

ABSTRACT

Safety of the selected food supplements in terms of the presence of additives

Additives are commonly present not only in food, but also in food supplements. Safety of these substances remains a question.

The aim of the theses is to evaluate the safety of the best selling supplements in the Czech Republic in the year 2011 from the viewpoint of additives and constituents.

Given the scale of researched products, I focused on products strengthening the cardiovascular system containing omega 3 fatty acids , garlic, coenzyme Q 10 and lecithin. As a source of information about the content and the presence of additives, the data from the Ministry of Health and the Information System decision of the Chief Hygienist (IS RoHy) were used. The safety evaluation of additives was carried out on the basis of the available methodology for consumers. Information about adverse effects of additives and content substances were searched using information databases Martindale , Reprotox, AltMedDex, Drugdex, National Center for Complementary and Alternative Medicine (NCCAM), IPCS INCHEM, PubMed independent commission database JECFA Joint FAO / WHO Expert committee on Food additives. Descriptive statistics was used.

Of the large number of products (97), 5 products were classified as safe and 92 as products harmful to health. In some products, I have found the same side effects in the content substance and additives contained there as well. The most common reactions were primarily gastrointestinal problems and hypersensitivity reactions. Given that some of the adverse effects of additives and content substances were identical, its action may even be potentiated.

In this pilot study, we concluded that the additives in food supplements may cause side effects for some predisposed individuals, so further research is recommended.

Key words:

coenzyme Q 10, food additives, food supplements, garlic, lecithin, omega 3 fatty acids