

The background consists of several rectangular blocks of color arranged in a grid-like pattern. The top row has three blocks: a dark green block on the left, a light green block in the middle, and a dark green block on the right. The second row has three blocks: a dark green block on the left, a light green block in the middle, and a dark green block on the right. The third row has three blocks: a light pink block on the left, a light pink block in the middle, and a light pink block on the right. The fourth row has three blocks: a dark red block on the left, a dark red block in the middle, and a dark red block on the right. The text is centered in the white space between the second and third rows.

The Protein Tracker foodservice

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THE PROTEIN TRACKER FOODSERVICE AN ASSESSMENT TOOL TO FOR THE PROTEIN TRANSITION

Introduction

In March 2022, the Dutch government set a national target for the shift towards alternative proteins: by 2030, the ratio of plant-based vs animal proteins consumed should equal Dutch protein consumption as it was in 1950: 50% animal-sourced and 50% plant-sourced¹. Looking at the most recent Dutch National Food Consumption Survey carried out by the RIVM (Dutch National Institute for Public Health and the Environment), the protein split in the average Dutch diet now sits at 58% animal protein vs 42% plant-based protein². If we want to achieve the 50/50 goal by 2030, a large share of consumers will need to be nudged towards a more plant-based diet.

Not just supermarkets, but foodservice companies, too, play a critical role in the shift towards alternative proteins. Of the food people in The Netherlands consume 20% is eaten outside the home³. This means foodservice companies have a large impact on Dutch food habits and can help accelerate this shift towards more plant-based diets. In order to find out how the foodservice sector is doing and to identify opportunities for furthering the plant-protein shift, we need to understand the split between animal vs plant-based proteins in the foodservice sector.

Following the success of [The Protein Tracker supermarkets](#), the Green Protein Alliance (GPA) and ProVeg Netherlands have developed the 'Protein Tracker for foodservice', in close collaboration with companies from the sector.

The Protein Tracker offers three key benefits:

1. It offers a standardized methodology to track the absolute volume of products purchased and the split between plant-based vs animal protein in these products, as well as monitor progress over time;
2. The data obtained can be used as a country-level benchmark for the protein split in the Dutch foodservice sector;
3. A long-term project team in which foodservice professionals, the GPA and ProVeg can come together to share experiences, work on continuous improvement of the methodology and exchange ideas and best practices for a more plant-based foodservice sector.

The Protein Tracker Methodology aims to create a level playing field for all foodservice companies. For individual companies, the Protein Tracker provides guidance on what steps they can take: insights in the protein split between all purchased products can set goals and discover strategies to effectively work towards a more plant-based offering. Using the Protein Tracker will also allow companies to communicate transparently about their status with external stakeholders. The methodology is open to the public and all participants' results are validated by GPA and ProVeg. Companies that have set a specific protein goal can report on their progress and compare results with those of their peers/competitors.

¹ <https://zoek.officielebekendmakingen.nl/dossier/kst-31532-271.html>

² <https://www.waetenederland.nl/resultaten/richtlijnen/plantaardig-eiwit>

³ <https://www.rivm.nl/sites/default/files/2018-11/Factsheet%20VCP%20basis.pdf>

Developing a standardized methodology is no easy task. It is thanks to our experience in creating the Protein Tracker for and in collaboration with supermarkets, and the combined efforts of various foodservice companies, that we managed to create a transparent methodology approved by both foodservice professionals and sector stakeholders.

We feel it is important that the Protein Tracker Methodology is publicly available. We want to allow all companies to carry out their own assessments based on what data they have available, but following the same methodology. The Protein Tracker methodology will produce the most accurate results when using the protein content of individual products. However, the methodology has been designed in such a way that even if a company has an incomplete product dataset, the assessment can still be carried out by manually adding missing data. Companies may also use their own product data or data from other relevant sources such as in The Netherlands the NEVO Online Database. In the years following the first assessments, companies can work on improving the completeness and quality of the data and still carry out a similar yearly assessment of the progress on the way to plant-based.

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Methodology

The Protein Tracker Methodology establishes the volume of animal vs plant-based products purchased and uses the volumes of these products to establish the total kgs of animal vs plant protein purchased. Based on the protein volumes, the total protein split is calculated. The Protein Tracker limits itself to the evaluation of food for human consumption. Assessments are carried out based on data of purchased products from a pre-defined period (e.g. one full calendar year). This methodology takes the user through a number of steps, as laid out below.

1. Linking of Protein Tracker groups to products & product categories
2. Calculating total volume & total protein volume
3. Establishing protein split
4. Validating & reporting

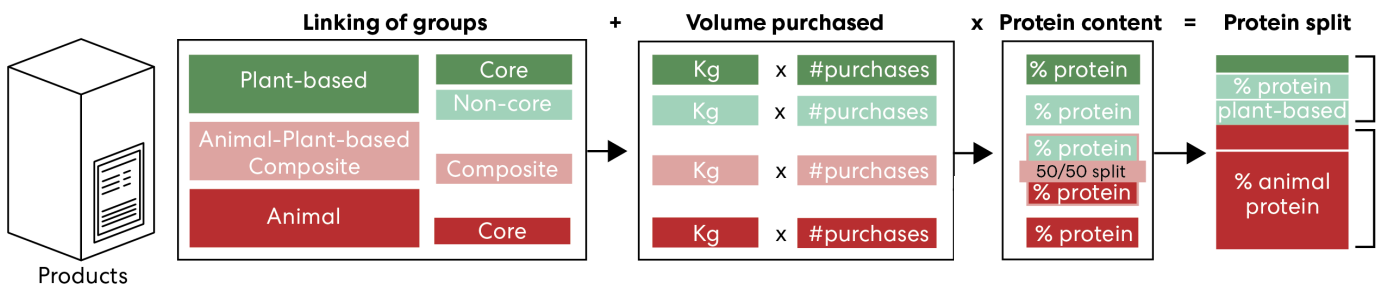


Figure 1 - The Protein Tracker methodology

1. Linking of Protein Tracker groups to product & categories

The Protein Tracker groups

The methodology distinguishes four Protein Tracker groups that serve to establish the total split between volumes of animal vs plant-based protein purchased. The groups are 'plant-based core', 'plant-based non-core', 'animal-plant-based composite' and 'animal core'. Figure 2 shows the different groups and how they add up towards the total animal vs plant protein split.

