Making Steamed Brownies with the Subtitution of Moringa Leaf Flour as a Snack for Young Women with Iron Deficiency Anemia

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ABSTRACT

Iron deficiency anemia is anemia that occurs because the body lacks iron, so the number of healthy red blood cells in the body is reduced and cannot function properly. Red blood cells or hemoglobin are formed by iron. This study aims to identify the characteristics of steamed brownies substituted with Moringa leaf flour as a snack for young women with iron deficiency anemia. The research design used was a completely randomized design (RAL) with 6 treatment formulations adding wheat flour: Moringa leaf flour, namely: 19: 1, 18: 2, 17: 3, 16: 4, 15: 5 and 14:6 as well as repetitions of 4 times. Based on the results of the study, the highest levels of substances in steamed brownies were found in treatment 2 with a proportion of 18 (wheat flour): 2 (moringa leaf flour). The results of the organoleptic test of steamed brownies in the best treatment resulted in a strong sweet taste and no bitter taste, a slightly strong brown color, a slightly weak unpleasant aroma, and a soft texture. The chemical test results of steamed brownies with the best treatment had iron content of 3.42 mg, energy 363.55 kcal, protein 9.60 grams, fat 13.39 grams, carbohydrates 51.16 grams per 100 grams. For one time consumption, consumers are recommended to consume 70 grams of brownies with 254.49 kcal of energy, 9.37 grams of fat, 6.72 grams of protein, 35.81 grams of carbohydrates and 2.39 mg of iron.

Keywords: Steamed Brownies, Iron, Moringa Leaf Flour, Iron Deficiency Anemia, Snacks