Consultation to the UK Nutrient Profiling Model 2018 review: Individual responses S-W

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35. Specialist Cheesemakers Association

This letter is a response to the above consultation. It is sent on behalf of the Specialist Cheesemakers Association (SCA) which represents producers, wholesalers and retailers of specialist cheeses. Such cheeses tend to be made by hand, using traditional methods, on farms with the majority of milk originating from that farm or from a limited number of known local herds. Cheeses may be made using raw, thermised or pasteurised milk from cows, sheep, goats or buffalo. The majority of SCA members are small businesses.

SCA wholeheartedly supports efforts to reduce obesity, particularly in children. It is a serious and growing problem and we agree that action must be taken. However, the DoH nutrient profiling model, with its disproportionate focus on calories, saturated fat, salt and sugar, does not reflect the importance of all nutrients, omitting completely any contribution by vitamins and minerals or other beneficial components. It therefore does not reflect the nutritional value of nutrient dense products, such as cheese, and favours lower calorie foods which provide few or no other nutrients. A very limited number of artisan cheeses meet the criteria as suggested and the majority are therefore classified as high fat, salt, sugar (HFSS), or "less healthy" foods, even though they would be consumed in small portions.

We strongly object to the classification of cheese as "unhealthy". Cheese is a key contributor of high value protein in children's diets, as well as a valuable source of calcium, phosphorus, vitamin B12 and zinc. Calcium is important for growth and development of bone as well as several other functions such as blood clotting and neurotransmission. It is of particular importance to children and especially children between nine and 18 years because that is a period of rapid growth and development, and the key period of development where maximum bone mass is built to support calcium needs during the rest of the life. Poor storage of calcium at this crucial period can have critical health effects later on in life, resulting in osteoporosis.

Calcium intakes have been going down for younger children (4-10 years) and are already of concern for older children/ teenagers with 22% of girls (11-18 years) and 11% of boys (11-18 years) below the lower recommended level. Dairy products feature prominently in the Top 10 contributors to calcium intakes across both age groups reported in the National Diet and Nutrition Survey with cheddar cheese alone the 6th and 4th biggest contributor respectively across both age groups.

The latest review of the NPM included the consideration of nutrient profiling models currently used in other countries. Five nutrient profiling models were identified that had been adapted from the UK NPM 2004/5. All five models contained an exemption or special treatment for cheese, acknowledging the valuable contribution it makes to children's diets as a rich source of calcium.

In Ireland, advertisements and other commercial communications for cheese are exempt from the model, upon the recommendation of the Department of Health in Ireland. The move was prompted by the <u>comments submitted</u> by the Food Safety Authority Ireland (FSAI) which are equally valid in the UK (see Appendix).

There are very good reasons for exempting cheese and the Irish model merits further discussion. The NPM is frequently used to identify foods as 'junk foods' that should be avoided. The unintended consequences of discouraging the consumption of foods, such as cheese, that are rich providers of nutrients has not been considered in sufficient depth.

Appendix

FSAI Comments on an Exemption for Cheese (Extract)

"The UK Nutrient Profiling (NP) Model provides Ireland with a method that enables prompt action to protect children's immediate and long-term health in an area where intervention is urgently required. However the inclusion of cheese with less healthy food products, which are subject to advertising restrictions, presents some challenges to the adoption of the UK NP Model in Ireland.

The FSAI believes there are three reasons to support amending the UK NP Model in the context of achieving a balanced diet. Firstly, as outlined in the BAI report, over a quarter of children in Ireland have inadequate calcium intakes. Puberty and the teenage years (from age 9 to 18 years) represent a critical period for bone mass accretion yet inadequacy of dietary calcium affects between 23 and 37% of this age group in Ireland. During these years children and teenagers need to consume five servings from the Dairy Food Group (Milk, Yoghurt and Cheese) every day in order to meet their calcium requirements. However, restricting intake of these foods to milk and yogurt only requires large amounts of food to be consumed on a daily basis e.g. 1000mls of milk or 750mls of yoghurt. Such large food volumes can overwhelm the limited capacity of many children within this age group who have a relatively small body size such as the younger children aged between 9 and 13 years. In relation to this, recent modelling of food intakes for healthy eating carried out by the FSAI found achievement of calcium requirements difficult in children aged 9 to 13 years. This work on healthy eating concluded that although low-fat milks and yoghurts should be predominantly used in order to achieve calcium intakes without exceeding saturated fat goals; nonetheless cheese can be part of a healthy diet. For the critical age group of 9 to 13 years, where calcium needs are highest yet capacity to consume large volumes of milk and yoghurt is limited due to small body size, cheese represents a useful calcium-rich food source.

Secondly, cheese intakes have been stable among children and teenagers in Ireland over last three decades when obesity rates increased dramatically.

Thirdly, FSANZ (Food Standards Agency New Zealand) has adapted the UK NP Model by creating an additional food category that facilitates the assessment of cheese and processed cheese taking particular account of calcium content......Therefore, the FSAI recommend the BAI adopt the UK NP Model with amendments to permit assessment of calcium-rich cheese."

36. The Institute of Food Science and Technology

Who are IFST? [Do we have any 'boiler-plate' text that we routinely use?]

The Institute of Food Science and Technology (IFST) is the leading qualifying body for food professionals in Europe and the only professional food body in the UK concerned with all aspects of food science and technology.

We are passionate about engaging food professionals, recognising standards, growing skills and informing debate. Our members cover all aspects of food from manufacturing, retailing, and R&D to academia and enforcement.

IFST is a registered charity with individual members working across all points of the food chain. We are independent of government, industry, and lobby or special interest groups.

IFST is submitting this response because the advancement and application of food science and technology are in the objectives of the organisation as well as improving public knowledge and awareness of important issues related to the production, safety and quality of food.