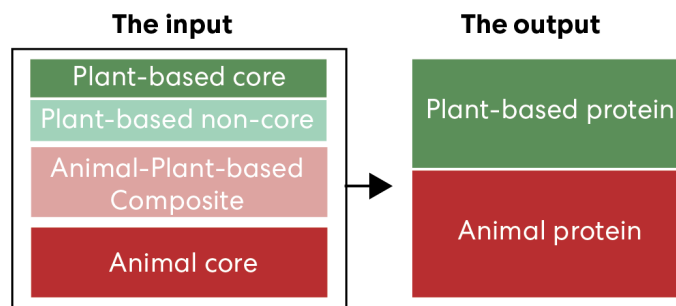


Figure 2 - Buildup of Protein Tracker groups

The core groups consist of products that have a high protein content and/or that make a significant contribution in the protein split. If a product belongs to the 'animal core' group, it means the product is made mainly or exclusively from animal ingredients or proteins. The group 'plant-based core' consists of products containing only plant-based ingredients and are products that serve as replacements for animal protein products.

The decision tree in Figure 3 helps to categorize products into the four Protein Tracker groups. Please refer to Appendix 1 for an elaborate overview of products and how they are grouped per product category.

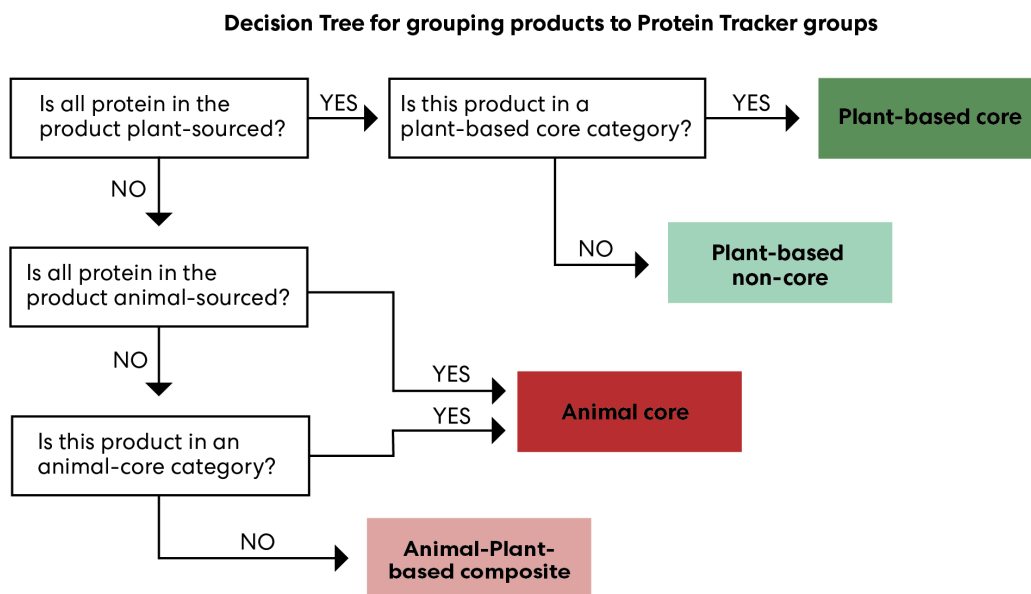


Figure 3 - Decision Tree for product grouping. For a more detailed grouping of the products please refer to Appendix 1.

The group 'plant-based non-core' consists of products that contain only plant-based ingredients, but that as a product don't directly contribute to a shift in protein diets. These are products such as fruit, rice, bread, vegetables and plant-based composite products.

'Composite products' contain proteins and ingredients of both plant and animal origin. These are products such as ready-made meals like a chicken and lentil salad, a chocolate cookie, an apple pie containing eggs, or ready-made lasagna bolognese with minced meat and dairy cheese. Vegetarian meat substitutes also belong to this group. Only if a meat substitute is fully plant-based it belongs to the plant-based core group. Composite products need to be split between animal based and plant-based protein content. In most of the current food service databases, it is not (yet) possible to separate the plant-sourced and animal-sourced protein in a composite product. We therefore classify these as 'composite products' for the time being. Until we have full disclosure of these data, we work with the assumption that these proteins are 50% animal-sourced and 50% plant-sourced.

Product categories

The Protein Tracker groups 'animal core', 'plant-based core', 'plant-based non-core' and 'composite products' are linked to product categories to help companies decide to which group their products belong. This categorisation of products is based on that of the Dutch National Institute for Public Health and the Environment, the NEVO Online dataset (Dutch Food Composition Database) and the preferences of different parties from the food service sector. In Appendix 2, an explanation can be found of the groups, the definitions used and an overview of product categories.



