FOOD CONSUMPTION SURVEY 2022-2023

Weight status and weight-related behaviours in the Belgian population

Epidemiology and Public Health

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Introduction

The **National Food Consumption Survey** (FCS) is a repeated cross-sectional survey aiming to collect detailed and quantitative information on the food consumption, nutrient intake and nutritional status of the general population. The weight status, eating habits, food-related perceptions and attitudes, physical activity and sedentary behaviour are also investigated. The third edition of this survey took place in 2022-2023 in the Belgian population aged 3 years old and above. 3777 persons – randomly selected in the National Register – participated in this survey between March 2022 and December 2023.

This first summary report presents the key findings on the weight status of the Belgian population, including overweight and obesity, as well as increased health risk associated with high waist circumference. Main results related to the topics of weight management, eating disorders, and risk for malnutrition in the population aged 65 years and above are then described. More results are available on our underline.

We would like to thank all the interviewers who contributed to the data collection, and all the participants who accepted to take part in the survey!

Profile of the participants

Distribution (%) by sex

Females 50.6%
Males 49.4%
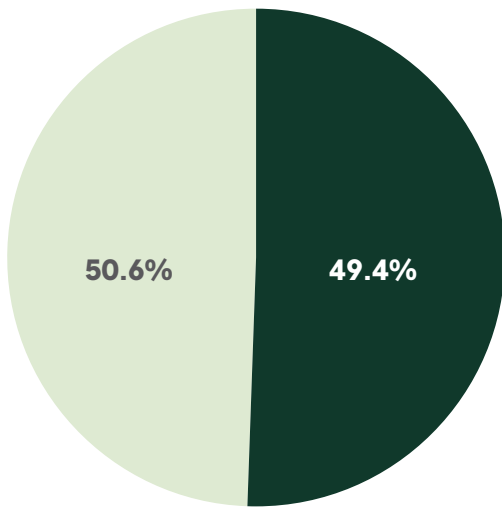
Distribution (%) by age

22.0%
24.1%
16.4%
16.5%
21.0%
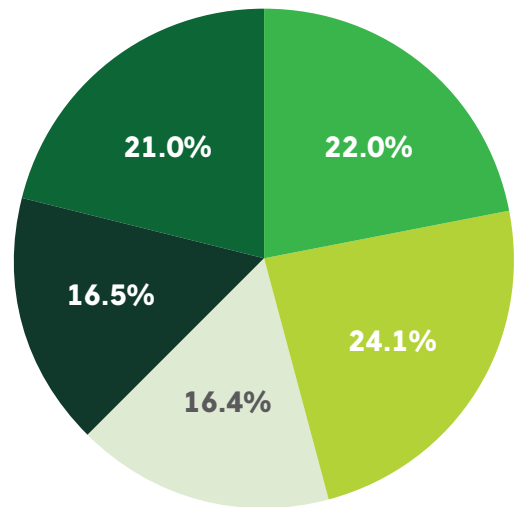
- ● 3-9 years: children
- ● 10-17 years: adolescents
- ● 18-39 years: young adults
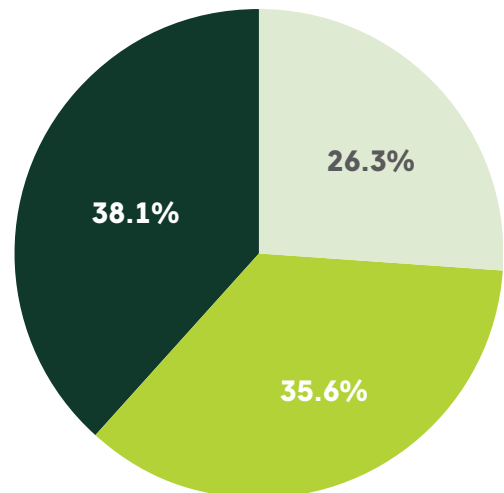- ● 40-64 years: middle-aged adults
- ● 65+ years: older adults

Distribution (%) by region

29.9%
25.7%
44.3%
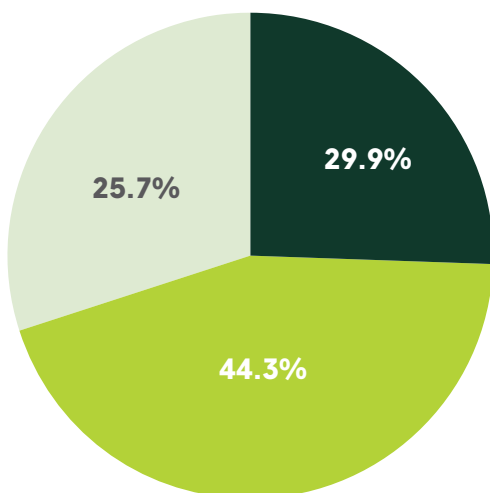
- ● Wallonia
- ● Brussels
- ● Flanders

Distribution (%) by education level

26.3%
38.1%
35.6%

- ● Low
- ● Mid
- ● High

The results presented in this report are weighted to provide a representative picture of the Belgian population. A detailed description of the methodology can be found on our website.

