PHYSICAL PROPERTIES, ORGANOLEPTIC PROPERTIES, AND FIBER CONTENT OF WET NOODLES WITH BLENDING OF MORINGA LEAF FLOUR (*MORINGA OLEIFERA*) AND YELLOW SWEET POTATO FLOUR (*IPOMOEA BATATAS L*)

Evril Katrina Riyanto[1], Setyowati[2], M. Primiaji Rialihanto[3]
[1 2 3]Nutrition Department Poltekkes Kemenkes Yogyakarta,
Jl. Tatabumi No.3 Banyuraden, Gamping, Sleman
email : evrilkatrina010@gmail.com

ABSTRACT

Background: Wet noodles are one of the most popular food products made from wheat flour in Indonesia. However, the dietary fiber content in currently available noodles is still relatively low. Therefore, innovation is needed in the form of wet noodles made from a mixture of moringa leaf flour (*Moringa oleifera*) and yellow sweet potato flour (*Ipomoea batatas L.*) to increase the dietary fiber content in the products.
Objective: To examine the effect of combining moringa leaf flour and yellow sweet potato flour in wet noodle production in terms of physical characteristics, organoleptic properties, and dietary fiber content.
Methods: This research is a quasi experiment with simple randomized design. There were four treatments with different ratios of wheat flour, moringa leaf flour, and yellow sweet potato, namely treatment A (100% : 0% : 0%), B (92,5% : 2,5% : 5%), C (85% : 5% : 10%), and D (70% : 10% : 20%). Data collected included physical properties, organoleptic properties, and dietary fiber content. Physical properties were analyzed descriptively, organoleptic data were analyzed using the *Kruskal-Wallis* test followed by the *Mann Whitney* test, and dietary fiber content was analyzed using *One Way Anova* followed by *Duncan's* test.
Results: The physical property test showed that increasing the proportion of moringa leaf flour and yellow sweet potato flour resulted in a darker color, a stronger characteristic aroma, a more bitter and distinctive taste according to the substituted ingredients, and a less chewy texture of the wet noodles. The results of the organoleptic test showed that treatment B wet noodles, with a composition of 92,5% wheat flour, 2,5% moringa leaf flour, and 5% yellow sweet potato flour, were the most preferred by the panelists among the wet noodles containing a mixture of moringa leaf flour and yellow sweet potato flour. The dietary fiber analysis demonstrated that higher levels of moringa leaf flour and yellow sweet potato flour increased the dietary fiber content of the wet noodles.
Conclusion: There is an effect of mixing moringa leaf flour and yellow sweet potato flour on the physical properties, organoleptic properties, and fiber content of wet noodles.

Keywords: Dietary Fiber, Moringa, Organoleptic Properties, Physical Properties, Wet Noodles, Yellow Sweet Potato

SIFAT FISIK, SIFAT ORGANOLEPTIK, DAN KADAR SERAT PANGAN MIE BASAH DENGAN PENCAMPURAN TEPUNG DAUN KELOR (*MORINGA OLEIFERA*) DAN TEPUNG UBI JALAR KUNING (*IPOMOEA BATATAS L.*)

Evril Katrina Riyanto[1], Setyowati[2], M. Primiaji Rialihanto[3]
[1 2 3]Jurusan Gizi Poltekkes Kemenkes Yogyakarta,
Jl. Tatabumi No.3 Banyuraden, Gamping, Sleman
email : evrilkatrina010@gmail.com

ABSTRAK

Latar Belakang: Mie basah merupakan salah satu produk pangan dengan bahan dasar tepung terigu yang sangat digemari oleh masyarakat Indonesia. Namun, kandungan serat pangan pada mie yang beredar saat ini masih tergolong rendah. Oleh karena itu, diperlukan inovasi mie basah dengan pencampuran tepung daun kelor (*Moringa oleifera*) dan tepung ubi jalar kuning (*Ipomoea batatas L.*) untuk meningkatkan kadar serat pangan dalam produk tersebut.
Tujuan: Mengetahui pengaruh pencampuran tepung daun kelor dan tepung ubi jalar kuning pada pembuatan mie basah ditinjau dari sifat fisik, sifat organoleptik, dan kadar serat pangan.
Metode: Penelitian ini merupakan penelitian eksperimen semu (*quasi experiment*) dengan desain rancangan acak sederhana. Terdapat 4 perlakuan dengan perbandingan tepung terigu, tepung daun kelor, dan ubi jalar kuning yaitu perlakuan A (100% : 0% : 0%), B (92,5% : 2,5% : 5%), C (85% : 5% : 10%), dan D (70% : 10% : 20%). Data yang dikumpulkan meliputi data sifat fisik, data organoleptik, dan data kadar serat pangan. Analisis sifat fisik secara deskriptif, analisis organoleptik dengan uji *Kruskal-Wallis* dan dilanjutkan uji *Mann Whitney*, serta analisis kadar serat pangan dengan uji *One Way Anova* dan dilanjutkan uji *Duncan*.
Hasil: Hasil uji sifat fisik menunjukkan bahwa semakin tinggi pencampuran tepung daun kelor dan tepung ubi jalar kuning, warna mie basah semakin pekat, aroma semakin langu, rasa semakin pahit dan khas sesuai bahan substitusi, serta tekstur menjadi kurang kenyal. Hasil uji organoleptik menunjukkan bahwa mie basah perlakuan B dengan komposisi 92,5% tepung terigu, 2,5% tepung daun kelor, dan 5% tepung ubi jalar kuning merupakan mie basah dengan pencampuran tepung daun kelor dan tepung ubi jalar kuning yang paling disukai panelis. Uji kadar serat pangan menunjukkan bahwa semakin banyak pencampuran tepung daun kelor dan tepung ubi jalar kuning kadar serat pangan mie basah semakin meningkat.
Kesimpulan: Terdapat pengaruh pencampuran tepung daun kelor dan tepung ubi jalar kuning terhadap sifat fisik, sifat organoleptik, dan kadar serat pangan mie basah.

Kata Kunci: Kelor, Mie Basah, Serat Pangan, Sifat Fisik, Sifat Organoleptik, Ubi Jalar Kuning.