Figure 4 - Outline distribution of 'core' categories

2. Calculating total volume & total protein volume

The next step is to look at the purchases and calculate the total volume of all products purchased for each Protein Tracker group. The volume is calculated by multiplying the weight (in kgs) of a product with the number of items purchased. Next, calculate the protein content of the volume of each product by multiplying the total product volume purchased by the protein percentage of the product as visible on the ingredient declaration of each product. The total protein volume of all products belonging to each Protein Tracker group can now be calculated. Figure 5 illustrates how the formula works. Depending on the availability of product-level data at the disposal, companies can establish the protein content of an product in two ways:

1. Calculate protein content using a product's ingredients declaration: Ingredients declarations state the grams of protein contained per 100 grams of product. Take this information to establish the protein content of each product.
2. Establish protein content using, if available, a national database with generalized protein contents for products for consumption (in The Netherlands this is the NEVO Online dataset)¹ or use a similar reliable source. If no nutrition or ingredients declaration is available, the protein content per product or per product category can be estimated using the NEVO Online Dataset or a similar source. See Appendix 3 for instructions on using NEVO Online to find an estimate of the protein content of a product.

¹ The protein content listed in the NEVO Online dataset is not entirely accurate because the dataset works with average percentages per product type. We recommend that professionals invest in creating a database holding information on protein content as listed in nutrition declarations of all their products.

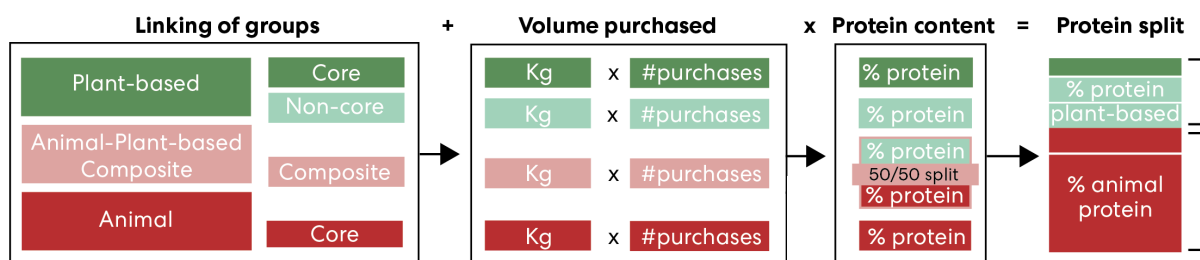


Figure 5 - Formula for establishing protein split

3. Establishing protein split

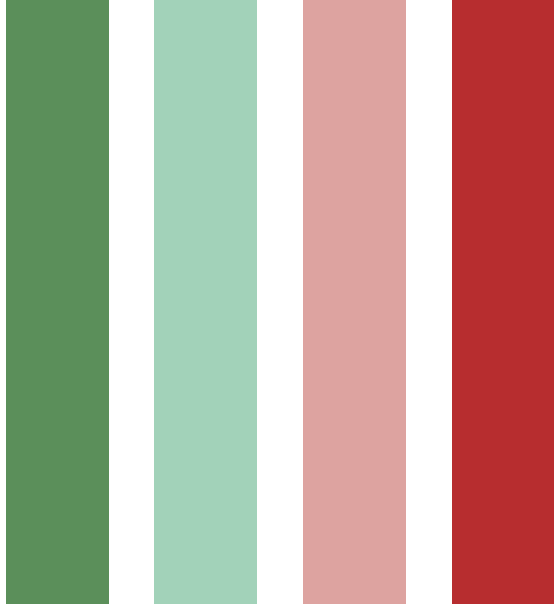
Once the volume of proteins purchased has been established for each Protein Tracker group, it is time to look into the total protein split. To establish the total split between animal and plant-based proteins, the results from the groups are added up. 'Plant-based core', 'plant-based non-core' and 50% of the 'composite products' all count towards the total volume of plant-based proteins. 'Animal core' and the remaining 50% of 'composite products' together count towards animal-sourced proteins. This eventually yields a split of the total volume and the ratio between plant-based (green) and animal (red) protein sold.

4. Validating & reporting

The final step to using The Protein Tracker is to have data validated and to draw up a report. Before being allowed to communicate about using The Protein Tracker methodology, companies must have their data validated by the GPA and ProVeg. All companies participating will receive The Protein Tracker form in which they can share their total volumes of product purchased and total volumes of proteins per Protein Tracker Group. The GPA and ProVeg will validate the calculation in consultation with the company. Once the validation process is complete, the results may be made public and companies can communicate that their split is Protein Tracker-approved. The Green Protein Alliance and ProVeg will not publish individual splits without permission, but can use the calculated protein splits of the company for cross-comparison and/or nation-wide assessments.

Previous publications

There is also a Protein Tracker methodology for retail. The very first nation-wide benchmark of Dutch supermarkets' protein splits has already taken place. In March 2024, the GPA and ProVeg published this nation-wide benchmark for the split in animal vs. plant-based protein sold in Dutch supermarkets in 2023. These data were shared with the (then-so-called) Dutch Ministry for Agriculture, Nature and Food Quality. From 2024, this national assessment will be repeated annually. More information and the first country-level benchmark report, the Protein Tracker methodology for retail, can be found on theproteintracker.com.



