

# Module 4: the regulatory context: information for consumers

## Objectives

This module will help you understand:

- The regulatory context for fibre in food information for consumers including:
  - Nutrition and Health claims.
  - Fibre on food labels.
  - Fibre in nutrient profiling.

The content of this module is for informational purposes only. Participants must seek legal and regulatory advice in relation to their products, markets and regions.



# Why regulate claims on food?

Ensure claims are based on high quality science and backed by independent evaluation

Protect consumers from misleading claims

Regulations cover claims made commercially in the labelling, presentation or advertising of foods to be delivered as such to the final consumer or caterers

In European Union countries (EU), regulations harmonise rules on claims allowing free trade – a 'level' playing field



# Claims in the EU and UK must not.....

- × Be **FALSE, AMBIGUOUS** or **MISLEADING**
- × Give rise to doubt about the safety and/or nutritional adequacy of other foods.
- × Suggest that health could be affected by not consuming the food.
- × Make reference to rate or amount of weight loss OR be medicinal.
- × Encourage or condone excess consumption of a food.
- × Imply that a balanced diet cannot provide appropriate quantities of nutrients.



**Similar but not identical conditions exist in other areas such as the US and Canada.**

# Regulatory background: Codex, US, EU and UK

Codex Alimentarius ('Food Code') is a collection of standards, guidelines and codes of practice adopted by the Codex Alimentarius Commission, established by FAO and WHO to protect consumer health and promote fair practices in food trade.



US nutrition and health claims and food labelling are regulated by the FDA, the US Food and Drug Administration

Nutrition and health claims on foods are controlled in the EU by Regulation (EC) 1924/2006. The evaluation of health claims is undertaken by European Food Safety Authority (EFSA) and these opinions are authorised by the European Commission.



Following the UK's departure from the EU on 31 January 2020 (BREXIT), nutrition legislation has transferred to the UK, but the EU Regulations have been retained.

*( Note: EU regulations still continues to be directly applicable in Northern Ireland).*



# Nutrition claims: Codex and UK

Nutrition claims (e.g. high in protein, low in salt) say something about the level of a nutrient in a food in a way that implies it is beneficial. Permitted claims and associated conditions are regulated.

<b>C O D E X</b> <small>International Food Standards ALIMENTARIUS</small>		
	<b>Source</b>	<b>High</b>
Dietary Fibre	3g per 100g or 1.5 g per 100 kcal or 10% of daily reference value per serving	6g per 100g or 3 g per 100 kcal or 20% of daily reference value per serving
<i>Conditions for claims in liquid foods to be determined at national level Serving size and daily reference value to be determined at national level</i>		



## SOURCE OF FIBRE

The product must contain at least 3 g of fibre per 100 g or at least 1.5 g of fibre per 100 kcal.

## HIGH FIBRE

The product must contain at least 6 g of fibre per 100 g or at least 3 g of fibre per 100 kcal.





# Nutrient claims: FSANZ and US



**FOOD STANDARDS**  
Australia New Zealand  
Te Hāua Kōwhiri Kaitiaki - Kaitiaki me te Aotearoa

Good source	A serving of the food contains at least 4 g of *dietary fibre.
Excellent source	A serving of the food contains at least 7 g of *dietary fibre.
Increased	<p>(a) The *reference food contains at least 2 g of *dietary fibre per serving; and</p> <p>(b) the food contains at least 25% more *dietary fibre than in the same amount of reference food.</p>



## NUTRIENT CONTENT CLAIMS

High	<ul style="list-style-type: none"> <li>Contains 20% or more of the DV per RACC.</li> <li>May be used on meals or main dishes to indicate that the product contains a food that meets the definition.</li> </ul>
Good Source	<ul style="list-style-type: none"> <li>Contains 10–19% of the DV per RACC.</li> <li>May be used on meals or main dishes to indicate that the product contains a food that meets the definition.</li> </ul>
"More", "fortified", "enriched", "added", "extra", and "plus"	<ul style="list-style-type: none"> <li>Contains at least 10% more of the DV per RACC than appropriate reference food.</li> <li>May only be used for vitamins, minerals, protein, dietary fibre, and potassium.</li> </ul>

### Fibre Content Claims

To make a fibre claim, the level of fat in a serving must be disclosed, unless the product meets the definition of a low fat food



# Health claims: EU and UK

Health claims link a food or one of its constituents to health.

