

Requests for changes to Nutri-Score algorithm

Here are the key areas where the Nutri-Score (NS) algorithm should be changed:

1. Calculation per 100g

The current nutrient profile is based on per 100 grams, this results in the amount of nutrients consumed being overestimated for small portions and underestimated for large portions. NS should be adapted to be portion based (but we realize this is highly unlikely in the absence of EU regulated serving sizes) or product group specific, as this is a better approach to:

- help consumers make the healthier food choice
- stimulate the foods industry to reformulate towards healthier products
- be based on evidence of impact on making better choices

We propose an algorithm based on a limited number of product groups that align to existing schemes ([EFSA](#), [EU Pledge](#), [Choices International](#) and [Keyhole](#)). Appendix 1 shows more details on the product groups but in summary:

- Four product groups (Meals, Beverages, Dairy, Fats) are an adaptation of the current product groups used by NS
- Additional five new groups (Fruit and vegetables, cereal/carbohydrates, meat/fish, sauces and condiments, snacks and treats).

2. Acceptable Level of Processing for Fruit and Vegetables

The current guidance for NS state that powdered fruit and vegetables and freeze dried vegetables and fruits cannot be included in the fruit and vegetable calculations. Published data from the nutritional quality of dried soups that shows that the nutrient content is retained, and as such they should be included in the calculation.

Ref: Leo van Buren [et al. Nutritional Quality of Dry Vegetable Soups. Nutrients. 2019 Jun; 11\(6\): 1270.](#)

3. Concentrated Fruit Juices

The differences between concentrated fruit juices when used as an ingredient and when used as the basis for a fruit drink should be removed.

- Currently fruit juices made from 100% concentrates, e.g. orange juice made from concentrate that is rehydrated to 100% can be counted towards fruit and vegetables. However concentrated fruit juices or fruit puree that have not been rehydrated to 100% e.g. juice/concentrated lemon syrup used in a sorbet cannot be counted as fruit/vegetables.

4. Rehydration Factor

The NS guidance propose a standard 'rehydration factor of 2' to rehydrate all dehydrated and concentrated products. The consequence of this is that a double tomato concentrate, or a triple tomato concentrate would have the same rehydration factor applied, even though they clearly do not contain the same quantity of equivalent fresh tomatoes.

This is also in conflict of EU regulations which explicitly addresses the effect of dehydration and dilution. In such regulation there are provisions which mandate that any concentration or dilution factor shall be 'provided and justified' (see for example article 2 in [Regulation \(EC\) No 1881/2006](#)). Furthermore such rehydration factor of 2 is also in conflict when any of these dried fruits or vegetables would contribute to a nutrition or health claim in the final product as those claims shall refer to the food ready for consumption (article 5-3 in [Regulation \(EC\) No 1924/2006](#)), so actual rather than standard rehydration factors must be applied.

Even when dried fruit are used in a cereal bar or a cake, that are consumed without being rehydrated a rehydration factor should be applied to calculate NS, which is illogical.

5. Whole grain

In many countries, dietary guidance refers to whole grain products, yet the NS does not account for this. The addition of clear rules on wholegrain ingredients would be welcomed.

6. Oils

Nutri-Score only includes rapeseed, walnut and olive oils in the 'positive component', indicating that these are the only three oils that "reflect the public health recommendations that advocate to favour these oils compared to other fats". However, to align with public health messaging we would like to see the addition of other unsaturated fats/oils as they too can be used in the diet to replace fats that are high in saturated fat. This aligns to the recommendations of dietary guidelines in e.g. Guidelines e.g. [NL](#), [UK](#), [Denmark](#)

7. Rounding Rules

The scoring of nutrients should be aligned with the rounding rules in the EU. For example:

- For zero calories / zero sugar beverages that declare <4kcal/100ml and <0.5g/100ml sugars they score less favourable than if the nutrition information were declared as 0kcal/100ml and 0g/100ml sugars, despite having the same meaning under [EU Guidance](#) (see table 4 therein).

General Comments

Here are some additional general comments:

Continue to be an all-inclusive model

The scheme should continue to be applicable to all products and not leave out any specific product groups, to be as consistent as possible for the consumer. For example, excluding artisanal unwrapped cheese but labelling packaged cheese.

Communication of the score

The FOP label should help encourage consumers to choose the better option within a product group, however it should not prevent consumption of certain foods or food groups. This is particularly challenging when there is not good within product group differentiation. Certain product groups have a score in the range of A and B whereas others only score D and E.

Through communication campaigns this should be explained to the consumer, to promote healthier choices, where they can be taught to look at a product group and choose D over E. However, we do see the front of pack labelling scheme being used in applications such as retailer promotions and marketing to children, where only A and B products are favoured.

Effectiveness study

In market effective studies, after implementation, to ensure good insight in how consumers use the schemes to improve their diet is important. Only with these learnings can we evaluate the effectiveness and adapt the scheme to maximise public health benefit.

APPENDIX 1

Proposal - adaptation of current NS groups

Product groups suggestion	Fats	Dairy	Beverages	Meals/ composite dishes
Alignment with Nutri-score	NS has an added fats adaptation but only includes "vegetable oils, margarines, butter, cream or dairy products"	NS has a "Cheese" adaptation	NS has an added "Beverages" adaptation	No adaptation currently scored under Solid or liquid foods. However, the algorithm does not differentiate the products well enough
Alignment with schemes (EFSA, EU Pledge, Choices and Keyhole)	All schemes have fats group, and includes spreadable fats and emulsion-based sauces	All schemes have a dairy group, that includes cheese	EFSA and Choices have a product group for beverages. The other schemes include drinks in other product groups	EFSA is the only scheme without this product group (understandable since meals do not have claims)
Action recommended	All added fats to be included.	All dairy should be included in the same group. Currently some dairy beverages are scored under NS 'solid or liquid foods' which is a more lenient algorithm	Category already exists in NS	Further adapt the NS algorithm for 'solid or liquid foods' in order to have a bigger differentiation for meals/composite dishes

Proposal - additional product groups

Product groups suggestion	Cereals/carbs	Fruits & Vegetables	Meat	Fish	Small (indulgent) products	Sauces/ Condiments
Alignment with Nutri-score	No adaptation currently scored under Solid or liquid foods				No adaptation currently scored under Solid or liquid foods. Portion are not taken into account	No adaptation for this product group
Alignment with schemes (EFSA, EU Pledge, Choices and Keyhole)	The name of the product group ranges from cereals to carbohydrates in the schemes, but all include this group	All schemes have these product groups, with very similar names and products in scope			EU Pledge has an "Edible ices" and Choices has "savory snacks" and "sweet snacks" product groups	Alignment with Keyhole and Choices International
Action recommended	Creation of NS algorithm adaption.	Creation of NS algorithm adaption	Creation of NS core algorithm adaption. Suggest that plant-based alternatives be included.		Other schemes include this group. Standards are set on energy per portion (kcal/portion)	Other schemes include this group.