



SAMOZDRAV
BREATHING TRAINING DEVICE

www.samozdrav.com

USER'S MANUAL

OF THE SAMOZDRAV
BREATHING TRAINING DEVICE



Complete set

COMFORT

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1. DESCRIPTION OF THE BREATHING TRAINING DEVICE

1.1. Purpose of the training device

The low level of movement in our lifestyle, (that is related to almost 80% of today's population), became the real problematic & growing health issue of modern medicine.



Hypodynamia, stresses and chronic diseases disturb the proper breathing rhythm in humans, gradually resulting in a deficiency of a natural vasodilating substance, carbon dioxide CO_2 , in the blood.



Blood carbon dioxide deficiency, in turn, leads to vascular spasm, disturbed circulation, the development of ischemia and, as a consequence, to many chronic diseases (arterial hypertension, coronary heart disease, angina pectoris, arrhythmia, insomnia, chronic fatigue). Systemic ischemia is also one of the key factors for the development of diabetes mellitus type II, arthrosis, osteochondrosis, stomach ulcer, obesity and constipation. It is not possible to restore the normal vascular lumen through the administration of vasodilating drugs or biologically-active supplements.

Therefore it is necessary that the body's normal carbon dioxide content must be restored. Training sessions using the breathing training device make it possible to improve circulation and set a regular respiration rhythm. This training device combines the recommendations of prominent specialists (Strelnikova's breathing exercises, Buteyko's breathing technique) and the latest advancements of modern science. What's more, the training method using this training device compares favorably with other breathing exercise techniques in terms of its simplicity of use.

Indications for use

This training device may be used for the treatment and prevention of the following diseases:

- Arterial hypertension (high blood pressure);
- Angina pectoris;
- Coronary heart disease;
- Arrhythmia;
- Migraine;
- Asthma and chronic obstructive bronchitis;
- Pulmonary emphysema;
- Focal pulmonary tuberculosis;
- Chronic obstructive pulmonary diseases (COPD);
- Diseases of the musculoskeletal system (arthrosis, osteochondrosis);
- Disturbed function of the gastrointestinal tract;
- Neuroses.

All of the aforementioned diseases are most often caused by vascular spasm, which is eliminated by the regular use of the Samozdrav training device. The device is indicated for prophylaxis to apparently-healthy persons and athletes as a respiratory muscle training device, for the formation of regular breathing rhythm, enhancement of exercise tolerance, and overall improvement of the body's adaptation resources. It is also recommended to use this training device to eliminate the consequences of stress and lower emotional tension level.

Contraindications for use

- Chronic and infectious diseases in the exacerbation and decompensation stage;
- Respiratory insufficiency accompanied by pronounced hypoxemia in combination with hypercapnia;
- Recurrent (repeating) pulmonary bleeding and hemoptysis;
- Period of severe hypertonic crisis;
- A current course of chemotherapy and 3 months thereafter in cancer patients;
- Acute period of post-stroke, post-infarction condition (the first 3 months after stroke or myocardial infarction);
- Period after abdominal surgery (3 months).

If a patient suffers from chronic disease, this training device is not used during the exacerbation stage. In case of chronic disease exacerbation, the patient should receive the necessary treatment and only thereafter resume training.

After an interval of more than 3 days, you should resume training with a shortened session duration (e.g., if you missed training for 14 days, you should resume the sessions with the stress shortened by 12-15 min).

1.2. Design of the training device

This training device consists of three chambers:

- External chamber – base ① and cover ③ of the training device
- Middle chamber ②
- Internal chamber – cup ④ and cup cover ⑤

The internal chamber makes it possible to control the physical stress on the body. The middle and external chambers are required to increase carbon dioxide concentration and lower oxygen concentration in the inhaled gas mixture. The inhaled mixture has a beneficial effect on the body that is similar to the effect of physical activity (dilated vessels, improved circulation, reduced stress on the heart). The mixture is formed in the chambers and is supplied to the body through a tube ⑥. All chambers have holes for the proper air flow.

