

## Breathing device of all ages

### S-IMT

The S-IMT is the world's smallest pressure-resistive breathing training instrument used for the inspiratory muscle movement. It can increase your breathing ability and relieve shortness of breath.



- Inhalation muscle exercise help making diaphragm thickness
- Relieving dyspnea and increasing lung capacity
- Helps in swimming, soccer, marathon, cycling, and vocal music by improving cardiopulmonary endurance
- Lung capacity improvement helps exercise ability  
Increase in maximum oxygen consumption (VO2Max)

S-IMT pressure control range : MAX100cmH<sub>2</sub>O

Horizontal: 46.2mm  
Vertical: 38.6mm  
Height: 71.3mm  
Weight: 27g

| Level    | 1Level | 2Level | 3Level | 4Level |
|----------|--------|--------|--------|--------|
| Pressuer | 16     | 24     | 32     | 45     |
|          | 58     | 71     | 80     | 92     |
|          |        |        |        | 100    |

If step-by-step training is required ?

### Type 3 IMT

For more detailed inhalation training, systematically train with IMT products divided into low, middle and high intensities



Horizontal: 140mm  
Vertical: 90mm  
Height: 60mm  
Weight: 44g

| Model    | CMH <sub>2</sub> O |      |      |      |      |      |      |      |      |      |       |
|----------|--------------------|------|------|------|------|------|------|------|------|------|-------|
|          | Level              | 1lev | 2lev | 3lev | 4lev | 5lev | 6lev | 7lev | 8lev | 9lev | 10lev |
| IMT LOW  |                    | 12   | 20   | 28   | 36   | 44   | 52   | 60   | 69   | 81   | 93    |
| IMT BLUE |                    | 19   | 32   | 48   | 64   | 81   | 98   | 115  | 134  | 154  | 174   |
| IMT RED  |                    | 31   | 54   | 77   | 100  | 123  | 146  | 169  | 193  | 222  | 251   |

Doubles the effectiveness of exercise!

### BreST-MASK

It is a training mask designed to allow you to exercise at the same time as breathing with a pressure control function. You can expect more effective exercise when you wear it.

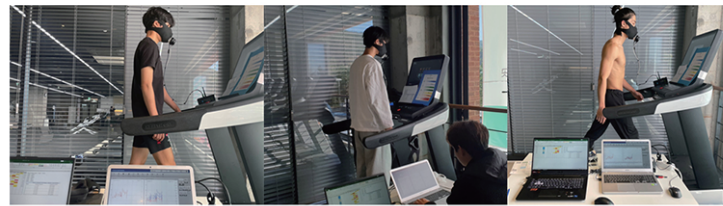
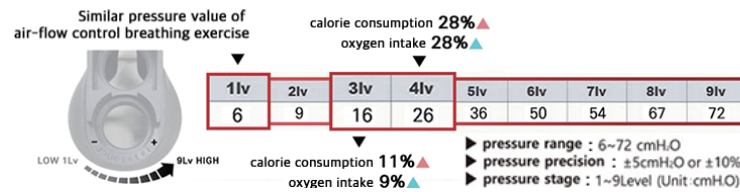
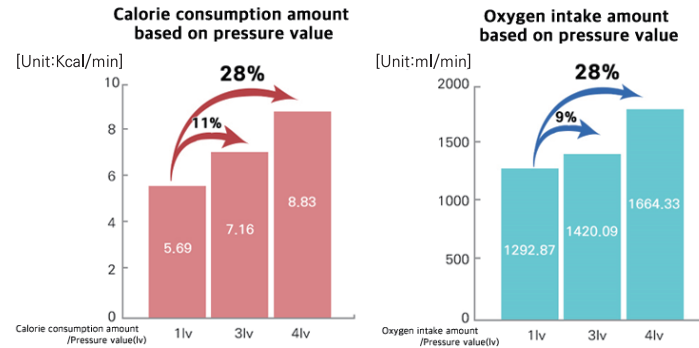


Horizontal: 110mm  
Vertical: 130mm  
Height: 85mm  
Weight: 121g

Your hands are free, so you can go with any workout.

### BreST-MASK Usability Test

Subject : Ordinary 20s of 21 men



The slide angle: risen from 10% to 16% | The speed: risen gradually starting from 2.7km/h

As the pressure increases, effective oxygen intake and burning calories per minute in 21 men with 20s has the potential to significantly improve so the higher pressure value, the higher effect will become.

## Do breathing exercises for your health!

BiG breathe



DO YOU WANT TO BREATHE HEALTHY?

breathing exercises of all ages  
**S-IMT**

Breathing exercises for rehabilitation and treatment purposes  
**IMT/PEP**

Deep Intake Exercise by Step  
**IMT**

Use for Sputum Excretion  
**V-PEP/IMT**

Pressure-controlled training mask  
**BreST-MASK**

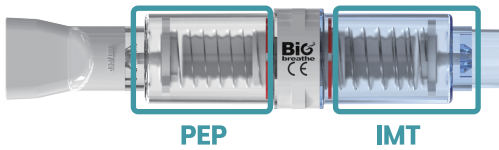
Measurement of respiratory muscles, breathing exercises and lung capacity  
**MIP/MEP**

## The basic of enhancing respiratory muscles

# IMT/PEP

This is medical devices for respiratory muscle exercise and respiratory rehabilitation of patients with respiratory diseases and the elderly. It can help strengthen the respiratory muscles before and after surgery and prevent lung complications such as pneumonia after surgery.

