

Position paper on the voluntary nutritional labelling system **NutrInform Battery**

In order to tackle the continuous increase of overweight and obesity, it is necessary to implement nutritional policies based on the principles of a balanced and sustainable diet, through the creation and strengthening of strategies and programs that promote healthy lifestyles.

In this context, as part of the “Farm to Fork” strategy, the European Commission would like to propose a system for front-of-pack nutrition labelling (FOP) harmonized at EU level, which should be proposed by the end of 2022 with the aim of allowing consumers to make informed and healthy food choices. To this end, several FOP label types have been proposed in the last few years which differ mainly in either being nutrient-specific (such as NutrInform Battery and Multiple Traffic Light) or being synthetic (such as Keyhole or Nutri-Score). Further differences between the different FOPs lie in the intention of either being purely informative, as in the case of the NutrInform battery, or being “judgmental”, especially through the use of colours and / or letters.

In this context, it is believed that FOP nutrition labelling systems should not be one of the main tools upon which to base actions aimed at reducing obesity and incorrect

eating habits in general; on the contrary, it should be a useful tool to facilitate the understanding of nutritional value of foodstuffs, allowing them to be placed within a varied and balanced diet, whose meaning must necessarily be promoted through adequate training and information initiatives, without which the contextualization of the information on the label would be lacking.

Based on these considerations, in order to avoid the risk of simplifying food education, we do not agree with the initiative aimed at using nutritional profiles outside of EU Regulation no. 1924/2006 and, as a result, at adapting them to the needs of those who propose this use, thereby neglecting the complexity of nutritional criteria and recommendations scientifically supported by evidence. This approach, which unites several types of FOP proposed so far, tends to be perceived by the consumer as a simple method that distinguishes between healthy / unhealthy food, thereby implying a possible shift in consumption patterns towards certain products, identified as a result of the uneven application of a food-tailored score,

potentially changeable on the basis of the commercial interests of the country in which they are applied (e.g. olive oil / EVO oil vs. seed oil). This kind of approach could also help promote in food companies actions to find a way around the obstacle imposed by evaluation systems, through a food reformulation policy merely aiming at improving the score of the reformulated products, leaving out their real role and nutritional impact in the context of healthy eating models. Furthermore, with the synthetic FOP methodologies the consumer is not educated to understand the characteristics of a foodstuff but “It is Decided for them”.

In this context, a further critical issue emerges since, to date, despite the thesis supported by some representatives of the scientific world, there is no consolidated evidence of a positive effect of the proposed labelling on dietary behaviours resulting in the reduction of the prevalence of obesity / overweight as well as of related chronic diseases. Indeed, the studies published to date have not shown any impact on health but only on consumption choices.

The “NutrInform Battery” FOP labelling system indicates, through data and graphics, the amount of calories, fats, saturated fats, sugars and salt contained in a portion of the product as well as their percentage with respect to reference consumption as

defined by Regulation (EU) No. 1169/2011) to meet the daily requirement (equal to 2000 reference kcal). It differs from other FOP labelling systems because it is based on the objective of informing consumers, without any conditioning, allowing them to make informed choices useful for composing a daily nutritionally balanced diet. This system is based on some fundamental principles:

- informing the consumer in a clear, easy to understand and transparent way about the nutritional value of a foodstuff;
- being based on the concept of portion, more useful for the consumer for the purposes of elaborating their own daily diet, rather than on evaluations expressed for 100 g / 100 ml of product as used in other systems, only good for comparing foods of the same type, indeed already listed in the nutritional information;
- being based on rigorous and proven scientific evidence, from the point of view both of the nutritional role and of a proper understanding by the consumer (validation process already started but still in progress);
- being fully compliant with Article 35 of EU Regulation 1169/2011 (Food Information to Consumer), and also respectful, as much as possible, of the nutritional “reference intakes” established by EFSA;
- not being an obstacle to the free trade of goods between EU Member

States as long as it is defined the concept of portion at EU level;

- being as objective and non-discriminatory as possible towards any food.