APPENDICES

- APPENDIX 1 - Food categories & Protein Tracker Groups**
- APPENDIX 2 - Terminology & delineation of product categories**
- APPENDIX 3 - Step-by-step guide to using NEVO Online**

APPENDIX 1 - Food categories & Protein

Headgroup	Categorie	Subcategory	Protein Tracker group
Fruit & vegetables	Canned pulses	Pulses	Plant-based core
Fruit & vegetables	Vegetables	Frozen pulses	Plant-based core
Fruit & vegetables	Sprouts	Sprouts	Plant-based core
Fruit & vegetables	Nuts	Nuts, peanuts	Plant-based core
Fruit & vegetables	Mushrooms	Unprocessed, ready-to-eat	Plant-based core
Baking products	Noten	Baknoten	Plant-based core
Baking products	Baking products ingredients	Vegan ei vervanger	Plant-based core
Spreads	Sandwich spreads	Peanut butter, nut butter	Plant-based core
Spreads	Hummus	Hummus	Plant-based core
Frozen ice	Frozen plant-based alternative to dairy ice	Frozen plant-based alternative to dairy ice	Plant-based core
Beverages	Chocolate drinks	Plant-based chocolate drinks	Plant-based core
Grains	Pasta	Pulse pasta	Plant-based core
Cheese	Plant-based alternative to international cheese	Plant-based alternative to international cheese	Plant-based core
Cheese	Alternatives to other	For baking, cooking & other	Plant-based core
Cheese	Alternatives to cheese slices and blocks	Dutch Cheese / Goat Cheese	Plant-based core
Cheese	Alternatives to grated cheese	Alternatives to grated cheese	Plant-based core
Cheese	Alternatives to cheese spreads	Cream cheese, dairy spreads	Plant-based core
Meal components	Sauces	Peanut sauce	Plant-based core
Nuts	Nuts	Unprocessed, roasted	Plant-based core
Nuts	Nuts	Salted, seasoned nuts	Plant-based core
Nuts	Nuts	Seeds	Plant-based core
Nuts	Nuts	Unsalted	Plant-based core
Fats, Oils and vinegar	Butters	Margarine	Plant-based core
Fats, Oils and vinegar	Butters	Plant-based butter (solid)	Plant-based core
Fats, Oils and vinegar	Butters	Plant-based butter (liquid)	Plant-based core
Pulses	Pulses	Dried	Plant-based core
Pulses	Pulses	Canned, bagged or jarred	Plant-based core
Tapas	Tapas hummus	Hummus	Plant-based core
Meat/fish/poultry	Vegan canned meat, fish	Vegan canned meat, fish	Plant-based core
Meat/fish/poultry	Fish & fishery products	Wakame, seaweed	Plant-based core
Meat/fish/poultry	Meat substitutes	Burgers, sausages, mince	Plant-based core
Meat/fish/poultry	Meat substitutes	Falafel, vegan meatballs	Plant-based core
Meat/fish/poultry	Meat substitutes	Other	Plant-based core
Meat/fish/poultry	Meat substitutes	Schnitzel	Plant-based core
Meat/fish/poultry	Meat substitutes	Tofu, tempeh, seitan	Plant-based core
Meat/fish/poultry	Plant-based processed meats	Spreads	Plant-based core
Meat/fish/poultry	Plant-based processed meats	Sliced	Plant-based core
Meat/fish/poultry	Plant-based processed meats	Other	Plant-based core
Meat/fish/poultry	Plant-based processed meats	International	Plant-based core
Meat/fish/poultry	Plant-based processed meats	Grill	Plant-based core
World foods	Other continents	Pulses	Plant-based core
World foods	Oriental	Indonesian peanut sauce	Plant-based core
Dairy	Plant-based drinks	Chilled	Plant-based core
Dairy	Plant-based drinks	Long-life	Plant-based core
Dairy	Plant-based dairy alternatives	Yogurt, cooking creams, desserts	Plant-based core
Fruit & vegetables	Potatoes	Potatoes	Plant-based non-core
Fruit & vegetables	Canned fruit	Canned fruit	Plant-based non-core
Fruit & vegetables	Canned vegetables	Vegetables (no pulses)	Plant-based non-core
Fruit & vegetables	Fruit	Citrus, bananas	Plant-based non-core
Fruit & vegetables	Fruit	Fruit	Plant-based non-core
Fruit & vegetables	Fruit	Frozen fruit	Plant-based non-core
Fruit & vegetables	Fruit	Hard fruit	Plant-based non-core
Fruit & vegetables	Fruit	Soft fruit, exotic fruit	Plant-based non-core
Fruit & vegetables	Vegetables	Ready-to-cook	Plant-based non-core
Fruit & vegetables	Vegetables	Entire fresh raw vegetables	Plant-based non-core
Fruit & vegetables	Vegetables	Fresh vegetables for cooking	Plant-based non-core
Fruit & vegetables	Vegetables	Peeled cut and shredded fruit and vegetables	Plant-based non-core
Fruit & vegetables	Nuts and dried fruits	Dried fruit	Plant-based non-core
Fruit & vegetables	Allium vegetables & peppers	Onion, garlic, pepper, etc.	Plant-based non-core
Fruit & vegetables	Soup kit	Vegetable soup kit	Plant-based non-core
Bakery wares	Bake at home rolls	Bake at home wholemeal or white bread	Plant-based non-core
Bakery wares	Bake at home snacks	Vegan alternatives (cake, donuts)	Plant-based non-core
Bakery wares	Bread loaf	Bake at home bread rolls, bread or baguette	Plant-based non-core
Bakery wares	Fruit loaf or cake	Fruit loaf	Plant-based non-core
Bakery wares	Bread or baguette in modified atmosphere packaging	Bake at home bread rolls, bread or baguette	Plant-based non-core
Bakery wares	Pastry	Vegan pastries	Plant-based non-core
Bakery wares	Bake at home baguette	Bake at home baguette	Plant-based non-core
Bakery wares	Bread varieties	Plant-based bread varieties	Plant-based non-core
Baking products	Baking mix	Bread	Plant-based non-core
Baking products	Baking mix	Fried dough snacks	Plant-based non-core
Baking products	Baking products ingredients	Flour	Plant-based non-core
Baking products	Baking products ingredients	Potato starch	Plant-based non-core
Baking products	Baking products ingredients	Sugar, sweeteners, sugar decorations	Plant-based non-core
Baking products	Baking products ingredients	Canned fruits	Plant-based non-core
Baking products	Baking products ingredients	Souther fruits	Plant-based non-core
Spreads	Sweet spreads	Fruit spreads, jam, marmelade	Plant-based non-core
Spreads	Sweet spreads	Sprinkles for bread	Plant-based non-core
Spreads	Plant-based sandwich spreads	Plant-based sandwich spreads (hummus excluded)	Plant-based non-core
Spreads	Sweet spreads	Dutch coconut bread	Plant-based non-core

