

## **ABSTRACT**

**Background :** In Jambi Province, the adult population with a body mass index of over 30% and obesity, while the population with a thin body mass index problem has a percentage of 4.9%. Factors that influence body mass index are age, genetics, gender, food intake, physical activity, body image, and infectious diseases. Excessive body mass index is influenced by excessive food intake and lack of physical activity. Food intake can affect body mass index. **Objective :** To determine the relationship between carbohydrate intake and physical activity with body mass index Jambi University Medical students.

**Method :** This research is a cross-sectional study with an analytical observational nature. The research sample consists of medical students from Jambi University. The sampling technique used is purposive sampling with 102 research subjects. The research data was collected through the completion of the IPAQ questionnaire to assess physical activity, a 2x24-hour food recall questionnaire, and measurements of height and weight. The data analysis was performed using SPSS version 29, 2022, with Spearman's correlation test.

**Results :** This study had low carbohydrate intake (85.3%), moderate physical activity (52.9%), and normal body mass index ( 44.1%). After carrying out the Spearman correlation test, the variable carbohydrate intake and body mass index obtained a p-value of 0.3 and for the variable physical activity with r value 0.1 and body mass index the p-value <0.001 was obtained with r value -0.43.

**Conclusion :** There is no relationship between carbohydrate intake and body mass index in Jambi University Medical students. and there is a relationship between physical activity and body mass index in Jambi University Medical students.

**Keywords :** Carbohydrate intake, physical activity, body mass index.

## ABSTRAK

**Latar Belakang :** Di Provinsi Jambi, penduduk dewasa dengan indeks massa tubuh lebih dan obesitas menunjukkan persentase 30% sedangkan penduduk dengan masalah indeks massa tubuh kurus dengan persentase 4,9%. Faktor yang mempengaruhi indeks massa tubuh adalah usia, genetik, jenis kelamin, asupan makanan, aktivitas fisik, *body image*, dan penyakit infeksi. Penelitian ini bertujuan untuk mengetahui hubungan antara asupan karbohidrat dan aktivitas fisik dengan indeks massa tubuh pada mahasiswa kedokteran Universitas Jambi.

**Metode :** Penelitian ini merupakan penelitian *cross sectional* analitik. Sampel penelitiannya yaitu 102 mahasiswa dengan teknik *purposive sampling*. Data penelitian didapatkan dengan kuesioner IPAQ, *food recall* 2x24 jam, dan pemeriksaan antropometri. Analisis menggunakan SPSS versi 29 tahun 2022 dengan uji korelasi *spearman*.

**Hasil Penelitian :** Subjek penelitian memiliki asupan karbohidrat kurang (85.3%), aktivitas fisik sedang (52.9%), dan indeks massa tubuh normal (44.1%). Pada variabel asupan karbohidrat dengan indeks massa tubuh didapatkan nilai *p-value* 0.3 dengan nilai *r* sebesar 0.1 dan pada variabel aktivitas fisik dengan indeks massa tubuh didapatkan nilai *p-value* <0.001 dengan nilai *r* sebesar -0.43.

**Kesimpulan :** Tidak terdapat hubungan antara asupan karbohidrat dengan indeks massa tubuh dan terdapat hubungan antara aktivitas fisik dengan indeks massa tubuh pada mahasiswa Kedokteran Universitas Jambi.

**Kata Kunci :** Asupan karbohidrat, aktivitas fisik, indeks massa tubuh.