

## **Physical Activity and Health**

# Breathing Power Check

### **SPECIFIC TARGETS:**

Functional test of respiration as well as guidance for the improvement of breathing power

### **CONTENTS:**

- Measurement of breathing power with Powerbreathe K5 analysis and training equipment
- Determination of breathing power index
- Interpretation and individual advice

### **TIME REQUIRED:**

15 minutes per person corresponding to 4 participants per hour

### **ORGANISATION:**

Space requirement:  $\geq 6 \text{ m}^2$ , power socket: 230 V







# Breathing Power Check

### **BACKGROUND:**

In addition to a number of other factors, our lung function also depends on the efficiency of the respiratory muscles. The better these are developed, the easier we find day-to-day activities or sports. Furthermore, well-trained respiratory muscles can also be regarded as a protective factor against diseases of the respiratory organs.

#### **PROCESS:**

The breathing power test measures the inhaled air within one breath at maximum inhalation with an active upright body posture. The actual measuring process takes only a few seconds. For hygienic reasons, every participant is given a disposable mouthpiece. The breathing power index (the so-called "S index", unit: cmH2O) is then determined for evaluation purposes. This value reflects the inhalation power. The evaluation is then based on age, sex, height, and weight-specific reference values.

#### **RESULTS:**

The participants are given a printout with an evaluation of the results of their breathing power check. Based on the test, they are given recommendations and exercises for targeted breathing training, which they can use to optimize their breathing technique or to complement their training. These are largely focused on exercises to strengthen the accessory respiratory muscles. In accordance with the respective data, the consultation also takes into account further aspects that are relevant for respiratory health, such as physical activity, smoking behaviour or known illnesses of the lung (e.g. asthma, COPD, fibrosis).

