

Design and Accessibility of Baby-Food Labelling from the Consumers' Point of View

List of EU-Wide Recommendations

Project Director: Nyysönen, Heikki

Coordinators: Cook, Guy
Gunnarsson, Britt-Louise
Polo, Xabier Fernández
Slembrouck, Stef
Vandenberg, Anne-Marie

Project officers: Björkvall, Anders
Haddington, Pentti
Maryns, Katrijn
O'Halloran, Kieran
Simal, Karen
Suárez Gómez, Cristina

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List of EU-wide recommendations

The national recommendations¹ for changes to be made to the design and content of infant formulae and cereal labels formed the basis for discussion of what would constitute the EU-wide recommendations. We made the assumption that if something is problematic on labels in one Member State, it may be also problematic for other Member States of the EU. Since one of the rationales of the project is to promote label harmonisation, the EU-wide recommendations supersede the national recommendations.

Our recommendations are intended to facilitate label literacy and our guidelines have been to improve the communication of the label. More specifically, we recommend improvements to the communicative power of the *obligatory* statements on the label. In making our recommendations, we have taken into account how parents actually read labels in our consumer studies.

The recommendations are also in light of the EU harmonisation project. Thus, we not only recommend increasing the communicative power of labels, but that this communicative power be harmonised across the Member States. Borders are now less rigid in the EU and trans-national movement is easier. We hope that harmonisation of the communicative power of labels would promote a more general label literacy across countries in the EU.

As a by-product of our EU-wide recommendations, certain aspects of the legislation are highlighted which we think might benefit from scrutiny in any subsequent legislative review.

In what follows, we list *general* recommendations concerning the overall design and content of labels and then we offer recommendations in the light of *specific* aspects of the EU legislation which will apply to obligatory, non-obligatory and prohibited information on the labels. Each recommendation is supported by comments which include references to the national reports. Some of the recommendations may refer only to infant formulae or follow-on formulae or cereals individually and this will be indicated in the headline accordingly.

1.1. General recommendations

- ✓ The background for all the obligatory information (see §1.2. below) should be the same colour. The background for all the non-obligatory information should be the same colour but a different colour from the obligatory information. The colour of the typeface in the obligatory information should be the same. Accordingly, the colour of the typeface for the non-obligatory information should be the same, but different from the typeface colour of the obligatory information.
- ✓ The line-spacing of the obligatory information should be increased and in a larger typeface than the non-obligatory information.

Comment:

The above recommendation is in line with the communication hierarchy used by designers (British Report 2000) and salience criteria (Finnish Report 2000, Spanish Report 2000 and Swedish Report 2000) applied in the label analysis of the national reports. It is hoped that the above recommendation will improve the label literacy in respect of the readers' ability to distinguish more easily between obligatory and non-obligatory information. Cases in which information of both types are mixed up can be found in the different national reports (Belgium, Finland and Spain (see Spanish report §3.3.6)).

- ✓ Future legislation may wish to consider whether personalisation be included in obligatory information.

Comment:

While the European directives are phrased in a depersonalised manner and appear on the labels accordingly, we have observed that persuasive non-obligatory information, which is usually salient, is often personalised. The latter can only enhance the communicative value of the non-obligatory information over that of the obligatory information. Our suggestion above seeks to redress the balance.

1.2. Recommendations on obligatory information

1.2.1. Place of origin

- ✓ If the place of origin is a country other than the one in which the product is sold, this should be explicitly stated in a salient way on the label.

Comment:

In the British and Finnish studies, the place of origin was misleading in some cases. In Britain, the semiotic configuration of a label ('Baby Organix') led all the consumers to believe the product came from Britain. The place of origin, Spain, was in a non-salient position (on the base of the package). On some Finnish labels there was, for example, a Finnish flag which led some consumers to believe that the product was Finnish, when in fact it was Swedish.

1.2.2. List of ingredients

- ✓ The list of ingredients should be presented in an uncluttered format and in larger type size. It should be in tabular form, listing one ingredient per line.

