

Study finds obesity may be just up the road

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Rhodes ISER visiting research fellow Steffen Otterbach conducted this innovative study with Rhodes University's Professor Michael Rogan and other research colleagues. Their research findings should influence policy and practice in addressing one of South Africa's major health issues – obesity.

The scientists used Google geolocation data to pinpoint about 2,800 supermarkets and 4,500 fast-food outlets.

For years fast food has been blamed for the epidemic of obesity, but new local research says supermarkets are also culpable.

The closer you live to supermarkets and fast-food outlets, the more likely you are to be overweight or obese, irrespective of income, according to a study by researchers from Rhodes University and the University of Hohenheim in Germany.

The scientists used Google geolocation data to pinpoint about 2,800 supermarkets and 4,500 fast-food outlets. They combined this information with the 2017 South African National Income Dynamics Study (Nids), which includes the locations and health measurements of people surveyed.

Their calculations suggest that for each kilometre away from a supermarket, the average body-mass index decreases by 0.14. They concluded that proximity to supermarkets and fast-food restaurants encourages weight gain.

Lead researcher Steffen Otterbach says in the journal *World Development* that it should be possible to introduce regulations to make it easier for consumers to make healthy food choices. "Studies from different countries demonstrate that interventions such as taxes, subsidies, changes of in-store placements of healthy and less healthy foods, and regulation of information and advertisement campaigns can influence consumer food choices significantly," he says.

Nids found that 68% of women and 31% of men in SA are overweight or obese. Among women, the prevalence of obesity is about three times the global average.

Lynn Moeng-Mahlangu, chief director for health promotion and nutrition at the department of health, said regulation of the food industry is crucial but should be combined with consumer education.

She said the department is conducting a dietary intake study in preparation for a review of regulations. Plans to simplify food labelling and to introduce front-of-pack warnings are at an advanced stage, she said.

Professor Vicki Lambert, director of the University of Cape Town Research Centre for Health through Physical Activity, Lifestyle and Sport, said: "The proximity of retail outlets may make food more accessible, but it does not increase the buying power of marginalised South Africans. These individuals are more likely to purchase highly processed foods with long shelf-lives than the more perishable, fresh and whole foods."

A progressive approach would be to subsidise healthy foods and support local growers, she said.

ORIGINAL STUDY: <https://www.sciencedirect.com/science/article/pii/S0305750X20304964>

Using Google data to measure the role of Big Food and fast food in South Africa's obesity epidemic

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