IFST understand the reasoning for the review of the previous Nutrient Profiling Model (NPM) in the light of the significant changes from the SACN reviews notably for free sugars and fibre. We recognise the extensive work carried out to try to formulate the new Model and we are grateful for the opportunity to provide comments on the proposals.

The primary focus for IFST is the use of sound science in food issues and this forms the basis of our comments.

Terminology

It is disappointing to see that throughout the whole of the consultation document the terms sugar and sugars are used interchangeably and indiscriminately. The correct term should always be sugars (plural). Sugar should only be used when referring to sucrose — which is in line with The Specified Sugar Products (England) Regulation 2003 (SI 2003 No 1563) where the term 'sugar' is a Reserved Description only to be used for white crystalline sucrose.

Potential confusion arising from the use of Free Sugars

The majority of the nutrients (eg salt, fibre, saturated fat, protein) included in the NPM are quantitative parameters determined using the approved analytical procedures routinely used for labelling and compositional standards. The notable exception is Free Sugars, which is based on estimates, not sound science. The usual method for declaring sugars is total sugars ie all mono and disaccharides which appears on a nutritional declaration under 'carbohydrates - of which sugars'. In Section 5.15 of this review it is reported that UK NPM 2004/05 which was based on Non Milk Extrinsic Sugars (NMES) was changed back to total sugars due to the practical difficulties associated with estimating NMES. There is no evidence provided to indicate that this system will be any more successful. It will only add to the confusion surrounding the use of the term free sugars and would be unenforceable if challenged as there is no agreed, reproducible analytical method to quantify free sugars.

Any profiling system should be based on the same tested and reproducible analytical methods used for labelling and compositional standards.

Disparity between Systems

The NPM aims to provide a classification to identify 'less healthy' foods. However the parameters proposed are at odds to currently used systems and even recent tax systems set up to penalise 'less healthy' foods. This is highlighted in the table below which compares the NPM with the Nutrition and Health Claims Regulations and the Soft Drinks Industry Levy.

System/Regulation	Sugars g/100g (or 100 ml)		
Draft 2018 NPM	0.9		
EU Regulation 1924/2006 on Nutrition and Health claims made on foods - Low Sugars	2.5g (per 100ml)		
Soft Drinks Industry levy No Tax Threshold	4.9		

This could result in a soft drink being seen as 'healthy' ie Low Sugars according to the EU regulations and not subject to the Soft Drinks Industry Levy in the UK (aimed at promoting healthier choices for children) but would be defined as less healthy by the NPM and not allowed to be advertised or promoted. This is confusing for the consumer and might be considered misleading. It also potentially decreases the incentive for the producer to reformulate products.

Halo Effect distorting diets

The classification of 'less healthy' results in the remaining products being classified as 'more healthy'. This over simplification may result in a 'halo effect' for the more healthy product resulting in more and possibly over consumption. With some products this may produce unintended consequences. For example with breakfast cereals – the more healthy option may have less free sugars and more fibre, however it is highly probable that this product will have the same energy content as the healthy product (exchanging sugars with starch which have the same energy content) and may also have a higher glycaemic response due to the higher starch content, which is not a healthier product. Similarly the less healthy products may have higher levels of fat soluble vitamins, fibre and/or other micronutrients but fail to be classified as more healthy thus distorting the diet. These unintended consequences are highly likely with the NPM as proposed.

37. Total Diet and Meal Replacements Europe

Introduction

Total Diet & Meal Replacements Europe (TDMR Europe), formerly known as the European Very Low Calorie Diet Industry Group, would like to thank Public Health England (PHE) for providing the opportunity to submit comments on the review of the UK Nutrient Profiling Model (NPM). Whilst TDMR Europe fully supports PHE's aim to tackle the advertising of unhealthy foods and drinks during children's programming we would also like to highlight a number of issues in relation to nutrient profiling in a more general context.

About TDMR Europe

TDMR Europe is a trade body for manufacturers and distributors of formula diet products, including total diet replacement products (TDRs) and meal replacement products (MRPs) and was set up to campaign for appropriate policy and legislation for slimming foods. Our members operate throughout Europe, providing a range of weight loss and weight management programmes designed for the overweight and obese, which, combined with conventional foods, behavioural change and a stepped programme of increased physical activity, help people lose and then maintain their weight.

Our position

TDMR Europe very much welcomes PHE's aim to bring the NPM in line with current UK dietary recommendations, particularly in the context of the government's childhood obesity plan. However, in a broader context and in the event that consideration is given to introduce nutrient profiles beyond the scope of advertising during children's programming and non-broadcast media including print, cinema, online, and in social media, TDMR Europe wishes to highlight the following points:

- ❖ It is crucial to give due consideration to the substantial variation in the dietary requirements of different population sub-groups, including those who are overweight and obese and as such who are eligible, indeed advised, to follow a weight loss programme. More specifically and of relevance to our particular sector is that both TDRs and MRPs are specially formulated to meet EU compositional requirements and as such their nutrient profiles fall outside the acceptable ranges detailed in 'standard dietary recommendations' for a range of nutrients, including both fat and salt.
- Therefore, given the specific legal requirements that these products have to meet, it is crucial that the modelling system takes into account the eventuality that if nutrient profiles are imposed on these products, it will have a devastating impact on this sector.
- ❖ We would ask that should the scope of the NPM reach beyond that for products advertised to children, that appropriate consideration and allowances are made to incorporate the specific nutritional make-up of TDRs and MRPs.
- ❖ It is also important to consider the regulatory framework applicable to food, including specific food categories, which provides for clear compositional and information and labelling requirements to ensure that consumers have access to safe products and

can make informed choices. It should be noted that the advertising of TDRs and MRPs is also already subject to the Committee of Advertising Practice's Code, which includes provisions on how to promote weight loss and weight control products.