In the EU and UK authorised health claims for dietary fibre are largely for specific types and mainly in relation to intestinal transit time and faecal bulk with the more commonly consumed fibres.

- Sugar beet fibre contributes to an increase in faecal bulk
- Barley grain fibre contributes to an increase in faecal bulk
- Oat grain fibre contributes to an increase in faecal bulk
- Wheat bran fibre contributes to an increase in faecal bulk
- Wheat bran fibre contributes to an acceleration of intestinal transit
- Rye fibre contributes to normal bowel function
- Chicory inulin contributes to normal bowel function by increasing stool frequency

However there are claims which have been approved by broadening health claims on specific fibres into wider categories (e.g. non-digestible carbohydrates when substituting for digestible carbohydrates – see next slide).

- Consumption of pectins with a meal contributes to the reduction of the blood glucose rise after that meal
- Pectins contribute to the maintenance of normal blood cholesterol levels
- Consumption of arabinoxylan produced from wheat endosperm as part of a meal contributes to a reduction of the blood glucose rise after that meal
- Replacing digestible starches with resistant starch in a meal contributes to a reduction in the blood glucose rise after that meal
- Consumption of beta-glucans from oats or barley as part of a meal contributes to the reduction of the blood glucose rise after that meal
- Beta-glucans (from oats or barley) contribute to the maintenance of normal blood cholesterol level
- Glucomannan (Konjac mannan) contributes to the maintenance of normal blood cholesterol levels
- Glucomannan (Konjac mannan) in the context of an energy restricted diet contributes to weight loss

Glucomannan is a fibre derived from the tuberous roots of the konjac plant used as an emulsifier and a thickener, or taken as a supplement



# Broader fibre health claims

- Consumption of foods/drinks containing non-digestible carbohydrates (e.g. fructo-oligosaccharides, non-starch polysaccharides, resistant oligosaccharides and resistant starch) instead of sugars induces a lower blood glucose rise after their consumption compared to sugar-containing foods/drinks
- Consumption of foods/drinks containing non-fermentable carbohydrates (e.g. resistant dextrin, polydextrose) instead of fermentable carbohydrates contributes to the maintenance of tooth mineralisation



**The limited number of general health claims may make the communication of the health benefits of fibre to consumers difficult.**



# Health claims: US



Four separate health claims for disease risk reduction have been authorized by the FDA for certain fiber containing foods.

These health claims relate to the following conditions:

- Fiber-Containing Grain Products, Fruits, and Vegetables and Cancer
- Fruits, Vegetables and Grain Products that contain Fiber, particularly Soluble Fiber, and Risk of Coronary Heart Disease
- Fruits and Vegetables and Cancer
- Soluble Fiber from Certain Foods and Risk of Coronary Heart Disease

## Fiber-Containing Grain products, Fruits, Vegetables and Cancer

### PRE-APPROVED HEALTH CLAIMS

The following authorized health claims are pre-approved for use, subject to the requirements below.

"Low fat diets rich in fiber-containing grain products, fruits, and vegetables may reduce the risk of some types of cancer, a disease associated with many factors."

"Development of cancer depends on many factors. Eating a diet low in fat and high in grain products, fruits, and vegetables that contain dietary fiber may reduce your risk of some cancers."

### REQUIREMENTS FOR USING THESE CLAIMS:

- The food must be OR contain a fruit, grain, or vegetable
- The food must meet the requirements for a "low fat food"
- The food must meet the requirements for a "good source of fiber" without fortification



# Fruits, Vegetables, and Grain Products that Contain Fiber, and the Risk of Coronary Heart Disease

## PRE-APPROVED HEALTH CLAIMS

The following authorized health claims are pre-approved for use, subject to the requirements below.

"Diets low in saturated fat and cholesterol and rich in fruits, vegetables, and grain products that contain some types of dietary fiber, particularly soluble fiber, may reduce the risk of heart disease, a disease associated with many factors."

"Development of heart disease depends on many factors. Eating a diet low in saturated fat and cholesterol and high in fruits, vegetables, and grain products that contain fiber may lower blood cholesterol levels and reduce your risk of heart disease."

## REQUIREMENTS FOR USING THESE CLAIMS:

- The food must be OR contain a fruit, grain, or vegetable
- The food must meet the requirements for a "low saturated fat" food, "low cholesterol" food, or a "low fat" food
- The food must contain 0.6g of soluble fiber per serving (without fortification).
- The soluble fiber content must be displayed in the nutrition panel.

