Google Search Interest and Obesity-Related Indicators

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Background

Official obesity, BMI, and diabetes indicators remain the outcome benchmark. Search behavior adds a patient-facing signal: what people notice, fear, compare, and seek help for in real time. This makes Google Trends useful for understanding information demand, treatment curiosity, stigma, body image, and prevention needs before they appear in annual health statistics.

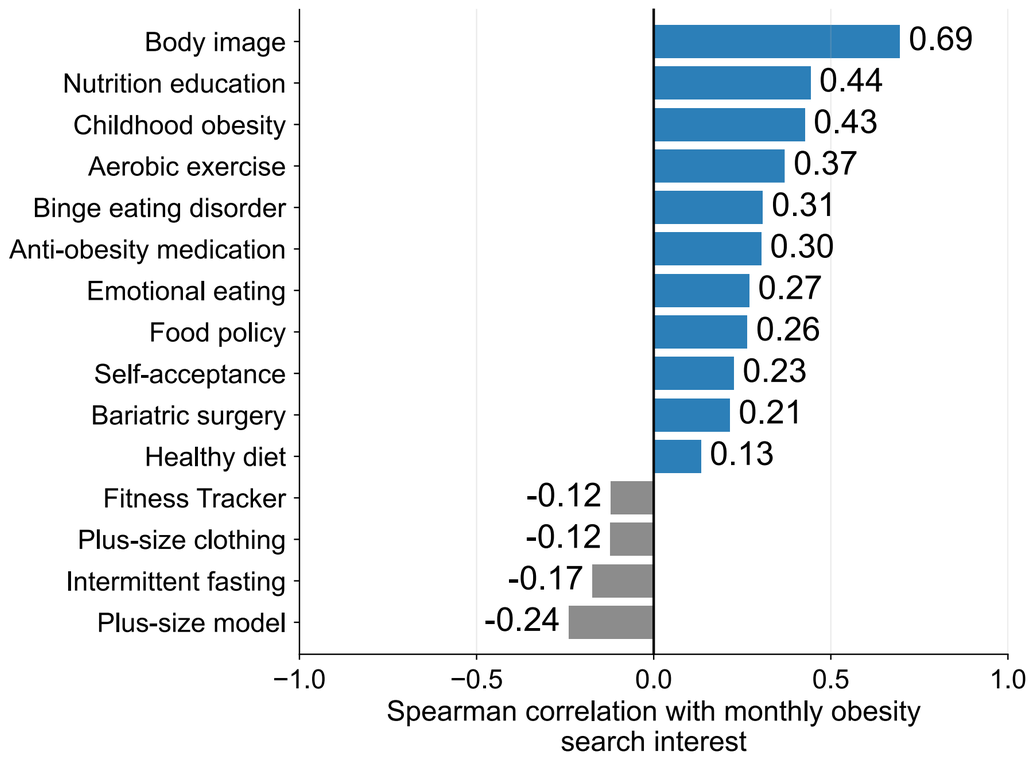
Methods

Monthly Google Trends topics from 2004-2025 were compared with country-year health indicators from the World Bank and World Health Organization. The study first asks which topics move with obesity searches, then tests whether country-level search intensity aligns with BMI, overweight, obesity, and diabetes measures.