1.3. Preparing the training device for operation

Before you use the training device for the first time and in the future, you should wash it every day with drinking water and once a week with a cleansing detergent (liquid soap, bicarbonate of soda) in warm water, rinse and dry it. If necessary, all training device parts may be disinfected with a 3% hydrogen peroxide solution with the addition of a household cleansing detergent for 30 minutes at a

The device must not be used in the case of changed plastic color, the occurrence of cracks or other defects making it unsuitable for use. Store your training device in a dark, dry place at room temperature.



Assembled Samozdrav Breathing Training Device

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Figure 1.1 Design of the training device

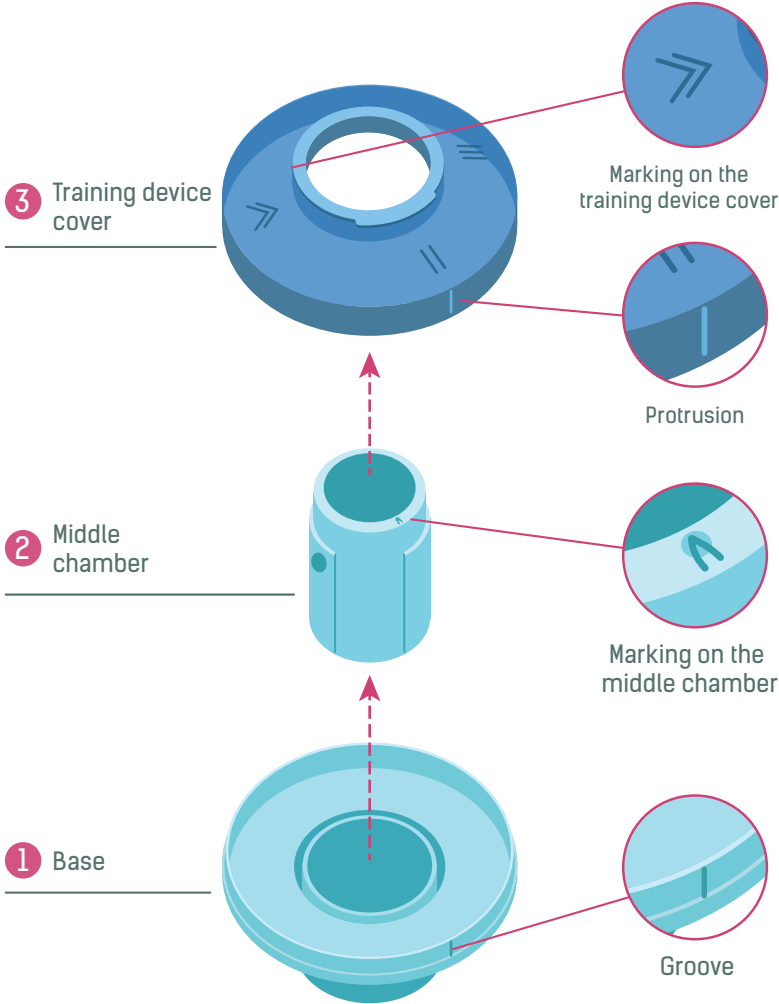
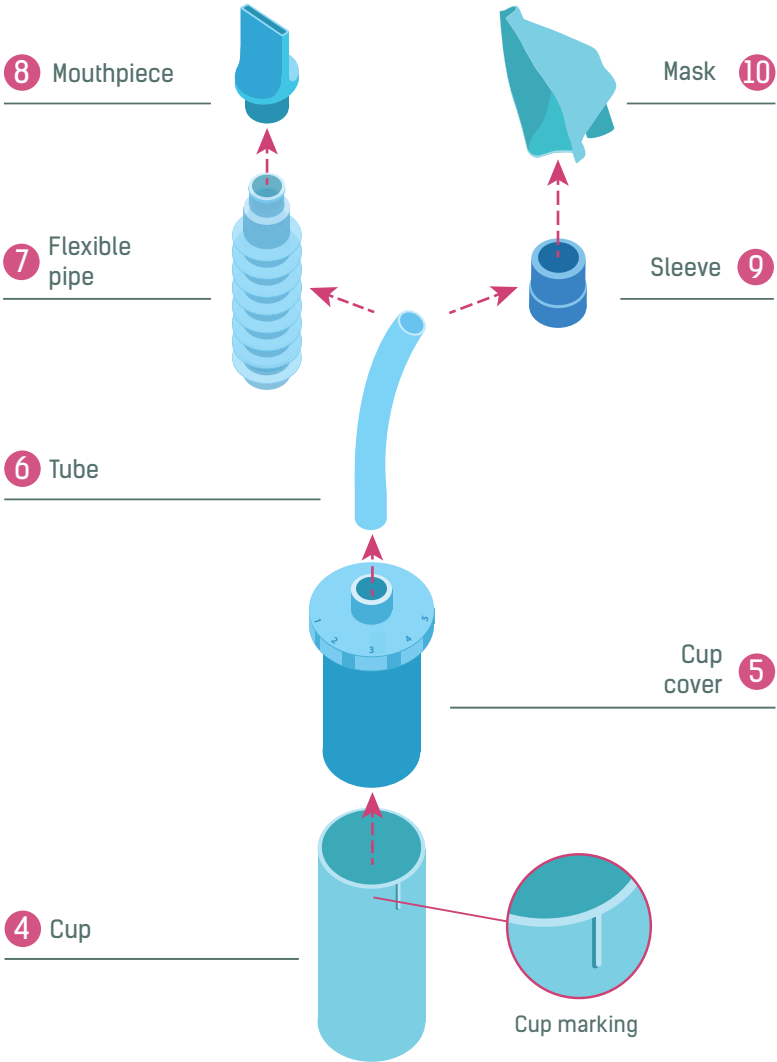