# Soluble Fiber and the Risk of Coronary Heart Disease

## PRE-APPROVED HEALTH CLAIMS

The following authorized health claims are pre-approved for use, subject to the requirements below.

"Soluble fiber from foods such as [\*Insert name of applicable soluble fiber] of this section and, if desired, the name of food product], as part of a diet low in saturated fat and cholesterol, may reduce the risk of heart disease. A serving of [name of food] supplies \_\_\_\_ grams of the [grams of soluble fiber applicable soluble fiber specified] soluble fiber from [\*Insert name of applicable soluble fiber] necessary per day to have this effect."

"Diets low in saturated fat and cholesterol that include \_\_\_\_ grams of soluble fiber per day from [\*Insert name of applicable soluble fiber] may reduce the risk of heart disease. One serving of [name of food] provides \_\_\_\_ grams of this soluble fiber."

\*Applicable Soluble Fibers: *oat bran, rolled oats, whole wheat flour, oatrim, whole grain barley, dry milled barley, barley betafiber, psyllium husk,*

## REQUIREMENTS FOR USING THESE CLAIMS:

- The food product must include at least 0.75g (per amount of the food typically consumed) of one of the following:
  - Oat Bran
  - Rolled oats
  - Whole wheat flour
  - Whole grain barley and dry milled barley
- The food containing oatrim must contain  $\geq 0.75$ g of beta-glucan soluble fiber per amount of the food typically consumed.
- The food containing psyllium husk must contain  $\geq 0.17$ g of soluble fiber per amount of the food typically consumed.
- The amount of soluble fiber must be claimed in the nutrition information label.
- The food must meet the requirement for a "low saturated fat" The only acceptable exception is if the food exceeds the requirement for "low fat" food due to fat derived from the whole oat sources.
- The food must meet the requirement for a "low cholesterol food".



# Fibre on food labels

- Nutrition labels on food products give a guide about the nutrients the food contains and can help consumers compare and choose foods.
- The nutrients that are listed and the format of the label depends on the regulations in that country.

In the US,  
it is mandatory to list  
dietary fibre on the  
Nutrition Facts label.  
Soluble and insoluble  
fibre can be listed but on  
a voluntary basis.

Nutrition Facts	
17 servings per container	
<b>Serving size</b>	<b>3/4 cup (28g)</b>
<b>Amount per serving</b>	
<b>Calories</b>	<b>140</b>
% Daily Value*	
<b>Total Fat</b> 1.5g	<b>2%</b>
Saturated Fat 0g	<b>0%</b>
Trans Fat 0g	
Polyunsaturated Fat 0.5g	
Monounsaturated Fat 0.5g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 160mg	<b>7%</b>
<b>Fluoride</b> 0mg	
<b>Total Carbohydrate</b> 22g	<b>8%</b>
Dietary Fiber 2g	<b>7%</b>
Soluble Fiber <1g	
Insoluble Fiber 1g	
Total Sugars 9g	
Includes 8g Added Sugars	<b>16%</b>
<b>Protein</b> 9g	<b>18%</b>
Vitamin D 2mcg (80 IU)	10%
Calcium 130mg	10%
Iron 4.5mg	25%
Potassium 110mg	2%
Vitamin A 90mcg	10%
Vitamin C 9mg	10%
Thiamin 0.3mg	25%
Riboflavin 0.3mg	25%
Niacin 4mg	25%
Vitamin B <sub>6</sub> 0.4mg	25%
Folate 200mcg DFE (120mcg folic acid)	50%
Vitamin B <sub>12</sub> 0.6mcg	25%
Phosphorus 100mg	8%
Magnesium 25mg	6%
Zinc 3mg	25%
Choline 60mg	10%
* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.	
Calories per gram:	
Fat 9 • Carbohydrate 4 • Protein 4	

Nutrition Facts	
4 servings per container	
<b>Serving size</b>	<b>1 1/2 cup (208g)</b>
<b>Amount per serving</b>	
<b>Calories</b>	<b>240</b>
% Daily Value*	
<b>Total Fat</b> 4g	<b>5%</b>
Saturated Fat 1.5g	<b>8%</b>
Trans Fat 0g	
<b>Cholesterol</b> 5mg	<b>2%</b>
<b>Sodium</b> 430mg	<b>19%</b>
<b>Total Carbohydrate</b> 46g	<b>17%</b>
Dietary Fiber 7g	<b>25%</b>
Total Sugars 4g	
Includes 2g Added Sugars	<b>4%</b>
<b>Protein</b> 11g	
Vitamin D 2mcg	10%
Calcium 260mg	20%
Iron 6mg	35%
Potassium 240mg	6%
* The % Daily Value (DV) tells you how much a nutrient in a serving of food contributes to a daily diet. 2,000 calories a day is used for general nutrition advice.	