For more information, please contact:

Total Diet & Meal Replacements Europe (formerly known as the European Very Low Calorie Diet Industry Group)

225 Metal Box Factory 30 Great Guildford Street London SE1 0HS United Kingdom

38. UK Health Forum

About the UK Health Forum

The UK Health Forum (UKHF), a registered charity, is both a UK forum and an international centre for the prevention of non-communicable diseases (NCDs) including coronary heart disease, stroke, cancer, diabetes, chronic kidney disease and dementia. We focus on upstream measures targeted at the four shared modifiable risk factors of poor nutrition, physical inactivity, obesity, tobacco use and alcohol misuse. We undertake policy research and advocacy to support action by government, the public sector and commercial operators. As an alliance, the UKHF is uniquely placed to develop and promote consensus-based healthy public policy and to coordinate public health advocacy.

Response

Poor nutrition status in the UK

Diet-related diseases place a significant burden on families, the NHS and wider society. For example, over one in three children in England and two thirds of adults in the UK are overweight or obese. Poor diets account for 69% of the Disability Adjusted Life Years associated with heart disease and 51% of deaths due to stroke in the UK. This is unsurprising, as according to the latest national diet and nutrition survey, the population is a long way off meeting the recommendations in the Eatwell Guide, and the majority of adults and children consume exceed the maximum recommended intake levels for sugar, saturated fat and salt.

Advertising of HFSS foods is a major factor underpinning the excess consumption of these harmful nutrients in the UK. We therefore welcome the opportunity to respond to the consultation on the 2018 review of the UK Nutrient Profiling Model. As the consultation document notes, the UK NPM 2004/5 is over 10 years old and does not reflect current UK dietary recommendations, in particular those for free sugars and fibre set on the advice of the Scientific Advisory Committee on Nutrition (SACN) and accepted by UK health departments.

We note and support the following main changes from 2004/5 model:

- the adjustment of the energy criterion in line with food labelling regulation intake of 8,400kJ (2,000kcal) as a result, nutrient components such as saturated fat and sugars were recalculated as a proportion of food/total dietary energy
- the replacement of the total sugars component of the NPM 2004/5 with 5% of total dietary energy for free sugars
- the adjustment of the fibre criterion as a proportional change from the existing UK NPM 2004/5 value to the current UK dietary recommendation for fibre
- the replacement of the sodium criterion with salt

Comments on the process and methods of the update

Scope and process to update the NPM

We broadly support the scope and process taken to update the NPM. We note that since 2005, several other models, including derivatives of the UK NPM 2004/5 have been developed by other countries and international organisations. We recommend that a future review of the UK NPM should consider the potential improvements and lessons from the wider NPM field that could be applied in the UK.

The NPM test data set

We note that the NPM test data set was comprised of food and drink at a household level and does not include food and drinks products consumed out of home (OOH). We strongly encourage PHE to undertake further testing, using OOH food and drink products to ensure the revised NPM provides adequate protection from fast food adverts.

As the Obesity Health Alliance have noted in their response: "One fifth of children eat food from OOH food outlets at least once a week. These meals tend to be associated with higher energy intake; higher levels of fat, sugar, and salt, and lower levels of micronutrients.³ Furthermore, our own evidence suggests that fast food is the most heavily advertised food and drink category, during the TV programmes most popular with children.⁴"

Specific comments on the recommended draft 2018 NPM

Sugar performance

We strongly support the performance measure fewer foods high in sugar to pass the 2018 NPM and are encouraged to see that fewer foods and drinks high in total sugars and free sugars passed the draft 2018 NPM compared to the UK NPM 2004/5 in the test dataset. We note that in particular, foods that did not pass the updated 2018 model included: sweetened yoghurts; juices; desserts; some breakfast cereals and cereal bars, largely due to their high content of free sugars.

Fibre performance

We note that fewer 'high fibre' and 'source of fibre' foods passed the draft 2018 NPM compared to the UK NPM 2004/5. However, we are not concerned by this development, because the excluded foods are also high in sugar. While fibre intakes need to rise, foods that are also high in fat, salt or sugar should not be the major source of fibre in the diet. There are many alternative sources of fibre which consumers should be encouraged and supported to consume more of, such as sugar-free cereals and porridge, pulses and other plant-based foods.

The final NPM 2018 model should therefore not allow 'high fibre' or 'source of fibre' foods to pass if these foods are also high in salt or fat.

The government should update the traffic light and GDA nutrition labelling guidance We note that data on free sugars is not currently available on nutrition labels, and several food companies have said that they do not have data on free sugars for their products. However, this should not be used as an excuse to delay implementation of the 2018 NPM. To this end:

• If securing data on free sugar content of food products is problematic in the short term, we recommend that total sugars are used as an interim proxy until relevant free sugar data becomes available.

 We recommend that the nutrition labelling high/medium/low thresholds for sugar are updated to reflect the updated SACN free sugar recommendations. This should either be pursued through the relevant avenues in Europe or made a priority for Brexit.

The government should extend the applicability of NPM beyond advertising

- While we note that this review excludes consideration of the use of NPM for any
 other use beyond restricting advertising of foods and drinks high in fat, sugars and
 salt to children, we would urge PHE to reconsider this position, and extend the
 application of the NPM to other relevant aspects of food policy designed to reduce
 the consumption of foods high in fat, salt and/or sugar.
- The foods targeted by the NPM are often subject to other forms of marketing in the broadest sense such price promotions on sugar-sweetened yoghurts and cereals in supermarkets; placement of sugary cereals bars at checkouts; and inclusion of juices and cereal bars in meal deals. All these forms of marketing are contributing to increased consumption of these products and the excessive sugar consumption rates seen in the UK.⁵
- 1. https://publichealthmatters.blog.gov.uk/2018/03/06/why-we-are-working-to-reduce-calorie-intake/
- 2. Global Burden of Disease. 2016. United Kingdom, 2013, YLDs attributable to dietary risk. Accessed 18 April 2016: http://ihmeuw.org/3ssf
- 3. Public Health England (2017). Strategies for Encouraging Healthier 'Out of Home' Food Provision A toolkit for local councils working with small food businesses
- 4. Obesity Health Alliance (2017). A watershed moment: why it's prime time to protect children from junk food adverts.
- 5. https://www-bmj-com.ez.lshtm.ac.uk/content/361/bmj.k2157

