also treat claims related to the joints because they, as part of the musculoskeletal system, are relevant to bone health, and because a number of substances or combinations of substances were linked to both the skeletal structure and joints. In this section, those claims linked to teeth are also treated, which have been presented in a direct connection with the skeletal structure (e.g. ‘strengthens teeth and bones’). Other claims related to the health of teeth are treated in section 5.3.2 Mouth, teeth and saliva. Claims related to the health of muscles are treated in section 5.2.3 Physical performance and condition.

5.2.2.1 Bone health

Claims related to bone health were made with respect to biotin; boron; calcium; green-lipped mussel; magnesium; methyl sulphonyl methane; nettles; silicon; soy isoflavones; vitamin C; vitamin D; vitamin K; zinc; and combinations of flower pollen, fermented pollen and royal jelly, and of soy extract, vitamins and minerals.

The following types of claims were presented:

- Strengthens bone
- For the health of bone / supportive tissue
- Strengthens teeth
- Functions as a building material for bone / teeth / cartilage
- Binds calcium to bone
- Helps bone to become strong
- Helps bone to stay strong

5.2.2.2 Joints

Claims related to joint health were made with respect to avocado-soy extract; citric bioflavonoids; evening primrose oil; ginger; green-lipped mussel; methyl sulphonyl methane (MSM); omega-3 fatty acids EPA (eicosapentaenoic acid) and DHA (docosahexaenoic acid); rose hip; shark cartilage; silicon; and the following combinations: bilberry and pine bark; *Boswellia serrata* and shark cartilage; curcuma, *Boswellia*, pineapple pulp and quercetin; shark cartilage and green-lipped mussel.
The following types of claims were presented:

- For the health of the joints
- Supports the function of the joints
- Maintains the mobility of the joints
- Strengthens the joints
- Natural elasticity for joints
- Activates the formation of joint cartilage
- Checks the breakdown of collagen and cartilage
- For the health of supportive tissue
- Good for connective tissue

5.2.3 Physical performance and condition

Claims related to physical performance and condition were made with respect to alpha-hydroxyisocapronic acid; caffeine in coffee; creatinine; dextrin; flavonoids; a combination of flower pollen, lactic whey and royal jelly; ginger; ginseng; green-lipped mussel; herbal yeast plasmolysate; L-arginine hydrochloride; L-carnitine; L-carnosine; magnesium; methyl sulphonyl methane; a combination of pistil pollen extract and SOD; proteins; rose hip; a combination of soy isoflavonoids and royal jelly; a combination of suma extract and phospholipids; ubiquinone; vitamin C.

The claims presented are related to strength, endurance, performance, muscle function and formation, and the prevention of oxidation damage. The following types of claims were presented:

- Increases power and endurance
- Improves performance
- Promotes good physical condition
- Proteins are the muscles’ building blocks
- Strengthens muscles
- For promoting the function and mobility of muscles
- Relaxes the muscles and nerves
- Accelerates restoration
- Helps to reduce oxidation damage in tissues caused by heavy exercise
- Prevents muscle fatigue during exertion
- Increases fat-free muscle mass

5.2.4 Weight control and insulin sensitivity

5.2.4.1 Weight control

Claims related to weight control and/or a sense of satiety were made with respect to beta-glucan; caffeine; calcium; chromium; CLA; flax seeds; flour-like nutritive preparations; green tea extract; inulin; kidney bean extract; L-carnitine; food supplements containing fibre from psyllium and inulin; oat, barley, wheat and rye fibre; oat bran; palm/oat oil fatty acid; plant fibre; polydextrose; proteins; spirulina algae; sugar beet fibre; whole grain.

The following types of claims were presented:

- Has a long satiating effect
- Releases energy slowly
- Helps with weight control
• Increases the sense of satiety
• Keeps sense of hunger at bay
• Accelerates fat burning
• Firms up the body
• Helps to lose weight and firm up
• Reduces visceral fat
• Reduces build-up of fat
• Increases fat burning in fat cells
• Reduces fat absorption
• Prevents the degradation of starch
• Promotes metabolism

5.2.4.2 Carbohydrate metabolism and insulin sensitivity

Claims related to carbohydrate metabolism and/or insulin sensitivity were made with respect to alpha-lipoic acid; aloe vera; chromium; cinnamon; coffee and lactitol; EPA and DHA fatty acids; fibre in fruit and berry juice; garlic; Gymnema sylvestre extract; ice cream containing cream and polydextrose; a combination of magnesium, green tea extract and maritime pine bark extract; oat, barley, wheat and rye fibre; a combination of oat bran, flax, psyllium and inulin; olive leaf extract; pectin; polydextrose; rye bread; soluble plant and berry fibre; sugar beet fibre; whole grain; vegetable fat.

The following types of claims were presented:

• Balances the secretion of pancreatic insulin
• Has a positive effect on the body’s sugar metabolism
• Increases the body’s insulin sensitivity
• Helps to regulate blood sugar
• Helps to reduce blood sugar
• Reduces increased blood sugar
• Long-lasting energy
• Keeps blood sugar level for long periods
• Levels / balances blood sugar (after eating)
• Low glycaemic index

5.2.5 Mental state and health

Claims related to mental state and health were made with respect to boron; caffeine; DHA and EPA fatty acids; flax seed oil; folic acid; garlic; gingko tree; ginseng; guarana; heather blossom; herbal yeast plasmolysate; hops; iodine; lactium-peptide compound; L-5-hydroxitryptophan; manganese; oat sprout extract; omega-3 fatty acids; passionflower; phenyl alanine; phosphatidylcholine; phosphatidylserine; phospholipids; pollen; quercetin; rosehip; taurine; theanine; tryptophan; vitamin B6; vitamin B12; vitamin E; yerba mate extract; and the following combinations: blackcurrant seed oil, special lecithin, GLA and ALA; floral pollen, fermented pollen, and royal jelly; maritime pine bark extract, green tea pollen and royal jelly; peppermint, garden angelica, nettles, rosehip pollen, fermented pollen and royal jelly; pollen pistil extract and SOD; soy isoflavones, royal jelly, suma extract and phospholipids; theanine and oat sprouts.

The claims presented were related to mood, memory, perception, brain function, attentiveness, concentration, vigour, liveliness, invigoration, sleep readiness, nerve function, tension, relaxation and tranquillity. The following types of claims were presented:
- Has a positive effect on mood
- For the health of the brain and/or nerves
- Refreshes the memory
- Improves concentration
- Promotes the ability to learn
- Refreshes / stimulates
- Relaxes
- Reduces tension
- Makes falling asleep easier

5.2.6 Stomach and gut health and immunity

Claims related to stomach and gut health and/or immunity were made with respect to aloe vera; anise; a combination of anthocyanidin and proanthocyanidin; a combination of beta-glucan and bacteria; sea buckthorn berry oil; camomile; carmellose; Chlorella algae; dandelion leaf and flower; dextrose; flav; flav groats; flav seed groats; fruit and berry juice fibre; galactooligosaccharides; grapefruit oil water emulsion; honey; inulin; a combination of inulin and polydextrose; Jerusalem artichoke; a combination of lactic acid bacteria, L-glutamine and inulin; different lactic acid bacteria and combinations of them (Lactobacillus acidophilus, L. bulgaris, L. paracasei, L. reuteri, L. rhamnosus, Bifidobacterium bifidum, B. breve, B. infantis, B. lactis, B. longum); lactic whey; natural berry fibre; food supplements containing fibre from psyllium and inulin; oat bran; oat, rye, wheat and barley fibre; oligofructose; oregano oil; polydextrose; a combination of polydextrose and lactitol; propolis; a combination of psyllium seed and dried herbs; sugar beet fibre; psyllium seed husk; silicon; silicon dioxide; a combination of sodium carbonate, tartaric acid, anhydrous citric acid and sodium carbonate.

The following types of claims were presented:

- Gut-friendly
- For the stomach’s health
- Promotes/balances the stomach’s and/or gut’s functioning
- Promotes/maintains the stomach’s and/or gut’s health
- Promotes the absorption of lactose
- Promotes digestion
- Increases faecal mass
- Maintains the gut’s microbial balance
- Increases the stomach’s and gut’s immunity
- Strengthens the body’s defence system through the gut’s epithelium
- Probiotic
- Promotes the health of the gut’s mucous membrane
- Protects the stomach’s mucous membrane
- Neutralizes stomach acids
- Calms the stomach and gut
- Reduces the formation of gas
5.3 **Claims that do not come under the scope of the Passclaim subject areas**

5.3.1 **Tasks and interactions of nutrients**

Claims related to the tasks and/or interactions of nutrients were made with respect to folic acid; iodine; iron; magnesium; phospholipids; proteins and omega-3 fatty acids; vitamin A; vitamin B1; vitamin B2; vitamin B12; and zinc. These claims are related to very different tasks in the body and therefore a list of typical claims is not given here; the claims can be found in appendix 2 of this report.

5.3.2 **Mouth, teeth, saliva**

Claims related to the health of the mouth and/or teeth were made with respect to betaine; cheese; green tea extract; *Lactobacillus reuteri* lactic bacteria; maritime pine bark extract; a combination of mushroom extract and apple polyphenol; xylitol; a combination of xylitol, fluorine, calcium carbonate and disodium hydrogen phosphate.

The following types of claims were presented:

- Tooth-friendly
- Promotes mouth and tooth health
- Stops acid attacks
- Strengthens and renews dental enamel
- Reduces the amount of plaque
- Increases the secretion of saliva
- Freshens the breath

5.3.3 **Eyes and ears**

**Eyes and vision**
Claims related to the health of eyes and vision were made with respect to anthocyanin; anthocyanins contained in bilberries; EPA and DHA fatty acids; ginkgo tree; lutein; lycopene; wheat sprouts; zeaxanthin. The following types of claims were presented:

- For the eyes’ health
- For overstrained eyes
- For eye circulation

**Ears and hearing**
Claims related to the ears and hearing were made with respect to ginkgo tree leaf extract and xylitol. The following types of claims were presented:

- Maintains the ears’ health
- Promotes good hearing

5.3.4 **Respiratory passages**

Claims related to the health of the respiratory passages were made with respect to corn extract; Iceland moss extract; a combination of ivy, thyme and liquorice root; liquorice; oregano oil; purple
coneflower; spruce sprouts; a combination of spruce sprouts, fresh sundew and fresh ivy; sundew. The following types of claims were presented:

- For the health of the respiratory passages
- Supports the health of the respiratory passages’ mucous membranes
- Freshens the breath
- Makes the voice clearer

5.3.5 Skin, hair, nails

Skin, connective tissue and mucous membranes
Claims related to the health of the skin and/or connective tissue and/or mucous membranes were made with respect to betacarotene; biotin; sea buckthorn berry oil; a combination of sea buckthorn oil and vitamin E; camomile extract; carotenoids (alpha, beta and gamma carotene, lycopene); corn extract; evening primrose oil; L-carnosine; liquorice; lycopene; omega-3 fatty acids; a shark cartilage extract-fish gelatine mixture; silicon and zinc.

The following types of claims were presented:

- For the skin’s well-being
- Strengthens the skin
- Moisturizes and improves the skin’s elasticity
- Protects the skin from the sun
- Soothes the skin
- Protects the mucous membranes
- Strengthens and renews the mucous membranes
- Strengthens connective tissue

Hair
Claims related to the health of hair were made with respect to biotin; nettle; shark cartilage-shellfish extract; silicon. The following types of claims were presented:

- For the health of hair
- Strengthens hair
- Promotes hair growth
- Reduces hair loss
- Improves the nourishment supply of the hair glands

Nails
Claims related to the health of nails were made with respect to biotin, nettle, and silicon. The following types of claims were presented:

- For healthy nails
- Strengthens nails
- Prevents nails from splitting

5.3.6 Sex-specific claims

Men
Claims related to men’s health were made with respect to flax seed husk extract; L-carnitine; lycopene; a combination of soy isoflavones, lycopene, zinc and selenium; *Tribulus terrestris* extract.

The claims are related to the regulation of hormonal activity, sexual desire and endurance, prostate health, and sperm quality. The following types of claims were presented:
• For men’s health
• For the prostate
• For the regulation of hormonal activity
• Promotes sexual desire
• Improves sperm quality
• Endurance

Women
Claims related to women’s health were made with respect to evening primrose oil; flax seed husk extract; a combination of floral pollen, fermented pollen and royal jelly; a combination of pollen/pollen pistillate flower extract; a combination of pollen and royal jelly; soy isoflavones; Tribulus terrestris extract.

The claims referred to stabilizing hormonal activity, sexual desire and health, especially during the menopause. The following types of claims were presented:
• For women’s health
• Stabilizes hormonal activity
• Phyto-oestrogen
• For menopausal women
• Maintains the condition of the mucous membranes
• Reduces sweating
• Promotes sexual desire

5.3.7 General immunity
Claims related to increasing and/or supporting the general immunity of the body were made with respect to beta-glucan (WGP); a combination of beta-glucan and olive leaf extract; Bifidobacterium bifidum, longum, breve, infantis and Lactobacillus acidophilus bacteria; blackcurrant seed oil; sea buckthorn berry oil; Chlorella algae; garlic; herbal yeast plasmolysate; Lactobacillus GG lactic acid bacteria; other lactic acid bacteria; pollen; propolis; purple coneflower; a combination of royal jelly and pollen; a combination of soy isoflavones and royal jelly.

5.3.8 Antioxidation
Claims related to antioxidation were made with respect to alphalipoic acid; anthocyanidins; berry and fruit juices; berry seed oils; bilberry; a combination of bilberry and pine bark; Chlorella algae; coffee; conjugated linoleic acids (CLA); corn extract; cranberry extract; a combination of curcuma, Boswellia, pineapple pulp and quercetin; cysteine; flavonoids; flavonoids extracted from sea buckthorn oil and sea buckthorn berry; flax seed husk extract; forest bilberry; ginkgo tree extract; grape seed extract; green tea extract; honey; hop; Iceland moss extract; L-carnosine; lycopene; manganese; molybdenum; olive leaf extract; oregano; a combination of paprika powder, rosemary leaf powder, peppermint leaf powder, yarrow powder and pumpkin seed; a combination of phenol compounds, procyanidins and anthocyanidins; phenolic compounds of cranberry and lingonberry; pollen extract; a combination of pollen extract and SOD; propolis; quercetin; rutin; selenium; ubiquinone; vitamin A and beta-carotene; a combination of vitamins A, E and C; vitamin C; vitamin E; wheat sprout powder; wine leaf extract; yerba mate extract.
5.3.9 Others

Other claims were made with respect to salt and fluid balance; perspiration; the excretion of waste products; urinary tracts; the liver; gall bladder and/or kidneys; digestion and absorption of nutrients. Detailed references can be found in appendix 2. Claims were made with respect to the following substances or combinations of substances:

Salt and fluid balance: birch leaf; coffee; common horsetail and dandelion root; dandelion leaf and flower; goldenrod; mineral salt; potassium; potassium chloride and magnesium sulphate; tripotassium citrate and magnesium sulphate.

Perspiration: fermented pollen and royal jelly; floral pollen; sage.

Excretion of waste products: psyllium fibre and dried herbs (nettle leaf, dandelion root, marigold, peppermint, yarrow, goldenrod); wheat sprouts.

Urinary tracts: cranberry extract; lingonberry and cranberry proanthocyanidins; pumpkin seed; soy extract.

Liver, gall bladder, kidney: artichoke leaf; artichoke leaf, milk thistle seed and dandelion sprout and root; buckthorn berry oil; *Chlorella* algae; dandelion root extract; garlic; globe artichoke; liquorice; phospholipids; quercetin.

Digestion and absorption of nutrients: enzymes that break down different carbohydrates; galactooligosaccharides; herbal yeast plasmolysate; honey; lactase enzyme; lipase; papaya; protease; vitamin D.

In addition, claims were presented which, on the basis of the information obtained from the operators, could not be classified under the above-mentioned headings. These include such general claims as ‘promotes health’ or ‘protects the system in various ways’ and other claims, whose purpose was not evident from the claims, such as e.g. ‘increases the production of nitric oxide’ or ‘protects from the hazards of heavy metals’. Such unclassified claims were made with respect to alpha-linoleic acid; bio-active plant compounds; a combination of sea buckthorn oil and vitamin E; flax grains; garlic; L-arginine hydrochloride; L-carnitine; plant phenol; quercetin; silicon; thiamine.

5.4 Nutritional value of products

The Regulation on nutrition and health claims for presenting a claim contains the requirement that there be a suitable composition and nutrient profile which will be defined later. For this reason, the claims in the health claim questionnaire were always linked to specific products, not only to specific ingredients. In addition, the operators were asked in the survey to state the nutritional values of the products. With regard to food supplements, it was not necessary to supply this information. The nutritional value of products was stated in 47% of the questionnaires.