Discussion

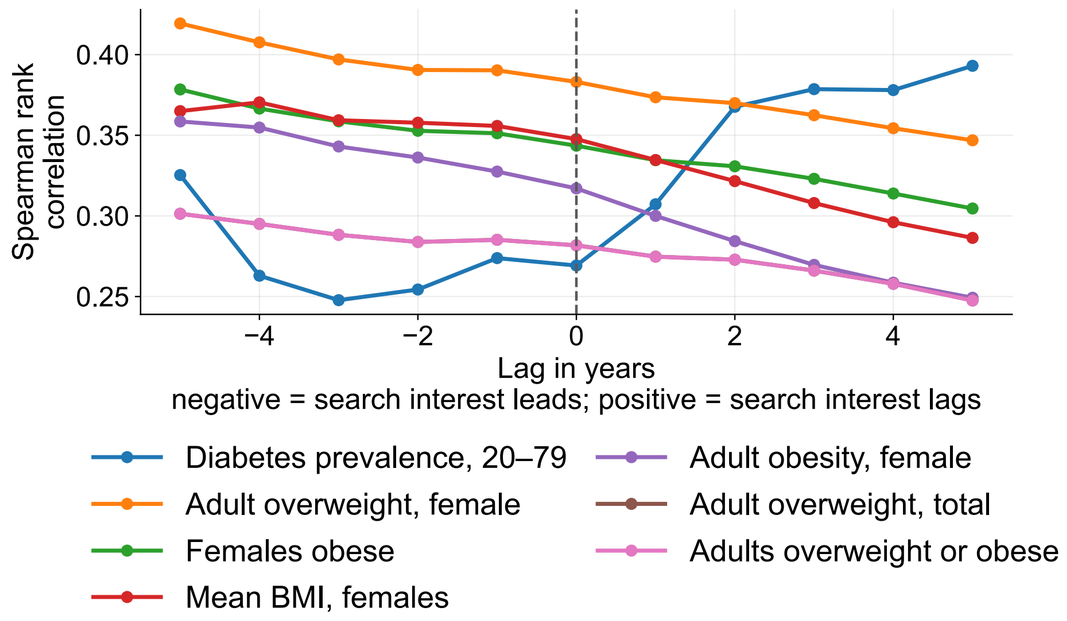
The findings support search data as public-attention intelligence for obesity medicine. Strong links with body image, childhood obesity, female BMI, and overweight suggest that search behavior reflects concern, treatment need, and social salience. Lead-lag signals are useful for early monitoring, while outlier countries highlight places where communication, access, or media context may need closer follow-up.

1 Topics that co-move with "obesity"

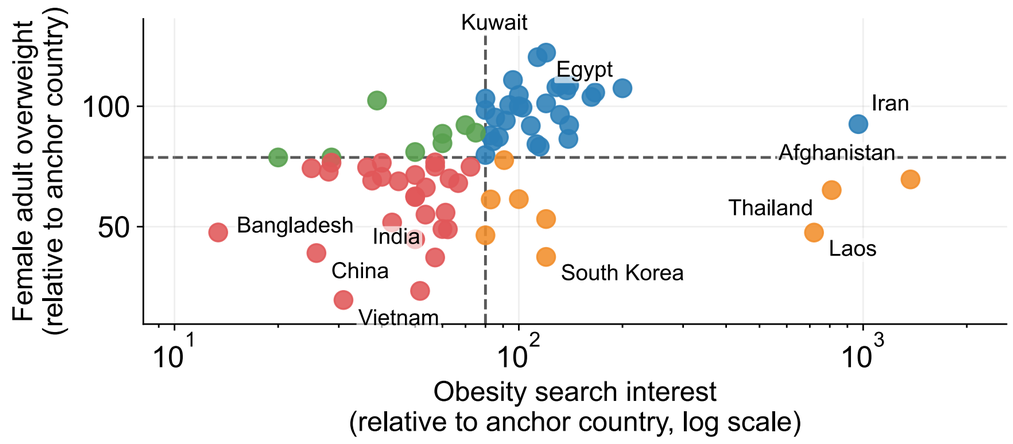


Body image, nutrition education, and childhood obesity align most strongly with obesity searches. This links medical attention with prevention, learning, stigma, and psychosocial experience.