39. Urban Fresh Foods

Response to the Consultation on the 2018 review of the UK Nutrient Profiling Model

This response is submitted on behalf of Urban Fresh Foods whose Brand portfolio includes BEAR Yoyo's, Claws and Paws (fruit and vegetable snacks), as well as Alphabites (cereal). BEAR was started in 2009 to help families find healthy snacks which are made from gently baked whole pure fruit and vegetables, all with the goal of helping more children across the UK achieve their 5-a-day. In the 9 years we've been going we've already helped provide an additional 485 million 5 a day portions to kids and will reach 1 billion if we hit our targets by 2020. We've also launched the only children breakfast cereal with no refined sugar or salt and have saved 15.6 million tablespoons of sugar and 1.16m teaspoons of salt at breakfast (since launch of BEAR Alphabites July 2013).

Total Sugar Vs Free Sugar

The SACN recommendation in their carbohydrate report related to free sugars. It is therefore appropriate that the modelling carried out was to establish how to reflect the recommendation in that report.

There are however concerns about the practicality of the proposal to include 'free sugars' as one of the elements in the matrix that would establish whether a product can be advertised.

The recent published definition for free sugar¹ has provided some clarity.

There is no scientific methodology to calculate free sugar – it is an estimate based on assumptions and in some cases subjective interpretations of ingredients lists and product manufacturing processes. Assumptions are acceptable for the calculation of general trends and modelling i.e. as within the National Diet and Nutrition Survey (NDNS²) for which the definition was developed but it is too general to establish specific product values.

The definition as it stands creates some significant anomalies for a category of products loosely termed "fruit snacks".

What are Fruit Bars and Snacks?

This is a group of products which have evolved from fruit based ingredients as the food industry took strides to produce products which had ideally no added sugar and were based on fruit ingredients to count towards 5 a day³. These products provided an alternative to confectionary and other less healthy snacks for lunch boxes and snacking and aimed to make fruit (and in some cases vegetables) more accessible to children and adults alike.

Often referred to as "Fruit Leathers"; "Extruded Fruit products" or "Processed Fruit Bars", they vary widely in their ingredients, manufacturing approach and nutrition profile. At one

¹ Swan, G., Powell, N., Knowles, B., Bush, M., & Levy, L. (2018). A definition of free sugars for the UK. Public Health Nutrition, 1-3. doi:10.1017/S136898001800085X

² https://www.gov.uk/government/collections/national-diet-and-nutrition-survey

³ 'Government 5 A Day logo: licensing guidelines' by Public Health England published at https://www.gov.uk/government/uploads/system/uploads/system/uploads/attachment_data/file/508442/5_A_Day_revised_licensing_guidelines_V10.pdf on 17 March 2016

end of the spectrum the products can be made from highly processed concentrated fruit juices and sugar syrups to the other end which is just fresh fruits and vegetables gently dried.

HMRC have reviewed the production processes for the latter and classify them as "Unsweetened Dried Fruit" for the purposes of VAT (e.g. Bear YoYo's; Paws and Claws), as the ingredients and method of manufacturing is identical (many chopped/diced apricots and dates are in fact pureed before drying). Tax and Customs tariffs have been used by government and other agencies to help define categories⁴ in nutrient profiling and other guidance.

A fruit bar (snack) is classified as confectionery by HMRC as the production involves a further processing stage beyond the point at which the fruit was a dried fruit⁵. This processing involves adding other ingredients (e.g. juice concentrates, gumming agents, fillers) to the dried fruit in a mixer before moulding them together using heat and pressure. In the case of BEAR and many chopped/diced traditional dried fruits the whole fruit is simply baked the way all unsweetened dried fruits are in a gentle baking oven then cut by hand into the final shape⁶. HMRC recognises that the process and the ingredients of a product define its classification, not the final shape, cut or presentation. An example provided by HMRC was that bread is bread whether it is presented as a loaf, roll, pita or other format.

Fruit Snacks and Free Sugars

A general description of "fruit snacks" or "extruded fruit products" for free sugars doesn't allow for the variation in the category and although many of these products are not "bars" they often get described together by NGO's and government departments. PHE have looked at splitting this group based on manufacturing process but this classification may not go far enough to clarify the products. The manufacturing processes described "extruded fruit products" vs "pressed dried fruit" does not clearly describe the range of products.

The ability to clearly differentiate between products and therefore their free sugar content is important for healthier product development and clarity of message for the consumer. Not only are processed fruit snacks different within the category but the level of processing and heating they undergo are also in some cases different to other "processed fruit" described in the definition e.g. stewed fruit which can be very similar to jam in its production and the can result in a puree.7

Helping the Industry move forward

It is clear that there have been various approaches to develop fruit snacks using the many fruit based ingredients available - some getting further and further away from "fruit" but appearing to the consumer to be similar to each other.

⁴ Indication of which food products fall within the WHO European nutrient profile model categories is provided by using international customs tariff codes.

http://www.euro.who.int/ data/assets/pdf file/0005/270716/Nutrient-Profile-Model Version-for-Web.pdf

⁵ See diagram in Annex 1

⁶ See diagram in Annex 1

https://www.jamieoliver.com/recipes/fruit-recipes/stewed-fruit/

Clarity on the categorisation of these products is important to avoid misleading the consumer but also to enable the industry to move forward on product development in a way that helps reduce free sugars intake whilst supporting 5 a day and high dietary fibre intake. Many products appear to have lower sugar contents than pure dried fruit because of further processing or the addition of bulking ingredients such as pectins, fibres or even fat⁸.

