1. **Introduction**

1.1. **Food Labelling Schemes**

Food labels do already depict an extended number of nutritional information. However, the complexity of requirements, many of which have not yet been clarified, creates a difficult puzzle for the companies’ food technicians responsible for the printing space, the form of the information, the legal compliance, and the correctness of the information. The available nutritional information, can be distinguished as:

- **Nutrition Statement**
- **Dietary guidelines**
- **Nutrition and health claims**

**The Nutrition Statement** is mandatory on all packaged foods, since December 2016 according to the European Regulation 1169/2011. The mandatory declaration data are: a) energy value (calories) and b) amounts of fat, saturated fats, carbohydrates, sugars, proteins and salt. Optionally, in a more extensive nutritional statement, there may be monounsaturated, polyunsaturated, polyols, starch, edible fiber, vitamins, minerals.

It is not mandatory to declare the coverage of daily needs (dietary guidelines) as well as nutrition and health claims.

In this context, several national or sectoral initiatives have been developed:

1. In 2005, the European Confederation of Food & Drink Industries Europe (formerly CIAA, Confédération des industries Agro-Alimentaires) launched the GDA (Guideline Daily Amount) label or the so-called "barrels" (from the corresponding cylindrical icons). This marking is on the front of the package (front of pack) and is quite successful, so it has been preserved in many foods packaging.

2. The “traffic light” labeling system, an initiative of the UK Food Standards Agency, was launched in 2013 to make it easier for consumers to read nutrition labels correctly and in conclusion to make healthier choices easily and quickly, making comparisons between similar products. It uses three colors, green, orange, and red on the front of the package, which correspond to small, medium, or large amounts of fat, saturated fat, simple sugars, and sodium / salt.

3. The "Keyhole" label launched by the Swedish Food Authority in 1989 and 2007 was extended to all Scandinavian countries. The symbol "Keyhole" has as its main purpose to indicate to consumers the healthiest choices between the same product category. Its use is voluntary and is considered the common Nordic symbol in the field of nutrition labelling.

4. **Italy has launched the system with the "batteries", the Nutrinform battery**. This system (in collaboration with 4 Italian Ministries of Health, Development, Finance and Agriculture), is a schematic variant of the GDAs, (barrels). Its peculiarity is that the coverage rate of ESAs is represented by the charging power of a battery.

The European Commission, following the initiatives, has decided on the development and implementation of the F2F strategy, the result of which is the proposal to implement a unified nutrition labelling system (FOPL).

1.2. Nutriscore

The Nutri-Score system is another nutrition labelling system, designed to appear on the front of food packaging (Front of Pack). It classifies packaged foods, applying a scale of 5 colors and letters (where A is green and represents the highest nutritional value, while E is dark orange and indicates the lowest nutritional value). This system, was proposed by the French Nutritional Epidemiological Research Group (EREN). https://www.santepubliquefrance.fr/en/nutri-score.

A strong front of political and scientific pressure has already been formed towards the European authorities, with the participation of two major Mediterranean countries, Spain and France, where the latter is known to have pioneered the early, voluntary implementation of the system by several European countries (The Netherlands, Belgium, Germany, Portugal, Denmark and Luxembourg), with the agreement of major industries and food retailers, like Nestle, Danone and Auchan. Within this framework, there are already 2 Committees of international representation, one steering committee and one scientific committee, consisted by representatives of the competent authorities of the member states that are in favor of Nutriscore, as well as eminent scientists of Public Health, Nutritional Epidemiology and Nutrition, headed by the French professor Mr. Serge Hercberg from INSERM and the University Paris 13 Nord. The consortium is supported by a platform for registering and acquiring the right to use the Nutriscore logo from any food production company that wants to implement the new system voluntarily, through a simplified digital procedure.

The European Commission has asked EFSA to issue a scientific opinion on the matter, with a deadline of March 2022, with a deadline of March 2022, with a view to completing the revision of the Regulation by the end of 2022. The competent committee of EFSA will schedule a consultation with the state, social and scientific stakeholders directly concerned.

1.3. First Reactions

To date, unfortunately, only fragmentary reactions have been expressed, from countries of the European south, such as Italy, Greece, Cyprus, on the grounds that the proposed system of compulsory front labelling is blatantly unfair to Mediterranean food products, endangers the agri-food sectors and the sustainability of traditional food models, but also from other countries, such as the Czech Republic, Hungary, Latvia and Romania. The objections were raised within the European Parliament from Greek and Italian MEPs, as well as unions of Spanish producers, and expressed in a resolution of the European Parliament on 13-12-2019.