As yet it is not known on the basis of which nutrient contents the nutrient profiles will be defined and whether different requirements will be linked to different types of products. In this report, the products are sorted into categories on the basis of the suggestions made by the Commission’s Working Group on 27 November 2006. As a base, the model proposed by Denmark was used, where the products are divided into the following seven categories:
- Dairy products except cheese
- Cheese
- Meat, poultry, eggs, charcuterie products, etc
- Fish and fish products
- Bakery products (including bread, biscuits, cakes etc), flour, grains and cereals
- Fruits and vegetables, potatoes or potato products
- Ready meals (including soups, pizza etc)
- Fats (including all fats, mayonnaise, dressing, sauces etc.)
- Beverages (non-alcoholic)
- Desserts, snacks and sweets

In addition, in its preliminary proposal the Commission presented the division of products into five categories:

- Vegetable oils
- Spreadable oils
- Dairy products
- Cereal products (bread, breakfast cereals)
- Fruits

In the current report, the Commission’s proposal has been taken into account such that, unlike in the Danish proposal, fats have additionally been divided into vegetable oils and spreadable oils. By conflating Denmark’s and the Commission’s models, the present report classifies the products into the following 12 categories:

1) Milk and milk products
2) Cheese and cheese-like products
3) Meat, poultry, eggs, charcuterie products
4) Fish and fish products
5) Cereal products
6) Vegetables, fruits and berries
7) Ready meals
8) Vegetable oils
9) Spreadable oils
10) Beverages
11) Desserts, snacks and sweets
12) Others

The classification of products into different categories caused problems. Certain dried products, such as mineral salt, soy powder, sugar beet fibre or certain seeds, such as flax seeds, could not easily be classified into the above-mentioned categories. These products are subsumed under number 12 (‘Others’). Juices and beverages appear under number 10 (‘Beverages’) irrespective of whether they concern, for example, unsweetened juice, in which case the product could also be classified as belonging to the ‘Vegetables, fruits and berries’ group.

Nutritional value information per product group can be found in the Finnish report and in its Appendix 6. Nutritional value information is presented for those nutrients that are mentioned in the Regulation on nutrition and health claims (fats, saturated fats, trans fatty acids, sugar, salt/sodium). For most products, the amount of trans fatty acids was not stated. Nutritional value information is given per 100 g of product.

The foods or food categories in the tables are presented in the form in which the operator has stated them in its responses. Evira has not evaluated their correctness or legality. If the operator has not stated any specific nutrient or other substance as the basis for the claim made, but the
claim is linked to e.g. a product in its entirety, a comment in brackets has been added to the column, ‘Nutrient or other substance,’ which shows what the claim is linked to, e.g.: [the claim was linked to the glycaemic index]. If the operator has reported the food on which the claim is based only by the product’s trade name, then the food entry is marked with a question mark, or with the food which Evira assumes might be the food in question, preceded by a question mark.

If it seems that the operator has stated the amount using a different unit than that used in the questionnaire, and the operator has not stated which unit was used, then a question mark in brackets (?) follows the unit. Most commonly, question marks have been used with regard to salt and sodium. The questionnaire asked operators to state the amount of salt in grams and the amount of sodium in milligrams. With regard to some products, however, Evira suspected that the operator had stated the amount of sodium in grams.

6. Discussion

The purpose of the project was to chart the health claims set forth in article 13 and used (or to be used) on the Finnish food market, and their scientific justification. The collection of the claims was to be implemented in order to give all interested parties the opportunity to participate in the charting of health claims.

The purpose of this English summary is to give an overview of the implementation and results of the project. The summary aims to portray the claims stated by the operators and the substances linked to the claims as accurately as possible. Information on the scientific justification and references can be found in the more detailed Finnish report. The information in both the Finnish and English reports is based only on that obtained from the operators and has not been evaluated or verified. All information presented in the reports must therefore be viewed from a particularly critical stance.

The authorities will later utilise the results of the report in the compilation of the list, required by the Regulation, of claims deemed acceptable by the Finnish authorities. The European Food Safety Authority (EFSA) will evaluate the scientific justification of the claims. In addition, information on the nutritional value and other composition of the products may be utilised when determining at Community level to what types of products claims may be linked in future.

6.1 The implementation of the project and functioning of the questionnaire

The project was implemented as openly as possible and, on several occasions, different operators were given information on the project and the opportunity to supplement the information already submitted. Collection of the material took place through the questionnaire on Evira’s Internet pages, which could be filled out by all who so desired. The questionnaire was pre-tested with operators in the sector before publication. Information on the project was widely distributed on the Internet, in the press and at various public events. A monitoring group was also established for the project, to which representatives from various areas of the food sector were invited. After preliminary project results became available, Evira published a preliminary report on the Internet, which was used as a basis for a health claim seminar for operators in the sector. During the seminar, the results of the survey were presented and there was a discussion of the kinds of health claims which are generally acceptable and the prerequisites required for their presentation. After the seminar the operators had another three weeks to supplement or comment on the data in the draft report.
The classification of the claims was based on the classification used in the ILSI Passclaim project. This classification, based on subject areas, was chosen because this type has also been discussed at the EFSA and classification linked to types of claims may facilitate further treatment and evaluation of the material.

6.2 Collected claims and their justification

In total, the health claim survey sent 625 forms, in which claims pertaining to 269 substances or combinations of substances were presented. The greatest number of claims pertained to cardiovascular health.

Although the English-language summary does not give more specific information on the scientific justification supporting the claims, some general viewpoints are given below which were presented at the seminar of 11 December 2006.

During the seminar, representatives from the food industry stressed that textbook data and nutrition references should be accepted as such without requiring new studies that fulfil the criteria of scientific proof. The criteria in general should be reasonable, and those demanded for such proof should not be too rigid. Representatives of the health food industry suggested that studies carried out with ingredients should suffice for health claims made with respect to food supplements. Product-specific proof could be required with respect to claims pertaining to the reduction of the risk of disease and the health and development of children. During the health claim seminar and also in the survey forms, it was suggested that different demands be placed on food supplements and medicines. Although studies are often carried out with a higher content than that of the final product, this should not be a requirement for presenting a claim that the product contains the same amount of active ingredient. The representative of the health food industry suggested that food supplements be treated as a separate group with regard to claims and the required proof. Food and health food operators suggested that in the choice of words for the claims, companies be given the freedom to formulate their claims in accordance with the situation.

Consumer and consumer research representatives emphasised that the consumer viewpoint should also be taken into account. The Regulation requires that claims should be understood by the average consumer. Carrying out research on the comprehension of consumers is challenging, and the attitude of consumers towards the claims on foods is liable to vary markedly. Some believe everything that is said in the marketing of a product. Claims should avoid vague terms such as ‘may’ and ‘maybe’. The consumer may not be misled with regard to the properties of a product. More research on consumers’ ability to understand claims is needed and, in the Nordic countries, a pan-Nordic study has started which evaluates claims utilising, among other things, the data collected in this project. Preliminary results will be available in the autumn of 2007 before the national lists are sent.

The research representatives emphasised that claims should not be accepted without proper scientific proof. Within the Community, scientific justifications will be evaluated by researchers and it would be unrealistic to expect that a positive evaluation would be obtained based on weak scientific justification. The Commission is preparing guidelines with regard to the compilation of applications and scientific justification. Although under the present circumstances the instructions will only be created for individual applications, they can also be utilised in the compilation of national lists. The report lists numerous Finnish-language books or articles supporting the claims. The EFSA has not yet published more detailed instructions for the required justification but, because the claims will be evaluated by a panel of international experts, the use of references in Finnish only may turn out to be problematic.
The representative of the local supervisory authorities underlined the worries of the local authorities with regard to their possibilities and resources to monitor claims. Although the local authorities do not need to evaluate the adequacy of the claims, they must still be able to ensure that the preconditions for use of the claims are fulfilled. The criteria and preconditions for use must be satisfactorily described in the forthcoming register.

The representative of the National Agency for Medicines focused attention on the interface between foods and medicine. The report contains various claims which are medicinal according to the Agency, and such claims should not be acceptable in the marketing of foodstuffs. Some claims refer to ingredients from the Medicinal Products List, and a number of studies refer to the treatment, prevention or curing of diseases.

Of the claims obtained in the health claim survey, only those claims were removed which were clearly medicinal claims: claims which referred to decreasing the risk of a disease and claims referring to the health and development of children. During the seminar, a number of operators also expressed the wish to obtain information about those claims which were considered medicinal and which Evira did not include in the report. No list of claims not included will be published, but Appendix 3 includes examples of claims considered medicinal.

6.3 Further processing of the results and challenges related to the compilation of national lists

One of the purposes of this project was to collect data on claims used in Finland and their scientific justification. The English summary aims to describe the claims presented by the respondents and the ingredients to which the claims are linked. The correctness of the data and the acceptability of the claims have not been evaluated. For example, the report may contain claims which can be interpreted as being linked to the reduction of the risk of disease or medicinal claims. It is therefore of extreme importance that the given information be examined, since the data in the report will be utilised in future, for example in the compilation of the national list as required by article 13 of the Regulation on nutrition and health claims. In the compilation of the national list it might make sense with regard to scientific justification to utilise the Evira expert network for the evaluation of health claims and the completed evaluations carried out by the network on the adequacy of the scientific justification.

The processing of the national lists required by the Regulation will commence under the direction of the Ministry of Trade and Industry after the report has been completed. The Ministry will send the Commission the national list of claims presented by Finland by 31 January 2008. Compiling the national lists will prove challenging, partly because there are still no Community-level guidelines available for the classification of claims or for the justification criteria. Additionally, the operators have different views on the processing of the lists, the classification of the claims and the adequacy of the scientific justification. For example, during the health claim seminar which was part of the project, a number of representatives of the foodstuff industry emphasised that Finland should not eliminate too many claims but should send as many as possible to the EFSA for evaluation. With regard to claims pertaining to the reduction of the risk of disease, representatives of the food industry emphasised that the interpretation of what is considered a disease should not be too limited. Research and consumer representatives, however, stated that elimination on a national level and the evaluation of scientific justification is necessary. Monitoring ensures that the preconditions for the use of claims are described clearly enough for monitoring when in actual use. For example, consideration of how one can be sure that the products always contain a sufficient amount of active ingredient for achieving the claimed effect will prove crucial. The problems raised by the representatives of the National Agency for Medicines concerning the medicinal effect of certain claims are important. Medicinal claims should not be permitted for foodstuffs.
During the seminar, various opinions were also presented with regard to the way claims are formulated. In particular, representatives of the food industry stated that formulations of claims should not be standardised but that the manufacturer or marketer of a product should have the opportunity to formulate the message. On the other hand, it was also suggested that with regard to the evaluation of the justification, as accurate a specification of claim formulation as possible would be in the interests of the monitoring process and consumers. According to the consumer representative, it is especially important that conditional claims, whose scientific justification is not convincing, are not accepted, since some consumers are unable to comprehend the uncertainty related to vague expressions. In processing the national lists and choosing the formulation, it may be worthwhile to utilise the studies being carried out at present with regard to consumers’ understanding of claims.
7. References


Aertgeerts P, Albring M, Klaschka F, Nasemann T, Patzelt-Wenczler R, Rauhut K, Weigl B. Vergleichendeprüfung von Kamillosan®-creme gegenüber seroidal (0.25% hydrocortison, 0.75% fluocinbutylester) und nichseroidalasen (5% bufexamac) extrena in der erhaltungsterpaie von ekzemeralkankungen. [Comparative testing of Kamillosan cream and steroidal (0.25% hydrocortisone, 0.75% fluocortin butyl ester) and non-steroidal (5% bufexamac) dermatologic agents in maintenance therapy of eczematous diseases]. Z Hautkr. 1985 Feb 1;60(3):270-7. (lication of the


Anderson JW. Dietary fiber, lipids and atherosclerosis. Am J Cardiol. 1987;60(12):17G-22G.


Anderson JW and Hanna TJ. Whole grains and protection against coronary heart disease: what are the active components and mechanisms? Am J Clin Nutr 1999;70 (3) 307-308.


Anon 3. Food labelling: health claims; soluble fiber from certain foods and coronary heart disease. Federal Register, 63, Docket No. 96P-0338. 1998


Anon 35. Nutrient Supplement and use of the same. Elmomed patettihakemus PCT/Fl2005/050365-PCT.


Anon 38. Calcium absorption from calcium L-lactate and other calcium sources in post menopausal women, a research bt TNO Nutrition and Food research institute, Zeist, The Netherlands,1999

Anon 39. Lactose, calcium source and age affect calcium bioavailability in rats, Department and Institute of food Science, new York State Collage of agriculture and Life sciences, Cornell University, 1991


Anon 51. Phytochemistry 1984,23(8)17-3-5/23(1),139-42


Aro A, Mutanen M, Uusitupa M. Ravitsemustiede. Duodecim / Gummerus Kirjapaino Oy, Jyväskylä 2005


Audeval B, Bouchacourt P. Double blind, placebo controlled study of the mussel Perna canaliculus (New Zealand green-lipped mussel) in gonarthrosis (arthritis of the knee), Gazette Médicale 1986, 93(38), pp. 111-116 (study)


Beer MU, Pritchard H, Belsey, EM, Davidson, M, 2000. Effect of a milk drink enriched with increasing doses of free tall oil phytosterols on plasma lipid levels of mildly hypercholesterolemic subjects. Novartis Consumer Health unpublished. (Clinical study report)


Billard Henri. L’extrait de Perna Canaliculus, la Moule aux Orles verts de Nouvelle-Zélande en Rhumatologie, Gazette Medicale 1985, 92 (7), pp. 97-101 (review)


Bjökman. Colonization of the human gastrointestinal tract by the lactic acid bacteria Lactobacillus reuteri. Helsingin yliopisto, 1999


Bone K. Bilberry-The vision herb. MediHerb Prof Rev. 1997;59:1–4. (katsaus)


Branth S, Gruber P. Ginseng improves performance, Biomed 3/91


Burrowes JD, Van Houten G. Herbs and Dietary Supplement Use in Patients with Stage 5 Chronic Kidney Disease. Nephrology Nursing Journal, 2006 Jan/Feb 33/1, 85-88.


Burton-Freeman B. Dietary fiber and energy regulation. J Nutr 2000;130:272S-275S.


Carlisle EM. In vivo requirement for silicon in articular cartilage and connective tissue formation in the chick. J Nutr 1976;106:478–484


Carlson SE, Neuringer M. Polyunsaturated fatty acid status and neurodevelopment: a summary and critical analysis of the literature. Lipids. 1999 Feb;34(2):171-8

Carroll DG. Nonhormonal therapies for hot flashes in menopause. Am Fam Physician 2006; Feb 1;73 (3): 457- 64


Castaldo S, Capasso F. Propolis, an old remedy used in modern medicine. 2002. Fototerapia, vol 73, suppl 1, pp. S1-S6


Castleman Mikael. Terveyskasvit. Otavan kirjapaino Oy, Keuruu 2000


Chantre P., Lairon D. Recent findings of green tea extracts AR25 (Exolise) and its activity for the treatment of obesity. Phytomedicine 2002, 9: 3-8


Cheatham et al. N-3 fatty acids and cognitive and visual acuity development, methodological and conceptual considerations. Am J Clin Nutr 2006; 83(suppl): 145S-146S.


Chen X. Pollen, trace elements and health. Huanjing Baohu (Beijing) (1985),(2), 12-14, 18.


Dam RM, Coffee and type 2 diabetes: from beans to beta-cells. Nutrition, Metabolism & Cardiovascular Diseases 2006; 16:69-77. (Katsaus)


Djoussé L, Folsom AR, Province MA et al: Dietary linolenic acid and carotid atherosclerosis: the National Heart, Lung, and Blood Institute Family Heart Study; Am J Clin Nutr 2003;77:819-25 (a)


Dörling, E. Bio-Strath and increased performance. SWISS PHARMA (11) (published in Germany) 1981

Dörrzapf A. Die Wirksamkeit des Extrakttes der “Grünlippigen Muschel” (Perna canaliculus) bei Pferden mit degenerativen Gelenkerkrankungen, Dissertation Ludwig-Maximilians-Universität München 2001 (animal test)


EFSA: Opinion of the Scientific Panel on Dietetic Products, Nutrition and Allergies on a request from the Commission related to the Tolerable Upper Intake Level of Silicon. (Request N° EFSA-Q-2003-018), 2004 (review)


Elintarvikevirasto. Terveysvääteiden valvontaopas 3/2002


Enkovaara A-L. 101 luontaistuotetta. Duodecim 2005


Erkkilä AT, Lehto S, Pyörälä K et al. n-3 fatty acids and 5-year of death and cardiovascular disease events in patients with coronary artery disease; Am J Clin Nutr 2003;78:65-71


Erkkola R and Yang B. Sea Buckthorn oils: towards healthy mucous membranes. AgroFood industry hi-tech. 2003;3, 53-57

Eskelinen A. and Santalahti J. Natural Cartilage Polysaccharides for the Treatment of Sun-damaged Skin in Females: a Double-blind Comparison of Vivida and Imedeen. 1993


Fletcher AE, Breeze E, Shetty PS. Antioxidant vitamins and mortality in older persons: findings from the nutritional add-on study to the Medical Research Council Trial of Assessment and Management of Older people in the Community. Am J Clin Nutr 2003;78:999.


