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Preventive Effect of hydroalcoholic extract of *Silybum marianum* and *fumaria vaillantii* in atherosclerosis

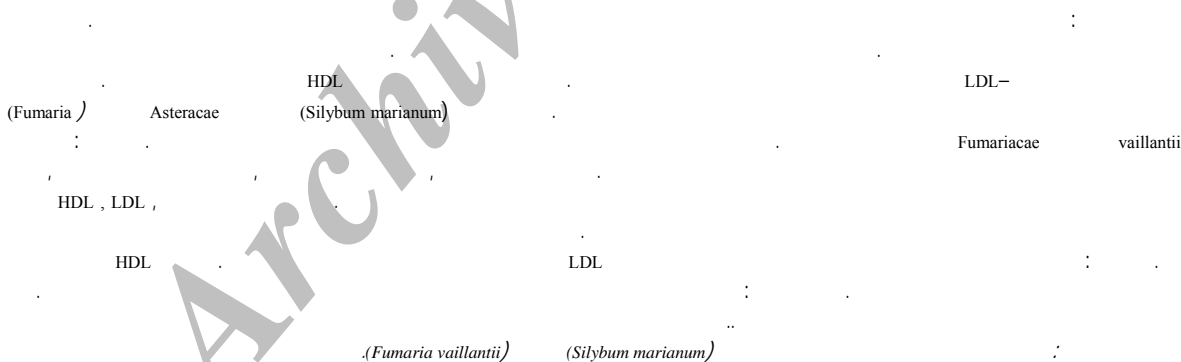
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Objectives: Atherosclerosis is a disease of the vascular system that produces a gradual deposition of lipids in large and medium arteries. This disease is the most common cause of death in the world. The increase in cholesterol is an important factor in development of atherosclerosis. Epidemiological studies have shown significant and positive affinity between total cholesterol and LDL cholesterol of serum by the formation of these diseases, but this affinity is negative about HDL cholesterol. It is reported that plant extracts contain flavonoids which are effective for the reduction of serum cholesterol. *Silybum marianum* of Asteraceae family and *fumaria vaillantii* of fumariaceae family contain flavonoid compounds. In this study we have evaluated the effect of hydroalcoholic extract of these plants on the level of serum cholesterol. **Methods:** 20 male rabbits were randomly divided in four experimental groups. Through 45 days, 4 groups were fed with standard food, hypercholesterolic food, hypercholesterolic food with *Silybum marianum* extract and hypercholesterolic food with *fumaria vaillantii* extract respectively. Then total cholesterol (TC), LDL cholesterol, HDL cholesterol and triglycerides (TG) were measured before and after experimental periods of 1 and 2 months of. The aorta was removed for assessment of atherosclerosis plaques. **Results:** The results indicate that in the third and fourth group the extracts of both plants reduce the amount of TC, LDL and TG but the amount of HDL augment. **Conclusion:** Therefore the extracts of *Silybum marianum* and *fumaria vaillantii* can be effective inhibited the development of atherosclerosis.

Key words: Atherosclerosis, Hypercholesterol, flavonoid, *Silybum marianum*, *fumaria vaillantii*.



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(Asteracea) Silybum marianum

% % %)
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LDL VLDL
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mg/kg b. w.

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Fumariaceae Fumaria vaillantii loisei C25H22O10

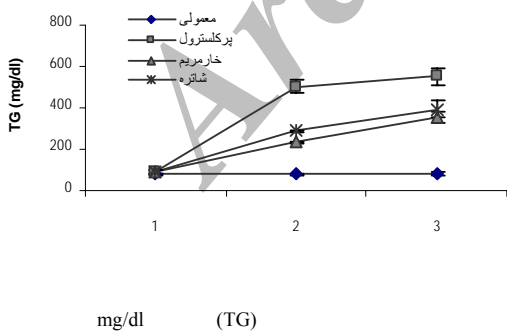
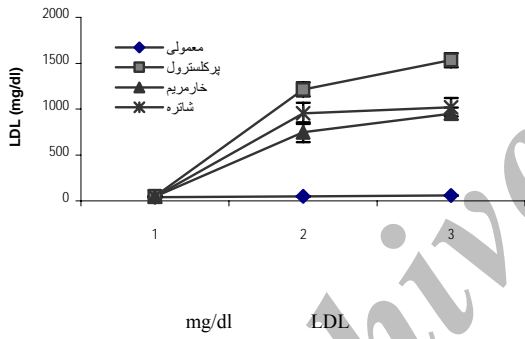
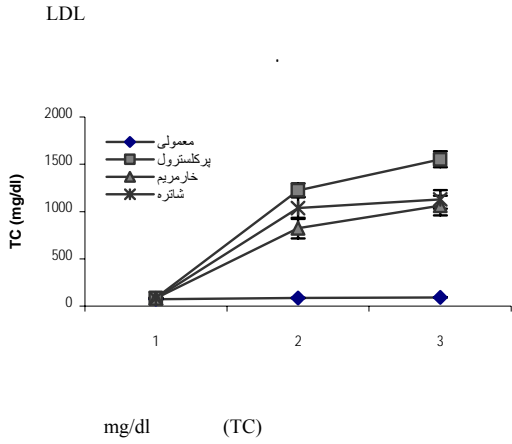
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(p<0.05)
(p>0.05)
LDL



HDL LDL

VLDL

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SPSS

P < /

Mean ± sd

(p<0.05)

VLDL

VLDL

(p>0.05)
(p<0.05)

LDL

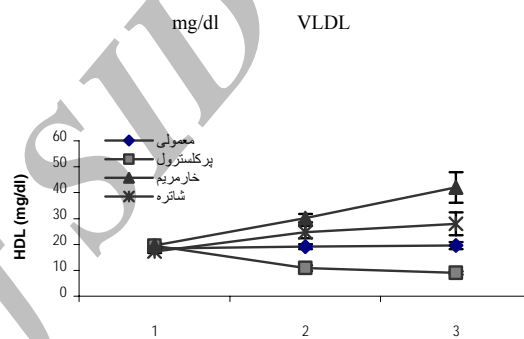
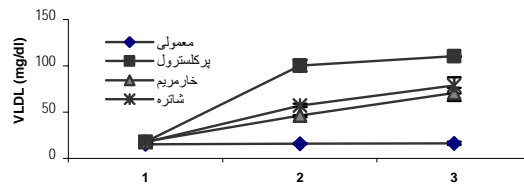
LDL

HDL
(p<0.05)

VLDL

(p<0.05)

(p>0.05)



HDL

HDL

HDL (p<0.05)

(p<0.05)

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6- References

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