



# **EATING ACCORDING TO THE FOOD TRIANGLE: GOOD FOR YOURSELF AND THE PLANET**

**Recommendations and guidelines for a healthy and environmentally  
responsible diet (2021)**

# PREAMBLE

“So what are we eating tonight?” It’s a universal question in a society where food is all-pervasive. Food connects people, is at the heart of all manner of traditions and rituals, provides pleasure and creates jobs. But what we choose to eat inevitably has an impact on our health and the environment.

Healthy food is important in the pursuit of the best possible health for everyone and in the fight against obesity and diseases such as type 2 diabetes and cardiovascular disease. But at the same time it’s clear that the current Western consumption pattern is putting a heavy strain on our planet. **By making certain dietary decisions, we can improve our own health and that of the planet.** A win-win: for ourselves in the short term, and for the planet and future generations in the long term. That way you can kill two birds with one stone.

It is only logical, therefore, that a healthy and environmentally responsible diet is high on the national and international agenda. But what exactly does such a diet consist of? The answer to that question is often subject to debate. With this document, we offer a substantive frame of reference, based on the latest scientific insights and the advice of experts in the field. We translate that knowledge into concrete, achievable recommendations for the consumer.

After all, that consumer obviously plays an important role in this story. Even though his choices and habits are strongly influenced by the food environment; external factors such as available supply, price and food marketing. That is why we call on policy-makers, organisations, producers and retailers to act on these recommendations. They can help promote healthy and environmentally responsible food and make it accessible to everyone.

## WHO IS THIS DOCUMENT FOR?

This document is aimed at all actors in the food system as well as interested citizens. It is the basis for the development of materials, communication and derivatives in the food triangle. From now on, the food triangle will again point the way towards a better diet for health and the environment.

For detailed information, practical tips and materials, we refer to the **substantiation reports of the food triangle (Health background document (Dutch), [2017](#) and Environment background document (English), [2021](#)) and [www.gezondleven.be/voedingsdriehoek](http://www.gezondleven.be/voedingsdriehoek).**

No references are included in this document.  
For this we refer to the substantiation reports.

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Disclaimer: For whom are these recommendations intended? The target group of the food triangle is the **general population as from the age of 1**. The triangle provides general advice for a large group of people. For individual recommendations, we recommend **bespoke advice** from a professional, for example for medical reasons, for weight loss, during pregnancy and breastfeeding, (young) children, intense sports, eating disorders etc. For example, you can ask advice from a **dietician**, your GP, **Kind en Gezin** or from the **help desk at Eetexpert**.

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# GLOSSARY

<b>Recommendations and action perspectives</b>	Concrete, practical and achievable tips and advice for consumers. Recommendations focus on what we eat, while the perspectives focus on how we eat.
<b>Processed meat</b>	Meat that has, for example, been smoked, salted or dried. Examples are charcuterie such as salami or ham, and fresh processed meats to which salt or additives (such as nitrite and phosphates) have been added, such as bacon. Read more <a href="#">here</a> .
<b>Empty calories</b>	Foods that provide energy (calories) (mainly from sugar and/or fat), but contain little or no beneficial nutrients such as fibre, vitamins and minerals. They are filling but not nutritious. Examples include crisps, soft drinks, cookies, sweets and alcoholic drinks. These can be found in the <a href="#">red circle outside the food triangle</a> .
<b>Mycoproteins</b>	Fermented proteins derived from fungi. These fermented proteins are used as the basis for certain plant-based meat substitutes (e.g. Quorn ©).
<b>Red circle</b>	Food that is not essential to a healthy diet can be found in <a href="#">the red circle outside the food triangle</a> . We advise consuming these products as little as possible. They are empty calories: they are filling but not nutritious. These products are often <a href="#">ultra-processed</a> .
<b>Red meat</b>	Meat of cattle, pigs, sheep and goats, whether or not cut or ground, to which nothing has been added. Read more <a href="#">here</a> .
<b>Ultra-processed food</b>	Food that is the result of complex industrial processes such as extrusion, fractionation, chemical modification and hydrogenation. Sugar, fat and/or salt are frequently or usually added as well as numerous additives. These products can be identified by a long list of known and unknown ingredients. Read more <a href="#">here</a> .
<b>Vegetarian and vegan diet</b>	Diet in which (certain) animal product groups are not consumed. There are different variations of a vegetarian diet. In a vegan diet, no animal products are eaten, including dairy, eggs or honey. Read more <a href="#">here</a> .
<b>Food environment</b>	External factors that influence people's dietary decisions. Examples are the physical locations where you can buy or eat food, but also the price, the information on food, advertising and marketing, where and how certain food is offered (e.g. sweets at the cash register), etc. Read more <a href="#">here</a> .
<b>Food waste</b>	When food intended for human consumption is lost, for whatever reason, we speak of food waste. This can occur at any link in the food chain, from farmer to consumer. Read more on <a href="http://www.voedselverlies.be">www.voedselverlies.be</a> .

# 1 CONTEXT

Below we describe why health and environment are considered together in the recommendations and why we speak of environmentally responsible food instead of sustainable food. We also underline the fact that healthy and environmentally responsible eating is a shared responsibility, involving not only the consumer but also many other actors in the food system as well.

## 1.1 Why should the environment be taken into account when making dietary recommendations?

Our way of life puts a heavy strain on our planet. Food plays a significant role in this. The production, processing and distribution of food has an impact on the climate, air quality, soil quality, land and water use and biodiversity ([see appendix for more information on these environmental indicators](#)). **The environmental impact of our food is currently greater than what our planet can bear** and we are heading for trouble. Moreover, that impact is not limited to Flanders. Our food, and the resources it requires, also comes in part from abroad.

This means that the environmental impact of what we eat in Flanders can also be felt beyond our borders.



### The role of the consumer

Our consumption is one of the most important links in the food system. Consumers can make a huge difference with their daily dietary decisions and contribute to a food system that stays within the carrying capacity of the earth.

**The food triangle is a guide to healthy dietary decisions that are also good for the environment.**

### The role of the food environment

This does not mean, however, that the responsibility for making dietary decisions can be shifted entirely to consumers. Our eating habits<sup>1</sup> are influenced by all kinds of external factors in the so-called food environment. Not only is food available always and everywhere, the price and marketing of certain products also influence our decisions. Producers, distributors, supermarkets, caterers, the hospitality industry, (local) authorities, educators, media and influencers all have a responsibility to support consumers when it comes to making dietary decisions.

