

SIFAT FISIK, VISKOSITAS, DAN ORGANOLEPTIK PADA MAKANAN *BLENDERIZED* UNTUK PASIEN DISFAGIA

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ABSTRAK

Latar Belakang: Disfagia adalah gangguan menelan yang umum terjadi pada pasien stroke dan dapat meningkatkan risiko malnutrisi serta aspirasi. Modifikasi diet berupa makanan *blenderized* berperan penting dalam pemulihan/latihan menelan.

Tujuan: Mengetahui formulasi makanan *blenderized* terbaik berdasarkan sifat fisik, viskositas, dan organoleptik untuk pasien disfagia.

Metode: Penelitian menggunakan desain eksperimen semu dengan Rancangan Acak Sederhana pada empat formula yaitu satu formula kontrol (F0) dan tiga formula perlakuan (F1, F2, F3) menggunakan bubur sumsum, ayam, tahu, wortel dan labu siam dengan variasi jumlah cairan/air kaldu (tanpa penambahan air, penambahan 10 cc dan 30 cc air). Sifat fisik diamati secara subjektif oleh panelis, viskositas diukur secara objektif menggunakan alat viskometer, dan uji organoleptik dilakukan oleh 20 panelis terlatih menggunakan metode hedonik.

Hasil: Sifat fisik semua formula memiliki karakteristik warna putih kekuningan, aroma khas bubur sumsum dan ayam, rasa gurih dan tekstur kental hingga encer. Hasil sifat organoleptik F2 (dengan penambahan 10 cc air) memiliki tingkat kesukaan tertinggi oleh panelis. Hasil viskositas pada F1 4323 cP, F2 3040 cP, dan F3 1973 cP. Ketiga formula sesuai dengan kebutuhan tekstur level *puree* berdasarkan standar IDDSI. Penambahan cairan terbukti memengaruhi viskositas dan daya terima makanan.

Kesimpulan: F2 merupakan formula makanan *blenderized* yang paling disukai panelis dari aspek organoleptik. Viskositas pada F1, F2, F3 sesuai dengan kebutuhan pasien disfagia latihan menelan, pada tahap awal latihan menelan bisa dimulai dengan F3.

Kata Kunci: disfagia, makanan *blenderized*, sifat fisik, organoleptik, viskositas.

PHYSICAL PROPERTIES, VISCOSITY, AND ORGANOLEPTIC CHARACTERISTICS OF BLENDERIZED FOOD FOR DYSPHAGIA PATIENTS

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ABSTRACT

Background: Dysphagia is a common swallowing disorder in stroke patients and can increase the risk of malnutrition and aspiration. Dietary modification in the form of blenderized food plays a crucial role in swallowing rehabilitation and training.

Objective: To identify the best blenderized food formulation for dysphagia patients based on physical properties, viscosity, and organoleptic characteristics.

Methods: This quasi-experimental study used a Simple Random Design with four formulas: one control formula (F0) and three treatment formulas (F1, F2, F3), composed of rice flour porridge, chicken, tofu, carrot, and chayote with varying amounts of broth (no added liquid, 10 cc, and 30 cc). Physical properties were assessed subjectively by panelists, viscosity was measured objectively using a viscometer, and organoleptic properties were evaluated by 20 trained panelists using the hedonic test method.

Results: All formulas exhibited yellowish-white color, the distinctive aroma of rice flour porridge and chicken, a savory taste, and a texture ranging from thick to thin. Organoleptic evaluation showed that F2 (with 10 cc broth) was the most preferred by panelists. Viscosity values were 4323 cP (F1), 3040 cP (F2), and 1973 cP (F3). All formulas met the texture requirements for the puree level based on IDDSI standards. The addition of liquid significantly affected viscosity and food acceptability.

Conclusion: F2 was the most preferred blenderized food formulation based on organoleptic characteristics. The viscosity of F1, F2, and F3 meets the needs of dysphagia patients undergoing swallowing training, with F3 recommended for the initial stage.

Keywords: dysphagia, blenderized food, physical properties, organoleptic, viscosity.