FoodDrinkEurope
Guidelines on Legibility of Labelling

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FOODDRINK
E U R O P E

Introduction

The food and drink industry is committed to helping consumers make informed choices by providing them with accurate and transparent information on pack. However, the demand for more information to be provided on pack continues to increase while the amount of space available is decreasing due to the fact that companies are working to reduce packaging for environmental reasons. We recognise that this can cause challenges for the legibility of on-pack information and we are committed as an industry to providing a workable solution to this.

FoodDrinkEurope, which represents the EU food and drink industry, has developed this 'Code of Practice' to provide guidance for manufacturers and enforcement authorities to ensure that all on-pack information is truthful, legible and accurate. This Code is not intended to be a substitute for legislation. It aims to provide recommendations and best practices to help Food Business Operators to ensure the legibility of the information provided on the label. The legibility of the information and compliance with the requirements set by EU law is ultimately the responsibility of the Food Business Operator.

Legal background

Regulation (EU) No. 1169/2011 on the provision of food information to consumers provides in Article 2 a definition for legibility:

> *'legibility' means the physical appearance of information, by means of which the information is visually accessible to the general population and which is determined by various elements, inter alia, font size, letter spacing, spacing between lines, stroke width, type colour, typeface, width- height ratio of the letters, the surface of the material and significant contrast between the print and the background.'*
>
> *Art. 2.2(m), Regulation (EU) No 1169/2011 on the provision of food information to consumers*

Article 13 of Regulation 1169/2011 establishes provisions related to certain aspects of legibility, such as a mandatory minimum font size; contrast; background; and positioning; for mandatory food information as per the Regulation. It indicates, amongst others, the following:

> *'[…], mandatory food information shall be marked in a conspicuous place in such a way as to be easily visible, clearly legible and, where appropriate,*

> *indelible. It shall not in any way be hidden, obscured, detracted from or interrupted by any other written or pictorial matter or any other intervening material.'*
>
> *Art. 13.1, Regulation (EU) No 1169/2011 on the provision of food information to consumers*

The Regulation also includes other mandatory provisions related to legibility, for instance the obligation to emphasise the substances or products causing allergies in the list of ingredients (Art. 21).

Labelling legibility is also addressed in section 8.1.2 of the General Standard for the Labelling of Prepacked Foods [Codex STAN 1-1985] and in some national legislative texts.

> *'Statements required to appear on the label by virtue of this standard or any other Codex standards shall be clear, prominent, indelible and readily legible by the consumer under normal conditions of purchase and use.'*
>
> *Section 8.1.2, General Standard for the Labelling of Prepacked Foods [Codex STAN 1-1985]*

1 Definitions

A number of terms are used in this Code of Practice. These are defined as follows:

Legibility

The physical appearance of information, by means of which the information is visually accessible to the general population and which is determined by various elements, inter alia, font size, letter spacing, spacing between lines, stroke width, type colour, typeface, width- height ratio of the letters, the surface of the material and significant contrast between the print and the background;

Text is deemed to be legible if it can be easily read by a person with normal visual acuity under good overall conditions (e.g. light intensity and light colour spectrum effects).

Typeface

Typeface is the style of lettering, such as Helvetica or Times.

Serif typeface

Serifs are the non-structural details on the ends of some of the strokes that make up letters and symbols. A typeface that has serifs is called a serif typeface (or serifed typeface).

Examples of serif typefaces are Times New Roman and Courier.

Figure 1: Example of Serif typeface

The elements in red are the strokes mentioned above.

Sans serif typeface

A typeface without serifs is called sans-serif, from the French 'sans", meaning "without". Some typography sources refer to sans serif typefaces as "grotesque" (in German "grotesk") or "Gothic," and serif types as "Roman." These terms are no longer commonly used however, except in specific font names.

Examples of Sans serif typefaces are Helvetica and Verdana.

Figure 2: Example of Sans serif typeface

Font

Font is the set of a typeface used to produce the letters. For example, Helvetica, point 12 and Helvetica, point 14 are different fonts even though both have the same typeface.

Point

Point is the standard unit of measurement used to specify font sizes. Many different conversion scales exist for the point size:

ATA = 0.3514598 mm
Didot = 0.3759 mm
IN = 0.4 mm
PS or DTP = 0.3527777778 mm
TeX = 0.3514598035 mm

Font size (point size)

The font size is the height of a character from the lowest descender to the highest ascender.

