Nutri-Score: Healthy Labelling Regulation

As consumer interest in healthy, clean label food continues to grow, so does a need to understand and contextualize the benefits. Nutri-Score is a Front-of-Pack (FoP) nutrition labelling scheme that allows a comparison of food products across categories, same category, and brands. It provides an evaluation of positive and negative nutritional aspects of the product's micro, macronutrients and food components to favor such ingredients as oils, fruits and vegetables and legumes.

All pre-packed food and non-alcoholic drinks in the EU and US must carry a nutritional declaration on the back of the pack. Consumers rarely have time to read these tables and require a quick summary. A simplified FoP nutrition label with color-coding enables them to spot the healthier food or snack instantly.

It's important as a bakery goods manufacturer to deeply understand the labelling schemes and develop those transparent, better-for-me products consumers want.

What is Nutri-Score & How Popular is It?

Countries like France, Belgium, Germany, Luxembourg, the Netherlands, Spain, and Switzerland have openly backed the Nutri-Score system. The Nutri-Score (previously referred as to the "5-color nutrition label") system rates food and beverages overall nutritional parameters on a scale from 'A' to 'E' with corresponding colors ranging from dark green to red.

It considers 'negative' nutritional attributes such as high sugar or salt and involves 'positive' factors such as proteins, dietary fibers, fruits vegetables, legumes and oils content and converts this into an easy to read value.

The choice of the Nutri-Score system, which is one of the many FoP nutrition labelling schemes proposed on the EU, is backed by scientific and consumer research. It is assumed that it is the easiest to understand, it helps consumers making healthy food choices, encourages manufacturers to reformulate products and helps consumers eating smaller portions.

NUTRI-SCORE

A B C D E
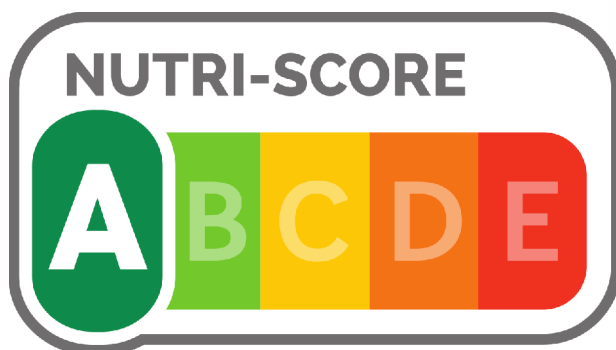
How to Calculate Your Product's Nutri-Score

Different algorithms are proposed within the Nutri-Score system as all food categories may not be discriminated by the same nutrients. There are calculation approaches for general foods, beverages and added fats (oils, butters or margarines).

General foods scores rank from -15 (best) to +40 (worst), and those scores are translated into color-associated letters. A is for the best values and E for the worst values. All scores are based on 100 grams or 100 mL of products, thus not talking into account serving size.

Score for nutritional attributes to encourage (from 0 to -15) is based on:

- Proteins (0 to 5 points)
- Dietary fibers (0 to 5 points)
- An aggregate of fruits, vegetables, nuts, legumes and "beneficial" oils (0 to 5 points)

Score for nutritional attributes to discourage (from 0 to +40) is based on:

- Energy (0 to 10 points)
- Sugars, i.e mono and disaccharide (0 to 10 points)
- Sodium (0 to 10 points)
- Saturated fatty acids content (0 to 10 points)

The lower the score, the better the product. The high positive factor values and reduced negative factor values result in a highly nutritional product.