Figure 1.2 Design of the training device



2. TRAINING SESSIONS USING THE TRAINING DEVICE

2.1. Training method

Your body position should be comfortable so that you can breathe quietly and regularly. You may train while sitting at table, in an armchair (on the sofa), leaning back, reclining, lying (except for stage 4).

Training frequency:

You should train daily. The minimum frequency is once daily. But it is recommended to have two sessions daily to achieve the maximum result. You should train either 30 minutes before meals or drug intake or 2-3 hours after meals.

Breathing regimen:

Breathe only through the training device. When using the mouthpiece, close your nose with the special clamp and place the mouthpiece in your mouth. When using the mask, you may breathe both through your mouth and nose; the mask should fit snugly against your face.

NB:

Your breathing should be quiet and regular. Inhalation should not be deep, and exhalation should not be fast and abrupt. No physical exertion should occur during the session. If you experience the sensation of “air shortage” or an acute desire to stop breathing while using the training device, stop the session. This is usually observed during the first training

sessions or under transition to the next stage. Make the training without increasing the stress for several days in this situation, and only after that you should return to the previous regimen of extending session duration.

Duration of a single session:

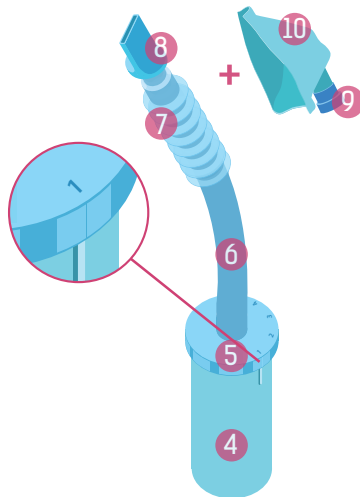
You should start your sessions at each stage for 3-10 minutes, thereafter gradually increasing the stress (by 1 minute every 1-3 days) and bring it to full-fledged training for 20-30 minutes. **Each stage duration is calculated from the time of reaching full-fledged training.**

2.2. Training stages

The training course using the training device encompasses 4 stages. When beginning to train, you should start from stage 1. There should be no intervals between the stages.

