seca|mBCA

Case report: bodybuilder
Medical field: sports medicine

1 Patient data

Age:	45 years
Gender:	male
Height:	1.86 m

Initial weight: **98.10 kg**
Initial BMI: **28.40 kg/m²**

2 Medical history / diagnosis

A 45-year-old former bodybuilder wants to maintain his good shape, particularly his well-defined muscles. His training plan calls for weight-lifting and endurance training four times a week. To obtain an accurate assessment of his training routine, he has his fitness level measured.

3 Graphs of measuring results

Body mass index (BMI)

The BMI diagram shows that he falls into the overweight range and even nears the obese level.
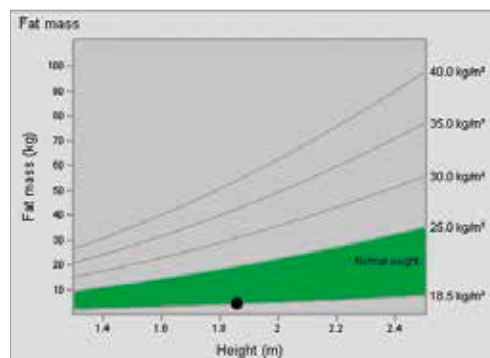
- 28.40 kg/m²
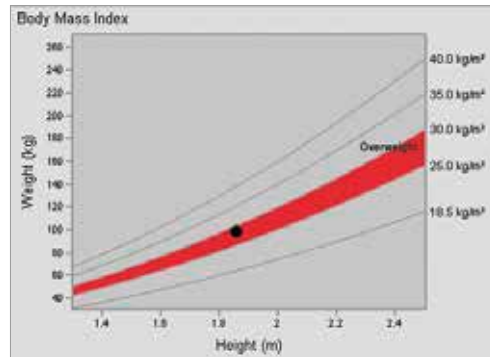
Fat mass (FM)

However, a look at the fat fass diagram reveals that the FM share of 6.20 % at 6.10 kg is very low. It shows that the FM category does not correspond to the BMI classification.

- Fat mass (FM):   6.10 kg
- Fat mass (FM) %:   6.20 %
- Fat mass index (FMI):   1.80 kg/m²
- -> BMI class: 18.50 – 25.00 kg/m²

seca ®
Precision for health

Body composition chart (BCC)

The BCC makes clear the reason for the low fat mass and high weight. The measurement point for the bodybuilder is outside the normal range and is indicative of a significantly elevated fat-free mass. This position is a strong indication of a high proportion of muscle mass.
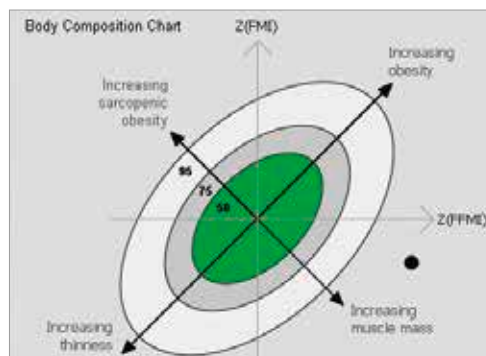
Skeletal muscle mass (SMM)

The high proportion of muscle mass in all extremities is a result of the bodybuilder's training. This is immediately apparent in the muscle mass diagram.

- SMM: 47.70 kg
- SMM (left arm): 3.14 kg
- SMM (right arm): 3.00 kg
- SMM (Torso): 20.20 kg
- SMM (left leg): 10.63 kg
- SMM (right leg): 10.46 kg

4 Summary

According to the BMI, the former bodybuilder is overweight and bordering on obese. The assessment of his body composition, however, makes it clear that the high BMI results not from a large proportion of fat mass, but rather from the high proportion of muscle. This is recognizable in the BCC. The fat mass diagram additionally shows very low fat mass. This body composition underscores the bodybuilder's successful training and his good fitness level.

Measurement of the former bodybuilder with the seca mBCA yields a very good assessment of his training level. It clearly shows that the relatively high BMI does not stem from a high proportion of fat but rather from a very high proportion of muscle in his body.

seca | mBCA