The Protein Tracker

Retail

Version 2025

Update: November 2025

Introduction

In 2022, the Dutch government articulated the ambition to work towards a healthier balance in Dutch protein consumption: by 2030, there should be a 50/50 split in animal vs plant protein consumption[1]. The Dutch Health Council issued an advisory report stating that plant-rich diets with at least 60% plant-based proteins are more in line with the Guidelines for a Healthy Diet[2] than the current Dutch diet. The most recent Dutch National Food Consumption Survey carried out by the RIVM (Dutch National Institute for Public Health and the Environment) shows that the protein split in the average Dutch diet currently sits at 42% plant-based protein and 58% animal protein. In order to achieve the 2030 target, we need a large-scale dietary shift in Dutch society[3].

Of all food consumed in the Netherlands, 70% is bought from supermarkets[4]. This means the retail sector has a key role to fulfill in this dietary shift towards plant-based proteins. Understanding the protein split in this sector is therefore of key importance. To this end, the Green Protein Alliance (GPA) and ProVeg Netherlands developed The Protein Tracker (Dutch: Eiweet Monitor) in 2022, in collaboration with Dutch supermarkets, experts at Natuur&Milieu and Questionmark Foundation. The Protein Tracker has become the industry's standard assessment tool for the protein shift. The Dutch Ministry of Agriculture, Fisheries, Food Security and Nature uses the Protein Tracker methodology as the basis for its online Supermarket Sustainability Dashboard[5].

Diversifying protein sources and selling more plant-based protein is a strategic priority for retailers. It captures growing demand, reduces supply chain risks and is the most effective lever for health and climate goals.

The Protein Tracker is a tool supermarkets can use to:

- Establish their protein split: the ratio of plant-based vs animal proteins sold
- Monitor progress consistently over time and make evidence-based decisions in their strategies
- Transparently communicate one standardised protein split that supports sustainability reporting

The Protein Tracker offers specific insights to help you move forward: data obtained through Protein Tracker assessments can help stores implement focused interventions to promote plant-based sales, such as changes to product range, pricing or promotional strategies. The Protein Tracker also builds transparency and allows companies to showcase their corporate responsibility work towards politicians and consumers. For governments, it offers a publicly supported, standardised tool to use to track the progress of the 'protein shift' in individual supermarkets and at the national level.

[1] https://zoek.officielebekendmakingen.nl/kst-31532-271.html
[2] https://www.gezondheidsraad.nl/onderwerpen/voeding/alle-adviezen-over-voeding/gezonde-eiwittransitie
[3] https://www.wateetnederland.nl/resultaten/richtlijnen/plantaardig-eiwit
[4] https://www.rabobank.nl/kennis/s011087550-detailhandel-food-veranderende-consument-vraagt-meer-creativiteit
[5] https://dashboardduurzaamheid.nl/eiwittransitie/

Update to the methodology (2025)

The Protein Tracker methodology was first developed in 2022. This first version was created in collaboration with the largest Dutch supermarkets: Albert Heijn, Jumbo, Lidl, Aldi, Plus and Dirk[1]. In autumn of 2025, the methodology received an update following data quality improvements.

In the first national assessment, there were different levels of detail in the data used. The minimum effort required from supermarkets was to (1) carry out the linking of Protein Tracker groups on sub-category level; (2) carry out protein split assessments using average protein ratios for individual products and (3) work with a 50/50-default ratio for composite products containing both animal and plant proteins. Many supermarkets were able to report protein splits on the level of individual products from this very first national protein assessment. At the moment of writing, many supermarkets are able to provide a full-scale analysis even for composite products, meaning data on the exact protein split per product (plant vs animal-sourced) is available. This means that retailers no longer use the 50/50 default split for products in the 'animal-plant-based composite group', but instead use the actual protein content for that specific product for their assessments.

This development fits into the context of the current Dutch market, where data accuracy on animal and plant-based protein within individual products is improving, and more and more animal products enriched with plant-based proteins are introduced to supermarket shelves. This new version of the methodology centers on the improved data at the individual product level, which enables a more precise analysis.

Supermarkets that do not yet have data on the exact protein split at product level will keep using the initial version of the methodology. They are encouraged to work towards the implementation of a product level protein split for products in all Protein Tracker groups.

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[1] A pilot assessment was carried out in the period May 2023 to July 2023, using data from Albert Heijn, Aldi, Dirk, Ekoplaza, Jumbo and Lidl. Their first results have been used to improve and perfect the methodology.