Food and Drug Administrator (FDA) health claim for barley beta-glucan

Food and Drug Administrator (FDA) health claim. 21 CFR Part 101 [Docket No. 01Q-0313. Food Labeling: Health Claims; Soluble Dietary Fiber From Certain. Foods and Coronary Heart Disease

Food and Drug Association (FDA) health claim: Whole Grain Foods and Risk of Heart Disease and Certain Cancers. Docket No. 99P-2209


Gebauer SK, Psota TL, Harris WS, Kris-Etherton PM. n-3 fatty acid dietary recommendations and food sources to achieve essentiality and cardiovascular benefits. Am J Clin Nutr 2006;83(suppl):1526-35S.


Gerhardsen G, Gerhardsen S et al, Femal, a natural remedy based on two pollen extracts, reduces symptoms of PMS. Presented at 6th Congress of the European Society of Gynecology, Helsinki, Finland June 2005 (a randomized, placebo-controlled parallel study)

Gerhauser C. Broad spectrum anti-infective potential of xanthohumol from hop (Humulus lupulus L.) in comparison with activities of other hop constituents and xanthohumol metabolites. Mol Nutr Food Res. 2005 Sep;49(9):827-31.

German Federal Health Office, Comission E for Phytotherapeutic Substances. Monografia Cucurbita pepo, Käyttöä leveyt: ärstytysrakko ja virtsaamisvaivat.


Gibson et al. Selective stimulation of Bifidobacteria in the human colon by oligofructose and inulin. Gastroenterology 1995;108: 975-982. (b)

Gibson RG, Fuller R. Aspects of in vitro and in vivo research approaches directed toward identifying probiotics and prebiotics for human use. J Nutr 2000;130:391S-SS.


Gindin J et al. 1995. “The effect of plant phosphatidylserine on age-associated memory impairment and mood in the functioning elderly.” Geriatric Institute for Education and Research, and Department of Geriatrics Kaplan Hospital, Rehovot, Israel.


Glore SR, J Am Diet Assoc 1994;94:425-436


Gmunder FK. Effect of a herbal yeast food supplement and long-distance running on immunological parameters. BRITISH JOURNAL OF SPORTS MEDICINE (Vol 24, No 2) 1990.


Gross H. Effect of honey consumption on plasma antioxidant status in human subjects. Abstract presented at the American Chemical Society, March 29, 2004


Grästen SM, Juntunen KS, Poutanen KS, Gylling HK, Miettinen TA and Mykkänen HM. Rye bread improves bowel function and decreases the concentrations of some compounds that are putative colon cancer risk markers in middle-aged women and men. J Nutr 2000;130:2215-2221.


Hallikainen MA, Sarkkinen ES, Uusitupa MI. Plant stanol esters affect serum cholesterol concentrations of hypercholesterolemic men and women in a dose-dependent manner. J Nutr 2000;130:767-776. (b)


Hinneburg J, Dorman H J D, Hiltunen R. Antioxidant activities of extracts from selected culinary herbs and spices. Food Chemistry 2006; 97; 122–129.


Hu FB. Am J Clin Nutr 2003;78(suppl):544S-551S


Huang Q, Liang W, Cai P. Adsorption, desorption and activities of acid phosphatase on various colloidal particles from an Ultisol. Colloids Surf B Biointerfaces. 2005 Nov 10;45(3-4):209-14 (a)


Huth PJ. Major scientific advances with dairy foods in nutrition and health, J Dairy Sci 2006;89:1207-1221.


Issac, C.E. and Schdeidman K., Enveloped viruses in Human and Bovine Milk are Inactivated by Added Fatty Acids (FAs) and Monoglycerides (MGs) FASEB Journal 1991 ;5:Abstract 5325, p.A 1288.


Joint Health Claims Initiative. “Eating long chain omega-3 polyunsaturated fatty acids, as part of a healthy lifestyle, has been shown to help maintain heart health”. Final report Long Chain Omega-3 Generic Health Claim to the JHCI: May 2004.


Joller PW. Influenza and colds in winter: prophylaxis with a herbal yeast preparation in comparison with influenza vaccination (published in German) GanzheitsMedizin 1996;8(5).


Kalim R et al. Activin, a grape seed-derived proanthocyanidin extract reduces plasma levels of oxidative stress and adhesion molecules in systemic sclerosis, Free Radic Res (2002) 36 819-825


Kazmierski M et al. Effect of differences in whey protein composition on the stability of fortified valencia orange juice. 2002


Kekkonen RA, Ahroos T, Suomalainen T, Tynkynen S, Poussa T, Nevala R, Korpela R. A combination of galacto-oligosaccharides and Lactobacillus GG increases bifidobacteria to a greater extent than Lactobacillus GG on its own [Submitted Milchwissenschaft 2006]. (a)

Kekkonen R, Jauhiainen T, Lummela N, Tuure T. Effects of a fiber enriched milk drink and fat-free milk on blood glucose levels in healthy subjects. (abstract) Neuroendocrinological regulation of food intake. 11-12 May, 2006, Kuopio, Finland. (b)

Kekkonen R, Jauhiainen T, Lummela N, Tuure T. Effects of a fiber enriched milk drink and fat-free milk on blood glucose levels in healthy subjects (abstrakti, hyväksytty EASO (European Association for the Study of Obesity) kongressiin (15th ECO, Budapest, Hungary, 22nd-25th April 2007))


Kimura H, Gruber P. Pre-menopausal symptoms reduced by Femal., Presented at the poster session on the 10th World Congress on the Menopause, Berlin, Germany, June, 2002.


Koch HP, Lawson L. Garlic, the Science and Therapeutic Application of Allium sativum L. and Related Species*, Williams & Wilkins, 1996


Korhonen H and Pihlanto A.Food-derived bioactive peptides- opportunities for designing future foods. 2003


Korthäuer W, de la Torre J: Behandlung deformierter Arthropathien beim Diensthund mit einem neuen Glykosaminoglykanpräparat, Kleintierpraxis 1992, 37, pp. 467-478


Kris-Etherton PM, Am J Med 2002;113:71S-88S


Kujala T. Rye: Nutrition, Health and Functionality 1999


Köhler B, Andréen I, Jonsson B. The earlier the colonization by mutans streptococci, the higher the caries prevalence at 4 years of age. 1988. Oral Microbiol immunol 3:14-17


Lane IW, Comac L. Sharks Don't Get Cancer. Avery Press, Garden City, NY 1992


Lassus A. et al. The repairing effect of Vivida on skin atrophy induced by long-term use of potential topical corticosteroids. Helsinki Research Center. 1993 (a)

Dermatological clinic. Les Nouvelles Dermatologiques, Strasbourg, (English-French International Journal): accepted to be published (b)


Le Bell AM, Söderling E, Rantanen I, Yang B, Kallio H. (2001) Effects of sea buckthorn oil on the oral mucosa of Sjögren’s syndrome patients: a pilot study. Poster at The eightieth General Session & Exhibition of International Association for Dental Research (IADR), March 6-9, San Diego, USA


Leonard A, Droy-Lefaix MT, Allen A. Pepsin hydrolysis of the adherent mucus barrier and subsequent gastric mucosal damage in the rat: effect of diosmectite and 16,16 dimethyl prostaglandin E2. 1994


Liebmann H R. Caffeine. In: Smith A P and Jones D M (Eds.), Handbook of Human Performance, Volume 2, 1992


Lummela N, Kekkonen R, Jauhiainen T, Tuure T, Järvenpää S, Eriksson JG, Korpela R. Effects of a fibre enriched milk-drink on blood glucose and insulin levels in healthy subjects. (a)


Mattson GH, J Nutr 1997;107:1139-1146


McCarty MF. A chlorogenic acid-induced increase in GLP-1 production may mediate the impact of heavy coffee consumption on diabetes risk. Med Hypotheses, 2005; 64:848-53.


Messina M, Hughes C. Efficacy of Soyfoods and Soybean Isoflavone Supplements for Alleviating Menopausal Symptoms Is Positively Related to Initial Hot Flush Frequency. Journal of Medicinal Food 2003; Volume 6, Number 1, 2003


Mikkonen, von Wright. The effect of food matrix on the intestinal viability and adhesion of probiotics bacteria. Kuopion yliopisto, 2001


Mäkelä H., Hiltunen R., Mäkeläinen H., Mahlberg K. (2001) Yksinkertaisilla ravinto ja elitapamuutoksilla on myönteinen vaikutus tavallismiin terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden terveyden 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Naghii MR, Samman S. The role of boron in nutrition and metabolism. Prog Food Nutr Sci 1993 Oct-Dec 17:4 331-49


New Canaan CT (Ed). Enzymes and Enzyme Therapy . Keats publishing, 1994


REPORT ON HEALTH CLAIMS USED IN MARKETING OF FOODSTUFFS IN FINLAND


Oliveira AL, Malafaya PB, Reis RL: Sodium silicate gel as a precursor for the in vitro nucleation and growth of a bone-like apatite coating in compact and porous polymeric structures. Biomaterials 2003 Jul;24(15), pp. 2575-2584.


Ouweland AC & Philipp S. Bifidobacterium lactis HN019; the good taste of health. AgroFOOD Industry Hi-tech 2004; Sept/Oct: 10-12.


Parker GB et al. Low levels of docosahexaenoic acid identified in acute coronary syndrome patients with depression. Psychiatry Res. 2006 Mar 30;141(3):279-86. (b)


Pedersen A. Longovital and herpes labialis: a randomised, double blind, placebocontrolled study. Oral diseases 2001;7:221-5. (a randomised, double blind, placebocontrolled study)


Pelka RB. Pre-geriatric study on Bio-Strath. NOTABENE MEDICI (Published in German) (3/4).1990.


Peltosaari L ja Raukola H. Ravitsemustieto, 2. painos, Kustannusosakeyhtiö Otava, Keuruu, 1998


Plat J, Mensink RP. Plant stanol and sterol esters in the control of blood cholesterol levels: mechanism and safety aspects. Am J Cardiol. 2005 Jul 4;96(1A):15D-22D.


Podczeck F. Particle-Particle Adhesion in Pharmaceutical Powder Handling. Imperial College Press, 1988


Qian BC. Progress of research on the nutritional pharmacology of pollen. Chung Hsi I Chieh Ho Tsa Chih 1989 Feb 9:2 125-8, 87.


Ramirez FC, Lee K, Graham DY. All lactase preparations are not the same: results of a prospective, randomised, placebo-controlled trial. Am J Gastroenterol 1994;89:566-70.


Rautavaara Toivo: Terveyskasvikirja. Werner Söderström Osakeyhtiö 1995


Reisser CH, Weidauer H. Ginkgo biloba extract EGb 761 or pentoxifylline for the treatment of sudden deafness: a randomized, reference-controlled, double-blind study. (in-vitro study)


Richardson AJ. The importance of omega-3 fatty acids for behaviour, cognition and mood. 2003.


Roy S, Khanna S, Krishnaraju Av, Subbaraju GV, Yasmin T, Bagchi D, Sen CK. Regulation of vascular responses to inflammation: inducible matrix metalloproteinase-3 expression in human microvascular endothelial cells is sensitive to
antiinflammatory boswellia. Antioxid Redox Signal. 2006 Mar-Apr;8(3-4):653-60 Antioxid Redox Signal. 2006 Mar-
Apr;8(3-4):653-60.


Ruel G, Pomerleau S, Couture P, Lamarche B, Couillard C. Changes in plasma antioxidant capacity and oxidized low-


Ruottinen L (toim.). Mehiläishoitoa käytännössä osa II. Suomen Mehiläishoitajain Liitto SML. 2005


Rushmore TH, Kong A-NT. Pharmacogenomics, Regulation and Signaling Pathways of Phase I and II Drug Metabolizing Enzymes. Current Drug Metabolism. 2002; 3; 481-490.


Sahar MM. Longovital and recurrent aphthous ulceration Doctor degree in Oral Medicine 2003 (a randomised double-
blind, placebo-controlled study)


Scientific Committee on Food. SCF/CS/NF/DOS/15 ADD 2 Final 13 March 2003

Scientific Committee on Food. SCF/CS/NF/DOS/20 ADD 1 Final 2 October 2002


Scientific Committee on Food (SCF). Report on Scientific Committee on Food on composition and specification of food intended to meet the expenditure of intense muscular effort, especially for sports men SCF/CS/NUT/Sport/5 Final (corrected) 28 February 2001.


Schwarz K. The activity of Flavomare in cooked and frozen meat products, University of Hannover. Institut für Lebensmittelwlesenschaft. May 1998

Schwarzenbach FH. Effects of subclinical nutritional deficiensi in high-performance sports (Published in German) JUGEND UND SPORT (6) 1976

Schwarzenbach FH, Brunner KW. Effects on herbal yeast preparation in convalescent patients (published in German) GanzheitsMedizin 1996, 8(6).


Schwarzenberg M, Joller P, Cogoli A. Mode of action of plasmolysed yeast on lymphocytes under microgravity stress. Immunological Investigation Vol 29., No. 4, 2000 (b)


Shoji T, Akazome Y, Kanda I, Ikeda M. The toxicology and safety of apple polyphenol extract. Food and Chemical Toxicology 2004; Vol 42, Iss. 6, pp 959-967.


Shornikova AV, Casas IA, Isolauri E, Mykkänen N, Vesikari T. Lactobacillus reuteri as a therapeutic agent in acute diarrhea in young children. J Pediatr Gastroenterol Nutr 1997;24:399-404. (b)

Shoskes DA, Manickam K. Herbal and complementary medicine in chronic prostatitis. World J Urol 2003 Apr 29; [epub ahead of print]


Sinebrychoff sisäinen raportti: Hyvää Päivää kevyt hedelmäjuoma, Tuotteen vaikutus veren glukoosipitoisuuteen ja kylläisyyteen tuntemukseen, 22.03.2004


Somasundaran P. Encyclopedia of Surface and Colloid Science, 2004 Update Supplement by Ponisseril Somasundaran discusses, Columbia University, New York, New York, USA.


Sotaniemi EA, Haapakoski E, Rahtio A. Ginseng Therapy in Non-insulin-dependent Diabetic Patients, Effects on psychophysical performance, glucose homeostasis, serum lipids, serum aminoterminalpropeptide concentration and body weight; Diabetes Care, volume 18, number 10, October 1995


Steinhoff B. The pharmacopoeia and Commission E of the ESCOP and the WHO.

Steinkellner H et al. Coffee consumption induces GSTP in plasma and protects lymphocytes against (+/-)-anti-benz[a]pyrene-7,8-dihydrodiol-9,10-epoxide induced DNA-damage: Results of controlled human intervention trials. Mutat Res 2005;591:264-75.

Steinmetz K, J Am Diet Assoc, 1996;96:1027-1039


Swedish Nutrition Foundation SNF. Health claim Sweden. Cardiovascular disease/Artherosclerosis - Blood cholesterol levels, b) Certains types of dietary fibre: oat beta-glucan

Swedish Nutrition Foundation SNF. Health claim Sweden. (Coronary) heart disease – Whole grain


Tolmunen T. Masennus, B-vitamiinit ja homokysteiini (väitöskirjan tiivistelmä) 2005


Touyz RM. Magnesium in clinical medicine. Front Biosci. 2004 May 1;9:1278-93.


Trewavas A. Current Opinion in Plant Biology, 2003;6:185-190


Truswell AS, Choudhury N. Monounsaturated oils do not all have the same effect on plasma cholesterol. Eur J Cln Nutr 1998 May;52(5):312-5.


Tungland, B.C., ja Meyer, D., Nondigestible oligo- and polysaccharides (Dietary fiber): their physiology and role in human health and food, Comprehensive reviews in food science and food safety, vol1, 2002, 73-92.