Stage 1:

Stage duration is 1-1.5 months. Assemble the device in simplified form (without external containers) at the first stage. Insert the cup cover **5** in the cup **4** so that digit "1" on the cover is opposite the cup marking. Connect the tube **6** with one end to the protrusion on the cup cover, the other end to flexible pipe **7**. You may connect either the flexible



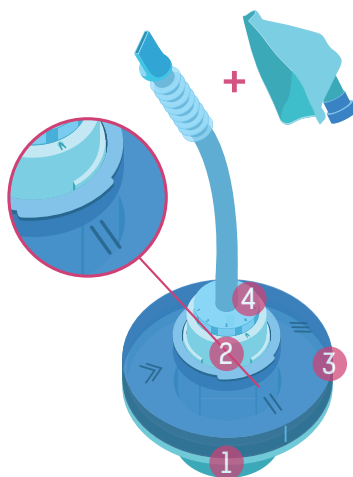
pipe to the mouthpiece 8 or the sleeve 9 of the mask 10

Stage 2:

Stage duration is 1-1.5 months.

At the second stage, connect the base 1 with the training device cover 3 so that the projection of the internal side of the training device cover rim fits in the groove on the base rim. Insert the middle chamber 2 up to the end in the assembled container so that the marking on the middle chamber coincides with the Roman digit II on the training device cover. Place digit "1" on

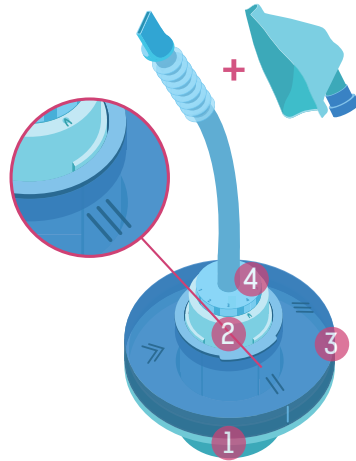
the cup cover opposite the cup marking. Place the cup 4 up to end in the middle chamber so that digit "1" on the cup cover is located opposite the marking on the training device cover.



Stage 3:

Stage duration is 2-3 months. At the third stage, connect the base 1 with the training device cover 3 so that the projection on the internal side of the training device cover rim fits in the groove on the base rim. Insert the middle chamber 2 to the assembled container up to the stop so that the middle

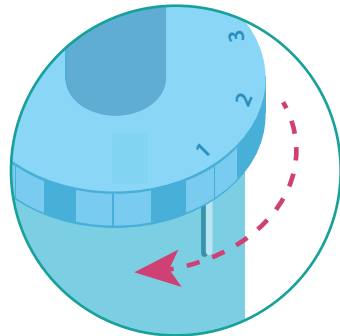
chamber marking coincides with the Roman digit III on the training device cover. Place digit "1" on the cup cover opposite the cup marking. Place the cup 4 up to the stop in the middle chamber so that digit "1" on the cup cover is located opposite the marking on the training device cover



Stage 4:

There are certain restrictions – please see "Stage duration."

Stage duration is 2 months. Assemble the training device similarly to the third stage. The middle chamber marking should coincide with the Roman digit III on the training device cover. Pour 3 table-
spoons of warm boiled water into the cup before each ses-



sion. When the session duration is brought to 20–30 minutes, move the digit on the cup cover relative to the cup mark from 1 to 2 in 15 days, to 3 in the next 15 days, and to 4 in the next 15 days.

2.3. Stage duration

Stage number and duration depend on the individual's particular health condition and his (her) age.

Persons taking vasodilating drugs or those with a pacemaker: duration of stage 1 and 2 is 1.5 months each, stage 3 lasts for not less than 3 months; stage 4 is excluded.

Children (aged under 12 years): duration of stage 1 and 2 is 1 month each, stage 3 lasts for not less than 2 months; stage 4 is excluded.

Persons aged over 70 years: duration of stage 1 and 2 is 1.5 months each, stage 3 lasts for not less than 3 months; stage 4 is excluded.

Patients with arterial hypertension: start each stage from 3–10 minutes, add 1 minute once daily; duration of a full-fledged training session is 30 minutes. It is recommended to move the session to a later/earlier time of day in case of significantly-elevated blood pressure (higher than 170/100).

Patients with arterial hypotension: start each stage from 1–2 minutes, add 1 minute once every 2–3 days; duration of a full-fledged training session is 20 minutes. If diastolic blood pressure is often below 60 mm Hg, train only once daily.