# Labelling Requirements: EU and UK

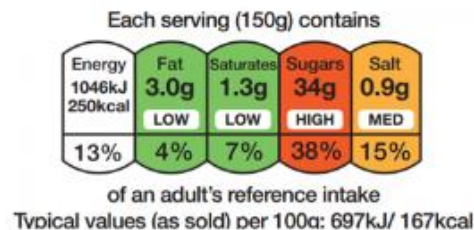
Mandatory values (required by law) are indicated for energy value and amounts of fat, saturates, carbohydrate, sugars, protein and salt.

## Not fibre.

But fibre can be declared on a voluntary basis.

Front-of-pack information is voluntary but, if provided, it can include energy alone or energy plus fat, saturates, sugars and salt.

## Not fibre.



It is not mandatory for fibre to be declared on nutrition labels. It can be declared on a voluntary basis and many products do provide this information

1 potato (approx 175g)		100g provides
Typical Composition	provides	
Energy	586kJ 138kcal	335kJ 79kcal
Protein	3.7g	2.1g
Carbohydrate of which sugars	30.1g 1.1g	17.2g 0.6g
Fat of which saturates	0.4g trace	0.2g 1.3g
Fibre	2.3g	trace
Sodium	trace	trace
Vitamins/Minerals		
Thiamin (Vitamin B1)	0.37mg (26% RDA)	0.21mg (15% RDA)
Folic Acid	61µg (31% RDA)	35µg (16% RDA)

RDA = Recommended Daily Allowance.  
This pack contains approx 10-14 servings. 1 potato contains approx 10g of salt.

Nutritional information on labels may also be expressed as a percentage of the reference intake (RI).

Energy or nutrient	Reference Intake
Energy	8400kJ/2000kcal
Fat	70g
Saturates	20g
Carbohydrate	260g
Sugars	90g
Protein	50g
Salt	6g

## Fibre is not included.

Therefore, consumers have no direct information of the fibre composition as a percentage of their daily fibre requirement although actual g per 100 g and per portion can be included on the back-of-pack.





# Fibre in UK nutrient profile models: HFSS

- A nutrient profiling model was developed (Food Standards Agency 2004/5) as a tool to help Ofcom, the UK's communications regulator, identify less healthy foods and reduce the exposure of children to television advertising of foods high in fat, salt and sugar (HFSS).
- The OfCom model assigns a score to food and drinks depending on a cumulative assessment based on:
  - *scores for unfavourable nutrients: fat, salt and sugar*
  - *scores for favourable nutrients/foods: protein, **fibre** and fruit/vegetables/nuts*
- The overall score indicates whether the product can be advertised on TV during children's viewing time. From 2022, the UK government are implementing further advertising restrictions on HFSS foods to children on TV and online.



