

Mission:

MY PERFECT

LUNCH

Educational resource
document

Table of contents

General presentation

Game objective.....	4
Educational aspect.....	4
Message.....	5
Nutritional qualities.....	5
Environmental impact and sustainability.....	5
Producers' working conditions.....	5

Game loop

Choosing food items.....	6
Information panels.....	6
Character comments.....	6
Placement in the box.....	6

How to play

How the app works.....	7
Installation.....	7
Playing a level.....	7
Tips.....	8
Choosing a level.....	8
Optimal score and personal preferences.....	8
Accessing the information panels.....	9
Placing the pieces.....	9

1 > Nutrition

Purpose of the chapter.....	10
Sources for nutritional quality.....	10
Monday > My first meal	11
Tuesday > A balanced meal	14
What is fibre?.....	14
Where do vitamins come from?.....	15
Sugar and fat: a matter of quantity.....	16
Calcium intake.....	17
Wednesday > Whole grains	19
Glycemic index rather than "fast" and "slow" carbohydrates.....	20
Nutritional changes in bananas as they ripen.....	23
Thursday > A sandwich	24
Friday > Not that simple	27
"Trans" fatty acids.....	27
The nutritional value of spinach.....	29

2 > Durability

Purpose of the chapter.....	33
Sources regarding environmental impact.....	33
Organic labels featured in the game.....	34
Monday > Where does it come from?.....	35
Environmental impact of transport.....	35
Meat imported from outside the EU.....	37
Origin of ingredients in processed products.....	40
Tuesday > Winter products.....	41
Winter radish varieties.....	41
Heated greenhouse tomatoes.....	42
Seasonality as a simple indicator of environmental impact.....	44
Wednesday > Summer products.....	46
"New" and "storage" potatoes.....	46
Endive cultivation.....	47
Production of "processed cheeses" such as The Laughing Cow.....	49
Thursday > Good for the environment.....	51
The significant environmental impact of animal farming.....	53
Friday > Winter again.....	58
The MSC label for fish.....	60

3 > Production conditions

Purpose of the chapter.....	62
Global South countries.....	62
Fair trade labels featured in the game.....	63
Monday > Fair pay, fair production.....	64
Economic principle of fair trade.....	64
Job insecurity among seasonal workers.....	65
Banana production conditions.....	67
Distribution of chocolate value along the production chain.....	68
Tuesday > Behind the label.....	70
The environmental impact of avocado cultivation.....	71
The exploitation of workers on shrimp farms in Asia.....	72
Wednesday > Spring Meal.....	75
Thursday > Vegetarian meal.....	78
The issue of child labor.....	81
Friday > Last meal.....	82

General presentation

Game objective

The goal of *Mission : My Perfect Lunch* is to put together a lunch box by selecting products proposed by the game, one after another. Choosing the best food products increases the score, then placing them in the box is left to players' creativity.

The stated goal, then, is to achieve a perfect score on each game level by understanding the reason behind each choice. However, players are free to experiment with different combinations, including putting together the worst possible meal, since that also contributes to the learning process.

Educational aspect

The game has an educational purpose and addresses several complex topics that come into play in our food choices. The pedagogy is split across three axes, each introduced in a separate chapter:

- The nutritional value of foods
- The ecological footprint of products
- The producers' working conditions

The descriptive text and iconography accompanying each product depend on the subject the level focuses on. For example, for a clementine, the first chapter mentions its vitamin content, the second chapter its country of origin and the impact of transport, while the third chapter mentions the poor working conditions found in certain regions.

This educational dimension is designed in two ways: first, (passive) learning through exposure, conveyed through the representations the game imposes. For example, the structure of a meal (starch, vegetable, protein, dairy, fruit, snack) and the proportions given to each food (more vegetables than meat) accustom players to good eating habits. Similarly, the end screen displays a water bottle as the drink and reusable cutlery around the lunch box.

Second, (active) learning through interaction occurs when players choose a product and receive direct feedback from the game (an increase or decrease of the star score) and from the mascot character (via an expression and a text comment).

Message

Eating well while thinking about both your health and your impact on the world is already very difficult for an adult. So our goal here is not to judge players too harshly or set traps for them. On one hand, the learning is segmented: each choice that presents three products puts them in direct competition over one specific criterion.

On the other hand, the game's scoring system is forgiving: a level is rated out of 5 stars but generally made up of 6 steps. Players therefore have one "free pass" they can use, for example on the last choice, which is often a snack.

There is, moreover, no push to get the best possible score every time. The mascot's feedback allows players to go back and correct their choice. The message to take away is that any progress is worth taking, and that improving one thing with each meal is already a nice effort. No one is required to be perfect in an imperfect world.

Nutritional qualities

At first, the game guides players toward foods that are better for their health: varied, nutrient-rich, minimally processed products consumed in balanced proportions. The Nutri-Score is displayed as the default indicator so that the learning can be easily transferred to the real world.

Environmental impact and sustainability

The game invites players to consider the overall impact of foods in order to raise awareness of choices that are more respectful of the planet. In particular, it covers their origin and mode of transport, their seasonality, their farming method, and their type of packaging.

Producers' working conditions

The focus of the last chapter is on supply chains where working conditions are ethical, transparent, and part of a fair trade approach, as a reminder that our food choices also have a social dimension. Recognizable logos found on products in stores are used in the game.

Game loop

Choosing food items

A level corresponds to a meal to be put together. At each step (starch, vegetable, protein, etc.), three products are offered, displayed side by side, to be added to the meal. The best product must be selected, based on the information given by the game (and, to some extent, personal preferences).

Products are represented by a name and an illustration, and are accompanied by a brief description and an iconographic image that help players make their choice. As a general rule, two products are good (or acceptable) and one product should be avoided.

Information panels

Certain keywords in the descriptions are clickable (or tappable on touch screen) to open an information panel on the topic. It consists of a few paragraphs of text designed to be easy to read, along with illustrations.

The content is tailored for children. More in-depth, sourced information is available in this document.

All the information panels already opened in the game can be reviewed via a glossary, accessible from the level selection screen.

Character comments

A mascot character accompanies players throughout the game via short dialogue lines that provide context for each level (each meal) and give feedback on the product chosen. The character's expression and text animations reinforce the positive, negative, or mixed nature of the feedback on the choice made.

Placement in the box

The selected product must then be placed in the box. Players are free to arrange their lunch box however they like, as long as all the pieces fit inside the box. The primary purpose of this game mechanic is to allow for creative freedom. Only the levels near the end of the game have complex arrangements that can be tricky. This document provides a placement solution for each level.

Once the last product has been placed, players can admire the result, and a score out of five stars is given.

The game is divided into a series of levels, each corresponding to one day of the week's meal. The best score achieved per level is displayed on the selection screen.

How to play

How the app works

Installation

Mission: My Perfect Lunch is available on PC and mobile.

The PC version can be downloaded from the website
<https://myperfectlunch.be/installation-en/>

The Android version is available on the Google Play Store.

The iOS version is available on Apple's App Store.

Playing a level

The language can be selected from the main menu.

To start the game, click the Play button, then select a level.

At each step, three products are offered. Read the short description of each product and look at the accompanying illustration to identify the "good" products, then choose the one you like best by clicking on it (or tapping it, on mobile). Click the folded-corner icon in the bottom right to switch between the text and the illustration.

The product must then be moved into the lunch box by dragging and dropping it.¹

Finally, click the Next button to move on to the next step.

¹ Drag-and-drop: click on an item, then, while holding down the button, drag it to a new location, and finally release the mouse button (or lift your finger from the touchscreen) to drop it.

Tips

Choosing a level

All levels are accessible from the start, to make the game easier to use in different contexts. However, it is recommended to discover the levels in order.

They are organized into three chapters. Each chapter is recommended from a different age onward, so that the issues explained in the product descriptions can be properly understood if the child is not accompanied by an adult.

Feel free to replay levels you've already completed to get a better score or try different combinations.

Optimal score and personal preferences

Many factors come into play in the choices related to our diet. Eating varied foods versus eating locally, eating healthily versus indulging, getting enough protein and calcium while limiting environmental impact and respecting animal welfare.

Mission: My Perfect Lunch attempts to highlight the main ones, isolating them to explain them in a pedagogical way. For example, a level that introduces the concept of fair trade highlights labels indicating fair pay conditions for producers, but ignores the nutritional aspect. The different criteria are only combined in later levels, and within the limits inherent to the game's format.

For this reason, contradictions may appear in the score and the comment given about a product from one level to another. The goal of the game is to find an acceptable compromise when putting together a meal within the given constraints.

Some products only give half a star for these reasons, but since most levels have six products, it is not necessary to get a full star at every step to achieve a perfect score.

Accessing the information panels

The information panels containing additional information are "unlocked" by playing the levels. Specifically, clicking a word shown in blue (accompanied by a speech bubble icon) opens the panel and unlocks it in the Glossary.

The glossary can be accessed via a button in the bottom right of the level selection screen.

Placing the pieces

All pieces can be moved and repositioned by dragging and dropping to fit into the lunch box. They cannot be rotated.

It is possible to move pieces that have already been placed, and even to remove a piece (by placing it to the left of the box) to make rearranging easier. Some levels near the end of the game require a bit of thought and manipulation to fit all the pieces in.



1 > Nutrition

The levels in this chapter are recommended from age 8 onward.

Purpose of the chapter

Eating well shouldn't be following a list of forbidden foods. The purpose of this chapter is to understand what our food brings to us, and what quantities are reasonable. To be able to spot foods rich in valuable nutrients (vitamins, fiber), and to become aware, without being alarmist, of the value of limiting excess sugar and fat.

The goal is not to achieve perfect balance at every meal, but to gradually build good habits.

Sources for nutritional quality

All Nutri-Scores are based on an average of products found on [Open Food Facts](#). The Nutri-Score combines several criteria into a single rating from A to E: sugar content, saturated fat content, salt content, fiber content, protein content, and fruit and vegetable content. Despite its limitations, it is a useful comparison tool for similar products.² For non-industrial products, we calculated a Nutri-Score ourselves using the same criteria, in order to offer equivalent iconography.

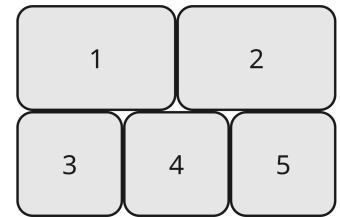
Information relating to the nutritional value of products comes from the Ciqua nutritional composition table (ciqua.anses.fr), a reference database managed by the French national food safety agency (ANSES).

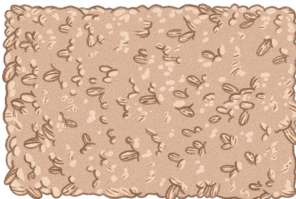
² Nutri-Score page on the FPS Public Health website

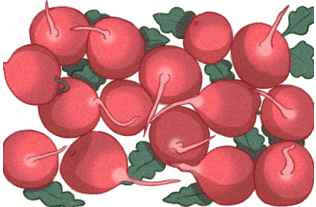
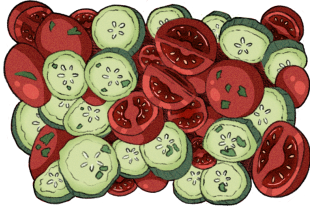
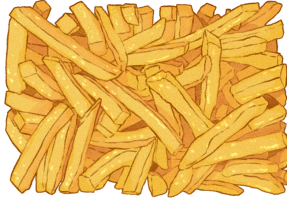
<https://www.health.belgium.be/fr/professionnels/entreprises/produits-consommation/alimentation/reglementations-alimentaires/sante-alimentation/nutri-score>

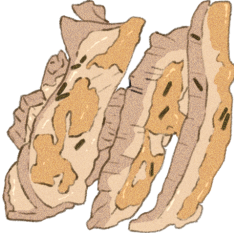
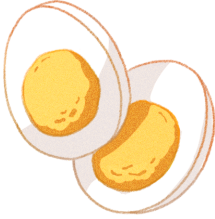
Monday > My first meal

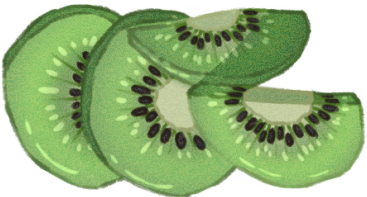
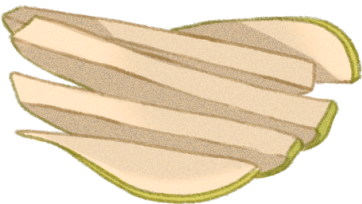
The first level introduces the game mechanic (selecting a product and then placing it in the box). Incorrect choices are clearly identifiable.

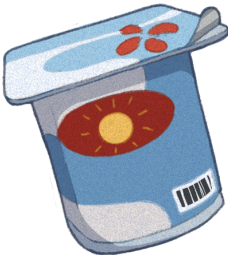
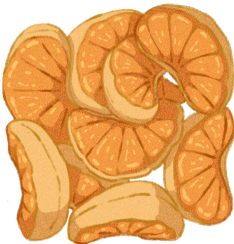


Starch		
Pasta salad	Brown rice	Potato salad
		
Pasta is a good starch, it gives you energy for the whole day.	Brown rice is also a good starch to start the meal.	The potato is a simple starch that grows in Belgium.
+★	+★	+★

Vegetable		
Radishes	Tomato and cucumber salad	Fries
		
The radish is a fresh, crisp vegetable.	Tomatoes and cucumbers are fresh vegetables, perfect to go with a meal.	Fries are good, but they're cooked in fat. They don't replace a vegetable.
+★	+★	☆

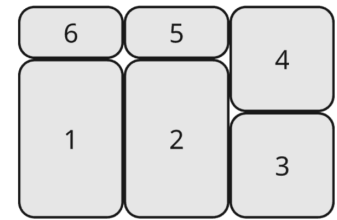
Protein		
Smoked chicken	Hard-boiled egg	Donut
		
Chicken is a good source of protein, which helps your muscles grow.	Eggs are also a good source of protein, and easy to prepare.	Donuts are very sugary and fatty, and don't provide the protein your body needs for this meal.
+★	+★	☆

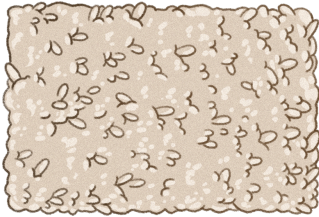
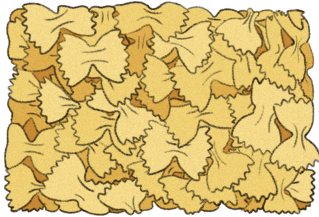
Fruit		
Kiwi	Apple	Salami
		
Kiwi is a fruit full of vitamins, good for staying healthy.	The apple is a fruit rich in vitamins and grows in Belgium.	Salami is very fatty and salty, it's not a fruit and it's not ideal to finish this meal.
+★	+★	☆

Snack		
Plain yogurt	Mandarin	Nougat
 Plain yogurt is a good source of calcium, with no added sugar. ++★	 The mandarin is a juicy fruit, full of vitamins to do you good. ++★	 Nougat is a sugary sweet, best saved for a special occasion rather than to finish every meal. ☆

Tuesday > A balanced meal

The second level clearly illustrates the typical structure of a meal (starchy food, vegetable, protein, calcium source, fruit) while highlighting the importance of each component. The poor choices are selected to be fairly obvious: too high in fat and/or sugar.



Starch		
Rice	Pasta	Madeleines
		
Carbohydrates and fiber are a good foundation for a meal.	Carbohydrates and fiber are a good foundation for a meal.	Cakes are very high in fat and sugar, which makes them unsuitable for a meal.
+★	+★	-★

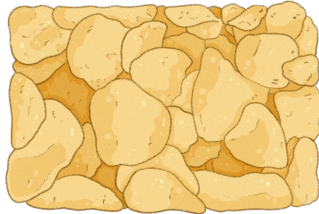
What is fibre?

