ABSTRAK

Latar belakang: Pada tahun 2030, 254 juta anak diperkirakan mengalami obesitas. Perubahan lingkungan, makanan cepat saji, dan perilaku sedentari berkontribusi meningkatkan risiko obesitas. Penelitian ini bertujuan untuk mengidentifikasi hubungan antara konsumsi UPF dengan *overweight* dan obesitas pada anak.

Metode: Penelitian ini menggunakan pendekatan PEO, studi observasional *peer-reviewed* yang berbahasa Inggris dalam 10 tahun terakhir. Eksklusinya adalah RCT, tinjauan, dan artikel *non-research*. Basis datanya yaitu PubMed, Scopus, Web of Science dan Google Scholar. Kualitas dinilai menggunakan JBI. *Random effects model* diuji Q (*DerSimonian-Laird),* dan uji Egger untuk mengecek bias publikasi. Analisis subgrup berdasarkan usia, pendapatan negara, dan jenis UPF.

Hasil: Sejumlah 51 studi terdiri dari 39 cross-sectional, 10 cohort, dan 2 case-control. Meta-analisis mencakup 43 studi dengan AOR, 8 studi dieksklusi karena *effect size* berbeda. Konsumsi UPF memiliki hubungan dengan *overweight, overweight*/obesitas, obesitas dan obesitas abdominal pada anak dengan OR (95% CI): 1,18 (1,01; 1.37); 1,26 (1,18; 1,35); 1,19 (1,06; 1,32); dan 1,45 (1,03; 2,05). Anak berusia 3–11 tahun memiliki kemungkinan peningkatan terjadinya *overweight*/obesitas, 1,52 (1,29; 1,77), dan obesitas 1,97 (1,32; 2,94). Studi didominasi oleh negara-negara berpendapatan menengah atas. Minuman berpemanis dan makanan ringan adalah kontributor utama terhadap luaran.

Kesimpulan: Konsumsi tinggi UPF pada anak berhubungan dengan *overweight* dan obesitas. Pola makan anak prasekolah dan sekolah dasar perlu untuk diperhatikan. Keterbatasan penelitian mencakup definisi kelompok usia dan *cut-off* IMT yang bervariasi, memengaruhi konsistensi hasil. Penelitian selanjutnya harus menilai standar IMT menggunakan persentil usia dan jenis kelamin, mempertimbangkan dinamika pertumbuhan anak-anak.

Kata kunci: makanan ultra-proses, *overweight,* obesitas, anak, prasekolah, sekolah dasar

ABSTRACT

Background: *By 2030, 254 million children may be obese. Environmental shifts like fast food access and sedentary habits raise obesity risk. This study identified the association of UPF consumption with childhood overweight and obesity.*

Method: *This study used the PEO approach, including peer-reviewed observational studies in English from the past 10 years. Exclusions were RCTs, reviews, and non-research articles. Databases were PubMed, Scopus, Web of Science, and Google Scholar. Quality was assessed using JBI. Random effects were tested with the Q test (DerSimonian-Laird), and Egger's test checked publication bias. Subgroup analyses considered age, country income, and UPF type. The protocol has been registered in PROSPERO (CRD420250598561).*

Result: *A total of 51 studies were included: 39 cross-sectional, 10 cohort, and 2 case-control. The meta-analysis included 43 studies with AOR, 8 studies were excluded due to different effect sizes.. UPF consumption has an association with overweight, overweight/obesity, obesity, and abdominal obesity in children with OR (95% CI): 1.18 (1.01, 1.37); 1.26 (1.18, 1.35); 1.19 (1.06, 1.32); and 1.45 (1.03, 2.05). Children aged 3–11 years have an increased odds of overweight/obesity, 1.52 (1.29, 1.77), and obesity, 1.97 (1.32, 2.94). Studies were dominated by upper-middle-income countries. Sugar-sweetened beverages and snacks are the main contributors to the outcomes*

Conclusion: *High UPF intake in childhood is linked to overweight and obesity. Preschool and primary school diets need attention. Study limitations include varied age group definitions and BMI cut-offs, affecting result consistency. Future research should assess BMI standards using age- and sex-specific percentiles, considering growth dynamics.*

Keywords: *ultra-processed food, overweight, obesity, children, preschool, primary school*