FORMULATION AND EVALUATION PHYSICAL CHARACTERISTICS EFFERVESCENT GRANULE SUSPENSION CHITOSAN MANGROVE CRAB (Scylla serrata) AS A CHOLESTETOL LOWERING SUPPLEMENT WITH COMPARISON SODIUM BICARBONAT 25% AND 30%

(Using Based Granulation Method)

ABSTRACT

Chitin is a biopolymer constructed from N-Acetyl-D-Glucosamine units. Chitosan is a 2-amino-2-deoxy-ß-D-glucose polymer which can be produced by processing chitin. Chitin molecules can be transformed to produce chitosan by changing the acetamide group (-NHCOCH) for an amine group ($-NH_3$). The result of evaluating the degree of deacetylation of chitosan 77,89±0,815%, ash content 0,2182±0,09%, moisture content 4,6±3,1 %, ninhdrin = purple, yield test 69,92%. This study was to evaluate the physical characteristics of effervescent granule suspension with a ratio of sodium bicarbonat 25% and 30% before and after reconstitution using the based granultaion method. The results of study indicated that effervescent granules meet the requipments, this formula showed flow rate F1 = 5.05±1.7 and F2 = 6.53±0.4, angle of repose F1 = 21.02 ±10.9 and F2 = 22.7±0.8, moisture content F1 = 3±1 and F2 = 4.6±2.5, particle size distribution F1 = 7.73 ±1.8 and F2 = 1.15 ±0.4, in vitro dispersion time F1 = 1.6±0.4 and F2 = 1.17±0.8, high foam F1= 1.06±0.1 and F2 = 1.3±0.3, pH F1 = 6.36±0.2 and F2 = 5.7±0.4, viskocity F1= 2.45±0.17 and F2= 2,32±0.09. Organoleptic evaluation results showed that the effervescent granule suspension in this study was accepted by the panelist. From the result obtained the best formula is formula 1.

Keyword : Chitosan, effervescent granule, sodium bicarbonat