

## **Sphere of application, risks, side effects of the Respiration Training Device**

### **1. What are the indications and contraindications for the use of Frolov's device?**

Indications for the use of the Frolov's Respiration Training Device include: acute and chronic bronchitis, bronchial asthma and vegetovascular disorders (hyper- or hypotension). It is also indicated for the complex treatment of pneumonia, lung tuberculosis and psychomatic diseases as well as for the heart attack, stroke and medical surgery rehabilitation.

The use of the Device is contradicted in patients with acute somatic and infectious diseases, onsets of chronic disease, decompensation, type II respiratory failure, class II A cardiovascular insufficiency, bronchial hemorrhage, bloody expectoration and implanted heart pacemaker. The use of the Device is also contraindicated in patients warned against physiotherapy.

### **2. What sensations does one experience when doing respiratory gymnastics with Frolov's Device?**

When doing respiratory exercises one usually experiences something like a slight shortness of air. This is associated with certain changes in the composition of the air in the lungs and with the stimulation of nerve cells, the chemoreceptors that react to such changes. Similar sensations appear when walking fast or running. While performing exercises with Frolov's Device, rookies often experience temporary sensation that is very much like slight dizziness. One may also experience warmth in the limbs, yawning, sialorrhoea, coughing up sputum. If you have yawning, coughing, sialorrhoea, you may have a 1-2 minute break from the exercise.

### **3. Can anyone get worse and develop an acute form of the disease because of doing respiratory gymnastics?**

A process known as sanogenesis is observed during breathing exercises, which means self-recovery and self-cleaning of the body that results in a natural purification of organs and tissues. Lungs, bowels, kidneys and liver are cleaned most effectively. Purification of joints, skin and other organs and tissues takes a longer time and is not so easy to notice. Remember that our body constantly renews itself: red blood cells (erythrocytes) renew every 90 days, and a full renewal cycle of the body is 7 years. Therefore, breathing is one of the keys to the renewal of the body!

If one has a nidus of infection (parodontosis, bad teeth, sinusitis, tonsillitis, bronchitis, pyelonephritis) a slight intensification of these diseases is possible because of the immune system activation. In such cases, special therapy is necessary at doctor's discretion (antibiotics, etc.) The process of recovery of a sick organ or tissue (joints, cardiac muscle, nerves) to its normal state is sometimes accompanied with sensations that eventually disappear on their own. After 3-4 weeks the trainees should pay special attention to their meals. Many patients lose appetite but continue overeating through habit. It is advisable to take smaller meals, eat as your appetite tells you, and choose the foods that have the most appeal to you.

### **4. What can be done if someone has exercised another method of breathing (the K.P. Buteyko or A.N. Strelnikova method, Qigong) and wants to master the breathing with Frolov's Device?**

If you practice any method regularly, your body gets used to it. The body's systems adjust to this kind of stimulation, activation and exercise. That is why it is unadvisable to quit these exercises. If you previously used another system of breathing exercises, split your time between the two methods. For example: breathe with Frolov's Device in the evening and take a session of another breathing gymnastics in the morning or in the afternoon. From sports medicine, it is known that the more varied the trainings are the better and more stable the result is. This is why such a compromising, combined version will only improve the stamina of your body. With time, you will recognize which breathing exercise program suits you best.

### **5. How long should one exercise with the Breathing Device and how often should one practice breathing gymnastics?**

If you wish to be in good health, you have to take care of it constantly. You cannot wash once and stay clean for a lifetime; you cannot eat once and stay full for a lifetime, etc. That is why one has to practice respiratory gymnastics on a regular basis. We recommend doing breathing exercises every day for the first 3-4 months (5-6 months for the seriously ill). This constitutes a therapeutic course. After that, breathing exercises as a special session are performed 2-3 times a week for preventive purposes. However, by this time there evolves the habit of controlling the breathing "on the go" and during everyday life activities.