Comment:

In some of the countries participating in the study, consumers found the list of ingredients to be among the most important pieces of information. In some of the national consumer studies (e.g. Swedish Report: 24), parents found the tabular shape of the nutritional table more accessible than the cluttered format

¹ Belgian Report (2000), British Report (2000), Finnish Report (2000), Spanish Report (2000) and Swedish Report (2000).

of the list of ingredients and for this reason, this design is recommended. Another reason for increasing the accessibility of the list of ingredients is that it is consulted more often than the nutritional table in most of the countries.

- ✓ The list of ingredients should be located near the nutritional table (if permitted by the size of the package).

Comment:

Because nutritional information and the list of ingredients are thematically related, this recommendation facilitates their joint accessibility.

1.2.3. Nutritional information

- ✓ The different nutritional elements (e.g. riboflavin, thiamin, etc.) should be grouped under generic titles (e.g. vitamins,...)

Comment:

The results of the Finnish consumer study suggest that supplying generic headings for different nutrients (e.g. vitamins, carbohydrates, etc.) facilitates accessibility, (see Finnish report, 2000 section 4(3)).

- ✓ For cereals, a salient distinction should be made between the nutritional composition of a cereal and the cereal prepared with milk.

Comment:

In the British consumer study, the complexity of the information in the nutritional table of one cereal label (Baby Organix: Organic Oat, Apple and Pear) led consumers to believe that the nutritional composition referred to the cereal only. But in fact it referred to the cereal prepared with milk.

- ✓ The inclusion in the nutritional table of RDAs (Recommended Daily Allowances) which are in relation to the weight of the baby should be considered in those countries where they are not mentioned.

Comment:

This recommendation is based on the results of the Swedish consumer study. Many of the parents thought that the mentioning of RDAs would make the nutritional table more useful to them.

- ✓ Where the initials R.D.A are used this should be explained in the language of the label.

Comment:

Clearly, R.D.A is an English abbreviation which may not be widely understood in other European languages. In Spain, the corresponding Spanish abbreviation is C.D.R (Cantidad Diaria Recomendada).

1.2.4. Storage instructions

- ✓ The storage instructions (concerning open, unopened packages and prepared babyfood) should be located near the preparation instructions.

Comment:

There is a thematic connection between the storage and the preparation instructions. Furthermore, the Spanish consumer study showed that parents expect to find the storage instructions near the preparation instructions. So we recommend that the storage instructions come in a more salient place near the preparation instructions.

The results of some of the national studies (e.g. Belgium and Finland (see section 4(4)) show that many consumers wanted clear information on how to store open packages and prepared babyfood.

- ✓ A salient transparent heading (e.g. 'storage') should be used to introduce this information. On Spanish labels, this information is sometimes introduced by unspecific headings such as Recomendamos 'we recommend', Recomendaciones 'Recommendations' or Consejos Prácticos 'Practical pieces of advice'.
- ✓ Vague words should be avoided or explained.

Comment:

We define vague words as those which consumers interpreted in different ways. For instance, there was no agreement among consumers as to the interpretation of cool. On Spanish labels the formulation is Conservar en lugar fresco y seco 'To keep in a cool and dry place'. This formulation caused comprehension problems among consumers. On the Swedish labels the formulation is "Lagras torrt, ej över normal rumstemperatur" ('To be stored in a dry place, not above normal room temperature'), which is not as vague as "cool".

1.2.5 Preparation instructions (PI)

- ✓ The PI should be accompanied by illustrative pictures. Pictures should correlate with the step they illustrate. The chronological order of the different steps to be performed should be followed in the PI. The different steps in the PI should be numbered.

Comment:

On some labels, the different steps and pictures do not correlate.

- ✓ Vague (see 1.2.4) or difficult unexplained words should be avoided.