Figure 3: Font size

The ascenders are the parts of the characters that lie above the meanline. The descenders are the parts of the characters that lie below the baseline.

Font height

The font height is the actual height of characters such as H or k, from the baseline to the top of the ascender. It is typically 72% of the font size.

Letter height (x-height or corpus size)

The letter height is the distance between the baseline and the mean line in a typeface. Typically, this is the height of the letter 'x' in the font. Whether two fonts appear to have the same height is primarily determined by whether their x-heights match.

Characters with rounded shapes (called 'bowls'), such as c, o, e, are always drawn larger than letters with flat upper and/or lower surfaces (for example, v, w, x, z). The reason is that, if lower-case letters with bowls were drawn to the same vertical dimension as x they would look smaller to the human eye.

Figure 4: Examples of x-height in relation with the font size of 6 points and different typefaces

Same font size (6 pt) in relation with different typefaces x-height

Same x-height (1.2 mm) in relation with different typefaces font sizes

Tracking (character spacing)

Tracking is the horizontal space added to or subtracted from the space between characters in a text.

Figure 5: Tracking
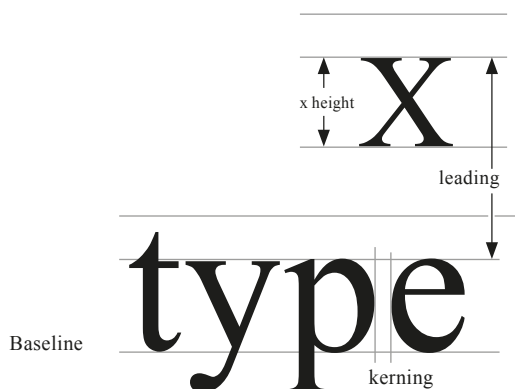
Leading (interlinear spacing)

Leading is the vertical spacing between the lines of text. The name comes from the physical piece of lead that used to be used in mechanical printing process to separate lines of text (see figure 5).

Symbols

A symbol is something – such as an object, picture, written word, or particular mark – that represents (or stands for) something else by association, resemblance, or convention, especially a material object used to represent something invisible. Symbols indicate (or serve as a sign for) and represent ideas, concepts, or other abstractions.

Field of vision

Field of vision means all the surfaces of a package that can be read from a single viewing point.

Largest surface area

The largest surface is the single largest area of the package that can be seen from a single point of view and that can be printed on from a technical perspective. The Commission notice on questions and answers on the application of Regulation (EU) No 1169/2011 provides the following guidance:

'In the case of rectangular or box-shaped packages, the determination of the 'largest surface area' is straightforward, i.e. the entire largest side of the package concerned (height × width).

In the case of cylindrical shapes (e.g. cans) or bottle-shaped packages (e.g. bottles) which often have uneven shapes, 'largest surface' could be understood as the area excluding tops, bottoms, flanges at the top and bottom of cans, shoulders as well as necks of bottles and jars.

Indicatively, according to the International Recommendation 79 of the International Organisation of Legal Metrology (1), the area of principal display panel of the package in the case of cylindrical or nearly cylindrical package is determined as 40% of the product of the height of the package x the circumference excluding the tops, bottoms, flanges at tops and bottoms of cans, and shoulders and necks of bottles and jars.'

Commission notice on questions and answers on the application of Regulation (EU) No 1169/2011 of the European Parliament and of the Council on the provision of food information to consumers, (2018/C 196/01).

2 | Legibility factors and recommendations

Legibility is determined by a number of inter-related factors including layout, font, colour, contrast, packaging/ label material, packaging shape, printing techniques, etc. No one factor can determine the overall legibility of the information. These factors should be considered collectively and the legibility of information assessed on a case-by-case basis.

Furthermore, given that reader-dependent factors and environmental factors can affect the legibility of a label, it must be assumed that the reader has a normal visual acuity and is viewing the information under good overall conditions.

