

## ABSTRAK

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### **KAJIAN PENGARUH PERBEDAAN *FAT MIMETICS* DAN TEPUNG TERHADAP KARAKTERISTIK FISIKOMIA DAN SENSORI *BAKED PRODUCT***

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(xiii + 46 halaman; 2 gambar; 9 tabel; 5 lampiran)

*Baked product* merupakan produk yang dibuat melalui proses pemanasan atau pemanggangan yang mengakibatkan perubahan bentuk dan struktur. Beberapa jenis produk yang termasuk ke dalam kategori *baked product* yaitu roti, *cakes*, *pastries*, *cookies*, *biscuit*, *muffin*, dan *crackers*. Namun *baked product* umumnya memiliki kadar lemak yang tinggi, kadar serat yang rendah, serta mengandung gluten. Tujuan dari kajian pustaka ini adalah mempelajari pengaruh jenis *fat mimetics* dan jenis tepung terhadap karakteristik fisikomia dan sensori *baked product* seperti, roti, *cakes*, *muffin*, *biscuit*, dan *cookies*. Jenis *fat mimetics* yang digunakan meliputi *puree* alpukat, okra gum, *puree* blewah, *puree* labu, dan lendir biji chia dengan masing-masing konsentrasi sebesar 100% untuk menggantikan *butter* dan margarin. Jenis tepung non-gluten yang digunakan untuk mensubstitusi tepung terigu meliputi tepung ubi jalar kuning, tepung labu kuning, tepung ampas mangrove dengan berbagai macam rasio yaitu 50:50, 55:45, dan 100:0, sedangkan substitusi tepung komposit yang digunakan meliputi tepung sukun, dan tepung ampas kelapa dengan masing-masing rasio yaitu 50:50. Pemanfaatan *fat mimetics* akan menurunkan kadar lemak, meningkatkan kadar air, dan menurunkan karakteristik sensori pada *muffin*, roti, dan *cakes*. Pengaruh substitusi tepung non-gluten akan meningkatkan kadar serat kasar maupun kadar serat pangan, meningkatkan kadar air, namun menurunkan karakteristik sensori pada *biscuit*, *muffin*, dan *cookies*. Pemanfaatan tepung komposit menghasilkan kadar serat kasar semakin meningkat, namun menurunkan kadar air dan karakteristik sensori pada *cookies*.

Kata Kunci : *Baked product*, *fat mimetics*, tepung non-gluten, karakteristik fisikomia

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## ABSTRACT

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### **STUDY ON THE EFFECT OF DIFFERENT FAT MIMETICS AND FLOUR ON THE PHYSICOCHEMICAL AND SENSORY CHARACTERISTICS OF BAKED PRODUCT**

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Baked products are food products that is made through heating or baking that causes change in its form and structure. Bread, cakes, pastries, cookies, biscuit, muffin, and crackers are the examples of baked products. However, baked products contain gluten, high fat content and low fibre. The aim of this literature review is to study the effect of the type of fat mimetics and type of flour towards physicochemical and sensory characteristics of baked products such as bread, cakes, muffin, biscuit, and cookies. Fat mimetics used in this review are avocado puree, okra gum, cantaloupe puree, pumpkin puree, and chia seed mucilage with each having 100% concentration to replace butter and margarine. In this review, the wheat flour will be substituted with non-gluten flours e.g. yellow sweet potato flour, pumpkin flour, mangrove pulp flour with various ratio 50:50, 55:45, and 100:0, respectively, meanwhile composite flour of breadfruit flour and coconut pulp flour is done with the ratio of 50:50. The utilization of fat mimetics will reduce fat content, increase water content, and reduce sensory characteristics in muffin, bread, and cakes. The substitution of wheat flour with non-gluten flour resulted in a higher crude fibre content or dietary fibre, and higher water content but it reduces sensory characteristics in biscuits, muffins, and cookies. The usage of composite flour resulted in a higher crude fibre content but it reduces water content and sensory characteristics in cookies.

**Keywords** : Baked products, fat mimetics, non-gluten flour, physicochemical characteristics

**References** : 28 (2010-2021)