2 Timing: do searches lead or lag indicators?

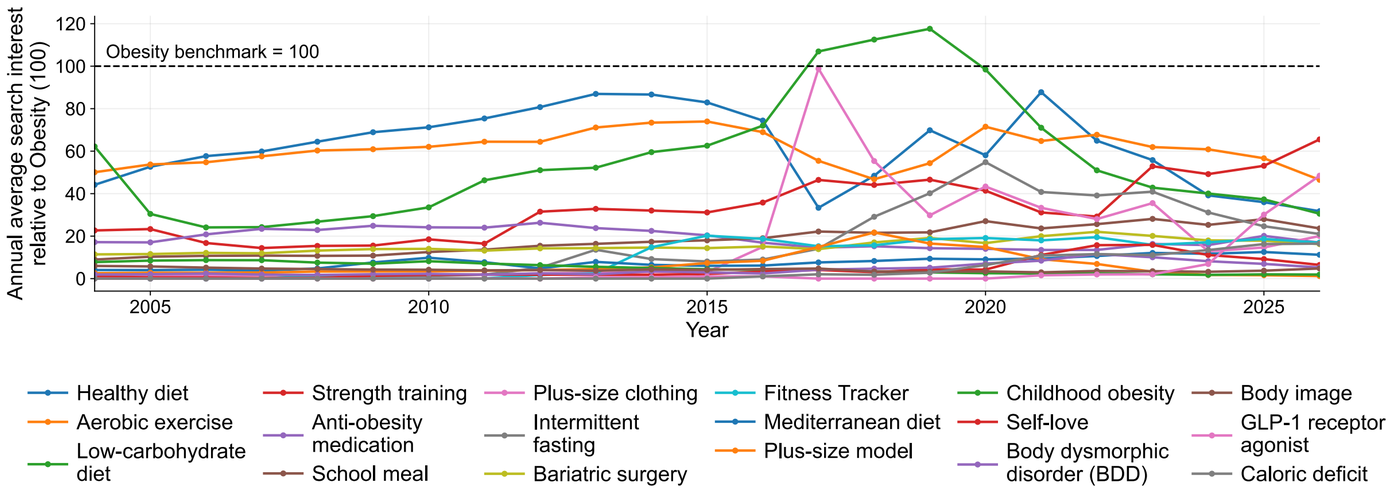


3 Example: female overweight indicator

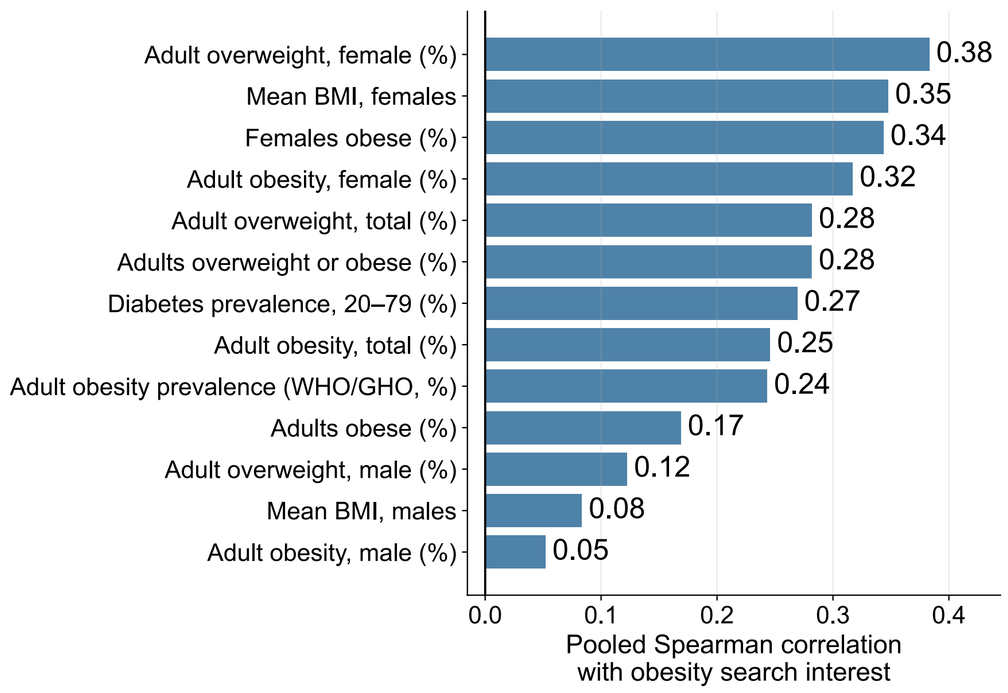


4 Shifting topic attention

- Peaks in low-carbohydrate diet and GLP-1 interest show how quickly attention can shift around popular interventions.
- Clinicians and public-health teams can time guidance, address misinformation, and anticipate patient questions.
- Divergence between search attention and health burden can flag countries or periods for deeper survey, policy, or clinical follow-up



5 Correlation with health indicators



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