Weight status

To assess the weight status of the Belgian population, the **weight, height and waist circumference** of the participants were **measured by trained interviewers**. Those objective measures are preferred over self-reported measurements because they are not influenced by memory and/or social desirability biases.

Three indicators were derived from the measures:
- **Body Mass Index (BMI):** weight in kg divided by the squared of the height in m (kg/m²)
- **Waist circumference:** in cm, measured with non-stretchable tape
- **Waist-to-height ratio:** waist circumference (cm) divided by height (cm)

Body Mass Index (BMI) is the most common method for assessing weight status. However, BMI does not show where fat is located on the body, especially abdominal fat, which is important for predicting heart disease risk.
Waist circumference and the **waist-to-height ratio** were therefore used in a complementary way.

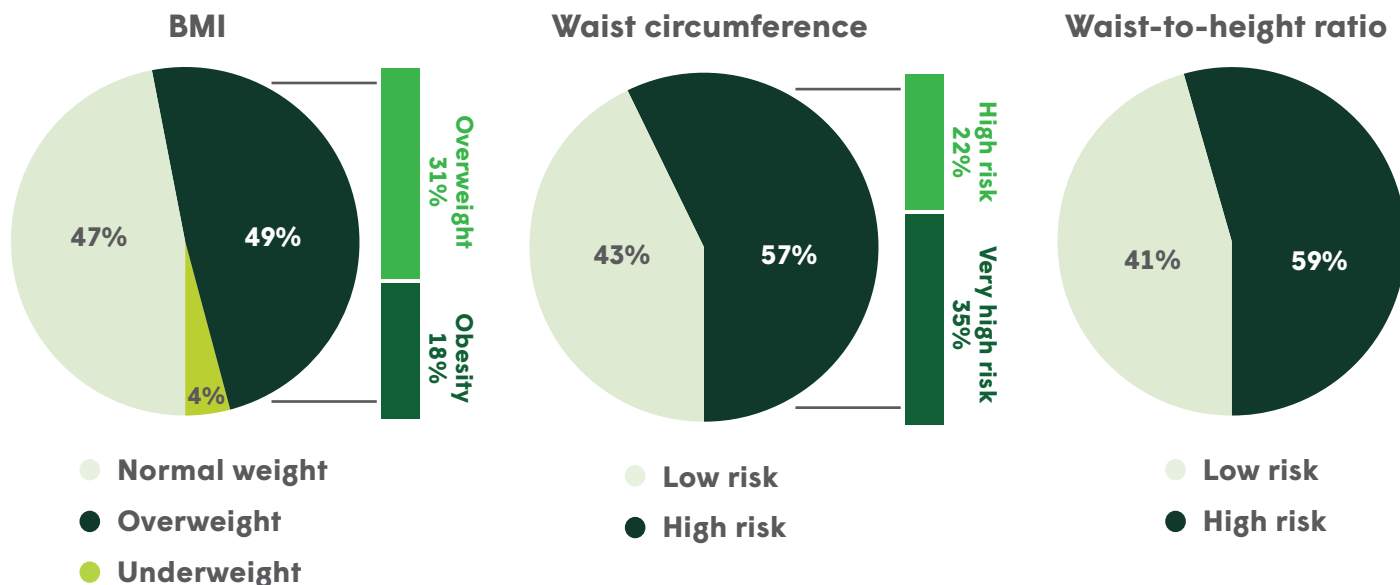## Overview of the indicators used to study the weight status of the Belgian population

	Increased health risk	Highly increased health risk
Body Mass Index (BMI)	**Overweight** Adults: BMI = ≥ 25 kg/m² Children and adolescents: age- and sex- specific classifications	**Obesity** Adults: BMI ≥ 30 kg/m² Children and adolescents: age- and sex- specific classifications
Waist circumference	**High health risk** Men: 94 – 102 cm Women: 80 – 88 cm Children and adolescents: age- and sex-specific cut-off values	**Very high health risk** Men: > 102 cm Women:> 88 cm Children and adolescents: age- and sex-specific cut-off values
Waist-to-height ratio	**Increased health risk** Waist-to-height ≥ 0.5	

Limitations exist in applying population-wide classification systems and should thus be interpreted with caution. Because people have different body compositions, the health risks related to weight may vary among specific groups such as adults aged 65 and older, certain ethnic or racial groups, adults with a lot of muscle, or young adults who haven't finished growing or are very lean.