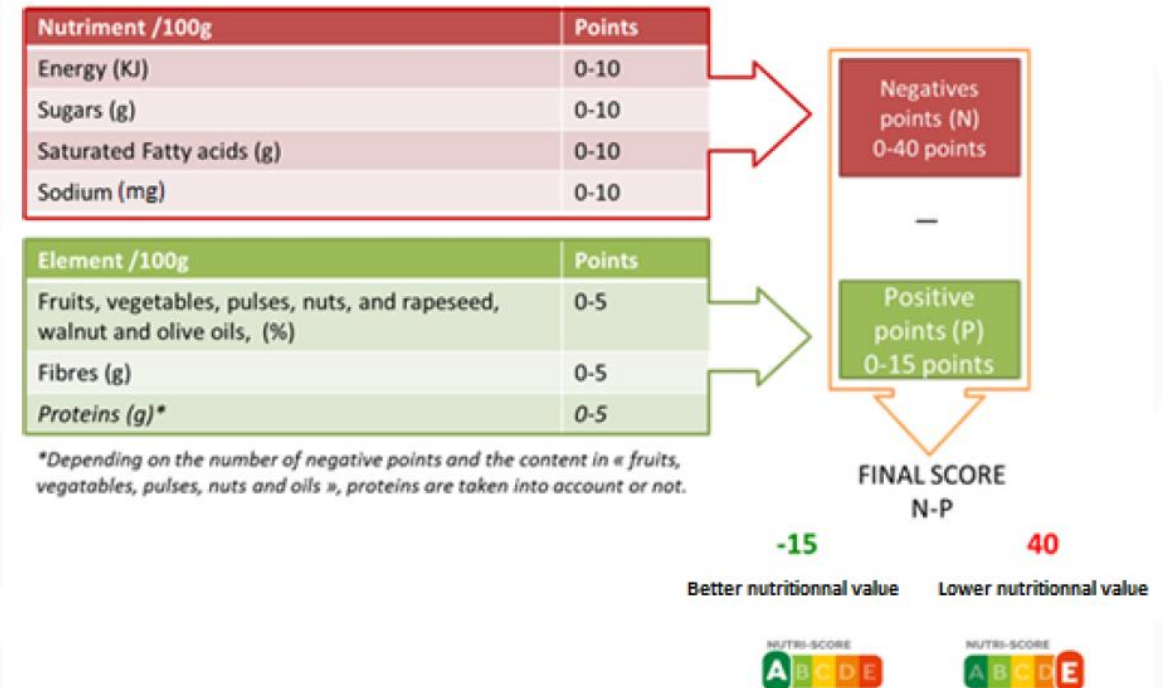
At the end of 2022, the UK will simultaneously introduce a 9pm watershed for HFSS products on TV and on-demand services, in addition to a restriction of paid-for HFSS advertising online.

From October 2022, store promotion of HFSS products will also be restricted in terms of location (e.g. checkouts and online equivalents) and volume price (e.g. "3 for 2" offers)



# Fibre in Nutri-score

- An adapted version of the FSA Ofcom nutrient profile model is used in the calculation of the Nutri-score front-of-pack labelling scheme used in some European countries (e.g. France, Belgium, Germany, Spain, Luxembourg, Netherlands)
- The Nutri-score formula takes into account nutrients to avoid (amount of energy, sugars, saturated fats and salt) and positive ones (**amount of fibre**, protein, fruit, vegetables and nuts, rapeseed oil, walnut oil and olive oil)
- The overall score is then converted to the Nutri-score A-E.



# Key learning points

- Nutrition claims say something about the level of a nutrient in a food in a way that implies it is beneficial. In countries like the UK, and US, as well as for EU members, these claims and associated conditions are regulated, e.g. in the EU a product labelled as a 'source of fibre' must have at least 3g of fibre per 100g.
- Currently in the EU and UK, no health claims have been authorised for total dietary fibre. But there are claims for specific fibre types such as reduction in postprandial (after meal) blood glucose for resistant starch, pectins, oat and barley beta-glucans and arabinoxylans from wheat endosperm; an increase in faecal bulk for sugar beet, barley grain oat grain and wheat bran fibres, and a contribution to normal bowel function for rye fibre and chicory inulin.
- Nutrition labels on food products can help guide consumers to make healthier food choices but whether fibre is listed depends on the regulations in that country. For example, it is not mandatory to list fibre on the nutrition label in the UK, but it is in the US.
- Fibre is recognised as a positive nutrient and included in some nutrient profiles to help in characterise healthier foods.



# Key references

## **Nutrition & health claims**

- EFSA [Scientific Opinion on the substantiation of health claims related to dietary fibre \(ID 744, 745, 746, 748, 749, 753, 803, 810, 855, 1415, 1416, 4308, 4330\) pursuant to Article 13\(1\) of Regulation \(EC\) No 1924/2006](#)
- European Commission – [Nutrition and health claims](#)
- FDA – [Authorized Health Claims That Meet the Significant Scientific Agreement \(SSA\) Standard](#)

## **Fibre on nutrition labels**

- Food and Drug Administration – [Questions and Answers on Dietary Fiber](#)
- Food Standards Agency – [Packaging and labelling](#)
- Food Standards Australia New Zealand – [Nutrition information panels](#)

## **Nutrient profiles and nutri-score**

- [NUTRI-SCORE FREQUENTLY ASKED QUESTIONS](#)



