

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**

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**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.

**Results and discussion.** Sublingual immunotherapy (SLIT) has recently emerged as an effective and safe alternative route to deliver immunotherapy. The use of the sublingual method of immunotherapy leads to the fact that the allergen for a long time comes into contact with the vast surface of the oropharyngeal Valdeyer ring (palatine and pharyngeal tonsils, lateral pharyngeal ridges, numerous granules of the oral mucosa), which in turn are connected through the lymphatic vessels with the system lymph nodes of the neck, submandibular region and trachea. When an allergen is swallowed with saliva, the lymphatic system of the digestive tract is also involved in the immunological process – Peyer's patches and others. Getting further into the blood, the allergen involves the system with the participation of T- and B-lymphocytes in the immune process. Clones of lymphocytes of immunological memory are formed, which prepare the patient's body for an effective protective immunological response. Thus, application of the allergen to the mucous membrane of the mouth and respiratory tract stimulates both local and general immunity. SLIT ensures good tolerance of medicinal doses of drugs; the possibility of achieving very high course doses of the allergen; low risk of developing anaphylactic reactions; no risk of transmission of life-threatening infections that exists with injecting drugs; saving the time of the doctor and the patient; high adherence to treatment on the part of patients.

**Conclusions.** Thus, intra-oral allergen delivery to the sublingual mucosa has been proven to be safe and effective. SLIT is widely accepted by most allergists as an alternative to conventional subcutaneous immunotherapy.

## **HEMOLYTIC JAUNDICE SYMPTOMS, CAUSES AND DIAGNOSIS**

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**Introduction.** Jaundice is often a symptom of a wide range of diseases of the blood system, liver, biliary tract and gastrointestinal tract. More than 400 reasons are known that cause a pathological increase in the content of bilirubin in the blood plasma.

**Aim.** The purpose of this literature research was to study the literature data concerning hemolytic jaundice symptoms, causes and diagnosis. For this research we used PubMed, which is one of the most popular free search engines about medicine and biomedical journal literature.