

FORMULASI YOGHURT OKARA SEBAGAI PANGAN FUNGSIONAL

PENCEGAH STUNTING

ABSTRAK

Okara adalah limbah yang dihasilkan selama produksi pembuatan tahu. Untuk mengurangi limbah *okara*, digunakan dengan mengubah *okara* menjadi pangan fungsional. Formulasi *yoghurt okara* sebagai pangan fungsional pencegah *stunting*. Rumusan masalah dalam penelitian ini adalah bagaimana formulasi *yoghurt okara* yang dapat menghasilkan kadar protein, kadar lemak, kadar karbohidrat, kadar air, kadar abu dan keasaman untuk pemenuhan gizi *stunting*, bagaimanakah populasi bakteri asam laktat pada *yoghurt okara*, bagaimanakah uji organoleptik produk *yoghurt okara*. Penelitian ini menggunakan RAL dengan 6 perlakuan dan 3 ulangan. Data dianalisis secara statistik menggunakan analysis of variance (ANOVA) dan dilanjukan dengan uji tukey.

Hasil analisis penambahan tepung *okara* pada pembuatan *yoghurt okara* berbeda nyata terhadap kadar proksimat, kadar *pH* dan total populasi bakteri asam laktat. Perlakuan terbaik adalah rasio tepung *okara* 3% b/v (Y3) yang memiliki kadar air 74.23%, rasio tepung *okara* 3% b/v (Y3) yang memiliki kadar abu 0,60%, rasio tepung *okara* 1% b/v (Y1) yang memiliki kadar protein 2,76%, rasio tepung *okara* 4% b/v (Y4) yang memiliki kadar lemak 3,78%, rasio tepung *okara* 0% b/v (Y0) yang memiliki kadar karbohidrat 22.94%, rasio tepung *okara* 5% b/v (Y5) yang memiliki kadar *pH* 4,45% dan rasio tepung *okara* 0% b/v (Y3) yang memiliki kadar total populasi bakteri asam laktat 8.00 cfu/g.

Simpulan dari penelitian ini formula tepung *okara* dapat digunakan dalam pembuatan *yoghurt okara* dan berbeda nyata terhadap kadar proksimat, kadar *pH* dan total populasi bakteri asam laktat. Dari hasil uji statistik pembuatan *yoghurt okara*, disarankan menggunakan formula Y3 yang dapat dilakukan uji zat gizi mikro pada penelitian selanjutnya.

Kata kunci: *tepung okara, yoghurt okara, proksimat, pH, total populasi bakteri asam laktat*

OKARA YOGURT FORMULATION AS FUNCTIONAL FOOD TO PREVENT STUNTING

ABSTRACT

Okara is the waste produced during soybean tofu production. To reduce okara waste, it is converted into functional food. Okara yogurt is formulated as a functional food to prevent stunting. The problem in this study is how the okara yogurt formulation can produce protein levels, fat levels, carbohydrate levels, water levels, ash levels, and acidity for the nutritional fulfillment of stunting, how the lactic acid bacterial population in okara yoghurt, and how organoleptic testing of okara yogurt products. This study uses RAL with 6 treatments and 3 repetitions. The data was analyzed statistically using analysis of variance (ANOVA) and continued with the tukey test.

When it comes to treatment, the best mix is 3% b/v (Y3) okara flour, which has 74.23% water, 0.60% grain, 1% b/v (Y1) okara powder, which has 2.76% protein, 4% b/V (YY4) okara broth, which has 3.78% fat, 0% b/v (Y0) okara mouth, which has 22.94% carbs, 5% b/c (Y5), with a pH level of 4.45%, and 0% b/v (Y3) okara powder, with a total population of 8.00 cfu/g of lactic acid bacteria.

The study conclusion is that the okara meal formula can be used to make okara yogurt. It is very different in terms of the rate of proximate formation, the pH level, and the total number of lactate acid bacteria. From the results of the statistical testing of the production of okara yogurt, it is suggested to use the formula Y3 that can perform the test of micronutrients in further research.

Keywords: *okara flour, okara yogurt, proximate, pH, total population of lactic acid bacteria*