

ABSTRACT

Charles University

Faculty of Pharmacy in Hradec Králové

Department of Pharmacology & Toxicology

Student: Leona Ryzová

Supervisor: PharmDr. Jana Pourová, Ph.D.

Title of diploma thesis: Cardiovascular effects of silymarin

Aim:

The aim of the diploma thesis is to summarize the existing knowledge about the mixture of natural plant substances collectively referred to as silymarin and to map the results of the latest studies focusing on the cardiovascular effects of silymarin.

Main findings:

Available data suggest that silymarin has positive effects on the human body, including hepatoprotective, choleric and cholagogic, neuroprotective, anticancer and antiviral, anti-inflammatory and positive effects on diabetes mellitus. Positive effects on the cardiovascular system include protective effects on the vascular endothelium, antioxidant effects, beneficial effects on blood lipids, regulation of blood aggregation and antidiabetic effects. Although the conclusions from cardiovascular studies are not always the same, most confirm the positive effect of silymarin on the cardiovascular system. A necessary part of future research will be the search for new dosage forms in order to increase the bioavailability of silymarin, which so far limits its clinical application.

Conclusion:

Silymarin is a mixture of natural substances with significant potential for the possible development of new drugs. It deserves its further research of both its therapeutic and preventive effects as well as other, not yet fully available findings, necessary for clinical application.