

## **UTICAJ LDL HOLESTEROLA NA POVEĆANJE SISTOLNOG PRITISKA**

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Kardiovaskularne bolesti predstavljaju jedan od vodećih uzročnika smrti današnjice, a najčešće su uzrokovane aterosklerozom. S druge strane, pored višestrukih faktora rizika za nastanak ateroskleroze, visoko je rangirana povišena vrijednost štetnog holesterola u krvi. Cilj ovog rada je ispitati povezanost i uticaj povišene vrijednosti LDL holesterola na povećanje vrijednosti sistolnog krvnog pritiska. U istraživanju je učestvovalo 80 ispitanika sa povišenim vrijednostima LDL holesterola u krvi, svi su podvrgnuti mjeranjima vrijednosti LDL holesterola i krvnog pritiska u dva ponavljanja, a podaci su statistički obrađeni metodama deskriptivne statistike. Korelacionom analizom poređene su vrijednosti LDL holesterola i sistolnog krvnog pritiska. Dobijen je Pearson-ov koeficijent korelacije 0.465, što ukazuje da postoji međusobna veza. Istraživanje pokazuje da problem sistolne hipertenzije kao posljedice povećanog LDL holesterola imaju dominantno osobe preko 35 godina, kao i da nema značajne razlike između polova. Istraživanje potvrđuje nultu hipotezu - povećan nivo LDL holesterola u krvi dovodi do povećanja sistolnog krvnog pritiska.

**Ključne riječi:** holesterol, sistolna hipertenzija, korelacija

## EFFECT OF LDL CHOLESTEROL ON INCREASED SYSTOL PRESSURE

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Cardiovascular diseases are one of the leading causes of death today, and are most often caused by atherosclerosis. On the other hand, in addition to multiple risk factors for atherosclerosis, elevated levels of harmful cholesterol in the blood are highly ranked. The aim of this study was to examine the association and the effect of elevated LDL cholesterol on the increase in systolic blood pressure. The study involved 80 subjects with elevated LDL cholesterol levels in the blood, all underwent measurements of LDL cholesterol and blood pressure in two replicates, and the data were statistically processed by descriptive statistics. Correlation analysis compared LDL cholesterol and systolic blood pressure. A Pearson correlation coefficient of 0.465 was obtained, indicating that there is a correlation. Research shows that the problem of systolic hypertension as a consequence of increased LDL cholesterol is predominantly in people over the age of 35, and that there is no significant difference between the sexes. The research confirms the null hypothesis - an increased level of LDL cholesterol in the blood leads to an increase in systolic blood pressure.

**Key words:** cholesterol, systolic hypertension, correlation