Convenience	Meals	Plant-based meals	Plant-based non-core
Convenience	Meals	Vegetable sushi	Plant-based non-core
Convenience	Meals	Plant-based pasta, lasagna sheets, gnocchi	Plant-based non-core
Convenience	Meals	Plant-based meals, pizzas	Plant-based non-core
Frozen ice	Frozen ice cubes	Frozen ice cubes	Plant-based non-core
Frozen ice	Frozen water ice, sorbet	Frozen water ice, sorbet	Plant-based non-core
Frozen meals	Frozen plant-based meals, pizzas	Frozen plant-based meals, pizzas	Plant-based non-core
Frozen meals	Frozen meals	Plant-based meals, pizzas, bread	Plant-based non-core
Frozen meal components	Frozen potatoes	Frozen potatoes	Plant-based non-core
Frozen meal components	Frozen fruit	Frozen fruit	Plant-based non-core
Frozen meal components	Frozen vegetables	Frozen vegetables	Plant-based non-core
Frozen meal components	Frozen plant-based bread & pastry	Frozen plant-based bread & pastry	Plant-based non-core
Frozen snacks	Vegan	Vegan	Plant-based non-core
Beverages	Alcoholic beverages	Alcoholic beverages	Plant-based non-core
Beverages	Soft drinks	Soft drinks	Plant-based non-core
Beverages	Coffee	Coffee and cocoa	Plant-based non-core
Beverages	Coffee	Coffee beans (whole, grounded)	Plant-based non-core
Beverages	Coffee	Coffee cups, pads, instant coffee with no milk or plant-based milk	Plant-based non-core
Beverages	Coffee add-ins	Sugar	Plant-based non-core
Beverages	Juices	Fresh juices	Plant-based non-core
Beverages	Juices	Shots	Plant-based non-core
Beverages	Tea	Tea	Plant-based non-core
Beverages	Water	Water	Plant-based non-core
Grains	Bread substitutes	Crackers	Plant-based non-core
Grains	Bread substitutes	Fruit cake	Plant-based non-core
Grains	Bread substitutes	Rice crackers	Plant-based non-core
Grains	Breakfast cereals	Oats & other cereals	Plant-based non-core
Grains	Pasta	Plant-based pasta, lasagna sheets, gnocchi	Plant-based non-core
Grains	Rice	Rice	Plant-based non-core
Grains	World grains	Bulgur, couscous, Israeli couscous, risotto	Plant-based non-core
Grains	World grains	Quinoa	Plant-based non-core
Grains	World grains	Granola, processed cereals	Plant-based non-core
Long shelf-life snacks	Chips	Dips	Plant-based non-core
Long shelf-life snacks	Chips	Plant-based chips	Plant-based non-core
Long shelf-life snacks	Chips	Popcorn	Plant-based non-core
Long shelf-life snacks	Chocolate	Plant-based chocolates, confectionary	Plant-based non-core
Biscuits	Biscuits and cookies	Plant-based biscuits, fresh cookies, etc.	Plant-based non-core
Herbs and spices	Herbs	Dried herbs & spices	Plant-based non-core
Herbs and spices	Herbs	Fresh herbs	Plant-based non-core
Meals	Plant-based salades, meals and pizzas	Plant-based salades, meals and pizzas	Plant-based non-core
Meals	Pre-made sandwiches	Vegan pre-made sandwiches	Plant-based non-core
Meal components	Other	Other	Plant-based non-core
Meal components	Puff pastry shells	Puff pastry shells	Plant-based non-core
Meal components	Condiments	Ketchup , curry sauce, mustard, naturally plant-based sauces	Plant-based non-core
Meal components	Condiments	Plant-based sauces	Plant-based non-core
Meal components	Condiments	Plant-based mayonnaise	Plant-based non-core
Meal components	Condiments	Condiments	Plant-based non-core
Meal components	Salad add-ins	Plant-based vinegars, croutons, herbs, nuts	Plant-based non-core
Fats, Oils and vinegar	Vinegar	Vinegar	Plant-based non-core
Fats, Oils and vinegar	Oils	Oils	Plant-based non-core
Other categories	Gluten-free	Plant-based products mix	Plant-based non-core
Savouries	Savoury snacks	Plant-based nut mix, popcorn, crackers	Plant-based non-core
Savouries	Savoury snacks	Plant-based nut mix, salty snacks, rice crackers	Plant-based non-core
Snacks sweet	Sweets	Plant-based sweets, liquorice	Plant-based non-core
Snacks sweet	Sweet snacks	Plant-based muesli and energy bars	Plant-based non-core
Snacks sweet	Sweet snacks	Plant-based bars	Plant-based non-core
Soup	Bouillon and stock	Vegetable, mushroom	Plant-based non-core
Soup	Noodle soup	Vegetable, mushroom flavour	Plant-based non-core
Soup	Canned or bagged soup	Plant-based soup	Plant-based non-core
Tapas	Tapas plant-based spreads	Tapas plant-based spreads (hummus excluded)	Plant-based non-core
Tapas	Olives, dried fruits, sundried tomatoes	Olives, dried fruits, sundried tomatoes	Plant-based non-core
World foods	Italian	Sundried tomatoes, peppers in oil, olives, capers	Plant-based non-core
World foods	Italian	Canned tomatoes, passata, tomato puree, diced tomatoes	Plant-based non-core
World foods	Central America	Wraps, tortillas, tacos	Plant-based non-core
World foods	Oriental	Rice noodles, rice sheets	Plant-based non-core
World foods	Italian	Plant-based toast	Plant-based non-core
World foods	Meal kit	Meal kit	Plant-based non-core
World foods	Central America	Canned vegetables (jalapeños)	Plant-based non-core
World foods	Central America	Guacemole, salsa	Plant-based non-core
World foods	Central America	Coconut milk, coconut flakes	Plant-based non-core
World foods	Oriental	Condiments (kimchi, onion, spice mixes)	Plant-based non-core
World foods	Oriental	Soy sauce, hot sauce	Plant-based non-core
World foods	Oriental	Vegan prawn crackers	Plant-based non-core
World foods	Oriental	Dried spice mixes	Plant-based non-core
Bakery wares	Bake at home croissants	Croissants	Composite products
Bakery wares	Bake at home snacks	Snack rolls, scones, etc.	Composite products
Bakery wares	Bake at home sweets	Pies, cookies, etc.	Composite products
Bakery wares	Bread varieties	Mix	Composite products
Bakery wares	Pastry	Small tarts and cakes	Composite products
Bakery wares	Pastry	Cakes, loaves	Composite products
Bakery wares	Defrosted sweet bakery	Cake, donuts, muffins, etc.	Composite products
Bakery wares	Soft bread	Soft rolls	Composite products
Bakery wares	Soft bread	Brioche, milk bread rolls, etc.	Composite products
Bakery wares	Pastry in modified atmosphere packaging	Focaccia, croissants, sausage rolls, etc.	Composite products
Bakery wares	Sweet pastry in modified atmosphere packaging	Cinnamon rolls, chocolate croissants, etc.	Composite products
Baking products	Baking mixes	Cake, biscuits	Composite products