The recommendations in this Code of Practice have been grouped into the following categories:

- Location of the information on the label;
- Lay-out;
- Font, colour and contrast;
- Packaging and printing.
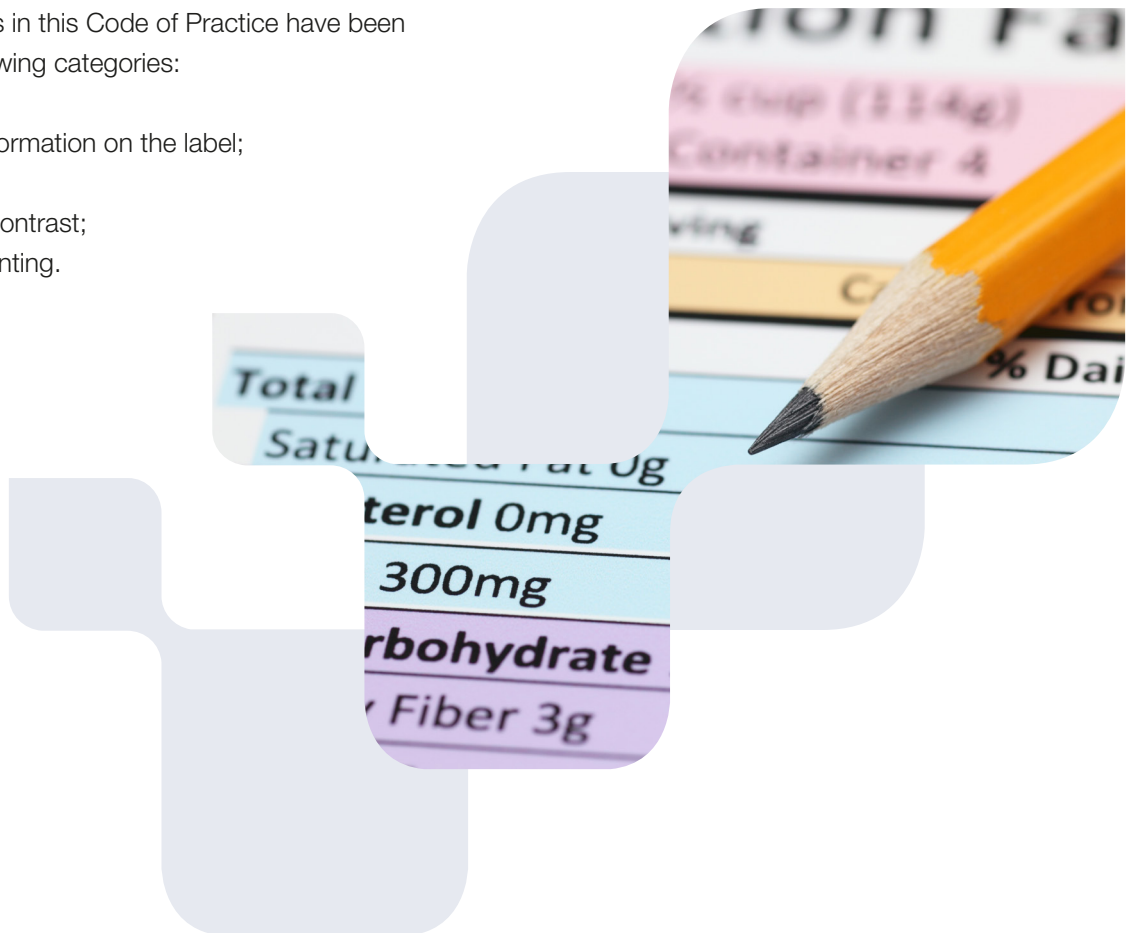
2.1 Location of the information on the label

The name of the food, the net quantity and the alcoholic strength for alcoholic drinks over 1.2% in strength shall appear in the 'same field of vision'. In accordance with Art. 13.5 of Regulation (EU) No 1169/2011. The mandatory nutrients and the voluntary nutrients must also be included in the 'same field of vision' (Art. 34.1 of Regulation (EU) No 1169/2011).

Referencing

As indicated in the section on lay-out below, the preferred approach is to group information that belongs together. Yet, due to space constraints or technical reasons, detailed or specific information may need to be placed elsewhere on the pack. In such cases asterisks, symbols or numbers can be used to refer to the information in question. When a reference to a given location on the pack is made, then the reference text should be specific (e.g. 'see lid', 'see top of bottle', 'see side of pack', 'see nutritional panel').

Date marking

Regulation (EU) No 1169/2011 does not mandate where the date marking should be placed on the label. However, to allow the consumer to easily identify this information on the label, is important that the date marking is clearly legible, easily visible and indelible.

Peel-off labels

The use of 'peel-off' labels (a label that can partly be lifted off and returned back) may be considered when the suitable area for labelling on the pack format is limited. Commission notice on questions and answers on the application of Regulation (EU) No 1169/2011 (2018/C 196/01) considers such labels acceptable when general requirements on the availability, accessibility and placement of the mandatory information are fulfilled.