In the same direction, following the Greek MEPs’ initiative, the EP voted to propose to the Commission (Internal Market, Consumers and Trade), an exclusion of PDO / PGI and TSGI products, as well as olive oil, from the implementation of a mandatory, pan-European front-labeling system, in the context of the forthcoming amendment of the requirements of Regulation 1169/2011, on the labelling and nutrition claims of foods.

The above actions are under the pressure of specific sectoral interests and have not yet succeeded in triggering a public debate on a more effective nutrition labelling system. They focus on claiming exceptions to the application of nutri-score rather than on meaningfully criticizing the incorrect nutrition information to the consumer.

1.4. First Evaluation

The proposed Nutri-score system, categorizes food into 5 categories, with a simplistic, algorithmic method that:

1. **considers** only some of the characteristics, and more specifically the calories, the amount of fat, the amount of saturated fat and the salt and sugar content, without assessing the overall nutritional profile of the food.
2. **calculates** the nutritional value at 100 grams and not per serving or percentage of daily coverage of needs,
3. **does not consider** the quantitative contribution of each food to the daily intake, nor to the frequency of consumption on a weekly or monthly basis. In this way, foods traditionally consumed at sparse intervals may be implicated with a lower score, while others, of daily...
consumption and after overprocessing, which is already engaged in by the food industry, be labelled as healthier. Typical are the examples of classification in the same category of unprocessed products of one ingredient, eg olive oil, with other processed, such as "cola" light, or ketchup (kat. C).

4. does not consider the content of beneficial ingredients such as vitamins, trace elements, antioxidants, omega-3 and omega-6 fatty acids as well as a variety of other bioactive ingredients. By using this seemingly simple and supposedly easy to understand (therefore dangerous) labelling system, however, underestimating many products of high nutritional value.

5. does not consider that some foods are used as primary ingredients for the manufacture of other finished foods. By highlighting fat, salt, and sugars as enemies of public health, adopting simplistic visual divisions based on them, we are leading to a peculiar dietary racism, which only irrationality brings and apparently only the nominal purpose of information does not serve.

The collective "incrimination" of food due to high content of fat, salt and sugars or due to high caloric value, not taking into account other critical characteristics, such as the content of useful and healthy ingredients (vitamins, trace elements, etc. etc.), but mainly their percentage of long-term participation in a balanced diet, can lead to wrong and simplistic choices for the consumer. It does not facilitate, on the contrary, negates the adoption of comprehensive dietary guidelines and healthier dietary habits.

This important issue needs to be studied from various angles, which have unfortunately been absent until now, from the discussions of front labelling of the packaging and Nutriscore.

1.5. Greek Collaborative Initiative

Their opposition to the promoted system and with a request for the adoption of a strategy for the proper information of consumers and the non-implementation of a misleading system of nutritional quality evaluation such as Nutri-Score, have already submitted with independent interventions at national and European level, dozens of associations, among which the co-signatories of the present bodies.

Initiated and hosted by the Athens Chamber of Small & Medium Industries (BEA) an online meeting held on 28/07/21, of almost all representative bodies of the Greek Food Industry, decided to jointly develop coordinated interventions, both at national and European level, with scientifically supported argumentation on the negative effects of the application of NUTRISCORE on manufacturing enterprises and their producers. The bodies that co-sign the principled text are:

1. Athens Chamber of Handicrafts (B. E. A.)
2. Federation of Bakers of Greece
3. Federation of Professional Craftsmen of Confectioners of Greece
4. Exporters’ Association of Crete
5. Federation of Greek Dairy Industries (SEVGAP)
6. Union of Industries – Handicrafts of Confectionery of Greece
7. National Interprofessional Organization of Honey
8. SEVE - Exporters’ Association
9. Panhellenic Union of Processors – Formulators – Exporters of Table Olives
10. National Interprofessional Organization of Table Olives
11. Scientific Society of Encyclopaedists of Olive Cultivation
12. Federation of Greek Olive Oil Standardization Industries (SEVITEL)
13. Federation of Greek Meat Processing Industries
15. The Hellenic Confederation of Professionals, Craftsmen & Merchants (GSEVVE)
16. INKA/ General Federation of Consumers of Greece
17. Union of Hellenic Chambers of Commerce
2. **Nutrition Policy Update**

Nutrition and Public Health

It is proven in many ways that eating habits affect the health level of populations and that the modern dietary model of the now globalized, developed world contributes to the increase of obesity and the emergence of many chronic metabolic diseases. It can steer the consumer to healthier choices and promote the level of health. Given that the information provided by any system, in the form of a nutrition declaration or a nutrition claim, is limited, the aim is to inform consumers as **objectively and comprehensively** as possible about the nutritional value of each food, in the context of a healthy dietary model, which should be promoted through national or European nutrition policy strategies.