To aim for nutritional well being, the consumer must be informed and at the same time be empowered to choose a healthy and adequate dietary pattern for themselves and others regardless of the specific dietary and cultural model.

In the European Union there are various dietary models such as the Mediterranean diet (DM) and the Nordic diet (DN), which have shown efficacy in reducing the risk for the onset of chronic non-communicable diseases.

The two models differ in the type of oils and fats consumed. Indeed, in the DM there is the use of olive oil whereas in the DN the use of seeds and animal fats is prevalent, due to the different biodiversity related to the difference in latitude. In addition to the health effects it is necessary to keep in mind their sustainability in environmental terms. As a matter of fact, from an assessment conducted on CO₂ emissions due to the production of foodstuffs, in relation to the quantities of food produced, it appears that the DM and the DN both have low values of greenhouse gas emissions.

For what has been exposed so far, one could suppose, as a further future evolution, the creation of a labelling on the front of the pack to be associated with a Dietary Model (MD), so as to be beneficial for the entire European population without penal-

izing the different cultures and traditions. The use of a score based on colours and letters could be inadequate when it comes to increase adherence to the DM, DN or any MD, as it is not able to sufficiently support the consumer at the time of choice, since they could be misled by the presence of a judgment (which is also true for traditionally healthy foods in the context of an adequate dietary model). Even more serious is the possibility that the algorithm used by the judging system may allow products characterized by a composition which is not beneficial in terms of nutritional effects (poor nutrition) to turn out to be healthy, thereby encouraging their own consumption.

On the contrary, the NutrInform Battery does not present such a possibility and may have, as already assumed, future developments and applications to different European food models, since, on the account of an objectivity related to the relationship between macronutrients, energy and portion, it would allow for innovative changes such as to make this type of labelling an even more effective and understandable tool for the consumer to achieve nutritional and wellness targets.

At the same time, the consumer is no longer a mere passive subject, whose choice is affected by a judgment (colour-letter), but they become an active subject, able to choose the most suitable foods for their nutritional needs. The innovative process of the NutrInform Battery, thanks to its adaptation possibilities, is able to address the

agrofood excellence as part of recognized identification methodologies of the entire European panorama.

The experimental research has carried out a comparison between the NutrInform Battery and the French Nutri score system, already adopted by some European countries on a voluntary basis. The research was conducted on a national and European scale, on a representative sample of families, who had a large basket of commonly used products at their home.

Two public bodies were entrusted with the scientific protocol of the research: the Istituto Superiore di Sanità (ISS) and the Council for Research in Agriculture and Analysis of Agricultural Economics (CREA). The Free International Social Studies "Guido Carli" University (LUISS) was entrusted with the operational execution.

Preliminary results of FOP experimentation

The goal of this trial was to evaluate the impact of the two systems (NutrInform Battery and Nutri-score) on improving consumers' nutritional knowledge. For this purpose, the Nutrition Knowledge questionnaire was used as survey tool allowing you to assess the adherence of the diet to food guidelines. The questionnaire allows to investigate three domains of knowledge: a) recommendations of the experts; b) the composition of some food products with respect to specific components / nutrients and critical food alternatives for the

diet in terms of health; c) the association between diet and pathologies.

The comparison made showed a clear superiority of the "NutrInform Battery" system compared to the Nutri-Score. Indeed, the total score of the questionnaire showed a variation of more than two points (2.35) between the beginning and the end of the intervention in the group that had the products labelled with the NutrInform Battery. Score clearly higher than the one detected with the Nutriscore (0.42) and with the white label (0.95).

Therefore, based on these results, the labelling with the NutrInform Battery seems to be more capable of stimulating the consumer to learn more about healthy eating as it resulted in an increase in nutritional knowledge for the sample tested.