When such label is used, the information related to easy identification and safety should be on the top layer:

- Name of the food;
- Storage conditions;
- Date marking;
- Allergens;
- Net quantity;
- Reference/indication where the other mandatory elements can be found.

2.2 Lay-out

The layout of information can have an impact on legibility. Given the wide variety of packaging sizes and shapes, no single ideal layout exists but there are a number of factors that should be taken into consideration when determining legibility, in particular titles/headings, blocks of information, text alignment and use of symbols.

Titles and headings

Headings can help direct consumers towards specific information and to separate text if space permits.

✅ **BEST PRACTICE**

Distinguish the text for headings by, for example, using bold type and/or upper case text

✅ **BEST PRACTICE**

Making headings clear, short and consistent, for example:
- Ingredients;
- Preparation or cooking instructions;
- Storage;

❗ **CARE!**

Extensive use of upper case and underlining

Figure 6: Example of title highlight (bold) for the list of ingredients

Ingredients: Beans (49%), Tomatoes (27%), Water, Sugar, Salt, Modified Corn flour, Spirit Vinegar, Spice Extracts, Herb Extract.

Figure 7: Example of title highlight (separated heading) for the Cooking Instruction

COOKING:

On the Hob

Empty the contents into a saucepan and stir gently while heating. Do not boil or overcook as this will impair the flavour.

To Microwave (650W)

Empty the contents into a suitable container. Cover and heat on full power for 1 minute. Stir, then heat for a further 1 minutes until hot.

Blocks of information

✓ **BEST PRACTICE**
Where space allows, group information which belongs together

✓ **BEST PRACTICE**
Where appropriate, separate different groups of information with frames or boxes

Figure 8: Example of blocks of information (separated with a frame) for the list of ingredients and recommendations of use

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VERVEINE-MENTHE

Ingrédients: Verveine (50%), menthe (50%).
Conseil de préparation: Utilisez un sachet par tasse, versez de l'eau bouillante, laissez infuser 3 á 5 minutes. A conserver a l'abri de l'humidité.

VERBENA-MENTA

Ingrédiente: Verbena (50%), menta (50%).
Consejos de utilixación: Usar una bolista por taza, verter agua hirviendo y dejar reposar 3 a 5 minutos. Conservar en lugar seco.

Text alignment

✓ **BEST PRACTICE**
Text should start and be aligned with the left margin;

! **CARE!**
Avoid placing information in circles

! **CARE!**
Avoid placing a large amount of text with only one or two words on each line

Figure 9: Example of text alignment

BEST PRACTICE	CARE!
Milk chocolate with blood orange filling (50%) Ingredients: sugar, whole milk powder, vegetable fat, butter, cocoa mass, whey powder, cream powder, lactose, blood orange powder (1%), milk fat, maltodextrin, flavourings (blood orange, vanillin), emulsifier (soy lecithin). Cocoa solids: 30% minimum in the chocolate. Milk solids: 18% minimum in the chocolate.	**Milk chocolate with blood orange filling (50%)** Ingredients: sugar, whole milk powder, vegetable fat, butter, cocoa mass, whey powder, cream powder, lactose, blood orange powder (1%), milk fat, maltodextrin, flavourings (blood orange, vanillin), emulsifier (soy lecithin). Cocoa solids: 30% minimum in the chocolate. Milk solids: 18% minimum in the chocolate.

Use of symbols

Simple, recognisable, functional symbols can help save label space and can be helpful in directing consumer attention to the information. However, the Commission notice on questions and answers on the application of Regulation (EU) No 1169/2011 (2018/C 196/01) clarifies that mandatory particulars such as the instructions for use must be indicated with words and numbers. The use of pictograms or symbols is only an additional means to express such particulars.

Please note that several logos, where used, have to follow mandatory requirements as prescribed by EU legislation (e.g. the EU Organic logo, identification marks for products of animal origin, etc.).

✅ **BEST PRACTICE**

Obvious symbols can be used, for example for storage, preparation and cooking instructions;

✅ **BEST PRACTICE**

Related advice should be displayed close to the symbols;

❗ **CARE!**

Too many or overly complex symbols can fail because they try to do too much. It is therefore important to get the balance right.

