Study of Making Nastar Flour Substitution of Green Spinach as a Source of Iron for Anemia Adolescent Girls

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ABSTRACT

Anemia is a health problem that still occurs in many developing countries, one of which is Indonesia. Indonesia is a developing country with a prevalence of anemia in adolescents, which is 31.2% (WHO, 2019). Efforts to meet the needs of iron can be done through foods that contain iron is green spinach. This study aims to determine the nutritional and organoleptic content of nastar green spinach flour substitution as a source of iron. The research design used was a Completely Randomized Design (CRD) with 5 formulations and 5 replications that are percentage of green spinach flour as much as 16%, 18%, 20%, 22% dan 24%. The analyzes carried out were iron content, organoleptic and proximate in the best formulation. Based on the results of the study, it was shown that the more green spinach flour substitutions, the higher the iron content in nastar, namely at P5 with an iron content of 11.2 mg/100 grams. The best formulation in this study was formulation 5 (24% green spinach flour and 76% wheat flour) with nastar characteristics, namely very dark green color, very strong green spinach aroma, strong green spinach bitter taste and slightly crunchy texture and overall based on hedonic test favored by the panelists. The serving size for one consumption is 50 grams or 5 nastar with an energy content of 231.07 kcal, 5.58 grams of protein, 8.50 grams of fat, 33.13 grams of carbohydrates.

Keywords : Anemia, green spinach, iron, nastar