

European Front-of-pack Nutritional Labelling Scheme: How to Foster Consensus?

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By 2022, the European Commission plans to adopt a harmonised front-of-pack nutritional labelling scheme, dedicated to improving consumer understanding of the nutritional value of foods. The current debate has developed into an increasingly fierce contest between two inherently different schemes: the French “Nutri-Score” and the Italian “NutriInform”. This cepInput proposes two compromise solutions.

Key Propositions

- ▶ The European Commission should choose between these two solutions:
 - The “unitary compromise” solution: The EU adopts the British Multiple Traffic Lights system as a mandatory European front-of-pack labelling scheme which combines the essential features of both Nutri-Score and NutriInform.
 - The “market” solution: The EU lets European consumers decide which scheme they prefer. It obliges producers to use front-of-pack nutritional labelling but leaves them the choice of which label to use, as long as it fulfils certain requirements as established by the Regulation on the provision of food information to consumers. This solution requires EU-wide mutual recognition of such labels.
- ▶ Whichever solution is chosen, the Commission should organise an extensive and articulate awareness and education campaign to improve the understanding of European labelling and its content.
- ▶ The Commission will have to consider two other trends:
 - the development of nutritional digital apps and
 - the multiplicity of front-of-pack labels for other purposes besides nutritional values, such as sustainability and organic farming labels, which will require a coherent overall labelling framework.

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1 Introduction

On 20 May 2020, the European Commission adopted the “Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system”,¹ intended to form part of the European Green Deal. One of the main aims of this strategy is to reduce the negative impact of the current EU food system on environment and climate. It also supports the adoption of healthy and sustainable nutritional habits,² providing the necessary steps for the future revision of Regulation (EU) No 1169/2011 on the provision of food information to consumers (FIC Regulation)³ in order to achieve a sustainable food labelling system. Therefore, one of the instruments that the strategy intends to use to achieve its goals is a “European harmonised front-of-pack nutritional labelling scheme”, which aims to “improve consumers’ understanding of the nutritional value of foods when purchasing them”.⁴ The initiative wants to promote the adoption of healthier diets among EU citizens. This would result in a better quality of life, due to a reduction in diseases related to diet and lifestyle, as well as a reduction in the associated healthcare costs.⁵

Member States have developed different models of nutritional labelling schemes over the years.⁶ The current debate particularly focuses on two specific nutritional labelling schemes: “Nutri-Score”, which was initially adopted by France in 2017⁷, and “NutriInform”, which was adopted by Italy in 2020.⁸ Recently, the EU debate has seen France, Germany, the Netherlands, Belgium, Luxemburg and Spain favour the Nutri-score model, whilst Italy, Greece, Cyprus, Romania, Hungary, Latvia and Czech Republic, all support NutriInform.⁹ As for the other European countries, Sweden, Denmark and Lithuania do not officially oppose Nutri-Score but really want to keep their Keyhole endorsement logo, which distinguishes the “best products” of each food category.¹⁰ Some countries, including Poland, have not yet

¹ [Communication from the Commission](#) to the European Parliament, the Council, the European Economic and Social Committee of the Regions, COM(2020) 381 A Farm to Fork Strategy for a fair, healthy and environmentally-friendly food system, 20.05.2020. See [cepPolicyBrief Farm to Fork](#).

² The Commission aims to establish ‘nutritional profiles’ limiting the promotion (via nutrition and health claims) of foods high in fats, sugars and/or salt. [Regulation \(EC\) No 1924/2006](#) on nutrition and health claims made on foods (‘Claims Regulation’) already demanded the setting of nutritional profiles: the recent evaluation of that Regulation, published alongside the Farm to Fork Strategy, states that the setting of nutritional profiles remains a relevant and necessary measure to guarantee a high level of consumer protection.

³ [Regulation \(EU\) No 1169/2011 of 25 October 2011 on the provision of food information to consumers](#).

⁴ [Inception Impact Assessment on the revision of rules on information provided to consumers \(hereafter, IIA\)](#), p.1 and p. 3, 23.12.2020. The Commission is granted the right to make a proposal related to consumer information and protection by Art. 169 of the Treaty on the Functioning of the European Union which provides that the Union must “contribute to the attainment of a high level of consumer protection”. Furthermore, Art. 4 of the [FIC \(EU\) Regulation 1169/2011](#) provides that a front-of-pack nutritional labelling scheme can be part of the mandatory food information domain: “where mandatory food information is required by food information law, it shall concern information that falls, in particular, into one of the following categories: (...) (c) information on nutritional characteristics so as to enable consumers, including those with special dietary requirements, to make informed choices”. Finally, Art. 9 also provides for a list of mandatory particulars about the food which empowers the Commission to introduce a mandatory front-of-pack nutritional labelling scheme.

⁵ Id.

⁶ [Report from the commission to the European Parliament and the Council regarding the use of additional forms of expression and presentation of the nutrition declaration](#), Section 1.5, 20.05.2020, p. 5-6.

⁷ [Katy Askew, Nutri-Score labelling comes into force in France](#), Foodnavigator.com, 31.10.2017.