Comment:

The Spanish consumer study (§4.3.2) shows that there is no agreement as to the interpretation of “the adequate eating temperature” (temperatura adecuada de toma.) In the text analysis of some other national studies, a number of other vague words were observed. Two Swedish examples are “ättemperatur” (‘eating temperature’) and “rör till lagom konsistens” (‘stir until the proper consistency is reached’). The reader does not always receive explicit guidance for their interpretation of “ättemperatur” and “lagom konsistens” (Swedish Report: 16). Two Finnish examples, ‘hyvälaatuinen kylmä vesi’ (good quality cold water) and ‘syöntilämpöinen jäähdytetty vesi’ (cooled down water whose temperature allows eating) are also vague although parents in most cases understood their meaning.

- ✓ The PI should be more salient in relation to neighbouring text (framed, bold type, etc.).

Comment:

The different consumer studies have shown that the PI is the most important information, so accessibility should be as great as possible. (The Spanish consumer study (§4.3.1) showed that the PI were AMONG the most important pieces of information).

- ✓ Complex grammatical constructions and single nouns to describe processes should be avoided where possible. In the preparation instructions of Spanish labels the use of single nouns to describe processes is pervasive (Spanish Report: §3.4.1.1), e.g. *remover la papilla **hasta su completa homogeneización*** (‘stir the porridge until its complete *homogenisation*’). Some examples of massing of information *before* the main noun have been found in Belgian preparation instructions, e.g. ‘slightly mineralised non-sparkling water’ or ‘previously boiled tap water cooled to hand temperature’ or low-mineral bottled water’. To assist accessibility, information should be distributed before and after the main noun or even postponed (e.g. ‘water which has been boiled previously’).

Below is an example we have created of an accessible set of PI, which avoids such complexity. Of course, this is only intended as a ‘model’ and not as a real set of instructions.

Powder infant formulae:

- 1) Boil fresh water from a tap and wash hands.
- 2) Let the water cool down for 30-40 minutes. Measure required amount of water into the sterilised bottle.
- 3) Add the correct number of scoops of powder into the bottle. Level each scoop off with the back of a clean dry knife.
- 4) DO NOT add extra powder or water to make feeds stronger or weaker.
- 5) DO NOT press powder into the scoop.
- 6) Close the bottle, shake firmly and let the powder dissolve.
- 7) If the product is prepared with cold water, you can heat it in a microwave oven (N.B. do not put the teat in the microwave oven). Beware of overheating.
- 8) Check the temperature.
- 9) Throw away the leftovers.
- 10) Do not reheat.
- 11) Storage:
 - ⇒ prepared product - in the refrigerator, use within 24 hours
 - ⇒ powder - in room temperature in a dry place, check best-before date

- ✓ Parallel grammatical structures (phrasing the different steps using similar grammar) to formulate the different instructions should be employed.

Comment:

In the Spanish and Belgian studies it was shown that in some cases there were complex sentences in the PI.

- ✓ Where possible and if space allows, manufacturers may like to consider the possibility of instructions being written in different foreign languages in those countries that have large groups of people who do not have the official language as their first language.

Comment:

In the case of the Swedish study there was a tendency for people that do not have Swedish as their first language to find the preparation instructions more difficult than Swedish native speakers. Formulating the preparation instructions also in the major immigrant languages of each country in combination with the illustrations would remedy these difficulties.

1.2.6. Best-before date

- ✓ We recommend the best-before date go on the bottom of the package.

Comment:

According to the results of the studies in all the participating countries, the best-before date is very frequently read when shopping. For example, the Swedish consumer study showed that the best-before date is usually read in the shop (65 % of respondents) or both in the shop and at home (25 % of respondents). In addition, many interviewees in the Swedish in-depth interviews said that they pay attention to the best-before date (Swedish Report: 29). 77% of respondents in Britain (British Report: 4.3e) and 77% in Spain usually read this information in the shop (Spanish Report: §4.3.1.)