SACN⁹ has considered a detailed definition of free sugars which formed the basis of the PHE paper. Professor Ian Macdonald, the Chair of the Carbohydrates Working Group, stated that the view of the working group was that the sugars in dried, canned and stewed fruit should be outside the definition of free sugars. The sugars in purees (fruit and vegetable) should be included in the definition of free sugars. Foods subject to blending, pulping or macerating which breaks down the cellular structure should also be considered as containing free sugars. This 'processing' covers both industrial and home preparation of foods and drinks. The processes that break down plant cell walls should also be explicitly stated.

The point about processing is important – there is very little evidence to show what sort of processing will break down cell walls – juices especially from concentrates will obviously be 100% free sugar but there is then variability depending on how harsh any process is and whether it includes filtration. PHE recognised that

"...processed fruit, where the cellular structure is broken down on processing to a greater or lesser extent, would also include a proportion of free sugars. The degree to which this happens is likely to be highly variable depending on the type and length of processing and there is no evidence on which to set free sugar contents for different types of processed fruit." ¹⁰

Public Health England's final definition of free sugars¹¹ acknowledges the "limited understanding of the extent to which the cellular structure of different types of processed foods containing naturally occurring sugars is broken down and the differences in the physiological response to sugar consumed in different forms."

Increasing understanding

In order to prepare the Bear Fruit snacks skin and seeds are removed but these are not always eaten with the whole fruit – the sieving system to do this has been changed in the last year and as a result the fibre content is now 12g/100g – the highest in the market¹².

BEAR has looked at various methodologies to assess the impact of processing based on previous work carried out by Innocent and Oxford Brookes University^{13,14}.

⁸ See Annex 2

⁹ SACN 48th MEETING 30th June 2016, Skipton House, London

¹⁰ SACN/16/09 Paper for discussion: Working definition of free sugars for use in NDNS

¹¹ Swan, G., Powell, N., Knowles, B., Bush, M., & Levy, L. (2018). A definition of free sugars for the UK. Public Health Nutrition, 1-3. doi:10.1017/S136898001800085X

¹² See Annex 2

¹³ Three academic papers, produced by researchers at Oxford Brookes University and the University of Aberdeen were commissioned by Innocent. In the first study, scientists at the Department of Biological and Medical Sciences, Oxford Brookes University, claimed suggestions that puréeing fruit destroys the cell wall matrix that gives fruit its structure and makes smoothies less fibrous than fruit

Fibre

Oxford Brookes University¹⁵ carried out research to understand how the fibrous structure of fruit snacks is affected by their processing on a microscopic level to give an indication of how the sugar content of the fruit may or may not be "freed".

Further information on this research is available on request

Glycaemic Index (GI)

Oxford Brookes University¹⁶ analysed a range of fruit snack samples to determine their GI content.

Carbohydrate foods consumed produce different glycaemic responses depending on many factors, such as particle size, cooking and food processing, other food components (e.g. fat, protein, dietary fibre) and starch structure.

Whilst GI is not accepted as part of the nutrition information or as a claim on product labels it is useful to use it to compare products that in other respects appear the same. The fast-release carbohydrate and higher blood glucose levels stimulates the insulin response.

Further information on this research is available on request.

Decision Tree

It is accepted that the definition of free sugars was not within the scope of the review of the Nutrient Profiling Model, however in Appendix L¹⁷ the paper seeks to interpret that definition by providing a decision tree. It specifically asks the question "Does the product contain any fruit and vegetable purees, juices or pastes where the cellular structure is broken down?" but provides limited guidance on what that means. Further guidance which could incorporate information on GI and natural fibre contents could help in this respect and potentially help link the free sugar content to the total sugar content. It is also not obvious at what point the decision tree is to be applied – mixing bowl in line with the ingredients list of final product in line with the nutrition information?

We are also unclear why a correlation could not be developed between free sugar and total sugar, so the outcomes reflect the SACN recommendation but the matrix would include all

eaten whole were not justified. "This is particularly evident when you look at a smoothie under the microscope and can see big chunks or undamaged cellular material," said lead author Professor Chris Hawes. Researchers found smoothies contained comparable fibre to that contained in whole fruit. In the study by Oxford Brookes Functional Food Centre, the strawberry and banana and mango and passion fruit Innocent smoothies were found to have a low GI value, meaning the naturally found sugars were absorbed slowly by the body deeming them no more harmful than the impact of eating an apple on blood glucose levels.

¹⁴ "fruit juice, smoothies and nutrition". June 2014 Innocent

¹⁵ Prof. Chris Hawes: Plant Cell Biology & Head of Biology Doctoral Training Programme, Department of Biological and Medical Sciences, Oxford Brookes University, Oxford, OX3 0BP, UK

¹⁶ Lis Ahlstrom: BSc MSc RNutr, Manager, Oxford Brookes Centre for Nutrition and Health (OxBCNH) Department of Sport, Health Sciences and Social Work; Faculty of Health & Life Sciences; Oxford Brookes University Headington Campus, Gipsy Lane, Oxford OX3 0BP

¹⁷ https://www.gov.uk/government/consultations/consultation-on-the-uk-nutrient-profiling-model-2018-review

elements for which the food industry would have data available and which is available on product labels.

The differentiation that was achieved using Total Sugars has been lost so a cereal that contains only 10.1g sugar is labelled as HFSS in the same way as one that contains 30g.¹⁸

The Sugar Reduction programme¹⁹ also focuses on total sugar, noting that free sugars are "currently not easy to measure and are not declared on the nutrition panel of food labels" and recommends "shifting consumer purchasing towards lower/no added sugar products" however the nutrient profiling model as it stands would not support that action as improved products would be limited in marketing opportunities.

