

VALIDITAS RELATIF HASIL PENILAIAN KONSUMSI PANGAN PADA APLIKASI SMARTPHONE KOMERSIAL "FATSECRET" TERHADAP FOOD RECALL 24 JAM

Nasyidatul Rosyidah¹, R. Dwi Budiningsari², Setyo Utami Wisnusanti²

INTISARI

Latar Belakang: Digitalisasi penilaian asupan makanan dianggap dapat mengurangi bias, meningkatkan keakuratan dan efisiensi waktu pengumpulan data. Tetapi digitalisasi penilaian konsumsi pangan belum banyak diiringi dengan hasil penelitian atas validitas dan kelayakan instrumen penilaian asupan makanan.

Tujuan Penelitian: mengetahui validitas relatif asupan zat gizi makro (energi, protein, karbohidrat, lemak) zat gizi mikro (sodium, kalium) dan serat pada makanan yang diukur menggunakan aplikasi *smartphone* komersial Fatsecret dengan penilaian konsumsi pangan konvensional menggunakan *food recall* 24 jam.

Metode Penelitian: Penelitian ini merupakan penelitian kuantitatif dengan menggunakan metode potong lintang (*cross-sectional*) dengan teknik pengumpulan data menggunakan pendekatan observasional. Penelitian ini dilakukan di Daerah Istimewa Yogyakarta (DIY) pada bulan Agustus-September 2022. Responden dalam penelitian ini sebanyak 38 orang. Pengambilan data dilakukan sebanyak 3 x 24 jam pada masing-masing metode penilaian konsumsi pangan. Analisis dilakukan menggunakan *Shaphiro Wilk test* untuk melihat normalitas data, *Spearman Correlation* untuk melihat hubungan antar variabel, dan *Mann Whitney Test* untuk melihat perbedaan antar variabel.

Hasil: Sebagian besar luaran kedua metode memiliki hubungan yang signifikan ($p < 0,005$) yaitu energi ($p = 0,000$), protein ($p = 0,002$), karbohidrat ($p = 0,000$), lemak ($p = 0,005$), serat pangan ($p = 0,006$). Hasil uji beda pada kedua luaran metode menunjukkan hanya lemak yang tidak memiliki perbedaan yang signifikan ($p > 0,05$) atau memiliki validitas relatif yang dapat diterima ($p = 0,216$)

Kesimpulan: Tidak terdapat perbedaan yang signifikan pada data asupan lemak namun terdapat perbedaan yang signifikan pada data asupan energi, protein, karbohidrat, sodium, kalium, dan serat yang diukur menggunakan aplikasi *smartphone* komersial Fatsecret dengan *food recall* 24 jam.

Kata Kunci: Penilaian Konsumsi Pangan, Fatsecret, *Food Recall*

¹ Mahasiswa Program Studi S1 Gizi Kesehatan, Fakultas Kedokteran, Kesehatan Masyarakat, dan Keperawatan Universitas Gadjah Mada, Jl. Farmako, Sekip Utara, Yogyakarta 55281

² Dosen Program Studi S1 Gizi Kesehatan, Fakultas Kedokteran, Kesehatan Masyarakat, dan Keperawatan Universitas Gadjah Mada, Jl. Farmako, Sekip Utara, Yogyakarta 55281

RELATIVE VALIDITY OF DIETARY ASSESSMENT RESULTS BETWEEN COMMERCIAL SMARTPHONE APPLICATION "FATSECRET" AND 24-HOUR FOOD RECALL

Nasyidatul Rosyidah¹, R. Dwi Budiningsari², Setyo Utami Wisnusanti²

ABSTRACTS

Background: Digitalization of food intake assessment is considered to be able to reduce bias, increase the accuracy and efficiency of data collection time. However, the digitalization of food consumption assessment has not been accompanied by many research results on the validity and feasibility of food intake assessment instruments.

Objective: To determine the relative validity of intake of energy, macronutrients (protein, carbohydrates, fat) micronutrients (sodium, potassium) and dietary fiber as measured using the commercial smartphone application Fatsecret compared to conventional food consumption assessment using a 24-hour food recall.

Methods: This research was a quantitative study using a cross-sectional method with data collection techniques using an observational approach. This research was conducted in the Special Region of Yogyakarta (DIY) from August to September 2022. There were 38 respondents in this study. Data collection was carried out 3 x 24 hours for each food consumption assessment method. Analysis was carried out using the Shapiro Wilk test to see the normality of the data, Spearman Correlation to see the relationship between variables, and the Mann Whitney Test to see the differences between variables.

Results: Most of the outcomes of the two methods had a significant correlation ($p < 0.005$). These variables were energy ($p = 0.000$), protein ($p = 0.002$), carbohydrates ($p = 0.000$), fat ($p = 0.005$), dietary fiber ($p = 0.006$). The results of the different test on the two output methods showed that only fat did not have a significant difference ($p > 0.05$) or had an acceptable relative validity ($p = 0.216$)

Conclusion: There were no significant differences in fat but there were significant differences in energy, protein, carbohydrates, sodium, potassium and fiber as measured using the commercial smartphone application Fatsecret with a 24-hour food recall.

Keywords: Dietary Assessment, Fatsecret, Food Recall

¹ Undergraduate student in the Department of Health Nutrition, Faculty of Medicine, Public Health, and Nursing Gadjah Mada University, Jl. Farmako, Sekip Utara Yogyakarta 55281

² Lecturer in the Undergraduate Program of Department of Health Nutrition, Faculty of Medicine, Public Health, and Nursing Gadjah Mada University, Jl. Farmako, Sekip Utara Yogyakarta 55281