Fiber is the part of plant-based foods that our digestive system cannot absorb. It is found in fruits, vegetables, legumes, and whole grains. Fiber slows down digestion, which helps you feel full for longer, and facilitates intestinal transit.³ Opting for whole-grain versions of cereals and regularly eating legumes, fruits, and vegetables makes it easy to meet your fiber needs without any special effort.

³ ANSES (the French food safety agency) recommends a daily fiber intake of approximately 25 to 30 g for adults. However, consumption studies show that most French people do not reach this level, with an average closer to 20 g per day.

Étude individuelle nationale des consommations alimentaires 3, Juin 2017

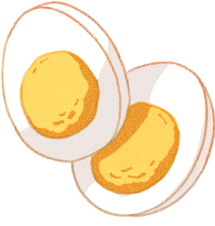
<https://www.anses.fr/fr/system/files/NUT2014SA0234Ra.pdf>

Vegetable		
Grated carrots	Cherry tomatoes	Potato chips
		
Vegetables are important sources of fiber and vitamins. It's best to include a variety at every meal.	Vegetables are important sources of fiber and vitamins. It's best to include a variety at every meal.	Fatty and salty. Appetizer crackers don't provide anything we really need.
+★	+★	-★

Where do vitamins come from?

Vitamins are chemical substances that the body needs but cannot produce itself (or only in very small quantities). They must therefore be obtained from the diet. Some play a role in vision, others in bone strength, and still others in defending against infections.

They are found primarily in fruits and vegetables, but also in dairy products, eggs, and fish. That is why it is important to have a varied diet: no single food contains every vitamin, but regularly eating fruits and vegetables of different colors is a simple way to meet most of your nutritional needs.

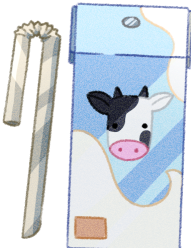
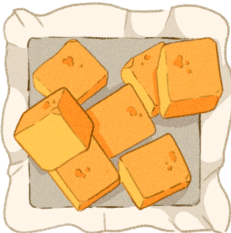
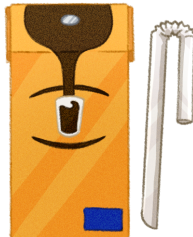
Protein		
Hard boiled egg	Smoked chicken	Bacon
 Eggs are rich in protein. +★	 Chicken is an ideal source of protein as long as you limit the fat in the sauce and on the skin. +★	 Smoked bacon comes from the thick fat of a pig. It is rich in flavor, but also high in fat and salt. ☆

Sugar and fat: a matter of quantity

Sugars (carbohydrates) and fats (lipids) are sources of energy necessary for the body's functioning. However, in excessive amounts, they cause various health problems.

It is important to add some nuance to this topic. Certain fats (such as those found in olive oil, fatty fish, or nuts and seeds) offer health benefits. And the sugars naturally present in fruit, for example, are considered less problematic since they come with vitamins and fiber.

Nevertheless, a good general rule, in addition to maintaining a varied diet, is to limit the consumption of high-calorie foods (sugar and fat account for the majority of calories). However, we need to be careful when giving quantified limitations of caloric intake. The body's needs vary depending on age, sex, physical activity, and growth variations for children. This rule is given in a context where high-calorie food is easily accessible. In other situations, or for individuals with eating disorders, focusing on calories can have a negative effect.

Dairy		
Milk	Gouda cheese	Chocolate milk
		
Milk is an obvious source of calcium.	It's fattier and saltier than milk, but it's a good source of calcium.	Chocolate or strawberry milk is mostly made from milk, but with added sugar. ⁴
+★	+★	+★

Calcium intake

For children and adolescents, it is recommended to consume approximately 200 mg of calcium per meal (three times a day). This amount corresponds roughly to a small glass of milk (160 ml), a plain or fruit yogurt, 30 g of cheese such as Emmental, Gouda, Comté, or Gruyère, or 60 g of cheese such as Camembert or Roquefort. Calcium is also found in leafy vegetables (spinach, cabbage, etc.) and legumes (dried beans, peas, lentils, etc.).⁵

Flavored milk drinks are indeed milk-based and therefore contribute to calcium intake. However, sugar is added alongside the flavorings. It is therefore best to avoid them in order to limit overall calorie intake.

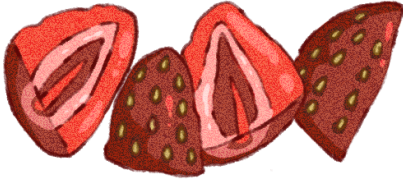
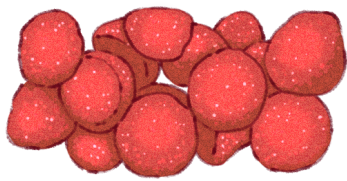
Cécémel chocolate milk, for example, contains nearly 10% added sugar (from the chocolate powder and additional sugar), earning it a poor Nutri-Score.⁶

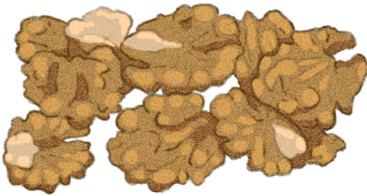
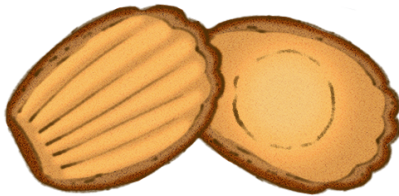
⁴ The World Health Organization (WHO) recommends limiting “free sugars” (added sugars, as well as those found in honey, syrups, and fruit juices) to less than 10% of daily energy intake, with additional health benefits observed when intake is below 5%.

WHO calls on countries to reduce sugars intake among adults and children, March 4 2015
<https://www.who.int/fr/news/item/04-03-2015-who-calls-on-countries-to-reduce-sugars-intake-among-adults-and-children>

⁵ Vitamines et minéraux chez les enfants. Article Vidal.fr du 16 septembre 2019.
<https://www.vidal.fr/sante/nutrition/equilibre-alimentaire-enfant-adolescent/recommandations-nutritionnelles-enfants/vitamines-mineraux.html>

⁶ Cécémel Le seul vrai – 1L. Page sur Open Food Facts.
<https://fr.openfoodfacts.org/produit/5414150629236/cecemel-le-seul-vrai>

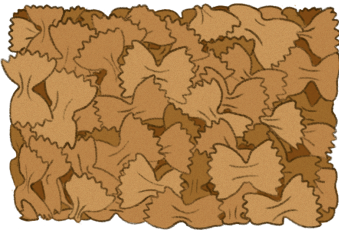
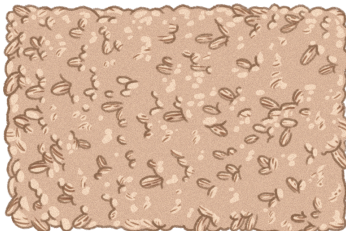
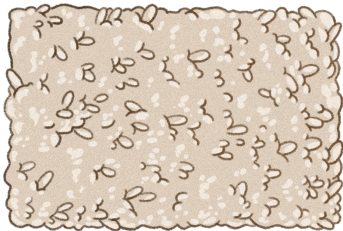
Fruit		
Strawberries	Clementines	Strawberry candy
		
Fruits provide fiber and vitamins (especially vitamin C and B9 in strawberries).	Fruits provide fiber and vitamins (especially vitamin C in clementines and mandarins).	Candy is made entirely of sugar and should therefore be eaten only in small amounts on occasion.
+★	+★	-★

Snack		
Walnuts	Madeleine	Candies
		
Although they are high in fat, nuts are also rich in minerals, trace elements, and vitamin E.	Madeleines are made up of equal parts fat and sugar. They should be eaten only occasionally and in moderation.	Candy is made entirely of sugar and should therefore be eaten only in small amounts on occasion.
+★	☆	-★

Wednesday > Whole grains

This level completes the study of nutritional intake by focusing on various sources of fiber. The first step therefore highlights "whole-grain" versions of pasta and rice, as opposed to their "white" counterparts, which undergo more extensive refining to completely remove the outer husk.



Starch		
Whole-grain pasta	Brown rice	White rice
		
Whole-wheat pasta is made from whole wheat, which means the outer layer of the grain is retained. This makes it higher in fiber (6% compared to 3% for white pasta).	Like full-grain wheat, brown rice retains its bran and remains rich in fiber (2% compared to 0.5% for white rice).	White rice has been refined: its husk has been removed. It therefore contains less fiber than brown rice.
+★	+★	+★

Glycemic index rather than “fast” and “slow” carbohydrates

The common terms “fast sugars” and “slow sugars” should be avoided because they are somewhat misleading. The concept, introduced in 1981,⁷ distinguishes between simple sugar molecules (glucose, fructose, galactose, etc.), which are digested quickly, and complex molecules (such as lactose, composed of galactose and glucose), which are digested slowly.

However, there are many exceptions. For example, boiled potatoes are rich in starch, a “slow” sugar, yet they raise blood glucose levels just as quickly as pure sugar. The reason is that the cooking method and the food’s composition determine how sugars are absorbed.

The concept of the glycemic index is now preferred: it is calculated based on the change in blood glucose levels after ingestion, measured on a scale from 0 to 100, with 100 being the reference level for pure glucose. Note that this index does not measure the amount of sugar but only the rate at which it is made available by the body.

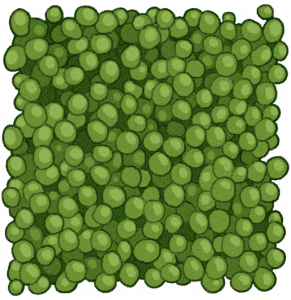
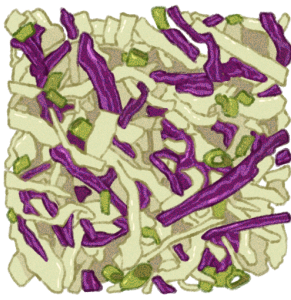
Here are a few examples to help you understand:

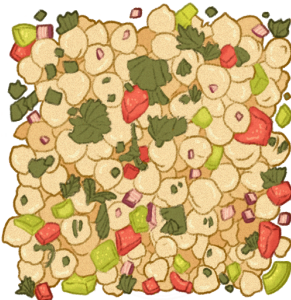
- Cooking raises the glycemic index. Carrots go from a glycemic index of 16 to 47 once cooked.⁸
- The glycemic index of fruits changes as they ripen. Bananas, for example, have a low glycemic index when they are not very ripe. But the starch they contain (about 20%) breaks down into simple sugars as they ripen, making them one of the fruits highest in carbohydrates once ripe.
- Pasta has a relatively low glycemic index (around 50). Rice has a higher index, depending on the variety and cooking method (50 to 70). In both cases, the less refined versions (whole-wheat pasta or brown rice) have a slightly lower index, largely due to the fact that they contain, on average, twice as much fiber.

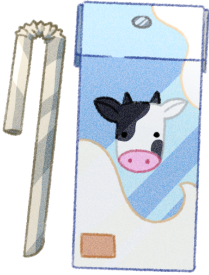
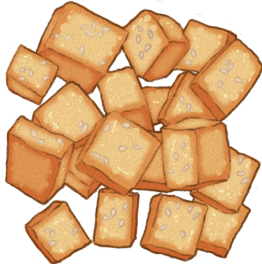
In short, only complete meals that contain fat cause delayed spikes in blood sugar. Instead, choose whole-grain starchy foods and breads (unrefined) and consume carbohydrates as part of complete meals.

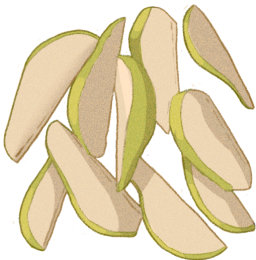
⁷ Jenkins DJ, Wolever TM, Taylor RH, Griffiths C, Krzeminska K, Lawrie JA, Bennett CM, Goff DV, Sarson DL, Bloom SR. Slow release dietary carbohydrate improves second meal tolerance. *Am J Clin Nutr.* 1982 Jun;35(6):1339-46. doi: 10.1093/ajcn/35.6.1339. PMID: 6282105

⁸ Foster-Powell K, Holt SH, Brand-Miller JC. International table of glycemic index and glycemic load values: 2002. *Am J Clin Nutr.* 2002 Jul;76(1):5-56. doi: 10.1093/ajcn/76.1.5. PMID: 12081815.

Vegetable		
Green peas	Cabbage salad	Packaged cherry tomatoes
		
Green peas are a green vegetable rich in fiber (almost 6%) and plant-based protein.	A crisp, raw cabbage salad dressed with a light vinaigrette. Contains about 3% fiber.	Cherry tomatoes wrapped in plastic. Tomatoes contain about 1.25% fiber, less than other vegetables.
+★	+★	★

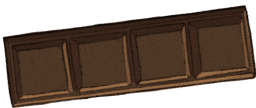
Protein		
Beef meatballs	Chickpea salad	Saucisson
		
Beef meatballs are a good source of protein. Meat contains no fiber.	Chickpeas are rich in plant-based protein but also contain 8% fiber.	Saucisson, like all cured meats, is very fatty and salty. Enjoy in moderation.
+★	+★	★

Calcium		
Milk	Tofu blocks	Nougat
 Milk is an obvious source of calcium. ++★	 A vegetarian option that contains calcium and plenty of protein. ++★	 Nougat is a sweet confection made from honey and egg whites. ★

Fruit		
Pear	Banana	Cereal and fruit bars
 Pears are juicy, low-calorie fruits that contain about 3% fiber. ++★	 Bananas are a fruit rich in fiber (2.7% on average) and potassium, making them perfect for a quick snack. ++★	 A cereal bar is generally high in fiber (estimated at 4%), but it is not a substitute for real fruit. Be mindful of portion sizes. ★

Nutritional changes in bananas as they ripen

When it is still green, a banana consists largely of starch that is difficult for the body to digest. Over time, the banana ripens, and enzymes naturally break down the starch into sugars: first sucrose, then glucose and fructose. This is why the banana softens and its taste becomes sweeter. The starch content can thus drop from about 74% to 31%. At the same time, the vitamin C content decreases significantly, but not the levels of other vitamins and minerals.⁹ The dietary fiber content also decreases, from 18% in a green banana to 5% in a banana that is just ripe, and to about 2% in a very ripe banana.¹⁰

Snack		
Chocolate	Dried fruit	Packaged cookies
		
Dark chocolate contains antioxidants and is less sweet than milk chocolate.	Dried fruits such as walnuts and almonds are rich in healthy fats and minerals, but they're too sweet to eat in large quantities.	Individually wrapped store-bought cookies that are high in sugar and fat.
+ ☆	+ ☆	- ☆

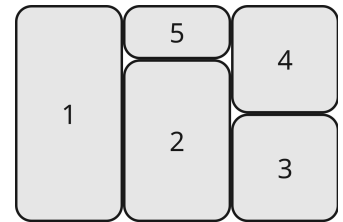
⁹ Huang, P.-H.; Cheng, Y.-T.; Lu, W.-C.; Chiang, P.-Y.; Yeh, J.-L.; Wang, C.-C.; Liang, Y.-S.; Li, P.-H. Changes in Nutrient Content and Physicochemical Properties of Cavendish Bananas var. Pei Chiao during Ripening. *Horticulturae* 2024, 10, 384.