49% of the population aged 3 years and above have overweight, of which 18% have obesity

This indication that a large part of the population has an unhealthy weight status is supported by the other two indicators: 22% of the Belgian population have a waist circumference defined as high health risk and 35% are at very high health risk. Based on the waist-to-height ratio, 59% of the Belgian population is classified as having an increased health risk.
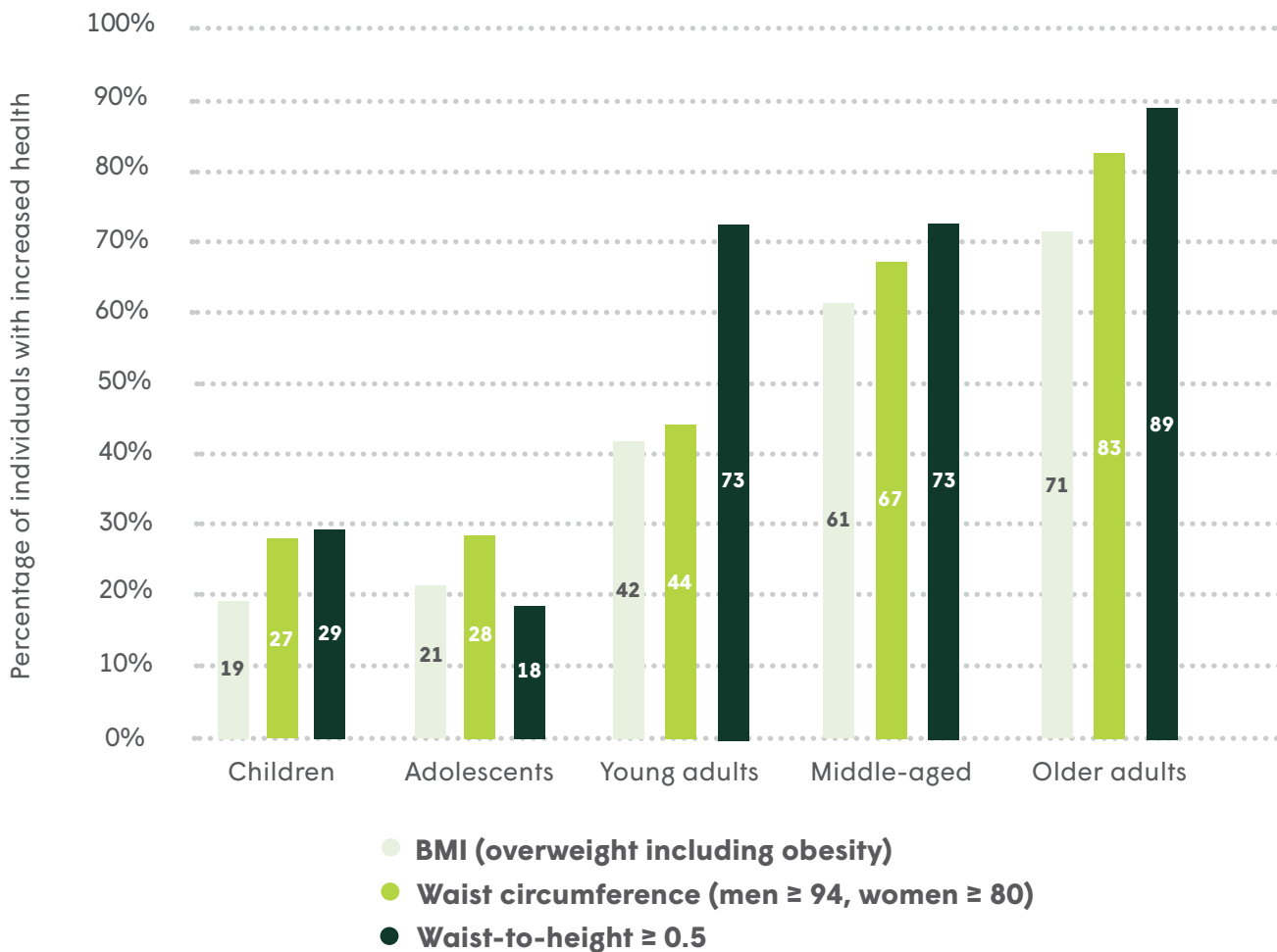
BMI

47% 49% 4%

Overweight 31%

Obesity 18%

- Normal weight
- Overweight
- Underweight

Waist circumference

43% 57%

High risk 22%

Very high risk 35%

- Low risk
- High risk

Waist-to-height ratio

41% 59%

- Low risk
- High risk

Age differences

The proportion of individuals with unhealthy weight status increases with age

The proportion of individuals having **overweight (including obesity)** increases with age: 19% of children, 21% of adolescents, 42% of young adults, 61% of middle-aged adults and 71% of older adults.

