ABSTRAK

PENGARUH VARIASI TEPUNG WORTEL (*Daucus carota L.*) DAN BAYAM MERAH (*Amaranthus tricolor* L.*)* TERHADAP AKTIVITAS ANTIOKSIDAN, VITAMIN A, ORGANOLEPTIK, DAYA OLES DAN DAYA SIMPAN MENTEGA SUSU SAPI

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Masyarakat banyak yang mengalami defisiensi vitamin A sehingga perlu dilakukan inovasi dalam makanan. Salah satu olahan makanan yang dapat dilakukan yaitu pada mentega. Namun, mentega juga memiliki sifat yang mudah teroksidasi yang mengakibatkan daya simpan yang relatif singkat. Defisiensi vitamin A dan proses oksidasi dapat dikurangi dengan memanfaatkan wortel dan bayam merah karena mengandung betakaroten dan flavonoid. Penelitian ini bertujuan untuk mengetahui pengaruh variasi tepung wortel (*Daucus carota* L.) dan bayam merah (*Amaranthus tricolor* L.) terhadap aktivitas antioksidan, vitamin A, organoleptik, daya oles dan daya simpan mentega susu sapi.

Mentega dibuat dengan pemisahan krim susu selanjutnya dipasteurisasi kemudian dikocok selama 45 menit. Pembuatan tepung dimulai dari wortel dan bayam merah diiris lalu dioven dengan suhu 95^0C selama 2 jam menggunakan loyang. Setelah itu diblender dan disaring. Mentega ditambah tepung wortel dan tepung bayam merah, kemudian dibungkus dengan alumunium foil dan disimpan. Penelitian ini menggunakan 3 perlakuan yaitu kontrol tanpa penambahan tepung (Ko), perlakuan 1 penambahan 6% tepung wortel (PW), perlakuan 2 penambahan 6% tepung bayam merah (PB), perlakuan 3 penambahan 6% tepung wortel dan 6% tepung bayam merah (PWB). Parameter yang diamati yaitu aktivitas antioksidan, vitamin A dan organoleptik berdasarkan berhitungan uji *anova one way factor*.

Hasil penelitian menunjukan penambahan tepung wortel dan tepung bayam merah memberikan pengaruh nyata ($p<0,00$) terhadap aktivitas antioksidan dan vitamin A. Perlakuan (PB) menghasilkan aktivitas antioksidan tertinggi sebesar 52,9967%, perlakuan (PWB) menghasilkan vitamin A tertinggi sebesar 11976,32 µg/100 g dan perlakuan (PWB) adalah hasil organoleptik yang disukai panelis.

Kata kunci : Mentega, antioksidan, vitamin A, tepung wortel dan tepung bayam merah

ABSTRACT

THE EFFECT OF VARIATION CARROT FLOUR (Daucus carota* L.*) AND RED SPINACH (Amaranthus tricolor* L.*) TO ANTIOXIDANT ACTIVITY, VITAMIN A, ORGANOLEPTIC, TOPPING AND SHELF LIFE IN COW'S MILK BUTTER

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Many people experience vitamin A deficiency so that innovation needs to be done in food. One processed food that can be done is in butter. However, butter also has properties that are easily oxidized that caused a relatively short storability. It can be reduced by utilizing carrots and red spinach because they contains beta-carotene and flavonoid. The purposes of this research were to analyze the effect of variations of carrot flour (Daucus carota L.) and red spinach (Amaranthus tricolor L.) on antioxidant activity, vitamin A, organoleptic, topping and the short storability of cow's milk butter.

Butter was made by separating the milk cream then pasteurized and shaken for 45 minutes. For making the carrot and red spinach's flours, sliced carrot and red spinach then baked with a temperature of 95°C for 2 hours using a baking sheet. After that, it was blended and strained. Butter added with carrot flour and red spinach flour, then wrapped in aluminum foil and stored. This study used 3 treatments, there were control without addition of flour (Ko), an addition of 6% carrot flour (PW) as a treatment 1, an addition of 6% red spinach flour (PB) as a treatment 2 and an additions 6% carrot flour and 6% red spinach flour (PWB) as a treatment 3. The parameters observed were antioxidant activity, vitamin A and organoleptic based on calculation of one way anova factor test.

The results showed that the addition of carrot flour and red spinach flour had a significant effect ($p < 0.00$) on antioxidant activity and vitamin A. Treatment (PB) produced the highest antioxidant activity of 52.99%, and treatment (PWB) produced vitamin A the highest was 11976.32 µg / 100 g and treatment (PWB) was the organoleptic result favored by panelists.

***Keywords** : Butter, antioxidant, vitamin A, carrot flour and red spinach flour*