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Draft Scientific and technical guidance for the preparation and presentation of a health claim application

(Revision 2)

EFSA Panel on Dietetic Products, Nutrition and Allergies (NDA)

Abstract

The European Food Safety Authority (EFSA) asked the Panel on Dietetic Products Nutrition and Allergies (NDA) to update the scientific and technical guidance for the preparation and presentation of an application for authorisation of a health claim published in 2011. Since then, the NDA Panel has gained considerable experience in the evaluation of health claims, and has also increased interactions and exchange of views with stakeholders. Lessons learnt from these experiences have been translated into a new General scientific guidance for stakeholders on health claim applications (published in January 2016). In this context, it is noted the need to adapt the existing scientific and technical guidance for stakeholders to the new scientific and technical developments in this area. This guidance document presents a common format for the organisation of information for the preparation of a well-structured application for authorisation of health claims which fall under Articles 13(5), 14, and 19 of Regulation (EC) No 1924/2006. This guidance outlines: the information and scientific data which must be included in the application, the hierarchy of different types of data and study designs (reflecting the relative strength of evidence which may be obtained from different types of studies) and the key issues which should be addressed in the application to substantiate the health claim.

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Keywords: health claims, food/constituent, substantiation, human pertinent data, comprehensive review, application, guidance

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48

49 **Summary**

50 The European Food Safety Authority (EFSA) asked the Panel on Dietetic Products, Nutrition and
51 Allergies (NDA) to update the scientific and technical guidance for the preparation and presentation of
52 an application for authorisation of a health claim, which was published in 2007 and subsequently
53 revised in 2011 to include purely administrative nature modifications.

54 Since then, the NDA Panel has gained considerable experience in the evaluation of health claims, and
55 has also increased interactions and exchange of views with stakeholders, both through a technical
56 meeting and through public consultations on guidance documents. Lessons learnt from these
57 experiences have been translated into a new General scientific guidance for stakeholders on health
58 claim applications (published in January 2016), which represents a step forward in assisting applicants
59 to compile their applications for health claims authorisation. In this context, it is noted the need to
60 adapt the existing scientific and technical guidance for stakeholders to the new scientific and technical
61 developments in this area.

62 The revision of the guidance, endorsed by the NDA Panel on 29 June 2016 for release for public
63 consultation, has been aligned with the General scientific guidance for stakeholders on health claim
64 applications and adapted to include claims that are based on the essentiality of nutrients. It has also
65 been re-structured concerning Parts 1 to 6 including the Appendices to clearly outline the information
66 to be provided.

67 The purpose of this guidance is to assist applicants in preparing and presenting their applications for
68 authorisation of health claims which fall under Article 14 (referring to children's development and
69 health, and to disease risk reduction claims) or 13(5) (which are based on newly developed scientific
70 evidence and/or which include a request for the protection of proprietary data), or for modification of
71 an existing authorisation in accordance with Article 19 of the Regulation (EC) No 1924/2006.

72 This guidance applies to health claims related to the consumption of a food category, a food, or its
73 constituents (including a nutrient or other substance, or a fixed combination of constituents);
74 hereafter referred to as food/constituent.

75 The guidance presents a common format to assist the applicant in the preparation of a well-structured
76 application. This format will also help the NDA Panel to deliver its scientific opinion in an effective and
77 consistent way.

78 It is important to consider whether or not the health claim proposed is based on the essentiality of
79 nutrients. Data requirements for claims based on the essentiality of nutrients differ compared to other
80 claims, e.g. for the characterisation of the food/constituent, for the characterisation of the claimed
81 effect, for the scientific substantiation of the claim, and for establishing conditions of use.

82 The application must contain: a proposal for the wording of the health claim and the specific
83 conditions of use. The following should be specified: the target population for the health claim; the
84 quantity of the food/constituent and pattern of consumption required to obtain the claimed effect, and
85 whether this quantity could reasonably be consumed as part of a balanced diet. Where appropriate,
86 the following should also be provided, with a rationale: a statement addressed to persons who should
87 avoid using the food/constituent for which the health claim is made; a warning for any
88 food/constituent that is likely to present a health risk if consumed in excess; any other restrictions of
89 use; directions for preparation and/or use.

90 The application must also contain:

- 91 • information on the characteristics of the food/constituent for which the claim is made. Such
92 characteristics may depend on the nature of the food/ constituent, but also on the claimed effect.
93 Where applicable, this information should contain aspects: such as the composition, physical and
94 chemical characteristics, manufacturing process, and stability, in order to show consistency in the
95 final product for those characteristics considered to influence the claimed effect;
- 96 • information to allow characterisation of the claimed effect. For function claims, the (specific)
97 function of the body that is the target of the claim should be specified; for reduction of disease
98 risk claims, both the risk factor and the disease should be identified. A rationale that the proposed
99 changes in the function or the risk factor for disease are beneficial physiological effects for the

100 target population for which the claim is intended should be provided, together with the outcome
101 measures and methods of measurement which could be used to assess such changes in *in vivo* in
102 humans;

103 • all pertinent scientific data (published and unpublished, data in favour and not in favour) which
104 form the basis for substantiation of the health claim. For claims other than those based on the
105 essentiality of nutrients, data from studies in humans addressing the relationship between the
106 consumption of the food/constituent and the claimed effect are required for substantiation.
107 Because of the scientific uncertainties in extrapolating non-human data to humans, data from
108 studies in animals or other model systems alone cannot substitute for human data, but may be
109 included only as supporting evidence, for example to provide evidence on the biological plausibility
110 of the specific claim, including evidence on the mechanisms by which the food/constituent could
111 exert the claimed effect.

112 • for claims other than those based on the essentiality of nutrients, a comprehensive review of
113 **published** human studies addressing the specific relationship between the food/constituent and
114 the claimed effect is required. This review, and the identification of studies considered pertinent to
115 the health claim, should be performed in a systematic and transparent manner in order to
116 demonstrate that the application adequately reflects the balance of all the evidence available. The
117 procedure followed to identify **unpublished human studies** that are considered as pertinent to
118 the health claim should be depicted. For claims based on the essentiality of nutrients, the
119 procedure followed to identify the evidence on the essentiality of the nutrients should also be
120 depicted.

121 In cases where any of the required data are not relevant for a particular application,
122 reasons/justification must be given for the absence of such data in the application.

123 As specified in the Regulation, health claims should be substantiated by taking into account the
124 totality of the available scientific data and by weighing the evidence, subject to the specific conditions
125 of use. In particular, the evidence should demonstrate the extent to which:

- 126 i. the food/constituent is defined and characterised;
- 127 ii. the claimed effect is based on the essentiality of a nutrient, OR
- 128 the claimed effect is defined and is a beneficial physiological effect for the target
129 population, and can be measured *in vivo* in humans;
- 130 iii. a cause and effect relationship is established between the consumption of the
131 food/constituent and the claimed effect in humans (for the target group under the
132 proposed conditions of use), by considering the strength, consistency, specificity, dose-
133 response, and biological plausibility of the relationship;
- 134 iv. the quantity of the food/constituent and pattern of consumption required to obtain the
135 claimed effect could reasonably be achieved as part of a balanced diet.

136 It is intended that the guidance will be kept under review and will be further updated as appropriate
137 in the light of experience gained from the evaluation of health claim applications. Once adopted, this
138 guidance supersedes the scientific and technical guidance for the preparation and presentation of an
139 application for authorisation of a health claim published in 2011.

140 **Table of contents**

141		
142	Abstract.....	1
143	Summary.....	3
144	Background and Terms of reference as provided by EFSA.....	7
145	Introduction.....	7
146	1. Scope.....	7
147	2. Objectives.....	8
148	General principles.....	9
149	Organisation and content of the application.....	12
150	1. Part 1: Administrative and technical data.....	13
151	1.1. Comprehensive table of contents of the application.....	13
152	1.2. Applicant.....	13
153	1.2.1. Company/organisation.....	13
154	1.2.2. Contact person.....	13
155	1.3. Specifications.....	13
156	1.4. Proprietary data.....	13
157	1.5. Confidential data.....	14
158	1.6. Regulatory status outside the European Union.....	14
159	1.7. Health claim particulars.....	15
160	1.7.1. Specify the food/constituent for which the health claim is made.....	15
161	1.7.2. Describe the relationship between the food/constituent and the claimed effect, including	
162	the outcome variable(s) used to assess the claimed effect <i>in vivo</i> in humans and the	
163	methods of measurement.....	15
164	1.7.3. Provide a proposal for the wording of the health claim.....	15
165	1.7.4. Conditions of use.....	15
166	1.8. Application form and summary of the application.....	15
167	2. Part 2: Characterisation of the food/constituent.....	16
168	2.1. Single constituent or fixed combination of constituents.....	16
169	2.1.1. Vitamins and minerals.....	16
170	2.1.2. Food/constituents other than vitamins and minerals.....	16
171	2.2. Food or category of food.....	17
172	2.2.1. Name and composition.....	17
173	2.2.2. Manufacturing process.....	17
174	2.2.3. Stability information.....	17
175	2.3. References.....	17
176	3. Part 3: Characterisation of the claimed effect.....	18
177	3.1. Function claims.....	18
178	3.2. Disease risk reduction claims.....	18
179	3.2.1. Definition of the claimed effect.....	18
180	3.2.2. Characterisation of the relationship between the factor and the risk of disease.....	18
181	3.3. References.....	19
182	4. Part 4: Identification of pertinent scientific data.....	19
183	4.1. Claims based on the essentiality of nutrients.....	19
184	4.2. Claims other than those based on the essentiality of nutrients.....	20
185	4.2.1. Identification of published human studies on the relationship between the consumption	
186	of the food/constituent and the claimed effect.....	20
187	4.2.2. Unpublished human studies on the relationship between the consumption of the	
188	food/constituent and the claimed effect.....	21
189	4.2.3. Published and unpublished supportive evidence.....	22
190	5. Part 5: Overall summary of pertinent scientific data.....	22
191	5.1. Claims based on the essentiality of nutrients.....	22
192	5.2. Claims other than those based on the essentiality of nutrients.....	23
193	5.2.1. Substantiation of a causal relationship between the consumption of the food/constituent	
194	and the claimed effect.....	23
195	5.2.2. Characterisation of the relationship between the consumption of the food/constituent	

