

Abstrak Nitric

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The Adequacy of Antioxidant Intake of Pregnant Women in Artisanal Small Scale Gold Mining in Encountering Pandemic Condition

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Abstract. Background. The antioxidant is nutrient which is needed to encounter free radical produced by internal metabolism and also from the environment. For people who lived in artisanal small scale gold mining areas, the environmental pollution particularly mercury could be the source of the free radical agents. Besides pollution, free radical source for this population was infectious agents, they have to combat Sar cov2 in pandemic conditions. The pregnant women in the ASGM area should have an adequate antioxidant levels to avoid mercury intoxication and also infection to ensure the fetal welfare. Essential antioxidants from dietary intake have an important role in providing antioxidants for the human body to maintain oxidative homeostasis.

Objective. The objective of this research was to find out the adequacy of antioxidant intake of pregnant women in the ASGM areas.

Method. This research conducted cross-sectional research design. A nutritional interview using 24-hours food recall was performed and followed by a nutrisurvey analysis to reveal the antioxidant intake of pregnant women. 130s subject which has met criteria such as having pregnancy in the third semester period and lived in the ASGM area for more than six months were enrolled. The antioxidant adequacy was analyzed by the dietary value compared to recommended dietary allowance.

Result. The mean vitamin A intake was 1023.01 μ g, vitamin E intake was 6.61 mg, and vitamin C intake was 127.62 mg. While antioxidants from mineral derivate; Iron intake was 8.00 mg, Zinc intake was 4.25 mg, Copper was 0.99 mg and Manganese was 4.70 mg. If the result compared to Indonesian nutritional adequacy, it was found that vitamin A meet the nutritional adequacy, while other vitamins did not meet the adequacy. For minerals, Manganese was adequate but other minerals did not meet the adequacy.

Conclusion. Antioxidant dietary intake of pregnant women in ASGM area did not meet the nutritional adequacy level, except for vitamin A and Manganese. These levels were not sufficient to avoid mercury intoxication and infection.

Keywords: dietary antioxidant intake, nutritional adequacy, pregnant women, artisanal small scale gold mining.

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