

Pengaruh Pemberian Sari Buah Markisa Ungu (*Passiflora edulis* Var. *Edulis sims*) terhadap Ketebalan Dinding Aorta Tikus (*Rattus norvegicus*) Strain Wistar yang Diberi Diet Aterogenik

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Abstract	<p>Coronary heart disease which still become a health problem in the world and included the main causes of death is a clinical manifestation of atherosclerosis. Atherosclerosis is an accumulation of cholesterol crystals on arteries wall. Purple passion fruit concentrate (<i>Passiflora edulis</i> var. <i>edulis Sims</i>) contains β-carotene, vitamin C and flavonoids compounds. Those are antioxidants that may inhibit atherosclerosis through hypolipidemic and antioxidative effects. The purpose of this study was to determine the effect of purple passion fruit concentrate (<i>Passiflora edulis</i> var. <i>edulis Sims</i>) to the thickness of aortic wall of rats (<i>Rattus norvegicus</i> wistar strain) that had been given atherogenic diet. This research was experimental, with posttest only control group design. The study was conducted for 60 days using 30 male wistar rats which was divided randomly into 5 groups: K (-) (normal diet), K (+) (atherogenic diet), P1 (atherogenic diet + passion fruit concentrate 17,5 ml/kgBW), P2 (atherogenic diet + passion fruit concentrate 21,87 ml/kgBW), and P3 (atherogenic diet + passion fruit juice 26,25 ml/kgBW). Dependent variable was the thickness of the aortic wall, which was measured by using an optical microscope completed with ocular micrometer at a magnification of 400 times. Analysis of data using One Way ANOVA followed by Post Hoc Tuckey. The results showed that administration of the purple passion fruit concentrate (<i>Passiflora edulis</i> var. <i>Edulis Sims</i>) could reduce the thickness of aortic wall of rats (<i>Rattus norvegicus</i> wistar strain) which were exposed to atherogenic diet with an optimal dose was 17.5 ml / kgBW/day ($p < 0.001$). Suggestions of this study was to test the effectiveness of the purple passion fruit concentrate when applied to humans.</p>
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