Healthy and environmentally responsible dietary decisions must become the most obvious and appealing options for consumers. We therefore encourage these actors to make use of this document. It provides a substantive framework for numerous actions: from guidelines for supply at public institutions to policy advice. **Only by joining forces can we work towards a healthy future for ourselves and the planet.**

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<sup>1</sup> All the factors that influence our (eating) habits have been summarised in *The Behavioural Wheel*, developed by the Flemish Institute for Healthy Living. [Read more here.](#)

## 1.2 Environmentally responsible or sustainable food?



The recommendations in this document point the way to healthy and environmentally diets. We deliberately use the term environmentally responsible food and not sustainable food. The concept of sustainability is represented by three pillars: the environment, the economy and society. Economic and social aspects such as a fair price, animal welfare, cultural acceptance and food security are not addressed in the substantiation report. That is why we cannot (yet) speak of sustainable diets. We invite research institutions and organisations with the relevant expertise to investigate further these other aspects of a sustainable diet. Together we can achieve an integrated vision and strategy.

## 1.3 Health and environmental integration: a necessity

When talking about food, health and the environment are difficult to separate. **We are facing a major challenge worldwide: producing sufficient healthy food for everyone, now and in the future, without exceeding the carrying capacity of earth.**

To do so we have to stay within a safe zone, which is delimited on two sides (see Figure 1). The planetary boundaries are the upper limit, also called the carrying capacity of the earth. Exceeding these runs the risk of causing irreversible environmental damage. In concrete terms, this means further global warming and extreme weather conditions (drought, extreme rainfall, etc.), which, among other things, lead to failed harvests. In short: exceeding planetary boundaries increases the risk of a global food shortage. Which in turn would endanger the survival of humans.

Social capacity is the lower limit. If we stay within that limit, the basic needs of humans will be met and allow them to lead a good and healthy life. Nutritionally, this translates into enough healthy food for everyone, including the most vulnerable. Fair compensation for food producers also falls under social capacity.

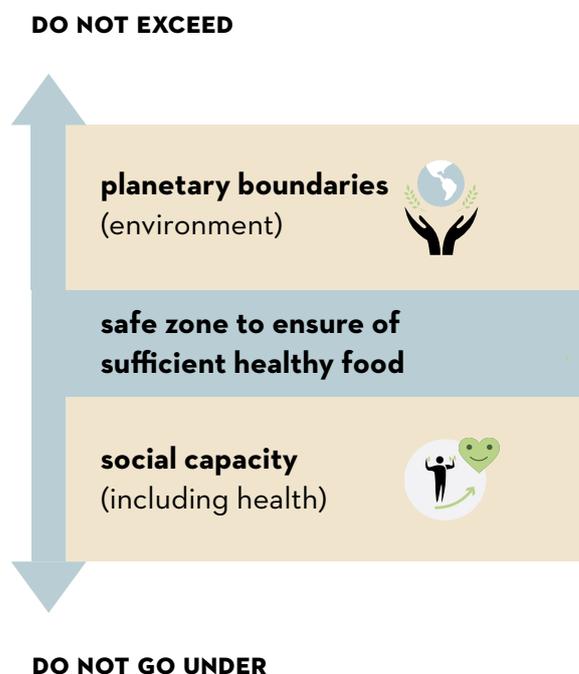


Figure 1: Own image based on K. Raworth's Doughnut model

Staying within these limits in terms of health and environment is in many cases feasible and even self-evident. Which is positive. Because making better dietary decisions creates a win-win in both areas. However, trade-offs sometimes have to be made. For example sugary soft drinks, which are bad for our health, but at the same time have a relatively low environmental impact. The reverse is also possible: eating fish regularly is recommended for health reasons, but catching and farming fish can create a considerable environmental burden.

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**By eating according to the recommendations of the food triangle, you kill two birds with one stone.**

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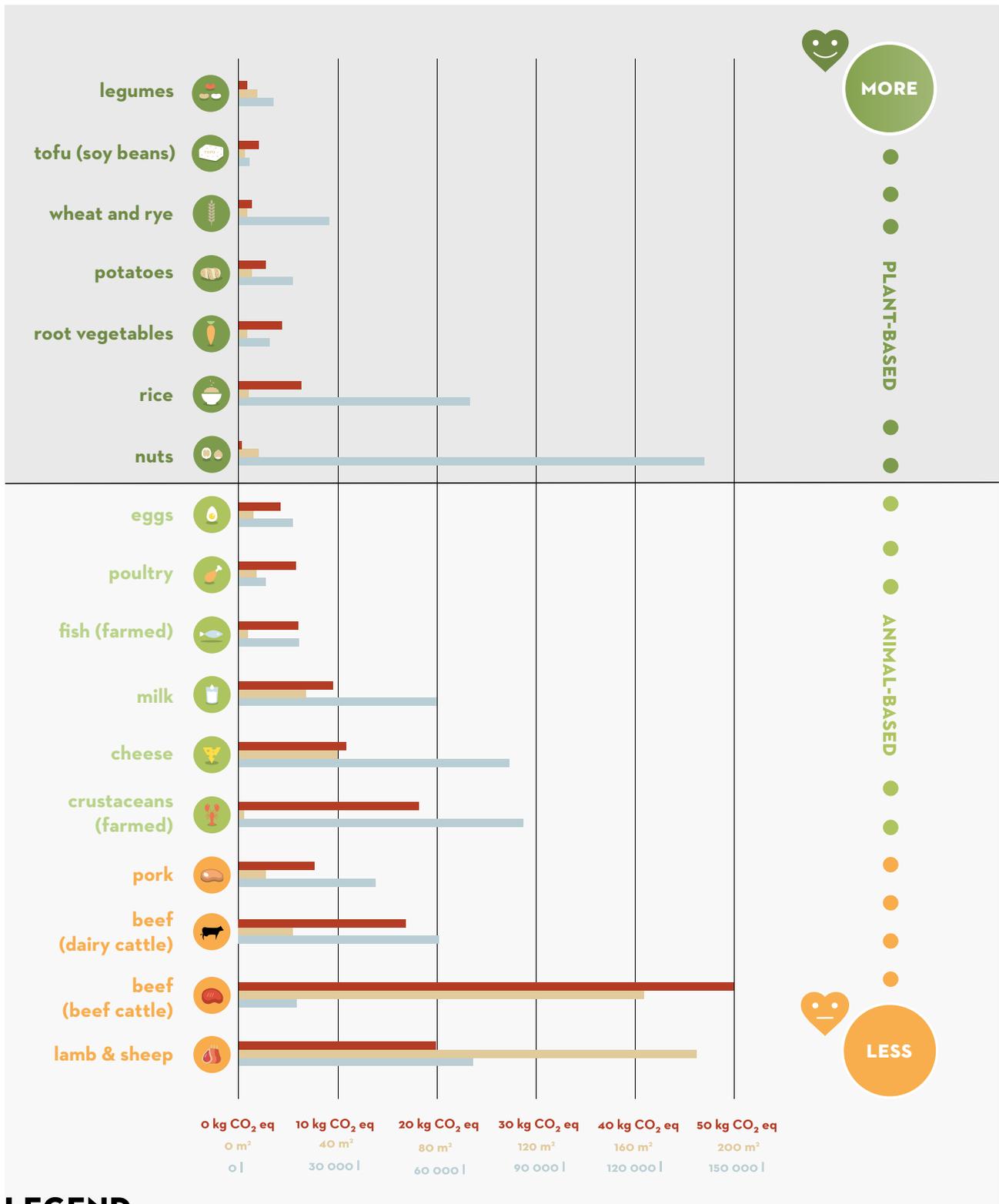
Fortunately, these examples are the exception rather than the rule, and healthier eating efforts often bring environmental benefits and vice versa. **By eating according to the recommendations of the food triangle, you kill two birds with one stone.** It is good for your own health, and simultaneously the most important thing you can do to reduce the environmental impact of your diet. Therefore, we strive to integrate both aspects in recommendations to the consumer. This way, we convey an unambiguous message to consumers and actors who want to work to help their target audience: **eating based on the food triangle is good for yourself and the planet.**

