

Abstract

In spite of good living conditions, the number of people in the state where the total food intake or individual nutrients is insufficient, unnecessary or unbalanced has increased in recent years. In case of superfluous food intake, amount of fat tissue increases and overweight and obesity appear, which is associated with an increased risk of type 2 of diabetes, cardiovascular disease or certain types of cancer. Insufficient intake of food may, for example, result in the function of the immune system, resulting in an increased risk of infection or poor wound healing. In addition to primary malnutrition, we can see malnutrition as the secondary manifestation of another illness. The state of weight loss and malnutrition caused by another disease is called cachexia. This is a serious complication of primary therapies. At present, in addition to established approaches to the treatment of these diseases, some studies address treatment options using compounds that influence the regulation of food intake. One group of these compounds is peptides able to reduce food intake (anorexigenic peptides) or increase it (orexigenic peptides). To these natural substances in the organism are also sought analogs with properties more favorable for use in practice. One of the possibilities are lipidized analogs, among the advantages belongs, besides other things, the reduction of the polarity of the modified peptide and thus the improved permeability of the membranes and the distribution to the tissues.

Key words: Obesity, cachexia, food intake, peptides and lipidized analogs.