196	and the claimed effect.....	23
197	5.2.3. Supportive evidence	23
198	6. Annexes to the application.....	24
199	6.1. Glossary and abbreviations	24
200	6.2. Copies/reprints of references related to characterisation of the claimed effect cited in	
201	Part 3.....	24
202	6.3. Copies/reprints of pertinent published data identified in Part 4.....	24
203	6.4. Full study protocols and reports of pertinent unpublished data identified in Part 4.....	24
204	6.5. Other	24
205	References.....	25
206	Glossary	26
207	Appendices	28
208	Appendix A – Application form [Mandatory]	28
209	Appendix B – Summary of the application [Mandatory].....	30
210	Appendix C – Information to be presented in a full study report for unpublished studies or	
211	for proprietary studies.....	32
212		
213		

214 **Background and Terms of reference as provided by EFSA**

215 **Background**

216 Regulation (EC) No 1924/2006¹ harmonises the provisions related to nutrition and health claims and
217 establishes rules governing the Community authorisation of health claims made on foods. According to
218 the Regulation, health claims should be only authorised for use in the Community after a scientific
219 assessment of the highest possible standard to be carried out by EFSA.

220 Owing to the scientific and technical complexity of health claims, the EFSA Panel on Dietetic products,
221 Nutrition and Allergies (NDA Panel) has placed considerable efforts on developing scientific criteria for
222 the substantiation of health claims, and has published guidance on the scientific substantiation of
223 health claims since 2007².

224 In the last years, the NDA Panel has gained considerable experience in the evaluation of health claim
225 applications. Interactions and exchange of views with stakeholders have also increased considerably,
226 both through a technical meeting³ and through public consultations on guidance documents⁴. The
227 NDA Panel has translated the lessons learnt from these experiences into a revised General scientific
228 guidance for stakeholders on health claim applications⁵, which was recently published and represents
229 a step forward in assisting applicants to compile their applications for health claims authorisation. In
230 this context, it is noted the need to adapt the existing scientific and technical guidance for
231 stakeholders⁶ to the new scientific and technical developments in this area.

232 To this end, the NDA Panel is asked to update the scientific and technical guidance for the preparation
233 and presentation of an application for authorisation of a health claim⁷.

234 **Terms of reference**

235 The NDA Panel is requested by EFSA to update the scientific and technical guidance for the
236 preparation and presentation of an application for authorisation of a health claim.

237 The guidance document shall clarify and address the scientific and technical developments in this
238 area, taking into account the experience gained by the NDA Panel with the evaluation of health claims
239 and the comments received from stakeholders in technical meetings and public consultations.

240 The draft guidance shall be released for public consultation prior to finalisation.

241 The draft guidance shall be revised taking into account the comments received during the public
242 consultation before the adoption by the NDA Panel. A technical report on the outcome of the public
243 consultation shall be published.

244 **Introduction**

245 **1. Scope**

246 The guidance presented in this document is for preparing and presenting applications for authorisation
247 of health claims which fall under Article 14 of the Regulation, i.e. reduction of disease risk claims and
248 claims referring to children's development and health.

- 249 • "Reduction of disease risk claim" means any health claim that states, suggests or implies that the
250 consumption of a food category, a food or its constituents significantly reduces a risk factor in the
251 development of a human disease (as defined in the Regulation).

¹ Regulation (EC) No 1924/2006 of the European Parliament and of the Council of 20 December 2006 on nutrition and health claims made on foods. OJ L 404, 30.12.2006, p. 9–25.

² <http://www.efsa.europa.eu/en/nda/ndaclaims.htm>

³ <http://www.efsa.europa.eu/it/supporting/pub/569e>

⁴ <http://www.efsa.europa.eu/it/supporting/pub/569e>

⁵ <http://www.efsa.europa.eu/it/efsajournal/pub/4367>

⁶ Scientific and technical guidance for the preparation and presentation of an application for authorisation of a health claim
<http://www.efsa.europa.eu/en/efsajournal/pub/2170>

⁷ <http://www.efsa.europa.eu/en/efsajournal/pub/2170>

- 252 • “For children’s claims”, there is no definition given in the Regulation. Therefore the proposed
253 health claims referring to children’s development and health will be considered on a case by case
254 basis (see also Commission guidance on the implementation of Regulation (EC) No 1924/2006).

255 The guidance is also applicable to applications for authorisation of health claims which fall under
256 Article 13(5) of the Regulation, i.e. which are based on newly developed scientific evidence and/or
257 which include a request for the protection of proprietary data.

258 Applications for the modification of existing authorisations of health claims in accordance with Article
259 19 of the Regulation shall also be presented, as appropriate, in the format outlined in this document.

260 **2. Objectives**

261 Without prejudice to Commission Regulation (EC) No 353/2008, the guidance presented in this
262 document is intended to assist applicants in the preparation and presentation of well-structured
263 applications for authorisation of health claims.

264 It presents a common format for the organisation of the information to be provided and outlines:

- 265 • the information and scientific data which must be included in the application, i.e. for health claims
266 which are based on the essentiality of nutrients and for other health claims,
- 267 • the hierarchy of different types of data and study designs, reflecting the relative strength of
268 evidence which may be obtained from different types of studies,
- 269 • the key issues which should be addressed in the application to substantiate the health claim.

270 It is intended that the guidance will be kept under review, and will be further updated as appropriate
271 in the light of experience gained from the evaluation of health claim applications.

272 This guidance supersedes the scientific and technical guidance for the preparation and presentation of
273 an application for authorisation of a health claim published in 2011.

274 General principles

275 This document should be read in conjunction with the General scientific guidance for stakeholders on
276 health claim applications (EFSA NDA Panel, 2016), Regulation on Nutrition and Health Claims made on
277 foods,⁸ the Guidance on the implementation of Regulation (EC) No 1924/2006 (Standing Committee
278 on the Food Chain and Animal Health, 2007), Commission Regulation (EC) No 353/2008,⁹ the
279 Commission Implementing Decision (2013/63/EU) of 24 January 2013,¹⁰ and future guidelines and
280 regulations, as applicable.

281 1) This guidance applies to health claims related to the consumption of a food category, a food,
282 or its constituents (including a nutrient or other substance, or a fixed combination of
283 constituents); hereafter referred to as **food/constituent**. A **fixed combination of**
284 **constituents** means two or more nutrients and/or other substances which are all required in
285 order to obtain the claimed effect, ideally in specified amounts.

286 2) In the context of this guidance document:

287 – The term **application** means a stand-alone dossier containing the information and
288 the scientific data submitted for the authorisation of a health claim.

289 – A **disease/disorder** means a pathological process, acute or chronic, inherited or
290 acquired, of known or unknown origin, having a characteristic set of signs and
291 symptoms which are used for its diagnosis. The diagnosis of diseases/disorders relies
292 on widely accepted, well-defined criteria (i.e. the criteria used for diagnosis are widely
293 accepted by the medical community and can be verified by a physician). In this
294 guidance document, the term **disease** is used to include diseases and disorders,
295 which for the purpose of this guidance are considered as synonymous and have the
296 same meaning.

297 – The **totality of the evidence** describes all the studies (e.g. in humans, in animals,
298 *in vitro*) which are taken into consideration to conclude on the substantiation of a
299 claim (including studies in favour and not in favour of the claim).

300 – **Efficacy study** refers to an intervention study (in humans, in animals) which
301 investigates the relationship between the food/constituent and the claimed effect.

302 – **Pertinent study** means a study from which scientific conclusions that are relevant to
303 the substantiation of a claim (e.g. efficacy studies, bioavailability studies, studies on
304 the mechanism(s) by which a food could exert the claimed effect) can be drawn.

305 – **Supportive evidence** refers to studies/data which, on their own, are not sufficient
306 for the scientific substantiation of a claim and that may be part of the totality of the
307 evidence only if pertinent human studies showing an effect of the food/constituent
308 are available.