**The recommendations in this document consider the intersections and contradictions between health and the environment, and enable consumers to make the most of both.**



# KNOW WHAT YOU EAT, FOR OUR PLANET

WHY MORE PLANT-BASED 🍏 (AND LESS ANIMAL-BASED 🍖) IS ALSO BETTER FOR THE ENVIRONMENT



## LEGEND

The graph shows average values per food group. These have been ranked according to their position in the food triangle, from low to high environmental impact. There may be variation between individual products in the same group.

- **greenhouse gas emissions**  
(number of kg CO<sub>2</sub> eq per 100 grams of protein)
- **land use**  
(number of m<sup>2</sup> per 100 grams of protein)
- **water usage**  
water extracted from groundwater, rivers or lakes for agricultural use (e.g. irrigation) (taking into account water scarcity)  
(number of l per 100 grams of protein)

Source: Poore, J., & Nemecek, T. (2018). *Additional calculations by Our World in Data.* Note: data represents the global average greenhouse gas emissions, land use, scarcity-weighted water use of food products based on a large meta-analysis of food production covering 38,700 commercially viable farms in 119 countries. [OurWorldInData.org/environmental-impacts-of-food](https://www.ourworldindata.org/environmental-impacts-of-food) - CC BY

Figure 2: The environmental impact of plant-based and animal-based food. Ranked according to their place in the food triangle.

# 2 THE FOOD TRIANGLE AS THE BASIS FOR HEALTHY AND ENVIRONMENTALLY RESPONSIBLE DIETS

The **food triangle** is the basis for a healthy and environmentally responsible diet. By following the advice of the food triangle, you are not only taking care of your own health, but that of the planet as well.

We formulated three principles for this food triangle. These principles are the basis for a healthy and environmentally responsible diet and are the result of extensive literature research and consultation with experts. To make the food triangle and the principles more concrete for the consumer, we have compiled seven tips to advise what to eat for a healthy and environmentally responsible diet.



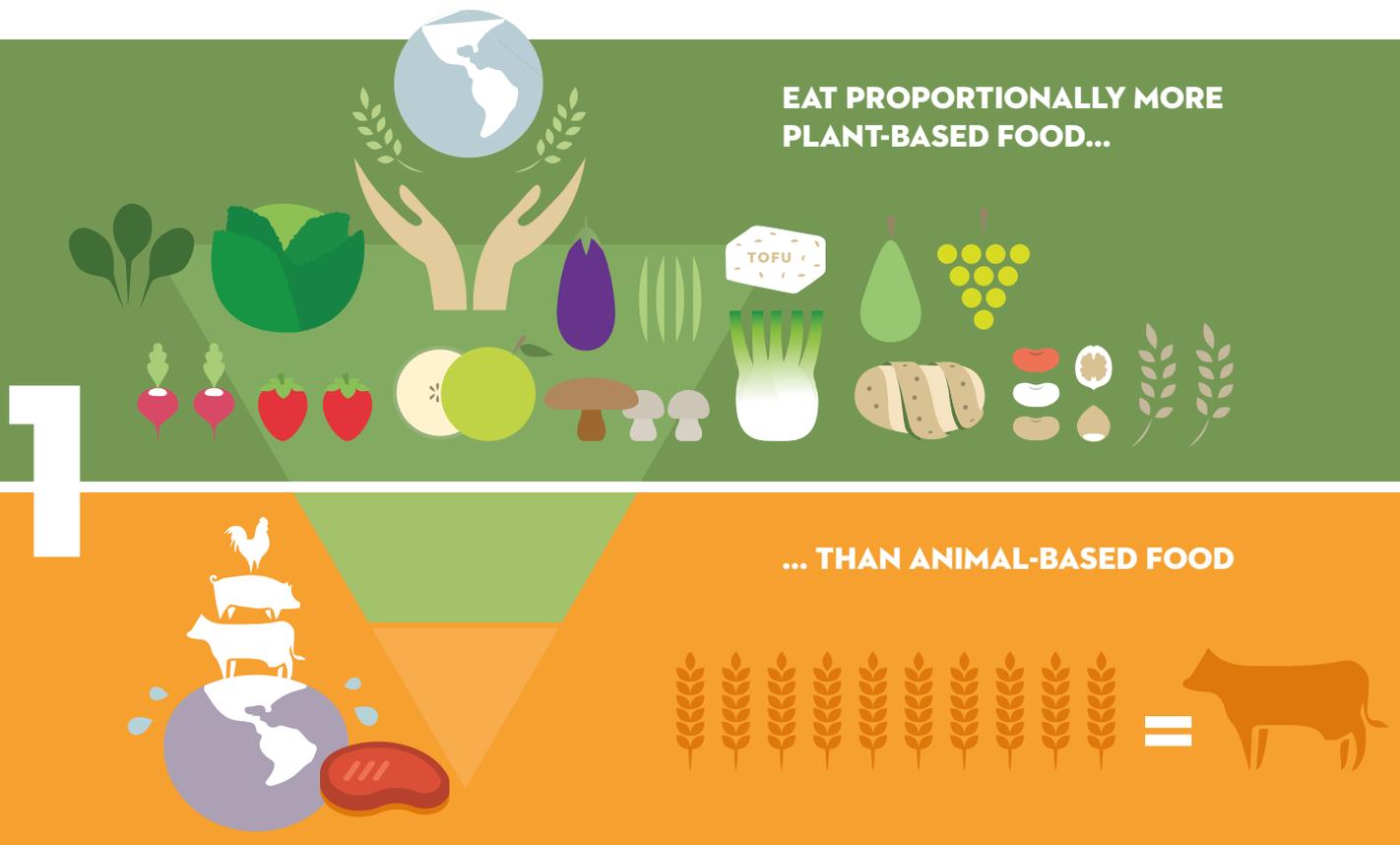
## Every small improvement is a step forward

