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NATURAL DYES IN THE CONCEPT OF HEALTHY EATING

The problem of functional foods with biologically active compounds of natural origin, used as natural dyes, is very current in the food industry.

Currently, synthetic dyes are used in the manufacture of products dairy products, carbonated beverages, sweets, etc. to give an attractive and appetizing look to the food. Prolonged consumption of these foods leads to various harmful effects on the health of consumers. Studies show that the intake of synthetic dyes, such as tartrazine and azorubin, associated with a diet high in trans fats, nitrites, nitrates and low fiber intake are linked to malignancies especially in the esophagus, breast, rectum, stomach, ovaries and can cause multiple allergies. Another noticeable harmful effect is hyperactivity with attention deficit in children. The replacement of synthetic dyes with compounds of natural origin obtained from berries (chokeberry, sea buckthorn, rosehip, hawthorn) in food is current. In vivo and in vitro research has shown that these berries have various positive effects on consumer health: hepatoprotective, cardioprotective, antioxidant, antimicrobial and others. Unlike synthetic dyes, natural pigments are sensitive to chemical and physical factors, they need to be stabilized, thus presenting a strategic problem. Procedures Intelligent extraction of biologically active compounds, while maintaining functionality and improving bioavailability, will allow the manufacture of a wide range of natural dyes and antioxidants with various applications, including for the food industry. Thus, the manufacture of functional foods, able to reduce the impact of oxidative stress and nutritional allergies, will contribute to the integration of the concept of healthy eating and increase the competitiveness of food industry enterprises.