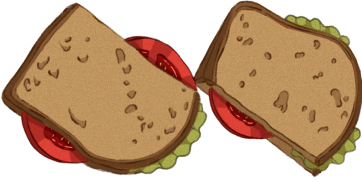
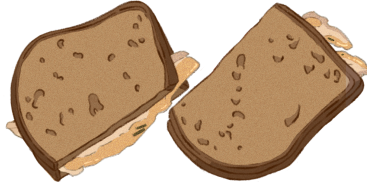
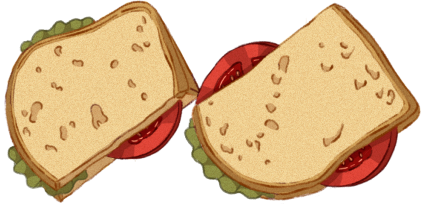
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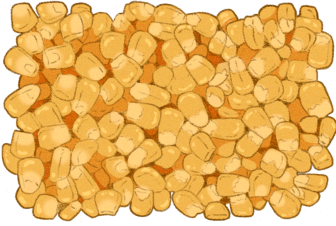
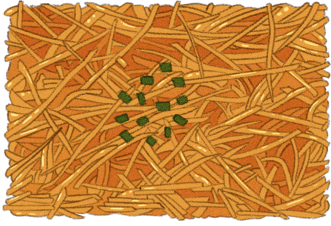
¹⁰ Phillips KM, McGinty RC, Couture G, Pehrsson PR, McKillop K, Fukagawa NK (2021) Dietary fiber, starch, and sugars in bananas at different stages of ripeness in the retail market. *PLoS ONE* 16(7): e0253366. <https://doi.org/10.1371/journal.pone.0253366>

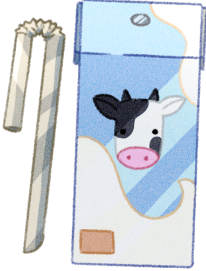
Thursday > A sandwich

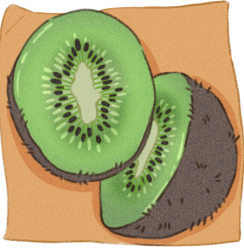
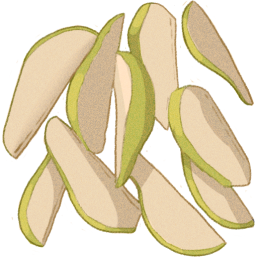
This level combines the concepts already covered in nutrition, but changes the usual structure by featuring a sandwich as the main dish.



Sandwich		
Whole-grain bread sandwich with vegetables	Whole-grain bread sandwich with chicken	White bread sandwich
 A sandwich with raw vegetables. Whole-grain bread is made with whole wheat, which retains more fiber. +★	 A chicken and mayonnaise sandwich. Whole-wheat bread is made from whole wheat, which retains more fiber. +★	 A sandwich with raw vegetables. Classic white bread is made from wheat that has been refined for longer to completely remove the seed's outer layer, making it whiter. ☆

Vegetable		
Corn	Grated carrots	Madeleines
		
Corn is eaten as a vegetable, but it's a grain that's similar to a starchy food because of its carbohydrate content.	Vegetables are important for fiber and vitamins.	Store-bought cakes are highly processed foods.
+★	+★	-★

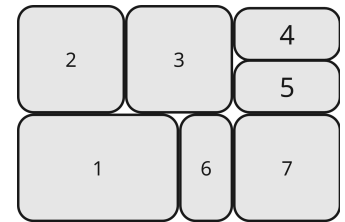
Dairy		
Milk	Soy milk	Portions of spreadable cheese
		
Milk is an obvious source of calcium.	A vegan alternative to milk that provides calcium.	A processed cheese made by blending several types of cheese and adding extra butter and salt.
+★	+★	☆

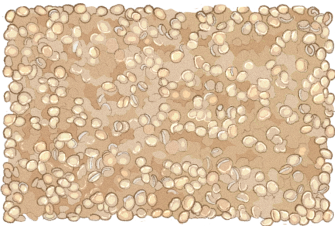
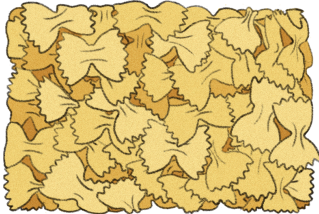
Fruit		
Kiwi	Pear	Dried apricots
		
Kiwis contain vitamin C, K1, and even copper.	Pears are a good source of fiber and vitamin B9.	Dried fruits are dried to remove most of their water content in order to preserve them. This does not reduce the amount of sugar, so they are higher in calories than fresh fruits.
+★	+★	+★

Snack		
Clementine	Walnuts, hazelnuts, almonds	Chocolate candy bar
		
Clementines provide fiber and vitamin C.	Nuts contain fats, but only "good" fats (known as unsaturated fats).	Chocolate bars are like candy: processed foods that are high in fat and sugar.
+★	+★	-★

Friday > Not that simple

This is the final section of this chapter. It covers all the nutritional criteria we've already discussed, organized into a structure with seven products instead of six.



Starch		
Quinoa	Pasta	French fries
		
Quinoa can contain up to 22% protein, which is close to the protein content of chicken (up to 27%) or beef (up to 26%).	Pasta provides carbohydrates (31%) and a small amount of protein (6%) and fiber (2% for white pasta).	French fries are high in fat because they're cooked in boiling oil. Fast-food French fries also contain "trans" fats due to the industrially processed fats used to cook them.
+★	+★	☆

"Trans" fatty acids

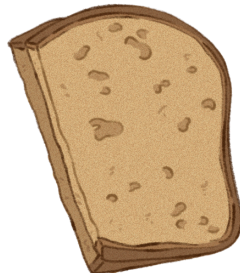
At the molecular level, "fats" are organic compounds (molecules with a chain of carbon atoms at their core) known as fatty acids. There are several categories of fatty acids, classified according to the shape of the molecule (see table below).

"Trans" fatty acids exist in a natural form found in small quantities in meat and dairy products, and in a form produced by industrial processes such as the hydrogenation of vegetable oils. This process solidifies a fat that was originally liquid and makes it less susceptible to oxidation, thus making it easier to store and use in food production.

Fatty acids			
Saturated	Unsaturated		
	« cis »		« trans »
	Monounsaturated	Polyunsaturated	
Butter, meat, coconut oil	Almonds, hazelnuts, avocado, olive oil	Fish, sunflower oil	Margarine and industrial products such as pizzas, quiches, cakes, and pastries.
Its chemical structure consists of a long chain of carbon atoms linked together by single, continuous bonds. All other possible bonds are connected to a hydrogen atom (they are "saturated" with hydrogen). This structure explains why these fats are generally solid at room temperature.	Its chemical structure contains one or more "bends" in its carbon chain. This less compact structure results in fats that remain liquid.	If hydrogen is added to unsaturated fats, these "bends" can be "straightened out" and converted into saturated fatty acids. The problem is that hydrogenation is incomplete: some bonds remain unsaturated, and part of their geometric configuration shifts to the "trans" configuration.	

The hydrogenation process is primarily used in the food industry; the fats are then labeled as "partially hydrogenated" on the packaging. It is this unintended conversion that creates the "trans" fats found in many processed foods. The World Health Organization is seeking to eliminate these industrial trans fats from the diet, as a diet high in trans fatty acids increases the risk of heart disease by 21% and the risk of premature death by 28%.¹¹

¹¹ WHO plan to eliminate industrially-produced trans-fatty acids from global food supply, News release, May 14 2018, <https://www.who.int/news/item/14-05-2018-who-plan-to-eliminate-industrially-produced-trans-fatty-acids-from-global-food-supply>

Vegetable		
Spinach in cream sauce	Zucchini fritters	Bread with chocolate spread
		
Contrary to popular belief, spinach does not contain that much iron. However, it is rich in vitamins A, B9, E, and K, fiber, and even calcium.	Fried fritters made with eggs and zucchini. A little greasy, but when they're homemade, there's no risk of "trans" fats.	Two slices of bread with chocolate-hazelnut spread.
+★	+★	-★

The nutritional value of spinach

Spinach is a leafy vegetable that is valuable from a nutritional standpoint: it is the vegetable with the highest manganese and calcium content, while also providing significant amounts of vitamin A, vitamin K, vitamin B9, and fiber.¹²

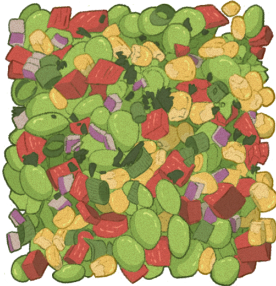
The common belief that spinach is a source of iron, popularized in particular by the character Popeye, is said to come from a miscalculation dating back to the 19th century. In reality, cooked spinach contains about 2.1% of iron. This is not insignificant, but this iron is known as "non-heme" (plant-based) iron, and is absorbed much less efficiently by the body than the iron found in meat or fish.¹³ The absorption of non-heme iron can, however, be improved by pairing spinach with a source of vitamin C (ascorbic acid), such as a tomato, lemon juice, or an orange for dessert.¹⁴

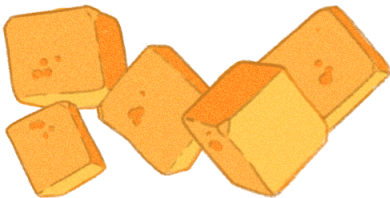
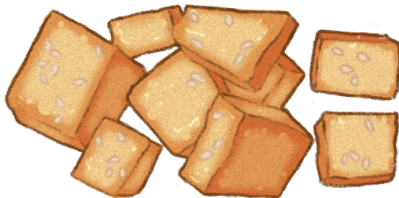
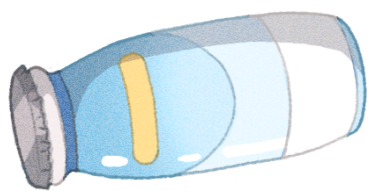
¹² The information comes from the Ciquial food nutritional composition table, ciquial.anses.fr

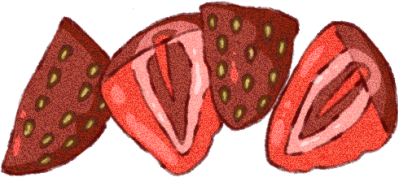
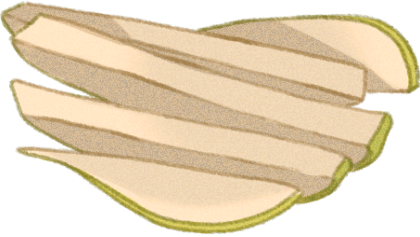
¹³ Ems T, St Lucia K, Huecker MR. Biochemistry, Iron Absorption. 2023 Apr 17. StatPearls Publishing; 2026 Jan-. PMID: 28846259.

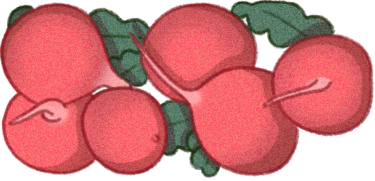
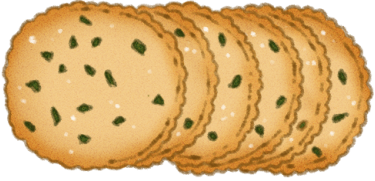
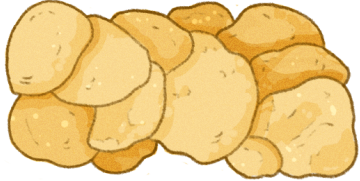
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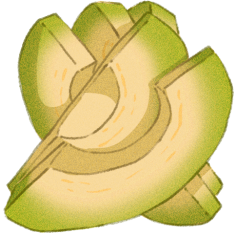
¹⁴ Teucher B, Olivares M, Cori H. Enhancers of iron absorption: ascorbic acid and other organic acids. Int J Vitam Nutr Res. 2004 Nov;74(6):403-19. doi: 10.1024/0300-9831.74.6.403.

Protein		
Edamame salad	Beef	Bacon
		
"Edamame" are soybeans that have not yet reached maturity. They are rich in vitamin E and are a plant-based source of protein.	Meat naturally contains small amounts of saturated fat.	Industrially produced bacon is a processed food with a lot of fat and salt.
+★	+★	-★

Calcium		
Gouda	Tofu	Drinking yogurt
		
This cheese is a good source of calcium.	A vegetarian option that contains calcium and plenty of protein.	A liquid yogurt, diluted with water, flavorings, and added sugar.
+★	+★	★

Fruit		
Strawberries	Pears	Candies
		
Strawberries contain vitamin C and B9.	Pears provide fiber and vitamin B9.	Candy is made entirely of sugar and should therefore be enjoyed only in small, occasional portions.
+★	+★	-★

Snack		
Radishes	Crackers	Potato chips
		
Radishes provide vitamin C.	Store-bought crackers contain fats, including a small amount of saturated fats.	Potato chips, depending on the brand, contain varying amounts of fat, including saturated fats.
+★	☆	-★

Second fruit / vegetable		
Avocado	Green salad	Doughnut
 Avocado is a very fatty vegetable (20% fat) and fairly high in calories, but it contains only "good" fats (known as unsaturated fats). It also contains 4% fiber. + ☆	 A lightly dressed salad to accompany the meal. + ☆	 A store-bought doughnut contains a lot of "trans" fats because they have a longer shelf life. - ☆



2 > Durability

The content of this chapter is recommended for ages 10 and up.

Purpose of the chapter

All the food we consume has a story, from where the raw ingredients were grown (or where the animals were raised), through the transportation and processing stages, to the final product that is packaged and sold. Each of these stages has an impact on the environment and the people who work in these sectors.

If we take CO₂ emissions as an example, food accounts for about a quarter of households' carbon footprint. This is comparable to the share attributed to housing or personal transportation. The majority of these emissions come from agricultural production itself (around two-thirds), with the remainder split between transportation, processing, packaging, and distribution.¹⁵

This second chapter of the game invites players to become aware of this impact, not to make them feel guilty, but to help them better understand it and reduce it where it matters most.

Sources regarding environmental impact

Data on the impact on climate change, expressed in CO₂e/kg (CO₂ equivalent emitted per kilogram of product), are sourced from the public Agribalyse® database (agribalyse.ademe.fr). The online tool [ImpactCO2.fr](https://impactco2.fr), developed by the French government, allows users to compare these data points with one another to make them more tangible.

¹⁵ TRANSITION(S) 2050 : l'enjeu de l'alimentation Les scénarios de l'ADEME : CHOISIR MAINTENANT, AGIR POUR LE CLIMAT, report by ADEME (French Agency for Ecological Transition) <https://librairie.ademe.fr/changement-climatique/6421-transitions-2050-l-enjeu-de-l-alimentation-les-scenarios-de-l-ademe-choisir-maintenant-agir-pour-le-climat.html>

Organic labels featured in the game

The game uses a selection of the main labels found in supermarkets in Belgium.¹⁶



European organic farming label

It guarantees that a product complies with the European specifications for organic farming: no artificial fertilizers, chemical pesticides, genetically modified organisms, or unapproved additives.



Biogarantie label

A private Belgian label that certifies compliance with organic farming standards, similar to the European label, but with additional, stricter requirements regarding sustainability. For example, it mandates a sustainability plan covering water and energy consumption as well as waste management.



Organic Agriculture label (AB)

Created by the French Ministry of Agriculture, it guarantees that a product is produced using organic farming methods. Since the creation of the European label, its regulations have been amended to align with European regulations. This label is therefore gradually being replaced by the European logo.



Fake organic label

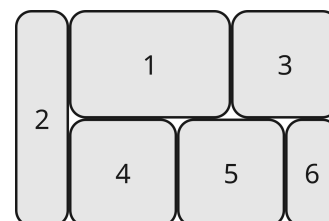
Some products in the game display this logo, which does not correspond to any real label. It serves as an example of all logos created by brands for commercial purposes that mimic the iconography of genuine labels.

