

## **Consultation Response: Building on the success of front-of-pack nutrition labelling in the UK: a public consultation**

**21 October 2020**

### **Summary:**

World Cancer Research Fund International (WCRF International) leads and unifies a network of cancer prevention charities with a global reach, including World Cancer Research Fund UK (WCRF UK). We are the world's leading authority on cancer prevention research related to diet, weight and physical activity. We advocate for the wider implementation of more effective policies that create environments that are conducive for people and communities to follow our Cancer Prevention Recommendations. Our NOURISHING policy framework brings together ten policy areas where governments need to take action to promote healthy diets and reduce overweight, obesity and diet-related NCDs. The framework is accompanied by an extensive, regularly updated [database of implemented government policy actions](#) from around the world. "Nutrition label standards and regulations on the use of claims and implied claims on food" is one of the ten policy areas outlined in the NOURISHING framework. Our Building Momentum report "[Lessons on implementing a robust front-of-pack food label](#)" seeks to equip policymakers with overarching guidance on how to design a robust front-of-pack food label.

In our response, we share the latest evidence on the design and implementation of robust FOPL schemes. Based on this evidence, we argue that the most effective FOPL schemes are:

- Mandatory;
- Designed through extensive testing of label characteristics in context;
- Launched alongside extensive communications campaigns;
- Supported by monitoring and evaluation plans.

We advise a number of steps for to ensure that the UK implements an effective scheme, as defined by these characteristics.

Please note that this response focused on the available evidence on new international examples (questions 11-15); we did not state a preference for a particularly but outlined what that evidence detailed. Questions directed to business only (1-6) or those that applied an individual perspective to the Multiple Traffic Light label currently used in the UK (6-10) were not answered. We also answered questions referring to links to current dietary advice (16) and to socioeconomic considerations (21).

### **WCRF International's consultation response:**

11a. Do you think you would be likely to use one of these labels more when shopping, compared to current Multiple Traffic Light label?

[I do not know]

11b. If answered yes – Which label would you be more likely to use?

- Chile [tick box]

- Nutri-score [tick box]

## 12. What aspects of the Nutri-score label do you like / dislike?

- Use of five colours [I do not have a view]
- Use of letters [I do not have a view]
- Lack of specific nutrition information and portion size [I do not have a view]
- Providing a single score for a product to indicate overall healthfulness [I do not have a view]
- Other (please specify) [Not filled in]

## 13. What aspects of the Chilean health warning label do you like/dislike?

- Use of colour (black and white only) [I do not have a view]
- Highlighting only less healthy options [I do not have a view]
- Lack of specific nutrition information and portion size [I do not have a view]
- Other (please specify)[Not filled in]

## 14. Both Nutri-Score and health warning labels have been introduced in countries around the world. Can you provide any further evidence on the impact of these labels, on the following aspects?

- Understanding or identification of healthier choices

### **Evidence on Nutri-Score**

The design of the Nutri-Score labelling scheme highlights several characteristics of front-of-package labelling (FOPL) systems that have been shown increase the effectiveness of a label [1,2]. First, with regards to the shape of the label, simplicity is a major factor that enables consumers to easily recognise how healthy a product is. This allows summary indicator systems, such as Nutri-Score, an advantage because they combine information about nutrient content into an overall indicator of the healthiness of a product and give a recommendation to consumers [3]. The overall score is presented on a scale of 5 letters, each associated with a colour: A (dark green) indicates best nutritional quality, whereas E (red) represents lowest nutritional quality. Based on the existing evidence on the impact of colour coding on the level of understanding by individuals, it is hypothesised that colour coding and grading lead to a high level of understanding by reducing the complexity of decision-making [4]. Reviews of existing evidence on FOPL systems suggests that simpler schemes, such as Nutri-Score, tend to score higher in consumer understanding than more complex schemes, such as the UK Multiple Traffic Light system [4, 2].

The simplicity of Nutri-Score is also aided by the scheme using a simple reference amount rather than portion sizes or a global daily allowance. It is well established that individuals prefer labels that refer to information such as number of calories or nutrients per 100g or 100ml, as Nutri-Score does. FOPL that refer to global daily allowances, for example, are less preferred by consumers [5]. Furthermore, experimental studies showed that the Nutri-Score scheme is effective in encouraging consumers to decrease their portion sizes of less healthy products, even if they do not use portion size as a reference [6]. Lastly, governments may also find that simpler reference systems are easier to regulate [2].

Importantly, the Nutri-Score scheme in France was developed by using the UK Food Standards Agency nutrient profiling model, which makes the Nutri-Score system particularly relevant for the UK. Large cohort studies within and outside France have shown that poorer diets – as expressed by the FSA nutrient profiling model dietary index, and more products in the lower Nutri-Score categories – are associated with a higher risk of non-communicable diseases (NCDs) [7, 8] and all-

cause mortality [9]. This evidence supports the conclusion that Nutri-Score may be effective in diverse settings.