⁸ [Ministero dello sviluppo economico, Made in Italy: notificato alla Commissione Ue il sistema di etichettatura ‘NutriInform Battery’](#), 27.1.2020.

⁹ Ministero delle politiche agricole, alimentari e forestali, [Coreper, l'Italia oggi formalizza la sua posizione sulle etichettature nutrizionali. Bellanova: "Impossibile proseguire nei negoziati europei"](#), 04.12.2020.

¹⁰ Information gathered during stakeholder interviews conducted in February and March 2021. The Keyhole logo is not mentioned as a viable option in this study because, since it only targets the best products of each food category, it cannot become an encompassing mandatory labelling scheme. According to our understanding, this is not in the spirit of the European front-of-pack labelling scheme which the Commission wants to implement.

officially expressed their opinion on the subject.¹¹ On 3 February 2021, the European Commission asked the European Food Safety Agency (EFSA) to provide scientific advice to support the development of a future EU-wide system for front-of-pack nutrition labelling. EFSA is required to produce its evaluation by March 2022, with a public consultation on the draft by the end of 2021.¹²

Recently, the debate has intensified between the supporters and opponents of Nutri-Score (see Section 5 and 6). On 16 March 2021, Serge Hercberg, creator of Nutri-Score, issued a call to the European Commission to adopt Nutri-Score, signed by 290 European scientists and experts. The text also argued against NutrInform, stating that it was made “by Italy and some agro-food lobbies”.¹³ At the same time, a “No-Nutri-Score Alliance” has been growing since November 2020, gathering together scientists, consumer association representatives, food retailers and producers opposed to Nutri-Score, in order to organise the opposition and possibly propose an alternative labelling system in the context of the European debate.¹⁴ This study will, therefore, focus essentially on Nutri-Score and NutrInform.

To settle the dispute and foster consensus in Europe, this ceplInput will first describe the Nutri-Score and NutrInform systems (Section 2). It will then assess Nutri-Score and NutrInform (Section 3), before summarising the various stakeholders’ positions in this regard (Section 4) and providing solutions to foster consensus on this project at a European level (Section 5). Finally, the conclusion sets out the priorities which must be considered by the European Commission in the implementation of its project (Section 6).

2 Characteristics of Nutri-Score and NutrInform

2.1 The Options covered by the Commission’s Consultation

Before looking in detail at Nutri-Score and NutrInform, we should set out the scenarios considered by the European Commission in the context of its consultation on food labelling:¹⁵

- Option 0: keeping the status-quo regarding front-of-pack nutritional labelling schemes. Any public or private actors can introduce a front-of-pack nutritional label under the control of Member States for their national markets. No European nutrient profiles are established.
- Option 1: numerical nutrient-specific labels including NutrInform (see Section 2.3).
- Option 2: colour-coded nutrient-specific labels including the British Multiple Traffic Lights (MTL) system (see Section 5.1).
- Option 3: Endorsement logos including the Keyhole logo (see Section 1).
- Option 4: Graded indicators including Nutri-Score (see Section 2.2).

¹¹ Id.

¹² The European Commission asked EFSA to provide scientific advice on: Nutrients of public health importance for European populations, including non-nutrient components of food (e.g. energy, dietary fibre); Food groups with important roles in the diets of European populations and subgroups; [EFSA’s scientific advice to inform harmonised front-of-pack labelling and restriction of claims on foods](#), 3.2.2021.

¹³ [Group of European scientists supporting the implementation of Nutri-Score in Europe](#), published on 16.3.2021

¹⁴ [No-Nutriscore Alliance](#) whose Twitter account started on 17.11.2020.

¹⁵ European Commission, IIA, p. 3.

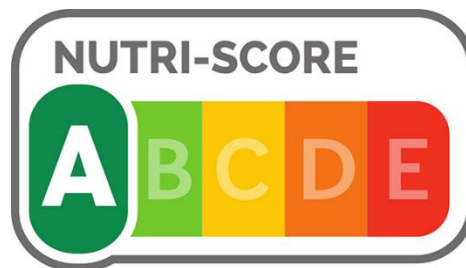
2.2 Characteristics of Nutri-Score

2.2.1 Background

Nutri-score is a front-of-pack nutritional label which was chosen by the French government in March 2017¹⁶ to appear on the package front of food products, after conducting scientific research and a comparison of several labels proposed by the food industry and retailers¹⁷. It relies on the computation of a score using a nutritional profiling system derived from the British Food Standards Agency nutritional profiling system (FSA score).¹⁸ It was created by Santé Publique France,¹⁹ the French public health agency, based on the work of Serge Hercberg from the University of Paris 13 Nord.²⁰ When compared with other front-of-pack labelling schemes, Nutri-Score emerged so far as the most efficient at conveying information on the nutritional quality of foods.²¹

The goal of Nutri-Score is to encourage consumers to buy healthy products in order to fight cardiovascular diseases, diabetes and obesity.²²

Figure 1: Nutri-Score design



Source: [Santé Publique France](#)

Nutri-Score has been approved or recommended by Belgian, Spanish, German, Luxembourg, Swiss and Dutch authorities²³ as well as the European Commission and the World Health Organization.²⁴ In Portugal, Switzerland, Slovenia and Austria, some food producers and retailers, such as Nestlé, have announced that they will use Nutri-Score although it is not officially recommended by the authorities.²⁵ The European Commission has also indicated that Nutri-Score is in compliance with the Art. 35 of Regulation 1169/2011.²⁶ The Art. 35 states that other forms of expression and/or presentation using graphical forms or symbols in addition to words or numbers are possible provided that

- they are based on sound and scientifically valid consumer research;
- their development is the result of a consultation with a wide range of stakeholder groups;

¹⁶ WHO, [France becomes one of the first countries in Region to recommend colour-coded front-of-pack nutrition labelling system](#), 22.03.2017.

