

## Supply balance sheet for meat

Every year, Statbel draws up a supply balance for the main animal species based on various information sources.

This balance establishes the relationships between production, consumption and external trade (and stocks) and makes it possible to describe the balance of resources and their use for a given product.

This balance is expressed in tonnes of carcass weight equivalent or cwe using technical conversion factors of average yields that differ from one product to another. For example, the factor applied to bovine animals of more than 300 kg is 56 %. This means that the carcass of these animals will weigh 56 % of their live weights. The use of this unit makes it possible to harmonise and aggregate data on live animals and meats in various forms (preparations, pieces, etc.).

### Methodology to determine the apparent consumption

The supply balance sheet is drawn up based on data on live animals, on the one hand, and on meat, on the other hands, for offals and the following animal species:

- Domestic bovine animals
- Domestic pigs
- Sheep and goats
- Horses
- Poultry
- Other animals including buffaloes, feral pigs, rabbits, pigeons, etc.

### Usable production and gross indigenous production (live animals)

For adult slaughter animals (bovine animals, pigs, sheep, goats and horses), data from the database of the FASFC (Federal Agency for the Safety of the Food Chain) are used to determine the *usable production* (or *net production*). Slaughtered animals are animals born and bred in Belgium, but also live animals imported and slaughtered in Belgium.

**Gross indigenous production**, which corresponds to the Belgian production of live animals, is calculated as follow:

$$PinB = Pn + \text{exports of live animals} - \text{imports of live animals}$$

For poultry, the gross indigenous production is also calculated based on slaughtering data from the FASFC.

For offals, the usable production is calculated based on slaughter carcass weights of the various categories of animals to which the following coefficients are applied:

- 7.2 % for calves and young bovine animals
- 8.7 % for oxen, bulls, cows and heifers
- 6.5 % for pigs
- 3.5 % for sheep and goats
- 5.8 % for horses.

The import and export data come from the National Bank of Belgium (NBB), which produces external trade statistics (Intrastat-Extrastat).

Since 2016, external trade data for live animals are expressed in heads. These data in heads are then converted into carcass weight equivalent based on average weights per head and technical factors of average yields.

External trade data on live animals are also grouped in the various categories mentioned above in order to determine the quantities of offals traded for the live animal item (the same coefficients as those used to determine usable production are applied).

### Domestic use of meat, gross apparent consumption and degree of self-sufficiency

After having determined the usable production for each animal species, the balance of meat imports and exports and stock variations should be established in order to calculate the **quantities of meat usable within the country or domestic uses**.

$$U_{tin} = P_n + \text{meat imports} - \text{meat exports} - (\text{final meat stock} - \text{initial meat stock})$$

For each animal species, the meat trade groups products into 3 main categories:

- Fresh, chill or frozen meat
- Dried, salted or smoked meat
- Prepared or preserved meat

The meat import and export data also come from the NBB. Meat weights are processed into carcass weight equivalent using the appropriate average yield coefficients.

Meat stock variations (trade, processing plants, slaughterhouses) are not known.

The gross domestic use of meat also corresponds to the **gross apparent human consumption**, since we do not have any information on the proportion of meat used for pet food.

$$ChB = U_{tin}$$

The **gross apparent human consumption expressed in carcass weight equivalent per year and per capita** is calculated by relating this gross apparent human consumption to the Belgian population on 1<sup>st</sup> January of the reference year.

The degree of self-sufficiency (**% self-sufficiency**) is calculated by dividing **gross indigenous production** by **domestic uses**.

$$\%self - sufficiency = \frac{P_{inB}}{U_{tin}} * 100$$

The **apparent consumption expressed in kg of marketable meat per year and per capita** is given as an indication using average conversion factors from carcass to retail weights.

These factors vary according to the animal species and within the same species according to various characteristics related to the animal itself (age at slaughter, sex, breed, carcass conformation, etc.) but also to the cutting techniques used. The main following factors have been used: 0.70 for bovine animals, 0.78 for pigs, 0.88 for sheep, goats, poultry and 0.6 for horses.