The potential for inconsistency will mean that enforcers will struggle to understand whether the value submitted is or not acceptable and would create a high level of queries which can also be played out in the press.

We feel the best outcome for the health agenda is that the total sugar content of products like the pure fruit snacks is reduced by a programme of choosing lower sugar fruit varieties or adding vegetable purees. The clear definition of the products and the interpretation of the sugar content are important to motivate that continued development and find the proposed NPM fails to provide that motivation.

Fibre

It is clear that the modelling undertaken for fibre has been extensive. However the model still fails to produce higher fibre options and severely restricts breakfast cereals as a result.

We understand that there is one further option PHE could model an increase in the maximum points for fibre to 10 together with an increase in the number of points for fruit and vegetables to 10 which could allow the advertising of a few more breakfast cereals and the lower sugar variants of fruit juices and 100% fruit products. This would enable a clearer differentiation of products and more motivation to improve products as the original profiling model did.

"A clear consequence of using nutrient profiling as a means of assessing eligibility for marketing is that the profiling scheme becomes a driver for product reformulation."²⁰

Dietary Guidelines and Labelling

We believe a key performance measure should be a comparison of the proposed model with the foods recommended for a children's diet e.g. with reference to the Eat Well guide. The view of Dietitians and Health Care Professionals in this respect is vital. The original model was assessed using a survey of nutrition professionals²¹. However, this validation step has not been repeated and it is unclear why?

https://www.gov.uk/government/publications/sugar-reduction-achieving-the-20

¹⁸ Cocoa Alphabites vs Coco Pops

The UK Ofcom Nutrient Profiling Model - Defining 'healthy' and 'unhealthy' foods and drinks for TV advertising to children Mike Rayner, Peter Scarborough, British Heart Foundation Health Promotion Research Group, Department of Public Health, University of Oxford Tim Lobstein, International Obesity Task Force, London October 2009

Testing nutrient profile models using data from a survey of nutrition professionals

An indication of how the profiling aligns with the traffic light labelling should also be considered

Scope

The review of the Nutrient Profiling Model excluded consideration of "the use of NPM for any other use beyond that related to restricting advertising of foods and drinks high in fat (saturated), sugars and salt to children".

However it is clear that the model is used more widely by NGOs and organisations who want shorthand for "healthy vs "unhealthy" food.

Products that don't pass the model are often referred to as "junk" foods not just by the media²² and campaigners^{23,24} but by government too^{25,26}.

The fact that some anomalous products fail the model is therefore much more significant and the model therefore needs to be see in a wider context – as part of the bigger picture for reducing obesity as discussed by PHE²⁷ last year.

Many of these initiatives require an assessment of the nutritional quality of products. Nutrient profiling models could clearly support a wide range of public health initiatives currently that means using the "Traffic Light" criteria or the Nutrient Profiling Model.

In future it is possible that the UK will look to apply profiling to the use of health claims enacting Article 4 of the Nutrition and Health Claims Regulation²⁸ post-Brexit.

Two of the experts involved in the recent review have also suggested that "Nutrient profiling provides a method for categorising foods for taxation or subsidy" 29.

In Summary

We are supportive of the principle but feel that the model is a blunt tool that is inconsistent and confusing. The free sugars element is particularly confusing for users and enforcers and the decision tree needs greater consideration.

We feel the resultant model should help direct consumers to healthier options and encourage healthier options to be produced and marketed.

Annex 1

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²² Children 'bombarded by junk food' ads on family shows - BBC

We've #AdEnough of junk food marketing

A Comprehensive Strategy to Tackle Childhood Obesity - Cross-Party Letter

The effect of junk food advertising on obesity in children - House of Commons Library - January 2018

²⁶ Scottish Government draft obesity strategy: A Healthier Future – Action and Ambitions on Diet,

Activity and Healthy Weight

27 https://www.gov.uk/government/publications/faculticatio

https://www.gov.uk/government/publications/health-matters-obesity-and-the-food-environment/health-matters-obesity-and-the-food-environment-2

https://ec.europa.eu/food/safety/labelling_nutrition/claims_en

The UK Ofcom Nutrient Profiling Model - Defining 'healthy' and 'unhealthy' foods and drinks for TV advertising to children Mike Rayner, Peter Scarborough, British Heart Foundation Health Promotion Research Group, Department of Public Health, University of Oxford Tim Lobstein, International Obesity Task Force, London October 2009

How are Bear Snacks made?

BEAR fruit snacks undergo an identical process to that of unsweetened dried fruit. The fruit snacks start as whole fresh fruit which gently pressed together before being gently baked in traditional dried fruit ovens at a low temperature (below 42°c), this takes 6-9 hours. The Yoyo's, Paws and Claws are then cut by hand in the same way other dried fruits are such as dried mango chunks or chopped apricots.

The only parts of the fruits that are removed in making unsweetened dried fruits are inedible parts such as the pips and stalks. (These wouldn't be eaten with the fresh fruit).

The use of the whole fruits and vegetables give BEAR products a high fibre content of 10.5g/100g.

See the diagram below for a comparison of the dried fruit (including BEAR products) process, vs. further processed fruit snacks and also highly processed fruit snacks.

