

ABSTRACT**EFFECT OF ZINC AND LYSINE SUPPLEMENTATION TO ZINC SERUM LEVEL AND LINEAR GROWTH IN STUNTED CHILDREN UNDER FIVE YEARS OLD**

Nutrient problems of malnutrition is one of the main cause of stunted children, it will cause morbidity and mortality. Children under five years old are susceptible become stunted because of malnutrition circumstances. The purpose of this research was to compare the outcome of zinc and lysine supplementation in zinc serum and linear growth in stunted children under five years old at Public Health Centre of Tanah KaliKedinding, Sub district Kenjeran, Surabaya City. This research was an experimental research used compare technique analyzed. The sample was 18 children under five years old chosen by simple random sampling and separated into 2 groups, control and intervention group. Primary data was collected by interviewing directly using forms. The difference was statistically tested by t-test independent sample and paired t-test. The result showed that there was significant difference of serum zinc level between two groups of stunted toddlers with $p=0.00$ and showed significant difference as well in stunted children's body height $p=0.00$. As conclusion, consumption of zinc and lysine supplementation had approved to be effective to help stunted children under five years old to reach their growth.

Keyword :

Children under five, stunted, zinc and lysine supplementation