Given the above, the position of the best-before date is not so important as long as it is not crowded by other information and it is in reasonably large typeface. We recommend that it go on the bottom for reasons that we will explain in §1.2.8. Because of the continuously changing nature of the best-before date, this piece of information does not need to be printed in the same colour as the rest of the obligatory information (see §1.1.). There should be a cross-reference to the best-before date ('for best-before date see the bottom of the package/tin'), for example, on the top plane.

1.2.7. Recommended age

- ✓ The recommended age should appear on the front.

Comment:

The recommended age was considered to be very important to the parents in all the consumer studies. However, there are a few cases in the label analysis where the recommended age is not on the front.

1.2.8. Superiority of breast feeding (infant formulae)

- ✓ Information on the superiority of breast feeding should be included with the best-before date on the bottom. This information should be in a salient colour and typeface.

Comment:

One of the strongest findings in many of the countries' consumer studies was that the 'breast feeding is best' message, along with other obligatory information, does not communicate to most parents despite the fact that this information is under the heading 'important notice'. Evidently the 'important notice' section on formulae has low communicative value. Since parents actively seek the best-before date, which we recommend be placed on the base of the package (§1.2.6.), we have decided that the most communicative place for the obligatory 'breast-is-best' information is also the base of the package. This may seem counter-intuitive. But it is counter-intuitive from the perspective of looking at the text in isolation from the reading behaviour of the parents.

However, in Finland and Sweden it may be problematic to place this information on the bottom of some of the liquid ready-to-use infant formulae and gruel packages. They are all Tetra Paks that are folded on the bottom.

- ✓ We recommend the "important notice" in the legislation be replaced with the salient heading "please read this" ("Lue tämä" in Finnish.)

Comment:

As we know that parents do not read the 'important notice', the recommendation increases the likelihood that the addressee is drawn in.

- ✓ Any non-obligatory messages which put the product close to the level of breast milk should be prohibited. Here are common examples of what should be avoided: Britain - "infant formula is nutritionally close to breast milk"; Spain - *leche para lactantes con una composición semejante a leche materna* ('infant milk with a similar composition to breast milk'). Any reference to breast or breast feeding, etc. should ONLY be in connection with the obligatory information.

Comment:

In the British, Spanish and Belgian consumer studies, references in the more salient non-obligatory information such as "this product is nutritionally close to breast milk" etc. took precedence in the consumer's mind on many testing occasions over the less salient superiority of breast feeding statement.

1.2.9. Specialised personnel advice (infant formulae)

- ✓ The information on specialised personnel advice should be located on the front. It should be in very large typeface. We recommend the following statement "only use infant formulae on the advice of a qualified professional". ("Käytä äidinmaidonkorviketta vain neuvolan ohjeiden mukaan" in Finnish).

Comment:

The "specialised personnel advice" statement is normally found in the "important notice" section on the label. As before, statements in the "important notice" do not communicate readily to the consumer. This is why we recommend this obligatory information be split apart from the other statements. The inclusion of "only" is more in line with the legislation (Directive 91/321/EEC: art. 7.4b - see below).

It seems logical that this message should come first on the label given the nature of the legislative information: "a statement recommending that infant formula be used only on the advice of independent persons having qualifications in medicine, nutrition or pharmacy, or other professionals responsible for maternal and child care" (Directive 91/321/EEC: art. 7.4b).

1.2.10. Suitability for infants from birth when they are not being breast fed (infant formulae)

- ✓ The information on the above statement should be located on the front. It

should be in very large typeface and not crowded.

Comment:

The same reasons as in §1.2.8-1.2.9 regarding accessibility and salience apply.

- ✓ The statement “infant formula is suitable for your baby when not being breast fed” (“Äidinmaidonkorvike on sopivaa imeväisen ravinnoksi syntymästä lähtien, jos lasta ei imetetä” in Finnish) should only be used in full and should not be fragmented. For instance, wording such as the following from S.M.A Gold infant milk (Britain) should be avoided: ‘Infant milk *from birth* onwards or *when no longer breast feeding*’. (Fragments from the obligatory statement are in italics).