Tuomilehto et al. 1999. A report from a double blind, placebo-controlled trial.


Tuomilehto J et al. Coffee Consumption and Risk of Type 2 Diabetes Mellitus Among Middle-aged Finnish Men and Women. JAMA 2004; 291(10):1213-1219. (c)


Uhari, M. & all (2001) Vaccine, 19, pp S144-s147


Van Den Kamp ed. Dietary Fibre. 2003


Van Duyn MA, Pivonka E. Overview of the health benefits of fruit and vegetable consumption for the dietetics professional: selected literature. J Am Diet Assoc 2000;100:1511-1521


Vetvicka V. Beta-Glucans as immunomodulators. JANA vol.3 No.4 31-33 (2001)


Virtanen J. Homokysteinin ja folaatin vaikutus sydän ja verisuonitautuijen riskiin; Kuopion yliopisto 2005


Visioli F, Bellosta S, Galli C. Oleuropein, the bitter principle of olives, enhances nitric oxide production by mouse macrophages. Life Sci 1998, 62(6) 541-6 (b)


VTT:n loppuraportti Tekesille (MMM:lle). Rukiin bioaktiiviset yhdisteet.


Watras AC, Buchholz AC, Close RN, Zhang Z, Schoeller DA. The role of conjugated linoleic acid in reducing body fat and preventing holiday weight gain. International Journal of Obesity advance online publication 22 August 2006; doi: 10.1038/sj.ijo.0803437


Wedler FC Biological significance of manganese in mammalian systems. Prog Med Chem 1993 30: 89-133


Westermark H et al. Use of hydroxy acid or a product containing the same and a product made thereof. US6203835B1, 20.3.2001/ FI962603


Widmaier W. Phlanzenheilkunde, Gesichte - Praxis - Resepturen WBV Biologisch-Medizinische Verlagsgesellschaft GmbH & Co KG 1986


Winther K, Gruber P. An open pilot study of Femal in reducing climacteric symptoms. Presented at the poster session on the 10th World Congress on the Menopause, Berlin, Germany, June 2002 (an open pilot study)
Winther K, Hedman C. A pollen pistil extract, Femal reduces weight gain, irritability and dysphoric disorders in women suffering from premenstrual syndrome (PMS). Presented at the poster sessions of the 8th World Congress of Gynecological Endocrinology in Florence, Italy, December 2000 (a randomized, double-blind, placebo-controlled study)

Winther K, Hedman C. Assessment of the Effects of the Herbal Remedy Femal on the Symptoms of Premenstrual Syndrome: A Randomized, Double-blind, Placebo-controlled Study, published in Current Therapeutic Research, Volume 63, number 5, may 2002; presented at the poster session on the 10th World Congress on the Menopause, Berlin, Germany, June 2002 (a randomized, double-blind, placebo-controlled study)


Wisker E, Daniel M, Feldheim W. Particle size of whole meal rye bread does not affect the digestibility of macro-nutrients and non-starch polysaccharides and the energy value of dietary fibre in humans. Journal of the Science of Food and Agriculture 1996;70:327-333.


Wren R C. Potters New Cyclopaedia of Botanical Drugs and Preparations Health Science Press Bradford 1980


Yang B. Berry seed oils as unique natural sources of alfa-linolenic acid and other bioactive lipids.4th EuroFed Lipid Congress 1-4.10.2006 University of Madrid, Spain


Yoon S, Lee J, Lee S. The therapeutic effect of evening primrose oil in atopic dermatitis patients with dry scaly skin lesions is associated with the normalization of serum gamma-interferon levels. Skin Pharmacol Appl Skin Physiol 2002 Jan-Feb;15(1):20-5


Yu H, Kosuna K, Haga M (edit.). PERILLA---The Genus Perilla. (published in 1997 by Harwood Academic Publishers, reprinted in 2004 by Taylor & Francis Group). This book is one of the Monographs listed in TGA (Therapeutic Goods Administration, Australia)-approved texts for "Guidelines for levels and kinds of evidence to support indications and claims, for non-registerable medicines, including complementary medicines, October, 2001" (page.31)


Öckerman P-A. Antioxidant Treatment of Chronic Fatigue Syndrome. Clinical Practice of Alternative Medicine, Volume 1, NO2, 2002


Instructions for filling out health claim questionnaire

General instructions

Before moving on to the questionnaire please read these instructions carefully and study the research evidence referred to that is essential to the claims.

The questionnaire can be filled out by all interested parties in Finland, such as food business operators, suppliers of raw materials, experts, representatives of patient organisations, authorities, etc.

The questionnaire is filled out separately for each presented claim and for each foodstuff. For several foodstuffs of similar type and of sufficiently similar composition (e.g. yoghurts of different flavours, different fruit juices) the questionnaire can be filled out to cover the whole group. If several operators market products of similar type (e.g. vitamin C food supplements), in which the amount of the effective ingredient is the same and on which same claims are made, the operators can fill out the questionnaire together.

A health claim refers to a claim that states, suggests or implies a relationship between a food category, a food or one of its constituents and human health. An individual health claim can in different situations be presented in different forms. Such health claims include, for example: Product x promotes cardiac wellbeing, compound a contained in product x helps in cholesterol management, product x is heart-friendly. For such claims, only one questionnaire needs to be filled out, with the different forms of the claim specified as accurately as possible. If other claims are made on the same product, such as product x has an impact on attentiveness, a separate questionnaire must be filled out for the other claim.

In the draft regulation a claim is always associated with a certain product, as criteria for making a claim include appropriate composition and nutrient profile, which according to the draft regulation will be defined later. For this reason, no separate information on individual ingredients is collected in the questionnaire. Suppliers of raw materials and/or operators who at present cannot specify the foodstuff or group of foodstuffs on which the claim related to an ingredient will be used, should indicate the foodstuff or group of foodstuffs on which they think the claim could be made and on which conditions (e.g. what is the required nutritional content of the product).

Pursuant to the draft regulation, the claims must be generally accepted and understandable to consumers. The primary purpose of this questionnaire is to collect various claims and the research evidence they are based on. Consumer issues will be reverted to at a later stage.

All the items in the questionnaire shall be filled out in applicable parts. In multiple-choice items, one or several choices can be filled out.
Instructions relating to individual questions

1. Foodstuff or group of foodstuffs on which the claim is used or planned to be used:

Foodstuff or groups of foodstuffs:

__________________________________________________________________________

An individual foodstuff can be e.g. yoghurt x, an oat bran product, an herb tablet, noni juice. A group of foodstuffs refers to e.g. yoghurts, soft drinks, etc. If the products in a group of foodstuffs clearly differ from each other in terms of the content of the effective ingredient or the composition in other respects (e.g. conventional vs. sugar-free soft drinks), the questionnaire must be filled out separately for each product.

If you are a supplier of raw materials, or an operator filling out the questionnaire for a product that does not exist, yet, you should indicate in this item the foodstuff /or group of foodstuffs, on which the claim can be used or is planned to be used. In this case, please indicate clearly (e.g. in parentheses after the group of foodstuffs), that the product does not exist, yet.

2. Which of the following choices best describes the claim?

The claim refers to:
☐ the role of a nutrient or other substance in growth, development and/or the functions of the body
☐ psychological and behavioural functions
☐ slimming or weight-control or a reduction in the sense of hunger or an increase in the sense of satiety or to the reduction of the available energy from the diet

Claims of other type, e.g. referring to the nutrient content of the product (e.g. rich in fibres, contains calcium) or to the reduction of disease risk, are not included in this investigation. Pursuant to the draft regulation, such claims will be assessed by another procedure.

Claims that suggest that the product prevents, treats or cures diseases are not included in this investigation, either, as it is prohibited to make such medicinal claims on foodstuffs.

3. Where is the claim used or planned to be used?

☐ Labelling
☐ Brochures / advertisements / Internet marketing directed at consumers
☐ Expert documentation
☐ Other forms of marketing, where: ________________________________

Select from the choices all the marketing channels in which the claim is used or planned to be used. If you are a supplier of raw materials, or an operator filling out the questionnaire for a product that does not exist, yet, and you do not necessarily know in which marketing channels the claim will be used, select the choice "Other forms of marketing".

Example:
☐ Labelling
☐ Brochures / advertisements / Internet marketing directed at consumers
☐ Expert documentation
☐ Other forms of marketing, where: ________________________________
The purpose of items 4-7 is to collect information about the claim made on the foodstuff or group of foodstuffs in all the formulations that are used or planned to be used. Claims made in expert documentation, for example, may differ from the claims used in labelling. Control is also in part dependent on the marketing channel.

Examples of claims:
- The calcium contained in yoghurt X reinforces bone
- A bone-friendly yoghurt
- Fibre is good for the stomach
- Balances intestinal functions

4. What is the claim made in labelling?

Example: A bone-friendly yoghurt

5. What is the claim made in brochures/advertisements/Internet marketing directed at consumers?

Example: TV advertisement: Yoghurt X for stronger bones

6. What is the claim made in expert documentation?

Example: Yoghurt reinforces bone, Yoghurt X contains calcium, which reinforces bone, and vitamin D, which supports the absorption of calcium

7. What is the claim made in other form of marketing?

8. Does the product family include foodstuffs with a brand name, trade mark or fancy name that includes a claim in itself, or foodstuffs that are advertised with symbols that can be interpreted to be health claims?

These questions are made because the draft regulation also applies to these. Pursuant to the draft regulation, a claim can also be a graphic, pictorial or symbolic representation.

☐ No
☐ Yes, name / names ____________________________
☐ Yes, symbol, picture, etc., what? ____________________________ (description)
9. The nutrient(s) or other substance(s) contained in the foodstuff or group of foodstuffs, on which the claim is based.

Nutrient or other substance: ________________
Amount / 100g: _____
Amount / portion: _____
Amount / daily portion: _____

There is space for a maximum of three substances in the questionnaire. If you think the foodstuff contains more substances that are essential to the claim, you can indicate these in your reply to question no. 16. If the claim is based on the joint influence of several components (standardised mixture), you can indicate the amount of the mixture and describe the mixture in more detail under question no. 16.

For conventional foodstuffs:
- indicate the amount both per 100 grams, and per portion or alternatively daily portion

For food supplements:
- indicate the amount of substance per daily portion.

For a product that does not exist, yet, or if the claim concerns ingredients, and it is not known in which foodstuff these will be used
- indicate the required amount in the product of the substance essential to the claim for the claim to be made

NOTE! The unit must always be indicated for any amounts.

Example of a conventional foodstuff:
- Nutrient or other substance: Calcium
  Amount / 100 g: 100 mg
  Amount / portion: 250 mg

Example of a food supplement:
- Nutrient or other substance: Avocado extract
  Amount / daily portion: 50 mg

Example of a food supplement on which a claim based on the mixture of several components is made:
- Nutrient or other substance: Avocado-soy extract
  Amount / daily portion: 100 mg

Example of an ingredient:
- Nutrient or other substance: phyto stanol
  Required amount in the product (daily portion) for the claim to be made: 1-3 g
Appendix 1.

Items 10 and 11 ask about any factors that can impair the absorption or utilisation in the body of the substance/substances on which the claim is based. In order for the claim made on the product to be true, the rest of the composition or the processing of the product shall not render the ingredient on which the claim is based unutilisable by the body. Phytates, for example, may impair the absorption of minerals, and fermenting sugars can eliminate the favourable effects of xylitol on teeth. If you choose "yes" or "no" in item 10, please give the grounds (which factor(s), how has it been taken into consideration) in item 11.

10. Are there factors (e.g. processing, other ingredients of the product) that can impair the absorption or utilisation in the body of the substance / substances on which the claim is based?

☐ Yes
☐ No
☐ No knowledge

11. If you replied "yes" or "no" in item 10, please give grounds for your reply

Examples:

☐ Yes
  Grounds: In our opinion the amount of the ingredient on which the claim is based is so high that the claim can be made despite phytic acid. In addition, the absorption and utilisability of the product has been studied through clinical trials.

☐ No
  Grounds: Phytic acid that impairs the absorption of minerals has been removed from the product

12. Is there any research or other evidence available to substantiate the claim made on the foodstuff or group of foodstuffs?

☐ Yes, clinical trials conducted on this product
☐ Yes, in vitro and/or animal tests conducted on this product
☐ Yes, clinical trials conducted on a corresponding product
☐ Yes, in vitro an/or animal tests conducted on a corresponding product
☐ Yes, other research evidence, e.g. research carried out on the ingredient in question
☐ Yes, information publicly available e.g. in textbooks
☐ Yes, other evidence, what? ____________________________
☐ No knowledge of research

Indicate the research or other evidence in applicable parts. If you wish, you can elaborate on your reply under item 14.

In addition to the claim itself, the evidence indicated here may concern also the absorption or utilisability of the ingredient. The amount to which the research evidence applies shall correspond to the amount present in the foodstuff or group of foodstuffs in question. If the research evidence applies to a different amount or the composition of the product on which research has been carried out differs from the foodstuff or group of foodstuffs in question, this shall be indicated in item 16.
13. List at most ten (10) essential studies or other references, on which the evidence is based.

1. 
2. 
3. 
4. 
5. 
6. 
7. 
8. 
9. 
10. 

You can list references that concern both the utilisability and the effect of the substance. If referring to published research evidence or other published material (e.g. textbooks), the reference shall be as detailed as possible so that it can be looked up, if required. For unpublished research evidence, the subject matter of the research shall be indicated in as much detail as possible.

In this item particularly research evidence of the highest prestige should be indicated such as randomised controlled clinical trials, meta-analyses, review articles, etc. Please indicate in parentheses after the reference the type of the research (e.g. epidemiological research, a review article, etc.).

14. Other evidence or grounds to support the claim:

This item is reserved, for example, for your own opinion of the extent and amount of research.
15. Nutritional content of the foodstuff:

The following question concerns the nutritional content of the foodstuff or group of foodstuffs. Pursuant to the draft regulation an appropriate nutrition profile and nutrition labelling are the required criteria for making claims. In addition to normal nutritional content information, you are also asked to indicate the amount of trans fatty acids, alcohol and salt, as according to the draft regulation also these will be considered when evaluating the products.

Indicate the nutritional content of the foodstuff or group of foodstuffs in applicable parts. Tick the nutrients in the left-hand side column and indicate the nutritional value per 100 g of the product in the space provided. For groups of foodstuffs, indicate the variation range, if any. If the variation range in a group of foodstuffs is large, we recommend that you fill out separate questionnaires for products.

Nutrition labelling is not required on food supplements. For food supplements and for foodstuffs or groups of foodstuffs, the nutritional content of which is not known, tick the box "Food supplement / No knowledge of nutritional content".

If you are a supplier of raw materials, or an operator filling out the questionnaire for a product that does not exist, yet, indicate the average nutritional content required for making the claim.

- [ ] Energy, kJ _____
- [ ] Energy, kcal _____
- [ ] Proteins, g _____
- [ ] Fat, g _____
- [ ] Saturated fatty acids, g _____
- [ ] Trans fatty acids, g _____
- [ ] Carbohydrates, g _____
- [ ] Sugar, g _____
- [ ] Nutritional fibre, g _____
- [ ] Alcohol, g _____
- [ ] Salt, g _____
- [ ] Sodium, mg _____
- [ ] Food supplement / No knowledge of nutritional content

16. Other information on nutrition profile or composition of product that is essential to the making of the claim.

_____________________________________________________________________________________
_____________________________________________________________________________________

This item is reserved for providing other essential information that has not come up in the other items.

Examples:

- The fatty acid profile of the product complies with recommendations
- This iron product contains also vitamin C, which promotes the absorption of iron
17. Other points to be taken into consideration, other comments:

---

In this item you can identify yourself as a supplier of raw materials, for example, and explain that the ingredient on which the claim is made has not, yet, been included in any specific foodstuff.

**Contact information for respondent:**

Contact person: ________________________________
Company/companies: __________________________
Address: ________________________________
Post office: ________________________________
Telephone: ________________________________
E-mail: ________________________________

**Printing out the questionnaire**
You can print out the replies you have filled out, to the extent they are shown on the screen, before you submit the questionnaire. If you want to retain a copy of all your replies, we recommend that you first write the replies in your own files and then copy them into the questionnaire. The questionnaire is best printed out in landscape.