The growing experience of countries that have adopted FOPL systems agrees that it is particularly important to test different FOPL format in-country, to ensure that they are appropriate to the country context [5, 9]. For example, before being adopted in France, multiple studies were conducted that assessed perception, understanding and use of the Nutri-Score label in purchasing situations. These studies demonstrated a positive impact, including among disadvantaged populations [8]. This means that, in designing a new FOPL scheme or possibly adopting Nutri-Score in the UK, understanding its appropriateness to the UK population is key and similar activities should be conducted in the UK.

With regards to changes in purchasing behaviours, evidence from experimental and large large-scale trials shows that Nutri-Score is not only well understood by consumers in France, but also that it is associated with a higher nutritional quality of purchases [8]. Moreover, the same evidence also suggest that Nutri-Score performs better than other FOPL schemes, such as the Multiple Traffic Light labelling system, in influencing purchasing behaviours among individuals in lower socio-economic groups. An evaluation of the scheme's impact was planned after three years of its implementation and to the best of our knowledge it has not been published. This prompts us to highlight that it is important to include monitoring and evaluation in any UK FOPL scheme design in order to continue to collect evidence on the effects on FOPL on purchasing behaviours.

In summary, evidence to date shows that the Nutri-Score FOPL scheme is effectively designed to be easily understood by consumers, to be effectively enforced by governments and is likely to be effective when correctly adapted to different context. These conclusions are largely based on experimental and large trial studies. Evidence on real-world effectiveness is starting to emerge.

### **Evidence on the Chilean Warning Label**

The Chilean warning label is an interpretative, nutrient-specific front-of-pack (FOPL) system that provides nutrition information by showing a judgement of "high in" energy, sugars, saturated fat and sodium. Its message takes the form of simple guidance on nutritional value rather than specific facts. Simplicity, as well as size and shape specifications of the label are well established factors that influence the degree of understanding of labels by individuals and their intention to make healthier choices [2]. Experimental studies have shown that black is more strongly associated with unhealthfulness, and that the most effective labels have an octagonal shape, which is hypothesised to be due to similar signs reflect a warning (such as STOP signs). As such, red, octagonal labels may be more effective as a warning as a result of the combination between colour and shape [10, 11]. The Chilean scheme uses black and an octagonal shape, as a result of extensive testing and research, specifically extensive qualitative and quantitative research that sought to understand which label would be understood best by the Chilean population. The design of the Chilean system sought a label that would be best understood, rather than most preferred by consumers. A black warning label performed the best in terms of visibility, understanding and intention to purchase.

The warning label design uses cut-off values per 100g, and avoided using the reference per serving, based on the argument that the Chilean population would not be aware of the definition of serving sizes, and would be unable to interpret a label that used this reference point. Nutrient levels were established across food categories, which was argued would contribute to the label remaining simple enough for consumers to use and enable comparison across food

categories. Lastly, the Chilean warning labels are accompanied by an enforcement system, with sanctions for non-compliance. This enforcement system likely contributed to incentivising companies to reformulate products, as found by the Chilean government six months after the implementation of the label [12].

Early evaluations of the Chile Warning Label system indicate that the scheme enjoys wide public support. Further, focus-group research among Chilean mothers showed that there was widespread understanding of the labels. However, the impact of the labels on purchasing behaviour was heterogeneous, from some who paid little attention, to others who changed their purchase habits only when buying new products to others who used the labels as a shortcut for fast decisions [13]. It is important to note that the impact of the Chilean warning label system is difficult to disentangle from the other measures that are part of the package of associated policies of which it was part. These included a ban on advertising 'High in' products to children younger than 14 years-old (including advertising on food packaging) and selling these products in schools. These difficulties notwithstanding, a before and after study (2015-2017) found that purchases of high-in beverages significantly declined following implementation of the package of policies which includes the mandatory warning labels [14].

In summary, the Chilean warning label system is effectively designed to be easily understood by consumers in the Chilean context. Its size, shape and simplicity are all positioned to ensure a high degree of understanding of the unhealthfulness of a product. It is also accompanied by an enforcement mechanism, which could explain its success in leading to nutrient reformulation. The evidence on its effectiveness in understanding by individuals comes mainly from experimental and large trial studies, whereas evidence on its real-world effectiveness is just now starting to emerge.