· IMT pressure range : MAX 40cmH<sub>2</sub>O · PEP pressure range : MAX 20cmH<sub>2</sub>O



Horizontal: 180mm  
Vertical: 50mm  
Height: 50mm  
Weight: 50g

※ Recommended exercise of more than 30% of MIP / MEP ※ Tolerance : ±2cmH<sub>2</sub>O or 5%

### MODE 1/ IMT

Strengthen diaphragm by inducing abdominal breathing during inhalation  
> Increase lung capacity and delay lactic acid secretion to improve motor ability

### MODE 2/ PEP

Strengthening of the exhalation muscles for sputum excretion of the lungs and airways

### MODE 3/ IMT + PEP

#### IMT/Inhale

- Improving the quality of life through constant training
- Prevention of airway secretions
- Effective in treating bronchial asthma

#### PEP/Exhale

- Improved symptoms of atelectasis
- Strengthen lung function, prevent lung complications
- Reduce shortness of breath

| Patient group  | Inspiratory | Expiratory |
|--|-------------|------------|
| COPD   | Yes         | Yes        |
| Asthma   | Yes         |            |
| Heart failure  | Yes         | Yes        |
| NMD  | Yes         | Yes        |
| Spinal cord injury                                   | Yes         | Yes        |
| Hypertension   | Yes         | Yes        |
| Sleep apnoea   | Yes         |            |
| Dysphagia  | Yes         | Yes        |
| Vocal cord dysfunction                               | Yes         | Yes        |
| Prevention of post operative pulmonary complications | Yes         |            |
| Weaning from ventilation                             | Yes         |            |
| Back pain  | Yes         |            |
| Stroke   | Yes         | Yes        |

※Reference ERS RESPIRATORY EQUIPMENT AND DEVICES EXHIBITION MAGAZINE

## Sputum & phlegm ejector by using stainless ball vibration

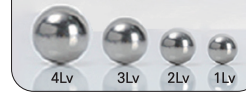
# V-PEP/IMT

It is a device that helps discharge sputum and phlegm in the lungs during exhalation and increases lung capacity by strengthening the diaphragm during inhalation.

| Level    | Lv1 | Lv2 | Lv3 | Lv4 | Lv5 | Lv6 | Lv7 | Lv8 | Lv9 |
|----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Pressuer | 7   | 11  | 16  | 21  | 26  | 31  | 36  | 40  | 46  |

vibrator ball can be detachable

#### Vibrator ball (vibration)Lv



IMT pressure range

MAX 46cmH<sub>2</sub>O  
(Pressure control unit : 5cmH<sub>2</sub>O)

Number of vibrations

23Hz

Horizontal: 150mm  
Vertical: 40mm  
Height: 95mm  
Weight: 51g



### Sputum, phlegm are signs of disease

Cough and sputum production due to fine dust

Pulmonary muscle X sputum discharge Difficulty lasting 3 weeks

secondary respiratory infection/airway obstruction

**permanent impaired lung function / destruction of the lungs**

• Recommended exercise pressure 30% or more of the table values below (We also have another various range of pressure)

**The effects demonstrated by various papers**



**BMC**  
Kims et al. BMC Geriatrics (2022) 22:155  
<https://doi.org/10.1186/s12877-022-02828-6>

**Medicine**  
Respiratory muscle training for recovered COVID-19 patients after weaning from mechanical ventilation  
A pilot controlled clinical study

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Respiratory muscle training for recovered COVID-19 patients after weaning from mechanical ventilation  
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**BMC**  
Effects of a new respiratory muscle training device in community-dwelling elderly men: an open-label, randomized, non-inferiority trial  
Sung Hyeon Kim, Seung Hyeon Kim, Sang Min Kim, Sanghwa Kim, and Sang Hyeon Kim

## Measurement of respiratory muscles, lung capacity, and breathing exercises

# MIP/MEP

It is a Big breath product that can check the intake and exhalation muscle and lung capacity in conjunction with the app, and it is a product that can do breathing exercises.

MIP/MEP pressure range

±300cmH<sub>2</sub>O  
(Pressure control unit : 5cmH<sub>2</sub>O)

Horizontal: 40mm  
Vertical: 50mm  
Height: 90mm  
Weight: 46g

Target

- respiratory rehabilitation
- improvement in sports performance
- Measurement of breathing exercises and functions to improve vocalization

- Wireless Devices Using Bluetooth Communication
- Various breathing exercises are possible using the app
- Enables remote monitoring through a web server



- Displayed by the user's gender and age compared to the average value
- ▶ Measuring the age of respiratory muscle strength
- When below LLN( Lower Limit of Normal), induce hospital visits
- Breathing levels can be monitored remotely in hospitals, nursing institutions, etc

