

ABSTRACT

THE COMPARISON HARDNESS AND FRIABILITY BETWEEN MARKETED VITAMIN C CONVENTIONAL AND LOZENGES TABLET

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Vitamin C is one of the important vitamins that the body needs to maintain endurance. Vitamin C is found in many fruits and vegetables, but not everyone can meet their vitamin C needs optimally. Therefore, Vitamin C preparations in tablet form are widely available on the market, one of which is conventional tablets and lozenges. This study aims to determine the effect of conventional tablet dosage forms and lozenges with the active ingredient vitamin C on tablet hardness and friability tests. The research method used was experimental, research samples were conventional tablets and lozenges. The hardness tester, while the brittleness test uses friability test. The research results showed that there was a significant difference between the hardness of conventional tablets and lozenges. This is caused by differences in composition and tablet manufacturing process. Meanwhile, in the tablet friability test, there was no significant difference between conventional tablet dosage forms and lozenges have different influences on the tablet hardness test, but do not have an influence on the tablet friability test. Based on the results of research on the characteristics of conventional tablet preparations, they do not meet the tablet hardness test requirements, namely $3.48 \text{ kgf} \pm 0.42$, but lozenges meet the lozenge hardness test requirements of $7.26 \text{ kgf} \pm 0.19$. However, the results of the friability test for conventional tablets and lozenges met the requirements for the tablet friability test, namely conventional tablets $0.4\% \pm 0.57$ and lozenges $0.5\% \pm 0.23$. It can be concluded that lozenges have higher hardness and brittleness than conventional tablets.

Keyword : *Vitamin C , conventional tablets, lozenges, hardness test, friability test.*