## References

- [1] World Cancer Research Fund International. NOURISHING policy database. Accessed [10.10.2020]. Available from: <https://policydatabase.wcrf.org>
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### - Healthier purchasing behaviours Evidence on Nutri-Score

The growing experience of countries that have adopted FOPL systems agrees that it is particularly important to test different FOPL format in-country, to ensure that they are appropriate to the country context [5, 9]. For example, before being adopted in France, multiple studies were conducted that assessed perception, understanding and use of the Nutri-Score label in purchasing situations. These studies demonstrated a positive impact, including among disadvantaged populations [3]. This means that, in designing a new FOPL scheme or possibly adopting Nutri-Score in the UK, understanding its appropriateness to the UK population is key and similar activities should be conducted in the UK.

That being said, the Nutri-Score scheme in France was developed by using the UK Food Standards Agency nutrient profiling model, which makes the Nutri-Score system particularly relevant for the UK. Large cohort studies within and outside France have shown that poorer diets – as expressed by the FSA nutrient profiling model dietary index, and more products in the lower Nutri-Score categories – are associated with a higher risk of non-communicable diseases

(NCDs) [3, 4] and all-cause mortality [5]. This evidence supports the conclusion that Nutri-Score may be applicable in diverse settings.

Evidence from experimental and large large-scale trials shows that Nutri-Score is not only well understood by consumers in France, but also that it is associated with a higher nutritional quality of purchases [3]. Moreover, the same evidence also suggest that Nutri-Score performs better than other FOPL schemes, such as the Multiple Traffic Light labelling system, in influencing purchasing behaviours among individuals in lower socio-economic groups. Experimental studies also showed that the Nutri-Score scheme is effective in encouraging consumers to decrease their portion sizes of less healthy products, even if they do not use portion size as a reference [6]. Further, governments may also find that simpler reference systems are easier to regulate [2]. An evaluation of the scheme's impact was planned after three years of its implementation and to the best of our knowledge it has not been published. This prompts us to highlight that it is important to include monitoring and evaluation in any UK FOPL scheme design in order to continue to collect evidence on the effects on FOPL on purchasing behaviours.

In summary, evidence to date shows that the Nutri-Score FOPL scheme is effectively designed to be easily understood by consumers, to be effectively enforced by governments and is likely to be adaptable to different context. These conclusions are largely based on experimental and large trial studies. Evidence on real-world effectiveness is starting to emerge.

### **Evidence on the Chilean Warning Label**

Early evaluations of the Chile Warning Label system indicate that the scheme enjoys wide public support. Further, focus-group research among Chilean mothers showed that there was widespread understanding of the labels. However, the impact of the labels on purchasing behaviour was heterogeneous, from some who paid little attention, to others who changed their purchase habits only when buying new products to others who used the labels as a shortcut for fast decisions [7]. It is important to note that the impact of the Chilean warning label system is difficult to disentangle from the other measures that are part of the package of associated policies of which it was part. These included a ban on advertising 'High in' products to children younger than 14 years-old (including advertising on food packaging) and selling these products in schools. These difficulties notwithstanding, a before and after study (2015-2017) found that purchases of high-in beverages significantly declined following implementation of the package of policies which includes the mandatory warning labels [8]. Further, the Chilean warning labels are accompanied by an enforcement system, with sanctions for non-compliance. This enforcement system likely contributed to incentivising companies to reformulate products, as found by the Chilean government six months after the implementation of the label [9].

In summary, the Chilean warning label system is effectively designed to be easily understood by consumers in the Chilean context. It is also accompanied by an enforcement mechanism, which could explain its success in leading to nutrient reformulation. The evidence on its effectiveness in understanding by individuals comes mainly from experimental and large trial studies, whereas evidence on its real-world effectiveness is just now starting to emerge.

### **References**

[1] World Cancer Research Fund International. NOURISHING policy database. Accessed [10.10.2020]. Available from: <https://policydatabase.wcrf.org>

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15. Are there any other Front of Pack Nutrition Labels that you think Government should consider? Please provide evidence on the following to explain your answer:  
- Understanding or identification of healthier choices

It is necessary that changes to UK's FOPL system undertake extensive testing of proposed labels within the UK context in order to gauge the impact of the colour, shape, size and placement of labels on individuals' preference, understanding and intention to change purchasing behaviour. Most FOPL systems have been found to enable consumers to select the healthier option when compared with a situation of no FOPL system [1]. Simpler, interpretative labels lead to the best understanding [2]. Some distilled experiences from testing in various settings show that black is associated with unhealthfulness, but that red in combination with an octagonal shape works as an effective warning [3]. That being said, these conclusions should always be tested, as they will be influenced by cultural context and other factors. For example, it is important to test whether the FOPL system performs well among people from lower socio-economic groups.

