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**Pengaruh Amilum Manihot Terhadap Karakteristik Fisik *Edible Film Candy* Herbal untuk Meringankan *Dismenorrhea***

XXV, 96 Halaman, 15 Tabel, 6 Gambar, 6 Singkatan, 10 Lampiran

**ABSTRAK**

**Latar belakang:** *Dismenorrhea* pada remaja wanita dapat diatasi melalui *edible film candy* berbasis kunyit, jahe merah, dan bunga rosella. Sediaan tipis ini larut di mulut, melepaskan senyawa analgesik dan antiinflamasi seperti kurkuminoid, gingerol, shogaol, dan antosianin. Formulasi ini diharapkan menjadi alternatif praktis dan efektif untuk meredakan nyeri menstruasi. **Tujuan:** Mengetahui pengaruh jumlah amilum manihot sebagai polimer terhadap karakteristik fisik *edible film candy* ekstrak jahe merah, kunyit dan bunga rosella. Mengetahui tingkat kesukaan responden terhadap *edible film candy* ekstrak jahe merah ekstrak kunyit ekstrak bunga rosella. **Metode:** eksperimental laboratorium dengan metode ekstraksi UAE dan pengujian karakteristik *edible film candy* dengan metode responden. **Hasil:** Jumlah amilum manihot sebagai polimer memengaruhi sifat fisik *edible film candy* berbasis jahe merah, kunyit, dan rosella, termasuk ketebalan, kekuatan, kerapuhan, dan daya larut. Uji organoleptik menunjukkan bahwa formulasi dengan komposisi polimer tertentu paling disukai konsumen dari segi rasa, tekstur, aroma, dan warna, sehingga *edible film candy* ini diterima sebagai produk inovatif untuk membantu meredakan *dismenorrhea*. **Kesimpulan:** Kadar amilum manihot sebagai polimer memengaruhi sifat fisik *edible film candy* herbal yang terbuat dari ekstrak jahe merah, kunyit, dan bunga rosella. Perubahan konsentrasi amilum berdampak pada ketebalan, daya larut, kekuatan tarik, dan kerapuhan *edible film*, sehingga memengaruhi kualitas fisiknya.

**Kata kunci:** Amilum Manihot, Sorbitol, Ekstrak Jahe Merah, Ekstrak Bunga rosella, Ekstrak Kunyit, *Edible Film Candy*.

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**The Effect of Manihot Starch on the Physical Characteristics of Herbal Edible Film Candy to Relieve Dysmenorrhea**

XXV, 96 Pages 15 Tables, 6 Pictures, 6 Abbreviations, 10 Appendices

**ABSTRACT**

**Background:** Dysmenorrhea in adolescent girls can be alleviated through edible film candy based on turmeric, red ginger, and rosella flower. This thin preparation dissolves in the mouth, releasing analgesic and anti-inflammatory compounds such as curcuminoids, gingerol, shogaol, and anthocyanins. This formulation is expected to be a practical and effective alternative to relieve menstrual pain. **Objectives:** To determine the effect of the amount of Manihot starch as a polymer on the physical characteristics of edible film candy made from red ginger extract, turmeric, and rosella flower. To determine the level of consumer preference for edible film candy made from red ginger extract, turmeric extract, and rosella flower extract. **Methods:** Laboratory experimental study using UAE extraction method and testing the characteristics of edible film candy with respondent-based sensory evaluation. **Results:** The amount of Manihot starch as a polymer affects the physical properties of edible film candy based on red ginger, turmeric, and rosella, including thickness, strength, brittleness, and solubility. Organoleptic tests showed that formulations with certain polymer compositions were most preferred by consumers in terms of taste, texture, aroma, and color, making this edible film candy accepted as an innovative product to help relieve dysmenorrhea. **Conclusion:** The concentration of Manihot starch as a polymer influences the physical properties of herbal edible film candy made from red ginger extract, turmeric, and rosella flower. Changes in starch concentration affect the thickness, solubility, tensile strength, and brittleness of the edible film, thereby impacting its physical quality. **Keywords:** Manihot starch, sorbitol, red ginger extract, rosella flower extract, turmeric extract, edible film candy **References :** 48 (2016-2025)