If N < 11 ⟶ Nutri-Score = Negative score (N) – Positive score (P)

If N ≥ 11

F&V, legumes, nuts and oils ≥ 5 ⟶ Nutriscore = N - P

F&V, legumes, nuts and oils < 5 ⟶ Nutriscore = N – (Points F&V + Fibres + Legumes + Nuts)

A	B	C	D	E
-15 to -1	0 - 2	3 - 10	11 - 18	19 - 40

How to Improve Your Nutri-Score

Improvement of the Nutri-Score for a product using a single method is more challenging. An ideal solution would be using both methods discussed below:

1 Reducing the adversely affecting components

- Reducing <u>fats</u> reduces the overall energy as fats contribute 9kcal/g.
- Often, replacing certain parts of fat with sugars is possible (4kcal/g). These replacements increase the simple sugars while lowering overall energy density and saturated fat content.
- Alternating processing conditions can reduce the requirement of salt, sugars, and fat.
- Simple variations such as using olive oil ('C'), with low saturated fats, in place of palm oil ('E') or butter ('E') can make a significant difference.
- The Nutri-Score system does not account for sugar replacers or other additives used as <u>sweeteners</u> in food products. Nevertheless, "label-friendly" is another concept that accounts for additives containing E-number, and hence, one should be cautious while considering such replacements.

2 Increasing the positively affecting ingredients

- Several unique fiber-based ingredients are available for replacing sugars and fats.
- <u>Fiber</u> and <u>protein</u> fortification and supplementation improve the nutritional score while not impacting the formulation significantly.
- The addition of natural fruits and vegetables to products further increases the nutritional claims and provides a natural perspective.
- Formulating bakery recipes to incorporate higher fiber and protein content is rewarded by the Nutri-Score system.

MAKING HEALTHIER CHOICES

Many critics have been claiming the system to be ineffective as some diet beverages rate better than olive oil. While the Nutri-Score makes it easy to compare across categories, the meaningful comparison is in the hands of consumers. Just because it is possible to compare apples and oranges does not mean you should. The algorithm is constantly evolving and takes into account new elements so that more understandable. The simplicity of the label aims at assisting consumers in choosing a more nutritious option from the selection.

Other Healthy Label Initiatives Around the World

The global necessity for such labels have created alternates for nutrition and health related initiatives in different countries. In fact, several of these nutrition labels have been developed in-line with Nutri-Score labels. Examples include:

- **United Kingdom Nutrient Profiling Model started in 2011:** [6] The level of fat, saturates, total sugars and salt in 100g of food is given a green (low) amber (medium) or red (high) color code on the FOP. Food scoring a 4 or more and drinks scoring 1 or more points are classified as 'Less Healthy'. Furthermore, the department of health recommends to Ofcom (Broadcast Regulator) to control advertising these products to children.

- **Mexico New Labelling Requirements started in 2019:** [7] A front warning label for pre-packaged food and non-alcoholic beverages displays stamps to show when a nutriment or ingredient is excessively used. It includes calories, sugars, fats and sodium levels. Furthermore, if a product includes sweetener or caffeine, it must be indicated in the stamps.

Latin America is coming together to develop a FOP label for harmonization of labelling regulations in-line with Nutri-Score and CODEX regulations.[8]Other regions such as the Middle East, India, Turkey, Africa, Japan, Australia and China are developing individual front labelling methods similar to the Nutri-Score regulation. All indicators suggest this labeling trend will continue to grow and spread around the globe.

" What's the difference between the protein absorbability for the different proteins like gluten, pea, soy, and corn?

Biological value (BV) is a measure of the proportion of absorbed protein from food that becomes incorporated into the proteins of the organism's body. This value for most of the plant proteins ranges from 60-80%.

For wheat, the BV ranges from 54-68 where gluten has a BV of 64. Corn protein[2] has even a lower biological value of 50. Pea protein has a BV of 65. Soy protein isolate[4] has a biological value of 74.

" How can I increase the moistness of my low-sugar, low-fat product and still give it a longer shelf life?

The Nutri-Score label does not reduce the score of using additives and ingredients. Alternative processing methods such as radiation, sterile circulation air-flow, microwave heating, pulsed light technology and more.[5] Packaging technologies can reduce oxygen interaction and light reactions that can lead to rancidity.

Additionally, supplementing with label-friendly, functional ingredients such as tocopherol and vitamin E increases the shelf life while improving the nutritional quality.[5]

References

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