## References

- [1] World Cancer Research Fund International. NOURISHING policy database. Accessed [10.10.2020]. Available from: <https://policydatabase.wcrf.org>

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### - Healthier purchasing behaviour

At a global level, evidence on the effectiveness of FOPL schemes comes mainly from experimental and large trial studies, whereas evidence on its real-world effectiveness is just now starting to emerge. WCRF International's NOURISHING policy database can be used to track implemented FOPL systems around the world, with links to published evaluations. [1]

Existing research on countries that adopted FOPL schemes suggest that the most effective FOPL systems share a number of characteristics [2]. The most effective FOPL schemes are:

- Mandatory;
- Designed through extensive testing of label characteristics in context;
- Launched alongside extensive communications campaigns;
- Supported by monitoring and evaluation plans.

To ensure that the UK implements an effective scheme, it should follow a number of steps:

First, the UK Government should make the implementation of the FOPL system mandatory, regardless of whether it decides adopt the Nutri-Score or the Chilean warning label models or maintain the existing Multiple Traffic Light system. This is because voluntary systems tend to have a low uptake, especially amongst food and beverage companies whose products score low, who are unlikely to adopt it. This is the case in France, where major companies whose products would receive low classification through Nutri-Score have avoided adopting the labels, which remain voluntary. In contrast, the Chilean warning labels have effectively incentivised companies to reformulate products, likely due to its mandatory nature, in combination with its associated enforcement mechanisms [3]. The argument that companies will be incentivised to reformulate their products even for voluntary schemes has not proven to work under voluntary schemes since the incentives are weak when there is no obligation to use a FOPL system at all.

Second, it is necessary that changes to UK's FOPL system undertake extensive testing of proposed labels within the UK context in order to gauge the impact of the colour, shape, size and placement of labels on individuals' preference, understanding and intention to change purchasing behaviour. Most FOPL systems have been found to enable consumers to select the healthier option when compared with a situation of no FOPL system. Simpler, interpretative labels lead to the best understanding. Some distilled experiences from testing in various settings show that black is associated with unhealthfulness, but that red in combination with an octagonal shape works as an effective warning [4]. That being said, these conclusions should always be tested, as they will be influenced by cultural context and other factors. For example, it is important to test whether the FOPL system performs well among people from lower socio-economic groups.



Third, for optimal effectiveness of a modified FOPL system in the UK, the government should include awareness and communication campaigns as an integral part of the implementation plans. This is because there is emerging evidence that the effectiveness of different FOPL models on changing people's buying choices towards healthier products is influenced by their degree of awareness of the respective scheme among the general public [5].

Last, the UK government is advised to develop a monitoring and evaluation framework during the policy design phase of the new FOPL system. This plan will be helpful in identifying how to measure the effects of the label and monitor compliance, as well as whether the new scheme has any unintended consequences. For example, it is important to gauge whether the scheme is effective among vulnerable groups whose diets are more likely to consist of high levels of unhealthful products. Further, this plan will contribute to our understanding of what works with regards to FOPL schemes. There is a vast amount of evidence on the efficacy of FOPL systems which comes from experimental studies. However, evidence on the real-world implementation of different FOPL models and their effect on changes in consumer behaviour is just now starting to emerge. This evidence suggests that the effectiveness of FOPL systems is influenced by the degree of awareness of the scheme.

## References

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## Questions regarding links to dietary advice

16. Do you think the Government should ensure that the recommended Front of Pack Nutrition label reflects latest dietary advice on free sugar? [Yes]

Please explain your answer:

The UK should adopt mandatory FOPL that reflects the latest dietary advice on free sugars (not merely total sugars). A report by Action on Sugar [1] highlights that products in high free sugar content can be easily advertised as 'healthy snacks' or 'made from real fruit' and do not carry the current Multiple Traffic Light system. If they did, they would be categorised as 'red' in sugar content. Such products can be marketed as 'healthy snacks' due to their high fruit content. However, the sugars in these products are categorised by Public Health England as 'free sugars' as they contain 'purees, concentrates, juices and extruded fruit or added sugar by coating or flavouring dried fruit'.

#### References

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#### Questions regarding Socioeconomic Considerations

21a. Do you think that the proposals in this consultation could impact on people from more deprived backgrounds? [Yes]

21b. Please explain your answer and provide relevant evidence.

Existing evidence suggest that Nutri-Score performs better than other FOPL schemes, such as the Multiple Traffic Light labelling system, in both understanding and influencing purchasing behaviours among individuals in lower socio-economic groups [1]. As such, the UK government must undertake extensive testing on the effect of any FOPL system that is considered as a replacement. Moreover, the UK government is advised to develop a monitoring and evaluation framework during the policy design phase of the new FOPL system. This plan will be helpful in identifying whether the scheme is effective among vulnerable groups whose diets are more likely to consist of high levels of unhealthy products or whether the new scheme has any unintended consequences.

#### References

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