309 – The **target population** is the population group(s) for which health claims are
310 intended (e.g. the general healthy population or specific subgroup(s) thereof).

311 – The **study group** denotes individuals recruited for human studies which are
312 submitted for the scientific substantiation of a claim.

313 – A **suitable study group** means a study group which is representative of the target
314 population for the claim or a study group from which extrapolation of the results to
315 the target population is biologically appropriate.

⁸ Regulation (EC) No 1924/2006 of the European Parliament and of the Council of 20 December 2006 on nutrition and health claims made on foods. OJ L 404, 30.12.2006, p. 9–25. Available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:2006R1924:20100302:EN:PDF>

⁹ Commission Regulation (EC) No 353/2008 of 18 April 2008 establishing implementing rules for applications for authorisation of health claims as provided for in Article 15 of Regulation (EC) No 1924/2006 of the European Parliament and of the Council (Text with EEA relevance) (OJ L 109, 19.4.2008, p. 11): <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CONSLEG:2008R0353:20091221:EN:PDF>

¹⁰ Commission Implementing Decision of 24 January 2013 adopting guidelines for the implementation of specific conditions for health claims laid down in Article 10 of Regulation (EC) No 1924/2006 of the European Parliament and of the Council. OJ L 22, 25.1.2013, p. 25–28. Available at <http://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32013D0063>

- 316 3) It is the duty of the applicant to provide all the available scientific data (including data in
317 favour and not in favour) which are pertinent to the health claim in order to demonstrate that
318 the health claim is substantiated by the totality of the scientific data and by weighing the
319 evidence. The NDA Panel should not be required to consider other data that are not part of
320 the application, to undertake any additional literature reviews, or to assemble, or process data
321 in order to evaluate the application. As such, the application should be comprehensive and
322 complete. Each application will be considered on a case by case basis.
- 323 4) This guidance presents a common format for the organisation of the information in order to
324 assist applicants in the preparation of well-structured applications. Adherence to this format
325 will facilitate easy access to information and scientific data in applications to help the NDA
326 Panel to carry out its evaluation and to deliver its scientific opinion in an effective and
327 consistent way.
- 328 5) One application should be prepared for each individual health claim; this means that only one
329 relationship between a food/constituent and a single claimed effect can be the object of each
330 application. However, multiple formulations of a food/constituent can be proposed by the
331 applicant in the same application as candidates to bear the health claim, provided that the
332 scientific evidence is valid for all proposed formulations of a food/constituent bearing the
333 health claim.
- 334 6) Not all the information and data specified in this guidance will be required for each
335 application. In cases where some of the data mentioned in this guidance do not apply to a
336 particular application, reasons/justification must be given for the absence of such data in the
337 application.
- 338 7) It is important to consider whether or not the health claim proposed is based on the
339 essentiality of nutrients. Data requirements for claims based on the essentiality of nutrients
340 differ compared to other claims, e.g. for the characterisation of the food/constituent, for the
341 characterisation of the claimed effect, for the scientific substantiation of the claim, and for
342 establishing conditions of use (EFSA NDA Panel, 2016).
- 343 8) The application must include a proposal for the wording of the health claim and the specific
344 conditions of use. The following should be specified: the target population for the health
345 claim; the quantity of the food/constituent and pattern of consumption required to obtain the
346 claimed effect, and whether this quantity could reasonably be consumed as part of a balanced
347 diet. Where appropriate, the following should also be provided, with a rationale: a statement
348 addressed to persons who should avoid using the food/constituent for which the health claim
349 is made; a warning for any food/constituent that is likely to present a health risk if consumed
350 in excess; any other restrictions of use; directions for preparation and/or use.
- 351 9) The application must contain information on the characteristics of the food/constituent for
352 which the claim is made. Such characteristics may depend on the nature of the food/
353 constituent, but also on the claimed effect. Where applicable, this information should contain
354 aspects such as the composition, physical and chemical characteristics, manufacturing
355 process, and stability, in order to show consistency in the final product for those
356 characteristics considered to influence the claimed effect. Measurements should be performed
357 in a competent laboratory which can certify the data. Whenever a quality control system is in
358 place for performance/control/documentation (e.g. good manufacturing practice (GMP), good
359 laboratory practice (GLP), applicable ISO standard), the particular system should be indicated.
- 360 10) The application must also contain information to allow characterisation of the claimed effect.
361 Such information may depend on the type of claim. For function claims, the (specific) function
362 of the body that is the target of the claim should be specified; for reduction of disease risk
363 claims, both the risk factor and the disease should be identified. A rationale that the proposed
364 changes in the function or the risk factor for disease are beneficial physiological effects for the
365 target population for which the claim is intended should be provided, together with the
366 outcome measures and methods of measurement which could be used to assess such
367 changes in *in vivo* in humans.
- 368 11) The application must contain all pertinent scientific data (published and unpublished, data in
369 favour and not in favour) which form the basis for substantiation of the health claim. For

370 claims other than those based on the essentiality of nutrients, data from studies in humans
371 addressing the relationship between the consumption of the food/constituent and the claimed
372 effect are required for substantiation. Because of the scientific uncertainties in extrapolating
373 non-human data to humans, data from studies in animals or other model systems alone
374 cannot substitute for human data, but may be included only as supporting evidence, for
375 example to provide evidence on the biological plausibility of the specific claim, including
376 evidence on the mechanisms by which the food/constituent could exert the claimed effect.

377 12) For claims based on the essentiality of nutrients, the procedure followed to identify the
378 evidence on the essentiality of the nutrients should be depicted.

379 For claims other than those based on the essentiality of nutrients, a comprehensive review of
380 published human studies addressing the specific relationship between the food/constituent
381 and the claimed effect is required. This review, and the identification of studies considered
382 pertinent to the health claim, should be performed in a systematic and transparent manner in
383 order to demonstrate that the application adequately reflects the balance of all the evidence
384 available. The procedure followed to identify **unpublished human studies** that are
385 considered as pertinent to the health claim should be depicted.

386 13) Data from intervention and observational studies in humans should be organised according to
387 a hierarchy of study designs, and should reflect the relative strength of evidence which may
388 be obtained from different types of studies. For claims other than those based on the
389 essentiality of nutrients, well-designed and conducted randomised controlled trials (i.e. at low
390 risk of bias) investigating the effect of a food/constituent which complies with the
391 specifications of the food/constituent for which the claim is proposed on appropriate outcome
392 variables for the claimed effect, in a suitable study group, and under the conditions of use
393 proposed for the claim are at the top of the hierarchy which informs decisions on
394 substantiation.

395 14) Data provided to substantiate a health claim should be of high quality with respect to the
396 methodology and reporting. Whenever a quality control system has been used/reported in the
397 conduct of the studies (e.g. GLP, good clinical practice (GCP), as relevant), the particular
398 system should be indicated. Journal abstracts and articles published in newspapers,
399 magazines, newsletters or hand-outs, books or chapters of books for consumers or the
400 general public should not be cited.

401 15) As specified in the Regulation, health claims should be substantiated by taking into account
402 the totality of the available scientific data and by weighing the evidence, subject to the
403 specific conditions of use. In particular, the evidence should demonstrate the extent to which:

- 404 v. the food/constituent is defined and characterised;
- 405 vi. the claimed effect is based on the essentiality of a nutrient, OR
406 the claimed effect is defined and is a beneficial physiological effect for the target
407 population, and can be measured *in vivo* in humans;
- 408 vii. a cause and effect relationship is established between the consumption of the
409 food/constituent and the claimed effect in humans (for the target group under the
410 proposed conditions of use), by considering the strength, consistency, specificity,
411 dose–response, and biological plausibility of the relationship;
- 412 viii. the quantity of the food/constituent and pattern of consumption required to
413 obtain the claimed effect could reasonably be achieved as part of a balanced diet.

414 16) The entire application in itself cannot be claimed as confidential. Specific parts, sections,
415 words, graphs or datasets considered as confidential by the applicant should be kept to a
416 minimum and clearly identified. The applicant is required to provide detailed and verifiable
417 justification for every part of the dossier claimed as confidential.

418 17) As defined in the Regulation, EFSA will make public the summary of the application when
419 received and as provided by the applicant. EFSA will also make public, once adopted, its

420 scientific opinion on the data and information included in the application, excluding the
421 information considered as confidential¹¹.

422 **Organisation and content of the application**

423 The following information should be provided in the application, and the structure should follow a
424 common format, i.e. order and numbering system (particularly for the Parts, their main heading and
425 first and second sub-headings). Data provided in the application should be organised into six Parts.

- 426 • **Part 1** contains the specific requirements for the administrative and technical data, such as
427 information related to the applicant and the nature of the application (including regulatory status
428 of the health claim), health claim particulars, the application form and the summary of the
429 application.
- 430 • **Part 2** contains information specific to the food/constituent that is the target for the claim and its
431 characteristics.
- 432 • **Part 3** contains information regarding the characterisation of the claimed effect.
- 433 • **Part 4** contains all pertinent scientific data (published and unpublished, data in favour and not in
434 favour) which form the basis for substantiation of the health claim.
- 435 • **Part 5** comprises an overall summary of the pertinent scientific data.
- 436 • **Part 6** comprises the glossary or abbreviation of terms quoted throughout the different Parts, full
437 reprints of pertinent publications, full study protocols and study reports of unpublished pertinent
438 data, and scientific opinions of regulatory bodies outside the European Union (EU).

