

**HUBUNGAN FREKUENSI KONSUMSI SUPLEMEN DENGAN ASUPAN  
ZAT GIZI MAKRO DAN ZAT GIZI MIKRO ANAK USIA PRASEKOLAH  
DI TK HJ. ISRIATI SEMARANG**

**Artikel Penelitian**

Disusun sebagai salah satu syarat untuk menyelesaikan studi  
pada Program Studi Ilmu Gizi, Fakultas Kedokteran  
Universitas Diponegoro



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SEMARANG  
2010**

# ASSOCIATION BETWEEN SUPPLEMENT CONSUMPTION FREQUENCY AND INTAKE OF MACRO- AND MICRO-NUTRIENT IN PRESCHOOL-AGE CHILDREN

*Study at Hj. Israti Kindergarten Semarang*

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## ABSTRACT

**Background:** Preschool-age children tend to change their pattern of food consumption from time to time and classify food using like or dislike statement. The occurrence of change in food pattern of preschool children is in accordance with change of appetite for food and food consumption. The advancement of food technology has given advantage to industries of food and pharmacy to produce supplement products. The purpose of this study is to find out the description about supplement use and to analyze the association between supplement consumption frequency and intake of macro and micro nutrient in preschool-age children in Hj. Israti Kindergarten Semarang.

**Methods :** The design of this study is *cross-sectional* using sample of 52 preschool-age children. The sample was taken from Hj. Israti Kindergarten Semarang, that was selected using *consecutive sampling* method. The data collected include identity, data on supplement consumption that is obtained using interview, data on intake of macro- and micro nutrient using 3x24 hours food recall and semi- quantitative food frequency. Data were analyzed using *rank Spearman* correlation.

**Results :** The age of the sample is 4-5 years old (78,8%). Data are on supplement consumption, supplement brand that mostly consumed is *Scott's Emulsion* (23,1%). The type of supplement given are vitamins and minerals (38,9%). Supplement is largely given in the form of syrup (55,8%). In the perception of mothers the function of supplements is generally to maintain the endurance of the body (48,1%). The source of information was found from advertisement in television/radio (59,6%). The frequency of supplement consumption is 4-7 times a week (82,7%). The energy intake of the students is categorized as inadequate (75.0%) and the intake of protein sufficient (86.5%). Intake of vitamin A is 100% less than adequacy rate. Intake of minerals phosphorus and magnesium is 100% in sufficient category.

**Conclusion :** There are no association between supplement consumption frequency and intake of energy intake, intake of protein, intake of vitamin and mineral.

**Key word :** preschool-age children, supplement consumption, intake of macro nutrient, intake of micro nutrient.

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