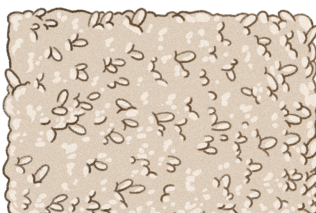
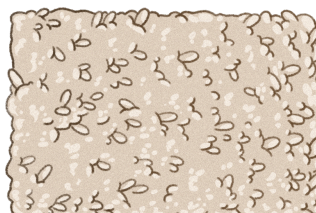
For example, you may see claims such as “quality guaranteed,” “protects nature,” or “eco-friendly product,” without these claims having been evaluated by independent organizations.

¹⁶ More information on all the labels is available at infolabel.be

Monday > Where does it come from?

This level focuses on assessing the products' place of origin and the transport distance involved. Local products are highlighted.



Starch		
Potato salad	Long-grain rice	Basmati rice
		
 Belgium	 Italia	 Pakistan
Potatoes grow well in Europe and require relatively little water.	Long-grain rice grown in Italy. Italian (and European) rice isn't just for risotto. Your "express" or "non-sticky" rice is probably produced in the EU.	Rice imported from Pakistan by ship.¹⁷ The main countries from which we import rice are, in order, Pakistan (25%), India, Myanmar, Thailand, and Cambodia (10%).¹⁸
+★	+★	★

Environmental impact of transport

For most foods, transportation accounts for only a small portion of CO₂ emissions. In the case of rice imported from Asia to Europe, for example, production (cultivation, methane, water, fertilizer) emits approximately 2.7 kg CO₂e/kg, while maritime transport adds only 0.13 kg CO₂e/kg, which is 5% of the total carbon footprint.¹⁹

¹⁷ Nearly all Asian rice varieties (e.g., Basmati) are produced in India and Pakistan

¹⁸ Rice Imports and Exports in the European Union for 2023 on TrendEconomy.

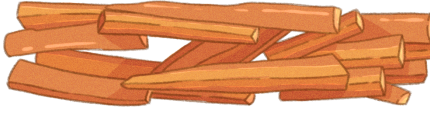
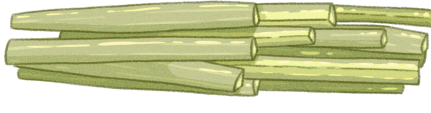
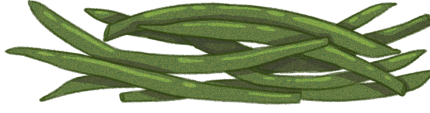
<https://trendeconomy.com/data/h2/EuropeanUnion/1006>

¹⁹ Thai or basmati rice, uncooked. Product sheet on Agribalyse.

<https://agribalyse.ademe.fr/app/aliments/9119>

This figure increases if the goods are transported by another mode of transportation (airplanes are used to transport certain exotic or out-of-season fruits and vegetables) or if refrigerated transport is required (for frozen products such as meat).

All other things being equal, consuming food produced in Europe is preferable for other reasons (such as regulations governing production and transportation conditions). However, CO₂ emissions are not always lower. The weight given to transportation in assessing environmental impact depends on the type of product.

Vegetable		
Carrots	Cucumbers	Fresh green beans
		
 Europe Grown locally, they don't have to be transported far and don't need packaging.	 Europe Cucumbers can be grown here as long as they're grown in a greenhouse, because they need warmth. Otherwise, they're usually imported from Spain.	 Rwanda Fresh, in-season green beans from Rwanda. Although green beans are grown in Belgium and northern France, some are imported from African countries in container ship.
+ ★	+ ★	- ★

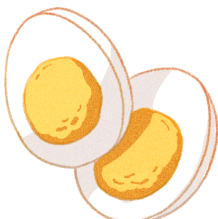
Fresh off-season green beans (in season in the Southern Hemisphere) are imported from Morocco, Kenya, Egypt, and Senegal.²⁰ Some also come from Rwanda, where production has recently increased.²¹

²⁰ Green beans. Fact sheet from the CTIFL's Fruit and Vegetable Guide.

<https://memento.ctifl.fr/fiche/legumes/haricot-vert>

²¹ SEUN, Rasheed (CEO of Souk Farms). Rwanda is the next major player in the exotic fruits and vegetables sector. March 20 2023.

<https://www.freshplaza.fr/article/9512132/le-rwanda-est-le-prochain-grand-acteur-dans-le-domaine-des-fruits-et-legumes-exotiques/>

Protein		
Hard-boiled egg	Lentil steak	Prepared chicken
  Belgium Eggs from Belgium or France. +★	  France Lentils grown in France, rich in protein. +★	  Brazil Made with chicken imported from Brazil. Importing meat over long distances consumes a lot of energy to keep it frozen. -★

Meat imported from outside the EU

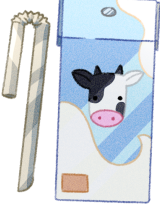
Most of the fresh chicken sold comes from Europe, but a significant portion of poultry consumption is imported from outside the EU. This imported meat is used in the foodservice industry and in processed food products.²² These imports have increased in recent years, with Brazil being the main source.²³ There, chickens are often fed soybeans grown on land suspected of being cleared through deforestation in the Amazon.²⁴

²² Poultry imports continue to rise in France. December 5 2024.

<https://interpro-anvol.fr/les-importations-de-volailles-continuent-daugmenter-en-france-2>

²³ DG AGRI DASHBOARD : POULTRY MEAT (poultry meat data on the European Agri-Food Data Portal). November 19 2025. https://agriculture.ec.europa.eu/document/download/0ce25b9f-1571-4310-8531-3fe3346c49e0_fr

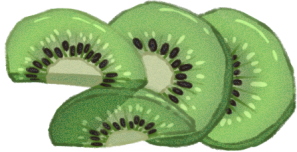
²⁴ PANTILLON, Sera. Brazilian poultry imported into Switzerland: a risk of deforestation (Greenpeace Switzerland investigation into a Brazilian farm). September 29 2025. <https://www.greenpeace.ch/fr/publication/125758/volaille-bresilienne-deforestation/>

Laitage		
Vieux Brugge cheese	Cow's milk	Almond milk
		
 Belgium Vieux Brugge, like Passendale and many others, is a cheese traditionally produced in Belgium.	 Belgium Local production meets demand. Therefore, milk is almost never imported from abroad. ²⁵	 Europe Produced by mixing a small amount of pureed almonds (which can be grown in Europe ²⁶) with water.
+★	+★	+★

²⁵ Imports of cow's milk to meet Belgian market demand stood at 3% in 2023. Belgian dairy companies increased their cheese and cream production in 2023 (Statbel, May 30 2024).

<https://statbel.fgov.be/fr/nouvelles/les-entreprises-laitieres-belges-accroissent-leur-production-de-fromage-et-de-creme-en>

²⁶ The almonds may come from Europe or the United States, but they account for only 2% of the drink (which is composed primarily of water).

Fruit		
Apple	Clementine	Kiwi
  Belgium Apples are widely grown in Belgium, France, Germany, etc. + ★	  Spain Mandarins and clementines need plenty of sunshine to grow. The ones closest to us are therefore produced in Spain, in southern Europe. + ★	  NewZealand Kiwis can be grown in Italy and even in France, but this one is imported from New Zealand, like all kiwis sold under the Zespri® brand.²⁷ ☆

²⁷ Zespri International Limited, the New Zealand kiwifruit marketing organization, has its European headquarters in Berchem, Antwerp.
KNOWLES, Mike. NZ kiwifruit: how a major brand emerged. April 25 2017.
<https://www.fruitnet.com/eurofruit/nz-kiwifruit-how-a-major-brand-emerged/172018.article>

Snack		
Walnuts, hazelnuts, almonds	Speculoos	Homemade cookies
		
Walnuts from France (Europe's leading producer), hazelnuts from Italy (Europe's leading producer), and almonds from the United States (world's leading producer).	Even if they're made locally, industrial products contain various ingredients whose origins aren't always listed.	For "homemade" items, the transportation impact depends on the origin of the ingredients. Raw ingredients purchased individually are generally more local than those used in processed products.
+★	☆	+★

Origin of ingredients in processed products

The legal labeling requirements for processed products are not very strict: generally, the origin of the ingredients does not have to be indicated. European regulations provide an exception if the product's country of origin (where it was manufactured) is indicated and its primary ingredient does not come from the same country. In that case, the origin of that ingredient must also be stated.²⁸ Another exception, applicable only in France, requires that the origin of milk and meat always be indicated.²⁹

In the case of speculoos,³⁰ for example, the flour may come from outside the European Union, while the palm oil used likely comes from Indonesia or Malaysia.³¹

²⁸ Règlement UE n° 2018/775 du 28 mai 2018

<https://eur-lex.europa.eu/legal-content/FR/TXT/?uri=CELEX%3A02018R0775-20190609>

²⁹ Décret n° 2016-1137 du 19 août 2016 relatif à l'indication de l'origine du lait et du lait et des viandes utilisés en tant qu'ingrédient

<https://www.legifrance.gouv.fr/loda/id/JORFTEXT000033053008/2020-12-04/>

³⁰ Speculoos Original – Lotus – 350 g. Page sur Open Food Facts.

<https://fr.openfoodfacts.org/produit/5410126806052/speculoos-original-lotus>

³¹ Indonesia (53%) and Malaysia (28%) are the leading exporters of palm oil.

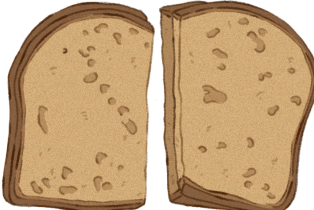
Global palm oil imports and exports for 2023 on TrendEconomy.

https://trendeconomy.com/data/commodity_h2/1511

Tuesday > Winter products

This level focuses on the seasonality of produce (specifically fruits and vegetables). The level takes place in winter, so products harvested in summer are out of season.

1	3	5
2	4	6

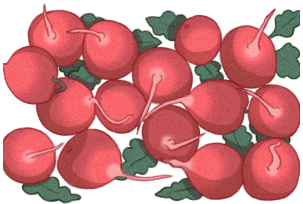
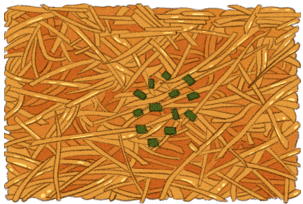
Starch		
Potato salad	Whole-grain bread slices	Pasta and tomato salad
		
 Belgium "Storage potatoes" keep long enough to be available year-round.	 Belgium Bread is made from wheat flour, a dry ingredient that keeps for a very long time. So it's made year-round.	 France Pasta is a dry good available year-round. Fresh tomatoes grow naturally in the spring and summer.
+★	+★	☆

Winter radish varieties

The most common variety of radish is harvested in three to six weeks, depending on the variety. Winter radishes are sown in the middle of summer for a later harvest.

Black radishes, for example, are sown from May to October in Europe, and their roots are harvested about four months later. It is recognizable by its black, rough skin and its white flesh, which is spicier than that of conventional radishes.

The Chinese pink radish is sown from July through September and harvested from August through November. It produces large pink roots with white flesh that are slightly spicy.

Vegetable		
Radishes	Grated carrots	Tomatoes
		
 Belgium	 Belgium	 Belgium
Most radishes are grown in the spring and summer. However, there are a few “winter” varieties, such as black radishes and Chinese pink radishes.	The carrot is a root vegetable: it grows underground. There are cold-hardy varieties that can be grown in winter.	Tomatoes need plenty of sun and heat to ripen. In winter, they are necessarily grown in heated greenhouses or imported from far away: they are an out-of-season product.
+★	+★	-★

Heated greenhouse tomatoes

Tomatoes need a temperature of around 20 °C to grow well. Their natural growing season, depending on the weather, runs from May/June to October/November. Outside of this period, greenhouses must be heated continuously. This comes at a very high environmental cost: one kilogram of tomatoes grown in a heated greenhouse emits about 2.36 kg of CO₂, compared to just 0.16 kg for one kilogram of in-season French tomatoes. This is roughly equivalent to the carbon footprint of a tomato that would be hypothetically imported by truck from South Africa, traveling across all of Africa and Central Asia.³²

This production method is inevitably widespread in Belgium, due to the climate. Some producers, however, are seeking to limit their impact by using biomass-fired boilers.³³

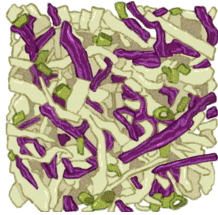
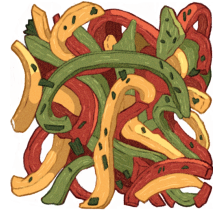
³² This estimated journey of over 20,000 km is provided for comparison purposes. Imported products are generally transported by ship, and tomato imports come primarily from Spain or Morocco.

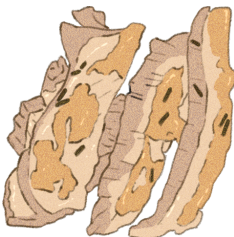
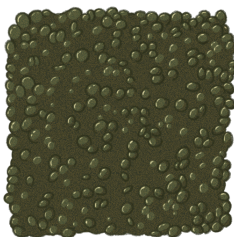
Vrai ou Fake : le bilan carbone d’une tomate..., France Info, du 17 janvier 2023

https://www.franceinfo.fr/vrai-ou-fake/vrai-ou-fake-le-bilan-carbone-d-une-tomate-sous-serre-francaise-similaire-a-celui-d-une-tomate-importee-d-afrique-du-sud_5608193.html

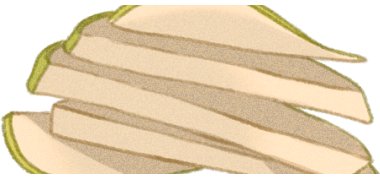
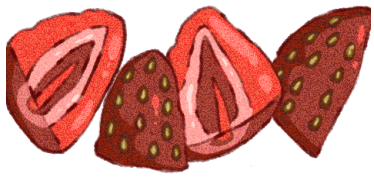
³³ Example of the Faascht farm, in Attert,

<https://fermedufaascht.be/laserre/>

Second vegetable		
Lamb's lettuce salad	Cabbage salad	Bell pepper salad
		
 France	 Belgium	 Morocco
Lamb's lettuce is a small leafy green that withstands the cold well and is harvested in the fall and winter.	Cabbage is a hardy vegetable that can withstand frost and is harvested from fall through late winter.	Bell peppers are summer vegetables. In winter, the bell peppers in stores are off-season: they're imported from distant countries where it's warmer.
+★	+★	★

Protein		
Chicken breast	Lentils	Prepared chicken
		
 Belgium	 France	 Brazil
Animals raised for meat are raised year-round. Farm-raised meat is therefore not seasonal.	Lentils are a dry good that stores easily. They are therefore a source of protein that can be enjoyed year-round.	Made with chicken imported from Brazil. Importing meat over long distances consumes a lot of energy to keep it frozen.
+★	+★	-★

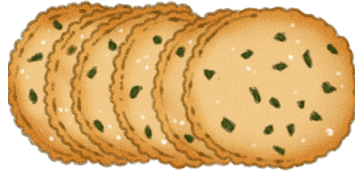
There is no protein that is not "in season." Although animal meat production has a significant environmental impact, it is not influenced by the seasons. Only certain types of game meat and wild fish are limited to the season during which hunting or fishing is legal. Legumes such as lentils and soybeans are dried and are therefore available year-round. The same is true for grains such as oats and quinoa.

