

Ideal weight | Reference values

Determining frame size using the wrist circumference

The measurements can be compared with this table:

Sex	Small frame	Normal frame	Broad frame
Man	> 10,4	10,4 – 9,6	< 9,6
Woman	> 10,9	10,9 – 9,9	< 9,9

Measuring the elbow breadth

The elbow breadth is measured by using a sliding calliper. The person's right arm is extended forward perpendicular to the body. The arm and elbow form a 90° angle, with the fingers pointing up and the dorsal part of the wrist toward the dietician. Use the largest breadth across the elbow joint. Frame size can be determined using the next table:

Normal elbow breadth for men	
Height	Elbow breadth
158 - 161 cm	6.4 - 7.2 cm
162 – 171 cm	6.7 – 7.4 cm
172 – 181 cm	6.9 – 7.6 cm
182 – 191 cm	7.1 – 7.8 cm
192 – 193 cm	7.4 – 8.1 cm
Normal elbow breadth for women	
Height	Elbow breadth
148 – 151 cm	5.6 – 6.4 cm
152 – 161 cm	5.8 – 6.5 cm
162 – 171 cm	5.9 – 6.6 cm
171 – 181 cm	6.1 – 6.8 cm
182 – 183 cm	6.2 – 6.9 cm

In the original table the length is including a 2,5 cm heels. This is an adapted table. If the measurement fits between the numbers above, the patient has a normal frame size. If the numbers are below, the patient has a small frame size and above it's a large frame size.

Metropolitan Life Insurance Table

For determination of ideal weight the tables of the Metropolitan Life Insurance Company (1983) are used. These tables are based on the mean weight of a healthy population, corrected for length, sex and frame size. The ideal weight can be read in the table. The lengths in this table include shoes (3 cm) and the weights include clothes (for men 2,3 kg, for women 1,4 kg). In the Academic hospital of Maastricht (Maastricht UMC+), an adapted table is developed; length and weight are adjusted. The Metropolitan Life table is based on a 25-59 year old group of people.

Elderly

Bodycomposition changes in time:

- Between 30 and 70 years old, the height of men diminishes by a mean of 3 cm and the height of women diminishes by a mean of 5 cm.
- At 80 years of age, this is for men 5 cm and for women 8 cm.
- The BMI for 70 year old is increased by a mean of 0.7 for men and 1.6 for women.
- At the age of 80 this is 1.4 for men and 2.6 for women.

Reference: Sorokin JD, Muller D, Andres R. Longitudinal change in height of men and women: implications for interpretations of body mass index: the Baltimore Longitudinal Study of aging. *Am. J. Epidemiol* 1999; 150: 969-977)