

Abstrak

ANALISIS SERAT PANGAN DAN TOTAL PADATAN TERLARUT PADA YOGURT SUSU KECAMBAH KACANG MERAH UNTUK PENDERITA HIPERKOLESTEROLEMIA

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Latar Belakang: Konsumsi serat pangan dan total padatan terlarut (TPT) yang memadai dapat menurunkan kolesterol. Kecambah kacang merah memiliki kandungan serat pangan tinggi. Adanya Bakteri Asam Laktat (BAL) dalam proses fermentasi mampu meningkatkan serat pangan dan TPT. Penelitian ini bertujuan untuk mengetahui pengaruh kadar BAL dan lama fermentasi terhadap kadar serat pangan dan TPT yogurt susu kecambah kacang merah.

Metodologi: Penelitian eksperimental ini menggunakan Rancangan Acak Kelompok. Faktor yang diuji yaitu kadar BAL dan lama fermentasi. Terdapat 4 kombinasi perlakuan dengan 5 kali pengulangan sehingga diperoleh 20 unit percobaan. Kadar serat pangan dianalisis menggunakan metode gravimetri dan TPT dianalisis menggunakan metode refraktometer. Data penelitian dianalisis menggunakan ANOVA dan dilanjutkan dengan DMRT 5%.

Hasil Penelitian: Terdapat pengaruh nyata kadar BAL, lama fermentasi dan interaksinya terhadap kadar serat pangan. Terdapat pengaruh nyata lama fermentasi dan interaksi BAL dengan lama fermentasi terhadap TPT.

Kesimpulan: Formula terbaik yogurt susu kecambah kacang merah yaitu BAL 2% dan lama fermentasi 24 jam yang mengandung serat pangan 1,36% dan TPT 15,2°Brix.

Kata kunci: Yogurt, Kecambah Kacang Merah, Serat Pangan, Total Padatan Terlarut, Hiperkolesterolemia.

Abstract

ANALYSIS OF DIETARY FIBER AND TOTAL DISSOLVED SOLID OF RED BEAN SPROUTS MILK YOGURT FOR HYPERCHOLESTEROLEMIA PATIENTS

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Background: Adequate consumption of dietary fiber and total dissolved solid (TDS) can reduce cholesterol. Red bean sprout have high dietary fiber. Lactic Acid Bacteria (LAB) fermentation can increase the content of dietary fiber and TDS. This study aims to determine the effect of LAB levels and fermentations duration on dietary fiber levels and TDS yogurt of red bean sprouts milk.

Methods: This experimental study uses a Randomized Group Design. Factors tested consist of LAB and fermentation duration. There were 4 treatment combinations that were repeated 5 times to obtain 20 experimental units. Dietary fiber observed were analyzed using gravimetri method. TDS observed were analyzed using refractometer method. Research data observed were analyzed using ANOVA and followed by DMRT 5%.

Result: There is a significant effect of LAB levels, fermentation duration and interaction on dietary fiber. Fermentation duration and interaction LAB levels with fermentation duration significant on TDS.

Conclusion: The best formula yogurt of red bean sprouts milk is 2% LAB and 24 hours fermentation duration which contains dietary fiber is 1.36% and TDS is 15.2°Brix.

Keywords: Yogurt, Red Bean Sprouts, Dietary Fiber, Total Dissolved Solid, Hypercholesterolemia.