Fruit		
Pear	Clementine	Strawberries
		
 Belgium	 Spain	 Belgium
Just like apples, there are pear varieties that are more commonly found in the summer, and others that are more common in the winter.	Clementines grow in southern Europe and are harvested in the fall and into the winter.	Strawberries need plenty of heat and sunshine. In winter, a lot of energy has to be expended to properly heat the greenhouse where they grow.
+★	+★	☆

Seasonality as a simple indicator of environmental impact

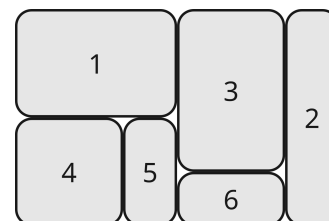
Dry goods like pasta or rice can be consumed year-round without seasonal considerations. Other products are unsuited to our climate and are imported regardless of the season.

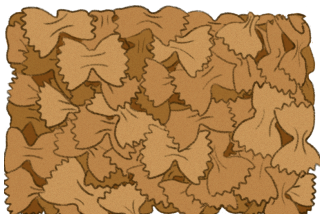
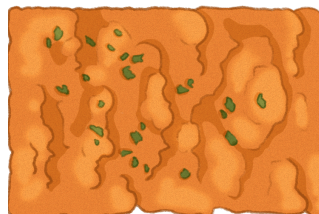
However, for most fresh fruits and vegetables, the fact that a product is available out of season (meaning it was grown outside its natural growing period) is a strong indicator that it required significant energy (such as for greenhouse heating) or was imported from a more southerly region, often via refrigerated transport. While not an absolute rule, this serves as a useful guide for reducing one's environmental impact.

Snack		
Dried fruit	Cookies	Crackers
 Dried fruit, such as walnuts or almonds, can last for years if kept completely dry. +★	 Cookies are made with dry ingredients that have a long shelf life and eggs that chickens lay all year round. +★	 Crackers contain very little water, which allows them to keep for a long time. +★

Wednesday > Summer products

This level focuses on the seasonality of produce (particularly fruits and vegetables). The level takes place in summer, so produce harvested in winter is out of season.



Starch		
"New" potatoes	Pasta salad	Butternut squash purée
		
 Belgium	 Italia	 Spain
"New" potatoes, with their very thin skins, are harvested in early summer, before they're fully ripe.	Pasta is made from dried wheat. Since it's a dry product, you can eat it all year round without worrying about the season.	Squashes, such as pumpkins and butternut squash, are generally harvested in early fall and eaten throughout the winter.
+★	+★	-★

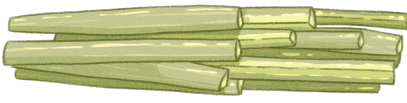
"New" and "storage" potatoes

Potato tubers are usually harvested when they are fully mature (the foliage begins to wilt), resulting in what are known as "storage" potatoes. "New" potatoes are harvested before they are fully mature. This gives them a very thin skin and makes them lighter (lower in starch), but they do not keep well.

In France, the sale of new potatoes is limited to August 15 of each year.³⁴

³⁴ Arrêté du 18 février 2009 portant modification de la date limite de commercialisation des pommes de terre de primeur

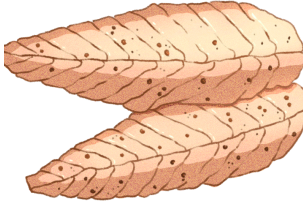
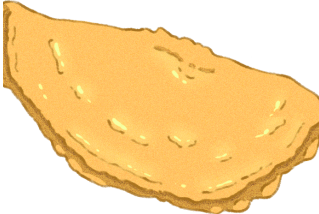
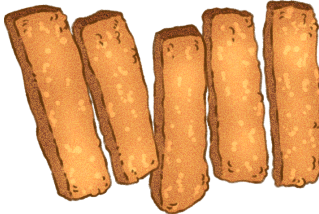
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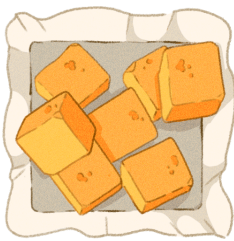
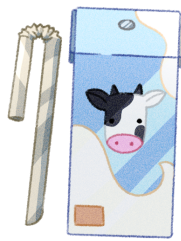
Vegetable		
Cherry tomatoes   Belgium Tomatoes need plenty of sun and heat to turn red and sweet. In Belgium, the peak season is from June to September. +★	Cucumbers   France Cucumbers are a refreshing vegetable packed with water. They grow very well in our region during the summer. +★	Endive salad   Belgium Chicory (or endive) is a typical winter vegetable in Belgium. The ones available in summer are stored in cold storage. ☆

Endive cultivation

Endive seeds are sown in the field around May so that the roots can grow (like carrots). The endives are then harvested between September and November and stored in a cold room before the “forcing” stage: the roots are replanted close together in the dark. This stage forces the endive to develop long, white leaves. If endives are available later in the season after April, they have necessarily spent more time in cold storage.³⁵

³⁵ Endive fact sheet on [lesfruitsetlegumesfrais.com](https://www.lesfruitsetlegumesfrais.com)
<https://www.lesfruitsetlegumesfrais.com/fruits-legumes/salades/endive>

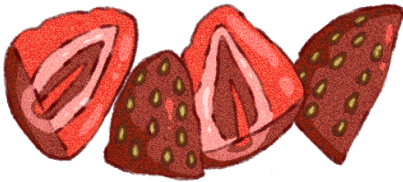
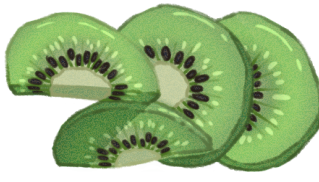
Protein		
Mackerel	Omelet	Fish sticks
  Belgium Mackerel is a fish that is abundant in the North Sea during the summer. Now is a great time to catch it. +★	  Belgium Chickens lay eggs all year round. +★	  Europe Sticks made from cod caught in the Pacific Ocean or Alaska pollock, and frozen to preserve them. ☆

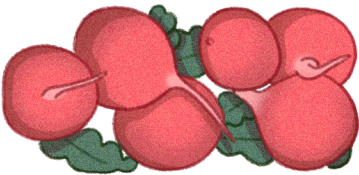
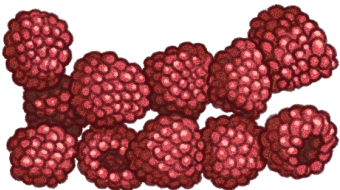
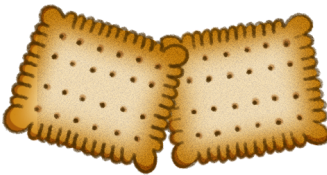
Dairy		
Mozzarella	Yogurt	Industrial spreadable cheese
		
 France	 Belgium	 France
An Italian cheese originally made with buffalo milk, but now widely produced with cow's milk.	Yogurt is made by fermenting milk, which makes it easier to digest and longer-lasting. Like milk, it's available year-round.	A processed cheese made by blending several types of cheese and adding extra butter and salt.
+★	+★	★

Production of "processed cheeses" such as The Laughing Cow

The Laughing Cow belongs to the "processed cheese" family, a product category made by melting together matured natural cheeses. Several hard cheeses (Emmental, Comté, Gouda, Cheddar, Edam) are grated and then melted together in large heated mixers, along with rehydrated skim milk powder, butter, and milk proteins. "Melting salts" are also added, those are additives that help create a smooth, homogeneous texture by binding the water and fats together.³⁶ As a result, this product contains more fat and salt than a traditional cheese.

³⁶ 2010 archive of the website of Bel, manufacturer of The Laughing Cow and Babybel.
<https://web.archive.org/web/20100818142625/http://www.bel-tchizbox.com/bel-et-ses-marques/foire-aux-questions>

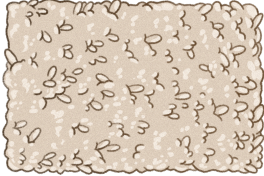
Fruit		
Strawberries   Belgium Belgian strawberries are harvested from May through August. That's when they're sweetest and most flavorful.	Melon   France Melons need a lot of heat. In the summer, you can find plenty that come from France (Cavaillon) or Spain.	Kiwi   New Zealand In the summer, there are no kiwis in Europe. This one probably comes from New Zealand, on the other side of the world.
++★	++★	-★

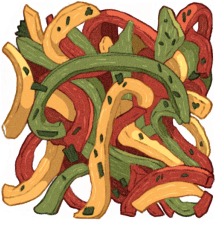
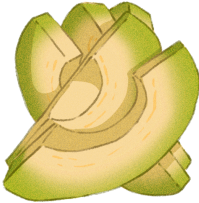
Snack		
Radishes   Belgium Radishes are root vegetables that grow very quickly in the spring and summer.	Raspberries   Belgium Raspberries are very delicate fruits that grow in the summer.	Petit beurre   France A classic dry cookie that keeps all year round.
++★	++★	++★

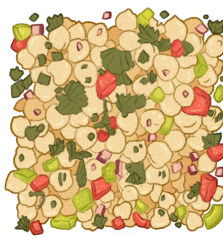
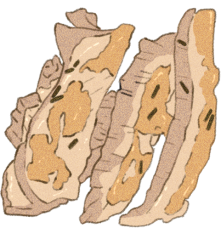
Thursday > Good for the environment

This level addresses the environmental impact of transport and adds the issue of plastic packaging and the concept of organic farming. The level takes place in summer.



Starch		
Pasta salad	Potato salad	Basmati rice
  France Pasta is a dry product made from wheat flour. This wheat was grown in France, so it wasn't transported over long distances. +★	  Belgium Potatoes grow easily in our region and don't require much water or energy to cultivate. +★	  India Basmati rice is grown in India or Pakistan, so it must be imported by ship. +★

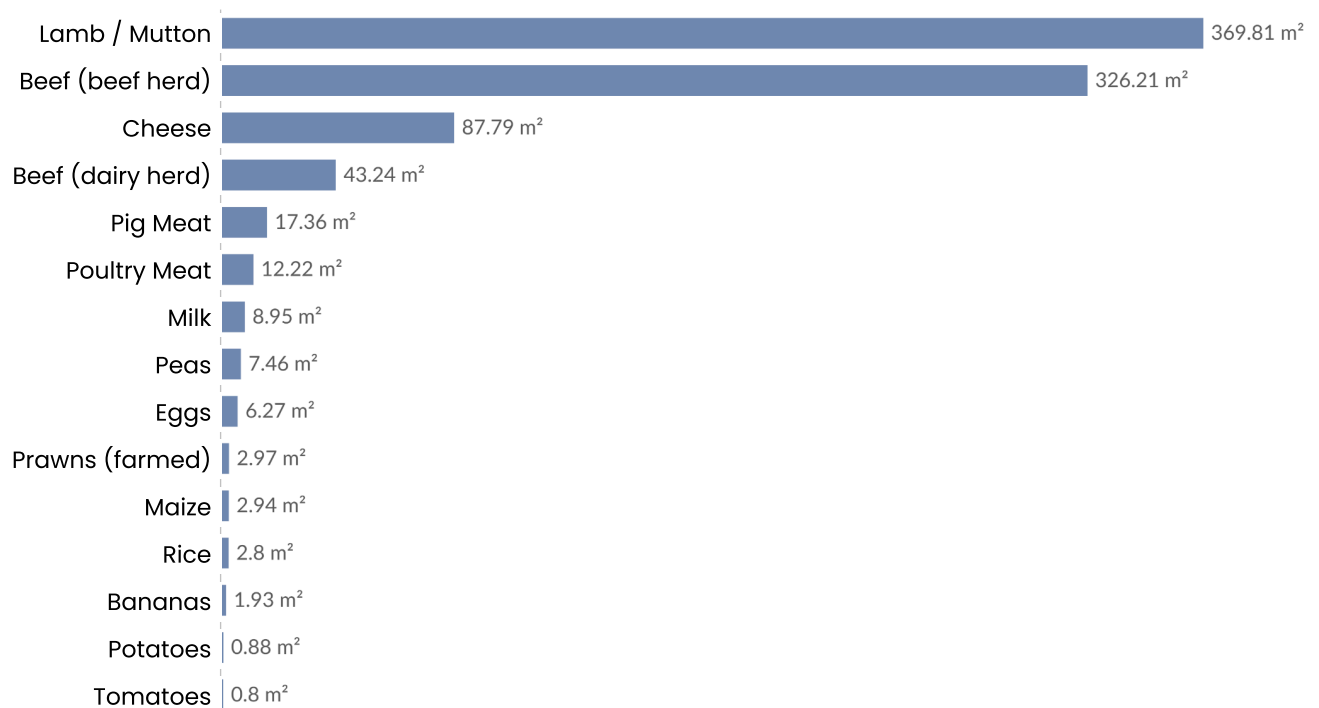
Vegetable		
Roasted bell peppers	Avocado	Bag of cherry tomatoes
  Belgium The organic label indicates that these bell peppers were grown according to the principles of organic farming: without pesticides or synthetic chemical fertilizers. +★	  Spain Grown using organic farming methods, this avocado comes from closer to home than those from South America, but its cultivation is still very water-intensive. +★	  France An individual serving of cherry tomatoes packaged in a plastic bag. -★

Protein		
Chickpea salad	Chicken breast	Surimi sticks
  France Chickpeas are legumes. Legumes generally have a low environmental footprint and require less fertilizer. +★	  Belgium Homemade using poultry raised in Belgium. Raising animals always consumes more resources than growing plants, since you first have to grow the food the animals will eat. +★	  Europe Surimi is made from fish meat (often Alaska pollock, caught far away) that's flaked, reshaped, and flavored. This requires a lot of processing and transportation. -★

The significant environmental impact of animal farming

Producing food requires space, primarily for growing crops and raising livestock. About 80% of this agricultural land is used to produce animal-based foods: pastures for grazing and crops to feed livestock.³⁷ This is why animal-based products have the largest carbon footprint (especially beef and lamb).³⁸

Land use (m²) per kilogram of food product



Data source: Poore and Nemecek (2018)

OurWorldinData.org/environmental-impacts-of-food | CC BY

³⁷ It is estimated that 26 million hectares of land are utilized for the French population, both within France and abroad. 80% of this land is dedicated to animal products (meat and dairy).