### **6. May one take breaks from breathing exercises with Frolov's Device? How long should these breaks last? How should one breathe after a break?**

Normally short 5-7 day breaks do not reduce fitness and therapeutic effect if one has not had any stress and has not abused food consumption during the break, as it usually happens during holidays. After such short breaks the trainee can resume breathing in the same mode as before the break. Prolonged breaks for 10 days and longer usually occur during vacations and the level of fitness usually falls in these cases. One should breathe in a lighter mode for the following 7-10 days; reduce the level of water in the Device by 3-5 ml and the duration of a session by 20%-30%.

### **7. Why do you recommend using the Device in the evening, before going to bed and do not recommend exercising at other times of the day?**

Medical research indicates that evening sessions before going to bed have the best effect. Breathing with a prolonged phase of exhalation produces a good sedative effect on the nervous system. That is why these exercises help to improve sleep considerably even in elderly patients with insomnia. During the sleep, the brain and the central nervous system restore the disruptions and changes in regulation of internal functions that have occurred during the day. The immune system is more active at night. This is why evening exercises are more beneficial. You just choose the time on your own depending on your work schedule and family circumstances. If you work in shifts, it is beneficial to have a breathing session after the night shift and have rest after that. If you have no chance of breathing with the Device in the evening, you can breathe at other times of the day, but it is important that you adhere to this rule: the interval between breathing and taking meals must not be less than an hour, and better 2-3 hours.

### **8. Is it necessary to restrain the amount of food taken with the evening meal before doing exercise?**

This recommendation has been worked out based on the extensive practice. Of course, if we talk about pregnant women or a diabetic person with frequent hypoglycemia, then they must have an individual nutrition schedule. Diabetic patients are recommended to have a light meal (apples, yogurts, etc.)

immediately after breathing. But a water drink after a breathing session with the Device is good for everyone. During breathing many blood vessels and lymphatic capillaries start working more actively, and for better cleaning of the tissues it is beneficial to drink 200 — 300 ml of water to help the kidneys filter toxins and other harmful elements more actively.

**9. What do you recommend to patients with cancer as regards exercises with Frolov's Device?**

Cancerous diseases include malignant neoplasms and tumors. As no studies have been conducted yet, these diseases are conditionally included in the list of contra-indications for using Frolov's Device. For this reason the trainee with a cancerous disease has to seek oncologist's advice prior to starting any breathing exercises. Breathing gymnastics could be used for rehabilitation purposes, in addition to the main course of therapy. Non-malignant neoplasms (adenoma of prostate, mastopathy, uterine myoma, etc.) do not belong to the category of cancerous diseases and are referred to this group conditionally. Specialist's supervision is required in such cases (gynecologist, oncologist, etc.). The patient has to follow all oncologist's recommendations and use the Breathing Device as a complementary means for recovery, not as treatment.

**10. How should one take medicine if he or she is doing breathing exercises with Frolov's Device?**

Medication should be taken strictly according to your doctor's instructions; the same applies to physiotherapy and massage. Breathing exercises go very well with all kinds of treatment, including psychotherapy and acupuncture. As your well-being and quality of life improves, your physician could reduce the dose of drugs in due time. This is especially important for patients who take hormonal (insulin, etc.) and psychotropic (sleeping pills, tranquilizers) medications.

**11. How should one breathe with Frolov's Device if he or she is soon to be operated?**

Breathing exercises are beneficial both during preparations for surgery and in the postoperative period. Breathing exercises with Frolov's Device increase the body reserves and make the patient better prepared for the surgery, especially those who suffer from pulmonary and heart diseases and diabetes. The exercises also help to get over narcosis more easily and to recover after the operation. In case of a prolonged bed rest, breathing gymnastics with Frolov's Device helps to efficiently prevent bedsores, constipations, pneumonia and compensate the congestion of blood and lymph that bed patients often develop. What is especially convenient in such cases is that the patient can have combined trainings: breathing exercises and aromatherapy using the same apparatus in a hospital ward, which makes the work of medical personnel easier.

