ABSTRAK

NUR LITA APRIYANI. 18S10271

ANALISIS KADAR SERAT KASAR, AKTIVITAS ANTIOKSIDAN DAN DAYA TERIMA MI BASAH DENGAN SUBSTITUSI TEPUNG UBI JALAR KUNING *(Ipomoea batatas L)* SEBAGAI PANGAN ALTERNATIF BAGI PENGIDAP DIABETES MELITUS

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(xv + 48 + 35 Lampiran)

Peningkatan konsumsi pangan tinggi serat dan aktivitas antioksidan diharapkan dapat menanggulangi Diabetes Melitus. Tepung ubi jalar kuning merupakan bahan pangan tinggi serat dan aktivitas antioksidan. Mi basah yang di substitusi tepung ubi jalar kuning diharap mampu menjadi pangan alternatif bagi pengidap diabetes melitus. Tujuan penelitian menganalisis pengaruh substitusi tepung ubi jalar kuning terhadap kadar serat kasar, aktivitas antioksidan dan daya terima mi basah. Penelitian ini merupakan penelitian eksperimental laboratorium menggunakan metode rancangan acak lengkap (RAL) dengan 3 kali replika dan 4 kali perlakuan substitusi (0, 20, 40, 60%). Analisis kadar serat menggunakan metode gravimetri dan analisis aktivitas antioksidan menggunakan metode DPPH. Kadar serat tertinggi pada mi basah ditemukan pada substitusi 60% tepung ubi jalar kuning yaitu 3,369 g per 100 g. Aktivitas antioksidan tertinggi pada mi basah ditemukan pada substitusi tepung ubi jalar kuning 40% yaitu 86,976% per 100 g. Substitusi tepung ubi jalar kuning berpengaruh secara nyata terhadap warna, rasa, tekstur tetapi tidak berpengaruh nyata terhadap aroma mi basah. Pada penelitian ini dapat disimpulkan bahwa substitusi tepung ubi jalar kuning secara bermakna meningkatkan kadar serat dan aktivitas antioksidan. Berdasarkan kadar serat dan aktivitas antioksidan serta uji daya terima mi basah yang di rekomendasikan yaitu mi basah dengan substitusi tepung ubi jalar kuning 60%.

Kata Kunci: Diabetes mellitus, Ubi jalar kuning, Mi basah, Serat, Antioksidan, Daya terima

ABSTRACT

NUR LITA APRIYANI. 18S10271

ANALYSIS OF CRUDE FIBER LEVELS, ANTIOXIDANT ACTIVITY AND ACCEPTANCE OF WET NOODLE WITH YELLOW SWEET FLOUR (Ipomoeabatatas) SUBSTITUTION AS AN ALTERNATIVE FOOD FOR PEOPLE WITH DIABETES MELLITUS

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Increased consumption of foods high in fiber and antioxidant activity is expected to overcome Diabetes Mellitus. Yellow sweet potato flour is a food that is high in fiber and antioxidant activity. Wet noodles substituted with yellow sweet potato flour are expected to be an alternative food for people with diabetes mellitus. The purpose of this study was to analyze the effect of substitution of yellow sweet potato flour on crude fiber content, antioxidant activity and acceptability of wet noodles. This study is a laboratory experimental study using a completely randomized design (CRD) method with 3 replications and 4 substitution treatments (0, 20, 40, 60%). Analysis of fiber content using the gravimetric method and analysis of antioxidant activity using the DPPH method. The highest fiber content in wet noodles was found in the substitution of 60% yellow sweet potato flour, which was 3.369 g per 100 g. The highest antioxidant activity in wet noodles was found in 40% yellow sweet potato flour substitution, which was 86.976% per 100 g. Yellow sweet potato flour substitution had a significant effect on color, taste, texture but had no significant effect on the aroma of wet noodles. In this study it can be concluded that the substitution of yellow sweet potato flour significantly increased fiber content and antioxidant activity. Based on the fiber content and antioxidant activity as well as the acceptability test of wet noodles, it is recommended that wet noodles be substituted with 60% yellow sweet potato flour.

Keywords: Diabetes mellitus, Yellow sweet potato, Wet Noodles, Fiber, Antioxidants, Acceptability