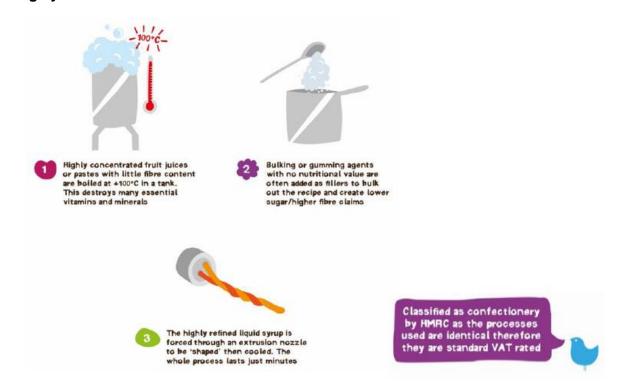
Dried Fruit Process



Further Processed Fruit Snacks Process



Highly Processed Fruit Snacks



Annex 2
Ingredients and Nutritional Composition

Product	Ingredients	Label Total Sugars g/100g	Label Fibre g/100g	NPM 2004 Score	NPM 2018 Score
BEAR Yoyo Strawberry	Apples, Pears, Strawberries, A little Black Carrot Extract, Absolutely nothing else, We bake 380g of Apples, 205g of Pears & 65g of Strawberries per 100g of Yoyos	42	10	0	-1
Product 2	Fruit (70%) (Pear Puree from Concentrate, Strawberry Puree from Concentrate {23%}), Glucose Syrup, Maltodextrin, Sugar, Vegetable Oil (Palm), Gelling Agent (Pectin), Emulsifiers (Mono and Diglycerides of Fatty Acids), Natural Flavouring, Elderberry Juice Concentrate, Citric Acid, Acidity Regulator (Sodium Citrate), Antioxidant (Ascorbic Acid), Malic Acid	37	2	12	13
Product 3	Concentrated Apple Puree, Concentrated Apple Juice, Strawberry Puree, Gluten Free Wheat Fibre, Gelling Agent (Pectin), Concentrated Elderberry Juice, Natural Flavouring, (An average of 671g Apple, 43g Strawberry & 7g Elderberry used to prepare 100g of Fruit Flakes™	58	7.5	5	2
Product 4	Dried Pear, Dried Apricot, Dried Grape, Fruit Puree (Strawberry (1%), Raspberry (1%), Cherry (1%), Blackcurrant (1%), Banana (1%)), Apple Fibre, Flavouring (Natural Fruit Flavourings with other Natural Flavouring), Natural Colour (Anthocyanin), Preservative (Sulphur Dioxide), To reduce stickiness, sticks are slightly dusted with White Starch	52.7	7.7	3	<1
BEAR Claws Strawberry & Butternut	Apples, Pears, Strawberries, Butternut, Black Carrot Extract, Absolutely nothing else, We bake 230g of Butternut, 213g of Apples, 213g of Pears and 45g of Strawberries per 100g of Claws	34	12	-2	-1
BEAR Paws Strawberry & Apple	Apples, Pears, Strawberries, A Little Black Carrot extract, We bake 415g of Apples, 200g of Pears & 35g of Strawberries per 100g of Paws	37.8	8	0	-1
Product 7	Apple (Concentrated Apple Juice, Apple Purée) (91%), Strawberry Purée (6%), Citrus Fibre to stop them sticking together, Pectin Gelling Agent found in Fruit - to help hold their wriggly shape, Concentrated Elderberry Juice	54.8	5.6	3	2
Product 8	Apple Juice Concentrate 66%, Apple Puree Concentrate 22%, Strawberry Puree 10%, Gelling Agent (Pectin)* <1%, Rice Flour <1%, Sunflower Oil <1%, Total 100%, *Gelling Agent (Pectin) has no Organic certification	67.2	1	7	7
Product 9	Organic Bananas 37%, Organic Strawberries 31%, Organic Apples 26%, Organic Raspberries 6%, Organic Lemon Juice Concentrate (a dash), Other Stuff 0%	11.9	1.5	-4	3
Product 10	California Seedless Raisins	71.4	5.8	3	-9

40. Waitrose

Thank you for the opportunity to comment on the new UK Nutrient Profiling Model, it is clearly a very comprehensive piece of work that has tested many options.

We have some concerns that the proposed model is identifying foods that make a valuable contribution to the micronutrient content of children's diets as HFSS. Waitrose strongly support the response from the ISBA in this regard.

We would also like to comment that although the model has been developed for the purposes of advertising restrictions, it is used now, and more likely in the future, to form the basis of broader advertising and marketing restrictions. Therefore it is important to consider the practical implications of obtaining the information needed to assess the healthiness of an entire product range. On this point, we support the response from the ISBA.

41. Weetabix Limited

Weetabix believes good nutrition at breakfast is vital. We are passionate about producing high quality cereals and breakfast drinks to give you many of the nutrients you need as part of a balanced breakfast.

On the 23rd March 2018, Public Health England (PHE) began consulting on an updated Nutrient Profiling Model that differentiates which food and drink products can be advertised during children's programming. In response, Weetabix proposes the following changes and comments:

Fibre Scoring Review

The scores for fibre in the PHE model should be reviewed to reflect its importance in the diet. Weetabix proposes:

- Food with 11 or more 'A' points also scores for protein if it has 10 points for fibre (i.e. 6g of fibre per 100g)
- Food scores 1 'C' point for 0.6g on fibre per 100g ranging up to 10 'C' points for 6g of fibre per 100g (i.e. high fibre)

Further comments

1. Impact of Free Sugars on Fibre Score

In the PHE model, positive points gained from the inclusion of protein and fibre in products are significantly outweighed by negative points allocated due to the presence of free sugars. Weetabix believes a better balance needs to be struck given the importance of fibre in the diet.

2. Dietary Needs in Respect of Fibre

The PHE model does not reflect the real dietary fibre needs of people living in the UK, particularly in respect of fibre intake.

for example, the proportion of children eating their recommended fibre intake each day is well below what it should be accordingly to the National Diet & Nutrition Survey.

- Only 10% of children aged between 18 months and 3 years;
- Only 10% of children aged between 4 and 10 years;
- Just 4% of children aged between 11 and 18 years.

Weetabix believes it is important for manufactures to be able to advertise products high in fibre.

This will help raise consumer awareness and increase fibre consumption amongst children.

3. High Fibre Products

The PHE model does not recognise high fibre products with more that 6% per 100g. The SACN Carbohydrates and Health Report published in 2015 states:

"Overall the evidence from prospective cohort studies indicates that diets rich in dietary fibre are associated with a lower incidence of cardiovascular diseases, coronary events, stroke and type 2 diabetes mellitus, colo-rectal cancer, colon and rectal cancer."

