

Supplementary Material 1: Food groups and sample size of products included in the study

Food groups	Sample size	Proportion
Appetizers	2,884	2.22%
Artificially sweetened beverages	1,892	1.46%
Biscuits and cakes	9,292	7.15%
Bread	3,143	2.42%
Breakfast cereals	2,702	2.08%
Cereal r	5,427	4.18%
Cheese	7,332	5.64%
Chocolate products	2,502	1.93%
Dairy desserts	3,013	2.32%
Dressings and sauces	7,272	5.60%
Dried fruits	1,344	1.03%
Eggs	466	0.36%
Fats	2,368	1.82%
Fish and seafood	5,063	3.90%
Fruit juices	8,925	6.86%
Fruit nectars	121	0.09%
Fruits	2,196	1.69%
Ice cream	2,495	1.92%
Legumes	1,447	1.11%
Meat	3,670	2.82%
Milk and yogurt	6,210	4.78%
Nuts	1,415	1.09%
Offals	430	0.33%
One-dish meals	8,980	6.91%
Pastries	1,734	1.33%
Pizza pies and quiches	1,320	1.02%
Plant-based milk substitutes	1,125	0.87%
Potato product	769	0.59%
Processed meat	8,348	6.42%
Salty and fatty products	4,793	3.69%
Sandwiches	795	0.61%
Soups	1,233	0.95%
Sweets	12,311	9.47%
Unsweetened beverages	2,529	1.95%
Vegetables	3,892	2.99%
Waters and flavored waters	512	0.39%

## Supplementary Material 2: Computation of the Nutri-Score

### 1. The 2017 Nutri-Score

Points are allocated based on the nutritional content per 100g of foods or beverages.

Points are allocated for unfavourable elements (A points) and for favourable elements (C points)

Component	A points				C points		
	Points	Energy (kJ)	Saturated fat (g)	Sugars (g)	Sodium (mg)	Protein (g)	Fibre (g)
0	≤335	≤1	≤4.5	≤90	≤1.6	≤0.9	≤40%
1	>335	>1	>4.5	>90	>1.6	>0.9	>40%
2	>670	>2	>9	>180	>3.2	>1.9	>60%
3	>1005	>3	>13.5	>270	>4.8	>2.8	
4	>1340	>4	>18	>360	>6.4	>3.7	
5	>1675	>5	>22.5	>450	>8.0	>4.7	>80%
6	>2010	>6	>27	>540			
7	>2345	>7	>31	>630			
8	>2680	>8	>36	>720			
9	>3015	>9	>40	>810			
10	>3350	>10	>45	>900			

$$A \text{ points} = \text{Points}_{\text{Energy}} + \text{Points}_{\text{Saturated fat}} + \text{Points}_{\text{Sugars}} + \text{Points}_{\text{Salt}}$$

$$C \text{ points} = \text{Points}_{\text{Fiber}} + \text{Points}_{\text{Protein}} + \text{Points}_{\text{F,V,P}}$$

#### In the general case:

- If  $A < 11$ ; Final nutritional score (FNS) =  $A \text{ points} - C \text{ points}$
- If  $A \geq 11$ ,  $\text{FNS} = A \text{ points} - (\text{Points}_{\text{Fiber}} + \text{Points}_{\text{F,V,P}})$

#### Specific calculation rules:

##### 1) For cheeses:

Same calculations as in the general case except for the FNS

- $\text{FNS} = A \text{ points} - C \text{ points}$  (regardless of the value of A)

##### 2) For fats and oils:

Component	A points				C points		
	Points	Energy (kJ)	Ratio SFA/total fat (%)	Sugars (g)	Sodium (mg)	Protein (g)	Fibre (g)
0	≤335	<10	≤4.5	≤90	≤1.6	≤0.9	≤40%
1	>335	>10	>4.5	>90	>1.6	>0.9	>40%
2	>670	>16	>9	>180	>3.2	>1.9	>60%
3	>1005	>22	>13.5	>270	>4.8	>2.8	
4	>1340	>28	>18	>360	>6.4	>3.7	
5	>1675	>34	>22.5	>450	>8.0	>4.7	>80%
6	>2010	>40	>27	>540			

7	>2345	>46	>31	>630			
8	>2680	>52	>36	>720			
9	>3015	>58	>40	>810			
10	>3350	≥64	>45	>900			