Spreads	Sweet spreads	Chocolate sprinkles	Composite products
Spreads	Sweet spreads	Chocolate spread	Composite products
Convenience	(Fresh) pizza	(Fresh) pizza	Composite products
Convenience	Bakery, pastry, other cereal products	Bapao ,other snacks	Composite products
Convenience	Bakery, pastry, other cereal products	Pre-made sandwiches	Composite products
Convenience	Bakery, pastry, other cereal products	Quiche, baguette with spread	Composite products
Convenience	Bakery, pastry, other cereal products	Pancakes	Composite products
Convenience	Bakery, pastry, other cereal products	Millefeuille containing dairy butter	Composite products
Convenience	Bakery, pastry, other cereal products	Buttered baguette, filled/stuffed bread	Composite products
Convenience	Meals	Dutch Meals	Composite products
Convenience	Meals	Italian meals	Composite products
Convenience	Meals	Oriental meals	Composite products
Convenience	Meals	Other meals	Composite products
Convenience	Meals	Fresh pasta	Composite products
Convenience	Meals	Fresh pasta sauce	Composite products
Convenience	Ultra fresh meal	Ultra fresh meal	Composite products
Frozen meals	Frozen meals	Mixed meals with animal products	Composite products
Frozen meals	Frozen pizza	Frozen pizza	Composite products
Frozen meals	Frozen soups	Frozen soups	Composite products
Frozen meal components	Frozen millefeuille and pastry	Frozen millefeuille and pastry	Composite products
Frozen meal components	Frozen bread	Frozen bread	Composite products
Frozen meal components	Frozen pastry and dessert	Frozen pastry and dessert	Composite products
Frozen snacks	Puff pastry, dumplings	Puff pastry, dumplings	Composite products
Frozen snacks	Oriental snacks	Oriental snacks	Composite products
Beverages	Smoothies	Smoothies	Composite products
Grains	Bread substitutes	Cheese crackers	Composite products
Grains	Pasta	Fresh pasta with eggs	Composite products
Grains	Pasta	Tortellini, ravioli	Composite products
Long shelf-life other	Pasta	Meals	Composite products
Long shelf-life snacks	Chips	Chips	Composite products
Long shelf-life snacks	Chocolate	Candy bars	Composite products
Cookies & biscuits	Fresh cookies, biscuits	Biscuits	Composite products
Cookies & biscuits	Fresh cookies, biscuits	Fresh cookies, cookies, etc.	Composite products
Meals	Pre-made sandwiches	Pre-made sandwiches with animal ingredients	Composite products
Meals	Salads (fresh & ready to eat)	Salads (fresh & ready to eat)	Composite products
Meals	Pre-made meals	Pre-made meals, microwave meals	Composite products
Meal components	Condiments	Dips	Composite products
Meal components	Condiments	Salad dressing	Composite products
Other	Other	Other	Composite products
Other categories	Gluten-free	Products mix	Composite products
Savouries	Savoury snacks	Nuts, salty snacks, rice crackers	Composite products
Savouries	Savoury snacks	Toasties	Composite products
Snacks sweet	Sweets	Candy, liquorice	Composite products
Snacks sweet	Sweet snacks	Fruit bars	Composite products
Snacks sweet	Sweet snacks	Muesli bars, energy bars	Composite products
Soup	Noodle soup	Vegetable, mushroom flavour	Composite products
Soup	Canned or bagged soups	Soups containing chicken, beef, fish, pork, eggs, cheese, cream	Composite products
Tapas	Mixed spreads, olives with cheese	Vegetarian spreads	Composite products
Meat/fish/poultry	Meat substitutes	Vegetarian meat substitutes	Composite products
Meat/fish/poultry	Cold meats	Paté and meat spreads	Composite products
World foods	Italian	Pesto, tapenade	Composite products
World foods	Italian	Toast	Composite products
World foods	Oriental	Egg noodles	Composite products
World foods	Other	Polish, Turkish, Moroccan, Lebanese, etc.	Composite products
World foods	Oriental	Sambal oelek	Composite products
World foods	Central America	Sauces, spice packages, meal kits	Composite products
World foods	Oriental	Sauces, spice packages, meal kits	Composite products
Bakery wares	Bake at home rolls	Stuffed	Animal core
Baking products	Baking mixes	Pudding	Animal core
Baking products	Baking products ingredients	Gelatine	Animal core
Baking products	Baking products ready-to-use	Cake base, tartelettes	Animal core
Convenience	Meals	Sushi with fish and/or eggs	Animal core
Frozen	Poultry	Poultry	Animal core
Frozen	Fish & fishery products	Fish & fishery products	Animal core
Frozen	Meat	Meat	Animal core
Frozen ice	Frozen ice cream	Frozen ice cream, Italian ice cream	Animal core
Frozen snacks	Bites meat, game, poultry	Bites meat, game, poultry	Animal core
Beverages	Coffee	Coffee cups, pads, instant coffee with milk, cocoa with milk	Animal core
Beverages	Chocolate drinks	Chocolate drinks	Animal core
Beverages	Coffee add-ins	Coffee creamer	Animal core
Eggs	Eggs	Eggs	Animal core
Long shelf-life other	Baby food	Baby milk formulas	Animal core
Long shelf-life snacks	Chocolate	Chocolate bars, chocolates	Animal core
Cheese	International cheeses	International cheeses	Animal core
Cheese	Other	For baking, cooking & other	Animal core
Cheese	Slices and blocks	Goat cheese	Animal core
Cheese	Slices and blocks	Dutch cheese	Animal core
Cheese	Grated cheese	Grated cheese	Animal core
Cheese	Cheese spreads	Cream cheese, dairy spreads	Animal core
Meal components	Condiments	Gravy	Animal core
Meal components	Condiments	Mayonnaise	Animal core
Oils, fats and vinegar	Butters	Butter for baking, frying	Animal core
Oils, fats and vinegar	Butters	Butter (solid)	Animal core
Oils, fats and vinegar	Butters	Flavoured butter	Animal core
Soup	Bouillon and stock	Chicken, beef, pork, fish, game.	Animal core
Tapas	Cheese blocks	Cheese blocks	Animal core
Tapas	Eggs	Eggs	Animal core
Tapas	Animal spreads	Animal spreads	Animal core