Methodology

The goal of the Protein Tracker methodology is to understand the ratio of animal and plant-based proteins sold across the entire supermarket range for the span of one full year. The scope of the methodology spans food sold for human consumption, both in physical stores and online supermarkets. The total number of kilogrammes of protein is based on the volume of a specific product sold, multiplied by its protein content. The Protein Tracker methodology takes the user through a number of steps, which are laid out in Figure 1 below.

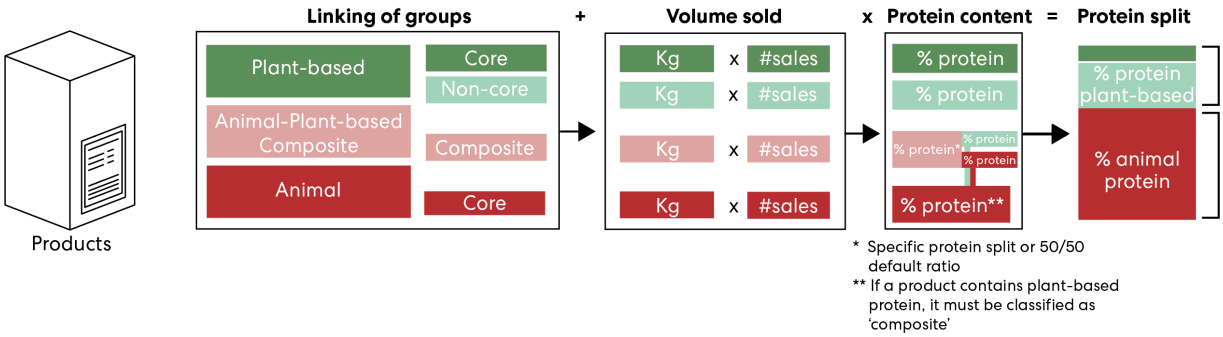

Figure 1 - The Protein Tracker Methodology

Protein Tracker groups

The Protein Tracker distinguishes four groups on which to base an assessment of the ratios of proteins sold. These groups are: 'plant-based core', 'plant-based non-core', 'composite products' and 'animal core'.

The 'core' groups span protein-rich products that have a big impact on the overall ratio of protein consumed or function as a direct alternative for an animal based product. Products in 'animal core' are products that are almost fully animal-sourced. The 'plant-based core' group is for products containing solely plant-based proteins that make a contribution towards consumers' shift to more plant-rich diets. Figure 2 provides an indication of the product categories that classify as 'core'.

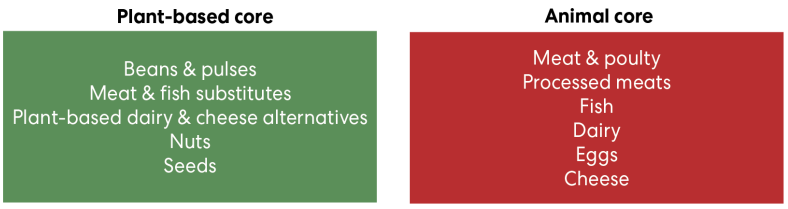

Figure 2 - Outline distribution of product categories

The group 'plant-based non-core' contains products that consist of only plant-based ingredients, but which don't directly need to contribute to a shift in protein diets. This list includes fruit, rice, bread and vegetables, as well as plant-based composite products such as salted crisps and bread sticks.

'Composite products' contain proteins of both plant and animal origin, such as ready-made meals. Examples include chicken and lentil salad, milk chocolate biscuits, apple pie made with eggs, a ready-made lasagna bolognese with ground beef and cheese, or a creamy tomato soup.

Establishing the protein split

The Protein Tracker methodology works with two levels of data accuracy. The first level (A) was introduced during this methodology update and is used when the exact ratio of plant vs animal protein in a specific product is known to the retailer. The second level (B) departs from the assumption that only the total protein content of a product is known, and not the ratio of animal and plant based protein within that product.

The methodology distinguishes between two levels of data accuracy:

A. **Protein Tracker assessment using product-level protein split**
   This is the most detailed level of assessment. Retailers may use this method when they have data on the exact ratio of animal vs plant proteins in individual products.

B. **Protein Tracker assessment using total protein content per product**
   This level of assessment is to be used in case the total protein content of individual products is known, but data on the exact protein split between plant and animal protein in the product is unavailable. For products in the animal-plant based composite group, calculations at this level are carried out using a default assumption that 50% of its protein content is animal-sourced and 50% is plant-sourced.

