

FORMULASI SUSU SEREAL TEPUNG UBI JALAR UNGU (*Ipomoea batatas* L.)  
DAN SERBUK DAUN PEGAGAN (*Centella asiatica* L.) BAGI  
PENDERITA DIABETES MELITUS TIPE 2  
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**Abstrak :** *International Diabetes Federation* (2017) melaporkan bahwa pada tahun 2017 terdapat 425 juta orang di dunia terkena penyakit diabetes melitus. Jumlah ini meningkat sebanyak 2,4% jika dibandingkan dengan jumlah penderita di tahun 2015 yaitu sebanyak 415 juta orang. Salah satu pilar penatalaksanaan diet DM adalah terapi gizi dengan menggunakan makanan sumber karbohidrat kompleks, tinggi serat dan antioksidan. Tujuan dari penelitian ini untuk mengetahui pengaruh formulasi susu sereal dari tepung ubi jalar ungu dan tepung pegagan terhadap mutu kimia (kadar air, kadar abu, protein, karbohidrat, lemak), nilai energi, aktivitas antioksidan, kadar serat kasar, mutu organoleptik dan taraf perlakuan terbaik. Metode yang digunakan adalah penelitian eksperimen dengan desain Rancangan Acak Lengkap (RAL). Formulasi susu sereal dibuat berdasarkan standar produk menurut SNI dan standar diet DM menurut Perkeni (2015). Perhitungan kepadatan energi dengan prinsip isokalori menggunakan 3 taraf perlakuan yaitu proposi tepung tapioka : tepung ubi jalar ungu : serbuk daun pegagan sebesar P1 (30:55:15), P2 (35:45:20), P3 (40:35:25). Setiap formulasi dilakukan replikasi sebanyak 3 kali sehingga terdapat 12 unit percobaan. Hasil penelitian menunjukkan bahwa proporsi tepung tapioka, tepung ubi jalar ungu dan serbuk daun pegagan memberikan pengaruh signifikan terhadap kadar air ( $p=0,025$ ) dan kadar abu ( $p=0,032$ ), dan memberikan pengaruh tidak signifikan terhadap kadar protein ( $p=0,499$ ), lemak ( $p=0,099$ ), karbohidrat ( $p=0,753$ ), nilai energi ( $p=0,079$ ), kadar serat kasar ( $p=0,663$ ), aktivitas antioksidan ( $p=0,179$ ) dan mutu organoleptik yaitu warna ( $p=0,949$ ), aroma ( $p=0,497$ ), rasa ( $p=0,390$ ), dan *mouthfeel* ( $p=0,337$ ). Pada penelitian ini taraf perlakuan 3 (P3) merupakan taraf perlakuan terbaik pada formula susu sereal.

**Kata Kunci :** Susu sereal, diabetes melitus tipe 2, tepung ubi jalar ungu, serbuk daun pegagan, mutu organoleptik, mutu kimia, nilai energi, aktivitas antioksidan, serat kasar

FORMULATION OF CEREAL MILK FROM SWEET POTATO FLOUR (*Ipomoea batatas* L.) AND *CENTELLA* LEAF POWDER FOR DIABETES MELLITUS TYPE 2

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**Abstract** : The International Diabetes Federation (2017) reports that in 2017 an estimated 425 million people in the world are associated with diabetes mellitus. This number increased by 2.4% compared to the number of sufferers in 2015 of 415 million. The purpose of this study was to determine the effect of cereal milk formulations from sweet potato flour and *centella leaf powder* on chemical quality (moisture content, ash content, protein, carbohydrate, fat), energy value, antioxidant activity, crude fiber content, organoleptic quality and treatment level best. The method used is an experimental study with a completely randomized design. Formulations of cereal milk are based on product standards according to SNI and diabetes mellitus diet standards according to Perkeni (2015). Calculation of energy density with the principle of iso calories using 3 levels of treatment namely tapioca flour proposition: sweet potato flour: *centella* leaf powder as big as P1 (30:55:15), P2 (35:45:20), P3 (40:35: 25). Each formulation was replicated 3 times so that there were 12 experimental unit. The results showed that proportion of tapioca flour, sweet potato flour and pegagan flour had a significant effect on water content ( $p = 0.025$ ) and ash content ( $p = 0.032$ ), and gave no effect significant for protein content ( $p = 0.499$ ), fat ( $p = 0.099$ ), carbohydrate ( $p = 0.753$ ), energy value ( $p = 0.079$ ), crude fiber content ( $p = 0.663$ ), antioxidant activity ( $p = 0.179$ ), color ( $p = 0.949$ ), aroma ( $p = 0.497$ ), taste ( $p = 0.390$ ), and mouthfeel ( $p = 0.337$ ) cereal milk in all three levels of treatment. In this study the level of treatment 3 (P3) is the best level of treatment in the formula of cereal milk.

**Keywords** : Cereal milk, diabetes mellitus type 2, sweet potato flour, *centella* leaf powder, organoleptic quality, chemical quality, energy value, antioxidant activity, crude fiber