¹⁷ The Lancet, [Front-of-pack Nutri-Score labelling in France: an evidence-based policy](#), 23.02.2018.

¹⁸ Ibid.

¹⁹ Santé Publique France, [Nutri-Score](#), 24.02.2021.

²⁰ Ministère des solidarités et de la santé, Nutri-Score : [Études spécifiques pays-régions](#), 02.02.2021.

²¹ US National Center for Biotechnology Information, [Objective Understanding of front-of-package Nutrition Labels: An International Comparative Experimental Study across 12 Countries](#), 10.2018.

²² Le Monde, [Intoxication agroalimentaire au ministère de la santé](#), 08.07.2016.

²³ Communiqué de Presse, [7 pays européens se sont engagés à faciliter le déploiement du Nutri-Score](#), 12.02.2021.

²⁴ Le Monde, [Le logo nutritionnel arrive dans les rayons des supermarchés](#), 20.02.2018.

²⁵ Reuters, [Nestlé to use Nutri-Score nutrition-labelling in Europe](#), 27.11.2019.

²⁶ European Parliament, [Parliamentary questions](#), 18.02.2020.

- they aim to facilitate consumer understanding of the contribution or importance of the food to the energy and nutrient content of a diet;
- they are based on generally accepted scientific advice on intakes of energy or nutrients;
- they are objective and non-discriminatory; and
- their application does not create obstacles to the free movements of goods.

On 25 January 2021, the steering committee of the organisation formed by 7 EU countries, known as the “Countries officially engaged in Nutri-Score” –hereinafter COEN – initiative, met for the first time to organise the governance transition from Santé Publique France to an EU-based structure. On 12 February 2021, the scientific committee of this organisation met for the first time to propose potential ways in which Nutri-Score could better reach its goal of improving consumer health in the long-term.²⁷

2.2.2 Ownership and Trademark Use

Nutri-Score is owned by Santé Publique France, which grants the right to use the label, free of charge, if food retailers and producers register on one of the dedicated registration platforms.²⁸

2.2.3 How does Nutri-Score work?²⁹

Nutri-Score is a front-of-pack colour-coded nutritional label which gives a unique and simple nutritional rating of a food product. The better the Nutri-Score of a product, the more frequently consumers can eat it. Therefore, products with unfavourable Nutri-Scores should be consumed less often.

Figure 2: Example of nutrient thresholds / points tables for favourable and unfavourable nutrients

Points	Energy (kJ)	Sugar (g)	Saturated fatty acids (g)	Sodium (mg)
0	≤ 335	≤ 4,5	≤ 1	≤ 90
1	> 335	> 4,5	> 1	> 90
2	> 670	> 9	> 2	> 180
3	>1005	> 13,5	> 3	> 270
4	> 1340	> 18	> 4	> 360
5	> 1675	> 22,5	> 5	> 450
6	> 2010	> 27	> 6	> 540
7	> 2345	> 31	> 7	> 630
8	> 2680	> 36	> 8	> 720
9	> 3015	> 40	> 9	> 810
10	> 3350	> 45	> 10	> 900
TOTAL	1 point	0 points	0 points	7 points

Points	Fruit, vegetables (%)	Fibers (g)	Proteins (g)
0	≤ 40	≤ 0,9	≤ 1,6
1	> 40	> 0,9	> 1,6
2	> 60	> 1,9	> 3,2
3	-	> 2,8	> 4,8
4	-	> 3,7	> 6,4
5	> 80	> 4,7	> 8,0
TOTAL	0 points	5 points	5 points

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Source: [Coltruyt Group](#).

So far, there are four food categories with their own points algorithm: (1) fat/oil/butter, (2) cheese, (3) drinks, and (4) a general category for the other food products. Certain products are, however, excluded

²⁷ WHO, op. cit. (15).

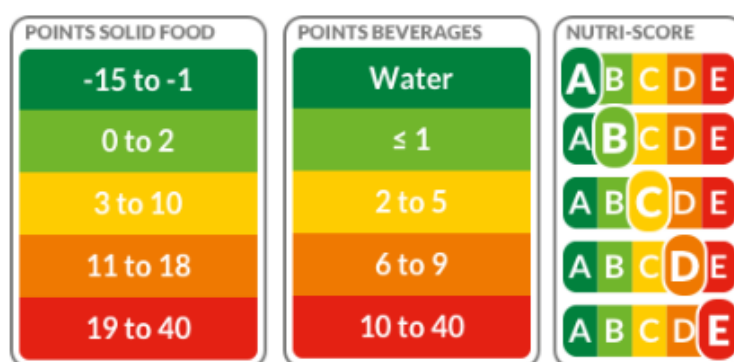
²⁸ Santé Publique France, [Registration procedure for the operator to obtain the right to use the registered collective trademark "Nutri-Score"](#).