2.4. Continuation of training sessions:

Do not stop breathing training sessions completely after having improved your health condition after a training course using the training device. The recovery process of normal carbon dioxide content in the body and bringing the vascular lumen back to normal is planned for 4–10 months. But the recovery process may be slowed down in elderly subjects as

a result of accumulated irreversible changes. Therefore, it is recommended for such subjects to continue daily sessions at stage 2 or 3. It is beneficial for other persons to have regular sessions while training 2-3 times a week to maintain their health.

If you stopped your sessions with no training for more than 3 months, it is recommended to start training from the first stage. If the interval is less than 3 months, you should resume your sessions from the stage immediately preceding the one at which you stopped your sessions.

Some people may experience an exacerbation condition (this is observed most often in case of abrupt transition from one stage to another or sessions with excessive intensity and physical exertion). This natural manifestation of the health strengthening process is not a disease exacerbation but restoration of the function of the nerve receptors responsible for relaying information on the body's morbid state to the brain. This condition is transient, so sessions should not be stopped. You may shorten training duration by 5-10 minutes if necessary.

3. ADDITIONAL RECOMMENDATIONS

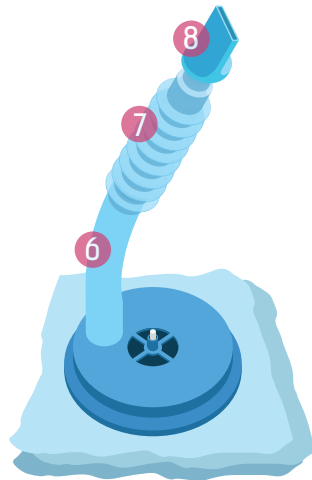
1. Training should not be associated with any tension. Do not have a session in an obviously irritated condition.
2. After alcohol use, you should train only on the next day.
3. If you follow the rules presented in the instruction consistently and correctly, you will not have to make any physical or volitional efforts during a session. **NB:** do not try to “accelerate the process,” “obtain a perceivable stress” because this results in the abrupt slowing down of the recovery process or its complete stoppage, as well as to a deterioration of achieved parameter values.
4. If you need to take a short break during your session (sneezing, coughing, swallowing saliva, etc.), it is permitted to interrupt breathing for 3–5 seconds, after which you should continue the training session in the same regimen. If the break lasts for more than 5 seconds, you should stop the training session.
5. A sanogenesis reaction, i.e. body clearing, may develop at the beginning of training sessions or when transitioning from one stage to another. This is sometimes manifested by intensified salivation or dry mouth, nasal discharge, lacrimation, pollakiuria, diarrhea or elevated blood pressure. These symptoms may be observed for 1–2 weeks. Do not stop training sessions in this case.

4. BREATHING INTENSITY METER

Carbon dioxide content in the human body at rest (immediately after sleep or after 40 minutes of immobility) is an index that makes it possible to assess the degree of abnormality of basic physiologic and biochemical parameters. Carbon dioxide quantity in the arterial blood influences the level of blood and oxygen supply of the entire body. Carbon dioxide content can be assessed by measuring breathing intensity. Respiratory minute volume (RMV) is the air volume inhaled and exhaled by a human per 1 minute.

4.1. Preparing the device for operation

For the purposes of measurement, assemble the device in the following form: the chamber is folded, i.e. it does not contain air; connect the tube **6** connected with the flexible balancer **7** and the mouthpiece **8** with the distributor projection.



4.2. Procedure for using the device

The measurement is taken in the morning, in sitting position, after fasting and before taking any drugs. Close your nose with your fingers, clamp or cotton wool. Place the mouthpiece in your mouth. Breathing should be quiet, regular, without delays. Both inspiration and expiration are done through the tube without removing it from the mouth.

Use a clock with a second hand to determine the time from beginning of chamber filling to its completion. The moment of chamber filling is assessed visually (the chamber becomes similar to an inflated pillow).

Expel the air after the measurement by pressing the air discharge valve. It is recommended to perform the measurement once every 2-3 months. Measure breathing intensity values for three days in a row, then calculate the average as indicated in the table.