The goal is not to change your entire diet from one day to the next. We encourage a step-by-step approach: every small improvement is a step forward. Seek out variety and opt for healthy, environmentally responsible alternatives that suit you. After all, it is still important to enjoy what you eat. So allow yourself a less healthy indulgence now and then. **Balance is key: take care of yourself and the planet, but don't forget to enjoy yourself.**

### HUNGRY FOR MORE INFORMATION?

This document is a concise summary and translates the insights from the background documents **for food and health (2017) (Dutch)** and **food and environment (2021) (English)** into practical recommendations in the food triangle. On the Healthy Living website ([www.gezondleven.be](http://www.gezondleven.be)) you will find more information (web texts, infographics) and practical tools (mijngezondleven.be, the Zeker Gezond recipe app, weekly menu and a seasonal calendar). These are communicated through our own channels, through our partners and health professionals. For certain topics (such as avoiding food waste) references are made to materials from other organisations.

## 2.1 Principles for healthy and environmentally responsible dietary decisions



### **PRINCIPLE 1: EAT PROPORTIONALLY MORE PLANT-BASED FOOD THAN ANIMAL-BASED FOOD**

A predominantly plant-based diet increases the chances of good health the most and has a lower impact on the environment. The average Flemish person still eats too much meat (especially red and processed meat) and too little plant-based food. Fruit and vegetables (preferably seasonal), legumes, whole grains and nuts form the basis for a healthy and environmentally responsible diet and can thus be found in the dark green zone of the food triangle. **A complete switch to a vegetarian or vegan diet is not necessary.** Products of animal origin still have a place in a healthy and environmentally responsible diet, simply less often and in smaller portions than what many people consume today. The focus is mainly on reducing red and processed meat.

New alternatives such as insects, in vitro meat, seaweed and algae are in full development. These have not yet been included in our recommendations because current consumption and supply is either very low or non-existent. Further research is also needed before we can say anything about their health effects and environmental impact.



## WHY IS IT HEALTHIER?

Plant-based foods in particular are associated with health benefits at higher consumption levels. Consider, for example, the prevention of obesity, type 2 diabetes, cardiovascular disease, certain cancers, etc. Within the category of animal-based foods, higher consumption of red and especially processed meat is associated with adverse health effects, such as a higher risk of type 2 diabetes, stroke and certain cancers. The Hoge Gezondheidsraad [Superior Health Council] therefore recommends that adults consume no more than 300 g of red meat and no more than 30 g of processed meat per week. Poultry, eggs and dairy are either assessed as neutral, or no unambiguous health effect has yet been proven. Fish is the exception (within animal products) and is beneficial for health, because it protects against cardiovascular disease.



## WHY IS IT BETTER FOR THE ENVIRONMENT?

The amount of meat and other animal-based foods that we consume today accounts for a very large proportion of the total environmental impact of our current diets. Generally speaking, plant-based foods have a lower environmental impact compared to animal-based foods: lower greenhouse gas emissions and less water and land use. Legumes have a very low environmental impact compared to meat and, like whole grains, are an interesting plant-based protein source. Nuts also provide protein, but require a relatively high amount of water. Eating a handful of nuts daily is sufficient. As far as fruit and vegetables are concerned, locally grown fruit and vegetables do not necessarily have a lower environmental impact. Therefore, primarily opt for seasonal varieties, which are more likely to have a lower environmental impact. Buying local is good for the local economy. It brings citizens and producers closer together, and gives consumers a better sense of the origin of their products.

### **FROM 60/40 TO 40/60: THE PROTEIN SHIFT.**

#### **HOW CAN WE IMPROVE THE RATIO BETWEEN PLANT-BASED AND ANIMAL-BASED PROTEIN SOURCES FOR THE ENVIRONMENT?**

One way to determine the ratio of animal-based and plant-based foods on our menu is to look at the protein content. On average, we currently get about 60% of our protein intake from animal-based products and 40% from plant-based products. In order to reduce the environmental impact of our diet, we need to source proportionally more protein from plant-based sources (e.g. legumes, cereals, nuts and seeds) in the future. With regard to protein intake, a ratio of 60% from plant-based products and 40% from animal-based products is set as a target at population level. This is referred to as the protein shift or protein transition. What the transition means in concrete terms for the consumer's diet and its (potential) health effects has not yet been adequately researched. It requires a major change to our current diet and requires a fully-fledged substitute for, among other things, meat. This is especially important for vulnerable groups such as children and the elderly. This objective as such is therefore not communicated to the public. The food triangle recommendations advise the consumption of proportionally more plant-based food than animal-based food and provide practical advice for making healthy and environmentally responsible choices.

# 2



## EAT AND DRINK AS LITTLE EMPTY CALORIES AS POSSIBLE

### PRINCIPLE 2: EAT AND DRINK AS LITTLE EMPTY CALORIES AS POSSIBLE

Empty calories such as soda, crisps, cookies and alcoholic drinks can be found in the red circle outside the food triangle. What do these products have in common? They provide energy (calories), but little or no useful nutrients (especially sugar and/or fat). **Empty calories are filling, but are not nutritious.** Although they are redundant, they are firmly embedded in our dietary habits. We tend to overeat them because they are appealing, widely available and easy to consume. On average, Flemish people get one third of their daily food from the group of empty calories. Again, it is not necessary to eliminate these products completely, but to eat them less often and in small portions.