Comment:

This wording above is found in a salient form on the front of the S.M.A tin but the introduction of the connective ‘or’ alters the meaning of the obligatory statement, downgrading the importance of breast-feeding. While the obligatory statement has been massaged, the manufacturer in this case still complied with the legislation by including the statement in the ‘Important Notice’ section. However, this was in very small typeface, decreasing its communicative value. The obligatory statement is also fragmented on other British labels as well as some Belgian and Spanish labels. The following unconnected fragments are found, for example, on some Spanish infant formulae labels: *adecuada para la alimentación del lactante* (‘suitable to feed the baby’) and *cuando no son amamantados* (‘when they are not breastfed’).

1.2.11. Warning of inappropriate preparation (infant and follow-on formulae)

- ✓ This statement should be integrated with the preparation instructions.

Comment:

This statement is often separated from the preparation instructions. Our recommendation is in light of the obvious thematic relation between the preparation instructions and the above statement. We figured that the warning of inappropriate preparation is more effective if it is read in connection with the preparation of the product.

- ✓ Explicit information about the consequences of incorrect preparation should be included.

Comment:

If the recommended proportions of water and powder are not followed over a long period, this may cause health problems to the baby. In the Belgian and Spanish consumer studies some parents were unaware of the possible consequences of incorrect preparation. In the Swedish consumer study, most of the parents were aware of the consequences but still thought that they would be more careful when preparing the products if the consequences of misuse were explicitly mentioned on the labels (Swedish Report: 28).

- ✓ We recommend this statement be personalised if it is not already, e.g. 'It is important that you follow all the preparation instructions very carefully; if you don't use the follow-on milk properly, you could be harming your baby's health.'

Comment:

Personalisation of the warning may increase the likelihood that the addressee is drawn in, increasing accessibility.

- ✓ We recommend that the warning be printed as a separate stage of the preparation instructions (see §1.2.5) and be boxed to increase salience.

Comment:

The warning is often found in non-salient form in the 'Important Notice' of infant and follow-on formulae and usually does not communicate to the parents. Viewing the label in isolation from actual reading behaviour, it might be argued that the warning be placed in a salient position (with heading, etc.) elsewhere on the label. However, since many of the parents in the studies had only instrumental parameters (e.g. British Report 2000: section 4), such a change hardly guarantees that the warning will be read. Instead, by making the base-line assumption that parents always look at the preparation instruction at least once, the recommendation increases the likelihood that parents will read the warning. This is especially so given that the parent is expecting to read another preparation instruction and so the likely effect is that the reader is jolted into reading the warning. (Cf. what has been said earlier about the "important notice" (§1.2.8-1.2.9), which rarely communicates despite the fact it has a bold heading).

1.2.12. The product should form only part of a diversified diet (follow-on formulae)

- ✓ This statement should be found on the front of the package.

Comment:

- ✓ For the same reasons as in §1.2.8-1.2.9, this statement should have a much more salient position. (The Spanish consumer study (§4.3.2) revealed also that the expression *dieta diversificada* ('diversified diet') does not reach all consumers). Furthermore, we have found in a number of cases that the use of 'should' in the wording of the legislation (see sub-heading above) was replaced by 'can', changing obligation to general possibility and thus diluting the force of the legislation (see British Report: 3.2.6). A subsequent review of the legislation may wish to take this point into account.

1.2.13. Not to be used as a substitute for breast milk during the first four months of life (follow-on formulae)

- ✓ As with the "superiority of breast feeding" notice for infant formulae, we recommend that this notice come on the base of follow-on formulae containers. The same reasons apply as in §1.2.8.

1.2.14. Presence and absence of gluten intended for babies less than six months old (cereals)

- ✓ Both the presence and absence of gluten should be mentioned in the same way on the front, in a very large typeface and not crowded.