**12. What is the minimum age for breathing with the Device?**

Children aged 6 and older underwent treatment in clinical studies conducted at the Center for Restorative Medicine and Balneology under the supervision of the RF Ministry of Public Health. Independent observations have shown that the Device can be used in 3-4 year old children under parents' supervision.

**13. What additional means could be used to enhance the effect of the respiratory gymnastics?**

Since many diseases and aging of the body are associated with excessive accumulation of free radicals, it is worthwhile to use some means of antioxidant protection of the organism, for example, certain substances

that neutralize and bind free radicals. These are vitamins C, A, E, such microelements as selenium, copper, manganese, zinc, and unsaturated fatty acids. The most "powerful" antioxidants include garlic, high quality green tea, bilberry, and freshly squeezed juices, especially chokeberry juice (black ashberry), pomegranate juice. Incidentally, green tea is brewed for only 10 minutes, 1 teaspoonful per cup of boiling water. Antioxidants are also abundant in haws, great bilberries, snowball trees, cranberries, black currant, dog-rose and Cornelian cherries. Vegetables with the highest content of antioxidants include radish, turnips, garden radish and beetroots. Corn oils and linseed oil of cold extraction have a good antioxidant effect too (mustard oil is known for its anti-tumoral effect). Considering the antioxidant qualities of amber acid, one can recommend taking it periodically in various forms at general indications. This may be beneficial also for the reason that amber acid considerably increases the diffusion of oxygen in cells. Unripe berries of gooseberries and turnips abound with amber acid.

#### **14. Should the trainees quit smoking if they start exercising with Frolov's Device?**

Of course, it is better for you to stop smoking for the period of doing exercises. However, if you smoke on a regular basis, it is advisable to refrain from smoking 30 — 60 minutes before the exercises and not to smoke at all after a breathing session. Usually in the process of breathing exercises nicotine addiction gradually decreases, the lungs get cleared of phlegm, slime, smoke resins, so it is easy to quit smoking gradually if you wish. Additionally, it is possible to perform aromatherapy session with essential oils.

#### **15. Why do I need your Device if I exercise regularly?**

Breathing exercises are a kind of general physical exercises. They are beneficial for sportsmen who go in for the sports that require high physical activity, especially activities with high loads on the respiratory system (running, skiing, etc.). It is also important for sportsmen who go in for the sports that involve sophisticated coordination of movements (e.g., gymnastics). Combination of several simultaneous factors of breathing exercises within a single program gives this kind of breathing exercises an advantage over others.

### **Advice on the use of Frolov's Device**

#### **16. Posture during the exercises**

Please, pay special attention to the posture for the exercises. During the first two or three weeks, try exercising in different postures: sitting at a table, sitting in an armchair, lying on the side. It is extremely important that your back stays straight, the front wall of your belly easily moves back and forth and there is no strain in the cervical spine. Patients who suffer from pulmonary diseases and insufficient brain blood circulation are recommended to exercise in a lying/half-lying position.

#### **17. Control of exhalation time**

To control the time of exhalation it is desirable to have a watch with a second hand or a stop-watch, e.g. in a mobile phone. Of course, it is difficult to time every exhalation to the second, that is why 2-3 second fluctuations of the length of exhalation are inevitable. It is also inconvenient to look at the watch all the time, so you can look at the face of the watch at the beginning and at the end of each exhalation. It is also

possible to control two or three breathing cycles by the watch and then breathe for two or three minutes without looking at the watch.

### **18. Technique of breathing motions**

The proper implementation of breathing motions during exercises with a Frolov's Device implies calm, slow motions of the belly (diaphragm). One must avoid energetic, abrupt, active motions, pushes and jerks during breathing exercises and during inhalation sessions. This is especially important for patients with bronchial asthma, pneumosclerosis, hypertension, vegetative-vascular dystonia, arrhythmia, after infarct, stroke, after thoracic and abdominal cavity surgery.