439 Where some of the data described in this guidance do not apply to a particular application,
440 reasons/justification must be given for the absence of such data in the application.

441 If a study appears under different Parts, cross-references should be given.

442

¹¹ More information about how EFSA handles confidential data can be found in Annex A, section A.4. of the General scientific guidance for stakeholders on health claim applications, available at: <http://www.efsa.europa.eu/it/efsajournal/pub/4367>.

443 **1. Part 1: Administrative and technical data**

444 **1.1. Comprehensive table of contents of the application**

445

446 **1.2. Applicant**

447 **1.2.1. Company/organisation**

448 Provide the name and address of the company or organisation.¹²

449

450 **1.2.2. Contact person**

451 Indicate the contact person authorised to communicate with EFSA on behalf of the applicant.¹³

452

453 **1.3. Specifications**

454 Please select one of the options below:

455 Application for a health claim pursuant to Article 13(5) of Regulation (EC) No 1924/2006

456 Please specify:

457 Based on newly developed scientific evidence and/or

458 Includes a request for the protection of proprietary data

459 Application for a health claim pursuant to Article 14 of Regulation (EC) No 1924/2006

460 Please specify:

461 Disease risk reduction claim

462 Claim referring to children's development and health

463 Application for a modification of an existing health claim authorisation in accordance with Article 19
464 of Regulation (EC) No 1924/2006

465 Please specify:

466 The health claim that has been authorised and for which the modification is requested

467

468 The Commission Regulation under which the claim has been authorised

469

470 The part of the authorisation which should be modified

471

472 **1.4. Proprietary data**

473 State whether the application includes a request for the protection of proprietary data:

474 yes

475 no

¹² In case more than one company or organisation submits an application, provide their names and addresses. EFSA requires that only one contact person be authorised to communicate with EFSA.

¹³ To facilitate communication, EFSA requires that there be only one contact person per application.

476 If yes, please specify the Part(s) of the application which include proprietary data for which protection
 477 is requested, clearly stating section(s) and page number(s):

478

479 Provide verifiable justification¹⁴/declaration for the proprietary claim:

480

481 **1.5. Confidential data**

482 State whether the application includes confidential data

483 yes

484 no

485 If yes, please specify the Part(s) in the application (including unpublished studies) which contain
 486 confidential data, clearly stating section(s) or data sets, and page number(s) (see also Annex A,
 487 section A.4. of the General scientific guidance for stakeholders on health claim application (EFSA NDA
 488 Panel, 2016)), and verifiable justification(s)¹⁴/reasons(s) why the afore-mentioned information needs
 489 to be kept confidential should be provided:

Elements of the application dossier for which a request for confidentiality treatment was filed by the applicant	Section(s) or data sets, and page number(s)	Verifiable justification(s)/reasons(s)

490

491 **1.6. Regulatory status outside the European Union**

492 If this health claim or a similar one has been submitted by the applicant to any regulatory body for a
 493 health claim authorisation outside the European Union (EU), please indicate the status of the
 494 evaluation of such health claim by each regulatory body (if more than one), as appropriate:

495 Under consideration

496 Specify the claimed effect, the wording of the claim, the food/constituent for which the claim has been
 497 submitted, and the date of submission. Indicate the regulatory body which is dealing with the
 498 application for authorisation of the health claim.

499

500 Withdrawn

501 Provide the claimed effect and the wording of the claim which were withdrawn, the date of
 502 submission, the date of withdrawal, and the reason for withdrawal. Indicate the regulatory body at
 503 the time of withdrawal.

504

505 Approved

506 Specify the approved claimed effect and the wording of the claim, the food/constituent for which the
 507 claim has been approved, the date of approval. Indicate the regulatory body which approved the
 508 health claim, and if available, provide a copy of the scientific opinion of the regulatory body which
 509 authorised the health claim (in Part 6, section 6.5).

510

¹⁴ Precise and factual information, ideally documents, proving that the disclosure of the information requested by the applicant to be treated as confidential would result in concrete harm to the commercial or economic interest of the applicant/requestor, or would undermine the protection of privacy and/or integrity of concerned individual(s).

511 Rejected

512 Specify the rejected claimed effect and the wording of the claim, the date of rejection and the reasons
513 for rejection. Indicate the regulatory body which rejected the health claim, and if available, provide a
514 copy of the scientific opinion of the regulatory body which rejected the health claim (in Part 6, section
515 6.5).

516

517 **1.7. Health claim particulars**

518 **1.7.1. Specify the food/constituent for which the health claim is made**

519

520 **1.7.2. Describe the relationship between the food/constituent and the claimed** 521 **effect, including the outcome variable(s) used to assess the claimed effect** 522 ***in vivo* in humans and the methods of measurement**

523

524 **1.7.3. Provide a proposal for the wording of the health claim**

525 The proposed wording should be in English.

526

527 **1.7.4. Conditions of use**

528 Specify the target population for the health claim.

529

530 Indicate the quantity of the food/constituent and pattern of consumption required to obtain the
531 claimed effect, and whether this quantity could reasonably be consumed as part of a balanced diet.

532

533 Provide, where appropriate, a statement addressed to the category(ies) of the population who should
534 avoid using the food/constituent for which the health claim is made, and include a rationale.

535

536 Specify, where applicable, a warning for any food/constituent that is likely to present a health risk if
537 consumed in excess, and provide a rationale.

538

539 Specify, where applicable, other restrictions of use, and provide a rationale.

540

541 Specify, where applicable, directions for preparation and/or use.

542

543 **1.8. Application form and summary of the application**

544 Please use the application form provided in Appendix A.

545 For summary of the application, please use the form provided in Appendix B.

546 Information requested in Appendices A and B are mandatory.

547

548 Supporting documents cited (e.g. the scientific opinion of other regulatory bodies outside the EU) in
549 Part 1 should be provided in Part 6 (section 6.5).

550 **2. Part 2: Characterisation of the food/constituent**

551 Indicate if the food/constituent that is the subject of the health claim is:

552 a single constituent or a fixed combination of constituents. If yes, please go to section 2.1.

553 a food or a food category. If yes, please go to section 2.2.

554 **2.1. Single constituent or fixed combination of constituents**

555 For single constituents or fixed combinations of constituents, which are exclusively vitamins and/or
556 minerals, please go to section 2.1.1.

557 For single constituents which are not vitamins or minerals, and for fixed combinations of constituents
558 in which at least one constituent is NOT a vitamin or a mineral (e.g. a combination of EPA+DHA+GLA
559 at a weight ratio of 9:3:1), please go to section 2.1.2.

560 **2.1.1. Vitamins and minerals**

561 If the food constituent for which the claim is made is a vitamin or a mineral, or a fixed combination of
562 vitamins and/or minerals, and its characterisation relates to the chemical form of the nutrient(s)
563 naturally present in foods and forms that are approved for addition to foods¹⁵, please specify:

564 The name of the food/constituent:

565

566 The chemical forms to which the health claim applies (one or more among those included in
567 Commission Regulation (EC) No 1170/2009¹⁵):

568

569 **2.1.2. Food/constituents other than vitamins and minerals**

570 **Name and characteristics**

571 The source and specifications (e.g. physical and chemical properties, composition, and where
572 applicable, microbiological constituents) of the constituent(s), or fixed combination of constituents, for
573 which the health claim is made should be provided.

574

575 The variability from batch to batch should be addressed.

576

577 Analytical methods applied should be scientifically sound and standardised to ensure quality and
578 consistency of the data.

579 Measurements should be performed in a competent laboratory that can certify the data. Whenever a
580 quality control system is in place for performance/control/documentation (e.g. GLP and applicable ISO
581 standard) the particular system should be indicated.

582

583 **Manufacturing process**

584 Where applicable, a brief overview should be provided. If the production process follows a quality
585 system (e.g. GMP), the particular system should be indicated.

586

¹⁵ Commission Regulation (EC) No 1170/2009 of 30 November 2009 amending Directive 2002/46/EC of the European Parliament and of Council and Regulation (EC) No 1925/2006 of the European Parliament and of the Council as regards the lists of vitamin and minerals and their forms that can be added to foods, including food supplements. OJ L 314, 1.12.2009, p.36–42.

587 **Stability information**

588 Where applicable, a brief summary of the studies undertaken (e.g. conditions, batches and analytical
589 procedures), and of the results and conclusions of the stability studies, should be provided.
590 Conclusions with respect to storage conditions and shelf-life should be given.

591

592 **2.2. Food or category of food**

593 **2.2.1. Name and composition**

594 A brief description of the food or food category, including characterisation of the food matrix and the
595 overall composition (including the nutrient content of the food), should be provided.

596

597 The source and specifications of the food or food category for which the health claim is made should
598 be provided, and in particular the content of the food/constituent(s) which may contribute to exert the
599 claimed effect, if known.

