

STUDY OF THE EFFECT OF SOYBEAN PRODUCT FLAVONOID ON ENDOTHELIAL FUNCTION (NO) IN CASE OF ISCHEMIC HEART DISEASE

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BACKGROUND/AIMS: The effect of soybean flavonoids – biologically active supplements extracted from soybeans – on endothelial function, lipid metabolism and C-reactive protein was studied in patients with ischemic heart disease.

METHODS: A total of 67 patients (average age 60±0.9) with ischemic heart disease were given 400-mg flavonoid supplement for 6 weeks. Levels of NO in patients' blood were measured by means of Epr spectrography and SPIN-trap method and lipid metabolism – by spectrophotometry. Echocardiographic and Doppler echocardiographic investigations were carried out as well.

RESULTS: The study proved that soybean flavonoid supplement positively affects endothelial function. It significantly increases NO level, improves lipid metabolism and reduces C-reactive protein. Administration of flavonoid supplement in patients with ischemic heart disease improved their global systolic function and increased transaortic flow.

CONCLUSIONS: Based on the obtained data, it can be assumed that soybean flavonoid stimulates endothelium relaxation factor - NO synthesis. It also has a lipotropic effect and anti-inflammatory action that makes it a reasonable option in patients with ischemic heart disease.

Key words: soybean product, flavonoid, NO.