### **19. Diseases of respiratory organs**

For respiratory organs diseases it is useful to have a full course of therapy, having both inhalation sessions in the morning and breathing exercises in the evening. A course of inhalation sessions can look like this: at first, have a 10-12 day course of inhalation sessions with herbs (e.g., sage or eucalyptus) followed by a course of inhalations with essential oils.

### **20. Passing on to the main mode of exercise**

At the start of exercising with the Device, it is recommended to breathe in a light mode: inhale with the nose, exhale into the Device. In the process of breathing in the main mode both inhalation and exhalation are performed through water with resistance. When and how to pass on to the main mode of exercise — inhalation and exhalation through the Device? The time for passing on to the main mode of exercise is determined individually: for young and healthy people it is 7-10 days, for the middle-aged and the sick — 15-30 days. The elderly and the sick have to breathe in the light mode for two or three months. The best way to determine when you are ready is as follows: if you can breathe in the light mode (inhalation with the nose, exhalation into the Device) for 20-30 minutes without getting tired and keep doing so for 3-5 days, then you can start breathing in the main mode (inhalation and exhalation through the mouth via the Device). At the same time, if you have serious disorders (asthma, bad stenocardia, arrhythmia), then during the first two weeks you can do the following: during the first half of the session breathe in the light mode (inhalation with the nose, exhalation into the Device), during the second half — in the main mode (inhalation and exhalation through the Device). Then move on to breathing in the main mode and breathe through the mouth via the Device from the very beginning of the session.

### **21. Breaks during breathing**

During prolonged (20-30 minutes) sessions one may have a physiological break for 1-3 minutes. This is especially advisable for patients with pulmonary diseases (asthma, bronchitis, tuberculosis, multiple bronchiectasis, pneumosclerosis, lungs emphysema, post-pleuritis condition, lungs surgery), as well as for those who suffer from short breath against a background of cardiovascular diseases. During the break, it is recommended to sit still and have a rest, to change water in the Device. Such breaks can be taken 2-3 times during a session.

### **22. Exercising when feeling not well**

During the sessions, one may feel worse due to existing diseases or because of the exercise regime disruptions, as well as because of stress, abrupt weather changes, etc. In this case one must take a 2-3 day break. In the case of a hypertension crisis, acute asthma or other diseases one should have a course of active therapy of the primary disease and then continue with the course of breathing exercises. In this case a longer break is possible — 7-10 days.

### **23. Discoloration of the Device's parts**

If parts of the Device have changed their color, one has to replace the parts. If the warranty has not run out, the manufacturer will replace them free of charge. Parts discoloration usually occurs with people who have lungs diseases, with smokers, with people who work in unhealthy industries (varnish and paint production and so forth). This happens because in the process of exercises purification of the lungs from toxic substances occurs. One must clean the parts of the Device regularly in accordance with the cleaning instructions specified in the manual.

### **24. Individual modes of exercises**

It is recommended to keep a diary of exercises in order to control exercise schedule and determine the effective mode of exercises. If you notice significant improvement under certain exercise conditions, you can breathe in this mode for a long time (1-3 months) without increasing the workload (exercise duration, water).

### **25. Exercising after taking medicine**

If you are on medication, you should take your medicine according to the schedule prescribed by your physician and breathe in the main mode in the evening, preferably 10-20 minutes before going to bed.

### **26. Diabetes and obesity**

Breathing exercises with Frolov's Device improve intracellular (endogenous) breathing and, therefore, induce metabolism. This is why they produce a favorable effect in patients with obesity and diabetes. In case of obesity, considerable reduction of appetite is possible. This is the time when the body uses its fat reserves. One should not starve in this case, it is recommended to follow various reducing diets that can be well combined with the breathing exercises. The trainees do not gain weight back after returning to their usual nutrition. Glucose uptake improves and the dose of insulin can be reduced in patients with diabetes. A considerable improvement up to complete recovery is possible in patients with diabetes of type 2.