

**DEVELOPMENT OF HIGH ENERGY AND HIGH PROTEIN
ENTERAL FORMULA BASED ON EGG WHITE AND SOY MILK
FOR BURNS PATIENTS AT THE PROF. DR. MARGONO
SOEKARJO PURWOKERTO GENERAL HOSPITAL**

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ABSTRACT

Background: Giving diet to burn patients is preferred in enteral form rather than parenteral with high protein content. Alternative ingredients that can be used are egg white and soy milk. Prof. Dr. Margono Soekarjo Purwokerto Regional Hospital still uses commercial enteral formula in the healing process of burn patients. So it is necessary to develop a non-commercial enteral formula.

Objective: To determine the physical characteristics, level of preference, nutritional value and food cost of the modified high energy protein enteral formula.

Method: The type of research is Research and Development (R&D) with a descriptive-comparative design, namely comparing physical characteristics, level of preference, nutritional content and food prices between the results of modified enteral formulas and commercial enteral formulas and analyzed descriptively. The level of satisfaction with the hedonic test was carried out by 10 trained panelists, namely Prof. Dr. Regional Hospital Nutritionist. Margono Soekarjo Purwokerto.

Results: The modified enteral formula has a viscosity value of 0.023 poise which does not meet the standard (0.07-0.135 poise) and an osmolarity value of 366.46 mOsm/L is in accordance with the standard (300-400 mOsm/L). Most panelists favored the modified enteral formula. The modified enteral formula has an energy content of 295 kcal, 21.5 grams of protein, 5.4 grams of fat and 42.1 grams of carbohydrates. The modified enteral formula per 250 ml has a price of IDR. 9,621 cheaper when compared to the commercial formula, namely Rp. 27,000.

Conclusion: A modified high energy and high protein enteral formula based on egg white and soy milk was obtained which can be given to patients and is well accepted by burn patients.

Keywords: Enteral Formula, Burns, Egg White, Soy Milk

**PENGEMBANGAN FORMULA ENTERAL TINGGI ENERGI
TINGGI PROTEIN BERBASIS PUTIH TELUR DAN SUSU SOYA
UNTUK PASIEN LUKA BAKAR DI RSUD PROF. DR. MARGONO
SOEKARJO PURWOKERTO**

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ABSTRAK

Latar Belakang: Pemberian diet pada pasien luka bakar lebih diutamakan dalam bentuk enteral daripada parenteral dengan kandungan protein yang tinggi. Alternatif bahan yang dapat digunakan yaitu putih telur dan susu soya. RSUD Prof Dr. Margono Soekarjo Purwokerto masih menggunakan formula enteral komersial dalam proses penyembuhan pasien luka bakar. Sehingga perlu dilakukan pengembangan formula enteral non komersial.

Tujuan: Mengetahui sifat fisik, tingkat kesukaan, nilai gizi dan *food cost* dari hasil modifikasi formula enteral tinggi energi tinggi protein

Metode: Jenis penelitian yaitu *Research and Development (R&D)* dengan desain deskriptif-komparatif yaitu perbandingan sifat fisik, tingkat kesukaan, kandungan gizi dan *food cost* antara hasil modifikasi formula enteral dengan formula enteral komersial dan di analisis secara deskriptif. Tingkat Kesukaan dengan uji hedonik dilakukan dengan mengambil 10 panelis terlatih yaitu Ahli Gizi RSUD Prof Dr. Margono Soekarjo Purwokerto.

Hasil: Formula enteral modifikasi mempunyai nilai viskositas sebesar 0,023 Poise dimana belum memenuhi standar (0,07-0,135 poise) dan nilai osmolaritas sebesar 366,46 mOsm/L sudah sesuai dengan standar (300-400 mOsm/L). Sebagian besar panelis menyukai formula enteral modifikasi. Formula enteral modifikasi mempunyai kandungan energi sebesar 295 kkal, protein 21,5 gram, lemak 5,4 gram dan karbohidrat 42,1 gram. Formula enteral modifikasi per 250 ml mempunyai harga sebesar Rp. 9.621 lebih murah jika dibandingkan dengan formula komersial yaitu Rp. 27.000.

Kesimpulan: Didapatkan modifikasi formula enteral tinggi energi tinggi protein berbahan dasar putih telur dan susu soya dimana dapat diberikan kepada pasien dan diterima dengan baik oleh pasien luka bakar.

Kata Kunci: Formula Enteral, Luka Bakar, Putih Telur, Susu Soya