

FULL ABSTRACT

Vitamin A Content of Fortified Unbranded Cooking Oil in the End of Distribution Point up to Households and its Impact on Vitamin A Status among Preschool Children.

Erry Yudhya Mulyani, M.Sc; Sudikno, SKM, M.Kes; Mury Kuswari, M.Si

School of Health Sciences, Esa Unggul University Address: Jl. Arjuna Utara No.9, Tol Tomang, Kebon Jeruk Jakarta Barat 11510 Tel 021-5674223 ext. 216/219, Fax 021-5674248

Correspondence: erry.yudhya@esaunggul.ac.id

According to the World Health Organization (WHO), 45 countries have vitamin A deficiency of public health significance, which includes overt signs of deficiency, and 122 countries have subclinical levels of vitamin A depletion with marginal liver reserves. Many women and children have vitamin A deficiency that leads to vision loss and increased morbidity and mortality. The initiative of vitamin A fortification is based on years of in-depth pilot studies that have been conducted since 2005 by Ministry of Health, Ministry of Trade and Industry, Board of Food and Drug, Universities, and Koalisi Fortifikasi Indonesia, a non-government organization actively supporting food fortification. It is also based on the low coverage of current program of high dose vitamin A capsule distribution for children under five and mother after giving birth. The pilot studies of oil fortification that have been conducted include food vehicles suitable for fortification, fortification technologies in small and large scale cooking oil producers, fortification at distribution storage site and not in plant site, cooking oil consumption, deficit of daily vitamin A intakes compared to RDA, acceptable level of fortification, stability of vitamin A (retinyl palmitate), impact studies among high risk groups of vitamin A deficiency that showed an improvement of vitamin A status in all age groups at risk of vitamin A deficiency (VAD). The Government of Indonesia will launch mandatory fortification in March 2015. By improving vitamin A status, it is expected to improve health and nutritional status of the community. The objective of the study is to measure the impact of vitamin A fortification of cooking oil among children 12-35 month old.