#### WHY IS IT HEALTHIER?

Empty calories have low nutritional value and have no added value in a healthy diet. Many of these foods (e.g. frozen pizza, sweets and crisps) are ultra-processed: they are the result of all kinds of complex industrial processes. They are linked to adverse health effects if consumed too much or too often. More research is needed, but possible explanations include: their unfavourable nutritional value (sugar, salt or other additives), the fact that they take the place of healthy food such as fruit and vegetables, or that it is easy to eat too much of them, which increases the risk of obesity.

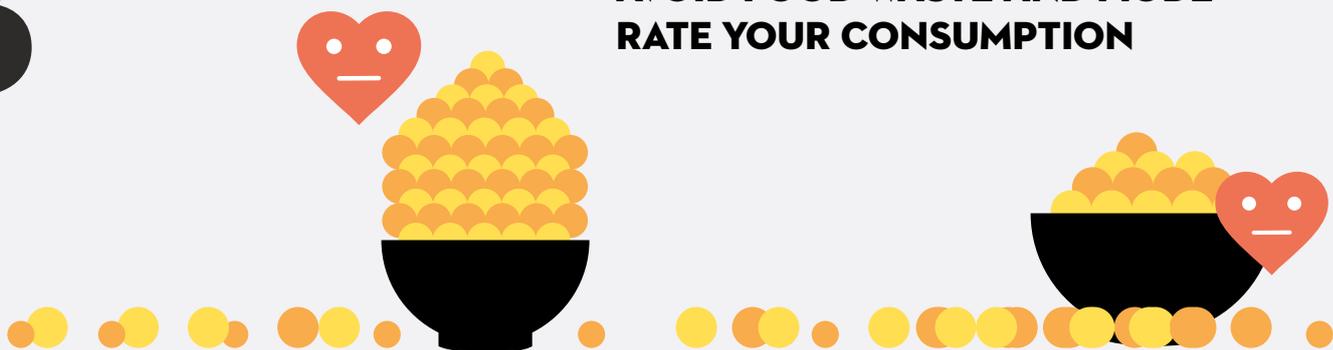


#### WHY IS IT BETTER FOR THE ENVIRONMENT?



Each extra step in the food processing process has an additional environmental impact. Food processing is often necessary and generally offers many advantages: better preservation (and therefore safer food and less food waste), better digestion, higher nutrient availability and increased convenience. Besides the often energy-intensive processing steps, the ingredients used also contribute to the overall environmental impact. Examples include the use of palm oil, refined sugar and food additives. If food processing leads to products that have no added value for our health, the accompanying environmental impact of those empty calories can be considered superfluous and therefore something to be avoided.

# 3



## AVOID FOOD WASTE AND MODERATE YOUR CONSUMPTION

### PRINCIPLE 3: AVOID FOOD WASTE AND MODERATE YOUR CONSUMPTION

The third principle around food waste and overconsumption is an overarching point of attention for the entire food triangle.

Due to an abundance of food, we tend to buy too much. As a result, we sometimes eat more than necessary, or have to throw food away. **On average, every Flemish person throws away no less than 37 kg of food and drinks annually.** In order to limit the environmental impact of our diet, we must therefore certainly focus (more) on this. Moreover, it is not only important for the environment not to eat more than your body needs, but also for your own health.

#### WHY IS IT HEALTHIER?

Avoiding food waste, for example by better planning your purchases and meals, can indirectly benefit your health. By planning how much you buy, prepare and eat, you can avoid throwing away food and consuming too much (= overconsumption). Overconsumption is a challenge in its own, even aside from avoiding food waste. Eating more than your body needs can not only lead to obesity, but also involves additional health risks.



#### WHY IS IT BETTER FOR THE ENVIRONMENT?



Every food item that is wasted represents an environmental impact that could have been avoided. We therefore have to prevent food from being thrown away. The food that is thrown away during the consumption phase bears all the environmental costs of all the previous steps in the chain (production, transport, processing, packaging, etc.). It can also be regarded as an unnecessary and therefore avoidable environmental impact if you eat more than necessary.

## 2.2 Tips for healthy and environmentally responsible dietary decisions

The principles are further elaborated and supplemented in order to arrive at a set of seven comprehensible and concrete tips for the Flemish consumer. They provide additional interpretation to the visual representation in the food triangle.

1. Drink mostly tap water
2. Eat more fruits and vegetables, preferably in season
3. Opt more often for legumes, whole grains and nuts
4. Eat less meat and opt for poultry, fish and eggs over red and processed meat
5. Eat and drink as little empty calories as possible such as soft drinks, snacks and sweets
6. Avoid food waste
7. Don't eat more than your body needs



### TIP 1: DRINK MOSTLY TAP WATER

#### MORE INFO AND MATERIALS TO GET STARTED

Would you like more information about tap water?

You can read it [here](#).

Tap water is the best thirst quencher. Looking for a little variation? Read more [here](#) about drinks in the food triangle.

Do you drink enough water every day? Test how much water and other drinks you drink [here](#).

The daily intake of sufficient fluids is essential to maintain the proper fluid balance in your body. Water is the best thirst quencher and is therefore at the very top of the food triangle. Consciously opt for tap water instead of bottled water. Given that no packaging and transport is required, tap water has a lower environmental impact. It is also budget-friendly, practical and high-quality, thanks to the thorough checks carried out regularly in Flanders. With a reusable drinking bottle you always have tap water at hand, even when you're on the go!



**BOTTLED WATER**

**TAP WATER**



## TIP 2: EAT MORE FRUITS AND VEGETABLES, PREFERABLY IN SEASON

### MORE INFO AND MATERIALS TO GET STARTED

Read more about [vegetables](#) and [fruit](#) on the food triangle overview pages.

Do you eat sufficient [vegetables](#) and [fruit](#)? Take the test!

Discover our tips and make sure you include sufficient fruit and vegetables during the day in your [breakfast](#), [lunch](#), [dinner](#) and as a [snack](#).

[Our seasonal calendar](#) with accompanying decision tree can help provide inspiration for eating according to the season.

Fruit and vegetables provide numerous health benefits, but we often don't eat enough of them. So be sure to eat fruit and vegetables every day and let the season guide you as much as possible. Not only are seasonal fruits and vegetables at their best then, but their environmental impact is also more limited. Did you know that buying local or via a short chain is not always better for the environment? For example, locally grown fruits and vegetables can have a higher environmental impact if they are grown in heated greenhouses. Buying local does bring you, the consumer, closer to what you eat and the origin of the product. Local consumption has primarily a positive effect on the local economy.

Out of season, frozen, tinned or jarred versions can be an environmentally responsible alternative.