The proportion of children and adolescents with an increased health risk due to **waist circumference** is similar, at 27% and 28% respectively. Among adults, this risk increases with age: 44% of young adults, 69% of middle-aged adults, and 83% older adults.

For the **waist-to-height**, the health risk decreases from childhood (29%) to adolescence (18%), but then progressively increases during young (73%), middle-aged (73%) and older adulthood (89%).

Percentage of individuals with increased health

	Children	Adolescents	Young adults	Middle-aged	Older adults
BMI (overweight including obesity)	19	21	42	61	71
Waist circumference (men ≥ 94, women ≥ 80)	27	28	44	67	83
Waist-to-height ≥ 0.5	29	18	73	73	89

● **BMI (overweight including obesity)**

● **Waist circumference (men ≥ 94, women ≥ 80)**

● **Waist-to-height ≥ 0.5**

Older adults have the highest risk for an increased BMI, waist circumference and waist-to-height ratio. Among adults aged 65 and above, 71% have overweight (including obesity), 83% have a waist circumference indicating high to very high health risk, and 89% have a waist-to-height ratio risk related to abdominal obesity.

One child in five (19%) has overweight (including 4% with obesity). This is concerning as childhood overweight and obesity harm immediate health, increase the risk of future diseases, and negatively impact mental well-being and quality of life.

Differences between males and females

Men are more likely to have overweight (including obesity) (53%) than women (46%)

The sex difference is only observed in the middle-aged and older adults. Adult men also have a higher health risk associated with abdominal obesity (waist-to-height ratio) compared to women.

However, when looking at **waist circumference**, **young adult women** are more likely to have a waist circumference indicating a health risk compared to men. The stricter cut-off values for waist circumference in women can play a role in this.

Differences based on educational level

Overweight and obesity are more frequent in low educated groups
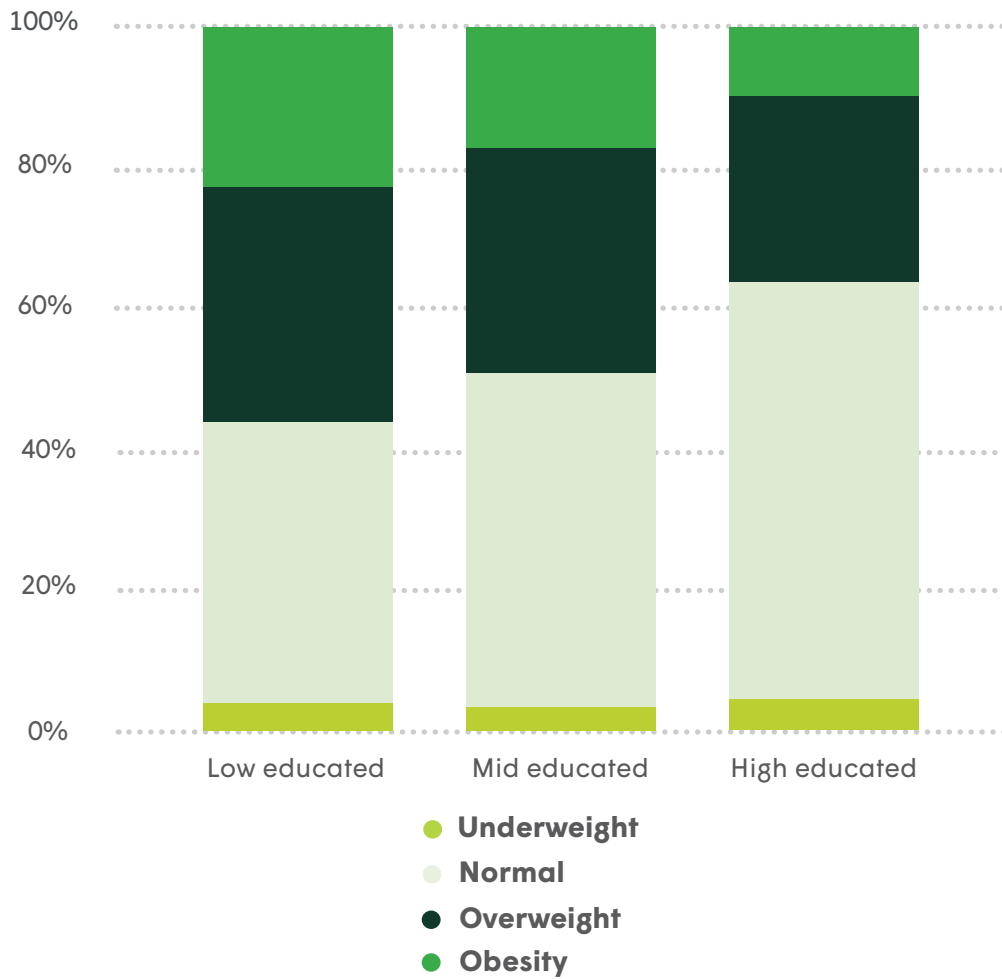
Distribution of BMI categories in the Belgian population aged 3 years and above

