

# **STUDI KOMPARATIF PENGARUH KONSENTRASI *SODIUM STARCH GLYCOLATE* TERHADAP WAKTU HANCUR TABLET KITOSAN DENGAN METODE GRANULASI KERING**

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## **ABSTRAK**

Telah dilakukan penelitian untuk melakukan analisis pengaruh konsentrasi *sodium starch glycolate* sebagai disintegran pada pembuatan tablet kitosan yang dibuat secara granulasi kering dengan tiga macam konsentrasi, yaitu *sodium starch glycolate* 1%, *sodium starch glycolate* 2%, dan *sodium starch glycolate* 5% terhadap karakteristik fisik tablet, terutama pada waktu hancur tablet. Evaluasi tablet dilakukan pada formula I yang mengandung *sodium starch glycolate* 1%, formula II yang mengandung *sodium starch glycolate* 2%, dan formula III yang mengandung *sodium starch glycolate* 5%, dan memenuhi persyaratan dalam hal keseragaman bobot, kekerasan, waktu hancur dan friabilitas tablet. Evaluasi waktu hancur tablet dari ketiga formula dianalisis secara statistik dengan metode *One-Way Anova*. Terdapat perbedaan yang signifikan pada hasil uji waktu hancur ketiga formula. Hasil yang didapat adalah konsentrasi *sodium starch glycolate* 5 % menghasilkan waktu hancur paling cepat.

Kata kunci : *sodium starch glycolate*, kitosan, disintegran, tablet, granulasi kering.

## **COMPARATIVE STUDY CONCENTRATION OF SODIUM STARCH GLYCOLATE CHITOSAN TABLET USING DRY GRANULATION**

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## **ABSTRACT**

A Research was conducted to analyze the influence of the concentration of *sodium starch glycolate* as disintegran in chitosan tablet manufacturing by dry granulation. The concentrations of *sodium starch glycolate* are 1%, 2% and 5%. Characteristics of tablets, especially disintegration time of tablets were analyzed. There were three formulas to be evaluated: formula I with 1% *sodium starch glycolate*, formula II with 2% *sodium starch glycolate* and formula III with 5% *sodium starch glycolate*. The evaluation was based on the uniformity of weight, hardness, disintegration time and friability. The result of evaluation from formula I,II and III was conformed with the qualifies of characteristics tablet. The disintegration time was analyzed statistically by *One-Way Anova*, and there are significant differences in the test result. It was concluded that 5% *sodium starch glycolate* produced the most rapid disintegration time.

Key words : *sodium starch glycolate*, chitosan, disintegran, tablet, dry granulation.