

OBESITY worldwide is increasing more quickly in rural areas than in cities, a study reported recently, challenging a long-held assumption that the global epidemic of excess weight is mainly an urban problem.

Data covering 200 countries and territories compiled by more than 1,000 researchers showed an average gain of roughly five to six kilogrammes per woman and man living in the countryside from 1985 to 2017.

City-dwelling women and men, however, put on 38 and 24 per cent less, respectively, than their rural counterparts over the same period, according to the findings, published in *Nature*.

"The results of this massive global study overturn commonly held perceptions that more people living in cities is the main cause of the global rise in obesity," said senior author Majid Ezzati, a professor at Imperial College London's School of Public Health. "This means that we need to rethink how we tackle this global health problem."

The main exception to the trend was sub-Saharan Africa, where women gained weight more rapidly in cities.

Obesity has emerged as a global health epidemic, driving rising rates of heart disease, stroke, diabetes and a host of cancers. The annual cost of treating-related health impacts could top a trillion dollars by 2025, the World Obesity Federation estimated in 2017.

To date, most national and international policies to curb excess body weight have focused on cities, including public messaging, the redesign of urban spaces to encourage walking, and subsidised sports facilities.



BODY-MASS INDEX

To factor health status into the comparison across nations, the researchers used a standard measure known as the "body-mass index", or BMI, based on height and weight. A person with a BMI of 25 or more is considered overweight, while 30 or higher is obese. A healthy BMI ranges from 18.5 to 24.9.

Approximately two billion adults in the world are overweight, nearly a third of them obese. The number of obese people has tripled since 1975.

The study revealed important differences between countries depending on income level. In high-income nations, for example, the study found that rural BMI were generally already higher in 1985, especially for women.

Lower income and education levels, the high cost and limited availability of healthy foods, dependence on vehicles, the phasing out of manual labour — all of these factors likely contributed to progressive weight gain. Conversely, urban

Obesity rising faster in rural area

Research shows that worldwide, men and women living in the countryside have gained a significant amount of weight

areas "provide a wealth of opportunities for better nutrition, more physical exercise and recreation, and overall improved health," Ezzati said.

Around 55 per cent of the world's population live in cities or satellite communities, with that figure set to rise to 68 per cent

by mid-century, according to the United Nations.

ULTRA-PROCESSED FOODS

The most urbanised regions in the world are North America (82 per cent), Latin America and the Caribbean (81 per cent), and Europe (74 per cent).

More recently, the proportion of overweight and obese adults in the rural parts of many low- and middle-income countries is also rising more quickly than in cities. "Rural areas in these countries have begun to resemble urban areas," Barry Popkin, an expert on global public health at the University of North Carolina, said in a comment, also in *Nature*.

"Modern food supply is now available in combination with cheap mechanised devices for farming and transport," he added. "Ultra-processed foods are also becoming part of the diets of poor people."

At a country level, several findings

stand out.

Some of the largest BMI increases from 1985 to 2017 among men were in China, the United States, Bahrain, Peru and the Dominican Republic, adding an average of 8-9kg per adult.

Women in Egypt and Honduras added — on average, across urban and rural areas — even more. Rural women in Bangladesh, and men living in rural Ethiopia, had the lowest average BMI in 1985, at 17.7 and 18.4 respectively, just under the threshold of healthy weight. Both cohorts were well above that threshold by 2017.

The populations — both men and women — in small South Pacific island nations have among the highest BMI levels in the world, often well above 30.

"The NDC Risk Factor Collaboration challenges us to create programmes and policies that are rurally focused to prevent weight gain", Popkin said.

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Barry Popkin