Tapas	Meat/fish/poultry	Poultry	Animal core
Tapas	Meat/fish/poultry	Beef	Animal core
Tapas	Meat/fish/poultry	Pork	Animal core
Meat/fish/poultry	Cold meats	Sandwich spreads	Animal core
Meat/fish/poultry	Canned goods	Poultry	Animal core
Meat/fish/poultry	Canned goods	Fish	Animal core
Meat/fish/poultry	Canned goods	Meat	Animal core
Meat/fish/poultry	Dried sausages, smoked sausages	Dried sausages, smoked sausages	Animal core
Meat/fish/poultry	Poultry	Fillet	Animal core
Meat/fish/poultry	Poultry	Grill	Animal core
Meat/fish/poultry	Poultry	Halal	Animal core
Meat/fish/poultry	Poultry	With bones	Animal core
Meat/fish/poultry	Poultry	Schnitzel	Animal core
Meat/fish/poultry	Other	Lamb, veal, horse, turkey	Animal core
Meat/fish/poultry	Other	For preparation	Animal core
Meat/fish/poultry	Beef	Burgers, meat balls, other	Animal core
Meat/fish/poultry	Beef	Minced meat	Animal core
Meat/fish/poultry	Beef	Grill	Animal core
Meat/fish/poultry	Beef	Halal	Animal core
Meat/fish/poultry	Beef	Parts and cuts (for frying, stews, etc.)	Animal core
Meat/fish/poultry	Beef	Sausages	Animal core
Meat/fish/poultry	Pork	Grill	Animal core
Meat/fish/poultry	Pork	Add-ins (diced ham, etc)	Animal core
Meat/fish/poultry	Pork	Schnitzel	Animal core
Meat/fish/poultry	Pork	Parts and cuts (chops, ham, roulade, etc)	Animal core
Meat/fish/poultry	Pork	Sausages	Animal core
Meat/fish/poultry	Fish & fishery products	Seafood	Animal core
Meat/fish/poultry	Fish & fishery products	For lunch, brunch, snacks	Animal core
Meat/fish/poultry	Processed meats	Sliced	Animal core
Meat/fish/poultry	Processed meats	Meat balls, other	Animal core
Meat/fish/poultry	Processed meats	International	Animal core
Meat/fish/poultry	Processed meats	Grill	Animal core
Meat/fish/poultry	Game	Game	Animal core
World foods	Italian	Sauces with meat	Animal core
World foods	Other	Long shelf-life meat	Animal core
World foods	Polish	Meats	Animal core
World foods	Oriental	Prawn crackers	Animal core
World foods	Oriental	Fish sauce	Animal core
Dairy	Dairy desserts	Pudding/porridge	Animal core
Dairy	Dairy desserts	Desserts	Animal core
Dairy	Milk	Drinks	Animal core
Dairy	Milk	Long life milk	Animal core
Dairy	Milk	Fresh milk	Animal core
Dairy	Dairy for cooking	Cooking cream, crème fraîche	Animal core
Dairy	Dairy desserts	Yogurt & other fermented dairy products	Animal core
Dairy	Dairy desserts	Sweet cooking cream, crème fraîche	Animal core

APPENDIX 2 - Terminology & delineation of product categories

Delineation of product categories

The Protein Tracker focuses solely on protein, not on other nutrients or ingredients found in food products. It is important to note that although there is significant overlap between plant-based protein products and vegan products, a product does not have to be 100% vegan to be grouped with 'plant-based'. Take products containing E numbers of animal origin, for example. They are not 100% vegan, but because the protein in these products is, they will still be grouped under plant-based (core or non-core).

