

## Foreword by Prof. K. P. Buteyko

Thirty seven years passed since I managed to discover a cause of some so-called "diseases of civilisation" (broncho- and vascular spasms, allergy, etc.) The only cause of them is alveolar hyperventilation or deep breathing. The idea which came to my mind was that by decreasing the depth of breathing, or in other words, by the normalisation of breathing, we can cure that range of illnesses. The idea was based on the fundamental laws of physiology, biochemistry, biology and so on, and the correctness of that assumption was confirmed by experiments and tests.

The main postulates of my theory are:

1. It is known that while breathing deeply the organism exhales too much CO<sub>2</sub> and, therefore, its content in lungs, blood and cells decreases.

The lack of CO<sub>2</sub>, caused by deep breathing, changes blood pH into the alkaline

Such a change of blood pH influences badly activities of all enzymes (there are about 1000) and vitamins (there are about 20). As a result, the whole metabolism suffers. And, when blood pH reaches 8, the metabolism becomes improper to the extent that the organism dies.

2. It is also known that the lack of CO<sub>2</sub> leads to spasms of bronchial smooth muscles, brain vessels, heart, intestines, gall ducts and other organs. At the end of the 19th century the Russian scientist Mr. Verigo, from the town of Perm, discovered a seemingly weird law. According to him, as a result of a fall of CO<sub>2</sub> in the blood, the bond between oxygen and hemoglobin becomes stronger. This creates difficulties in the oxygen transition from blood to brain cells, heart, kidney and other organs. In other words, the deeper the breathing, the lesser amount of oxygen is available for brain, heart and kidney cells. This particular law, not very well known so far, underlies our discovery. As the Verigo law was left under wraps, the same discovery was much later made by a Danish scientist and named the Bohr effect. Being unfamiliar with this law would have resulted in great difficulties in understanding and accepting the theory offered by us.

3. The lack of oxygen in the brain (hypoxia), caused by deep breathing, is aggravated by broncho- and angiospasms. Organism's attempts to compensate for hypoxia of vital organs results in high blood pressure (arterial hypertension). Consequently, the blood flow increases and blood supply to the organs improves. Along with the lungs hyperventilation, hypoxia creates a false feeling of lack of air, accompanied by intensified breathing. This leads to an inevitable progression of the disease. CO<sub>2</sub> deficiency in nerve cells stimulates the whole nervous system and that makes the organism breathe even deeper.

Hence, nerve cell hypoxia along with upset metabolism and over excitation of the nervous system causes weakness of the intellect and destroys the nervous system (brain vessel sclerosis). That finally leads to a defunct mentality.

4. Destruction produced by deep breathing is aggravated by poisoning of the environment and food with chemicals, herbicides and medications. If this is so, then all of Western medicine's main principles that are based on methods of prevention and treatment, consisting of teaching people deep breathing techniques, only assist in increasing those diseases. At the same time, deep breathing exercises and Broncho-vasodilatory medications that increase the rate of

CO<sub>2</sub> removal from the body, do not improve but worsen the state of already ill patients. That is why so-called "diseases of civilisation" are not yielding to the treatment but spreading even further.

Based on this idea, the method of the intentional normalization of breathing, or in other words, the 'Deliberate Volitional Breathing Method' (DVBM) was developed. The principle of it is the decrease of the depth of breathing by deliberate efforts made by the patient to relax respiratory muscles until the feeling of some shortage of air. All mentally sound adults and children from the age of three are able to learn the method.

Our ideas can be used on a broader scale, starting from antenatal training of prospective mothers, caring for infants, teaching children some physiological norms and finishing by the implementation of the general health improvement program for the entire population. The ideas also can be used widely in space medicine, surgical practice (as a part of the preparation to complex surgeries), pedagogy, singer's training and sport.

In common opinion, medicine (similar to many other sciences) needs to be radically reshaped. We are seeing our ideas — along with other progressive but previously rejected ideas — as a foundation of the future medicine.

We believe the first and foremost task is to give people the information about our discovery in order to stop the deep breathing propaganda by radio, TV and mass-media and to cancel deep breathing exercises at the hospitals and clinics.

The complete victory will come when the whole civilised world realises: the deep breathing principle of greed is the worst of the human vices. That is the source of almost all troubles, the main cause of diseases and death for overwhelming majority of human beings.

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