

## DAYA TERIMA *COOKIES* TEPUNG CAMPURAN UBI UNGU, DAUN KELOR, DAN IKAN TERI SEBAGAI PANGAN DARURAT BENCANA BERBASIS PANGAN LOKAL

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### INTISARI

**Latar Belakang:** Fasilitas yang kurang memadai menyebabkan bantuan makanan yang dapat diberikan saat terjadi bencana sangat terbatas dan tidak dapat mencukupi kebutuhan gizi penyintas bencana. Pangan darurat siap santap seperti *cookies* padat energi dan gizi dapat menjadi solusi untuk masalah tersebut. Penggunaan bahan pangan lokal dalam pembuatan produk pangan darurat direkomendasikan agar dapat meningkatkan penerimaan produk dan kemandirian masyarakat. Ubi ungu, daun kelor, dan ikan teri merupakan beberapa komoditas pangan lokal yang bernilai gizi tinggi dan berpotensi digunakan dalam pengembangan produk pangan.

**Tujuan:** Mengetahui karakteristik sensoris dan daya terima *cookies* pangan darurat yang disubstitusi tepung campuran ubi ungu, daun kelor, dan ikan teri.

**Metode Penelitian:** Terdapat empat formula *cookies* dengan persentase substitusi berbeda, yakni 0% (kontrol), 25%, 50%, dan 75%. Karakteristik sensoris diteliti dengan uji deskripsi oleh 6 panelis terlatih, sedangkan daya terima diukur dengan uji hedonik/kesukaan oleh 34 panelis tidak terlatih. Parameter sensoris yang diteliti yaitu warna, aroma, rasa, tekstur, dan keseluruhan produk.

**Hasil Penelitian:** *Cookies* formula 0% (kontrol) memiliki warna kuning cerah, aroma harum khas *cookies*, rasa manis dan gurih, serta tekstur renyah dan lembut. *Cookies* yang disubstitusi (25%, 50%, dan 75%) secara umum memiliki warna cokelat kehijauan sampai cokelat kehitaman, aroma amis dan langu yang menonjol, rasa manis, gurih ikan teri dan sedikit pahit daun kelor, serta tekstur yang lebih renyah namun lebih kasar dari *cookies* kontrol. Pada semua parameter sensoris, *cookies* kontrol memiliki skor hedonik lebih tinggi dibandingkan *cookies* yang disubstitusi, dan *cookies* substitusi 50% memiliki skor hedonik tertinggi di antara kelompok *cookies* tersubstitusi.

**Kesimpulan:** *Cookies* yang disubstitusi (25%, 50%, dan 75%) secara umum memiliki warna cokelat kehijauan sampai cokelat kehitaman, aroma amis dan langu yang menonjol, rasa gurih ikan teri dan sedikit pahit daun kelor, serta tekstur yang lebih renyah namun lebih kasar dibandingkan *cookies* kontrol. *Cookies* substitusi 50% menjadi formula dengan skor hedonik tertinggi di antara kelompok *cookies* yang disubstitusi.

**Kata Kunci:** *cookies*, pangan darurat, ubi ungu, daun kelor, ikan teri, karakteristik sensoris, daya terima, panelis.

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## **ACCEPTABILITY OF COOKIES SUBSTITUTED WITH PURPLE SWEET POTATO, MORINGA LEAF, AND ANCHOVY COMPOSITE FLOUR AS LOCAL-COMMODITY-BASED EMERGENCY FOOD**

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### **ABSTRACT**

**Background:** Poor facilities in a disaster event cause limited food supplying and insufficient nutrient intake of the survivors. Ready-to-eat emergency food such as high energy-nutrient density cookies might become a solution to this. Local food use in emergency food development is recommended to increase its acceptability by the society and to improve their economic independence. Purple sweet potato, moringa leaf, and anchovy are some of the local commodities with high nutritional values and have potencies to be used in food product development.

**Objective:** This study aims to find out sensory characteristics and acceptabilities of cookies substituted with purple sweet potato, moringa leaf, and anchovy composite flour as ready-to-eat emergency food product.

**Methods:** The cookies are made in four formula groups with different substitution percentage; 0% (control group), 25%, 50%, and 75%. Sensory characteristics are observed with descriptive test by 6 expert panelists, while acceptabilities are measured with hedonic test by 34 consumer/untrained panelists. The attributes that being observed are color, aroma, taste, texture, and overall product preference.

**Results:** Cookies in the control group have a bright yellow color; buttery aroma like the conventional cookies; sweet and savory taste; and tender, crumbly texture. Cookies in the substituted groups (25%, 50%, dan 75%) are generally have greenish-brown to blackish-brown color; dominant fishy and leafy aroma; savory taste from the anchovy and bitter taste from the moringa leaf; and crumblier but grainier texture than the control group. For all sensory attributes, cookies in the control group have higher hedonic scores than the substituted groups, and cookies substituted with 50% composite flour have highest hedonic scores among substituted groups of cookies.

**Conclusions:** Cookies in the substituted groups (25%, 50%, dan 75%) are generally have greenish-brown to blackish-brown color; dominant fishy and leafy aroma; savory taste from the anchovy and bitter taste from the moringa leaf; and crumblier but grainier texture than the control group. Cookies substituted with 50% composite flour have highest hedonic scores among substituted groups of cookies.

**Key Words:** cookies, emergency food, purple sweet potato, moringa leaf, anchovy, sensory characteristic, acceptability, panelists.

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