"People with obesity live longer" - headlines like these are common. Recently published epidemiological studies however provide new food for thought: how is a body mass index (BMI) in the overweight range associated with total mortality? There are many studies showing that a BMI outside the normal range is associated with a higher total mortality. In contrast, there are indications that a BMI in the overweight range is associated with a lower mortality rate. These observations should be interpreted with caution, because of the limitations of the BMI as a measure of overweight and obesity and because the results are based on cohort data. There is currently no reason to deviate from the recommendations regarding the indications for weight loss of the German Obesity Association.