Plant-based, vegetarian and vegan

As yet there is no standardised definition of the term 'plant-based'. Experts from ISO are developing a definition. If, upon publication of the ISO-definition, it does not align with the above subdivision of plant-based groups (in other words: if the use of the term 'plant-based' still allows for x% of animal-derived protein in the product), we will evaluate how this impacts the The Protein Tracker and how we can implement the new definition. The impact of such a change on the protein ratios laid out in this document is expected to be relatively insignificant.

The classification of products as 'vegan' or 'vegetarian' in the Protein Tracker methodology is based on widely accepted societal definitions:

Vegan: Not containing any ingredients or processing aids of animal origin. Products carrying the label 'vegan' are automatically classified as 'plant-based core' or 'plant-based non-core'. Proteins from fungi and microorganisms (mushrooms, yeast, mycoprotein, etc.) all qualify as vegan too.

Vegetarian: Not containing any products or by-products from slaughter. Products carrying the label 'vegetarian' will often consist (in part) of animal ingredients and fall into the group 'animal-core' or 'composite products'.

Innovation

The field of alternative proteins is thriving with innovation. Newly developed products are finding their way onto the market almost daily. Consider such potential game changers as cultured meat or products made with proteins derived from precision fermentation. The Protein Tracker aims to align itself with societally accepted definitions for its classification of products as plant-based, animal, or composite. Whenever a definition is lacking, the matter will be discussed in the Protein Tracker project team and a definition will be added into this section of the methodology.

Product categories and Protein Tracker groups

There are a number of product categories that we classify as 'composite products' even if they contain mostly food products with exclusively plant-based proteins. This is because some of the products from this (sub) category contain a small percentage of animal protein. These are categories such as chips, chocolate, granola and tapenades. We have chosen to place these categories in 'composite products' for three reasons:

1. By making calculations for these products with the 50/50 ratio, we reduce data distortion. This is because 50% of the protein from these categories already counts towards the plant-based share of the total;
2. Classifying these products as fully plant-based would remove the incentive for food category managers to purchase alternatives that are actually 100% vegan;
3. The problem of data accuracy will be solved automatically once measurements are carried out at the product level, and each product containing solely plant-based proteins is grouped with 'plant-based core' or 'plant-based non-core'.

In the linking of Protein Tracker groups to food (sub)categories in the Protein Tracker methodology the following rules were used as a guideline:

- If 100% of products from a category or subcategory are plant-based/vegan, the category will classify as 'plant-based core/ non-core'.
- If a product category falls within a category identified as relevant to the shift towards alternative proteins ('core'), it will classify as 'plant-based core' or 'animal core'.
- If a mainly plant-based category also lists products that contain animal ingredients, this category will fall into 'composite products'.
- If a category contains vegan/plant-based, vegetarian and animal products, this category is labelled as 'composite products'.
- If a category contains products with solely animal-sourced ingredients, it will be classified as 'animal core'.
- Wherever possible, we distinguish between (sub)categories with animal products and (sub)categories with plant-based products. If it is not possible to distinguish between the two, the (sub)category will be classified as 'composite products'.
- If a (sub)category containing almost exclusively animal-sourced products also lists a few individual plant-based products, it will still classify as 'animal core'.

Note: Some (sub)categories will contain individual products that deviate (in terms of composition) from the rest of their group. Supermarkets may sort these individual products manually into the correct group during their data analysis. This may be relevant if a plant-based product falls into an animal subcategory. The individual product can then still be tagged as 'plant-based' (core or non-core). The other products from the subcategory will remain tagged as 'animal-core'.

APPENDIX 3 - Step-by-step guide to using NEVO Online

How to use the NEVO Online database

If data on the protein content of a product or product category are not available in a supermarket's dataset, we recommend using the NEVO Online database to arrive at an estimate of the protein content. Take the following steps to determine the protein content of a product or product category. Note: The NEVO Online database (developed in the Netherlands) provides data on the composition of foods expressed per 100 g edible part. For information that is relevant to complete the calculation, please refer to comparable datasets specific to the company and its country.

For product categories

1. Download the NEVO Online dataset
www.rivm.nl/form/nevoonline-gegevensbestand-2
2. Select all products that correspond with the relevant category
3. Select the protein content of all these products and calculate their average
4. This result can be taken and used as the average of the product category

For products

1. Download the NEVO Online dataset
www.rivm.nl/form/nevoonline-gegevensbestand-2
2. From the dataset, select the product that best corresponds with the product to be evaluated.
3. Select the protein content of that product. This protein content estimate can be used for calculations regarding the product.

Note: The parties responsible for developing the Protein Tracker methodology are aware that data regarding products or product categories based on the NEVO Online dataset are not the most reliable data. The Green Protein Alliance and ProVeg are happy to offer support in the selection of products and product categories and in improving the quality of the available data, so that we can collectively work towards a situation where we no longer rely on the NEVO Online database for the required information.