Household food security: Perceptions, behavior and nutritional quality of food purchases

Andrés Silva\textsuperscript{a,a,*}, Juan Carlos Caro\textsuperscript{b,1}, David Magaña-Lemus\textsuperscript{c}

\textsuperscript{a}Department of Economic and Management Sciences, Universidad Central de Chile, Lord Cochrane 417, Torre A, Third floor, Santiago, Chile

\textsuperscript{b}Universidad Diego Portales, Manuel Rodríguez Sur 415, Santiago 8370190, Chile

\textsuperscript{c}Economic Research Unit FIRA-Banco de Mexico, Antigua Carretera a Patzcuaro 8555, Morelia, Michoacan 58342, Mexico

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\textbf{A B S T R A C T}

Food security is an encompassing concept that includes several dimensions: sufficiency, acceptability, safety, stability and nutritional quality. Lately, diverse studies discuss how much objective and subjective indicators are able to characterize some of the above-mentioned dimensions. This has opened the door to some apparent contradictions between different food security measurements that reflect perception (through specific surveys) and behavior (expenditure data).

This article aims to extend the food security debate, focusing on the dimension of nutritional quality and classifying food products as healthy or unhealthy, in addition to computing their calorie value. Using a nationally representative database of nearly 6700 households in Mexico, we found that food-secure households (55% of the total sample) purchase an overall food basket that is 0.7 items less diverse, spend $85 Mexican pesos per week more, and show no significant difference in terms of purchased kcals compared to food-insecure households. After controlling for confounding factors, we found that food-secure households purchase a wider variety of healthy food items (and a smaller variety of unhealthy food items), spend more money on food, and purchase more calories in healthy food items compared to food-insecure households. Therefore, with this article, we enhance the relevance of the nutritional quality of food purchases in the food security debate.

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1. Introduction

The term \textit{food security} is currently defined by the Food and Agriculture Organization (FAO) as the physical, economic and social access, at all times, to sufficient, safe, and nutritious food to meet people’s dietary needs and food preferences for a healthy and active life (FAO, 1996). As noted by several authors, the definition of food security involves five dimensions: sufficiency, nutritional quality, acceptability, safety and stability (Coates, 2013). Given the complexity of the concept of food security, objective indicators have proven to be insufficient to capture all pathways to food insecurity (Maxwell, Vaitla, & Coates, 2014). Recent evidence suggests that subjective measurements such as experiential (psychological) and behavioral questionnaires capture important aspects of food insecurity, such as the stability of access to food (Maxwell, Watkins, Wheeler, & Collins, 2003). However, several studies have shown that subjective food safety measurements cannot fully characterize changes in food expenditure behavior – such as coping strategies – because some households continue to report their status...