**Submitting the questionnaire**
Remember to click the Submit button after you have completed the questionnaire. You cannot edit your replies any more after you have submitted the questionnaire.
## Appendix 2. Constituent-/compound-specific list of claims

OBS! Evira has not evaluated or examined the scientific substantiation or acceptability of claims or foods

<table>
<thead>
<tr>
<th>Food (group) or nutrient or other substance contained in food on which the claim is based:</th>
<th>Claim example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acidophilus bacteria + Bifidus bacteria</td>
<td>They stabilize the stomach and make you feel good. Stomach-friendly acidophilus and bifidus bacteria protect your stomach.</td>
</tr>
<tr>
<td>Alfalfa</td>
<td>May help to reduce LDL cholesterol. For cardiovascular health.</td>
</tr>
<tr>
<td>Aloe vera gel</td>
<td>Helps to control blood sugar. For stomach health.</td>
</tr>
<tr>
<td>Alpha-lipoic acid</td>
<td>Reduces oxidative stress in the body. Slows down the ageing of cells. Helps the body to protect itself against oxidation reactions. Makes other antioxidants more effective. Protects against the hazards of heavy metals. Takes up heavy metals. Removes heavy metals from the body. Has a positive effect on the body’s sugar metabolism. Balances blood sugar.</td>
</tr>
<tr>
<td>Alphatocopherol → cf. vitamin E</td>
<td></td>
</tr>
<tr>
<td>Anise</td>
<td>Reduces gas formation in the alimentary tract.</td>
</tr>
<tr>
<td>Anthocyanidines + flavonols (bilberry)</td>
<td>Flavonoids are antioxidants and, together with vitamins C and E, they can protect the body cells from the hazards of free oxygen radicals. Due to a number of different phenolic compounds bilberry, like other berries, has a strong antioxidant property. Antioxidant compounds prevent the oxidation of harmful LDL-cholesterol. Powerful antioxidants. The effect of bilberry's active substance has also been studied with regard to hemeralopia.</td>
</tr>
<tr>
<td>Anthocyanidines + proanthocyanidines</td>
<td>Especially for the eye health of older people. Good for the circulation. Good for the cardiovascular system. For stomach health.</td>
</tr>
<tr>
<td>Artichoke leaf (fresh) + milk thistle seed + dandelion root and sprout (fresh)</td>
<td>Liver-cleansing treatment. Beneficial effect on lipid metabolism. Makes bile excretion more effective, balances cholesterol and supports liver functioning. Artichoke phenolic compounds make bile excretion more effective. Artichoke also has hypocholesterol activity.</td>
</tr>
<tr>
<td>Ascorbic acid → cf. Vitamin C</td>
<td></td>
</tr>
<tr>
<td>Avocado-soy extract (ASU)</td>
<td>Natural flexibility for the joints. Accelerates the formation of new cartilage by increasing the formation of cartilage growth factors. Facilitates exercise. Activates the building of joint cartilage. Natural flexibility remains. Accelerates the formation of joint cartilage growth factors in cartilage cells (chondrocytes). Accelerates the formation of collagen in joint membrane cells (synoviocytes).</td>
</tr>
<tr>
<td>Bees’ cementing wax → cf. Propolis</td>
<td></td>
</tr>
<tr>
<td>Berries (natural berries)</td>
<td>Natural berries contain very little sodium, so that they are also safe and healthy for those who monitor their blood pressure. Phenolic compounds in berries help to prevent oxidation of LDL cholesterol.</td>
</tr>
<tr>
<td>Berry seed oils</td>
<td>Balance fatty acid metabolism in the body. Essential fatty acids promote the development and activity of the brains and are essential to the development of sight. Berry seed oils promote cardiovascular health and reduce the risk of obesity. They contain antioxidants and bioactive lipids.</td>
</tr>
<tr>
<td>Beta-glucan</td>
<td>Long-lasting energy. Increases the sense of satiety. Stabilises the increase of blood sugar after meals. Low glycaemic index. Reduces cholesterol. Helps to control cholesterol.</td>
</tr>
</tbody>
</table>

Courtesy translation
## Appendix 2. Constituent-/compound-specific list of claims

**OBS! Evira has not evaluated or examined the scientific substantiation or acceptability of claims or foods**

<table>
<thead>
<tr>
<th>Food (group) or nutrient or other substance contained in food on which the claim is based:</th>
<th>Claim example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Beta-glucan (WGP)</td>
<td>For immunity. Strengthens immunity.</td>
</tr>
<tr>
<td>Beta-glucan + olive leaf extract</td>
<td>Supports the body's own defence mechanism / immunity.</td>
</tr>
<tr>
<td>Betaine (hydrochloride)</td>
<td>Effective mouth moisturiser. Protects the mouth's mucous membranes and skin from cleansing agents.</td>
</tr>
<tr>
<td>Betaine</td>
<td>Helps to reduce cholesterol.</td>
</tr>
<tr>
<td>Bifidobacterium bifidum, longum, breve, infantis + Lactobacillus acidophilus</td>
<td>Strengthen the immune system. Healthy for the gut.</td>
</tr>
<tr>
<td>Bifidobacterium lactis BB-12™ + Lactobacillus acidophilus LA-5™ + L. Rhamnosus 705</td>
<td>Probiotic. Heart Symbol. Probiotic lactic acid and bifido bacteria (including Bifidobacterium lactis BB-12™ and Lactobacillus acidophilus LA-5™) increase the number of useful bacteria in the gut microbe climate and stabilise the stomach's activity, increasing the gut's immunity.</td>
</tr>
<tr>
<td>Bilberry extract with anthocyanins (→ cf. also Anthocyanidines and flavonols)</td>
<td>For strained eyes. For hemeralopia. For eye circulation. Strong antioxidant.</td>
</tr>
<tr>
<td>Bioactive plant compounds</td>
<td>Bioactive compounds in plants protect the human body in many ways. Protective effects include antioxidant effects. Prevention of the formation of nitrosamines. Positive changes in the conditions of the large intestine. Maintenance of the DNA repair system. Maintenance of lung functioning. Heart function maintenance.</td>
</tr>
<tr>
<td>Biologically activated mycelium → cf. Mycelium, biologically activated</td>
<td>For splitting nails. For the health of nails, hair, shin, bones and joints. Prevents nails from splitting. Natural shine for hair.</td>
</tr>
<tr>
<td>Biotin</td>
<td>For metabolism. Removes surplus fluid.</td>
</tr>
<tr>
<td>Birch leaf</td>
<td>For metabolism. Removes surplus fluid.</td>
</tr>
<tr>
<td>Blackcurrant seed oil (through carbon dioxide extraction) + vitamin E</td>
<td>Blackcurrant seed oil contains essential omega-3 (alpha-linolenic acid) and omega-6 (linolic acid) fatty acids in the correct ratio (1:4). These fatty acids are of crucial importance for cardiovascular health. For balancing fatty acid metabolism and maintenance of the cardiovascular system. Reduces LDL cholesterol and improves the HDL/LDL-ratio. Increases the body's amount of dihomogammalinolenic acid, the metabolism of which supports the body's immunity.</td>
</tr>
<tr>
<td>Blackcurrant seed oil + special lecithin + GLA + ALA</td>
<td>Special lecithin contains fatty acids necessary for the brain in the right form (phospholipids). &quot;Brain capsule&quot;, &quot;Memory capsule&quot;. The brain's phospholipids contain a large amount of polyunsaturated fatty acids (PUFA). Gamma-linolenic acid is an important preliminary stage of local hormones. Phospholipids are the building blocks of all cell membranes. The right lecithin compound for people (Lecithin ex animalia).</td>
</tr>
<tr>
<td>Boron</td>
<td>For brain health. For brain functioning. Strengthens bones. For bone health. For joint health.</td>
</tr>
<tr>
<td>Boswellia extract + shark cartilage extract</td>
<td>Supports joint functioning. For joint health. Maintains joint health and flexibility. Suppresses collagen and cartilage substance break-up by inhibiting the matrix's metalloproteinase.</td>
</tr>
<tr>
<td>Bread, low salt</td>
<td>Helps to control blood pressure.</td>
</tr>
<tr>
<td>Food (group) or nutrient or other substance contained in food on which the claim is based:</td>
<td>Claim example</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Caffeine</td>
<td>Activates your metabolism. Activates your body to intensify the calorie-burning process. Invigorates. Natural caffeine stimulates immediately after use. Natural caffeine speeds up the circulation. This reduces the feeling of tiredness and performance increases temporarily. Caffeine activates the central nervous system and invigorates.</td>
</tr>
<tr>
<td>Calcium</td>
<td>Strengthens bone and teeth. Functions as a building block for bone and teeth. Maintains mineral density in bone. The connection between increasing the supply of calcium and bone thickening has been shown in all age groups. Calcium is an important building material for bone. For bone health, supportive tissue health. Increases fat burning for energy and reduces fat storage. Increases fat breakdown in fat cells. Decreases fat absorption. Makes weight control more effective. Helps to control blood pressure.</td>
</tr>
<tr>
<td>Calcium + casein + phosphorus cf. Cheese</td>
<td>Strengthen bone.</td>
</tr>
<tr>
<td>Calcium + vitamin C</td>
<td>Added vitamin D helps your body to utilise calcium. Calcium together with vitamin D helps bones to become as hard as possible and to withstand the weakening of the skeleton as it ages. Vitamin D makes the absorption of calcium more effective.</td>
</tr>
<tr>
<td>Calcium + vitamin D</td>
<td>Added vitamin D helps your body to utilise calcium. Calcium together with vitamin D helps bones to become as hard as possible and to withstand the weakening of the skeleton as it ages. Vitamin D makes the absorption of calcium more effective.</td>
</tr>
<tr>
<td>Camomile</td>
<td>For stomach health.</td>
</tr>
<tr>
<td>Camomile extract</td>
<td>Soothes the skin.</td>
</tr>
<tr>
<td>Carmellose (galactomannan)</td>
<td>Forms a protective membrane for mucous membranes. Prevents gastric acid from damaging the sensitive mucous membranes of the alimentary tract.</td>
</tr>
<tr>
<td>Carotenoids (alpha, beta and gamma carotene, lycopene)</td>
<td>Helps to protect the skin from the effect of UV radiation. Reduces the skin's susceptibility to burning. Increases the skin's sun tolerance.</td>
</tr>
<tr>
<td>Cheese (calcium, casein and phosphorus)</td>
<td>Interrupts acid attacks. Limits an acid attack. Eating hard, ripened cheeses reduces cavity formation.</td>
</tr>
<tr>
<td>Chlorella algae (Chlorella pyrenoidosa)</td>
<td>Antioxidant. Strengthens immunity. For liver and gut health.</td>
</tr>
<tr>
<td>Chromium</td>
<td>Stabilises blood sugar. Promotes metabolism. Supports weight control physiologically.</td>
</tr>
<tr>
<td>Cinnamon extract (extract of soluble cinnamon compounds)</td>
<td>Cinnamon activates enzymes in our body that make insulin receptors more sensitive and which thus make the absorption of glucose into cells more effective.</td>
</tr>
<tr>
<td>Citrus bioflavonoids</td>
<td>May help to keep joints healthy. Help to reduce blood lipid values. For the health of the veins.</td>
</tr>
<tr>
<td>CLA or conjugated linoleic acid</td>
<td>Accelerates fat-burning. Helps with slimming and toning up. Protects muscles during strong exertion and accelerates regeneration. Strong antioxidant.</td>
</tr>
<tr>
<td>Coenzyme Q10 → cf. Ubiquinone</td>
<td>Helps you stay alert. Invigorates. Coffee improves your mood. Coffee improves physical performance. Coffee's antioxidants: can protect the system from free radicals which cause cell damage; can protect your cells and tissues from damage caused by oxidation; increase the total antioxidant capacity of the system. Coffee can help to maintain the blood's normal glucose level. Coffee can have a positive effect on glucose metabolism / insulin metabolism. Coffee adds fluid to the body and does not remove it.</td>
</tr>
<tr>
<td>Colostrum (lyophilised)</td>
<td>Important antibodies for the organism. Strengthens immunity.</td>
</tr>
<tr>
<td>Food (group) or nutrient or other substance contained in food on which the claim is based:</td>
<td>Claim example</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Conjugated linoleic acid → cf. CLA</td>
<td></td>
</tr>
<tr>
<td>Corn extract (carbon dioxide-extracted)</td>
<td>For the maintenance of skin health. Antioxidant.</td>
</tr>
<tr>
<td>Cranberry extract (Vaccinium macrocarpon) (CranMax ) (→ cf. also Proanthocyanidins)</td>
<td>For the health of the urinary tracts. Active plant antioxidant.</td>
</tr>
<tr>
<td>Creatine</td>
<td>Increases muscle power and endurance.</td>
</tr>
<tr>
<td>Curcuma extract + boswellia extract + pineapple pulp powder + quercetin</td>
<td>For the maintenance of joint health. Maintains normal metabolism and joint flexibility, even when a joint or the metabolism is temporarily under strain. Curcumin in curcuma is an antioxidant, which reduces histamine levels, increasing the production of natural cortisol. Bromelain in pineapple pulp maintains the circulation. Boswellia acids maintain normal well-being and joint flexibility. Quercetin is a flavonoid, a plant antioxidant. Quercetin has a fortifying effect on the immune system and prevents the release of histamines.</td>
</tr>
<tr>
<td>Cysteine</td>
<td>Prevents oxidation damage.</td>
</tr>
<tr>
<td>Dandelion root extract</td>
<td>Maintains the normal functioning of the liver. Helps the liver to manage. Helps with digestion. Makes liver activity and bile secretion more effective. Beneficial effect on blood cholesterol and blood sugar values.</td>
</tr>
<tr>
<td>Dextrose (→ cf. also Fructose + dextrose)</td>
<td>Dietary fibres are filling and good for stomach functioning. A sufficient supply of dietary fibre is required for stomach and gut health. Dietary fibres maintain gut health.</td>
</tr>
<tr>
<td>DHA fatty acid (docosahexaenoic acid), (→ cf. also EPA + DHA fatty acids)</td>
<td>Supports memory and brain activity. DHA has an efficacious effect on the memory in older people.</td>
</tr>
<tr>
<td>Dietary fibre + beta-glucan</td>
<td>Helps with weight control. Increases the sense of satiety.</td>
</tr>
<tr>
<td>Dietary fibre + protein</td>
<td>Helps to keep feeling of hunger at bay. Helps with weight control, keeps feeling of hunger at bay for a long time.</td>
</tr>
<tr>
<td>Dietary fibre, insoluble and soluble + omega-3 and 6 fatty acids - fatty acids + lignans</td>
<td>Normalises stomach and gut activity. Helps to reduce blood cholesterol and balances the supply of essential fatty acids.</td>
</tr>
<tr>
<td>Digestive enzymes (proteases, lipase and various enzymes that break down carbohydrates)</td>
<td>Promotes digestion. The preparation’s enzymes break down proteins, fat and carbohydrates. The preparation, containing digestive enzymes, is recommended, especially after heavy meals and as the years pass, to complement the weakening secretion of digestive enzymes.</td>
</tr>
<tr>
<td>Food (group) or nutrient or other substance contained in food on which the claim is based:</td>
<td>Claim example</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Dry extract of common horsetail summer shoots + dry extract of dandelion root</td>
<td>Removes surplus fluid from the body and helps you feel better. Flavonoids in plants stimulate the kidneys to produce more urine.</td>
</tr>
<tr>
<td>EPA + DHA fatty acids (eicosapentaenoic acid and docosahexaenoic acid)</td>
<td>Helps with the regulation of the blood sugar level. For cardiovascular health. Heart-friendly. Helps to maintain good cardiovascular health. Helps to control blood pressure. Helps to reduce blood pressure. Maintains eye health. For eye health. For the health of the psyche and nervous system. Stabilises the mood. Stabilises mood changes. Lifts one's mood. Important for the functioning of the brain. Has a good effect on the skin and joints.</td>
</tr>
<tr>
<td>Epigallocatechin gallate (EGCG) + caffeine</td>
<td>Activates your metabolism. EGCG, a powerful antioxidant. Together with caffeine it activates your metabolism to burn calories.</td>
</tr>
<tr>
<td>Evening primrose oil</td>
<td>Promotes skin elasticity. Promotes maintenance of the skin’s moisture balance. For joint health. Makes women's lives easier, especially during the menopause, through nutrition. Reduces feelings of pressure, especially in breasts.</td>
</tr>
<tr>
<td>Fermented whey</td>
<td>For stomach health. A whey concentrate maintains a healthy gut bacteria population and aids the metabolism. (L+) lactic acid resulting from fermentation is a natural prebiotic and makes the metabolism more efficient.</td>
</tr>
<tr>
<td>Fibre → cf. Dietary fibre</td>
<td>Vegetable fibre increases the sense of satiety. Fibre-rich vegetarian food increases the sense of satiety, which reduces eating and helps with weight control. Vegetable fibre increases the amount of stool and accelerates the through passage time of food mass.</td>
</tr>
<tr>
<td>Fibre naturally present in vegetables and berries</td>
<td>Soluble fibre in vegetables and berries reduces blood cholesterol and has a positive effect on insulin metabolism.</td>
</tr>
<tr>
<td>Fish (rainbow trout)</td>
<td>Fish/rainbow trout is a good source of polyunsaturated, heart-friendly fatty acids. Fish is good for your health, because it contains good fatty acids.</td>
</tr>
<tr>
<td>Fish oil omega-3 fatty acids → cf. EPA + DHA fatty acids</td>
<td></td>
</tr>
<tr>
<td>Flavonoids</td>
<td>Flavonoids are natural antioxidants and conducive to health. A sufficient daily supply of flavonoids ensures the health effects of flavonoids. Flavonoids are essential for good health, being able to 'tame' free radicals harmful to health. They lower cholesterol levels, but keep good HDI cholesterol at a high level. They markedly reduce the oxidation of cholesterol, and of DNA. They reduce blood pressure. They reduce the absorption of carbohydrates. Slimming effect. Reduces visceral fat.</td>
</tr>
<tr>
<td>Flavonoids + ascorbic acid</td>
<td>The product has constituents with an antioxidant effect.</td>
</tr>
<tr>
<td>Flavonols → cf. Anthocyanidins + flavonols</td>
<td></td>
</tr>
<tr>
<td>Flax seed husk extract</td>
<td>For hormone activity regulation. Beneficial to the prostate. Stabilises hormones in women and protects, especially during the menopause. Antioxidant. For heart health. To protect the heart.</td>
</tr>
<tr>
<td>Food (group) or nutrient or other substance contained in food on which the claim is based:</td>
<td>Claim example</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Flax seeds</td>
<td>Reduce total and LDL cholesterol.</td>
</tr>
<tr>
<td>Folic acid (cf. also → Vitamin B12 + vitamin B6 + folic acid)</td>
<td>Folic acid is necessary for cell division and the formation of blood cells. Folic acid is important for cell health. Lowers the blood’s homocysteine level. For pregnant women and those planning to become pregnant. Mood-improving, especially for women.</td>
</tr>
<tr>
<td>Foodstuff X</td>
<td>Long-lasting energy. Stabilises the blood sugar increase after meals. Low glycaemic index.</td>
</tr>
<tr>
<td>Fructose</td>
<td>When there are no rapid drops in blood sugar, people feel more active. Fructose releases energy into the body slowly and therefore prevents the feeling of tiredness due to a ‘sugar peak’ drop.</td>
</tr>
<tr>
<td>Fructose + dextrose</td>
<td>Slow carbohydrates prevent rapid changes in blood sugar. Slow carbohydrates help to keep blood sugar levels even for a long time. With no rapid drops in blood sugar people feel more satiated, due to which weight control is easier. Fibre-rich food is good for those wanting to lose weight. Fibre does not contain energy, but is filling.</td>
</tr>
<tr>
<td>Galactooligosaccharides (GOS fibre)</td>
<td>When used regularly, GOS accelerates the stomach’s functioning. A good supply of fibre is especially important for the stomach’s health. Increases calcium absorption. Increases the amount of useful bifidobacteria. Increases the vitality of the gut’s own useful bacteria. Prebiotic.</td>
</tr>
<tr>
<td>Garlic extract (from freeze-dried garlic)</td>
<td>Makes the immune defence system more effective. Supports the body’s activity during tiredness and stress situations and provides additional energy. Reduces blood lipid values, cholesterol and homocysteine. Reduces platelet aggregation. Improves peripheral blood circulation. Prevents LDL oxidation. Powerful antioxidant which prevents cells from turning ‘rancid’, prevents cholesterol oxidation, and slows down premature ageing of the body. Protects the liver and participates in the elimination of poisons from the body.</td>
</tr>
<tr>
<td>Ginger extract</td>
<td>For joint health. For the muscles.</td>
</tr>
<tr>
<td>Ginger root (Zingiber officinale) (dried)</td>
<td>Ginger is good for joints.</td>
</tr>
<tr>
<td>Gingko tree extract (Ginkgo biloba)</td>
<td>Invigorates mood and memory. Increases brain functioning. Promotes the peripheral circulation, which is especially useful for the eyes and ears. Contributes to good hearing and vision. Antioxidant.</td>
</tr>
<tr>
<td>Ginseng</td>
<td>Improves concentration and coordination. The ginsenosides contained in ginseng act in the body according to need, calming ginsenosides act in stress situations and, when a higher performance is needed, stimulating ginsenosides act.</td>
</tr>
<tr>
<td>Food (group) or nutrient or other substance contained in food on which the claim is based:</td>
<td>Claim example</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Ginseng extract</td>
<td>Increases physical performance. Ginseng increases physical endurance by promoting sugar and lactic acid breakdown.</td>
</tr>
<tr>
<td>Globe artichoke extract + artichoke leaf (fresh)</td>
<td>For liver health, has a positive effect on lipid metabolism. For cleansing treatments and balancing lipid metabolism. Makes the secretion of digestive juices more effective, balances cholesterol and promotes metabolism by taking care of the liver and making it function more effectively. Positive effect on cholesterol. Phenolic acids and cynarin increase the liver's effectiveness in burning fat.</td>
</tr>
<tr>
<td>Goldenrod (fresh)</td>
<td>Removes fluid. Promotes the removal of fluid and the reduction of swelling. Goldenrod's saponins and phenolglycosides promote the functioning of the bladder.</td>
</tr>
<tr>
<td>Grapefruit oil (water emulsion)</td>
<td>The bioflavonoids and glycosides of grapefruit extract help to maintain gut health. The gut is the most important part of our immune defence system and one should therefore take good care of it. An efficacious gut cleanser.</td>
</tr>
<tr>
<td>Green tea, green tea extract</td>
<td>Strong plant antioxidant. Protects cells. For heart health. Helps to reduce cholesterol. Improves oral hygiene.</td>
</tr>
<tr>
<td>Green-lipped mussel (Perna canaliculus)</td>
<td>Healthy joints. Helps to maintain joint health and mobility. Supports the normal functioning of joints and connective tissue.</td>
</tr>
<tr>
<td>Green-lipped mussel powder and extract (Perna canaliculus)</td>
<td>For joint health. For supportive tissue health. For the promotion of joint, muscle and bone functioning and mobility. For joint stiffness.</td>
</tr>
<tr>
<td>Greenshell mussel powder + shark cartilage powder and extract</td>
<td>Supports joint functioning. Maintains joint health.</td>
</tr>
<tr>
<td>Guarana (Paullinia cupana) seed extract</td>
<td>Stimulates and invigorates.</td>
</tr>
<tr>
<td>Guarana extract</td>
<td>Guarana is stimulating.</td>
</tr>
<tr>
<td>Gymnema sylvestre leaf extract</td>
<td>Balances blood sugar fluctuations. For the maintenance of sugar balance.</td>
</tr>
<tr>
<td>Hawthorn (Crataegus oxyacantha) leaf and flower</td>
<td>For cardiovascular health.</td>
</tr>
<tr>
<td>Herbal yeast plasmolysate (saccharomyces cerevisiae)</td>
<td>Improves concentration. Improves performance. Adds vigour and activity. Reduces feeling of tiredness. Strengthens the body's defence system. Increases immunity. Promotes the absorption of nutrients. Helps the body utilise nutrients obtained from food more effectively.</td>
</tr>
<tr>
<td>Ice cream (lactitol+vegetable fat+cream+polydextrose)</td>
<td>Low GI (glycaemic index).</td>
</tr>
<tr>
<td>Iceland moss extract</td>
<td>For the health of the respiratory passages. Supports the health of the respiratory passages' and the lungs' mucous membranes. Nature's antioxidant.</td>
</tr>
<tr>
<td>Insoluble (natural) berry fibre</td>
<td>Insoluble fibre promotes gut activity.</td>
</tr>
</tbody>
</table>
## Appendix 2. Constituent-/compound-specific list of claims

