Dietary Fiber Supplement by coconut flour from coconut Wastes Oil Extraction process in Bakery Product CHAYAPAT KEE-ARIYO¹, NANOLN DANGSUNGWAL² AND SASITHON POMCHIANGPIN²

Abstract

The studies of Dietary Fiber Supplement by coconut flour from coconut Wastes Oil Extraction process in Bakery Product was investigated Production of coconut flour from coconut wastes oil extraction, drying at 55 °C for 12 hours, and then grinding to powder gave the off-white fine powder. The chemical compositions of coconut flour were 57.70 % carbohydrate, 29.4 % fat, 6.23 % moisture, 5.20 % protein and 1.48 % ash by dye weigh. Butter cake making experiment by substitution of wheat flour with coconut flour at 5 % of wheat flour weigh which has the highest sensory scores comparing butter cake with the control found that increase dietary fiber 1.34 g. /100 g. The majority of the tested consumers (92%) accepted butter cake with 5 % of coconut flour substitution. Muffin making experiment by substitution of wheat flour with coconut flour at 15 % of wheat flour weigh which has the highest sensory scores comparing muffin with the control found that increase dietary fiber 2.34 g /100 g. The majority of the tested consumers (81%) accepted muffin with 15 % of coconut flour substitution. Cornflake cookie making experiment by substitution of wheat flour with coconut flour at 20 % of wheat flour weigh which has the highest sensory scores comparing cornflake cookie with the control found that increase dietary fiber 3.54 g. /100 g. The majority of the tested consumers (94 %) accepted cornflake cookie with 20 % of coconut flour substitution. Butter cookie making experiment by substitution of wheat flour with coconut flour at 10 % of wheat flour weigh which has the highest sensory scores comparing butter cookie with the control found that increase dietary fiber 3.04 g. /100 g. The majority of the tested consumers (94 %) accepted Butter cookie with 10 % of coconut flour substitution. Frozen cookie making experiment by substitution of wheat flour with coconut flour at 20 % of wheat flour weigh which has the highest sensory scores comparing cookie with the control found that increase dietary fiber 4.02g. /100 g. The majority of the tested consumers (93 %) accepted 20 % of coconut flour substitution. Butter bread making experiment by substitution of wheat flour with coconut flour at 15 % of wheat flour weigh which has the highest sensory scores comparing butter bread with the control found that increase dietary fiber 2.22 g. /100 g. The majority of the tested consumers (75 %) accepted 15 % of coconut flour substitution. Whole wheat bread making experiment by substitution of wheat flour with coconut flour at 15 % of wheat flour weigh which has the highest sensory scores comparing whole wheat bread with the control found that increase dietary fiber 2.09 g. /100 g. The majority of the tested consumers (79 %) accepted 15 % of coconut flour substitution. Pie crust making experiment by substitution of wheat flour with coconut flour at 15 % of wheat flour weigh which has the highest sensory scores comparing pie crust with the control found that increase dietary fiber 2.91 g. /100 g. The majority of the tested consumers (82 %) accepted 15 % of coconut flour substitution.

¹Asistant Professor, ²Lecturer of the Faculty of Home Economics Technology