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## Two pyramids of two products

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Nutrition is the basis of life activity, but in recent years it has been the main cause of morbidity and mortality in humans. Apparently we are missing very important aspects in the science of nutrition. All the theories of balanced nutrition are aimed at solving issues of the nutrition safety and adequacy. Nutrition is primarily aimed at ensuring the repair and renewal of protein and cellular structures and the storage of excess energy flow. This process occurs due to the secretion of the insulin hormone and the activation of the parasympathetic nervous system. However, this leads to a loss of efficiency - "well-fed animal is not a hunter". Currently, a number of proposed products to ensure the rehabilitation processes, which are presented in the form of "Food pyramid". When we work, we use the energy reserves of the body. This is the so-called endogenous nutrition, which are presented in the form of "Energy pyramid". Nowadays the life style of a person has changed significantly. There is a decline in physical labor and a predominance of intellectual and operator activities, which led to a reduction in fat consumption and increased use of glucose. This led to the development of a deficit of the one energy source (glucose), against an excess of the other – fats. An energy imbalance has been developed that contributes to the increase in metabolic pathologies - diabetes, obesity and cardiovascular diseases. It is necessary to contribute to the correction of energy imbalance, through the use of specialized products in the phase of work or in the post-absorbent period. Based on such principles, we have developed a specialized product for feeding obese patients, to which English patent GB 2496119 of January 22, 2014 was received. This product does not induce the secretion of insulin, so working capacity remains; it improves the glucose homeostasis in reduced diet and prevents the development of functional disorders that accompany the usual technology directed to body weight reduction.

## Biography

Emil Mukhamejanov is a doctor of medical sciences, professor. In 1964-1972, I worked in the Institute of Physiology, responsible for the regulation of muscle contraction. In 1974-1991, I worked in the Institute of nutrition, responsible for the regulation of energy metabolism and metabolic diseases. Developed metabolic model of balanced diet coupled with effects of toxic compounds, physical activity and dietary factors. Has developed specialized nutrition products for athletes and for the prevention and treatment of metabolic diseases. Currently working in the Scientific Center of anti-infective disorders, develop approaches of reducing the negative impact of drugs. I participate in a grant (JSC National Medical University named after S.Asfendiarov) for the study of polymorphism in diabetes mellitus. I am a scientific consultant at Fucoidan-World.

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