Some varieties, such as exotic fruits, cannot be grown locally. But you should avoid fruit and vegetables that have been transported by plane. Transport by plane has a greater environmental impact than by ship or truck. This is not always clear to consumers, but is something sales outlets could make clear.



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### WEEKLY CALENDAR FOR SPRING

gezondleven.be

BREAKFAST	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
							
							
							
							

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# VEGETABLES AND FRUIT ON THE MENU?

USE OUR DECISION TREE AND MAKE ENVIRONMENTALLY RESPONSIBLE CHOICES

Fruits and vegetables are healthy, but can have varying environmental impact. Our decision tree will help you choose types with a limited impact on the planet.



## IN SEASON?

Use our seasonal calendar



**YES**

**NO**

Is this variety grown locally?

Ideally opt for varieties that are in season and choose non-seasonal varieties for alternation

**YES**

**NO**

Ideally opt for varieties that are grown in Flanders

Avoid in this case varieties that have been transported by plane



### SOUTHERN/EXOTIC FRUITS

Fruits grown in southern countries (such as bananas, lemons, kiwis, tangerines, mangos, grapefruit, oranges) can be eaten for variety, preferably during winter months.



### TIP 3:

## OPT MORE OFTEN FOR LEGUMES, WHOLE GRAINS AND NUTS

Legumes, whole grains and nuts are healthy plant-based protein sources<sup>2</sup> packed with healthy nutrients. Particularly if you opt for the low- or unprocessed varieties<sup>3</sup>. These are healthy, but often also a better choice for the environment. Beans, chickpeas and other legumes are not yet staples on the Flemish menu. They are, however, an affordable alternative to meat with a very low environmental impact. What's more, they're delicious and often quick and easy to prepare: a chilli sin carne (a chilli without meat) can be prepared in no time.

Also opt for whole grains such as wholemeal bread, brown rice and oatmeal instead of the white varieties. Finally, eat a handful of (unsalted) nuts every day, for example as a snack or as part of your breakfast. This way you give plant-based protein sources a well-deserved place in your diet.

#### MORE INFO AND MATERIALS TO GET YOU STARTED

Read more about [legumes and meat substitutes](#), [whole grains](#) and [nuts and seeds](#) on the food triangle overview pages.

Make a [week menu](#) and plan one veggie day to begin with. Are you already doing that? Then you can increase the number of veggie days step by step to, for example, [two, three or even four days per week](#). Opt for healthy vegetarian meals and vary with legumes, whole grains and nuts. On the [Zeker Gezond](#) website and in the app you will find inspiration for tasty and healthy recipes.

#### WHAT ABOUT PLANT-BASED MEAT AND DAIRY SUBSTITUTES?

Legumes, whole grains, nuts and other protein sources (such as mycoproteins in e.g. Quorn ©) can be used in meat and dairy substitutes. These products can occasionally help reduce the consumption of animal-based foods, but they are not a 'must' in a healthy and environmentally responsible diet.

The nutritional value of meat substitutes (e.g. breaded vegetable burgers, vegetarian sausages, falafel) can vary widely and is not always equally beneficial. They often contain too much salt. It's better to opt for less processed variants such as tofu, tempeh and seitan and use the Nutri-Score to make better choices within the group of meat substitutes.

As for dairy substitutes, a soy drink enriched with calcium and vitamins has a nutritional value comparable to that of milk. Plant-based drinks based on nuts, oats or rice have a lower protein content.

<sup>2</sup> Plant-based protein sources may have a lower quality of protein than animal-based protein sources. Eating more plant-based foods does not, however, immediately pose a risk to our protein intake, which is high enough for the average Flemish person. Varying between different plant-based and animal-based protein sources throughout the day and week ensures the intake of sufficient (essential) proteins.

<sup>3</sup> A lot of food processing is necessary to guarantee the edibility, safety and proper preservation of food. Cooked pulses, ground and crushed whole grain cereals and roasted nuts are regarded as minimally processed and fit into a healthy and environmentally responsible diet.



#### TIP 4:

### EAT LESS MEAT AND OPT FOR POULTRY, FISH AND EGGS RATHER THAN RED AND PROCESSED MEAT

On average, Flemish people eat too much (red and processed) meat. Reducing the current consumption of meat and other animal-based foods, such as cheese, has major environmental benefits. This is especially true when it comes to limiting beef and lamb. It is also better for our health to eat less red meat (pork, beef and lamb) and processed meat. So it's a big win-win!

#### MORE INFO AND MATERIALS TO GET YOU STARTED

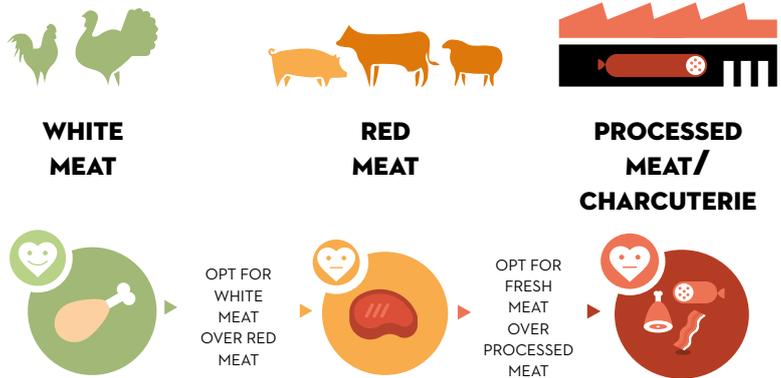
Read more about [meat](#), [fish](#), [eggs](#), [milk](#) and [cheese](#) on the food triangle overview pages.

Take a look at our infographic '[Could we do with a little less meat?](#)'.

Consider replacing animal-based protein with plant-based protein sources both in your [lunch](#) and your [dinner](#). One helpful guideline is to consume meat no more than once a day if you eat meat. It is therefore best to limit your meat consumption to a maximum of one meal, for example in a sandwich or with a hot meal.

If you prefer a completely vegetarian or vegan diet, you should take [a number of points into account](#).

Use a [fish calendar](#) or [fish guide](#) to find out what fish types are in season.



It is not necessary to eliminate meat completely. Have a day without meat on a regular basis and be inspired by the food triangle to eat more plant-based food. Opting for meat anyway? Then limit yourself to one meal with meat per day and have a small portion. For a hot meal, a small portion is roughly the size of your palm.