²⁹ For the entire sub-section: Coltruyt Group, [What is the Nutri-score?](#)

from these categories and cannot receive a Nutri-Score.³⁰ The drinks category has its own points scale, while the other three share a single points scale ranging from -15 to 40 points (Figure 3). Nevertheless, the three “solid food” categories differ from each other in their threshold-point tables (Figure 2) – the threshold for “awarding” an additional point differs for each nutrient. The general position is as follows:

- The more energy, sugar, saturated fats and salt in a food product, the more unfavourable red points the product will receive, which may be detrimental to its Nutri-Score. Products can receive up to 10 points each, depending on their value (Figure 2).
- The more fruits, vegetables, fibres and proteins, the more favourable green points the product will receive, which may improve its Nutri-Score. They can receive up to 5 points each, depending on their value (Figure 2).
- To obtain the final score, favourable points are subtracted from unfavourable points. The Nutri-Score is awarded according to the table in Figure 3. The unhealthiest food has +40 points, the healthiest food -15.

Figure 3: Points / Nutri-Score identification tables according to food categories



Source: [Coltruyt Group](#).

The identification of nutrient quantity and the points to be awarded is based on scientific research and will therefore be updated every three years from now on.³¹ New nutrients may be included in the calculation to reflect the current level of knowledge. For instance, rapeseed oil, walnut oil and olive oil in a product are now taken into account in the calculation of the Nutri-Score via their inclusion in the “protein” category, which positively impacts the Nutri-Score.³²

2.3 Characteristics of NutrInform

2.3.1 Background³³

NutrInform was established in Italy by a decree of the Ministry of Health, the Ministry of Economic Development and the Ministry of Agricultural Food and Forestry Policies and is based on the indication

³⁰ [Alcoholic drinks which exceed 1,2% of alcohol, teas, coffees, yeasts, aromatic herbs, fishes, fruits and vegetables](#) are excluded from the Nutri-Score system.

³¹ From the call of the [Group of European scientists supporting the implementation of Nutri-Score in Europe](#), published on 16.3.2021

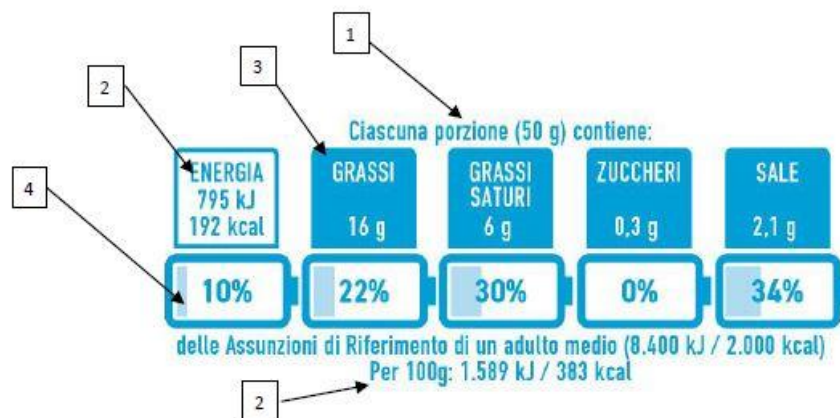
³² Ibid.

³³ For the entire sub-section [Decreto del 19 novembre 2020 Forma di presentazione e condizioni di utilizzo del logo nutrizionale facoltativo complementare alla dichiarazione nutrizionale](#) in applicazione dell'articolo 35 del regolamento (UE) 1169/2011, Gazzetta Ufficiale 304, 7.12.2020.

of actual portions of food or drink, and also gives an indication of the quantity of nutrients per 100 grams or millilitres. NutrInform's goal is to provide nutritional information "without effectively influencing consumer decisions".

Nutrition information is displayed in a graphic form consisting of a series of boxes with icons representing "batteries" at the bottom for energy and 4 nutrients, whose consumption should be limited: fat, saturated fat, sugar, and salt. The consumer should therefore avoid "exceeding" the daily dose of nutrients, i.e. filling the batteries more than recommended, considering other foods (nutrients and calories) consumed throughout the day. In detail, the "NutrInform" front labelling scheme contains: Information on the specific portion size of the product, expressed in grams or millilitres (nr. 1 in Figure 4); Information on the energy value expressed in kilojoules (kJ) and kilocalories (kcal) per 100g/ml and for a specific portion of the product (nr. Information on the amounts in grams of fat, saturated fat, sugar (total) and salt in a specific portion of the product (no. 3); Information on the percentage reference intake (%AR) based on the amount of each nutrient and energy value contained in a portion (no. 4).

Figure 4: Design of NutrInform



Source: Ministero dello Sviluppo Economico, [Manuale d'uso del marchio nutrizionale "NutrInform Battery"](#).