600

601 The variability from batch to batch should be addressed.

602

603 Analytical methods applied should be scientifically sound and standardised to ensure quality and
604 consistency of the data.

605 Measurements should be performed in a competent laboratory that can certify the data. Whenever a
606 quality system is in place for performance/control/documentation (e.g. GLP and applicable ISO
607 standard) the particular system should be indicated.

608

609 **2.2.2. Manufacturing process**

610 Where applicable, a brief overview should be provided. If the production follows a quality system (e.g.
611 GMP), the particular system should be indicated.

612

613 **2.2.3. Stability information**

614 Where applicable, a brief summary of the studies undertaken (e.g. conditions, batches and analytical
615 procedures), and of the results and conclusions of the stability studies, should be provided.
616 Conclusions with respect to storage conditions and shelf-life should be given.

617

618 **2.3. References**

619 Provide a complete list of the references quoted in Part 2 (alphabetical order of first authors).

620

621

622 Supporting documents should be provided in Part 6 (section 6.5).

623 **3. Part 3: Characterisation of the claimed effect**

624 **3.1. Function claims**

625 The proposed health claim is based on the essentiality of a nutrient

626 yes no

627 **If yes**, please specify:

628 a) the function of the body that is the subject of the claimed effect.

629

630 b) the rationale/reasons why the body function is a beneficial physiological effect for the target
631 population for which the claim is intended.

632

633 **If not**, please specify:

634 a) the specific body function that is the subject of the claimed effect.

635

636 b) the rationale/reasons why the specific body function is a beneficial physiological effect for the
637 target population for which the claim is intended.

638

639 c) how the specific body function can be assessed *in vivo*¹⁶ in humans by generally accepted
640 methods. Please indicate the outcome variable(s) and the methods of measurement proposed
641 to assess the claimed effect in human studies.

642

643 **3.2. Disease risk reduction claims**

644 **3.2.1. Definition of the claimed effect**

645 Please specify:

646 a) the disease that is the subject of the health claim:

647

648 b) the criteria used for the diagnosis of the disease (i.e. the criteria used for diagnosis are widely
649 accepted by the medical community and can be verified by a physician):

650

651 c) the risk factor for the development of the human disease:

652

653 d) how the specific risk factor can be assessed *in vivo*¹³ in humans. Please indicate the outcome
654 variable(s) and the methods of measurement proposed to assess the risk factor in human
655 studies:

656

657 **3.2.2. Characterisation of the relationship between the factor and the risk of**
658 **disease**

659 If available, provide evidence from observational studies for an independent association between the
660 proposed risk factor and the incidence of the disease:

¹⁶ It includes the measurement of functional outcome variables *in vivo* and the measurement (*ex vivo*) of outcome variables in biological samples following an intervention *in vivo*.

661

662 Provide evidence that the relationship between the risk factor and the development of the disease is
663 biologically plausible:

664

665 If available, provide evidence from intervention (drug or dietary) studies that a reduction of the risk
666 factor generally reduces the incidence of the disease:

667

668 **3.3. References**

669 Provide a complete list of the references quoted in Part 3 (alphabetical order of first authors):

670

671

672 Full reprints of the references quoted should be provided in Part 6 (section 6.2).

673

674 **4. Part 4: Identification of pertinent scientific data**

675 **4.1. Claims based on the essentiality of nutrients**

676 The procedure followed to identify the evidence on the essentiality of the nutrients should be
677 depicted.

678

679 Provide case reports of clinical signs and symptoms of deficiency, depletion–repletion studies in
680 humans, animal studies, *in vitro* studies, and/or any other evidence (in favour and not in favour) to
681 establish that:

682 i. the food/constituent is required for normal human body function(s) i.e. it has an essential
683 mechanistic role in a metabolic function and/or it has the ability to reverse clinical signs
684 and symptoms of its deficiency;

685 ii. the food/constituent cannot be synthesised by the body, or cannot be synthesised in
686 amounts which are adequate to maintain normal human body function(s);

687 iii. the food/constituent must be obtained from a dietary source (i.e. a source which is
688 appropriate for human oral consumption).

689 A complete list of the references (alphabetical order of first authors) should be provided and
690 organised as follows:

691 a) depletion–repletion studies in humans

692

693 b) case reports of clinical signs and symptoms of deficiency in humans

694

695 c) animal studies

696

697 d) *in vitro* studies

698

699 e) review publications (e.g. narrative reviews, text-book chapters, etc.)

700

701 Full reprints of references quoted should be provided in Part 6 (section 6.3).

702 **4.2. Claims other than those based on the essentiality of nutrients**

703 **4.2.1. Identification of published human studies on the relationship between the** 704 **consumption of the food/constituent and the claimed effect**

705 Published human studies on the relationship between the consumption of the food/constituent and
706 the claimed effect should be identified in a systematic and transparent manner through a
707 comprehensive review of the scientific literature.

708 The following information on the comprehensive review should be provided, as appropriate:

709 **Authorship**

710 Name, affiliation, declaration of interests and signature of the reviewer(s) responsible for the
711 comprehensive review should be indicated.

712

713 **Objectives**

714 The questions that the comprehensive review aims to address should be clearly specified in relation to
715 the study participants, the food/constituent, the comparator (if applicable), the outcome variable(s)
716 used to assess the claimed effect, the methods of measurement which are considered valid with
717 respect to their analytical characteristics, and the study design(s).

718

719 **Eligibility criteria**

720 Specify the inclusion (and exclusion) criteria applied in order to select publications that are considered
721 pertinent to the health claim with respect to the study participants, the food/constituent, the
722 comparator (if applicable), the outcome variable(s) used to assess the claimed effect, the methods of
723 measurement, the study design(s), and other characteristics, where appropriate.

724

725 **Literature search and other data sources**

726 The databases that have been searched should be listed.

727

728 Please provide the full search strategy, including the terms used, limits used (e.g. publication dates,
729 publication types, languages, population subgroups or default tags), in order to allow replication.
730 Other sources of data used to retrieve pertinent published human studies should be acknowledged
731 (e.g. web sites, hand searching, expert knowledge, etc.).

732

733 **Published human studies on the relationship between the consumption of the** 734 **food/constituent and the claimed effect identified as pertinent to the health claim**

735 a) Provide a reference list of the publications that have been identified through the literature
736 search (and/or other data sources) and which have been considered as pertinent to the health
737 claim (i.e. which meet the eligibility criteria specified above). The reference list should be
738 organised in accordance with the hierarchy of study design and publication type as follows:

739 a.1) Publications reporting on human intervention (efficacy) studies (e.g. randomised
740 controlled studies, randomised uncontrolled studies, non-randomised controlled
741 studies, other intervention studies)

- 742
- 743 a.2) Publications reporting on human observational studies (e.g. cohort studies, case-
744 control studies, cross-sectional studies, other observational studies)
- 745
- 746 a.3) Summary publications reporting on human intervention and/or human observational
747 studies (e.g. systematic reviews, pooled analyses, meta-analyses, other review
748 publications)
- 749
- 750 Full reprints of the above-mentioned publications should also be provided in Part 6 (section
751 6.3).
- 752 b) Please provide a reference list of the publications that have been identified through the
753 literature search (and/or other data sources) on the relationship between the consumption of
754 the food/constituent and the claimed effect, which have NOT been considered as pertinent to
755 the health claim (i.e. which do NOT meet the eligibility criteria specified above). **For each**
756 **publication, the reason(s) for exclusion** of the publication from the application should be
757 clearly specified. The full text of these publications should NOT be provided in the application.
- 758

759 4.2.2. Unpublished human studies on the relationship between the consumption 760 of the food/constituent and the claimed effect

761 The procedure followed to identify unpublished human studies that are considered as pertinent to the
762 health claim should be depicted.

763 **Reference list of unpublished human studies**

764 Provide a reference list of any unpublished human (intervention or observational) studies and of any
765 summary publication (systematic reviews/meta-analyses/pooled analyses) reporting on human
766 (intervention or observational) studies which the applicant considers as being pertinent to the health
767 claim. The reference list should be organised in accordance with the hierarchy of study design and
768 publication type, as follows:

- 769 a.1) Human intervention (efficacy) studies (e.g. randomised controlled studies, randomised
770 uncontrolled studies, non-randomised controlled studies, other intervention studies)
- 771
- 772
- 773 a.2) Human observational studies (e.g. cohort studies, case-control studies, cross-sectional studies,
774 other observational studies)
- 775
- 776 a.3) Summary reports of human intervention and/or human observational studies (e.g. systematic
777 reviews, pooled analyses, meta-analyses, other reviews)
- 778

779 The full protocol and the full study report of the above-mentioned studies **SHOULD** be provided in
780 **Part 6** (section 6.4). For study reports, please see **Appendix C** for the content requirements. EFSA
781 will not evaluate study reports not complying with requirements outlined in Appendix C.

782 The quality of reporting should be sufficient to allow a full scientific assessment of the studies by the
783 NDA Panel. To this end, applicants should follow international reporting guidelines¹⁷ (e.g. the
784 CONSORT guidelines for randomised controlled trials, the STROBE guidelines for observational studies,

¹⁷ <http://www.equator-network.org/>

785 the PRISMA guidelines for systematic reviews, etc.) and the EFSA guidance on statistical reporting¹⁸
786 (EFSA, 2014).

