

# **Analysis of Fish Derived Protein Intake Adequacy and Cultural Factors and its Correlation with the Occurrence of Stunting among Children Under Two Years Old in Martapura Riverbanks, Banjar District Area**

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## **Abstract**

Banjar is an area of higher fish farming production compared to other districts in South Kalimantan. Taking the condition of the area and the fish farming production into account, Banjar is an area of significant potential to become the source of fish as supplies of animal protein to be utilized by people to improve their nutritional status and overcome the protein energy malnutrition problems. Correlations have been demonstrated between food consumption and nutritional status. The implication of chronic malnutrition for children under two years old is called stunting. To conduct an in-depth analysis on the cultural factors and fish-origin protein intake adequacy with the occurrence of stunting. This three month cross-sectional study recruited 36 children aged 6-24 months as samples. The study was conducted for three months in 2015 in Sungai Pinang, Banjar District. The children's nutritional status was determined according to the 2005 edition of WHO anthropometry reference standard with categories as follows: 1) stunting (very short, z score  $< -3.0$  SD); 2) short ( $\geq -3$  SD sd  $< -2$  SD); 3) no stunting (normal status,  $\geq 2$  SD). Protein intake adequacy was determined by the standards of Nutrition Adequacy Score for children For Age 0-3 Year on WNPNG 2004. Data were analyzed using chi square test with 95% confidence interval. This study demonstrated a correlation between the fish derived protein intake adequacy with the occurrence of stunting among children under two years old. Children of poor protein intake adequacy had 5.5 times greater risk of stunting. This significant number of stunting was partially caused by the culture of not establishing a habit of eating fish since early age and during pregnancy. The fish-origin protein intake adequacy and cultural factors played important roles on the occurrence of stunting among children under 6-24 months in Sungai Pinang, Bajar District.

**Keywords:** *Children under two years old, fish-origin protein intake adequacy, stunting, cultural factors.*