PENGARUH PENAMBAHAN MATERIAL PENGAYA ANTIOKSIDAN PADA PRODUK ROTI TAWAR

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Oleh

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memperoleh gelar Sarjana Sains pada Fakultas Pendidikan Matematika
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ABSTRAK

Roti tawar merupakan salah satu produk sereal yang paling banyak dikonsumsi di berbagai negara, sehingga cocok dilakukan pengayaan untuk meningkatkan kandungan alami mikronutriennya. Salah satu bahan yang dapat ditambahkan ke dalam formula roti tawar adalah material pengaya yang dapat dijadikan sebagai sumber antioksidan. Penelitian ini bertujuan untuk mengetahui pengaruh penambahan berbagai jenis material pengaya antioksidan pada produk roti tawar terhadap aktivitas antioksidan, sifat fisik dan sensori produk. Material pengaya antioksidan diperoleh dari bubuk pomace anggur, seledri, dan kulit mangga. Penelitian ini berbasis studi literatur dengan model *narrative review.* Alur penelitian terdiri dari seleksi jurnal yang dilakukan dengan kata kunci *"the effect of enrichment on the quality of bread"* didapat enam jurnal kemudian diseleksi berdasarkan kesesuaian isi dan kelengkapan data maka didapat tiga jurnal sebagai rujukan utama. Analisis roti tawar dilakukan terhadap data aktivitas antioksidan, sifat fisik dan analisis sensori. Hasil kajian jurnal menunjukkan bahwa penambahan material pengaya antioksidan bubuk pomace anggur, seledri, maupun kulit mangga pada produk roti tawar meningkatkan aktivitas antioksidan secara signifikan, sementara semakin meningkatnya rasio penambahan bubuk pomace anggur, seledri, maupun kulit mangga menyebabkan volume spesifik menurun dan tekstur kekerasan roti tawar meningkat. Roti tawar yang diperkaya masing-masing 2% bubuk pomace anggur, 1% bubuk seledri, dan 1% bubuk kulit mangga dapat diterima dengan baik oleh panelis.

Kata Kunci : antioksidan, analisis sensori, pengayaan, roti tawar, sifat fisik.

ABSTRACT

White bread is one of the most widely consumed cereal products in various countries so it is suitable for enrichment to increase the natural micronutrient content. One of the materials that can be added to the white bread formula is an additive that can be used as a source of antioxidants. This study aims to determine the effect of adding various types of antioxidants-enriching materials to white bread products on antioxidant activities, physical and sensory properties of the products. Antioxidant-enriching materials were obtained from grape pomace, celery, and mango peel powder. This research is based on literature study with a narrative review model. The flow of the research was consisted of journal selection conducted with the keyword "the effect of enrichment on the quality of bread". The research obtained six journals and then based on the suitability of the content and completeness of the data, three journals were obtained as the main references. The analysis of white bread was carried out on data antioxidant activity, physical properties, and sensory analysis. The results of a journal study showed that the addition of antioxidant-enriching materials of grape pomace, celery, and mango peel powder in white bread products significantly increased antioxidant activity, while the increase of ratio in the addition of grape pomace, celery, and mango peel powder caused a decrease specific volume but texture of the hardness of the bread is increased. The white bread enriched with 2% grape pomace powder, 1% celery powder, and 1% mango peel powder were well received by the panelist.

Keywords: *antioxidant, enrichment, physical properties, sensory analysis, white bread*

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