OBS! Evira has not evaluated or examined the scientific substantiation or acceptability of claims or foods.

<table>
<thead>
<tr>
<th>Food (group) or nutrient or other substance contained in food on which the claim is based:</th>
<th>Claim example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Inulin</strong></td>
<td>For active weight control. For the stomach's functioning. Balances the gut's bacteria population. Vitality for the gut's useful bacteria. Promotes and balances the gut's activity. Prebiotic for supporting useful bacteria. Improves/promotes your body's production of healthy bacteria. Research results show that 5 g of inulin a day helps to optimise/maintain the health of the digestive system. Prebiotic fibres strengthen the body's good bacteria. Fibres promote the stomach's and gut's functioning.</td>
</tr>
<tr>
<td><strong>Inulin (oligosfructose) + polydextrose</strong></td>
<td>Prebiotic. Protects the stomach by adding bacteria that do good.</td>
</tr>
<tr>
<td><strong>Iodine</strong></td>
<td>Iodine is necessary for normal (cell) energy metabolism. Iodine is necessary for the body as a constituent of thyroid hormones. Activates the thyroid gland's functioning. Aids the metabolism. Invigorates.</td>
</tr>
<tr>
<td><strong>Iron</strong></td>
<td>Iron is essential for the maintenance of the body's haemoglobin level. Iron is necessary as a building material for haemoglobin for the transport of oxygen and carbon dioxide. Is essential for the utilisation of energy. Strengthens muscle activity.</td>
</tr>
<tr>
<td><strong>Iron + magnesium</strong></td>
<td>Helps the body in the production of power and energy.</td>
</tr>
<tr>
<td><strong>Ivy shoot (fresh) + thyme (fresh) + liquorice root (dried)</strong></td>
<td>Good for the respiratory tract. Ethereal oils are calming for sleep.</td>
</tr>
<tr>
<td><strong>Jerusalem artichoke root extract, Jerusalem artichoke root (fresh)</strong></td>
<td>For pancreas health, fat upper body. Stabilises sugar metabolism, supports pancreas activity and carbohydrate burning, so that desire for sweets and hunger feelings diminish. A sense of satiety is achieved with smaller meals. Jerusalem artichoke also supports the digestive system so that the stomach is calmed, food is well digested and one obtains a light feeling. Inulin supports the gut's population of beneficial bacteria. It stabilises the pancreas' insulin secretion, leading to the stabilisation of sugar metabolism, which in turn helps to keep weight under control. Promotes lactose absorption. Prebiotic inulin maintains the gut's population of beneficial bacteria, so that the stomach remains in good shape.</td>
</tr>
<tr>
<td><strong>Kidney bean extract (bean extract)</strong></td>
<td>For weight control. Prevents the breakdown of starch. Allows you to eat as you do normally, but you take in less energy. Undegraded starch passes through the intestines and promotes intestine activity (fibre effect).</td>
</tr>
<tr>
<td><strong>L-5-hydroxytryptophan</strong></td>
<td>May help to improve one's mood. Helps to concentrate.</td>
</tr>
<tr>
<td><strong>Lactase enzyme</strong></td>
<td>For the breakdown of milk sugar (lactose). Useful for people whose own lactase enzyme production does not suffice for breaking down lactose from food.</td>
</tr>
<tr>
<td><strong>Lactic acid bacteria (different types)</strong></td>
<td>Stabilises stomach/gut activity. Maintains stomach and gut health. Promotes digestion. For the maintenance and promotion of the gut's microbe balance. Supports the body's own defence system/immunity. For the protection of a healthy bacteria population. To take care of the beneficial bacteria population of expecting mothers. Probiotic. Is recommended for use, especially during travel.</td>
</tr>
<tr>
<td><strong>Lactic acid bacterium + L-glutamine + inulin</strong></td>
<td>Promotes digestion. Maintains the condition of the gut's mucous membranes. Promotes the well-being of the gut's mucous membranes.</td>
</tr>
<tr>
<td><strong>Lactic acid bacterium X</strong></td>
<td>Soothes the stomach. Gut-friendly.</td>
</tr>
<tr>
<td><strong>Lactic acid bacterium X + beta-glucan + omega-3 fatty acid / alpha-linolenic acid</strong></td>
<td>Heart-friendly. Helps to control cholesterol.</td>
</tr>
<tr>
<td><strong>Lactic acid bacterium X + dietary fibre</strong></td>
<td>Balances gut activity. For stomach health.</td>
</tr>
<tr>
<td>Food (group) or nutrient or other substance contained in food on which the claim is based:</td>
<td>Claim example</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Lactic acid bacterium X + omega-3 fatty acid</td>
<td>Strengthens the defence response. Makes the natural immunity more effective.</td>
</tr>
<tr>
<td>Lactic acid bacterium X + soy protein + omega-3 fatty acid</td>
<td>Heart-friendly. Helps to control cholesterol.</td>
</tr>
<tr>
<td>Lactium-peptide compound</td>
<td>Regulates stress hormone secretion. Stabilises vital functions during stress.</td>
</tr>
<tr>
<td>Lactobacillus reuteri lactic acid bacterium</td>
<td>Has an effect on health. Strengthens the immune system. Strengthens the body’s defence system through the intestine’s epithelium. Probiotic, health-promoting bacteria, which occur naturally in the human alimentary tract as part of our defence system. Increase stomach and gut immunity. Stabilises stomach and gut activity. Promotes stomach and gut health and well-being. Shown to adhere to the intestine’s mucous membrane and to reproduce there. The ability to adhere is proof of the lactic acid bacteria’s health-promoting properties. Promotes mouth and tooth health.</td>
</tr>
<tr>
<td>Lactobacillus rhamnosus GG lactic acid bacteria</td>
<td>Function as part of the gut’s natural, useful bacterial environment. Makes the body’s immunity more effective and increases the production of antibodies. Natural immunity. Has an effect on health. Maintains the microbe balance in the gut. Stabilizes stomach functioning. Maintains the health of the alimentary tract (mucous membranes).</td>
</tr>
<tr>
<td>L-arginine hydrochloride</td>
<td>Increases nitric oxide production. For the heart. For the blood vessels. Power for muscles.</td>
</tr>
<tr>
<td>L-carnitine</td>
<td>Makes energy metabolism more efficient. Protects cell energy metabolism. Reduces changes in energy metabolism caused by ageing. Protects the heart. Improves sperm quality.</td>
</tr>
<tr>
<td>L-carnitine + green tea extract</td>
<td>Utilises fat as an energy source. Helps with weight control. Makes energy use more efficient by utilising fatty acids and reducing the need for carbohydrates.</td>
</tr>
<tr>
<td>L-carnitine + pycnogenol (maritime pine bark extract)</td>
<td>Energy level remains level. Accelerates regeneration.</td>
</tr>
<tr>
<td>L-carnosine</td>
<td>Against skin ageing. Muscle power and endurance. Protects cells from ageing. For a healthy heart.</td>
</tr>
<tr>
<td>Lecithin preparation (special lecithin preparation made from soy)</td>
<td>Invigorates the memory. Concentration. Attention.</td>
</tr>
<tr>
<td>Linoleic acid (from buckthorn) (→ cf. also Buckthorn oil, cf. Buckthorn oil + vitamin E)</td>
<td>Reduces blood cholesterol like other vegetable oils.</td>
</tr>
<tr>
<td>Liquorice (Glycyrrhiza glabra)</td>
<td>For respiration and throat. Protects mucous membranes. Promotes the effect of cortisone. Contains flavonoids and isoflavonoids. Liquorice protects the liver from poisonous substances. Research has shown that it protects the liver and other organs.</td>
</tr>
<tr>
<td>L-theanine (Suntheanine)</td>
<td>Reduces nervousness and restlessness. Alleviates tension and calms the mind rapidly. Performance remains the same or even improves. When the mind calms, studying, memory and concentration improve. Helps to relax. Reduces feelings of stress. Helps with falling asleep and improving sleep quality. Alleviates irritability before menstruation. Helps to maintain a normal healthy attitude before menstruation. Reduces normal feelings caused by the body’s physiological functioning before menstruation. Increases the feeling of satisfaction.</td>
</tr>
<tr>
<td>Food (group) or nutrient or other substance contained in food on which the claim is based:</td>
<td>Claim example</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Lutein</td>
<td>For eye health.</td>
</tr>
<tr>
<td>Lutein + zeaxanthin</td>
<td>For eye health.</td>
</tr>
<tr>
<td>Lycopene (→ cf. also Carotenoids)</td>
<td>Powerful antioxidant. Good for the eye health of older people. Good for cardiovascular health, especially after the menopause. Protects the heart. For heart health. Protects cells. For prostate health. Protects skin from the sun.</td>
</tr>
<tr>
<td>Magnesium</td>
<td>Magnesium is an important mineral substance for the body’s metabolism, which supports the activity of the nervous system and the muscles in particular. Strengthens the muscles. Is an important building block for bone and teeth. Relaxes the muscles. Important for the heart’s health. Regulates blood pressure and sugar balance. Wards off muscle cramps. Relaxes the nerves. Relaxes muscles and nerves. Ensures maximum performance levels in sport. Increases performance. Strengthens bone. May help to reduce blood pressure. Magnesium promotes muscle activity. Magnesium plays an important role in the body’s energy metabolism reactions.</td>
</tr>
<tr>
<td>Magnesium + green tea extract + Pycnogenol (maritime pine bark extract)</td>
<td>Stabilises sugar metabolism. Keeps blood sugar level.</td>
</tr>
<tr>
<td>Maltodextrin</td>
<td>Maltodextrin releases energy slowly and equally, in stages and easily.</td>
</tr>
<tr>
<td>Methyl sulphONYl methane (MSM)</td>
<td>For joint stiffness. For the health of supportive tissues. For the promotion of joint, muscle and bone functioning and mobility.</td>
</tr>
<tr>
<td>Mineral salt (sodium chloride + magnesium sulphate + potassium chloride)</td>
<td>Removes fluid from the body. Helps to reduce blood pressure. Protects the cardiovascular system. Heart-friendly.</td>
</tr>
<tr>
<td>Momordica fruit powder + cinnamon</td>
<td>Balances sugar metabolism and blood fat levels.</td>
</tr>
<tr>
<td>Monounsaturated fatty + polyunsaturated fatty acids in a cheese-like preparation</td>
<td>The product's fat content, in accordance with nutrition recommendations, helps to control cholesterol.</td>
</tr>
<tr>
<td>Monounsaturated fatty acids, omega-6 and omega-3 fatty acids + vitamin E (rape oil) → cf. Rape seed oil</td>
<td>Effectively removes the odour of e.g. garlic, tobacco and alcohol. Helps to freshen the bad odour caused by illness or medicines. Helps to remove unpleasant odours from the source, does not just mask them. Prevents the activity of odoriferous bacteria in the mouth and digestive system. Removes odours ensuing from sulphur compounds. Freshens the breath.</td>
</tr>
<tr>
<td>Mushroom extract (Champex) + apple polyphenol (Applephenon)</td>
<td>For immune protection. Makes the body's defence system more effective.</td>
</tr>
<tr>
<td>Mycelium, biologically activated (contains ACHH, active hemicellulose compound)</td>
<td></td>
</tr>
</tbody>
</table>