Figure 10: Example of effective use of symbols
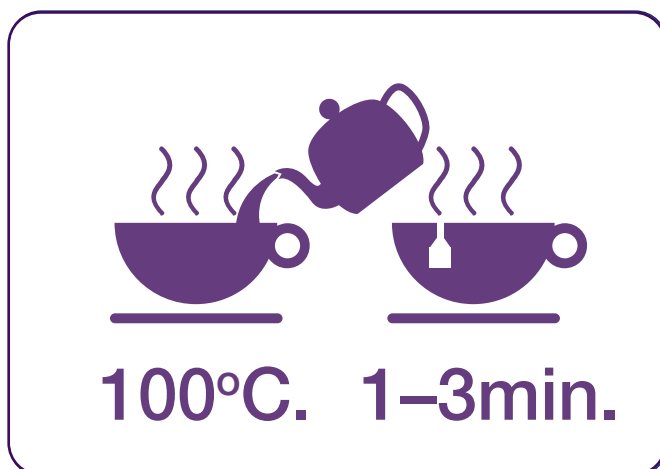

100ºC. 1–3min.

Figure 11: Example of effective use of symbols

COOKING GUIDELINES

To Oven Cook:
Preheat oven to 190ºC/375ºF/Gas mark 5. Place on a baking tray and cook for 20–25 minutes

To Shallow Fry:
Frying a little oil over a medium heat for 12–14 minutes turning occasionally

800 W
D

To Microwave:
Cook on full power for 10 minutes

2.3 Font, colour and contrast

The appearance of the font can have an impact on legibility. There are a number of factors that should be taken into consideration when determining legibility in particular font size, character spacing, choice of font, colour, contrast and visual background noise.

Font

Letter height

The generally accepted method for determining letter height is by reference to the x-height as this provides the specific measurement of two reference points of the letter. Point size is not used because the same point size can result in different letter heights depending on the typeface used and font sizes/font heights are not used because of the difficulty in identifying the reference points for the measurement of letters.

There is no pre-established ratio between the x-height and a font size. Nevertheless, an x- height of 1.2 mm is approximately equivalent to 7.2 point size arial and this equates to a font size of between 2.5 mm – 2.7 mm.

✅ **BEST PRACTICE**

As a basic principle try to use as large a letter height (x-height) as possible

! CARE!

Standard size packaging: In accordance with EU Regulation (EU) No 1169/2011, for packages or containers with the largest surface of 80 cm^2 or higher, a font size where the x-height is minimum 1.2 mm is required for the mandatory particulars prescribed in the Regulation.

! CARE!

Small packaging: Where the largest surface area is smaller than 80 cm², a font size where the x-height is minimum 0.9 mm is required by Regulation (EU) No 1169/2011 for the mandatory particulars prescribed in the Regulation. Please note that small packs and containers with the largest surface of less than 10 cm^2 may bear fewer mandatory particulars.

Tracking (character spacing)

Adequate character spacing is an important factor for legibility as characters too close together prevent the reader from recognising the letters.

! CARE!

It is recommended that characters should not be condensed by more than 1pt.

Figure 12: example of character spacing: normal and condensed by 1.2pts

BEST PRACTICE

Milk chocolate with blood orange filling (50%) Ingredients: sugar, whole milk powder, vegetable fat, butter, cocoa mass, whey powder, cream powder, lactose, blood orange powder (1%), milk fat, maltodextrin, flavourings (blood orange, vanillin), emulsifier (soy lecithin). Cocoa solids: 30% minimum in the chocolate. Milk solids: 18% minimum in the chocolate.

CARE!

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Leading (interlinear spacing)

✅ BEST PRACTICE

It is recommended that the line space should be 120% of the point size. For example, 6 point font should be set with 7.2 point leading.

✅ BEST PRACTICE

In cases where this is not possible, the minimum recommended line space is 0.5 point more than the point size. In this context, it is important to consider the fact that the x-height, weight of type (whether it is bold or not), case or line length can impact the perception of inter-linear spacing.

✅ BEST PRACTICE

Fonts with proportionally larger x-heights need more inter-linear spacing.

Font selection

✅ BEST PRACTICE

Sans serif faces (e.g. Arial, Helvetica, Myriad, Frutiger, Univers) are generally preferable, or those serifed faces that have a large bowl size and work well at a small size

✅ BEST PRACTICE

It is important to ensure that numbers are distinct. Numbers can easily be misread in certain typefaces (particularly the numbers 6, 8 and 9 in Arial).

! CARE!

Stylised, ornamental, decorative fonts can be hard to read and should be used with care. It is best practice to ensure that the information is visible also when the pack is partially emptied.

Figure 13: Example of inter-linear spacing of 11.5pt and 10pt

BEST PRACTICE

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CARE!

