

Food Consumption and Obesity in France: Identification of Causal Effects and Price Elasticities

Céline Bonnet*, Pierre Dubois†, Valérie Orozco‡

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Abstract

The objective of this paper is to identify the causal effects between food consumption, calories intakes and body mass index (BMI) and then the effects of food prices on consumption. We then analyze the relevance of policies of taxation for the reduction of obesity in the population. Actually, the price elasticity of BMI can be decomposed into the causal relationship between obesity and calories consumption and the price elasticity of consumption. In this way, we can determine the real impact of food consumption on BMI. Using French data recording household and individual characteristics, households food purchases (quantities and expenditures) over a period of two years and nutrition information of all products, we recover individual level estimates of calories consumption following Chescher (1998). This individual consumption allows to analyze food demands and its price elasticity as well as their relationships with obesity at the individual level, avoiding the household aggregation bias.

Key words: Body Mass Index, obesity, taxation, nutrients, individual food consumption

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*Toulouse School of Economics (GREMAQ, INRA), 21 Allée de Brienne, F-31000 Toulouse

†Toulouse School of Economics (GREMAQ, INRA, IDEI) and CEPR, 21 Allée de Brienne, F-31000 Toulouse

‡Toulouse School of Economics (GREMAQ, INRA), 21 Allée de Brienne, F-31000 Toulouse

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