787 **4.2.3. Published and unpublished supportive evidence**

788 The procedure(s) followed to identify published and unpublished studies other than human studies on
789 the relationship between the consumption of the food/constituent and the claimed effect (e.g.
790 bioavailability studies, studies on the mechanism(s) by which a food could exert the claimed effect)
791 should be depicted.

792

793 **Reference list of published/unpublished studies**

794 Provide a reference list of the publications/unpublished studies other than human studies on the
795 relationship between the consumption of the food/constituent and the claimed effect which have been
796 considered as pertinent to the health claim. The reference list should be organised in accordance with
797 the hierarchy of study design and publication type, as follows:

798 a) human studies

799

800 b) animal efficacy studies

801

802 c) other animal studies

803

804 d) *in vitro* studies

805

806 Full reprints of the above-mentioned publications, and the full protocol and study report for
807 unpublished studies, should also be provided in Part 6 (sections 6.3 for published studies and 6.4 for
808 unpublished studies).

809

810 **5. Part 5: Overall summary of pertinent scientific data**

811 The scope of this section is to critically and concisely summarise the extent to which the relationship
812 between the consumption of the food/constituent and the claimed effect is supported by the totality
813 of the evidence identified as pertinent to the health claim in **Part 4** of the application.

814 Note: No new/additional references should be cited in Part 5, except those identified in Part 4.

815 **5.1. Claims based on the essentiality of nutrients**

816 Provide a reasoned and concise summary on the extent to which:

817 i. the food/constituent is required for normal human body function(s) i.e. it has an essential
818 mechanistic role in a metabolic function and/or it has the ability to reverse clinical signs and
819 symptoms of its deficiency. Please provide a rationale for the relationship between the
820 metabolic function and/or the specific clinical signs and symptoms of deficiency and the human
821 body function that is the subject of the health claim.

822

823 ii. the food/constituent cannot be synthesised by the body, or cannot be synthesised in amounts
824 which are adequate to maintain the normal body function that is the subject of the health claim.

825

¹⁸ http://www.efsa.europa.eu/sites/default/files/scientific_output/files/main_documents/3908.pdf

826 iii. the food/constituent must be obtained from a dietary source (i.e. a source which is appropriate
827 for human oral consumption).

828

829 Cross-references to the pertinent scientific data identified in Part 4 (section 4.1) should be given,
830 where appropriate.

831 **5.2. Claims other than those based on the essentiality of nutrients**

832 The scope of sections 5.2.1 and 5.2.2 is to critically and concisely summarise the extent to which the
833 relationship between the consumption of food/constituent and the claimed effect is supported by the
834 totality of (published and unpublished) human studies identified as pertinent to the health claim in
835 Part 4 (sections 4.2.1 and 4.2.2) of the application. Cross-references to pertinent human studies
836 (intervention or observational) should be given, as appropriate.

837 **5.2.1. Substantiation of a causal relationship between the consumption of the** 838 **food/constituent and the claimed effect**

839 The extent to which the data substantiate a causal relationship between the consumption of the
840 food/constituent and the claimed effect should be addressed by considering:

- 841 i. the specificity of the effect
- 842 ii. the dose-response relationship
- 843 iii. the magnitude of the effect and its physiological relevance,
- 844 iv. the consistency of the effect across studies

845

846 **5.2.2. Characterisation of the relationship between the consumption of the** 847 **food/constituent and the claimed effect**

848 The relationship between the consumption of the food/constituent and the claimed effect should be
849 characterised by considering:

- 850 i. the study population in which the effect has been demonstrated and whether study
851 participants are representative of the target population,
- 852 ii. the conditions under which the effect has been achieved (metabolic room, clinical setting,
853 free-living subjects, etc.),
- 854 iii. the sustainability of the effect over time with continuous consumption of the food/constituent,
855 where applicable
- 856 v. the lowest effective dose, when available.
- 857 vi. the amount of the food/constituent used to achieve the effect, the usual intakes of the
858 food/constituent in the target population, and whether these amounts could be reasonably
859 consumed as part of a balanced diet.

860

861 **5.2.3. Supportive evidence**

862 **Bioavailability**

863 Where applicable, concisely summarise the relevant data and rationale to support that the
864 food/constituent for which the health claim is made is in a form that is available to be used by the
865 human body (e.g. absorption studies).

866

867 If available, describe any factors (e.g. formulation and processing) that could affect the absorption or
868 utilisation in the body of the food/constituent for which the health claim is made.

869

870 Note: If absorption is not necessary to produce the claimed effect (e.g. plant sterols, fibres and lactic
871 acid bacteria), concisely summarise the relevant data and rationale to support that the
872 food/constituent reaches the target site.

873

874 **Mechanism(s) of action**

875 If known, concisely describe the mechanism(s) by which the food/constituent could exert the claimed
876 effect. If the food/constituent is a fixed combination of constituents, please indicate how each
877 constituent could contribute to the claimed effect.

878 Cross-references to published and unpublished supportive studies identified in Part 4 (section 4.2.3)
879 should be given, as appropriate.

880

881 **Summary of supportive evidence**

882 This section should critically and concisely summarise how, and the extent to which, the published
883 and unpublished studies other than human studies on the relationship between the consumption of
884 the food/constituent and the claimed effect identified in Part 4 (section 4.2.3) may help to support the
885 relationship between the food/constituent and the claimed effect in humans (e.g. by providing
886 evidence on the biological plausibility of the specific claim, including bioavailability of the
887 food/constituent, and the mechanisms by which the food/constituent could exert the claimed effect).

888

889

890 **6. Annexes to the application**

891 **6.1. Glossary and abbreviations**

892 Used throughout the different Parts. To be presented alphabetically.

893

894 **6.2. Copies/reprints of references related to characterisation of the** 895 **claimed effect cited in Part 3**

896 Copies/reprints should be provided by alphabetical order of first authors.

897

898 **6.3. Copies/reprints of pertinent published data identified in Part 4**

899 Copies/reprints of pertinent published data identified in Part 4 (sections 4.1, 4.2.1 and 4.2.3)

900

901 **6.4. Full study protocols and reports of pertinent unpublished data** 902 **identified in Part 4**

903 Copies/reprints of pertinent published data identified in Part 4 (sections 4.2.2 and 4.2.3)

904

905 **6.5. Other**

906 If available, include here, e.g.:

907 Scientific opinions of regulatory bodies outside the EU for health claim authorisation if available, as
908 referred to in **Part 1**

909

910 Supporting documents related to **Part 2** (sections 2.1 and 2.2)

911

912

913 **References**

914 EFSA NDA Panel (EFSA Panel on Dietetic Products, Nutrition and Allergies), 2016. General scientific
915 guidance for stakeholders on health claim applications. EFSA Journal 2016;14(1):4367, 36 pp.
916 doi:10.2903/j.efsa.2016.4367

917 SCF (Scientific Committee on Food), 2000. Guidelines of the Scientific Committee on Food for the
918 development of tolerable upper intake levels for vitamins and minerals.

919

920

921 **Glossary**

922 Notes: The definitions given in this glossary are valid only for the purpose of this guidance document

Applicant	Refers to the natural or legal person responsible for the submission and content of the application and for the interaction with regulatory authorities in the course of the evaluation until such time as the claim is included in the lists of permitted or rejected health claims by Commission Decision
Application	Means a stand-alone dossier containing the information and scientific data submitted for authorisation of the health claim in question
Bioavailability	Bioavailability of a nutrient relates to its absorption and may be defined as its accessibility to metabolic and physiological processes (SCF, 2000).
Central laboratory	In a multi-centre study, a laboratory is termed to be a central laboratory, if all samples for a certain analysis are sent to a single (central) laboratory for analysis
Clinical study with adaptive design	A study with a prospectively planned opportunity for modification of one or more specified aspects of the study design (e.g. sample-size, randomisation ratio, number of treatment arms) based on an interim analysis with full control of the type I error (FDA, EMA)
Disease/disorder	A pathological process, acute or chronic, inherited or acquired, of known or unknown origin, having a characteristic set of signs and symptoms which are used for its diagnosis
Efficacy study	An intervention study (in humans, in animals) which investigates the relationship between the food/constituent and the claimed effect
Health claim	Any claim which states, suggests or implies that a relationship exists between a food category, a food or one of its constituents and health (as defined in Regulation (EC) No 1924/2006)
Fixed combination of constituents	Two or more nutrients and/or other substances which are all required in order to obtain the claimed effect, ideally in specified amounts
Food/constituent	A food category, a food, or its constituents (including a nutrient or other substance, or a fixed combination of constituents)
GCP	Good clinical practice
GLP	Good laboratory practice
GMP	Good manufacturing practice
Nutrient	Means protein, carbohydrate, fat, fibre, sodium, vitamins and minerals listed in point 1 of Part A of Annex XIII to Regulation (EU) No 1169/2011 ¹⁹ , and substances which belong to or are components of one of those categories
Other substance	Without prejudice to Regulation (EC) No 178/2002 ²⁰ , it means a substance other than a nutrient that has a nutritional or physiological effect (as defined in Regulation (EC) No 1924/2006)
Pertinent study	A study from which scientific conclusions that are relevant to the substantiation of a claim (e.g. efficacy studies, bioavailability studies, studies on the mechanism(s) by which a food could exert the claimed effect) can be

¹⁹ Regulation (EU) No 1169/2011 of the European Parliament and of the Council of 25 October 2011 on the provision of food information to consumers, amending Regulations (EC) No 1924/2006 and (EC) No 1925/2006 of the European Parliament and of the Council, and repealing Commission Directive 87/250/EEC, Council Directive 90/496/EEC, Commission Directive 1999/10/EC, Directive 2000/13/EC of the European Parliament and of the Council, Commission Directives 2002/67/EC and 2008/5/EC and Commission Regulation (EC) No 608/2004. J L 304, 22.11.2011, p. 18–63. <http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32011R1169&from=EN>.