Legend:
- Underweight
- Normal
- Overweight
- Obesity

56% of the individuals with a low education level have overweight (including 23% having obesity), compared to 36% (including 10% having obesity) among those with a high education level.

The same trend is observed for waist circumference: **63% of the individuals with a low education level have a high or very high health risk**, compared to 44% among those with a high education level.

For waist-to-height ratio, **67% of the individuals with a low education level have an increased health risk** related to abdominal obesity, compared to 45% for those with a high education level.

Regional differences

Flanders performs better in terms of weight status indicators related to increased health risks. The proportion of individuals with **obesity is higher in Wallonia (22%) than in Flanders (16%)**. Similarly, the proportion of individuals with an **increased health risk related to abdominal obesity** (as measured by waist circumference and waist-to-height ratio) is **higher in Brussels than in Flanders**.

Differences over time

Overall, no changes over time (2014-2015 vs. 2022-2023) are observed in the weight status of the Belgian population, but regional differences are noted.

For waist circumference, the proportion of the Belgian population aged 15-64 years with a **very high health risk due to a large waist circumference increased from 2004 to 2014-2015** in all regions except Brussels.

There are **no differences over time** for the **different age groups**.

Despite the fact that weight status remained the same, these are **worrisome numbers** for which the Belgian population does not score well.

2014-2015 vs 2022-2023			
Flanders	=	Decrease in the proportion of individuals with a **very high health risk from 35% to 30%**	=
Wallonia	Decrease in the proportion of individuals with **overweight (including obesity) from 50% to 45%**, although the proportion of individuals with obesity did not change	=	Decrease in the proportion of individuals with **high health risk from 61% to 56%**

Weight management

Attitude towards weight

In the Belgian population aged 10 years and above...