RMV (Respiratory Minute Volume) value and CO₂ concentration can be found in the table provided below,

	Filling time	RMV, l/min	CO ₂ , %	Measurement date
3 – 10 months	50 s	17.3	3.3	
	1 min 00 s	13.0	3.5	
	1 min 10 s	11.1	3.6	
	1 min 20 s	9.8	3.8	
	1 min 30 s	8.7	3.9	
	1 min 40 s	7.8	4.1	
	1 min 50 s	7.1	4.2	
	2 min 00 s	6.5	4.4	
	2 min 10 s	6.0	4.5	
	2 min 20 s	5.6	4.7	
	2 min 30 s	5.2	4.8	
	2 min 40 s	4.9	5.0	
	2 min 50 s	4.6	5.1	
	3 min 00 s	4.3	5.3	
	3 min 10 s	4.1	5.4	
	3 min 20 s	3.9	5.6	
	3 min 30 s	3.7	5.7	
	standard	3 min 40 s	3.5	5.9
3 min 50 s		3.4	6.0	
4 min 00 s		3.3	6.2	
4 min 10 s		3.1	6.3	
	4 min 20 s	3.0	6.5	

5. ADDITIONAL INFORMATION ABOUT THE SAMOZDRAV TRAINING DEVICE

The Samozdrav Breathing Training Device is a medical product. Registration Certificate No. P3H 2014/1595 dated May 7, 2014 is issued by the Russian Federal Service for Healthcare Supervision. The efficiency of the training device was confirmed by clinical trials performed at the «Academician Shumakov Federal Scientific Center for Transplantology and Artificial Organs».

You can view video instructions on the breathing method to be adopted when using the training device, video lectures and customer testimonials – and even consult with a physiologist online (“Ask a question”) at the website www.samozdrav.ru.

BREATHING TRAINING DEVICE TU 9444-001-75160460-2013 CERTIFICATE

1. Purpose

The Breathing Training Device is an original portable device intended for breathing training for the purposes of the prevention and treatment of various bronchopulmonary and cardiovascular diseases and enhancement of the body's natural adaptation resources. This training device provides for the training of the breathing muscles with the generation of respiration resistance both in inspiration and expiration. Moreover, breathing training is carried out in the regimen of so-called "adaptation breathing," providing for the body's physiological adaptation under conditions of increased carbon dioxide concentration and lowered oxygen content in the inhaled gas mixture. The medical and preventive effect in patients suffering from diseases of not only the respiratory system but also other bodily systems is ensured by the generation of a hypoxic-hypercapnic gas mixture stimulating immune and adaptation mechanisms.

2. Complete set

Base (1 pc.); training device cover (1 pc.); middle chamber (1 pc.); cup (1 pc.); cup cover (1 pc.); tube (1 pc.); flexible pipe (1 pc.); mouthpiece (1 pc.); mask (1 pc.); nasal clamp (2 pc.); sleeve (1 pc.); instruction for use (1 pc.).

3. Safety precautions

If necessary, all parts of the training device may be disinfected with a 3% hydrogen peroxide solution and the addition of a household cleansing detergent at a temperature of 18–24°C for 30 minutes. The device must not be used in case of changed plastic color, occurrence of cracks or other defects making it unsuitable for use. Store your training device in a dark, dry place at room temperature. **Store your training device in a dark, dry place at room temperature.**

4. Certificate of acceptance

The training device meets applicable specifications.
Manufacturing date is indicated on the package.

5. Manufacturer's warranty

The manufacturer warranty period of the training device Samozdrav is for 12 months from the date sale. Validity of usage of Samozdrav is 3 years.

6. Claims procedure

Claims are submitted to the manufacturer in accordance with the established procedure to the address: «Samozdrav» Ltd. 18, 9 Maya Street, Samara, 442023, Russia.



SAMOZDRAV
BREATHING TRAINING DEVICE

WARRANTY VOUCHER

«Samozdrav» Ltd. as the manufacturer guarantees the compliance of the Samozdrav Breathing Training Device with applicable specifications, provided that transportation, storage and operation rules are observed.

Manufacturing date is indicated on the package.

Warranty period is 12 months after the date of sale/purchase of the training device.

Claims are submitted to the manufacturer in accordance with the established procedure:
address: «Samozdrav» Ltd.

18, 9 Maya Street, Samara, 442023, Russia.

E-mail: info@samozdrav.ru

Date of purchase _____

