

Abstract

Omega-3 and omega-6 fatty acids are known to play an essential role in the growth and development of children, particularly brain health. There is a need to have information about the intakes of children and what are the food sources. The objectives of the study were to assess omega-3 and omega-6 fatty acid intakes in preschool children and also to investigate the main dietary sources. A cross-sectional study was conducted on the mothers of preschool children in PAUD Cempaka, Cibubur, East Jakarta. The subjects of the study were the children aged 3 – 6 consisted of 17 boys and 12 girls. Dietary intakes were assessed using semi-quantitative FFQ. Dietary sources were determined based on the percentage contribution of food groups to the fatty acid intakes. From the results, it was showed that the mean overall intakes of omega-3 and omega-6 fatty acids in children were 1.045 and 16.805 g/day respectively. The main dietary sources of omega-3 fatty acids in children were legumes (51.11%) and poultry, meat, and fish (16.62%), while the main dietary sources of omega-6 fatty acids were legumes (28.57%) and snacks (26.48%). In compared with Indonesia's RDA, the preschool children, in general, had adequate intakes of omega-3 and omega-6 fatty acids. For recommendations, the children who did not meet the recommended level need to increase the omega-3 and omega-6 fatty acid intakes through consuming food rich in PUFAs, such as legumes and fish.

Keywords: omega-3 fatty acids, omega-6 fatty acids, semi-quantitative FFQ