Courtesy translation
<table>
<thead>
<tr>
<th>Food (group) or nutrient or other substance contained in food on which the claim is based:</th>
<th>Claim example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Narrow-leaf coneflower extract (Echinacea angustifolia)</td>
<td>Strengthens immunity. For respiratory passage health.</td>
</tr>
<tr>
<td>Natural berries → cf. Berries</td>
<td></td>
</tr>
<tr>
<td>Nettle (fresh)</td>
<td>Provides strength. Good for bone. The minerals and trace elements in nettle strengthen bone, nails and hair.</td>
</tr>
<tr>
<td>Niacin</td>
<td>Helps to reduce blood lipid values.</td>
</tr>
<tr>
<td>Nutritional preparation, powdery (contains proteins, fat, carbohydrates, fibres)</td>
<td>Helps to reduce cholesterol. For the control of obesity and cholesterol. Has beneficial effects on fat metabolism when slimming.</td>
</tr>
<tr>
<td>Oat grain fibre</td>
<td>Stabilises sugar metabolism. For a long-lasting sense of satiety / frees energy slowly. Helps to reduce cholesterol. Promotes gut functioning.</td>
</tr>
<tr>
<td>Oat sprout extract, oat sprout (fresh)</td>
<td>Mood-stabilising. Supports nerve functioning. Is used to stabilise nerve functioning in a state of tension. Calms down and stabilises the mind and helps to fall asleep. One can take it before one thinks one might become tense. Flavonoids together with other oat sprout substances fortify nerve functioning.</td>
</tr>
<tr>
<td>Oat, rye and wheat fibre</td>
<td>Long-lasting energy. Stabilises the rise in blood sugar after eating. Low glycaemic index.</td>
</tr>
<tr>
<td>Oligofructose</td>
<td>Dietary fibre promotes stomach and gut activity.</td>
</tr>
<tr>
<td>Olive leaf extract</td>
<td>Antioxidant effect. Effect on blood pressure. Strong plant antioxidant. Protects the heart.</td>
</tr>
<tr>
<td>Olive leaf extract (EFLA)</td>
<td>For blood pressure regulation. Balances blood sugar.</td>
</tr>
<tr>
<td>Olive leaf extract + monoester of lauric acid + Melissa extract</td>
<td>Supports the normal activity of the body's defence system. Helps to maintain the body's internal cleanliness. Makes defence more effective as it takes the strain temporarily. Together, the active substances of the product weaken the living conditions of many bacteria and viruses in the body, so that the normal defence activity of the body can maintain your health effectively.</td>
</tr>
<tr>
<td>Omega-3 fatty acids</td>
<td>Omega-3 fatty acids are need for growth and development, as building material for cells. Protect skin from UV radiation. Protect skin from harmful UVB and UVA radiation, to which the sun subjects it. Reduce blood cholesterol and triglycerides. Reduce blood pressure. Beneficial effect on arteries. Beneficial effect on blood fluidity. Fat composition according to nutrition recommendations, including omega-3 fatty acids; help to control cholesterol. A supply of omega-3 fatty acids is a precondition/important for the activity of the heart and circulation. Have an effect on vision, skin condition, blood pressure and the regulation of nervous system activity. Improve memory and brain activity. Positive effect on memory in older people.</td>
</tr>
<tr>
<td>Omega-3 fatty acids + folic acid + vitamin B6 + vitamin B2</td>
<td>Omega-3 fatty acids promote cardiovascular health.</td>
</tr>
<tr>
<td>Oregano</td>
<td>Antioxidant effect.</td>
</tr>
<tr>
<td>Oregano oil (Oreganum vulgare)</td>
<td>For stomach, gut and respiratory passage health.</td>
</tr>
<tr>
<td>Palm/oat oil fatty acid</td>
<td>Increases and prolongs the sense of satiety.</td>
</tr>
<tr>
<td>Papaya</td>
<td>Supports pancreas activity and protein break-up. Papaya breaks down proteins and relieves after a heavy meal and when travelling in areas with different food hygiene. Papaya's papain enzyme breaks down proteins and activates digestive enzymes.</td>
</tr>
</tbody>
</table>
### Appendix 2. Constituent-Compound-Specific List of Claims

OBS! EVIRA has not evaluated or examined the scientific substantiation or acceptability of claims or foods.

<table>
<thead>
<tr>
<th>Food (group) or nutrient or other substance contained in food on which the claim is based:</th>
<th>Claim example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paprika powder + rosemary leaf powder + peppermint leaf powder + yarrow flower powder + pumpkin seed</td>
<td>Vitality and immunity-increasing effect. Paprika/rosemary have an antioxidant effect. Peppermint contains menthol, which cleanses the maxillary sinus. Yarrow has a beneficial effect on digestion and skin health.</td>
</tr>
<tr>
<td>Passionflower extract, passionflower shoot (fresh)</td>
<td>Mood and stress-relaxing. Helps with falling asleep. Helps with handling stress and pressure, so that falling asleep is easier. Indolins, together with the other substances of passionflower, support the functioning of serotonin.</td>
</tr>
<tr>
<td>Pectin → cf. Soluble berry fibre / pectin</td>
<td></td>
</tr>
<tr>
<td>Peppermint (Mentha x piperita) + garden angelica (Angelica archangelica) + nettle (Urtica dioica) + roseroot (Rhodiola rosea)</td>
<td>Herbs invigorate. They have a comprehensive invigorating effect on the body and mind.</td>
</tr>
<tr>
<td>Peptides + vitamin C + calcium</td>
<td>Helps to control blood pressure. Bioactive peptides derived from whey proteins have been shown to have a lowering effect on blood pressure.</td>
</tr>
<tr>
<td>Peptides in fermented milk products</td>
<td>Bioactive peptides/peptides help to control blood pressure.</td>
</tr>
<tr>
<td>Perilla leaf extract (Perilla frutescens)</td>
<td>Makes the body’s tolerance more effective (in a natural way).</td>
</tr>
<tr>
<td>Phenol compounds + proanthocyanidins + anthocyanins (mountain crowberry (Empetrum hermaphroditum))</td>
<td>Phenolic compounds help to prevent harmful oxidation reactions in the body.</td>
</tr>
<tr>
<td>Phenolic compounds of cranberry and lingonberry (catechins, flavonoids, phenolic acids, anthocyanins, lignans) + ascorbic acid</td>
<td>Antioxidant constituents that prevent the oxidation of harmful LDL cholesterol.</td>
</tr>
<tr>
<td>Phenylalanine (DL form)</td>
<td>Has an effect on the activity of enzymes linked to the spread and free movement of endorphins. Prevents the activity of enzymes from hindering the free movement of endorphins. For the maintenance of good moods.</td>
</tr>
<tr>
<td>Phosphatidylserine</td>
<td>Stimulates the memory. Increases memory efficiency. Wards off memory loss due to age. Promotes learning ability. Increases vigour and the ability to concentrate. Maintains good moods. Wards off mood dips. Wards off stress. Facilitates the adaptation of the body when stressed.</td>
</tr>
<tr>
<td>Phospholipids</td>
<td>Phospholipids are the building blocks of cell membranes. They play an important part in cell growth and the maintenance of vital functions. Makes the immune defence system more effective and repairs oxidation damage of cells. Helps to reduce cholesterol. Supports the functioning of the liver. Improves the memory, and learning and concentrative ability. Strengthens the nervous system.</td>
</tr>
<tr>
<td>Phosphor → cf. Cheese (calcium + casein + phosphor)</td>
<td></td>
</tr>
<tr>
<td>Pine shoot (fresh)</td>
<td>Freshens the breath and makes the voice clearer.</td>
</tr>
<tr>
<td>Pine shoot (fresh) + sundew (fresh) + ivy (fresh)</td>
<td>For the health of the respiratory tracts.</td>
</tr>
</tbody>
</table>
## Appendix 2. Constituent-/compound-specific list of claims

OBS! Evira has not evaluated or examined the scientific substantiation or acceptability of claims or foods.

### Food (group) or nutrient or other substance contained in food on which the claim is based:

### Claim example

<table>
<thead>
<tr>
<th>Food (group) or nutrient or other substance contained in food on which the claim is based:</th>
<th>Claim example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plant phenols (hydroxicinnamic acid derivatives + simple plant phenols + stilbenes + flavonoids)</td>
<td>Plant phenols make the elimination of foreign bodies from the system, before they cause damage at cell level, more effective.</td>
</tr>
<tr>
<td>Plant stanol</td>
<td>Reduces cholesterol.</td>
</tr>
<tr>
<td>Plant stanol/plant sterol mixture</td>
<td>Reduces cholesterol. Used regularly, plant stanols and sterols reduce the absorption of cholesterol from the alimentary tract and reduce serum LDL cholesterol levels by 10-15%, without affecting the level of HDL cholesterol. Regularly used, they reduce the level of cholesterol in the blood by ca. 10–15% and, together with a healthy diet, by even 15–25%. This effect is based on the ability of plant stanols and sterols to prevent the absorption of both dietary and biliary LDL cholesterol. Plant steroids and cholesterol are similar in structure. The cholesterol-lowering effect of plant stanols and sterols is based on their competition for compound micelles, through which cholesterol is absorbed from the small intestine into the bloodstream. Plant stanols and sterols displace a proportion of cholesterol from the micelles. The bile necessary for bile formation is not available to such an extent that there are enough micelles for the displaced cholesterol molecules. For this reason, the absorption of cholesterol into the bloodstream is reduced. Only a very small amount of plant stanols and sterols are absorbed into the body.</td>
</tr>
<tr>
<td>Plant sterol</td>
<td>Reduces cholesterol.</td>
</tr>
<tr>
<td>Pollen</td>
<td>Increases vigour, vitality and alertness.</td>
</tr>
<tr>
<td>Pollen pistil extract + SOD (super oxide dismutase)</td>
<td>Gives energy. Invigorating. Pollen contains many natural vitamins, minerals, proteins, amino acids, enzymes and hormone-like active substances. Due to the SOD it contains, it also functions as an antioxidant. Prevents the formation of lactic acid in muscles. Prevents the muscles from tiring during exertion (reduces lactic acid production in muscles).</td>
</tr>
<tr>
<td>Pollen-/dry pistillate flower pollen extract (PI 82-GC Fem (3-4:1))</td>
<td>For women's well-being. A natural way to stay in balance. Has a beneficial effect on the metabolism, cell regeneration, physical endurance, stress tolerance, general energy levels. Proven to reduce irritability and weight gain, fluid accumulation, decreases in patience, drops in experienced life quality. Proven to make menopausal years more tolerable. Reduces hot flushes, perspiration and exhaustion.</td>
</tr>
<tr>
<td>Polydextrose</td>
<td>Low GI balances the blood sugar level after meals. Added fibre balances blood sugar and suppresses hunger. Contains fibre, which helps with weight control. Helps you to control your weight and to keep yourself shape.</td>
</tr>
<tr>
<td>Polydextrose + fructose</td>
<td>Polydextrose increases the sense of satiety. Fructose balances rapid changes in blood sugar. Low glycaemic index.</td>
</tr>
<tr>
<td>Polydextrose + lactitol</td>
<td>Normalises gut functioning. For alimentary tract activity and health. Polydextrose: a prebiotic that ferments smoothly in the gut. Lactitol: a prebiotic, which reduces the gut's pH and reduces ammonia yield.</td>
</tr>
<tr>
<td>Potassium</td>
<td>Potassium promotes the maintenance of the fluid and salt balance. Removes fluid. Wards off the accumulation of fluid due to the use of too much salt.</td>
</tr>
<tr>
<td>Potassium chloride + magnesium sulphate</td>
<td>An instrument for reducing the harm caused by salt: swelling, surplus fluid bound by salt; overweight; cosmetic effects, on e.g. bags under the eyes. Reduces the amount of fluid and sodium bound by salt to the body. Reduces/prevents blood pressure risk.</td>
</tr>
</tbody>
</table>

Courtesy translation
<table>
<thead>
<tr>
<th>Food (group) or nutrient or other substance contained in food on which the claim is based:</th>
<th>Claim example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proanthocyanidins (from lingonberry and cranberry)</td>
<td>Cranberry helps to inhibit the attachment of certain E.coli bacteria to the urinary tracts. Proanthocyanidins contained in lingonberry have been observed to have similar protective effects to cranberry.</td>
</tr>
<tr>
<td>Propolis (bees’ cementing wax)</td>
<td>Soothes the stomach and gut. Can be used to strengthen the immune system. Nature’s antioxidant. Increases immunity.</td>
</tr>
<tr>
<td>Protease</td>
<td>Promotes digestion. The preparation’s enzymes break down proteins. Is particularly recommended after heavy meals and, as the years pass, to complement the weakening secretion of enzymes that break down protein.</td>
</tr>
<tr>
<td>Protein</td>
<td>Increases the sense of satiety. Is needed for growth and protective substances, muscle development and regeneration, enzyme and hormone production. Proteins are building material for muscles.</td>
</tr>
<tr>
<td>Psyllium fibre + dried herbs</td>
<td>Promotes gut activity. Activates the metabolism. Activates secretory organs. Promotes the secretion of waste products from the body.</td>
</tr>
<tr>
<td>Pumpkin seed extract + soy extract (EFLA 940)</td>
<td>Helps to maintain normal urine continence. Phytoestrogenic effects.</td>
</tr>
<tr>
<td>Purple coneflower extract (Echinacea purpurea)</td>
<td>Strengthens immunity. For the health of the respiratory passages.</td>
</tr>
<tr>
<td>Pycnogenol (maritime pine bark extract) (Pinus maritima)</td>
<td>Reduces gum bleeding and plaque formation.</td>
</tr>
<tr>
<td>Pycnogenol (maritime pine bark extract) + green tea extract</td>
<td>Improves concentration and learning.</td>
</tr>
<tr>
<td>Quercetin</td>
<td>For the health of the nervous system and the brain. Increases the body’s capacity to resist tissue damage due to oxidation. Helps to reduce oxidation damage in tissues due to different stress situations. For liver and kidney health. For cardiovascular health.</td>
</tr>
<tr>
<td>Rainbow trout → cf. Fish</td>
<td></td>
</tr>
<tr>
<td>Rape seed oil</td>
<td>Rape seed oil helps to control cholesterol. Helps to reduce blood LDL cholesterol. Reduces blood clotting factors.</td>
</tr>
<tr>
<td>Resveratrol</td>
<td>For cardiovascular health.</td>
</tr>
<tr>
<td>Riboflavin → cf. Vitamin B2</td>
<td></td>
</tr>
<tr>
<td>Rose hip (Rosa canina)</td>
<td>The active substance GOPO in rose hip (Rosa canina) has a positive effect on joint mobility.</td>
</tr>
</tbody>
</table>
### Food (group) or nutrient or other substance contained in food on which the claim is based:

<table>
<thead>
<tr>
<th>Claim example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Royal jelly + pollen</td>
</tr>
<tr>
<td>Supports the body's own defence system/immunity. Maintains the natural defence system/immunity. Helps to strengthen natural immunity. Maintains vigour and vitality. Contributes to good physical condition. Balances hormone activity. For menopausal women.</td>
</tr>
<tr>
<td>Rutin</td>
</tr>
<tr>
<td>Helps to protect tissues from oxidation damage due to different stresses.</td>
</tr>
<tr>
<td>Rye bread (made with sour dough)</td>
</tr>
<tr>
<td>Balances sugar metabolism.</td>
</tr>
<tr>
<td>Rye fibre</td>
</tr>
<tr>
<td>Long-lasting energy. Levels out the blood sugar increase after meals. Low glycaemic index. Helps to control cholesterol.</td>
</tr>
<tr>
<td>Rye grain fibre</td>
</tr>
<tr>
<td>Helps to reduce cholesterol. Promotes gut activity.</td>
</tr>
<tr>
<td>Salvia extract</td>
</tr>
<tr>
<td>Suppresses excessive perspiration. Salvia reduces all kinds of perspiration and feelings of hotness. Flavonoids, together with other substances in salvia, suppress gland secretion.</td>
</tr>
<tr>
<td>Sea buckthorn berry oil (cold-pressed)</td>
</tr>
<tr>
<td>Healthy for the skin, mucous membranes, heart, stomach and blood vessels. Protects the liver and gut. Strengthens immunity.</td>
</tr>
<tr>
<td>Sea buckthorn oil (a standardised compound of carbon dioxide-extracted sea buckthorn seed oil and pulp oil carbon dioxide) + vitamin E</td>
</tr>
<tr>
<td>Strengthens and renews the mucous membranes and nourishes and moisturises dry, sensitive and ageing skin. Helps to maintain good general condition and is good for the heart and circulation. Protects, strengthens and renews mucous membrane cells. For the protection of mucous membranes and skin. Balances the supply of basic fatty acids. The essential fatty acids of sea buckthorn oil help to maintain the body's lipid level. Proven to reduce platelet aggregation, and so helps to keep the blood fluid.</td>
</tr>
<tr>
<td>Sea buckthorn oil and flavonoids extracted from sea buckthorn berries</td>
</tr>
<tr>
<td>Increases heart health and has a positive effect on the heart's functioning while promoting blood circulation in the brain and heart. Strengthens the defence mechanisms of the heart, brain and whole body. Is an antioxidant. Flavonoids may intercept free radicals, reduce the blood's viscosity and promote the heart's functioning.</td>
</tr>
<tr>
<td>Selenium</td>
</tr>
<tr>
<td>Shark cartilage - crustacean extract</td>
</tr>
<tr>
<td>Makes hair grow and strengthens it. Reduces hair loss. Improves the nutriment supply for hair glands. Supports hair gland activity: the hair gland becomes stronger, and the growth of new hair recovers.</td>
</tr>
<tr>
<td>Shark cartilage extract - fish gelatine mixture</td>
</tr>
<tr>
<td>Tones up, moisturises and regenerates. Strengthens skin, moisturises, and improves the skin's elasticity. Reduces spider vein.</td>
</tr>
<tr>
<td>Shark cartilage, powder and extract</td>
</tr>
<tr>
<td>For joint health. For supportive tissue health. Promotes joint functioning. The glucosaminoglycans contained in shark cartilage are the building blocks of human cartilage, joint tissue and joint surfaces. Glucosaminoglycan levels change with age and with strong wear. The use of shark cartilage powder restores joint functioning. Supports immune response.</td>
</tr>
<tr>
<td>Shark liver oil</td>
</tr>
<tr>
<td>Strengthens immunity.</td>
</tr>
<tr>
<td>Food (group) or nutrient or other substance contained in food on which the claim is based:</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Silicon</td>
</tr>
<tr>
<td>Silicon, colloidal (silicon dioxide dispersed into water)</td>
</tr>
<tr>
<td>Sodium bicarbonate + wine acid + anhydrous citric acid + sodium carbonate</td>
</tr>
<tr>
<td>Soft, unsaturated fat (67.5-94% of total fat)</td>
</tr>
<tr>
<td>Soluble berry fibre / pectin</td>
</tr>
<tr>
<td>Soy isoflavones</td>
</tr>
<tr>
<td>Soy isoflavones + lycopene + zinc + selenium</td>
</tr>
<tr>
<td>Soy isoflavones + magnesium + calcium + vitamin C + zinc + manganese + copper + vitamin B6 + vitamin D + vitamin K</td>
</tr>
<tr>
<td>Soy phytoestrogens + royal jelly</td>
</tr>
<tr>
<td>Soy protein</td>
</tr>
<tr>
<td>Soy protein + rye and/or flax lignans</td>
</tr>
<tr>
<td>Spirulina alga</td>
</tr>
<tr>
<td>Sugar cane extract, containing policosanol</td>
</tr>
<tr>
<td>Suma (Pfaffia paniculata)-phospholipid compound</td>
</tr>
</tbody>
</table>
### Appendix 2. Constituent-/compound-specific list of claims

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<table>
<thead>
<tr>
<th>Food (group) or nutrient or other substance contained in food on which the claim is based:</th>
<th>Claim example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sundew</td>
<td>For the breathing and throat.</td>
</tr>
<tr>
<td>Taurin</td>
<td>Taurin invigorates.</td>
</tr>
<tr>
<td>Theanine + oat shoot extract</td>
<td>Relaxes without tiring. Reduces tension. Help for tension. For stress tolerance. For concentration. Natural help for those under tension and stress.</td>
</tr>
<tr>
<td>Thiamin → cf. Vitamin B1</td>
<td></td>
</tr>
<tr>
<td>Tribulus terrestris extract</td>
<td>Promotes sexual desire (in women and men).</td>
</tr>
<tr>
<td>Tripotassium citrate + magnesium sulphate</td>
<td>Medium for reducing harmful effect of salt: swelling, surplus fluid bound by salt, overweight, cosmetic effects, including bags under the eyes. Reduces the amount of fluid and sodium bound by salt in the body. Reduces/prevents blood pressure risks.</td>
</tr>
<tr>
<td>Tryptophan</td>
<td>Makes it easier to fall asleep. Promotes a good sleep rhythm. Increases sleep quality. Relaxes the mind. Relaxes. Maintains good mood.</td>
</tr>
<tr>
<td>Ubiquinone (coenzyme Q 10)</td>
<td>For the energy production of cells. For performance. For heart health. Antioxidant for cell protection and to slow down ageing.</td>
</tr>
<tr>
<td>Vegetables, fruits and berries</td>
<td>Eating vegetables reduces blood pressure. Eating plenty of vegetables reduces blood pressure. Eating plenty of vegetables and fruits reduces systolic blood pressure on average by 2,8 mmHg and diastolic blood pressure on average by 1,1 mmHg.</td>
</tr>
<tr>
<td>WGP beta-glucan → cf. Beta-glucan (WGP)</td>
<td></td>
</tr>
<tr>
<td>Wheat grain fibre</td>
<td>Balances sugar metabolism. For a long-lasting sense of satiety / releases energy slowly. Promotes gut activity.</td>
</tr>
<tr>
<td>Wheat sprouts</td>
<td>Cleans the organism. A strong antioxidant. Protects cells from premature ageing. For eye health.</td>
</tr>
<tr>
<td>Wine leaf extract / grape seed extract</td>
<td>Antioxidant.</td>
</tr>
<tr>
<td>Vitamin A</td>
<td>Vitamin A is needed for growth and cell renewal/differentiation and vision maintenance. Vitamin A and its precursor, beta-carotene, are antioxidants that prevent cell damage. Protects cells from attack by free radicals. Prevents protein oxidation and therefore slows down cell ageing.</td>
</tr>
<tr>
<td>Vitamin B compound</td>
<td>Group B vitamins (niacin, pantothenic acid, vitamins B6, B2 and B12) promote carbohydrate and energy metabolism.</td>
</tr>
<tr>
<td>Vitamin B1 or thiamine</td>
<td>Essential for the functioning of the nervous system and the heart. Those taking plenty of simple carbohydrates and the elderly may need extra thiamine.</td>
</tr>
<tr>
<td>Vitamin B12 (→ cf. also Vitamin B12 + vitamin B6 + folic acid)</td>
<td>Vitamin B12 is important for the health of the nervous system and blood vessels. Vitamin B12 is necessary for the formation and division of blood cells.</td>
</tr>
</tbody>
</table>

Courtesy translation
### Food (group) or nutrient or other substance contained in food on which the claim is based:

<table>
<thead>
<tr>
<th>Claim example</th>
<th>Vitamin B12 + vitamin B6 + folic acid</th>
<th>Vitamin B2 or riboflavin</th>
<th>Vitamin B6 (→ cf. also Vitamin B12 + vitamin B6 + folic acid)</th>
<th>Vitamin C (→ cf. also Calcium + vitamin C)</th>
<th>Vitamin C + iron</th>
<th>Vitamin D (→ cf. also Calcium and vitamin D)</th>
<th>Vitamin E</th>
<th>Vitamin K</th>
<th>Xylitol</th>
<th>Xylitol + fluorine + calcium carbonate + disodium hydrogen phosphate</th>
<th>Yerba mate extract</th>
<th>Zinc</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good for the memory and perception. Good for blood vessel health. B-group vitamins have been shown to have beneficial effects on cardiovascular health. Reduces the formation of homocysteine in the body. Helps to reduce homocysteine.</td>
<td>Good for the memory and perception. Good for blood vessel health. B-group vitamins have been shown to have beneficial effects on cardiovascular health. Reduces the formation of homocysteine in the body. Helps to reduce homocysteine.</td>
<td>Riboflavin is an important vitamin in the metabolism of numerous cells. Riboflavin is important for the normal energy metabolism of cells. It is necessary for converting energy into a form which can be used by the body and for the formation of proteins.</td>
<td>Has a positive effect on mood, especially for women.</td>
<td>Vitamins C are antioxidants which prevent cell damage. Help to reduce oxidation damage in tissue resulting from hard exercise. Protects the heart and blood vessels.</td>
<td>Vitamin C improves iron utilisation.</td>
<td>Vitamin D is necessary as a building block for bones.</td>
<td>Vitamin E functions in the body with an antioxidant effect by preventing other substances, i.e. vitamin A, from oxidising. Prevents cell damage. Prevents proteins from oxidising and thereby slows down cell ageing. Protects the heart and blood vessels. Helps memory and perception retention, especially in the elderly.</td>
<td>Strengthens bone.</td>
<td>Interrupts acid attacks. Slows down the formation of plaque. Xylitol is good for your teeth. Tooth-friendly. Unsweetened xylitol gives teeth the best possible protection. Xylitol reduces the amount of plaque and makes it easier to brush. Xylitol prevents the adhesion/movement/increase of plaque-forming bacteria in the mouth. Helps to keep teeth whole. Increases the secretion of saliva. Xylitol is good for ear health. Maintains the well-being/health of the ears. Xylitol product with a health effect.</td>
<td>Strong plant antioxidant. Protects cells. Protects the heart and blood vessels. Invigorates.</td>
<td>Essential for normal growth. Has a beneficial effect on bone and skin health. Antioxidant. For cell protection. Regulates enzyme activity. Strengthens immunity.</td>
<td></td>
</tr>
</tbody>
</table>
Examples of claims regarded as medicinal by the Finnish Food Safety Authority Evira

Cardiovascular diseases
- Reduces rhythm disorders
- Helps to protect against cardiovascular diseases
- Prevents the formation of blockages in blood vessels
- Prevents platelet agglomeration and hence blood clots
- A lack of substance X predisposes to coronary disease

Bone health and osteoporosis
- Prevents osteoporosis
- Substance X plays a role in the prevention of osteoporosis

Physical performance
- Compound X alleviates stress damage
- Expedites recovery of injuries caused by exercise

Weight control, insulin sensitivity, diabetes
- Reduces increased blood sugar
- Compound X is suitable for the prevention of adult diabetes
- Useful for the treatment of diabetes

Cancer
- Protects / helps to protect against cancer
- Reduces tumour regeneration
- Compound X prevents the growth of new blood vessels (angiogenesis)
- Activates anticarcinogenic enzymes

Mood, mental performance
- Is of use for depression
- Of use when one feels distressed
- Reduces restlessness and anxiety
- Stage fright pill
- For the alleviation of temporary sleeplessness
- Prevents dementia

Stomach and gut health and immunity
- For digestive insufficiency
- For stomach trouble
- For stomach pains
- For colic symptoms
- For loose and hard bowels
- Prevents constipation / is good for constipation
- Has a slight laxative effect
- Prevents / treats diarrhoea
- Reduces the duration of diarrhoea diseases and relieves symptoms
- Reduces diseases of the intestinal canal
- Prevents gastroenteritis and infections
- Helps with inflammatory stomach pains
- Dislodges helicobacter
- Reduces pathogen activity in the intestine
- Relieves lactose intolerance symptoms. Is very suitable for those suffering from lactose intolerance.
Joint pains
• Prevents joint symptoms
• Relieves joint and rheumatic pains
• Prevents joint pain by reducing inflammation
• Slows down the onset of tissue damage
• Relieves joint pain and inflammations in osteoarthritis sufferers
• Reduces the development of inflammatory factors in connective tissue
• Supports the body’s own healing process after an operation or trauma
• Helpful for joint wear / gout
• Prevents joint cartilage disintegration
• Reduces joint stiffness and limb movement restrictions

Cold symptoms
• First aid for colds
• May be used to soothe sore throats and alleviate cold symptoms
• Treats inflammation of the upper respiratory passages
• Traditionally used for irritant and dry cough / bronchial catarrh / whooping cough / convulsive cough / soothing hoarseness / asthma treatment
• Compound X increases mucus secretion / loosens and removes mucus / reduces mucosity in the respiratory passages / alleviates congestion by thinning viscous mucus / acts as an expectorant / has a spasmolytic effect (reduces muscle spasms) / suppresses respiratory passage irritation
• Reduces the amount of bacteria in the respiratory passages

Inflammations
• Reduces / prevents / helps to prevent / suppresses inflammation / inflammation symptoms
• Has an anti-inflammatory effect by suppressing inflammation

Microbe growth
• Prevents the activity of bacteria / wound bacteria / yeasts / fungi / viruses / microbes
• Prevents the division / multiplication of disease-causing bacteria
• Prevents the growth of harmful micro-organisms
• Kills bacteria / fungi / yeast microbes / micro-organisms
• Protects against harmful pathogens
• Contains antimicrobial substances. Produces antimicrobial compounds.
• Suppresses yeast
• Compound X has an antibacterial / fungistatic/ fungicidal / virostatic / antiseptic / disinfectant effect

Allergies
• Reduces allergies / allergy symptoms
• Research has shown promising evidence for the effect of compound X on the prevention of allergies
• Product Y is useful against pollen allergies. Improves quality of life during pollen season.

Others
• Prostate: Reduces excessive prostate growth. For prostate pains.
• Urinary tracts: Reduces urinary problems. Substance A has a proven effect on the prevention of urinary tract inflammations. Reduces infections of the urinary tracts.
• Skin: For wounds. Relief for acne / psoriasis / rashes / minor skin problems.


• Mouth: Alleviates xerostomia symptoms.

• Mucous membranes: Protects irritated mucous membranes / mucous membranes from damage. Prevents inflammations of the mucous membranes.

• Eyes: Prevents grey cataract. Effective for glaucoma. Reduces retinopathy.

• Pain: Helps to soothe pain. Reduces feelings of pain. Reduces the need for painkillers.

• Disorders: Effective for fat metabolism / liver / pancreas / nervous system disorders.

• Deficiencies: For the prevention of vitamin / mineral substance X deficiency.

• Drug / medicine, etc.: Substance A is an effective drug / one of the world’s oldest medicinal plants / one of the best-known drugs used in herbal medicine / an old medicinal herb / a traditional plant drug / an antiseptic medicinal plant. A basis for self-treatment.