2.1. **Except "bad" foods, there is also an unbalanced diet**

The food industry's consistent position for many years has been that there are no 'bad' foods, but only 'bad' nutrition. Due to various negative assessments on the nutritional value of certain mass-produced products, as well as the increased sensitivity of consumers, a "shallow" communication policy has been developed to deal with problematic eating habits of consumers accusations against food industry.

Specifically, the logic behind this, is that today's nutritional communication did not work all these years, because of an increase in obesity and significant / chronic diseases such as heart disease, stroke, cancer, diabetes, etc. This argument, however, which is unfortunately rather widespread, is not at all correct, as it is based on the theory that consumers are not in a position to evaluate what is good or bad for them, so we should provide them with colors, numbers and scores for to make them understand!

Nutrition, however, is much more, such as enjoyment, tradition, family, social interaction, etc. etc.

2.2. **Consumers are entitled to more than five colors and letters**

Any planning, communication, education, and responsibility must help to shape the average consumer as mature and prudent, ensuring that he is informed with all the necessary information. The aim is to educate, with serious instructions on the nutrition of consumers, starting with young children. The aim is to prevent consumers from being deceived by prevailing directives containing aphorisms of certain foods and/or certain ingredients instead of rules.

In this context, there is an urgent need for better information and education for consumers.

3. **The scientific data**

The new drafted legislation is based on scientific data of the past that existed for several years, which, if not overturned, at least to a large extent have been questioned.

3.1. **The “other” ingredients**

Many foods have very important bioactive ingredients (antioxidants, special peptides, fatty acids, sterols, etc.). The Nutriscore model cannot just pretend that they are of no value. It is not possible, therefore, that such foods - many of them traditional - receive negative Nutri-scores. This is poor nutritional information / advice to the consumer if not misleading, as Professor Kyriakides of YALE has shown.
The example of the "synergy" of the beneficial components of the Mediterranean diet is the most characteristic.

3.2. Health Claims

Findings of many scientific studies over-emphasize the nutritional value of products, such as olive oil and olives, and support their positive health claims and dietary recommendations.

There are many foods that are degraded by the Nutriscore system, while they contain perhaps more than one nutrient, which are referred as health claims of the European Regulation 432/2012, at the same time, they are also sold individually, as nutritional supplements and are promoted either for the prevention of diseases by strengthening the immune system, or for a more balanced and healthy diet. They are considered healthy as food supplements, while they are not as food ingredients!? It should just not be acceptable, for any score model, to indirectly abolish or ignore Regulation 432/12!

Many fish products bear legal claims on nutrition issues in accordance with the European Regulation 1924/2006 concerning Omega-3 fatty acids as well as health claims based on Regulation 423/2012.

The consumption of olive oil, which is an excellent source of polyphenols and unsaturated fatty acids, is also associated with health claims, while the National dietary guidelines recommend the daily consumption of two servings of dairy products.

3.3. Saturated Fat - Salt

There is a significant number of scientific studies, which question their relationship (cause-and-effect) with cardiovascular diseases. There are also "guilty" food ingredients (e.g. salt, sugars) for which consumers have very different needs depending on their physical activity / exercise. It is just not rational to unreluctantly incriminate them.

We must not overlook the use of salt in many foods, as a natural means of preservation, thus contributing to the reduction of the use of synthetic additives. Although the excessive use of salt has been combined with certain diseases, its addition to many traditionally fermented products such as pickles, a multitude of dairy products and table olives is necessary for the proper development of the production process. Salt may have been combined with certain diseases, however it contributes to the prevalence of the desired lactic acid flora and to the inhibition of the growth of pathogens. The presence of beneficial lactic acid bacteria, contributes positively to the organoleptic characteristics of the products, while many of them also have probiotic activity.

3.4. Bioavailability of nutrients

Not all nutrients have the same bioavailability in the different foods contained in them and it is therefore at least wrong to characterise and rate foods on the basis of only their nutritional content. Not all proteins have the same biological value. It is not possible for simply their quantity to give sufficient and necessary nutritional information. Also, there are nutrients, which act synergistically or sedatively in the absorption of other nutrients, making the entire complex of a food unique, so it is wrong to examine it and rate it clearly only at the numerical level of its components. There are many scientific studies that have shown these results and the differences are indeed significant that completely change the real nutrient profile of a food.

3.5. Food Processing

One point that is overlooked is the fact that some foods must be cooked before they are consumed, while others are not. The effect of this heating stage on the preservation of its nutrients or on the
reduction or increase of their bioavailability is not taken into account and everything is labelled and rated with the recommendation stated on the packaging, which is also practically not correct.