According to its supporters, NutrInform is considered to be in compliance with Regulation 1169/2011, which allows the declaration of nutritional information for energy and some specific nutrients on the front of packages per portion, and aims to establish "reference portions" for each product category based on available scientific nutritional evidence. 34 Nevertheless, as of April 2021, no assessment of NutrInform's compliance with Regulation 1169/2011 has been issued by the European Commission.

³⁴ The concept of "portion" is here understood as a standard portion representing the specific quantity of a food, normally expressed in grams, which is taken as the reference unit of measurement. The portions of different foods have been defined by experts in consideration of their nutrient content, the average food consumption of the Italian population and the weights of some packaged products available on the market. Standard portions, which are consistent with food tradition and of a reasonable size for consumer expectations, should be recognisable and identifiable both by health and food professionals and by the population (SINU, Società Italiana di Nutrizione Umana Livelli di Assunzione di Riferimento di Nutrienti ed energia per la popolazione italiana. [IV Revisione. Coordinamento editoriale SINU-INRAN](#). Milano, SICS, 2014). According to the scientific committee that defined NutrInform (Ministero dello Sviluppo Economico, [Manuale d'uso del marchio nutrizionale "NutrInform Battery"](#), p. 9-10) the standard portion ("serving size") should also not be confused with the "portion size", i.e. the amount of a specific food consumed that is individually taken on a specific consumption occasion (in a meal or snack). A "portion size" is not a standardised quantity, but is subjective and variable (The United States Department of Agriculture (USDA) - U.S. Department of Health and Human Services. [Dietary Guidelines for Americans 2010](#)).

Each battery depicted by NutriInform corresponds to the level (expressed in percentage) of a specific nutrient by comparison with the daily recommended portion for this nutrient, based on the Reference Intakes (Part B of Annex XIII of Regulation 1169/2011).

2.3.2 Ownership and Trademark Use³⁵

The owner of the trademark is the Ministry of Economic Development, while the use of the mark is voluntary and limited to natural or legal persons, producers and retailers of food products marketed in Italy and in the European single market. The right to use the mark is granted free of charge to all operators who communicate their willingness by registering on the appropriate section of the Ministry of Health website.

2.3.3 How does NutriInform work?

The NutriInform front-of-pack labelling scheme contains:

- Information on the specific portion size of the product, expressed in grams or millilitres (n°1 on Figure 5).
- Information on the energy value expressed in kilojoules (kJ) and kilocalories (kcal) per 100g/ml and for a specific portion of the product (n° 2).
- Information on the amounts in grams of fat, saturated fat, sugar (total) and salt in a specific portion of the product (n° 3).
- Information on the percentage reference intake (%AR) based on the amount of each nutrient and energy value contained in a portion (n° 4).

3 Assessment and impact of Nutri-Score and NutriInform

3.1 Assessment and Impact of Nutri-Score

3.1.1 Assessment

Nutri-Score facilitates access to nutritional information through its simplified colour-coded rating of a food product's nutritional content. It has helped to improve the nutritional content of products in cases where a recipe has been modified by the food industry to adapt to the new choices being made by consumers (currently occurring on the French market).³⁶ The Nutri-Score algorithms driving food product scores are entirely based on peer-reviewed scientific publications. Their beneficial effect on nutrition is statistically significant (see Section 3.1.2.). On the other hand, however, it reduces the complexity of the nutritional content of a food product to a one-dimensional approach whereas consumers might need more information to make their choices depending on their preferences.³⁷ It may irritate consumers themselves in the long-term as they may regard Nutri-Score as an attempt to manipulate their diet without their consent.³⁸ It could impact purchase decisions to such an extent that small food

³⁵ Ibid.

³⁶ Santé Publique France, [Nutri-Score](#).

³⁷ To temper this assertion, a balanced argument from [the Commission' literature review on nutritional labelling](#): "When it comes to information disclosure, 'more is not necessarily better' or, in other words, 'too much information may harm'. This may partly explain an inherently contradictory finding, namely the relative attractiveness of directive (or evaluative, or simpler) front-of-pack schemes, and the respondents' concomitant self-reported preference for more information (see Hodgkins et al., 2012)."

³⁸ A public official's position on the topic, gathered during interviews conducted in February and March 2021.

producers have difficulty coping with mandatory adherence to the scheme.³⁹ It does not give any details about diet, i.e. on the complementarity with other food products giving rise to a balanced diet.⁴⁰ It does not consider additives or processed foods in its rating process.

3.1.2 Impact

Recent studies have been released on front-of-pack nutritional labelling schemes, almost all of which include Nutri-Score in their analysis. For instance, in one of them, the presence of Nutri-Score enabled respondents to assess the healthiness of products more effectively.⁴¹ In a second, Nutri-Score significantly improved the nutritional quality of the food basket purchased by the consumer.⁴² A third study showed that Nutri-Score's impact on purchasing behaviour was greater over time on younger populations and on those who frequently read the labelling. The labelling system was well received and used by all socioeconomic groups, including subgroups who are more likely to have a lower-quality diet.⁴³ Lastly, in another study, Nutri-Score demonstrated the highest overall performance in "helping Italian consumers to correctly rank the products according to their nutritional quality compared to the reference intakes".⁴⁴ 94% of surveyed French consumers said they were in favour of the mandatory use of Nutri-Score. In July 2020, products with Nutri-Scores amounted to 50% of total food sales. 57% of consumers declared to have modified at least one purchase decision as a result of the Nutri-Score label.⁴⁵

