ANALISIS DAYA TERIMA CARTEMUFFLE (CAROB, TEMPE, MADU *TRUFFLE*) SEBAGAI ALTERNATIF KUDAPAN KAYA ANTIOKSIDAN (ISOFLAVON DAN POLIFENOL) PENCEGAH KANKER PAYUDARA

ABSTRAK

Kanker payudara paling sering menyerang wanita. Prevalensi data GLOBOCAN (*Global Burden of Cancer*) tahun 2020, kanker payudara di Indonesia mencapai 68.858 kasus. Carob, madu dan tempe merupakan pangan potensial dimodifikasi menjadi kudapan coklat kaya antioksidan dapat menangkal radikal bebas penyebab kanker payudara. Penelitian bertujuan untuk mengidentifikasi daya terima (warna, aroma, rasa dan tekstur) serta kadar antioksidan isoflavon dan polifenol dari formula kontrol dan 3 formula CARTEMUFFLE sebagai alternatif kudapan pencegah kanker payudara.

Metode penelitian menggunakan desain *true experimental*, Rancangan Acak Lengkap (RAL). Terdapat 4 formula, 1 formula kontrol LF0 (0%:0%:0%) (0 : 0 : 0), LF1 (38% : 24% : 38%) (50 : 30 : 50), LF2 (35% : 30% : 35%) (45 : 40 : 45), LF3 (27% : 38% : 35%) (35 : 50 : 45). Uji daya terima dilakukan pada 25 panelis agak terlatih untuk mengetahui formula paling disukai. Dikarenakan keterbatasan biaya, uji kandungan antioksidan isoflavon dan polifenol dilakukan terhadap formula kontrol dan formula paling disukai.

Hasil uji organoleptik, formula paling disukai adalah formula LF3 dengan rerata skor penilaian dari indikator warna, aroma, rasa dan tekstur sebesar 4,01 kategori disukai. Hasil uji kandungan antioksidan isoflavon 0,06 mcg dan polifenol 1,64 mg pada formula kontrol, sedangkan formula LF3 mengandung 0,12 mcg isoflavon dan 1,73 mg polifenol per 100 gram.

Penelitian menunjukan formula paling disukai adalah LF3 mengandung antioksidan isoflavon 0,12 mcg dan polifenol 1,73 mg lebih tinggi dibandingkan formula kontrol. Penelitian selanjutnya dapat menganalisis total antioksidan, kandungan gizi makro, serta serat pada semua formula dan megubah teknik pemasakan.

Kata kunci : Kanker Payudara, Carob, Tempe, Madu, Antioksidan

ACCEPTABILITY ANALYSIS OF CARTEMUFFLE (CAROB, TEMPEH, TRUFFLE HONEY) AS AN ALTERNATIVE SNACK RICH IN ANTIOXIDANTS (ISOFLAVONES AND POLYPHENOLS) TO PREVENT BREAST CANCER

ABSTRACT

Breast cancer most commonly affects women. The prevalence of GLOBOCAN (Global Burden of Cancer) data in 2020, breast cancer in Indonesia reached 68,858 cases. Carob, honey and tempeh are potential foods modified into antioxidant-rich chocolate snacks that can ward off free radicals that cause breast cancer. The study aimed to identify the acceptability (color, aroma, taste and texture) and antioxidant levels of isoflavones and polyphenols from the control formula and 3 CARTEMUFFLE formulas as an alternative snack to prevent breast cancer.

The research method used a true experimental design, completely randomized design (CRD). There were 4 formulas, 1 control formula LF0 (0%: 0%: 0%) (0: 0: 0), LF1 (38%: 24%: 38%) (50: 30: 50), LF2 (35%: 30%: 35%) (45: 40: 45), LF3 (27%: 38%: 35%) (35: 50: 45). The acceptability test was conducted on 25 moderately trained panelists to determine the most preferred formula. Due to cost constraints, isoflavone and polyphenol antioxidant content tests were conducted on the control formula and the most preferred formula.

The results of the organoleptic test showed that the most preferred formula was formula LF3 with an average assessment score from the indicators of color, aroma, taste and texture of 4.01 in the preferred category. The test results of isoflavone antioxidant content were 0.06 mcg and 1.64 mg polyphenols in the control formula, while formula LF3 contained 0.12 mcg isoflavone and 1.73 mg polyphenols per 100 grams.

The study showed that the most preferred formula was LF3 containing 0.12 mcg isoflavone antioxidants and 1.73 mg polyphenols higher than the control formula. Further research can analyze the total antioxidants, macronutrients, and fiber content in all formulas and change the cooking technique.

Keywords : *Breast Cancer, Carob, Tempeh, Honey, Antioxidant*