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Development of gluten-free soybean residue (okara) cracker with mixture design

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Due to the remaining residue (okara) from the industry producing soy milk drinks is large quantities so the gluten-free cracker, popular snack was to create. The mixture design, extreme vertices type, with 3 components: 30 - 60% chickpea flour (X), 10 - 20% corn starch (Y), 20 - 50% dried okara (Z) was used. The each recipe also contained white sugar, vanilla, baking powder, margarine, tapioca flour, and white butter resulting a total of 9 formulas. The products were examine for hardness with texture analyzer, sensory test by hedonic scale. The optimize components from the texture liking provided of 59.49% chickpea flour, 13.21% corn starch and 27.30% okara. The accepted product, 100 grams contained of chickpea flour 14.87 grams, corn starch 3.31 grams, okara 6.82 grams, sugar 7.1 grams, vanilla 0.25 grams, baking powder 1.75 grams, margarine 6.5 grams, tapioca flour 3.15 grams, and white butter 6.25 grams. Product, 100 grams provides 500.57 kilocalories of energy, moisture 4.84 grams, fat 25.33 grams, high protein of 15.66 grams, total carbohydrates 52.49 grams, sugar 14.51 grams, sodium 202.73 mg and ash 1.68 g. The product can be produced industrially with high in nutrients can be sold both domestically and abroad.

Biography:

I am an expert researcher of the Institute for Food Research and Product Development, Kasetsart University. I have worked for 31 years in the field of fruit and vegetable processing, sensory testing, and study of food shelf life.