

ABSTRACT

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Title of diploma thesis: Cardiovascular effects of isoflavonoids

Background:

The aim of this thesis is to summarize existing findings about natural vegetable substances known as phytoestrogens-isoflavones and to map the results of latest studies focused on cardiovascular effects of isoflavones.

Main findings:

Available data suggest that isoflavones and their metabolites have positive effect on human organism. These include antiatherosclerotic, antimenopausal and anticarcinogenic effects and a positive effect on osteoporosis. Positive effect on cardiovascular system includes antihypertensive, anti-inflammatory, anti-angiogenic, antiproliferative and antiaggregating effects. On the other hand, there are studies that point out possible risks related to mainly long-term use of isoflavones. Nevertheless, even though the findings of cardiovascular effects are not always consistent, most of them confirm positive effects of isoflavones on cardiovascular system.

Conclusion:

Isoflavones and their metabolites are a very interesting group of substances with natural origin and carry a potential for possible development of new drugs. Therefore, they deserve further research of both their therapeutic and preventive effects as well as their risks.

Key words: Isoflavones, cardiovascular effects, oestrogen, atherosclerosis, menopause