− 28% try to lose weight

= 44% try to keep their weight stable

+ 4% try to gain weight
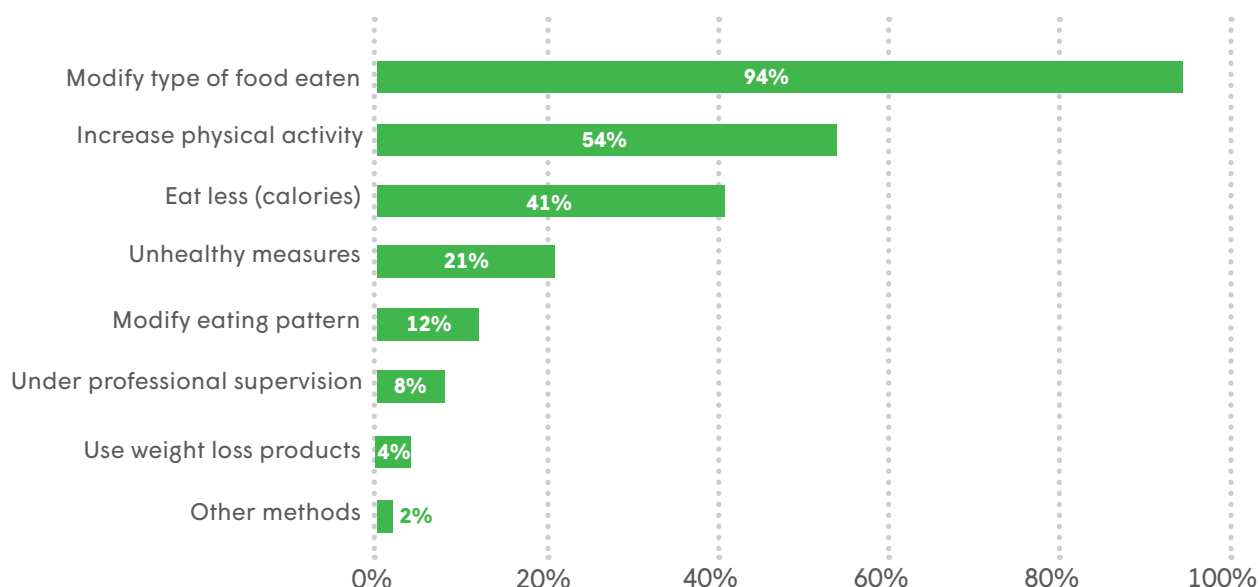
24% do not worry about their weight
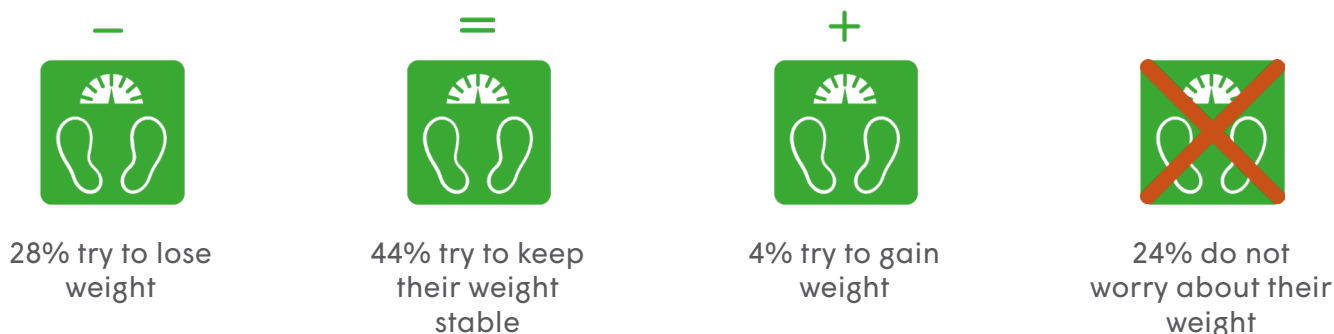
The proportion of individuals trying to lose weight is higher among females than males (31% versus 24%), and higher among adults aged 18-39 years (31%) and 40-64 years (35%), compared to adolescents (17%) and adults aged 65 years and above (21%). In addition, mid-educated persons are more likely (33%) than low- and high-educated ones (26%) to try losing weight. No differences by region or in comparison to 2014-2015 are observed.

Methods used to lose weight

Among individuals aged 10 years and above who report to try to lose weight:
- most **modify the type of food** they eat;
- half of them **increase their physical activity;**
- one third **eats less;**
- one fifth **uses unhealthy measures**, i.e. smoking, laxatives use, meal skipping, prolonged fasting or vomiting;
- only 8% **are supervised by professionals** when trying to lose weight.

Method	Percentage
Modify type of food eaten	94%
Increase physical activity	54%
Eat less (calories)	41%
Unhealthy measures	21%
Modify eating pattern	12%
Under professional supervision	8%
Use weight loss products	4%
Other methods	2%

Unhealthy measures are more frequently reported by adolescents (35%) than adults aged 65 years and above (9%), while one in four adults aged 18-39 years (22%) and 40-64 years (24%) reports using such methods.

Drivers for losing weight

Advised by general practitioner, specialist or dietician: 18% of individuals aged 10 years and above who try to lose weight were advised by a health professional. This is more frequent in males (24%) than females (13%), and among older adults (31%) compared to younger age groups (11% to 18%).

Advised by family or friends: 14% were influenced by family or friends. This is more frequent in males (17%) than females (12%), and among adolescents (23%) than among young adults (13%) and older adults (11%). Influence of family or friends is less frequently reported in 2022-2023 (14%) than in 2014-2015 (33%).

Own initiative: 89% decided to lose weight by themselves. This proportion is higher in females (92%) than in males (85%), and higher among young and middle-aged adults (94% and 91%) compared to adolescents (76%) and older adults (80%).

Eating disorders

An eating disorder is a mental health condition where people have **abnormal eating or weight control behaviours** (e.g. anorexia, bulimia). Identifying such disorders requires a medical diagnosis. In the current survey, a screening tool was used to identify persons with **suspicion of eating disorders.**

In Belgium, 13% of the population aged 10 to 64 years is suspected to have eating disorders.

The largest sex difference is observed among **adolescents aged 10-17 years: 18% of the girls** are suspected to have eating disorders, compared to **7% of the boys.**

Suspicion of eating disorders is linked to **education**: a higher proportion of persons of **low education level (16%)** than persons of **high education level (10%)** are suspected to have eating disorders.