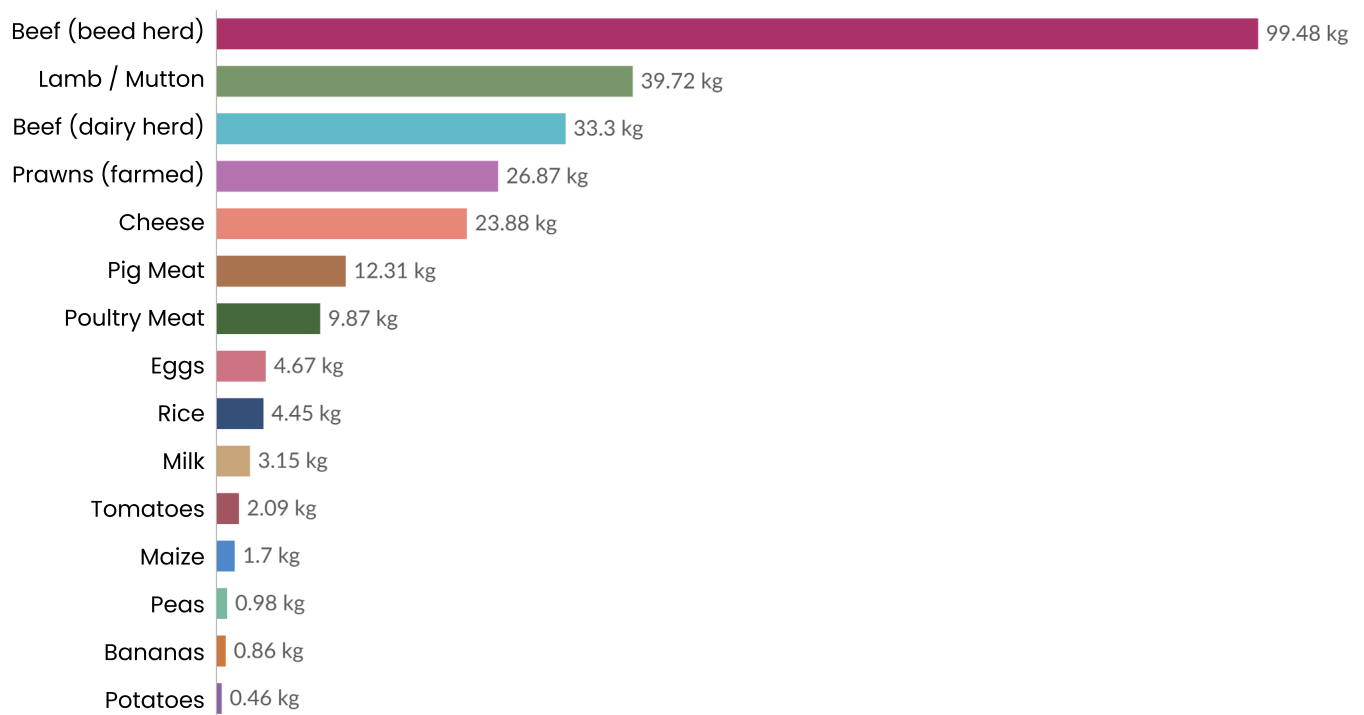
TRANSITION(S) 2050 : l'enjeu de l'alimentation Les scénarios de l'ADEME : CHOISIR MAINTENANT, AGIR POUR LE CLIMAT, report by ADEME (French Agency for Ecological Transition) <https://librairie.ademe.fr/changement-climatique/6421-transitions-2050-l-enjeu-de-l-alimentation-les-scenarios-de-l-ademe-choisir-maintenant-agir-pour-le-climat.html>

³⁸ Environmental Impacts of Food Production, Our World In Data <https://ourworldindata.org/environmental-impacts-of-food>

Data source: Poore and Nemecek (2018)

The digestive processes of ruminants (cows, sheep, goats) produce methane, a gas with a global warming potential far greater than that of CO₂. Pork and poultry, which do not ruminate, have a significantly lower impact than beef or lamb, but generally still emit more greenhouse gases than legumes or vegetables, which are among the foods with the lowest environmental impact.

Greenhouse gas emissions per kilogram of food product (in carbon dioxide-equivalents)

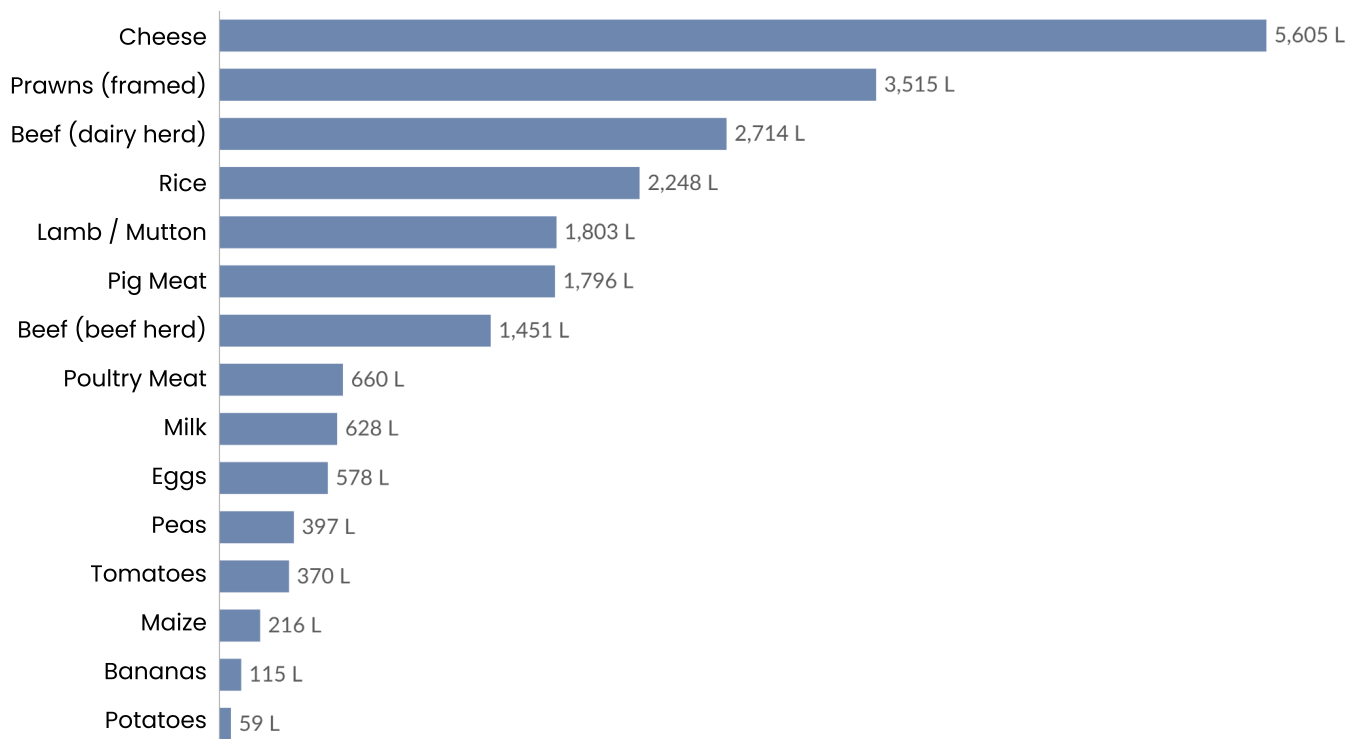


Data source: Poore and Nemecek (2018)

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On top of that, livestock farms consume a lot of water.

Freshwater withdrawals per kilogram of food product

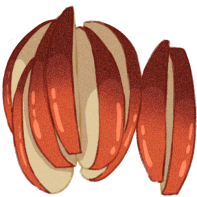


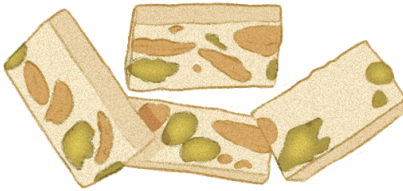
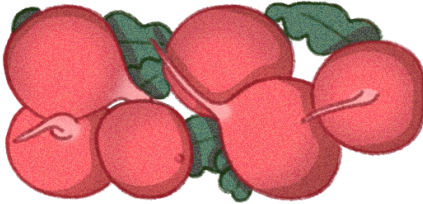
Data source: Poore and Nemecek (2018)

OurWorldinData.org/environmental-impacts-of-food | CC BY

Reducing meat consumption (especially red meat) and occasionally replacing it with plant-based proteins is one of the individual actions that has the greatest impact on the carbon footprint of our diet.

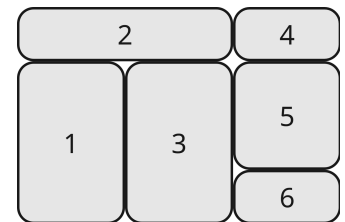
Calcium		
Tofu blocks	Yogurt in a glass jar	Plastic yogurt cup
		
 France	 Belgium	 Belgium
Tofu is made from soybeans, a plant-based protein source that requires less water and farmland than meat to produce the same amount of protein.	This yogurt comes in a glass jar. It can be reused or recycled more easily than plastic.	Plastic is made from petroleum and doesn't recycle as well as glass. It often ends up polluting the soil or the oceans.
++★	++★	★

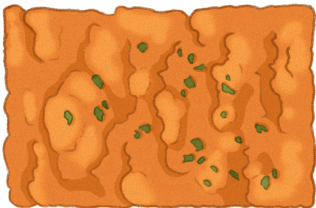
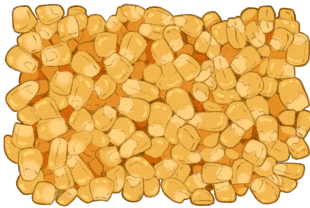
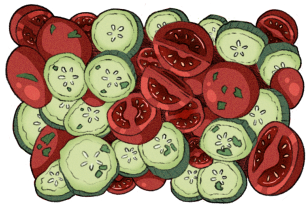
Fruit		
Apple	Banana	Apple compote drink
		
A Belgian apple grown using organic farming, without pesticides and without a long journey to get to you.	This banana, grown using organic farming, comes from Martinique, a French territory, but it still has to cross the Atlantic Ocean by ship to get here.	A compote sold in a small disposable plastic pouch. Very convenient, but it generates a lot of waste for a single serving.
++★	++★	★

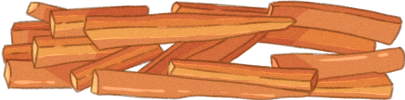
Snack		
Organic nougat	Organic radishes	Individually wrapped cookies
		
 Belgium A nougat made from ingredients sourced from organic farming, such as honey and almonds.	 France Some radishes are grown using organic farming.	 Belgium Each cookie is individually wrapped in its own plastic bag, which multiplies the waste for a meal.
+★	+★	☆

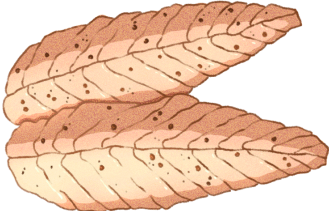
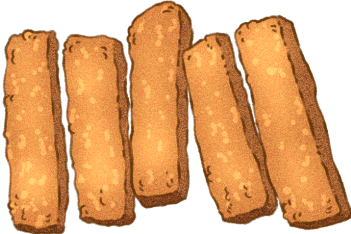
Friday > Winter again

The final level of the chapter, combining choices based on nutrition with others based on seasonality. The level takes place in winter.



Starch		
Squash purée	Corn	Cucumber and tomato salad
		
 Belgium	 France	 Morocco
Squashes, like pumpkins and butternut squash, are usually harvested in early autumn and eaten all winter long.	Fresh corn is harvested in late summer and autumn. But canned, it keeps for a long time and can be eaten all year round, even in the depths of winter.	Cucumbers and tomatoes need warmth and sunshine to grow well. They're naturally harvested in spring and summer.
+★	+★	-★

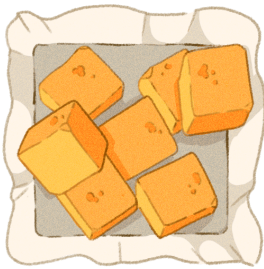
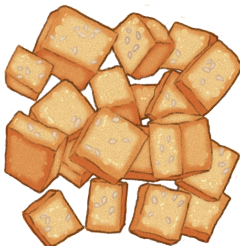
Vegetable		
Endive salad   Belgium Chicory (or endive) is a typical winter vegetable in Belgium.	Carrots   Belgium Carrots are available all year round. The kind harvested in winter is called the storage carrot.	Fresh green beans   Kenya Green beans grow here in summer. Outside that period, they're either canned or flown in from warmer countries.
++★	++★	-★

Protein		
Mackerel   Europe The MSC label guarantees the fishing conditions for wild fish. Like most labels, it's imperfect, but it pushes toward more sustainable fishing.	Omelet   Belgium Belgian eggs are available all year round thanks to laying hens raised here.	Breaded fish   Europe Breaded fish sticks, made from fish caught far away, whose exact origin isn't indicated.
++★	++★	★

The MSC label for fish

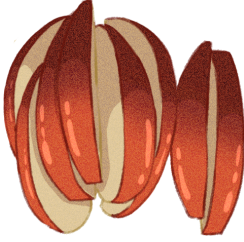
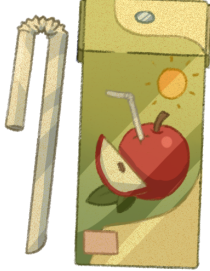
The MSC (Marine Stewardship Council) is an international nonprofit organization founded to combat overfishing. According to the WWF, the MSC label is currently the most comprehensive certification for wild-caught fish: it sets ecological standards, encourages fisheries to become more sustainable, and ensures the traceability of supply chains. Since overfishing and illegal fishing are widespread, this label is useful. However, it is not an absolute guarantee of “sustainable fishing.” The label still has shortcomings that have been criticized by the WWF, among others. It is still recommended to consume fish and seafood in moderation to reduce pressure on the oceans.³⁹

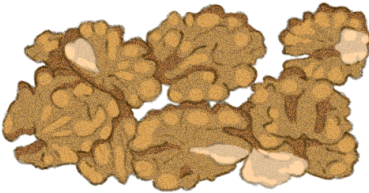
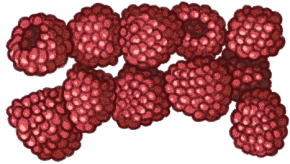


Calcium		
Gouda	Tofu	Drinkable yogurt
  Belgium Cheese is a good source of calcium. + ★	  Brazil A vegetarian option that contains calcium and lots of protein. + ★	  Belgium A liquid yogurt, diluted with water, flavorings, and added sugar. ★

³⁹ 6 faits sur le label MSC,

<https://www.wwf.ch/fr/projets/6-faits-sur-le-label-msc>

Fruit		
Apple pieces	Apple juice carton	Applesauce
		
 Belgium Fresh apple cut into pieces, with no processing or unnecessary packaging.	 Belgium Apple juice is pressed and then packaged in a cardboard carton. Unlike the whole fruit, it has lost most of its fiber during processing.	 Belgium Applesauce is apple that's been cooked then blended, put into a pouch to keep longer.
+★	+★	★

Snack		
Walnuts	Cereal bar	Raspberries
		
 France Rich in fats, walnuts are also full of minerals and good nutrients. Grown in France, they don't have far to travel to get here.	 France A cereal bar, handy to take with you. The quality of cereal bars varies a lot depending on the ingredients and the amount of sugar used.	 France Raspberries are very delicate fruits that grow in summer.
+★	+★	-★



3 > Production conditions

Some themes addressed in this chapter are not recommended for ages under 12.

Purpose of the chapter

For every food item we consume, there are people who grow, harvest, or raise it. This third chapter examines this aspect of our food system that is often overlooked: the working conditions of producers, particularly those in the Global South.

The goal is not to stop consuming anything that isn't local. Some products can only be grown in certain climates (such as cocoa, coffee, or bananas), and we need, and want, these products for a varied diet. The subject is complex and involves global economic realities. The goal here is to become aware of these realities, to understand the role of fair-trade labels, and to reduce our consumption of problematic products.

Global South countries

The term "Global South" refers to countries that have historically been less industrialized and are generally characterized by a lower level of economic development than that of the countries referred to as the "North." Most of the South countries are located in Africa, Asia, and Latin America, but the North-South distinction is a simplification. Australia, for example, is considered a country of the Global North.

The term has replaced the expressions "developing countries" or "Third World," which no longer make sense in today's world. However, the North-South distinction is also outdated (China, a country of the South, is the world's second-largest economy). This is why the term "least developed countries" is now more common.

Fair trade labels featured in the game

The game uses a selection of the main labels found in supermarkets in Belgium.



Max Havelaar Fair Trade label

A global fair trade label that guarantees producers receive a fair and stable price for their products (guaranteed minimum price + premium), in accordance with social and environmental criteria.

Fairtrade International is a nonprofit organization that brings together three producer networks (Fairtrade Africa, Latin America, and Asia) and 20 national organizations (including Fairtrade Belgium).



Fair Trade OXFAM label

This label is associated with the Belgian organization *Oxfam-Magasins du monde* and guarantees fair trade products, with an emphasis on direct support for small-scale producers and raising awareness about fairer trade relations.