²⁰ Regulation (EC) No 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety. Official Journal of the European Union OJ L 31, 1.2.2002, p. 1–24.

	drawn
Study group	Individuals recruited for human studies which are submitted for the scientific substantiation of a claim
Suitable study group	A study group which is representative of the target population for the claim or a study group from which extrapolation of the results to the target population is biologically appropriate
Supportive evidence	Studies/data which, on their own, are not sufficient for the scientific substantiation of a claim and that may be part of the totality of the evidence only if pertinent human studies showing an effect of the food/constituent are available
Target population	The population group(s) for which health claims are intended (e.g. the general healthy population or specific subgroup(s) thereof)
Totality of the evidence	The population group(s) for which health claims are intended (e.g. the general healthy population or specific subgroup(s) thereof)

923

924

925 **Appendices****Appendix A – Application form [Mandatory]**

Application form

926 The application form should be used for an application for a health claim pursuant to Article 13(5) or
 927 14, or for a modification of an existing authorisation in accordance with Article 19 of Regulation (EC)
 928 No 1924/2006²¹ submitted to a Member State of the European Union for the scientific evaluation by
 929 the European Food Safety Authority (EFSA).

930 A separate application form for each health claim is required.

Food/constituent²² (specify as appropriate):

Proposed wording of the health claim:

Application for a health claim pursuant to:

- Article 13(5) of the Regulation 1924/2006
- Article 14 of Regulation 1924/2006 - Claim referring to children's development and health
- Article 14 of Regulation 1924/2006 - Reduction of disease risk claim
- Article 19 of Regulation (EC) No 1924/2006 - for a modification of an existing authorisation

Specify the recipient Member State's Competent Authority:

Applicant²³:

(Company) Name:

Address:

Country:

Contact person²⁴:

Name:

Company name:

Address:

Country:

Telephone/mobile number:

E-Mail:

It is hereby confirmed to our best knowledge that all existing data which are relevant to the health claim authorisation have been supplied in the application, as appropriate.

On behalf of the applicant:

Signature

²¹ Regulation (EC) No 1924/2006 of the European Parliament and of the Council of 20 December 2006 on nutrition and health claims made on foods. OJ L 404, 30.12.2006, p. 9–25.

²² "Food/constituent" refers to a food category, a food, or its constituents (including a nutrient or other substance, or a fixed combination of constituents).

²³ In case more than one company or organisation submit an application, provide their names and addresses.

²⁴ To facilitate communication, EFSA requires that there be only **one contact person per application**.

Name

Function

Place and date (dd-mm-yyyy)

931

932

Appendix B – Summary of the application [Mandatory]

933

Summary of the application

934 The template provided should be used for the summary of the application for a health claim pursuant
 935 to Article 13(5) or 14, or for a modification of an existing authorisation in accordance with Article 19 of
 936 Regulation (EC) No 1924/2006²⁵ submitted to a Member State of the European Union for the scientific
 937 evaluation by the European Food Safety Authority (EFSA).

General information

Applicant²⁶:

(Company) Name:

Address:

Country:

938

939 Recipient Member State of Application:

940

941 This application concerns:

942 a health claim pursuant to Article 13(5) of Regulation (EC) No 1924/2006

943 a health claim referring to disease risk reduction pursuant to Article 14 of Regulation (EC) No
 944 1924/2006

945 a health claim referring to children's development and health pursuant to Article 14 of Regulation
 946 (EC) No 1924/2006

947 a modification of an existing health claim authorisation in accordance with Article 19 of
 948 Regulation (EC) No 1924/2006

949 Please specify:

950 Modification of an authorised Article 14 health claim

951 Modification of an authorised Article 13(5) health claim

952

²⁵ Regulation (EC) No 1924/2006 of the European Parliament and of the Council of 20 December 2006 on nutrition and health claims made on foods. OJ L 404, 30.12.2006, p. 9–25.

²⁶ In case more than one company or organisation submit an application, provide their names and addresses.

Health claim particulars

953 Specify the food/constituent:

954

955 Describe the relationship between the food/constituent and the claimed effect, including the outcome
956 measure(s) used to assess the claimed effect in humans:

957

958 Proposal of the wording of the health claim:

959

960 Specify the conditions of use:

961

962

963

964

Appendix C – Information to be presented in a full study report for unpublished studies or for proprietary studies

965 EFSA will not evaluate study reports not complying with requirements outlined below.

966 A study report can be considered complete when it contains at least the information as outlined in this
967 Appendix. This Appendix has been adapted from the International Conference on Harmonization (ICH)
968 guideline E3 on the structure and content of clinical study reports²⁷ for the purpose of health claim
969 substantiation. Study reports which follow the full structure of ICH E3 are also acceptable.

970 **1. Title page**

971 The title page should include information on the food/constituent under investigation, the primary
972 outcome variable studied, the method of measurement used to assess the outcome variable(s) *in vivo*
973 in human, the study design (e.g. double or single-blind, two or more arms/periods, parallel or cross-
974 over, single or multi-centre), the study population, the study initiation date, the study completion
975 date, the place in which the study was conducted, the name of the funding source, the name of the
976 principal investigator, the name of the author of the report and the date when the report has been
977 signed off.

978 **2. Summary**

979

980 **3. Table of contents**

981

982 **4. List of abbreviations and definition of terms**

983

984 **5. Ethical considerations**

985 This section should include information about the review and approval of the study by an ethics
986 committee. In case a review or approval by an ethics committee was not necessary under local
987 requirements, this should be specified and a detailed justification should be given why this is the case.
988 The section should also contain information about the ethical conduct of the study as well information
989 pertaining to subject information and consent.

990 **6. Trial registration**

991 In this section it should be specified whether the study has been registered in a trial registry. If so,
992 the trial registration number should be given. In case the study has not been registered, explanation
993 should be given.

994 **7. General information about the study**

995 This section should include the name/affiliation of the investigators involved in the study as well as of
996 other people with a major role in the study (e.g. staff carrying out observations related to the
997 outcome variable(s) under investigation), the statisticians and the authors of the report. The section
998 should also provide information about the facilities which were used (e.g. for multicentre studies:
999 information about the study sites and about the use of a central laboratory vs. non-central sample
1000 analyses) and whether a contract research organisation has been tasked to carry out the work.

1001 **8. Study objectives**

1002 The study objectives (i.e. the aim of the study) should be specified in this section

1003 **9. Study design**

1004 This section should outline whether the study was planned as parallel or cross-over study, as open-
1005 label, single-blind (specifying who was unblinded) or double-blind study, as a single- or multi-centre
1006 study (with a specification about the number of study sites). This information should also contain
1007 information about the country setting, the type of control used, the study duration (including

²⁷ <http://www.ich.org/products/guidelines/efficacy/article/efficacy-guidelines.html>

1008 information about the length of the different study periods) and a discussion on the choice of the
1009 study design for investigating the selected outcome. This should also include a discussion on why the
1010 chosen control was considered appropriate for the study context. In case the study was planned with
1011 an adaptive design, it should be specified which kind of adaptations at which time points were
1012 planned in the protocol and whether a Data Monitoring Committee has been used for the
1013 implementation of the plan.

1014 **10. Study population**

1015 In this section the inclusion and exclusion criteria should be described, including the diagnostic criteria
1016 (and their validation) used to select subjects, if applicable. This section should also contain a
1017 discussion about the appropriateness of the study population for the particular purpose of the study.
1018 Any pre-defined criteria for excluding subjects from the study after randomisation should also be
1019 given together with information on how these subjects are intended to be followed-up.

1020 **11. Study products**

1021 A detailed description of the food/constituent under investigation and the control used (if any),
1022 including information on the mode of administration, and the amounts used, should be given in this
1023 section.

1024 **12. Method of assigning subjects to groups**

1025 In this section details on the method of assigning subjects to groups (randomisation or minimisation)
1026 should be given. It should be given whether this allocation was done in a centralised or decentralised
1027 way, whether it was stratified (and if so by which factors) or whether the allocation was done in
1028 blocks. Information on the measures taken to conceal the allocation should also be given here.