<sup>1</sup> Olive, canola and walnut oil are included in the fruit and vegetable component

A points= Points<sub>energy</sub>+ Points<sub>Saturated fat</sub>+ Points<sub>Sugars</sub>+ Points<sub>Salt</sub>

C points= Points<sub>Fiber</sub>+ Points<sub>Protein</sub>+ Points<sub>F,V,P</sub>

- If A points<11; Final nutritional score (FNS)=A points – C points
- If A≥11, FNS= A points – (Points<sub>Fiber</sub> + Points<sub>F,V,P</sub>)

### 3) Beverages

Component Points	A points				C points		
	Energy (kJ)	Saturated fat (g)	Sugars (g)	Sodium (mg)	Protein (g)	Fibre (g)	Fruits, vegetables, pulses (%)
0	≤0	≤1	≤0	≤90	≤1.6	≤0.9	≤40%
1	>0	>1	>0	>90	>1.6	>0.9	>40%
2	>30	>2	>1.5	>180	>3.2	>1.9	>60%
3	>60	>3	>3	>270	>4.8	>2.8	
4	>90	>4	>4.5	>360	>6.4	>3.7	
5	>120	>5	>6	>450	>8.0	>4.7	>80%
6	>150	>6	>7.5	>540			
7	>180	>7	>9	>630			
8	>210	>8	>10.5	>720			
9	>240	>9	>12	>810			
10	>270	>10	>13.5	>900			

A points= Points<sub>energy</sub>+ Points<sub>Saturated fat</sub>+ Points<sub>Sugars</sub>+ Points<sub>Salt</sub>

C points= Points<sub>Fiber</sub>+ Points<sub>Protein</sub>+ Points<sub>F,V,P</sub>

- If A points<11; Final nutritional score (FNS)=A points – C points
- If A≥11, FNS= A points – (Points<sub>Fiber</sub> + Points<sub>F,V,P</sub>)

### Nutri-Score allocation

FNS		Class
All foods except beverages	Beverages	
≤-1	Waters	A
0 to 2	≤1	B
3 to 10	2 to 5	C
11 to 18	6 to 9	D
≥19	≥19	E

## 2. The 2023 Nutri-Score

Points are allocated based on the nutritional content per 100g of foods or beverages.

Points are allocated for unfavorable elements (A points) and for favorable elements (C points)

Component	A points				C points		
	Points	Energy (kJ)	Saturated fat (g)	Sugars (g)	Salt (g)	Protein (g)	Fiber (g)
0	≤335	≤1	≤3.4	≤0.2	≤2.4	≤3	≤40%
1	>335	>1	>3.4	>0.2	>2.4	>3	>40%
2	>670	>2	>6.8	>0.4	>4.8	>4.1	>60%
3	>1005	>3	>10	>0.6	>7.2	>5.2	
4	>1340	>4	>14	>0.8	>9.6	>6.3	
5	>1675	>5	>17	>1	>12	>7.4	>80%
6	>2010	>6	>20	>1.2	>14		
7	>2345	>7	>24	>1.4	>17		
8	>2680	>8	>27	>1.6			
9	>3015	>9	>31	>1.8			
10	>3350	>10	>34	>2.0			
11			>37	>2.2			
12			>41	>2.4			
13			>44	>2.6			
14			>48	>2.8			
15			>51	>3			
16				>3.2			
17				>3.4			
18				>3.6			
19				>3.8			
20				>4			

$$A \text{ points} = \text{Points}_{\text{Energy}} + \text{Points}_{\text{Saturated fat}} + \text{Points}_{\text{Sugars}} + \text{Points}_{\text{Salt}}$$

$$C \text{ points} = \text{Points}_{\text{Fiber}} + \text{Points}_{\text{Protein}} + \text{Points}_{\text{F,V,P}}$$

**In the general case:**

- If  $A \text{ points} < 11$ ; Final nutritional score (FNS) =  $A \text{ points} - C \text{ points}$
- If  $A \geq 11$ ,  $\text{FNS} = A \text{ points} - (\text{Points}_{\text{Fiber}} + \text{Points}_{\text{F,V,P}})$

**Specific calculation rules:**

1) For cheeses:

Same calculations as in the general case except for the FNS

- $\text{FNS} = A \text{ points} - C \text{ points}$  (regardless of the value of A)

2) For red meat and processed meat:

Same calculations as in the general case except maximum number of protein points is set at 2.

