

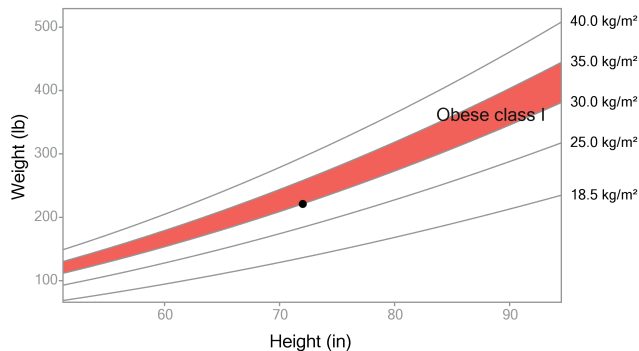
seca® | results of examination

Patient Data

ID: seca_20151212131038- Age: 40 Date: 12/12/2015
Name: John Doe Gender: Male Time: 01:12 PM

Body Mass Index

Weight: 221.23 lbs
Height: 6' 0"
Body Mass Index: 30.00 kg/m²

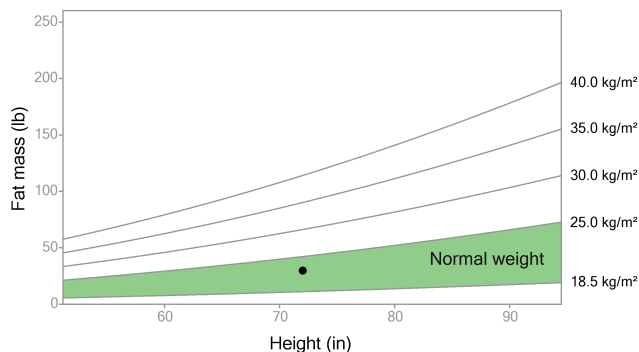


A person's state of nutrition is initially assessed by measuring and weighing the subject. The ratio between weight and height is indicated by the body mass index (BMI). The more accurately weight and height are measured, the more accurate the BMI will be. According to the World Health Organization (WHO) an adult is considered to be overweight with a BMI of 25 kg/m² or more, and obese as of 30 kg/m². A person with a BMI of below 18.5 kg/m² is considered to be underweight. The BMI does not allow any conclusions to be drawn about body composition or the proportions of body weight accounted for by muscle, fat and water. Sports people, in particular, are often categorized as overweight due to high muscle mass, which increases their weight.

Fat Mass & Fat-Free Mass

Fat Mass: 30.09 lbs (13.6 %)*
Fat-Free Mass: 191.14 lbs (86.4 %)*

Interpretation of FM according to BMI



The fat mass (FM) is the total amount of fat in the body. In addition to storage or depot fat, it also includes structural fat. Depot fat stores energy and heat for the body. Structural fat is vital for life and plays a role in various parts of the body. For example, it helps with the development of somatic cells and protects the organs. However, if the FM is permanently high, this increases the risk of diabetes and cardiovascular disease.

In the graph the individual FM is interpreted using the BMI. In contrast to the classical BMI graph, it is not body weight that serves as the basis here but the FM. The BMI limit values are listed on the right of the graph. Here you can see which BMI category you fall into according to your FM and compare the result with the classical BMI index.

The fat-free mass (FFM) is the difference between your weight and FM. Averaging 73.2%, water accounts for the largest share of FFM. Muscles, bones, organs, cartilage, tendons and ligaments are also part of FFM.

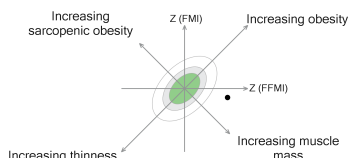
Energy

Resting Energy Expenditure: 2010 kcal
Physical Activity Level: 1.8
Total Energy Expenditure: 3618 kcal
Empfohlene Energieaufnahme:
Therapiedauer:
Therapy Goal:

Resting energy expenditure (REE) is the amount of energy a body needs to maintain its respiratory, digestive and cardiovascular systems, etc. REE depends on a person's age, height, weight and gender and accounts for around 60-70% of total energy expenditure. Total energy expenditure (TEE) is the amount of energy a person requires every day, taking into account physical activity in addition to resting energy expenditure (REE). This level of activity varies widely from person to person. TEE can be boosted by increasing physical activity.

Body Composition Chart

Fat Mass Index (FMI): 4.1 kg/m²
Fat-Free Mass Index (FFMI): 25.9 kg/m²



The body composition chart (BCC) gives a graphical representation of fat mass (FM) in relation to fat-free mass (FFM) in a two-axis system. FM is shown on the vertical axis, and FFM on the horizontal.