SACN recommends the dietary reference value for fibre is increased to 30g per day. According to the NDNS PR survey in 2015/16, high fibre breakfast cereals only contribute on average between 2% and 3% of total free (added) sugars to the UK diet.

Weetabix believes it is important for manufactures to be able to advertise products higher in fibre. This will help raise consumer awareness, increase fibre consumption and help people gain the health benefits recognised by SACN.

4. Sugar Reduction

Having made the model so challenging to comply with, we believe PHE is penalising healthier cereals by grouping them with the less healthy ones in the market. This means manufactures will not be incentivised to continue reducing sugar and make it harder for them to communicate nutritional improvements made to consumers.

The fact that many breakfast cereals with moderate amounts of added sugar will now be classed as high in fat, salt and sugar (HFSS) is at odds with the Traffic Light pack labelling scheme. A product that contains a moderate amount of sugar and amber rating (eg Weetabix Minis Fruits & Nut) will be classed as HFSS and no longer be suitable for advertising to children.

The rule on added fruits is not consistent between the Nutrient Profiling Model (NPM) and sugar reduction targets for cereal- added fruit is allowed in the NPM but not in the PHE sugar reduction targets. We believe it will be simpler if there are consistent rules.

5. Encouraging Healthier Breakfasts

In recent years, there has been an increase trend for consumers to skip breakfast of seek" on the go" alternatives. We believe the new PHE model has the potential to encourage consumers into less health alternative. Whilst we appreciate there is a need to reduce very high sugar levels in some products, the current proposal ignores the nutritional benefits offered by the majority of breakfast cereals.

For example, Weetabix Minis Fruit & Nut currently have an amber rating for fat and sugar content under the Traffic Light pack labelling scheme, along with a green rating for saturated and salt. They are also high in fibre and fortified with 4 vitamins, plus iron. Under the PHE model they would be classed as HFSS a 40g serving only providing 9.8% of the reference sugar intake.

Weetabix Crips Minis Fruit & Nut Case study. Effect on a high fibre breakfast cereal

Weetabix Crips Minis Fruit & Nut are a mini wholegrain cereal popular with children and under the current NPM (Nutrient Profile Model), can be advertised to children.

In 2016 we reduced the sugar content from 23.3g/100g to 21g/100g. This resulted in the product being classed as Amber (Medium) rather than Red (High) for sugars under the FOP (Front of Pack) traffic light labelling scheme.

A 40g serving of Minis Fruit & Nut only provides 9.8% of the Reference intake for sugar stipulated in labelling regulations, however, 40% of this is not free sugars and comes mainly from the dried fruit.

Under the proposed changes to the NPM, Minis Fruit & Nut will be reclassed as HFSS (High in Fat, Salt and no longer be allowed to advertise to children.

It is technically challenging to reduce the added sugar in Minis Fruit & Nut to a level at which it will meet the proposed Nutrient Profile Model.

There are several consequences resulting from this significant change in status.

sugar, and green for saturated fat and salt.

Minis Fruit & Nut have a number of nutritional benefits. Over two thirds of the product is wholegrain wheat, they are low in saturated fat, high in fibre, low in salt and fortified with 4 vitamins and iron.
 The concerns is that children will move to other breakfast alternatives which may not be as healthy and they will miss out on these nutritional benefits, especially the contribution that the fortification and fibre make to their diets.
 For instance, a typical Chocolate Croissant or Pain Au Chocolat will have red traffic lights for fat, saturated, and amber for sugar and salt and have less than a

third the fibre of Minis Fruit & Nut, which has an amber traffic light for fat and

- 2. Minis Fruit & Nut would be classed as HFSS under the proposed NPM, whereas under the Front of Pack Traffic Light Scheme it is a medium for sugar and fat (Amber traffic light), and low for salt and saturated fat (Green traffic light). This effectively makes the two schemes incompatible with each other and does not assist with consumer understanding.
- 3. As part of PHE's 2020 sugar reduction targets, we are already working on lowering the sugar in Minis Fruit & Nut further. As the product is already an Amber traffic light and it is technically challenging to achieve a green traffic light, the fact that it will no longer be able to advertised to children reduces the incentive to continue to lower the sugar in the product. As it would be classed as HFSS will likely create an unhealthy image in consumer's minds.

42. Which?

Which? is the largest consumer organisation in the UK with more than 1.7 million members and supporters. We operate as an independent, a-political, social enterprise working for all consumers and funded solely by our commercial ventures. We receive no government money, public donations, or other fundraising income. Which?'s mission is to make individuals as powerful as the organisations they have to deal with in their daily lives, by empowering them to make informed decisions and by campaigning to make people's lives fairer, simpler and safer.

Which? welcomes the opportunity to comment on the Public Health England (PHE) review of the UK nutrient profiling model. It is essential that the UK has a robust nutrient profiling model to underpin advertising restrictions and help to tackle some of the barriers that can make it difficult for people to make healthier food choices. Over ten years on from the development of the model, it is important to ensure that it reflects current dietary recommendations and is therefore fit for purpose.

We support the proposals for a revised model that are set out in the consultation. More specifically:

- We agree that it is most appropriate to revise the UK 2004/5 model in line with current dietary recommendations, rather than developing a new model from first principles.
- We agree that the model does need to reflect the changes that have been made to dietary recommendations following advice from the Scientific Advisory Committee on Nutrition (SACN). This includes the revised advice for intakes of free sugars for example.
- We consider it appropriate that as a result of these changes some products that have currently been able to be advertised, according to advertising restrictions, would no longer be permitted to – for example because the sugar content is now too high. This should also act as an incentive to companies to reformulate and provide consumers with a wider range of healthier choices.