- If  $A \text{ points} < 11$ ;  $\text{FNS} = A \text{ points} - (\text{Points}_{\text{Fiber}} + \min(\text{Points}_{\text{Protein}}, 2) + \text{Points}_{\text{F,V,P}})$
- If  $A \geq 11$ ,  $\text{FNS} = A \text{ points} - (\text{Points}_{\text{Fiber}} + \text{Points}_{\text{F,V,P}})$

3) For nuts, seeds and oils:

Component	A points				C points		
Points	Energy from SFA (kJ) <sup>1</sup>	Ratio SFA/total fat (%)	Sugars (g)	Salt (g)	Protein (g)	Fiber (g)	Fruits, vegetables, pulses (%) <sup>2</sup>
0	≤120	<10	≤3.4	≤0.2	≤2.4	≤3	≤40%
1	>120	>10	>3.4	>0.2	>2.4	>3	>40%
2	>240	>16	>6.8	>0.4	>4.8	>4.1	>60%
3	>360	>22	>10	>0.6	>7.2	>5.2	
4	>480	>28	>14	>0.8	>9.6	>6.3	
5	>600	>34	>17	>1	>12	>7.4	>80%
6	>720	>40	>20	>1.2	>14		
7	>840	>46	>24	>1.4	>17		
8	>960	>52	>27	>1.6			
9	>1080	>58	>31	>1.8			
10	>1200	≥64	>34	>2.0			
11			>37	>2.2			
12			>41	>2.4			
13			>44	>2.6			
14			>48	>2.8			
15			>51	>3			
16				>3.2			
17				>3.4			
18				>3.6			
19				>3.8			
20				>4			

<sup>1</sup>Energy from SFA= Saturated fat content (g/100g)\*9\*4.18

<sup>2</sup>Oils derived from elements qualifying in the fruit and vegetable component qualify for fruit and vegetable component

A points= Points<sub>energy</sub>+ Points<sub>Saturated fat</sub>+ Points<sub>Sugars</sub>+ Points<sub>Salt</sub>

C points= Points<sub>Fiber</sub>+ Points<sub>Protein</sub>+ Points<sub>F,V,P</sub>

- If A points<7; Final nutritional score (FNS)=A points – C points
- If A≥7 FNS= A points – (Points<sub>Fiber</sub> + Points<sub>F,V,P</sub>)

#### 4) Beverages

Component	A points					C points		
	Points	Energy (kJ)	Saturated fat (g)	Sugars (g)	Salt (g)	NNS <sup>1</sup>	Protein (g)	Fiber (g)
0	≤30	≤1	≤0.5	≤0.2	Absence	≤1.2	≤3	≤40%
1	>30	>1	>0.5	>0.2		>1.2	>3	
2	>90	>2	>2	>0.4		>1.5	>4.1	>40%
3	>150	>3	>3.5	>0.6		>1.8	>5.2	
4	>210	>4	>5	>0.8	Presence	>2.1	>6.3	>60%
5	>240	>5	>6	>1		>2.4	>7.4	
6	>270	>6	>7	>1.2		>2.7		>80%
7	>300	>7	>8	>1.4		>3		
8	>330	>8	>9	>1.6				
9	>360	>9	>10	>1.8				
10	>390	>10	>11	>2.0				
11				>2.2				
12				>2.4				
13				>2.6				
14				>2.8				
15				>3				
16				>3.2				
17				>3.4				
18				>3.6				
19				>3.8				
20				>4				

<sup>1</sup>NNS stands for Non-nutritive sweeteners, as listed in Appendix 2 of the EU Regulation n°1333/2008

A points= Points<sub>energy</sub>+ Points<sub>Saturated fat</sub>+ Points<sub>Sugars</sub>+ Points<sub>Salt</sub>+ Points<sub>NNS</sub>

C points= Points<sub>Fiber</sub>+ Points<sub>protein</sub>+ Points<sub>F,V,P</sub>

- FNS=A points – C points

#### Nutri-Score allocation

FNS			Class
Solid foods	Nuts, seeds, oils	Beverages	
≤0	≤-6	Waters	A
0 to 2	-5 to 2	≤2	B
3 to 10	3 to 10	3 to 6	C
11 to 18	11 to 18	7 to 9	D
≥19	≥19	≥10	E