Retailers will gradually improve the level of detail in their data as they start implementing the method. To accommodate this process, supermarkets are permitted to use both levels (levels A and B) of data accuracy in combination. This is to bridge this transitional phase until a full upgrade towards level A accuracy can be achieved. Users of the methodology should be aware that it is crucial to report which parts of the assessment have been carried out using level A data accuracy and which were done using level B data accuracy. The two levels of accuracy are explained below.

Level A: Protein Tracker assessment using product-level protein split

Below you will see how the assessment is carried out using product-level protein splits (i.e.: when the exact ratios of animal and plant-based protein of products are available)[1].

1. Collect product data from a set time period
Compile a list of all products for human consumption that were sold over the specified time period, listing the following information for each product:

- Product name
- Volume of product sold (in kgs)
- Protein content per 100g of product
  - Plant-based protein content per 100g of product
  - Animal protein content per 100g of product

2. Link each product to a Protein Tracker group
When product-level protein split data are available, automatically assign products to the correct Protein Tracker group. Only the 'Plant-based core' group needs to be linked up based on product category level data. The categorisation based on Protein groups provides valuable insights into the growth of plant-based core groups over time. The following categorisation can be used:

- *Plant-based core*[2] = The plant-based core group is for products containing exclusively plant-based proteins that should contribute towards more protein in consumers' diets, i.e.:
  - Beans and pulses (dried, canned)
  - Nuts and seeds (including salted and roasted nuts)
  - Plant-based spreads & condiments made from beans, pulses, nuts or plant-based alternatives to spreads/condiments (such as peanut sauce, plant-based mayonnaise, hummus, tahini)
  - Plant-based meat, fish, dairy, butter, cheese and egg alternatives (fresh, long-life or frozen)
- *Plant-based non-core* = products containing solely plant-based ingredients that do not qualify as plant-based core
- *Animal-plant-based composite* = products containing both plant-based and animal-sourced proteins
- *Animal core* = products containing mostly animal proteins

At level B analysis, animal products that contain a small percentage of plant based protein (such as schnitzels, meaty spreads and breaded animal cuts) are considered animal core, because the majority of their protein content is animal-sourced. At level A analysis, when you know the exact animal vs plant protein ratio in the product, these products will be classified as 'composite products' because they contain plant-based protein as well as animal protein. The impact of this shift between level B and level A is expected to be minimal because the plant-based content of such products is quite low. Placing these products in the composite group at level B analysis will

1- Sources to use: data from the supplier or GS1.
2- The Protein Tracker makes this division explicit, because plant-based core product play an significant role in the protein transition. It is therefore important to monitor the development in this protein group.

unjustly assume these products are in equal parts plant-based and animal-based. The decision to keep these animal focused products in 'animal core' for level B analysis only applies to the heavy animal based products from animal-based food categories. This is why, until a split between the exact animal and protein content has been established for these products, they are all grouped as 'animal core'.

3. Establish total volume of protein sold for each Protein Tracker group (in kgs)
In order to track progress in the shift towards alternative proteins, the split between the different Protein Tracker groups is evaluated. This will help identify increased consumption of high-protein alternatives as well as an increase in sales of 'hybrid products', which will impact the shift from animal to animal-plant-based composite products.

- Plant-based core
- Plant-based non-core
- Animal-plant based composite
    - Of which plant protein
    - Of which animal protein
- Animal core

4. Establish total protein split (plant-based vs animal protein)
To establish a retailer's overall protein split, add up the volumes of protein in individual products.

- *Plant-based = Total volume of plant-based proteins sold when all individual products are added up.*
- *Animal = Total volume of animal proteins sold when all individual products are added up.*

Level B: Protein Tracker assessment using total protein content per product

Below you will see how the assessment is carried out using only the total protein content per product, when the exact protein split (plant-based vs animal protein) of that product is unknown.

1. Collect product data from a set time period
Compile a list of all products for human consumption that were sold over a specific time period, listing the following information for each product:

- Product name
- Volume of product sold (in kgs)
- Protein content per 100g of product

2. Link each product to a Protein Tracker group
The following method of categorisation can be used:

- *Plant-based core* = The plant-based core group is for products containing exclusively plant-based proteins that significantly contribute towards more protein in consumers' diets, i.e:
    - Beans and pulses (dried, canned)

