

ABSTRACT

IN VITRO TESTING FOR REDUCING COLESTEROL LEVELS OF CHITOSAN EFFERVESCENT GRANULE SUSPENSION WITH MANUFACTURING CRAB (*Scylla serrata*) SHELLS WITH PVP K-30 BINDING 1% and 3%

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Foods high in fat and cholesterol can threaten health, especially the heart. Chitosan has been proven to reduce blood cholesterol levels by binding cholesterol. One source of chitosan comes from crab shells. Mangrove crab shells have a suspension that is produced when reconstituted. This research used an in vitro test with UV-Vis spectrophotometry with the Liebermann-Burchard method. the results showed that the chitosan effervescent granule suspension met all specification tests and showed a reduction in cholesterol levels of $19,57\% \pm 4,259$ for the formulation using 1% PVP K-30 and for the formula using PVP K-30 with a concentration of 3%, a percent reduction was obtained. amounting to $32,85\% \pm 1,372$. In this study, the Independent T-Test statistical test was also carried out which showed that there was a significant difference in concentration to the value of reducing cholesterol levels.

Keywords: PVP K-30; Mangrove crab shells; Lowering cholesterol; chitosan