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Figure 14: Example of Sans Serif Font (Arial – 9pts) and Serif Font (Times New Roman – 9pts)

Ingredients

Beans (49%), tomatoes (27%), water, sugar, salt, modified corn flour, spirit vinegar, spice extracts, herb extract.

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Beans (49%), tomatoes (27%), water, sugar, salt, modified corn flour, spirit vinegar, spice extracts, herb extract.

Colour, contrast, visual background noise

✅ **BEST PRACTICE**

While the choice of colours may often be dictated by their use in the brand, it is essential that the contrast between text and background is as high as possible. It is recommended that the selected colours clearly contrast.

❗ **CARE!**

Subtle contrasts, shadowing and 3D effects can reduce legibility and should therefore be used with care and avoided where possible.

❗ **CARE!**

Busy images, pictures, patterns and watermarks may create visual background noise, and should therefore be used with care and avoided where possible.

❗ **CARE!**

If the packaging is transparent, a good contrast is needed with the food product forming the visible background.

Figure 15: Example of use of colours, contrasts and visual background noise

Ingredients: Sugar, milk powder, butter, vegetable oil, antioxidant ascorbic acid, flavouring.

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2.4 Packaging

Packaging technique

Mandatory information should not be printed in areas of the package where it would be difficult to read, in particular, in areas, which are not directly accessible and require the packaging to be opened in order to read the information.

Below are some examples of situations where extra care should be taken to ensure legibility.

✅ **BEST PRACTICE**

Give preference to matte finish printing surfaces.

! **CARE!**

Deformation zones of sleeves or 3D surfaces and other thermoform packaging techniques.

! **CARE!**

Heat sealed areas (for example ends of the wrappers of bar products).

! **CARE!**

Plastic shrink-wrap.

Packaging material

The packaging material and print finishes can have an impact on legibility.

! **CARE!**

Be aware that high-gloss surfaces (e.g. metal cans) might increase glare and therefore greater attention needs to be given to contrast as well as the appropriate printing technique.

! **CARE!**

Be aware that the shape of the packaging can increase glare.

Date marking

In most cases, labels of prepacked foods are pre-printed and only the date marking is printed on the packaging line (and lot code). Various techniques can be used to print the date marking, such as ink-jet printing, laser printing or embossing/debossing (creating raised or indented characters on the pack material). All the above recommendations on font, colour, contrast and surface apply to date marking as well, but require extra care in cases where the date marking is printed outside the label area, i.e. directly on the packaging material or lid surface. Bigger font-size may be needed to ensure adequate legibility. The food business operator should make a case-by-case evaluation, to ensure that the solution is both technically feasible and ensure that the information provided is clear, in accordance with Regulation (EU) No 1169/2011.

3 Summary table – best practices for legibility

	Recommended	Use with care	Best avoided
Layout	• Headings to be clear, short and consistent; • Use bold type and/or upper case text to distinguish headings; • Where space allows, group information which belongs together; • Where appropriate, separate different groups of information with frames or boxes; • Text should start and be aligned with the left margin; • Use symbols to help reduce the quantity of text and direct the reader to information.	• Extensive use of upper case and underlining; • Text in other format than blocks; • Text wrapping; • Centre alignment; • Text aligned with the right margin.	• Over hyphenation of text; • Blocks of texts without headings, titles or any separation; • Placing a large amount of text with only one or two words on each line; • Placing the information in circles; • Too many or overly complex symbols.
Font, colour and contrast	• Comply with the requirements in Regulation (EU) No 1169/2011, including minimum font size; • Adequate character spacing; • Inter-linear spacing of 120% of the font size; • Easy-to-read (sans serif) fonts; • Choose a typeface designed for use at small font size; • Clearly contrasting colours.	• Inter-linear spacing of less than 120% of the font size • Italic; • Serif typefaces; • Stylised, ornate decorative fonts; • Subtle contrasts, shadowing, 3D effects, watermarking or non-uniform background; • Where packaging is transparent, good contrast is necessary with food product forming the visible background.	• Character spacing condensed by more than 1 pt; • Inter-linear spacing of less than 0.5pt more than the font size; • Colours with similar tonal contrasts – light type on a light background or dark type on a dark background
Packaging/ printing	• High quality printing.	• Printing on deformation zones; • Heat sealed areas; • Plastic shrink wrap; • Metallic and shiny printing surfaces; • Labels printed on curved surfaces.	• Zones of the packaging which are not directly accessible; • Areas where the destruction of the package is required to read the text.