SPP (Small-Scale Producers) label

Created and administered by a coalition of small-scale farmers in South America, it ensures that they retain control over their marketing conditions.



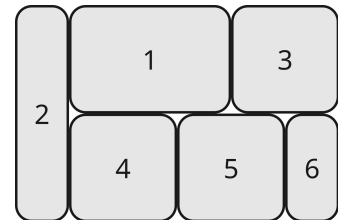
Fake Fair Trade label

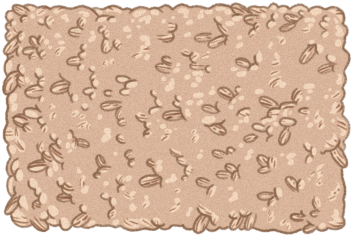
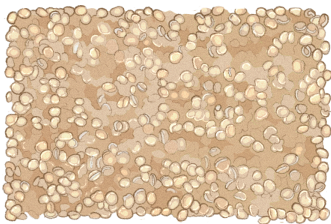
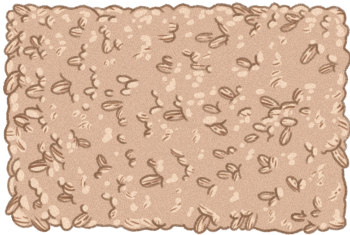
Some products in the game display this logo, which does not correspond to any real label. It serves as an example of logos created by brands for commercial purposes that mimic the iconography of genuine labels.

For chocolate, for example, you'll find labels such as "cocoa life," "cocoa plan," or "cacao selection," which are self-declarations by manufacturers without independent verification.

Monday > Fair pay, fair production

This level is the first to address the working conditions of food producers. It highlights the main fair trade labels in Belgium. The level takes place in summer, but this criterion is not used to select the food items.



Starch		
Fair trade brown rice	Fair trade quinoa	Brown rice with no label
  Thailand The FairTrade label indicates that this rice follows the principles of fair trade. +★	  Bolivia The Small Producers label indicates that this quinoa follows the principles of fair trade. +★	  Thailand This rice has no label, so it's likely that the producers are poorly paid, possibly below the poverty line. ☆

Economic principle of fair trade

Farmers often have to cope with insufficient incomes that leave them below the poverty line. They perform work that is often physically demanding and may be exposed to pesticides. Fair trade labels aim to correct some of these economic imbalances through two main mechanisms:

- A guaranteed minimum price: If world market prices are low, producer organizations receive a minimum price for their crops. If the market price is higher, producers sell at the market rate.
- A development premium: an additional sum, paid on top of the sale price, that producers (organized into cooperatives) can invest to improve their working conditions or in projects that benefit their community (schools, agricultural equipment, access to water, housing).

These labels do not solve all the problems facing global agricultural supply chains, and their scope remains limited to a small portion of production. However, for many producers and their families, they offer a more stable and predictable income that allows them to thrive rather than merely survive from day to day.

Vegetable		
Fair trade green beans	Fair trade tomatoes	Tomatoes with no label
  Kenya The FairTrade label indicates that these beans follow the principles of fair trade.	  Tunisia The FairTrade label indicates that these tomatoes follow the principles of fair trade.	 Spain These have no label, so it's possible the producers are poorly paid and work long hours. Even in Europe, some farms employ seasonal workers who struggle to have their rights respected.
+ ★	+ ★	☆

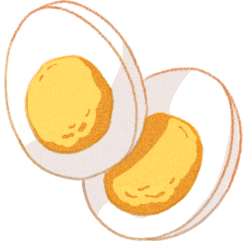
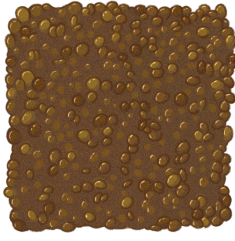
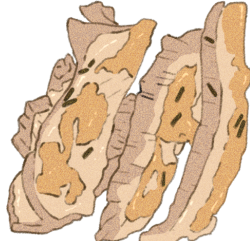
Job insecurity among seasonal workers

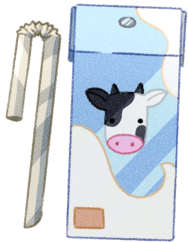
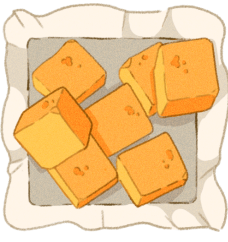
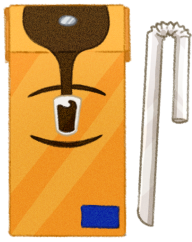
In Europe, the status of seasonal agricultural workers remains particularly precarious, especially for foreign workers. Seasonal workers' contracts are renewed each year at the employer's discretion, leaving them vulnerable to abuse and exploitation.⁴⁰

Fruit and vegetable farming in the Huelva region of Spain is a prime example. Many farmworkers, often migrants and sometimes undocumented, work under living and working conditions described as miserable, with very low wages and limited access to healthcare.⁴¹

⁴⁰ Les oubliés de la crise agricole : pas de droit de séjour pour les saisonniers étrangers ?, Béatrice MÉSINI, Anne LASCAUX, Gaëlla LOISEAU, 28 mai 2024, The Conversation <https://theconversation.com/les-oublies-de-la-crise-agricole-pas-de-droit-de-sejour-pour-les-saisonniers-etrangeurs-222051>

⁴¹ Espagne : conditions de vie "déplorables" pour les travailleurs étrangers agricoles, Leslie CARRETERO, 27/07/2020, Info Migrants <https://www.infomigrants.net/fr/post/26256/espagne--conditions-de-vie-deplorables-pour-les-travailleurs-etrangeurs-agricoles>

Protein		
Hard-boiled egg	Lentils	Prepared chicken
		
 Belgium Eggs from hens raised in Belgium, where working conditions are regulated.	 France Lentils grown in France, where working conditions are regulated.	 Brazil Made with chicken imported from Brazil, where working conditions are often much worse than in Europe.
++★	++★	-★

Dairy		
Milk	Gouda	Chocolate milk drink
		
 Belgium Milk from cows raised in Belgium, where working conditions are regulated. Still, a brand that pays producers fairly is preferable.	 Belgium Cheese made in Belgium, where working conditions are regulated.	 Belgium We don't know where the cocoa used to flavor this milk comes from, or under what conditions it was harvested.
++★	++★	++★

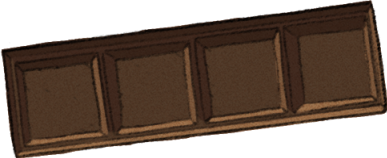
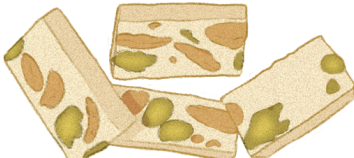
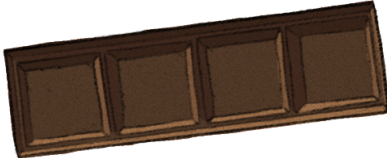
Fruit		
Fair trade banana	Fair trade pineapple	Banana with no label
  Ecuador The FairTrade label indicates that these bananas follow the principles of fair trade. 	  Thailand The FairTrade label indicates that this pineapple follows the principles of fair trade. 	  Ecuador These bananas have no label, so it's likely the producers are poorly paid and work in difficult and dangerous conditions. 

Banana production conditions

Outside of fair-trade channels, working conditions on banana plantations in Latin America (the world's leading exporting region) are often very precarious. Workdays can last up to 10 to 12 hours, wages are low, sometimes below the legal minimum, and labor rights are ignored.⁴² Exposure to pesticides is another major problem, both for the environment and for workers, who are sometimes directly exposed. Workers are present on the fields during spraying and lack adequate protective equipment. This chronic exposure is linked to respiratory irritation and more serious health conditions.⁴³

⁴² According to a survey conducted by Oxfam Germany in 2011 (Bittere Bananen), as reported in an article by Street Press: Les bananes vendues par Lidl ont un arrière-goût sanitaire et social amer, Alice BORDAÇARRE, Aladine ZAÏANE, 10 Mai 2017
<https://www.streetpress.com/1494408374-bananes-lidl-sanitaire-social-amer/>

⁴³ According to a survey by the Swiss NGO Public Eye: Le prix à payer, Chiquita et les droits du travail en Équateur, Romano PAGANINI, Alice KOHLI, Mars 2020, Public Eye
https://stories.publiceye.ch/chiquita_equateur/

Snack		
Fair trade chocolate	Organic nougat	Chocolate with no label
  Peru The Small Producers label indicates that the cocoa used to make this chocolate follows fair trade principles. 	  Bolivia The OXFAM label indicates that the trade behind this nougat follows the principles of fair trade. 	 This chocolate has no label, so it's very likely that the cocoa producers are poorly paid and work under poor conditions. 

Distribution of chocolate value along the production chain

Before we can enjoy chocolate, cocoa goes through many hands: transporters, middlemen, processors, brands, and distributors. At each stage, a portion of the final price is taken. Cocoa farmers generally receive only a small portion of the final price of a chocolate bar, while the majority of the value and profit margins are captured by the manufacturers who process the cocoa and by the distributors. This imbalance is not unavoidable; it stems primarily from the structure of the market, where a small number of large companies negotiate with millions of small, scattered farmers.

The percentages shown in the hypothetical example presented in the game are based on data from the 2025 Cocoa Barometer,⁴⁴ rounded and adjusted to a pre-tax price (since local taxes and VAT are not shown in the in-game graphic). The actual breakdown varies and can be estimated as follows:

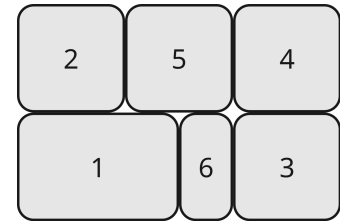
Actor Share of the final price	What this pays for
Tax (VAT) 5% à 20%	In Belgium: 6% for all types of chocolate classified as food products. In France: 5.5% for dark chocolate and plain milk chocolate, but 20% for filled chocolates or confectionery.
Distributors (supermarkets) 35% à 40%	The store's margin, shelf space, storage, promotions, and point-of-sale operations. This is often the largest component.
Manufacturers and brands 35% à 40%	Industrial processing (grinding, conching), adding other ingredients (sugar, milk), packaging, marketing, and research and development.
Transportation and trading 5% à 8%	Maritime and land transportation, as well as intermediaries who collect bags from the bush and transport them to ports.
Cocoa farmers 5% à 7%	The farmer's gross income. Once production costs (tools, labor) are deducted, their net profit is even lower.

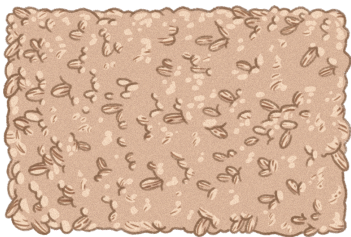
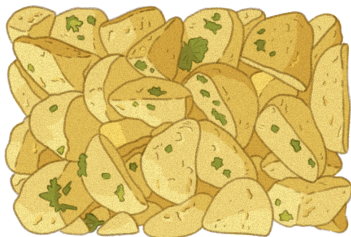
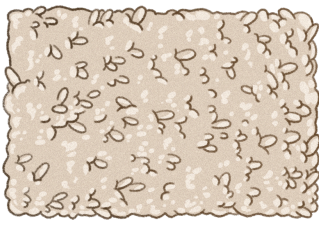
Note that the percentage of cocoa in the final product mathematically affects the share of the final price that goes to producers (between dark and milk chocolate, for instance) The 2024/2025 cocoa crisis has also driven up raw cocoa prices and increased the percentage of the final price accounted for by cocoa (though this does not reflect a sustainable positive trend).

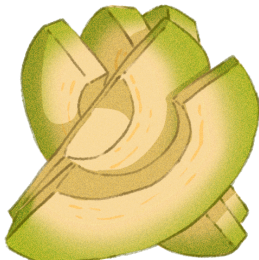
⁴⁴ <https://oxfambelgique.be/publications/barometre-cacao-2025>

Tuesday > Behind the label

This level continues the theme of working conditions regarding "Fairtrade" labels and combines them with organic labels as well as fake labels. The level takes place in the spring, but this criterion is not used to select the food items.



Starch		
Brown rice	Potato salad	Basmati rice
		
 Thailand Brown rice with an OXFAM label indicating it follows the principles of fair trade.	 Belgium A fresh salad made with local potatoes.	 Pakistan Rice imported from Pakistan, where there can be serious doubts about the working conditions of the people who grow it.
+ ★	+ ★	- ★

Vegetable		
Zucchini fritters	Fair trade avocado	Tomato salad
		
 Morocco	 Peru	 Morocco
Fried fritters made with eggs and zucchini sourced from fair trade.	Fresh avocados, rich in omega-9 and vitamins. However, even under fair trade, growing them uses a lot of water and they have to be shipped chilled.	Resellers sometimes invent logos to look like real labels, but they don't actually guarantee anything. Watch out for vague terms like "100% natural" or "quality commitment."
+★	+★	★

The environmental impact of avocado cultivation

Avocado production is expanding rapidly to meet growing demand (in the United States and Europe). This crop has a significant environmental impact, particularly due to its water consumption. A large portion of the avocados grown for export are produced in Mexico, in the state of Michoacán. Between 1993 and 2023, cultivated land increased by 168%, while forest cover declined by 59%. Avocados are a particularly water-intensive crop: in 2020, they reportedly required the equivalent of at least 70% of the region's available freshwater resources, even though the region is already regularly affected by drought.⁴⁵

⁴⁵ Study based on the analysis of satellite images: Rodriguez Garcia, Maria Teresa & Pedrozo-Acuña, Adrián & Breña-Naranjo, Jose. (2025). Impact of avocado expansion on deforestation and water availability in Michoacan, Mexico. Hydrology Research. 57. 31-60. 10.2166/nh.2025.058.
https://www.researchgate.net/publication/400016514_Impact_of_avocado_expansion_on_deforestation_and_water_availability_in_Michoacan_Mexico

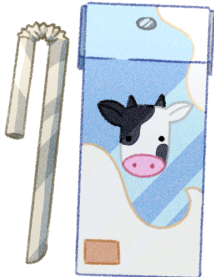
Protein		
Fish	Lentil steak	Shrimp
		
 Belgium Fish caught by a Belgian sea-fishing company, which must therefore follow proper working conditions for its sailors.	 France A lentil steak made with French lentils, full of protein.	 Vietnam Farmed tropical shrimp. These are raised in Southeast Asia, where working conditions are regularly criticized.
+★	+★	-★

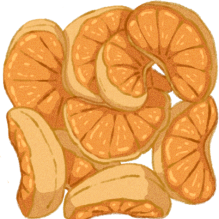
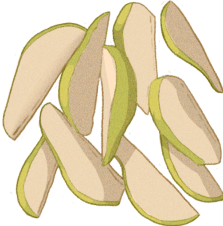
The exploitation of workers on shrimp farms in Asia

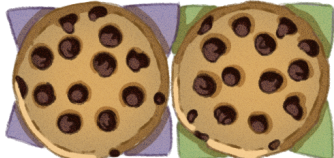
Shrimp farming in Southeast Asia is known for its widespread poor working conditions: unpaid overtime, wages that are often below the legal minimum, and cases of debt bondage (a form of forced labor in which a person must repay a sum of money through their labor), hazardous working conditions, and even reported cases of child labor in India.⁴⁶

⁴⁶ According to a large-scale investigation conducted in 2024 by the organization Sustainability Incubator, with support from the Associated Press, at shrimp farms in India, Vietnam, and Indonesia.