1029 **13. Blinding**

1030 Information on the strategy used to ensure blinding should be provided in this section. It should be
1031 described how it was achieved that products were not distinguishable by smell, taste or packaging and
1032 how products were labelled (e.g. by subject individual codes or other). Information should be given on
1033 who had access to the product codes, whether there were any pre-defined circumstances in which the
1034 blind would be broken and who from the investigational team would be unblinded in case of such a
1035 need. For studies for which proper blinding could not be achieved, it should be discussed and justified
1036 why it was considered that this was not possible. In case of studies with an adaptive design, it should
1037 be reported how it was ensured that the study personnel remained blinded to the interventions,
1038 especially if the pre-planned adaptation required unblinding of the data. In such a case, it should be
1039 justified why the particular adaptation made it necessary to unblind the data and why the same aim
1040 could not have been achieved with statistical methods not requiring such unblinding.

1041 **14. Concomitant medication or interventions**

1042 Any concomitant medication or non-pharmacological interventions allowed by the study protocol
1043 should be described here.

1044 **15. Compliance with the intervention and the protocol**

1045 This section should include a detailed description about the measures taken to ensure and assess
1046 compliance with the intervention and the protocol.

1047 **16. Outcome variable(s) measured**

1048 Information about the pre-defined primary outcome variable(s), secondary outcome variable(s) and all
1049 other outcomes planned to be measured should be presented in this section.

1050 The methods of measurement used to assess the outcome variable(s) *in vivo* in human should be
1051 specified.

1052 This section should also include information about the timing of the measurements, ideally including a
1053 flow-chart and a justification of the appropriateness of the endpoints chosen for the aim and
1054 objectives of the study.

1055 **17. Data quality assurance**

1056 Any measures taken with respect to the quality assurance of collected data should be addressed here.

1057 **18. Pre-planned statistical analyses**

1058 This section should include information about what was planned with respect to the statistical analysis
1059 (and not what has actually been done). The choice of each statistical technique to be used should be
1060 appropriately justified. In this section, it should also be stated whether there were any pre-planned
1061 sub-group analyses. Also, the data analysis sets (e.g. ITT vs. PP) should be defined. It should be
1062 specified which of the analyses presented have been pre-specified as the main analysis in case several
1063 alternative analyses for one outcome are planned (e.g. ITT vs. PP or different models used). The
1064 reasons for the choice of the analysis should be given. In case it is planned to impute data,
1065 information should be given on how it is planned to assess the robustness of the assumptions made
1066 with respect to the imputation of data. For studies for which an adjustment for multiple comparisons
1067 is needed in order to preserve the family-wise type I error rate, the pre-planned approach towards
1068 adjusting for multiplicity should be specified. In case of studies with an adaptive design, the number
1069 and time-points of pre-specified interim analyses as well as the statistical methods used to conserve
1070 the type I error rate should be given. The appropriateness of the statistical method used for the
1071 design of the study should be discussed. Finally, it should be stated which analyses were planned to
1072 be confirmatory and which ones exploratory.

1073 **19. Determination of sample size**

1074 Detailed information on how the planned sample size of the study was calculated should be given
1075 here. This should include information about the expected size of the effect, the assumed standard
1076 deviation of the population, the significance level chosen, the anticipated power of the study, and the
1077 statistical tests (to be performed) to which the sample size calculation related. In addition, information
1078 should be given on whether equal or unequal allocation to groups has been accounted for in the
1079 sample size calculation (if unequal allocation is foreseen) and whether any allowance for drop-out has
1080 been made. Finally, the programme used to calculate the sample size should be stated. In case of
1081 studies with adaptive design allowing for sample size re-estimation, the planned method for re-
1082 estimating sample size should be described.

1083 **20. Protocol amendments, deviations and violations/deviations from the planned** 1084 **approaches and analyses**

1085 This section should address in detail any non-adherence or changes made during or after the study
1086 with respect to the pre-planned approaches or pre-planned analyses.

1087 Any protocol amendments (i.e. a systematic change in the protocol after approval of the protocol),
1088 protocol deviations and violations (i.e. unplanned unsystematic deviations from the protocol either
1089 with minor effects (deviations) or affecting the scientific integrity (violations)) should be outlined in
1090 this section. A protocol amendment may for example relate to a systematic change of the pre-
1091 established inclusion and exclusion criteria, the planned study design, addition or deletion of
1092 endpoints, sample size or the planned statistical approaches and the definition of data analysis sets
1093 (e.g. ITT vs. PP).

1094 If no protocol amendments have been made, it should be confirmed that the study was carried out
1095 according to the protocol and that all pre-established definitions were adhered to.

1096 Protocol deviations and violations may relate to, for example, inadequate or not-timely collected
1097 informed consent, inclusion of subjects not meeting the eligibility criteria, improper breaking of the
1098 blind, improper assessment of an outcome, incorrect or missing tests, rescheduled or missed study
1099 visits, visits outside the permitted window, inadequate record keeping, use of not permitted
1100 medication or a non-pharmacological intervention.

1101 In case any additional exploratory analyses were conducted which were not part of the (amended)
1102 protocol, but should, for example be used to inform a subsequent study, such as unplanned sub-
1103 group analyses, this should be stated as well.

1104 **21. Subject flow**

1105 A clear description on who entered the study, on the number of randomised subjects, on the number
1106 of subjects who entered and completed each study phase, on the number of drop-outs and
1107 withdrawals should be included in this section. The reasons for subjects dropping-out of the study or
1108 having been withdrawn from the study by investigators should be stated. Also, information if and in
1109 how many occasions the blind has been broken should be given here.

1110 **22. Data sets analysed**

1111 This section should include a clear description of the definition of each analysis set (e.g. ITT, PP) used
1112 for final analysis, including information on the number of subjects included in each of the analysis per
1113 time point measured. In case PP analyses are presented, information should be given to which extent
1114 subjects included in this analysis set could have deviated from the protocol and were still considered
1115 eligible for inclusion in this analysis set. Finally, the reasons for excluding subjects from analysis at
1116 each time point should be given.

1117 **23. Baseline characteristics of the study population**

1118 In this section baseline characteristics for all analysis sets should be given (e.g. ITT, PP, completers,
1119 other) - overall and by study centre.

1120 **24. Results of assessment of compliance with the intervention and the protocol**

1121 In this section results of the assessment of compliance with the intervention and the protocol should
1122 be given.

1123 **25. Statistical analysis carried out**

1124 A detailed description of the statistical analysis carried out should be given in this Section which
1125 should be in line with EFSA's guidance on statistical reporting²⁸ (EFSA, 2014). This description should
1126 include in particular, amongst other:

- 1127 • information on the statistical programme with which the analyses were carried out (version
1128 number and operating system),
- 1129 • information on the type of test or model used,
- 1130 • information about the model selection,
- 1131 • a discussion on the appropriateness of the test or model used for the type of data generated
- 1132 • information on the handling of missing data (including a detailed description about the
1133 potential missingness mechanism of the data and how as a consequence the missing data
1134 were handled, i.e. in case it was chosen to impute data which methods were selected to do so
1135 and which sensitivity analyses were carried out),
- 1136 • information on which variables or factors were used as fixed and which as random effects (if
1137 appropriate),
- 1138 • information on the assumed covariance structure for longitudinal analyses,
- 1139 • information on the adjustment for covariates (and justification about the covariates used),
- 1140 • information on the handling of data stemming from multicentre trials,
- 1141 • a discussion about whether any issue with respect to multiple comparisons arises (in case of
1142 multiple primary outcome or multiple group comparisons or if a secondary outcome is
1143 intended to be used as the primary efficacy criterion instead of the primary outcome; this
1144 should include a description of the method chosen for adjusting the analysis for multiple
1145 comparisons; information on the number of outcomes for which the analysis has been
1146 adjusted should also be given.

²⁸ http://www.efsa.europa.eu/sites/default/files/scientific_output/files/main_documents/3908.pdf

1147 26. Results of the study

1148 Results for all endpoints studied for all analyses sets investigated should be presented. The results
1149 should be given as estimates with associated confidence intervals and p-values (if corrected for
1150 multiple comparisons both the uncorrected and corrected results (simultaneous confidence intervals,
1151 p-values accounting for multiple comparisons) should be given. Results should be presented for all
1152 groups under investigation and for each time point (if foreseen in the pre-specified analysis plan,
1153 otherwise descriptive statistics should be included). Information about the number of subjects
1154 included in each analysis at each time point should be given. The information should be presented in
1155 a tabular format as well as graphically. For multi-centre trials, results (if comparisons have been pre-
1156 specified) or descriptive statistics for the individual centres should also be presented. The number of
1157 subjects included in each analysis should be reported (including for each time point for which an
1158 analysis is presented or for which information is given). In case data have been imputed, the results
1159 of the related sensitivity analyses should be included. The full outputs of the statistical analyses
1160 together with the associated codes used for programming should be presented as an Annex. A full list
1161 of abbreviations used to denominate variables or factors in the programming should also be given, so
1162 that the statistical outputs are self-explanatory.

1163 27. Adverse events

1164 In case adverse events are assessed in the study, information on the outcome of this assessment
1165 should be included here.

1166