Nevertheless, the Commission's literature review identifies knowledge gaps which remain to be investigated: the magnitude of the effect of front-of-pack nutritional labelling on consumption, production, diet and health outcomes, as well as on the intra- and extra-EU food trade.⁴⁶

3.2 Assessment and Impact of NutrInform

3.2.1 Assessment⁴⁷

Numerically quantified nutritional values are displayed in order to facilitate a comparison of similar products or ascertain whether food products are suitable for special diets. However, its information is less easy to read and comprehend than other labelling systems aimed at the consumer, who may therefore ignore the information provided. In addition, the fact that the nutritional information is less easily readable and comprehensible may trigger consumer reluctance to purchase certain food products and this may have a negative impact on the sales of products using the NutrInform label.

³⁹ A food industry official's position on the topic, gathered during interviews conducted in February and March 2021.

⁴⁰ Major criticism from Italian stakeholders regarding the Nutri-Score, gathered during interviews conducted in February and March 2021.

⁴¹ De Temmerman et al., [The impact of the Nutri-Score nutrition label on perceived healthiness and purchase intentions](#), 02.2021.

⁴² Dubois et al., [Effects of front-of-pack labels on the nutritional quality of supermarket food purchases: evidence from a large-scale randomized controlled trial](#), 04.2020.

⁴³ Sarda et al., [Appropriation of the front-of-pack Nutrition Label Nutri-Score across the French Population: Evolution of Awareness, Support, and Purchasing Behaviors between 2018 and 2019](#), 09.2020.

⁴⁴ Fialon et al., [Effectiveness of Different front-of-pack Nutrition Labels among Italian Consumers: Results from an Online Randomized Controlled Trial](#), 05.2020.

⁴⁵ OQALI, [Suivi du Nutri-Score](#), 2020.

Ministère de la Santé, [Évaluation à 3 ans du logo nutritionnel Nutri-Score](#), 02.2021.

⁴⁶ European Commission, [Front-of-pack nutrition labelling schemes: a comprehensive review](#), 10.06.2020.

⁴⁷ Roberto Volpe, Stefania Maggi, [Nutrition Labelling: We Need a New European Algorithm](#), ES Journal of Nutritional Health 2/2020, 4-5.

3.2.2 Impact

Between August 2020 and March 2021, two experimental studies⁴⁸⁴⁹ measured the effects of NutrInform on consumer understanding of this new front-of-pack labelling scheme as compared with Nutri-Score. The two studies indicate that, both in the specifically Italian context and in the other six countries, NutrInform received largely positive assessments in terms of both subjective comprehension and liking. The positive judgements are shared in all the tested national contexts, with specific socio-cultural differences making little impact, even though consumers were already more familiar with Nutri-Score. Nevertheless, these results were drawn from experiments and do not represent such strong scientific evidence for NutrInform’s effectiveness as cohort studies, which are still lacking for this labelling scheme.

3.3 Comparison between Nutri-Score and NutrInform

The previous sections show that Nutri-Score and NutrInform share similarities but also display major differences. This is illustrated in the following table.

Table 1: Comparison between Nutri-Score and NutrInform⁵⁰

Nutri-Score	NutrInform
Features	
Rating in the form of letters	Rating in the form of numbers and percentages
1 rating dimension and 1 piece of information for the consumer	5 rating dimensions and 11 pieces of information for the consumer
Colour-coded	Blue
Use of scientifically founded nutritional algorithms to determine the Nutri-Score	Display of raw information
Based on a 100 ml/g portion	Based on a 100 ml/g portion and a need-related reference portion
No emphasis on diet	Emphasis on diet via the batteries
Impact	
Significantly improves the nutritional content of consumer food purchases	Unknown impact on consumer purchases
Significantly improves the ability of consumers to choose products with a better nutritional content	Unknown impact in real life on the ability to classify food products according to their nutritional content
Significantly incentivises producers to reformulate their product to improve their Nutri-Score	Unknown impact on product reformulation

⁴⁸ Marco Francesco Mazzù , Simona Romani & Antea Gambicorti, [Effects on consumers’ subjective understanding of a new front-of-pack nutritional label: a study on Italian consumers](#), International Journal of Food Sciences and Nutrition, 4.8.2020.

⁴⁹ Marco Francesco Mazzù, Simona Romani, Angelo Baccelloni & Antea Gambicorti, [A cross-country experimental study on consumers’ subjective understanding and liking on front-of-pack nutrition labels](#), International Journal of Food Sciences and Nutrition, 3.3.2021.

⁵⁰ All sources are to be found in Section 3.1 and 3.2.

Used by every socio-economic subgroup	Unknown impact in real life by socio-economic subgroup
Unclear magnitude of the impact on consumption and production sides	
Unknown impact on health outcomes and costs	
Unknown impact on intra-EU and extra-EU trade	

4. Stakeholder Positions on Nutri-Score and NutrInform

4.1 French Stakeholder Positions

Many French stakeholders show a strong convergence towards Nutri-Score. The French government, backed by the WHO and the European Commission, promotes Nutri-Score within the COEN initiative and the EU because it seeks to improve global welfare and reduce health costs in the long term. Consumer associations are in favour of Nutri-Score and aim to raise more awareness of its benefits for nutrition. The food industry takes a neutral stance regarding Nutri-Score.