Comment:

On many of the cereal labels across all five countries, the presence of gluten was signalled in a non-salient way whereas the absence was signalled in a much more salient way (in a coloured ticked box, etc.). The recommendation is corrective of this disparity from the perspective of the label in isolation from reading behaviour but *also* from the perspective of reading behaviour. This is because many parents expect the information on gluten to appear on the front of the package.

Many of the nutritional experts interviewed pointed out the importance of introducing gluten when the baby is being breast fed. For this reason, it is important that the presence of gluten is mentioned saliently on the front of the labels. Furthermore, parents with gluten intolerant babies need the 'gluten-free' information to be mentioned saliently as well.

1.3. Recommendations on non-obligatory information

- ✓ Ambiguous sugar claims such as "no added sugar" ("sokeroimaton" in Finnish) on cereal packets should be prohibited. Instead the sugar content should be included in a salient position.

Comment:

In most consumer studies, claims such as "no added sugar", 'reduced sugar' etc were misinterpreted to varying degrees. In the British consumer study (British Report 4.2b), parents were given the Farley's Rusks 'Original' label and shown the indicator in the nutritional table that it had a sugar content of 29%. They were then shown the front of the new 'REDUCED SUGAR Farley's Rusks' (i.e. not the nutritional table) and asked to estimate the sugar content. 87% of parents said 'half this or more', but the actual value was 21.7 %. These parents presumably equate REDUCED with LOW. In the Swedish consumer study, 44 % of the respondents correctly answered that the products labelled "osockrad" ('no added sugar') could contain sugar, while 26 % said that they could not; 30 % did not know. This means that the majority of the respondents either had problems interpreting the "osockrad" information, or they misinterpret it (Swedish Report: 21f). In Finland, 38.7% knew exactly what "sokeroimaton" means, while the remainder had comprehension problems (see Finnish Report: 3.3).

"Sucrose-free" was often interpreted as "sugar-free" even though the product contained other sugars (British Report 4.2b). The situation is further complicated by the presence of artificial sweeteners, (e.g "maltodextrins") which, in many cases, parents do not take into consideration when reading the above claims. One possible remedy for such misunderstanding could be the introduction of a "cariogenic scale" in a salient position on the label.

'Cariogenic' refers to the property of substances to lead to tooth decay.

- ✓ Statements to the effect that the product contains sugar which "naturally" ("Luontaisia sokereita" in Finnish) occurs in fruits should be prohibited.

Comment:

In some of the studies such statements misled the parents. The assumption was that because of the use of the term "naturally" that this was something positive for the baby. However, such wording disguises the distinction between intrinsic sugars (those found in fruit cells and thus less cariogenic when consumed) and extrinsic sugars (which have been extracted from fruit cells and are thus more cariogenic in consumption).

1.4. Prohibited information

What follows relates to the European legislation for infant formulae: "the labelling of infant formulae shall not include pictures of infants, nor shall it include other pictures or text which may idealise the use of the product. It may, however, have graphic representations for easy identification of the product and for illustrating methods of preparation" (Directive 91/321/EEC: art.7.5).

- ✓ We recommend the above reference to graphic representation be extended by including prohibition on anthropomorphic figures (e.g. ducks and teddy bears wearing bow-ties) on the infant formulae labels.

Comment:

In some of the consumer studies, some of the parents recalled that there was a baby on the front of the package. This can be put down to anthropomorphic pictures on the front of infant formulae labels.

Despite our working interpretation, we still regard the reference to "idealise the use of the product" in the above legislation as too unclear to gauge possible idealising effects of the following: advertising on the infant formulae label together with scientific claims (e.g. presence of Long Chain Polyunsaturates (British Report 2000: 3.1.1), vague evaluative words, pseudo-scientific vocabulary, etc.). Interestingly, there is great discrepancy between the Member States on the issue of advertising on infant formulae labels. In Finland and Sweden there is very little or no advertising and it is always non-salient. In Britain, Spain and Belgium there is much more advertising and is usually very salient.