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The effects of net food imports on obesity in selected Latin American and Caribbean Countries

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Abstract

Obesity is becoming a major health problem in Latin America and the Caribbean (LAC). The prevalence of obesity and its related diseases such as cardiovascular diseases (CVD) which were estimated at 26 percent of all diseases are expected to triple by 2020. Researchers and policy makers have accredited the rise in obesity to changes in diet, life style, income and the growth of urbanization. Not much attention has been paid to food availability and imports. Food production in the LAC countries has been increasing at a slow rate, but food availability due to imports has grown at a much faster rate. Much of this growth in food availability can be associated with an increase in cheap food imports from the United States (US) and Europe. About half of all LAC countries are net food importers. In recent years surplus food producing countries have increased assistance for food purchases. The increase in food availability and consumption of imported foods are likely to affect weight gain and lead to obesity if the imported foods enhance caloric density, and lower the diversity of foods consumed. On the other hand, if the imported foods facilitate diet diversity this is likely to lower the risks of overweight and obesity. In this paper, we investigate the effects of food imports on obesity in selected LAC countries. Cross sectional data for the year 2002 for 25 selected LAC countries were collected from the World Health Organization health data base, FAO, the World Bank development indicator database, and World Penn tables. Regression analysis with a semi-log functional form was used to investigate whether food imports and other socio-economic variables were related to total population, male and female obesity. For total obesity the equation had an adjusted R² of 0.72 which means that the variation in the independent variable explained 72 percent of the variation in total obesity.

Net food imports, meat consumed per capita per day, and total food imports, negatively influenced the prevalence of total obesity whereas the total number of television sets and the number of tractors used in agriculture had positive effects on the prevalence of total obesity. For female obesity the equation had an adjusted R² of 0.68 which means that the variation in the independent variable explained 68 percent of the variation in total obesity.

Net food imports, meat consumed per capita per day, and total food imports, negatively influenced the prevalence of female obesity, whereas the total number of television sets had positive effects on the prevalence of female obesity. Female participation in the agricultural labor force had no effect on female obesity. For male obesity, the equation had an adjusted R² of 0.64 which means that the variation in the independent variable explained 64 percent of the variation in male obesity. Net food imports, meat consumed, and food imports, negatively influenced the prevalence of male obesity whereas the total number of television sets had a positive effect on the prevalence of male obesity. However, net food imports had a negative influence on obesity in LAC countries indicating that net food imports may be enhancing the nutritional status of these relatively poor neighbors of the US.