    - Nuts and seeds (including salted and roasted nuts)
    - Plant-based spreads & condiments made from beans, pulses, nuts or plant-based alternatives to spreads/condiments (such as peanut sauce, plant-based mayonnaise, hummus, tahini)
    - Plant-based meat, fish, dairy, butter, cheese and egg alternatives (fresh, long-life or frozen)
- *Plant-based non-core* = products containing solely plant-based proteins that do not qualify as plant-based core
- *Animal-plant-based composite:* products containing both plant-based and animal-sourced proteins (such as a lasagna containing meat and cheese, a chicken and lentil salad, cakes, milk rolls, egg noodles, etc). Products containing small quantities of animal protein, such as vegetarian meats containing milk protein or chicken egg protein, should be grouped with 'composite products'. E numbers may be disregarded in this classification
- *Animal core*[1]*:* products containing solely or mostly animal proteins (e.g. meat, fish, cheese, eggs, yogurt, ice cream, meat and fish spreads and animal product-based condiments).[1]

3. Establish total volume of protein sold for each Protein Tracker group (in kgs)

- Plant-based core
- Plant-based non-core
- Animal-plant based composite
- Animal core

4. Establish total protein split (plant-based vs animal protein)

- *Plant-based* = Plant-based core + plant-based non-core + 50% of total protein in animal/plant-based composite group
- *Animal* = Animal core + remaining 50% of total protein in animal/plant-based composite group

The total protein split from the level A assessment, level B assessment or a combination of both will result in a single total protein split that can be reported.

Guidelines for when in doubt about the right group

1- Products classified as 'animal core' at level B analysis which contain just a small share of plant-based protein (e.g. schnitzel, meaty spreads) will move to 'composite' at level A data analysis. The impact of this shift on the total protein split will be rather small given these products' low plant protein content.

The decision tree in Figure 3 can help to identify the correct Protein Tracker group for a specific product. This guideline can be especially helpful when in doubt of whether to group a product under 'animal core' or 'animal plant-based composite'.

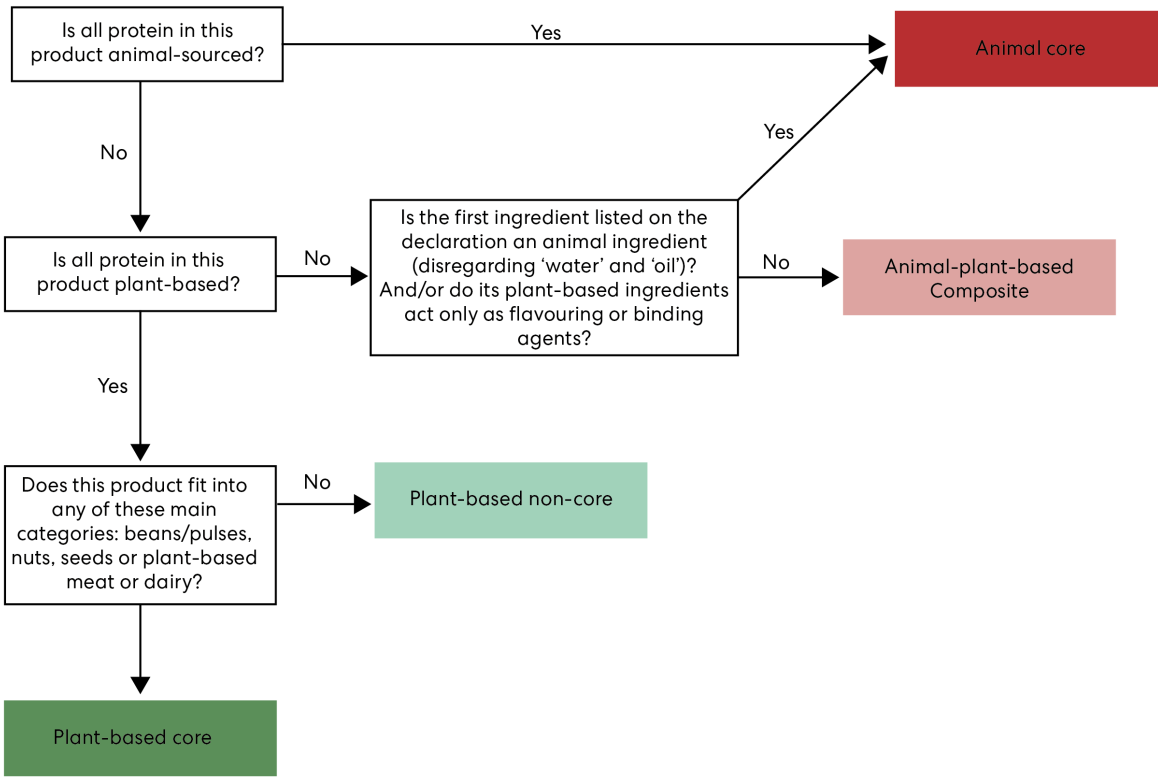

Figure 3 - Decision tree to determine correct Protein Tracker group

Animal core:

Until the exact protein split is known and the product can be assessed with level A data accuracy, one should evaluate a product as 'animal core' if it meets any of the following criteria:

- The first ingredient on the nutrition declaration (with the exception of water and oil) is of animal origin. Some of the protein content has been replaced by plant-based proteins, making the product classify as 'composite'.
- Its plant-based ingredients are mainly added for flavour, texture or food technological purposes (e.g. as a binding agent or batter) and do not contribute any significant amount of protein.