4.2 Italian Stakeholder Positions

Several Italian stakeholders fear that the Nutri-Score scheme will have a negative effect on the consumption of many products that are the flagship of the Italian food sector throughout the world. According to these critics, many products with a designation of origin would fall into the C, D or E Nutri-Score category (orange and red colours)⁵¹, therefore making it preferable for them to be consumed in a limited way in a healthy diet.⁵² The newly appointed Minister of Agriculture, Stefano Patuanelli, expressed his strong opposition to Nutri-Score, considering it harmful for businesses and citizens. The President of Coldiretti,⁵³ Ettore Prandini, shared the same opinion claiming that both the French Nutri-Score label and the British Multiple Traffic Lights system are at risk of being misleading, discriminatory and incomplete." Agostino Macrì, head of the Food Safety Area of the UNC (National Consumers' Union) doubted the scientific basis of "Nutri-Score, whose colours simplify the message and may create distortions".⁵⁴ According to Ivano Vacondio, President of Federalimentare⁵⁵, NutrInform does not classify any food as unhealthy per se, but it does illustrate the right amount to be consumed daily, while Nutri-Score did not inform the consumer of how much sugar, salt or fat a food contains.⁵⁶ CREA⁵⁷ members⁵⁸ interviewed for this study stated that NutrInform should be preferred to Nutri-Score because it

⁵¹ In this regard, in the [Opinion 2020/2260\(INI\)](#) "on a Farm to Fork Strategy for a fair, healthy and environmentally friendly food system" issued on 18 March 2021, the Committee on International Trade of the European Parliament asked the European Commission "to explore the necessity of applying specific conditions to and exemptions for certain food categories or foodstuffs such as olive oil and for those covered by geographical indications, for the assessment of harmonised nutritional labelling, in view of their key role in EU trade agreements and protecting local value at a global level". If this position should be shared also by the other European institutions, it could result in an exemption of the mentioned food products from the obligation to display any kind of front-of-pack labelling scheme.

⁵² Oreste Gerini, "[NutrInform Battery](#)", [la risposta italiana al "Nutri-Score"](#), Consortium 2020_04, 18.12.2020.

⁵³ Coldiretti (Confederazione Nazionale Coltivatori Diretti) is the largest association representing and supporting Italian agriculture.

⁵⁴ Id.

⁵⁵ Federalimentare represents the Italian associations active in the food industry, with more than 6,850 companies with at least 10 employees each.

⁵⁶ Caterina Vianello, [Cos'è l'etichetta Nutri-Score e perché l'Italia non la vuole](#), dissapore.com, 10.12.2020.

⁵⁷ CREA - Centre for Food and Nutrition Research, part of the Italian Ministry for Agricultural, Food and Forestry Policies.

⁵⁸ Interview with CREA experts, 10.3.2021.

would provide specific information on the amount of individual nutrients (salts, fat, saturated fat, sugar), whereas Nutri-Score, whilst providing an overall “letter+colour” rating, would not explain whether the colour assigned was due to e.g. too much fat, salt or sugar in the food.

However, there are also Italian stakeholders who are in favour of Nutri-Score and critical of NutriInform: the consumers' protection association AltroConsumo, for example, believes that Nutri-Score should be preferred because it is synthetic and colourful in the representation of the food rating, and therefore easier for consumers to read; NutriInform, on the other hand, which does not use colours and relies on "battery" symbols, would not offer consumers a synthetic food rating index and would not therefore facilitate consumer choice. Furthermore, by referring to a portion of a food in a system without standard quantity portions, NutriInform would prevent consumers from comparing different products.⁵⁹

5 Recommendations for a European Solution

The discussion as to which front-of-pack labelling scheme should be adopted by the EU has gained new attention following the adoption of the Farm-to-Fork Strategy. The European debate, which had been developing in fairly clear-cut but generally peaceful terms, has recently taken on a more radical tone with two new initiatives, one favouring Nutri-Score and denouncing the NutriInform, and the other denouncing the Nutri-Score without defending any particular alternative, presenting direct criticism of each other's front-of-pack label without entering the scientific discussion. At present, therefore, neither Nutri-score nor NutriInform can be adopted as the European front-of-pack labelling scheme; furthermore, the confrontation between the supporters of each model has escalated, so the adoption of either model would immediately trigger resistance from the opposing camp. Nevertheless, the cep Network aims to provide recommendations for the Commission which may eventually lead to the adoption of a single labelling scheme based on consumer preferences.