Fish, poultry and eggs are preferable to red and processed meat. Fish is healthy, but can have a significant environmental impact. That is why it is recommended to eat (oily) fish once or twice a week. When buying fish, choose a variety of (local) seasonal types that are not overfished and are caught sustainably (recognisable by the MSC label) or farmed (ASC label)<sup>4</sup>.

Furthermore, dairy products such as milk, yoghurt and cheese fit into the food triangle, but the consumption of cheese is best done in moderation.

<sup>4</sup> The MSC and ASC label are checked by several independent organisations. In 2021, these certification systems for sustainable fishing and fish farming have, however, been the subject of controversy.





**TIP 5:**  
**EAT AND DRINK AS LITTLE EMPTY CALORIES AS POSSIBLE SUCH AS SOFT DRINKS, SNACKS AND SWEETS**

**MORE INFO AND MATERIALS TO GET YOU STARTED**

Read more about empty calories and their place in the [red circle](#).

Use our [substitute groceries](#) to replace empty calories with healthy and less processed foods.

The [Nutri-Score](#) can be an additional tool to make better choices within the same product group, but the food triangle remains the basis for making healthy and environmentally responsible dietary decisions.

Empty calories such as soda, crisps, cookies and alcoholic drinks are filling, but are not nutritious. These can therefore be found the [red circle](#) outside the food triangle and are best eaten as little as possible. You are better off replacing them with healthier and less processed food from the food triangle. Opt for food with less added sugar, saturated fat and salt, but with more fibre, vitamins and minerals and other useful nutrients for your body. Of course you can enjoy the occasional treat from the red circle, but not too often and opt for a smaller portion.



CHOCO/SPECULOOS SPREAD



MASHED BANANA, NUT BUTTER, COTTAGE CHEESE



SOFT DRINK IN THE OFFICE



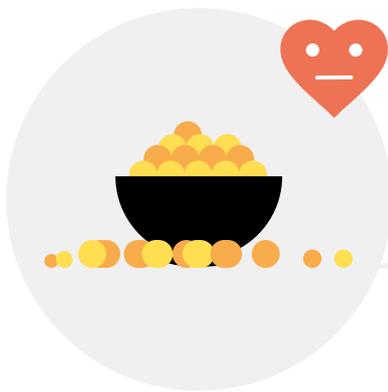
GLASS OF WATER IN THE OFFICE



COCKTAIL NUTS



UNSALTED NUTS



## TIP 6: AVOID FOOD WASTE

### MORE INFO AND MATERIALS TO GET YOU STARTED

Plan your meals in a [week menu](#) and prepare your groceries with a [grocery list](#).

You can discover the eight tips on how to keep food waste at home to a minimum on the [voedselverlies.be](#) website.

Discover the meaning of different [expiration dates](#) on packaged foods and don't throw away food unnecessarily. Use your senses to properly estimate the edibility of products with a 'best before' date: 'Look, smell, taste'.

You can prevent food waste by making targeted purchases and planning them in advance. This way you won't buy more than you need or can eat. Furthermore, better storage of purchases and leftovers ensures less spoilage and therefore less food waste. Better assessing portions when preparing and serving also helps. Still find yourself with leftovers? Store them in a sealed box in the fridge or freezer for another meal. Eating leftovers immediately, despite feeling full, encourages overconsumption and is better to avoid.



**A grocery list can save you a lot of time when shopping. Moreover, it helps you to make healthy purchases, to save money, and avoid wasting food. Good preparation is half the job**

## HEALTHY GROCERY LIST

### SOME TIPS:

Make a grocery list based on your week menu.

Consider breakfast, lunch, dinner and snacks. This way you will not face any surprises.

What is left in the fridge, freezer and pantry? You can already remove that from your list.

Above all, add healthy products to your list: plant-based and unprocessed. The food triangle can help with this!

Write down quantities on your grocery list. Keep in mind that some vegetables shrink. Pasta and rice increase in volume by cooking.

Arrange your groceries by department in your supermarket or according to your own healthy route.

Make a standard grocery list. This way you'll be reminded during busy times of the most important products that you need to buy.

Always hang a note on the refrigerator so that you can make a note when you notice that something is finished. Otherwise you often forget to do so.



## TIP 7: DON'T EAT MORE THAN YOU BODY NEEDS

### MORE INFO AND MATERIALS TO GET YOU STARTED

Curious about how you can change your eating habits? Read how [here!](#)

Plan your meals in a [week menu](#) and prepare your groceries with a [grocery list](#).

The principles of [mindful and intuitive eating](#) can help you learn to listen better to your body (hunger and satiety) and not overeat