Examples of products with plant-based proteins that are placed in 'animal core' in Level B are: breaded meat or fish, yoghurt with fruit, cheese with herbs, egg salad, meat in marinade or gravy.

Animal/plant-based composite:

- Product contains both animal and plant-sourced proteins.
- The first-listed high-protein ingredient is plant-based, or the product contains a mix of different animal and plant-sourced proteins.
- The product is a hybrid product - some animal protein has been substituted with one or several plant protein sources.

If, based on these guidelines, there is still some doubt about whether or not a product should go in 'animal/plant-based composite', the product should be classified as 'animal core'. As soon as the exact protein split per product is available, this should lead to a correction in the right direction (more plant-based), rather than a shift towards more animal protein.

Data and sources

To achieve a reliable assessment of protein splits, it is essential that retailers make sure the underlying data are as complete and accurate as possible. These are some guidelines to follow to that end:

Units of weight/volume

Product volumes must be converted into kilogrammes. In case the only data available on volumes is in litres, please convert them using this guideline:

- 1 litre = 1 kilogramme
- 1 millilitre = 1 gramme

Establishing products' protein contents

The best way is to use information provided by the supplier. Suppliers' data on the total protein content per 100 gram of product tends to be most reliable. If the supplier cannot provide information on the specific product's protein contents, supermarkets may refer to a relevant national database that provides protein values for comparable products.They may also use data on the protein content of a similar product sold from other online retailers instead.

Source of protein split per product

In general the exact plant vs animal protein content of a product is not listed on the ingredients declaration. Suppliers are increasingly making this information available to their customers and GS1 hopes to include these data in the near future. However, suppliers are not legally obliged to provide this information.

Transitional phase: moving from total protein to protein splits in individual products

It will happen that supermarkets have data on the exact protein splits for some products, but not for others. In this transitional phase, supermarkets may use both levels A and B of data accuracy in their assessment. In the end, using as high a level of data accuracy as possible will improve the accuracy of the overall assessment.

Linking to each Protein Tracker group:
Until the exact protein split for a product becomes available, the linking of products to Protein Tracker groups should be carried out based on level B data.

Establishing the total protein split:

- For products of which the exact ratio of plant vs animal protein is known, carry out calculations based on level A accuracy.
- For products of which the exact ratio of plant vs animal protein is unknown, carry out calculations based on level B accuracy, based on how the products have been assigned to the different Protein Tracker groups.

This methodology is dynamic and will change in response to increased data accuracy and market developments affecting its users. Once large strides have been made in data accuracy, supermarkets are advised to redo their calculations of protein splits from previous years with the optimised protein splits per product.

Reports and validation

Once supermarkets have carried out their calculations, their reports will be evaluated by the GPA and ProVeg Netherlands. Each supermarket will submit a form with the results of their assessment, detailing the total volume of protein sold, the volume of protein per Protein Tracker group (animal vs plant-based) and their total protein split. Once the GPA and ProVeg have carried out their validation of the data, the supermarkets may publish their results in any way they choose. In the Netherlands, in order to provide the market with insights into the progress of the protein shift on a national level, the GPA and ProVeg will publish a report providing insights into the individual supermarkets' and nation-wide protein split. The annual reports are shared with the Dutch Ministry of Agriculture, Fisheries, Food Security and Nature. The results can help assess whether specific interventions have been successful and to what extent supermarkets are successful in promoting the required dietary shift towards more plant-rich food choices. The methodology thus allows supermarkets and NGOs to join forces in creating transparency regarding this social responsibility.

APPENDIX

APPENDIX 1 - Delineation of product categories

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Product categories

The Protein Tracker methodology focuses solely on protein, not on other nutrients or ingredients found in food products. A product can be assigned to the 'plant based core' and 'plant-based non-core' groups only if it contains no products of animal origin (with the exception of animal-sourced E numbers).

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

> *Plant-based/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 protein production is thriving with innovation. Newly developed products are finding their way to our supermarket shelves 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 is discussed in the Protein Tracker project team. The project team will continue to come together to make sure the Protein Tracker methodology is up-to-date with technological and societal developments.