THE INFLUENCE OF CARBONATED BEVERAGES ON THE COURSE OF METABOLIC PROCESSES IN THE BODY

Dymchenko A.A.
Scientific supervisor: Rybak V.A.
National University of Pharmacy, Kharkiv, Ukraine
anyadimchenko30@gmail.com

Introduction. The discovery of the secret of carbonated beverages was as unexpected as most of the great discoveries. English scientist Joseph Priestley wondered what kind of bubbles emit beer during fermentation. He then placed two containers of water over the brewing beer. After a while, the water was charged with beer carbon dioxide. After tasting the liquid, the scientist was struck by its unexpectedly pleasant sharp taste and in 1767 he made the first bottle of soda. Today in the modern Carbonated drinks are becoming more and more popular in the world, especially among young people. According to statistics, most Ukrainians drink carbonated beverages. Therefore, the study of the effects of carbonated beverages on the human body becomes very relevant.

Aim. To study the effect of carbonated beverages on the course of metabolic processes in the body.

Materials and methods. The work uses analytical, logical, generalizing methods.

Results and discussion. Carbonated drinks are water in which one or more gases are dissolved by natural action (water load of carbon dioxide during its ascent to the source) or artificial (by adding carbon dioxide or other products to create carbonic acid). Carbonated drinks are sweet and unsweet. Sweet carbonated drinks are one of the most harmful products we consume.

The American Heart Association estimates that a small bottle of the drink contains about 3 times the daily value of sugar. When a person drinks this drink, the pancreas quickly begins to produce insulin, reacting with the entry of sugar into the body. As a result, the sugar level in blood rises sharply. About 20 minutes after drinking, the amount of sugar in the blood reaches a high enough level, the liver begins to respond, turning a huge amount of sugar into fat. In 40-50 minutes increases the production of dopamine – a hormone that stimulates the pleasure centers in the brain. An hour later, your blood sugar begins to drop sharply and you want to drink a carbonated sweet drink again. Such drastic changes in blood sugar levels can lead to diabetes and cancer.

Dietary recommendations from the United States, Canada, Britain and Ukraine warn people against drinking sugary carbonated beverages. The consequences of drinking such drinks can be: caries, obesity, gout, cardiovascular disease, leaching of

calcium from the bones. It is not recommended to drink carbonated drinks to children under 3 years.

The use of ordinary mineral water does not lead to serious consequences. Unlike sweet carbonated drinks, unsweetened ones also have some benefits. The use of carbonated water brings positive changes in the digestive system. It helps to improve swallowing movements by stimulating the nerves that are responsible for swallowing function; elimination of constipation, especially in the elderly. Drinking carbonated water lowers blood cholesterol, sugar levels and prevents the development of cardiovascular disease. When drinking carbonated water, belching, bloating, and flatulence may occur. All this is due to the excess content of carbon dioxide in the body, especially among people, who suffer from diseases of the gastrointestinal tract. Carbonated water bubbles irritate the mucous membrane of the gastrointestinal tract and lead to hypersecretion of gastric juice and hyperchlorhydria, which is manifested by poor health in people who suffer from peptic ulcer disease.

Conclusions. Thus, the use of carbonated beverages has a negative effect on the course of metabolic processes in the body. This leads to the formation of diseases of the gastrointestinal tract, kidneys, liver, causes allergic reactions, increases the likelihood of obesity and diabetes, destroys teeth, is addictive, and with prolonged use can provoke the development of cancer.

ALLERGEN SPECIFIC SUBLINGUAL IMMUNOTHERAPY

Fida Sleiman
Scientific supervisor: Myronchenko S.I.
National University of Pharmacy, Kharkiv, Ukraine
fida_sleiman@yahoo.com

Introduction. Allergen specific immunotherapy (ASIT) is the only method that can fundamentally change the response of the immune system to an allergen. ASIT acts on almost all pathogenetically significant links of the allergic process, inhibits the early and late phases of an IgE-mediated allergic reaction, which is an indisputable advantage of this method of therapy. Even modern pharmacological preparations do not possess such properties.

Aim. The aim of this review is to provide an overview of the current knowledge of the mechanisms of sublingual immunotherapy based on the recent publications.

Materials and methods. Data analysis of literature and Internet sources.