Therefore, a score based only on the net content of certain nutrients in food is rather short-sighted and, in many cases, misleading.

4. **Strategy for a Complete Nutritional Value Assessment System**

4.1. **Fundamentals**

The ultimate aim is the proper nutrition of citizens, based on a system of integrated and not unilateral information. In this direction, producers, nutritionists, and consumer organizations must cooperate at national and European level to create a new nutritional strategy.

We fully support the European authorities seeking an effective system of nutritional education, which leads to the right choices, part of which is the labelling of foods, uniform and mandatory – however, this should improve and not obscure the information of consumers, for the selection of healthier foods and the acquisition of healthier eating habits.

The new system of nutritional education should also give priority to the consumption of more traditional and unprocessed foods and be based on scientific data and epidemiological studies.

From all the above, it is shown how misleading it is to evaluate food nutritionally through the Nutri-score system based solely on the content of certain nutrients. This score can lead to the opposite results from those it is aimed at.

The Mediterranean diet has been proven to be an important factor for the improvement of Public Health, while its version based on the balanced nutritional variety of foods of animal and plant origin and the use of olive oil as the main source of fat intake, contributes to better health, the prevention of chronic diseases and the improvement of life expectancy.

In addition, olive oil is used as a garnish in a variety of recipes of healthy meals, due to its property as a extractive agent of fat-soluble beneficial ingredients, which will be absorbed by the human body only in its presence. A typical example is the absorption of lycopene - an important fat-soluble vitamin contained in tomatoes - or various components of herbs, which give aroma, taste, and valuable substances to the food, only if cooked in the presence of olive oil.

It is also crucial to ensure that, especially for micro-enterprises, there will be infrastructure that will allow them, at low cost, to respond to the new regulatory environment.

4.2. **Need for Documentation**

It has been proven that it is difficult to carry out studies assessing the effectiveness of each system, not so much on purchasing behaviour, but more on improving public health. All types of labelling tend to be more oriented towards the “branding” and “scoring” of healthy choices, rather than towards the use of quantitative data covering the daily intake. Recently, a virtual experiment was carried out at Harokopio University, to investigate whether the consumer prefers the indication of calories, or a simple symbol of healthy choice in restaurant lists.

From the branding perspective, the effective information will develop consumer’s judgment leading to the desirable nutritional choice. In other words, any nutritional weighting system, bearing limits on calories, fat, sugar, salt, etc. will benefit these food producers who will be able to readjust compositions by reformulating their products.

Signs, symbols, and scales of evaluation without nutritional education, can have negative consequences, both in terms of public health, but also in terms of social & commercial discrimination.
For public health in particular, attention must be paid to quantity and frequency of consumption. A food bearing symbol of health and well-being (e.g. heart, apple) or is graded green and not red, does not necessarily mean that it should be consumed very often and in large quantities. On the other side, nutritional “branding” should not exclude traditional products such as virgin olive oil, olives, and honey only because they have a lot of fat, salt or sugar with measured in 100 gr / ml. Our diet is the aggregation of our food choices and not the sum of “colored” products - there is no value when food and gastronomic culture are missing.

4.3. The commercial trap of exceptions

It should be emphasized that any promise that traditional products are likely to be excluded from Nutriscore, is not only misleading, but also distorts the final result. Even if it happens, the final image on the shelves will project the products with an impressive Nutriscore “medal” A or B, which will “hang from their necks” against any exceptions. It is obvious that consumers will prefer the former, thus causing unfair competition. In any case, the legislation is expected to clarify the concept of "traditional products": does it concern only PDO-PGI or other products which, by Regulation (EEC) No. 1129/2011, are considered traditional without certification?

4.4. Initiative’s Proposal

The Initiative will monitor and express its opinion on the ongoing legislative initiative of the European Commission, for the front of Pack Nutrition labelling of foods as intensified in EFSA and at any other level of the EU. It will also disseminate the information gathered, mobilizing, and coordinating all stakeholders.

The battle, Food Producers should fight, is deployed in three levels: a) the non-implementation of Nutriscore system as it is proposed, b) the co-formation of a European labelling system that takes into account all the nutritional characteristics of products and c) the promotion of a holistic the nutritional education of citizens, which will ensure in the best possible way both their health and the preservation of diversity and tradition in the agri-food sector.

A single, scientifically based argumentation should be adopted in a coordinated manner and alliances should be sought at national and European level:

1. Consumer Organizations
2. Nutritionists
3. Through National Bodies to European Associations

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6. Signatories:

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3. Federation of Professional Craftsmen of Confectioners of Greece
4. Exporters' Association of Crete
5. Federation of Greek Dairy Industries (SEVGAP)
6. Union of Industries – Handicrafts of Confectionery of Greece
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