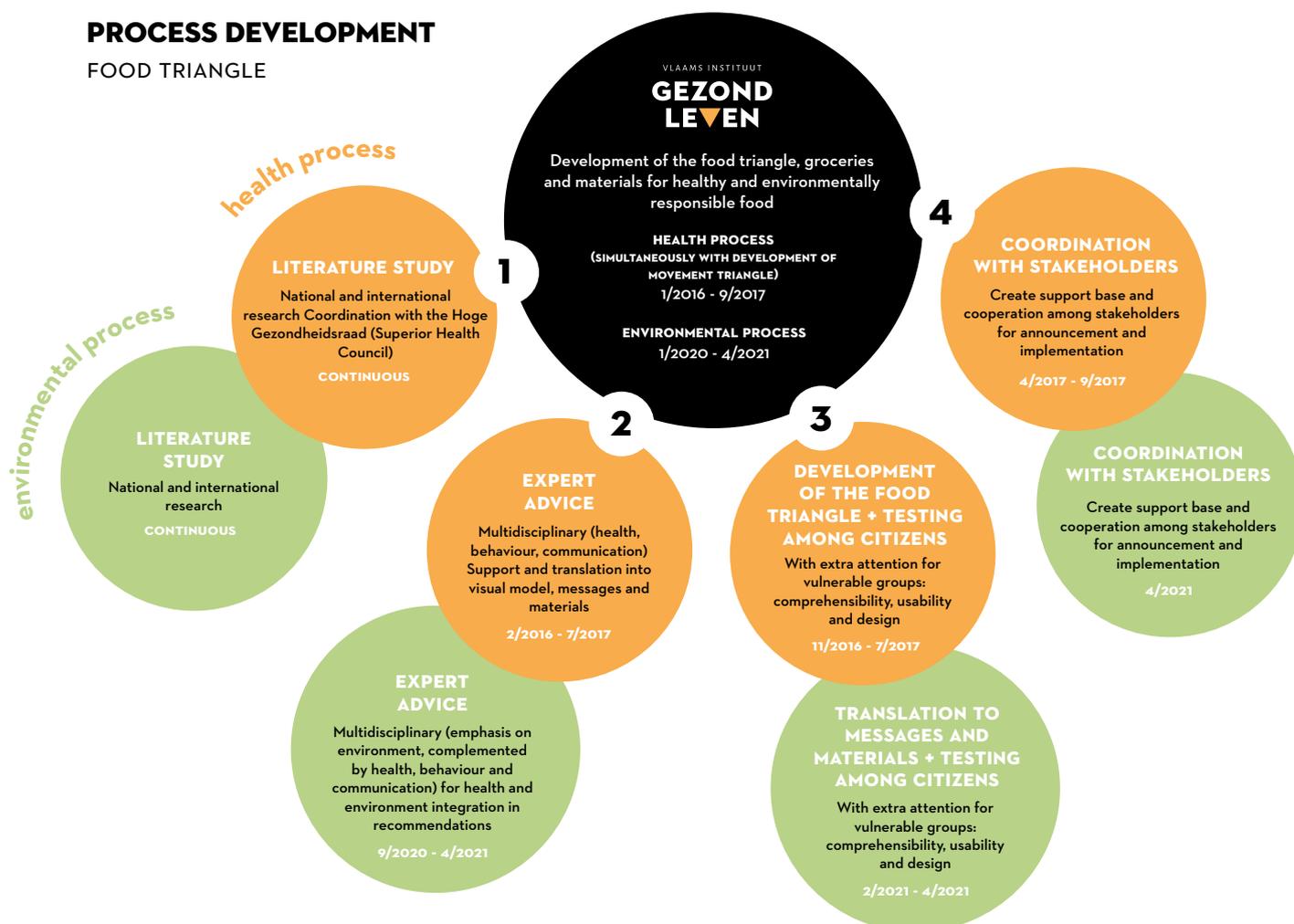
Due to an abundance of food, many people - often unconsciously - eat more than necessary. By planning your groceries and meals, you can avoid buying and eating more than necessary. It can also help to learn (once again) to listen to your hunger and satiety feelings, for example by avoiding distractions (such as the television) while eating, by [learning how to deal with cravings](#), or by providing healthy snacks between meals, etc.



# 3 HOW WAS THIS DOCUMENT DEVELOPED?

## PROCESS DEVELOPMENT

### FOOD TRIANGLE



The food triangle of Gezond Leven is the food information model for the Flemish population. In 2017, the food triangle was revised and the emphasis shifted to the effect of food on health. For the first time, (limited) attention was also paid to the environmental impact of diets. In 2021, the aspect of environmentally responsible food will be extensively documented and integrated into the recommendations of the food triangle. To this end, the Flemish Institute for Healthy Living (partner organisation of the Agency for Care and Health) and the Department of the Environment of the Government of Flanders joined forces.

Insights from scientific literature were coordinated with **environmental experts** from (academic) knowledge and research institutions and bundled in a **substantiation document for professionals**. It was decided to fully integrate health and the environment.

The present document summarises the insights for **healthy food from 2017** with the insights of the substantiation report for **environmentally responsible food (2021)**.

In this document they are translated into concrete recommendations for the food triangle. The recommendations were coordinated with experts in the fields of the environment, health, behaviour and communication. They were also tested among citizens in terms of comprehensibility, usability and design, with extra attention being paid to vulnerable groups.

**When developing additional materials (e.g. web texts and infographics) for consumers, we aim for concrete and practical tips, which also take into account how practical they are for the consumer.**

# 4 APPENDIXES

## THE ENVIRONMENTAL IMPACT OF FOOD

Before food reaches our plates, it has already travelled a long way: production, processing, transport, etc. Every step in that process has an impact on the environment. The total environmental impact of food is determined by the impact on different environmental indicators during all these different steps. From greenhouse gases to water consumption: the main indicators are listed here.

### ENVIRONMENTAL INDICATORS

#### Greenhouse gas emissions

Whether it is bananas imported from Ecuador, or a Belgian farmer heating his greenhouses: food production involves the emission of greenhouse gases, due, among other things, to transport, heating, agricultural activities and processes in the food industry. Those gases, such as CO<sub>2</sub>, methane and nitrous oxide, contribute to global warming. Livestock farming directly and indirectly emits a lot of greenhouse gases. This applies in particular to ruminants such as cows and sheep. During their digestion processes they produce methane, a greenhouse gas that is 23 times stronger than CO<sub>2</sub>. Storage and use of animal manure also releases greenhouse gases such as methane and nitrous oxide.

Food that requires a lot of water in its production puts extra pressure on that limited supply of (fresh) water. This is the case in Flanders, but also in countries such as Spain.

#### The impact on (global) biodiversity

There's no getting around it: every form of agricultural production has a negative impact on biodiversity. Ecosystem variation diminishes wherever humans intervene in nature. The reduction of such things as beef, cocoa, soy and palm oil has a major impact on global biodiversity. To this end, forests are cut down and other natural landscapes, such as peat bogs and savannahs, are grabbed.

#### The use of land

Agricultural land is the basis of food production. An enormous amount of agricultural land, if we continue to produce on the large scale we do today. Forests are disappearing worldwide and are being exchanged for growing or cultivating products. This puts pressure on our forests and biodiversity. Here too, livestock farming has a major impact: 77% of agricultural land is used for grazing and to produce fodder. Storage and use of animal manure also releases greenhouse gases such as methane and nitrous oxide.

#### The impact on air, water and soil quality

Food production impacts the quality of our air, water and soil. Air is polluted by fine dust from, say, agricultural engines. Our soil and waterways are in turn affected by over-fertilisation and antibiotics in livestock farming. Furthermore, erosion affects the fertility of the soil. Potato cultivation, for example, is particularly sensitive to erosion. Other crops actually improve soil quality, such as legumes that make the soil more fertile through nitrogen fixation, or permanent grassland that stores carbon in the soil.

#### Water consumption

Water is essential for food production. Water scarcity is a global problem that we are also facing in our country. Consider for example the watering ban in dry summers.



## Colophon

These recommendations are a product of the Vlaams Instituut Gezond Leven vzw [Flemish Institute for Healthy Living] in cooperation with the Department of the Environment.

And with support from the Flemish Agency for Care and Health.

Thanks to **all members of the expert group** for their advice in the preparation of this text. The Flemish Institute for Healthy Living is responsible for the final text and recommendations.

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[www.gezondleven.be](http://www.gezondleven.be)