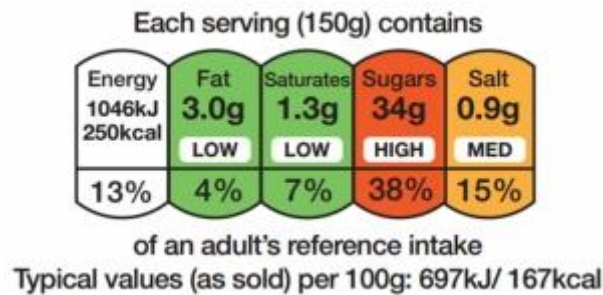
5.1 The “Unitary Compromise” Solution

The European Commission could decide to endorse a labelling scheme which would allow the supporters of Nutri-Score and NutriInform to meet halfway and would be equivalent to option 2 in the Commission's consultation. An example is the British Multiple Traffic Lights (MTL) system: it provides information about the amount of energy (kJ and kcal), fat, saturated fat, sugars (total sugars) and salt, contained in a food product, displayed per 100g/100ml, per portion or both⁶⁰. The format includes red, amber, green colour-coding and percentage Reference Intakes, resulting in a traffic light labelling system.

⁵⁹ Matteo Metta, [L'Italia sceglie l'etichetta “a batteria”. Perché sarebbe stato meglio il Nutri-Score](https://altroconsumo.it/2020/01/29/italia-sceglie-etichetta-a-batteria/), altroconsumo.it, 29.1.2020.

⁶⁰ British Nutrition Foundation, [Helping you eat well](https://www.bnf.org/uk/helping-you-eat-well/).

Figure 5: Design of the British “Multiple Traffic Lights” label



Source: [British Nutrition Foundation](#)

The MTL Label, used in the UK as a mandatory front-of-pack labelling scheme, if proposed for the EU, would firstly have the advantage of identifying a single label model for all EU producers and retailers; secondly, the MTL Label actually represents a potential compromise between Nutri-Score and NutrInform, as it contains both the colour-coded design (like Nutri-Score) and the numerical quantification by quantity and/or portion of a certain type of nutrient contained in the food (like NutrInform). Eventually, the MTL system proved its efficiency, although minor compared to Nutri-Score's,⁶¹ regarding the ability given to consumers to classify and choose food products in function of their nutritional value. Its adoption would relieve the European Commission of the obligation to choose between one of two conflicting options, without compromising the aim of providing consumers with clear and easily readable information on food content.

5.2 The “Market” Solution

The Commission could also immediately work towards removing potential regulatory barriers between national food markets due to front-of-pack nutritional labelling by setting up a “nutritional labelling competition” in the EU. This would “let the market decide” which front-of-pack nutritional labelling scheme should be chosen by leaving it up to consumers and producers. The EU would only apply Art. 35 of the FIC Regulation 1169/2011 to define the pool of authorised labelling schemes. This would make it mandatory for all producers to introduce any one of the front-of-pack nutritional labelling schemes, without the EU prescribing which one. The product choices of European consumers will, in the course of a few years, give an indication of which label they prefer. Once the European food market has defined a “winner”, the EU Commission could revise its regulation and impose a single mandatory front-of-pack nutritional labelling scheme.

In this regard, European Member States would have to agree to transfer control over the introduction of front-of-pack nutritional labelling solutions to a European body. The European Commission could commission, e.g., the European Food Safety Authority (EFSA) to examine all the labels submitted by the Member States and verify their compatibility with the guidelines of the initiative supported by the European Commission. All accepted labels would be adopted by the Member States and marketed both in their national markets and in other Member States. This option would also have the advantage of flexibility as stakeholders would be able to submit front-of-pack nutritional labelling schemes for

⁶¹ Dubois et al, [Effects of front-of-pack labels on the nutritional quality of supermarket food purchases : evidence from a large-scale randomized controlled trial](#), 04.2020.

evaluation by EFSA at a later stage, stimulating research in the field and developing innovative labelling proposals for the future.

The option of introducing an obligation to use a front-of-pack nutritional labelling scheme is in any case preferable: otherwise it is likely that consumers would remain without any kind of informative label, which contradicts the European Commission's intention in launching this important initiative on transparency and information in the food sector. In addition, although the first of the two above-mentioned solutions represents a compromise that tries to meet the needs of the two factions supporting Nutri-Score and NutrInform, its weakness is that it provides a specific, once-and-for-all food label model. This would "petrify" the debate on the best front-of-package label for the European market. The second solution, however, offers the advantage of maintaining a high degree of flexibility with regard to both the possibility of introducing further front-of-packaging labelling models in the future and the freedom of commercial operators and consumers to choose between several labels in line with the parameters set by the European Commission.

6 Conclusion

Regardless of the decision taken, the Commission should organise an extensive and articulate awareness and education campaign, aimed at improving the understanding of the contents of the European label(s). The ultimate goal of the initiative is, in fact, to enable consumers to fully understand the information about the nutritional values of the food products they buy.

Furthermore, the Commission should consider two concurrent major phenomena: the development of nutritional digital apps like the French app Yuka⁶² and the multiplicity of front-of-pack labels – especially sustainability and organic farming labels. Indeed, the multiplicity of information sources on different features of food products (sustainability, nutrition) could trigger confusion among consumers. A harmonisation effort is needed to avoid such a situation. The Commission could use the opportunity of the Sustainable Labelling Framework announced in the Farm-to-Fork strategy to bring in consistency on the matter and thus improve the efficiency of its public health policies.

⁶² [Yuka](#) is a mobile app enabling to scan food products to obtain clear nutritional and environmental information.

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