Individuals living in **Brussels** are more likely suspected to have eating disorders **(18%)**, compared to those living in **Flanders (12%)**, while individuals living in **Wallonia** have an intermediate position **(15%)**.

An **increase** in the proportion of **adolescents aged 10-17 years** with suspicion of eating disorders was observed in **Flanders** between **2014-2015 (4%)** and **2022-2023 (9%)**. By contrast, in **Wallonia**, no change was noticed.

For the year comparison, a different screening tool was used, that is why the values are lower than the previous figures!

Risk for malnutrition among adults aged 65+ years

Malnutrition in older adults is characterised by a **lack of essential nutrients**, caused by a reduced access to food, loss of appetite, difficulty chewing and swallowing,... Individuals with overweight can also be at risk for malnutrition.


2%

29%

69%
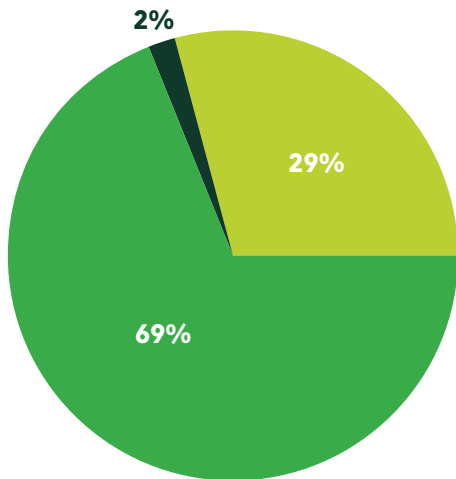
In Belgium, **2%** of the population aged 65 years and above is in a situation of malnutrition, **29%** is at risk for malnutrition and **69%** has a normal nutritional status.

Institutionalised (including those in care homes) or hospitalised individuals, and those who could not be interviewed without assistance (e.g., individuals with dementia) are not included.

- Normal nutritional status
- Risk for malnutrition
- Malnutrition

Differences between males and females

Males

0.5%

22.8%

76.7%

- Normal nutritional status
- Risk for malnutrition
- Malnutrition

Females

3.2%

34.6%

62.2%
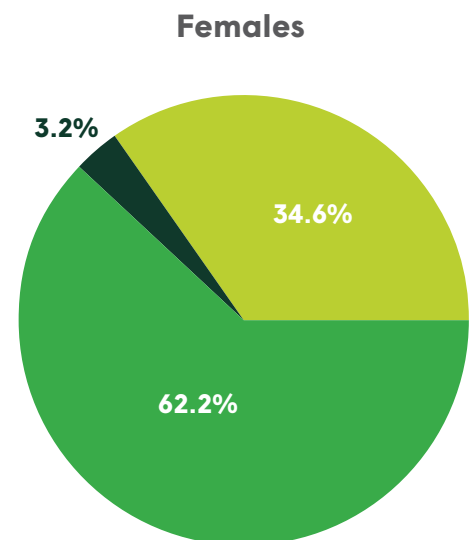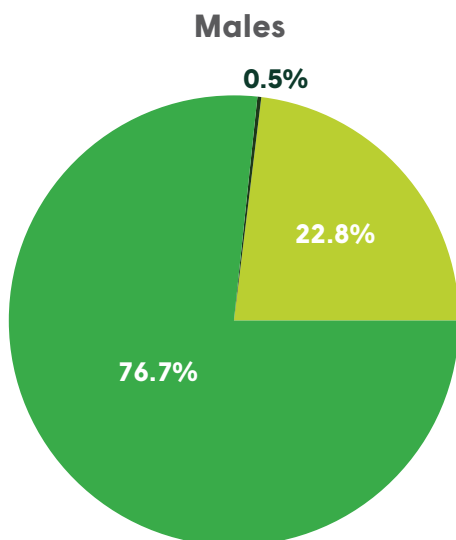
Higher proportions of females than males are in a situation of malnutrition (3% versus 0.5%) or at risk for malnutrition (35% versus 23%).

Regional differences

Chart showing nutritional status by region:

	Normal nutritional status	Risk for malnutrition	Malnutrition
Wallonia	61%	38%	1%
Brussels	70%	25%	5%
Flanders	71%	27%	2%

