Effects of royal jelly on atherogenesis in apoproteinE knockout mice
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Royal jelly is a substance secreted by hypopharyngeal and mandibular glands of young worker bees and it is used in several countries as a dietary supplement. It has many biological and pharmacological activities, being a vasodilator, hypotensive agent, anti-hipercholesterolemic, anti-inflammatory and antioxidant. We evaluated the effect of royal jelly on glycemia, lipid profile and atherosclerotic lesions in ApoE-/- mice. Animals were divided into Control (CT, n=5) and Royal Jelly (RJ, n=5; administered via gavage, 71 mg/kg) and received chow diet and water ad libitum during 8 weeks. On weeks 0, 2, 4, 6, and upon sacrifice, blood, liver, heart, thoracic aorta, and epididimal adipose tissue were removed for analysis. The RJ group consumed more food than CT and presented increased weight gain after the 3rd week. Glycemia was lower in RJ on the 2nd and 4th weeks. There was no significant difference on cholesterol, serum, liver, and fecal triglycerides between groups. The epididimal adipose tissue was significantly bigger on the RJ group and there was no significant difference on size of atherosclerotic lesion of the thoracic and abdominal aortas (SUDAN IV). The data indicated there is no benefits in royal jelly intake for the experimental model proposed.

Word Keys: royal jelly, atherosclerosis, antioxidant, apoE knockout mice.
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