As big supermarkets pursue profits, new research shows growing exploitation of shrimp farmers, David RISING, 30 Septembre 2024, Associated Press,
<https://www.ap.org/news-highlights/spotlights/2024/as-big-supermarkets-pursue-profits-new-research-shows-growing-exploitation-of-shrimp-farmers/>

Calcium		
Cow's milk	Almond milk	Drinkable yogurt
		
 Belgium Milk from cows raised in Belgium, where working conditions are regulated. Still, a brand that pays producers fairly is preferable.	 Europe Almond milk made from almonds grown in Europe.	 Europe An industrial dairy product made by a company that buys milk at the lowest possible price, at the farmers' expense.
++★	++★	☆

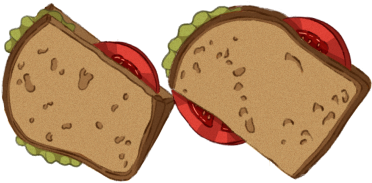
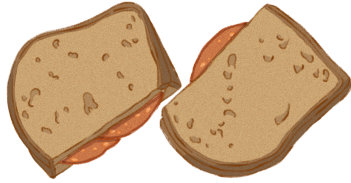
Fruit		
Fair trade mandarin	Apple	Pineapple
		
 South Africa Mandarins are grown in Europe (particularly in Corsica), as well as in Turkey and South Africa. In all cases, fair trade versions exist.	 Belgium Apples are widely grown in Belgium, France, and Germany, where working conditions are regulated.	 Nigeria Pineapple rings from Nigeria, the world's largest pineapple producer.
++★	++★	-★

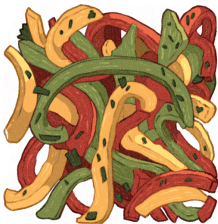
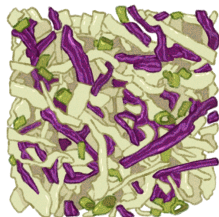
Snack		
Fair trade speculoos	Homemade cookies	Speculoos
 A speculoos biscuit made with fair trade ingredients, notably the honey and cinnamon that give it its great taste.	 The advantage of homemade preparations, unlike processed foods, is that you know everything that goes into them.	 An industrial speculoos with an unknown label reading "traditional recipe."
+★	+★	☆

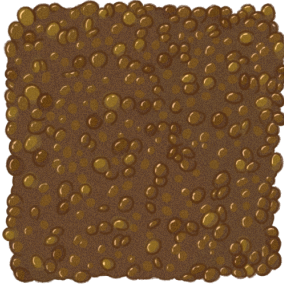
Wednesday > Spring Meal

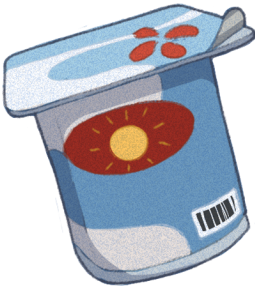
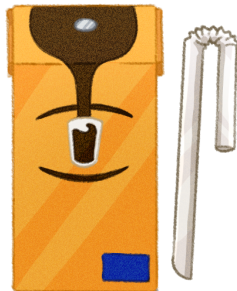
This level begins to combine labels with the Nutri-Score and product seasonality. The level takes place in the spring.

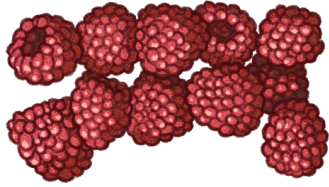
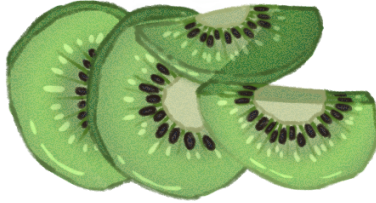
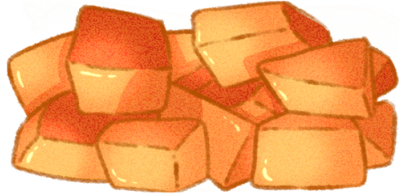
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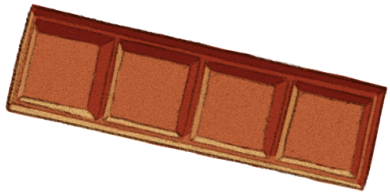
Sandwich		
Vegetarian sandwich	Chicken sandwich	Rosette sandwich
		
A wholemeal bread sandwich with tomato and lettuce.	Chicken is a good source of protein, but the dressing adds fat to the sandwich.	Rosette is a dry cured pork sausage, similar to salami. Like all cured meats, it's high in fat and salt.
++★	++★	★

Vegetable		
Bell peppers	Creamed spinach	Coleslaw
		
 Belgium	 Belgium	 Italia
Peppers need warmth to grow. They're just starting their season in spring, before being at their best in summer.	Spinach handles cold well and stays available from autumn through spring, before summer heat stops it from growing.	Cabbage is an autumn and winter vegetable.
++★	++★	★

Protein		
White fish	Lentils	Surimi sticks
		
 Europe	 France	 France
The MSC label is given to fisheries that respect fish stock levels and limit their impact on marine ecosystems.	Lentils keep well and are available all year round.	Surimi is made from blended white fish flesh, then flavored and colored to imitate the taste and look of crab.
+★	+★	-★

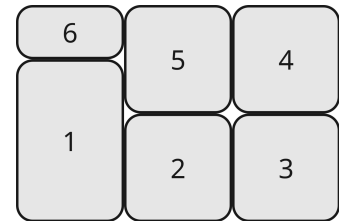
Dairy		
Yogurt	Mozzarella	Chocolate milk
		
 Belgium	 France	 Belgium
Yogurt is made by fermenting milk, which makes it easier to digest.	The AB label guarantees that this cheese is produced according to organic farming principles.	Chocolate-flavored milk, made in Belgium, but with added sugar.
+★	+★	★

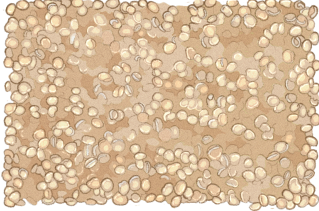
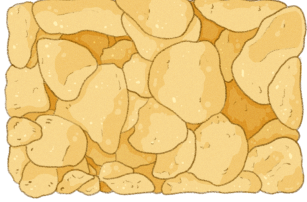
Fruit		
Raspberries	Kiwi	Melon
		
 Belgium Belgian raspberries start ripening in spring, as temperatures warm up.	 New Zealand Some kiwis are grown in Italy or France. This one is imported from New Zealand.	 Brazil This melon is a summer fruit, but it's also produced out of season, imported from countries like Brazil where working conditions are questionable.
+★	☆	-★

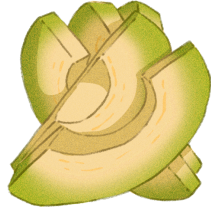
Snack		
Walnuts, hazelnuts, almonds	Cereal bar	Milk chocolate
		
The Producteurs Paysans label guarantees that these nuts follow fair trade principles.	A convenient cereal bar to take with you, made with ingredients produced under good working conditions.	The origin of the cocoa used to make this chocolate is unknown, making it hard to know what conditions it was harvested under.
+★	+★	☆

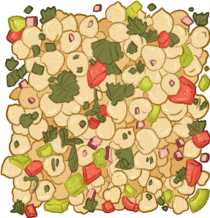
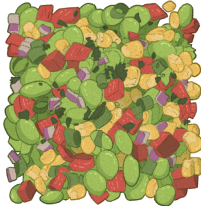
Thursday > Vegetarian meal

This level combines nutrition, "fair trade" labels, and food origin, but offers only vegetarian options, which allows for direct comparison among them. The level takes place in the summer, but this criterion is not used to select the foods.

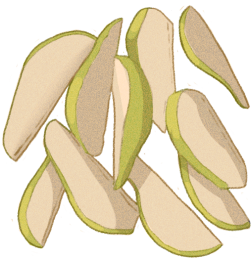


Starch		
Quinoa	Whole wheat pasta	Chips
		
 Bolivia	 Italia	 France
Quinoa is a seed that has been grown for thousands of years in the mountains of the Andes, in South America. Unlike most starches, it's rich in protein.	Whole wheat pasta is made from whole wheat, which gives it more fiber than white pasta.	Chips are potato slices fried in oil, then salted.
+★	+★	-★

Vegetable		
Tomatoes	Cherry tomatoes	Avocado
		
 Belgium Tomatoes with a Bio Garantie label.	 France Cherry tomatoes with the French Organic Farming label.	 Peru An avocado grown in Peru then shipped by boat, kept refrigerated.
+★	+★	-★

Protein		
Chickpea salad	Edamame	Lentil steak
		
 Spain Chickpeas are a legume rich in plant protein and fiber, grown since antiquity.	 China Edamame are soybeans harvested before they're fully ripe, then steamed or boiled.	 France A plant-based "steak" made from lentils, a legume rich in protein and iron.
+★	+★	+★

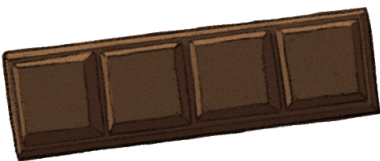
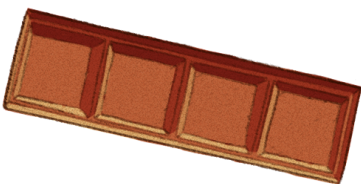
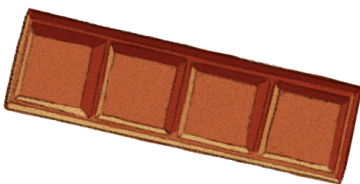
Calcium		
Almond milk	Soy milk	Drinkable yogurt
		
 Europe	 France	 Belgium
Almond milk is made by blending almonds with water. Many brands add sugar to improve the taste, which lowers the Nutri-Score.	Soy milk is made from soybeans that are soaked and then ground with water.	A drinkable yogurt that says "quality commitment" on the packaging.
+★	+★	☆

Fruit		
Pear	Pineapple	Banana
		
 Belgium	 Thailand	 Ecuador
Pears grow well in Belgium's temperate climate, where they're harvested at the end of summer and keep for several months.	Pineapple only grows in tropical climates, so it has to be imported.	Bananas from Ecuador. On some uncertified plantations, children are sometimes made to work.
+★	+★	-★

The issue of child labor

In certain agricultural sectors, particularly in sub-Saharan Africa, children are involved in farm work. This affects approximately 138 million children aged 5 to 17. Agriculture remains by far the most affected sector, accounting for more than 60% of all cases of child labor.⁴⁷

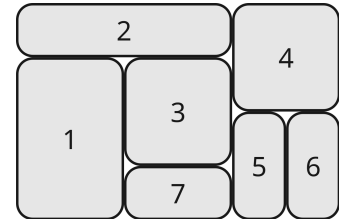
This phenomenon, which deprives children of their education and childhood, is necessary for the family's economic survival. For this reason, efforts to eliminate child labor must focus first and foremost on improving the incomes of adult farmers: when a family can make a decent living from farming, the need to put children to work decreases.

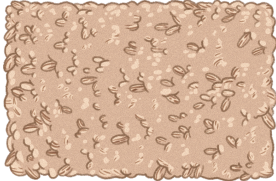
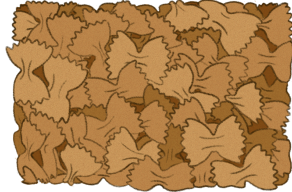
Snack		
Dark chocolate	Milk chocolate	Milk chocolate
		
  Peru The Small Producers label provides guarantees on cocoa production. Dark chocolate also contains antioxidants.	  Peru The Belgian OXFAM label provides guarantees on cocoa production. Milk chocolate contains milk and sugar in addition to cocoa.	The origin of the cocoa used to make this chocolate isn't stated on the packaging.
+ ★	+ ★	- ★

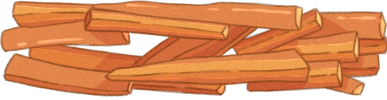
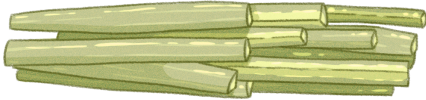
⁴⁷ 2024 Global Estimates of Child Labour in figures, International Labour Organization, June 11 2025
<https://www.ilo.org/resource/other/2024-global-estimates-child-labour-figures>

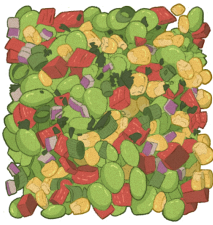
Friday > Last meal

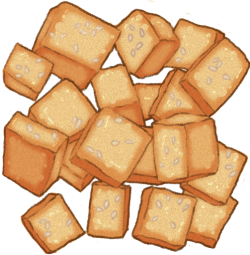
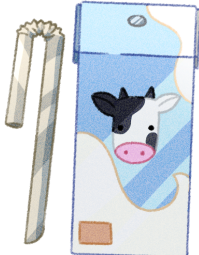
The final level of the game combines all the selection criteria (nutrition, environment, working conditions) and displays multiple information icons for a single food item. The seven food items are harder to fit into the box than in previous levels. The level takes place in the fall.

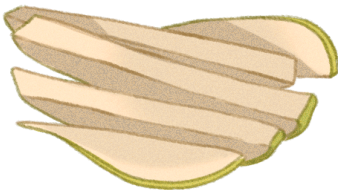


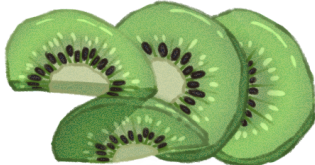
Starch		
Whole wheat rice	Whole wheat pasta	Pasta salad with fresh tomatoes
		
 Thailand	 France	 Belgium
Whole wheat rice keeps its outer layer, rich in fiber. This one is imported from Thailand.	Whole wheat pasta made from French whole wheat.	A salad with tomatoes grown in a Belgian greenhouse.
+★	+★	-★

Vegetable		
Carrots	Green beans	Cucumbers
		
 Belgium Carrots grown in Belgium. These are certified with a label.	 Kenya Green beans harvested in early autumn in Kenya.	 Belgium Cucumbers grow well here, but mainly in spring and summer, when temperatures are milder.
+★	+★	☆

Protein		
Beef meatballs	Edamame	Shrimp
		
 Belgium Belgian beef meatballs.	 China Edamame are soybeans, usually grown in Asia.	 Vietnam Farmed Vietnamese shrimp, with no label.
+★	+★	-★

Calcium		
Tofu	Carton of milk	Portions of soft cheese
  Belgium A plant-based protein source made from Belgian soybeans. +★	  Belgium Milk produced in Belgium. +★	  France A processed cheese made by blending several cheeses together and adding extra butter and salt. -★

Fruit		
Clementine	Pear	Melon
  Spain A clementine grown in Spain, one of the closest producing countries to us. +★	  Belgium Thanks to different varieties and good storage, Belgian pears are available for much of the year. +★	  France A melon from the south of France. -★

Fruit		
Apple	Dried fruits	Kiwi
		
 Belgium	 Belgium	 New Zealand
A Belgian apple. It's one of the most widely grown fruits in our region.	Dried fruits can be stored for years if they are kept completely dry.	A kiwi from New Zealand, with a logo added by the retailer.
+ ★	☆	- ★

Snack		
Vegetable chips	Speculoos	Chocolate bar
		
Chips made from vegetables (parsnip, beetroot, sweet potato...) fried in oil like regular chips.	A speculoos biscuit whose ingredients (like cinnamon) come from fair trade.	An industrial chocolate bar.
☆	☆	- ★

Thank you for reading this document.



The app Mission: My Perfect Lunch was developed by Maracas Studio.
This educational resource was created by Maracas Studio.

Dutch translation by Dagmar Blommaert and Anna Konijnendijk



With the support of the Belgian Development Cooperation

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