- **Wallonia**
- **Brussels**
- **Flanders**
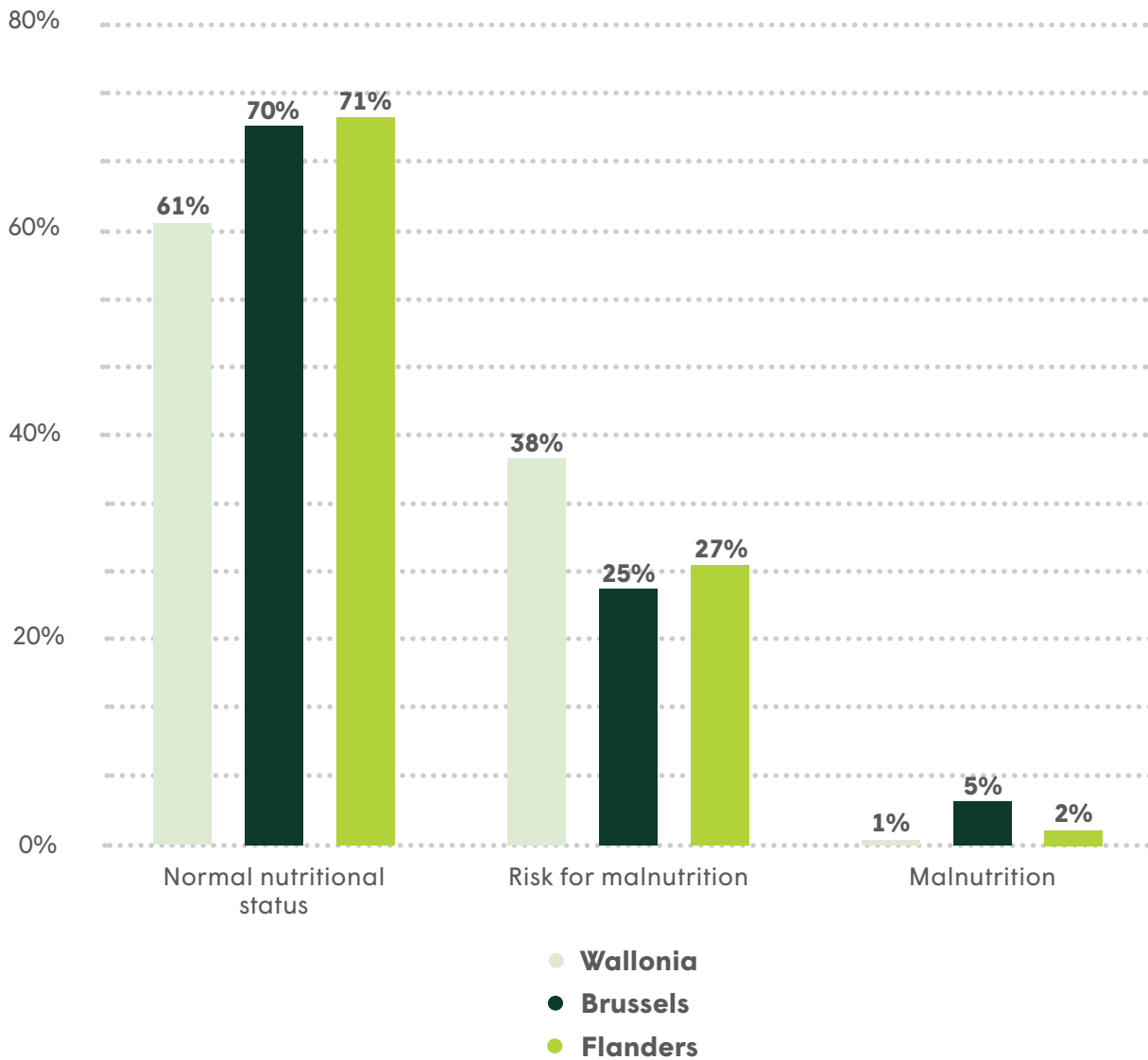
Older adults living in Wallonia are more likely to be at **risk for malnutrition** (38%), compared to those living in Flanders (27%) or in Brussels (25%). The proportion of individuals in situation of malnutrition does not differ significantly between regions.

Conclusion

The Food Consumption Survey 2022-2023 shows that half of the Belgian population aged 3 years and above has overweight, including 18% having obesity, which is unchanged compared to the previous survey conducted in 2014-2015. Almost one third of the population aged 10 years and above try to lose weight. Among them, 21% use unhealthy methods, such as use of laxatives, smoking or vomiting, and almost 90% decide on their own initiative. In the population aged 10 to 64 years, 13% of the individuals are suspected to have eating disorders. This percentage rises to 18% among adolescent girls. Finally, among the adults aged 65 years and above (excluding institutionalised persons), 2% of the individuals are in situation of malnutrition and 29% are at risk for malnutrition. These results underline that weight-related issues are highly prevalent in the Belgian population and tackling these health risks should be the focus of future policy measures. Moreover, existing socioeconomic disparities will have to be taken into account.

Questions? Mail fcs@sciensano.be or visit our website FCS.

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