

DEVELOPING LOW PROTEIN ENTERAL FORMULA MADE FROM YELLOW PUMPKIN AND EGG WHITE IN PRE-DIALYSIS CHRONIC KIDNEY FAILURE PATIENTS

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ABSTRACT

Background : Low-protein enteral formulas are given to pre-dialysis Chronic Kidney Failure patients in commercial formula (FEK) or hospital-made formula (FERS). Modifications were needed to improve the previous formula, which was high in residue, high in sugar, and expected to resemble the commercial formula. Pumpkin and egg white are used in the modification because they are beneficial for CKF sufferers.

Objective : To compile, make, analyze the comparison of low-protein FERS modified made from pumpkin and egg white with FERS old recipe and FEK.

Methods : Types of research: quasy-experimental, post-test only control group design research with 10 panelists of physical characteristics formula.

Result : Nutritional content of FERS Modification made from pumpkin and egg white, namely 294.5 kcal energy, 6.2 grams of protein, 10.8 grams of fat, 43.1 grams of carbohydrates. Cost per serving of FERS Modification (Rp.5099.8), lower than old recipe and FEK. Calorie density (1.18 kcal/mL), higher than old recipe (0.94 kcal/mL), but lower than FEK (1.3 kcal/mL). Viscosity (1.1 cP) and osmolarity (479.6 mOsm) have fulfilled the standards.

Conclusion : Modifications of low-protein enteral formula have nutritional content that resembles FEK, lowest cost, calorie density, viscosity and osmolarity have fulfilled the standards.

Keywords : chronic kidney failure, egg white, low protein enteral formula, modifications, pumpkin.

PENGEMBANGAN FORMULA ENTERAL RENDAH PROTEIN BERBAHAN LABU KUNING DAN PUTIH TELUR PADA PASIEN GAGAL GINJAL KRONIS PRA DIALISIS

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ABSTRAK

Latar Belakang : Formula enteral rendah protein diberikan pada pasien Gagal Ginjal Kronis pradialisis dalam bentuk komersial (FEK) atau buatan rumah sakit (FERS). Modifikasi diperlukan untuk memperbaiki formula sebelumnya, dimana tinggi sisa, gula tinggi, dan diharapkan menyerupai formula komersial. Labu kuning dan putih telur digunakan dalam modifikasi dikarenakan bermanfaat bagi penderita GGK.

Tujuan : Menyusun, membuat, menganalisis perbandingan FERS modifikasi rendah protein berbahan labu kuning dan putih telur dengan FERS Resep awal dan FEK RP.

Metode : Jenis penelitian *quasy experiment*, desain penelitian *post-test only control group design* dengan panelis karakteristik fisik berjumlah 10 orang.

Hasil : Kandungan gizi FERS modifikasi berbahan labu kuning dan putih telur menyerupai FEK yaitu energi 294,5 kkal, protein 6,2 gram, lemak 10,8 gram, karbohidrat 43,1 gram. Biaya perporisi FERS modifikasi (Rp5099,8) lebih rendah dibanding FERS resep lama dan FEK. Densitas kalori (1,18 kkal/mL) lebih tinggi dibanding FERS resep lama (0,94 kkal/mL), lebih rendah dari FEK (1,3 kkal/mL). Viskositas (1,1 cP) dan osmolaritas (479,6 mOsm) memenuhi standar.

Kesimpulan : Modifikasi FERS rendah protein berbahan labu kuning dan putih telur memiliki kandungan gizi menyerupai FEK, harga termurah, densitas kalori lebih baik, viskositas dan osmolaritas memenuhi standar.

Kata Kunci : formula modifikasi, gagal ginjal kronis pradialisis, labu kuning, putih telur, rendah protein.