The ellipses show the measuring ranges of a comparison group of healthy people. A measuring point outside the ellipses merely indicates a difference from the comparison group. It is thus possible to determine for example whether an increased BMI is due to a high proportion of fat or muscle.

seca® results of examination

Patient Data

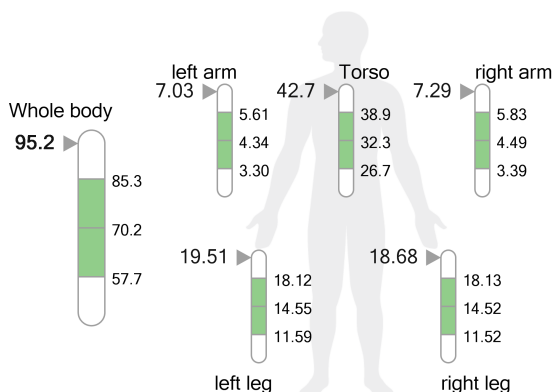
ID: seca_20151212131038-
Name: John Doe

Age: 40
Gender: Male

Date: 12/12/2015
Time: 01:12 PM

Skeletal Muscle Mass

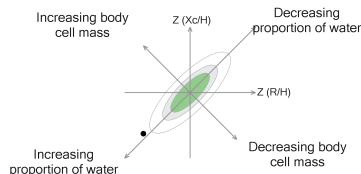
Normal values in lbs
for 6' 0"



The skeletal muscle mass (SMM) comprises the mass of all the muscles that move the body and are responsible for posture. Skeletal muscle mass is also involved in thermogenesis (heat production). Skeletal muscles account for a significant proportion of the body's energy expenditure. If skeletal muscle mass is increased, this also increases resting energy expenditure. Normal muscle mass can help avoid problems with the locomotor system. Skeletal muscle mass can in addition influence the immune system, the metabolism and the development of diabetes mellitus by means of messenger substances.

BIVA

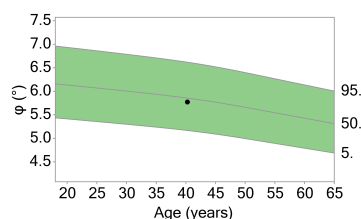
Resistance (R):
367.1 Ω
Reactance (Xc):
37.1 Ω



In bioelectrical impedance vector analysis (BIVA) the body's fat-free mass is analyzed. In the chart a distinction is drawn between the cellular axis (which runs diagonally from the bottom right to the top left) and the water axis (which runs diagonally from the top right to the bottom left). The individual measurement point indicates the number and quality of the somatic cells as well as the body's water balance. The ellipses show the measuring ranges of a comparison group of healthy people. A measuring point outside the ellipses merely indicates a difference from the comparison group.

Phase Angle

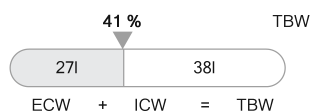
Phase Angle (ϕ):
5.8°
Percentile:
43.



The phase angle (ϕ) is a measure of the quantity and quality of the somatic cells. ϕ allows conclusions to be drawn about a person's nutritional condition and state of health. A high phase angle indicates a person is in good physical condition. Generally speaking, the phase angle decreases from birth to old age. Women have a lower phase angle than men.

Fluid

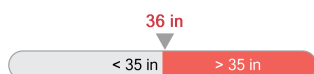
Total Body Water (TBW):
64.3 l (63.7 %)*
Extracellular Water (ECW):
26.6 l (26.3 %)*



Total body water (TBW) accounts for around 60% of the body weight of a healthy adult. The proportion of body water decreases from birth to old age. In a healthy person, two-thirds of total body water is found within the somatic cells and is known as intracellular water (ICW), while a third of total body water is found outside the cells and is known as extracellular water (ECW). Hydration (HYD) indicates the distribution of water in the body. This value, which is expressed in percent, is the ratio of ECW to ICW.

Visceral Adipose Tissue & Waist Circumference

Visceral Adipose Tissue:
2.0 l
Waist Circumference:
3' 0"



The waist circumference (WC) allows conclusions to be drawn about the amount of body fat in the abdominal cavity. This abdominal fat, which is also known as visceral fat, is a risk factor for vascular disease (arteriosclerosis) and diabetes mellitus type 2, which can result in heart attacks and strokes. Women with a waist circumference of 80 cm or more and men with a waist circumference of 94 cm or more have an increased risk. Women with a waist circumference of 88 cm or more and men with a waist circumference of 102 cm or more have a greatly increased risk.