In particular, the preliminary results show that consumers who received products labelled with the NutrInform Battery improved their knowledge regarding the experts' nutritional recommendations, that went from a score of 0.38 to a score of 0.41 for the NutrInform Battery whereas for the Nutriscore this gap was lower from 0.38 to 0.39; in addition, as regards the composition of some food products with respect to specific components / nutrients important for health, the NutrInform Battery labelling allowed better discrimination capability, so much so the score went from 0.34 to 0.37 whereas for Nutriscore the difference was lower going from 0.35 to 0.36. The most interesting data of this work was the increase in knowledge relating to the

relationship between nutrition and pathologies, which, as a matter of fact, only got better with the NutrInform Battery, going from 0.51 to 0.53. This is the most critical section of nutritional knowledge that is normally lacking in consumers. The observed variation points out that with the NutrInform Battery the consumer learns more and increases their awareness on the issues of nutrition and health.

In particular, the research results point out that in the case of using the NutrInform Battery, the answers to the questions related to the composition of foods showed sharper improvements in knowledge than those observed with the use of the Nutri-score, thereby suggesting that consumers tended to consider in more detail the pattern of nutrients that distinguishes the food.

Two recent studies have instead evaluated the level of understanding of the NutrInform battery label, comparing it with that of the Nutri-Score. In a first study, conducted on 200 Italian subjects, the NutrInform battery was found to be – as compared to the Nutri-Score - more informative and more useful for understanding the composition of the food products subject to the experiment.

Later, the A cross-country experimental study on consumers' subjective understanding and liking on front-of-pack nutrition labels, verified the effect that the NutrInform Battery new enriched information label and the Nutri-Score summary label have on subjective understanding

and liking by analysing a sample of 2776 respondents from seven European countries (France, Germany, Greece, Italy, Portugal, Romania and Spain). This study therefore extends the current research on subjective understanding and liking with a cross-country analysis. The results suggest that NutrInform Battery can help consumers understand information in a relevant way, achieving maximum performance in all countries and showing a limited impact of socio-cultural differences.

As for subjective understanding and liking, the study highlights that the NutrInform Battery turns out to be more effective than the Nutri-Score in enabling consumers to understand information in a relevant way. Furthermore, with the exception of France, where Nutri-Score presented a higher but not significant average, compared to NutrInform Battery in terms of rating, the NutrInform Battery has emerged as the preferred label for subjective understanding within and across each Country examined.

|| Essential bibliography

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Signatories of the document
in alphabetical order

Silvio Buscemi, Ordinario MED/49, Università di Palermo
Nicolantonio D’Orazio, Ordinario MED/49, Università di Chieti-Pescara
Antonino De Lorenzo, Ordinario MED/49, Università di Roma Tor Vergata
Daniele Del Rio, Ordinario MED/49, Università di Parma
Lorenzo Maria Donini, Ordinario MED/49, Università di Roma La Sapienza
Luigi Fontana, Ordinario MED/49, Università di Brescia
Lucia Frittitta, Ordinario MED/49, Università di Catania
Fabio Galvano, Ordinario MED/49 Università di Catania
Tiziana Montalcini, Ordinario MED/49, Università di Catanzaro
Andrea Natali, Ordinario MED/49, Università di Pisa
Loris Pironi, Ordinario MED/49, Università di Bologna
Marisa Porrini, Ordinario MED/49, Università di Milano
Arturo Pujia, Ordinario MED/49, Università di Catanzaro
Patrizia Riso, Ordinario MED/49, Università di Milano
Angela Albarosa Rivellese, Ordinario MED/49, Università di Napoli Federico II
Diego Francesco B. Russo, Ordinario MED/49, Università di Catanzaro
Giovanni Scapagnini, Ordinario MED/49, Università del Molise
Mauro Serafini, Ordinario di MED/49, Università di Teramo
Anna Tagliabue, Ordinario MED/49, Università di Pavia

