1. Introduction

Because they are common, cheap, and easy to install, refrigerator thermometers have been recommended as an essential part of food safety education (FDA, 2003; Ricci et al., 1999). Despite their obvious benefits, however, many American households do not use this simple food safety tool, and most consumers fail to understand how to properly use it. Therefore, we conducted a national survey of consumer refrigerator practices to examine the levels and determinants of consumer refrigerator practices among the US population, which also include pregnant women, to inform food safety education messages.

2. Study Design

Using a Web survey approach, we sampled a nationally representative sample of 2,428 non-institutionalized adults aged 18 and older, and the remaining population (i.e., those age 18 to 59, the remaining population aged 18 to 40, and those aged 41 to 59). We included the older adults on the survey because we wanted to understand their refrigerator practices, the reasons they do or do not use thermometer, and the relationship between their demographic characteristics and refrigerator practices. The rural/urban status of the respondents was based on zip code, and the remaining population was based on the zip codes of the respondents who were from a metropolitan area, and the remaining population was based on the zip codes of the respondents who were from a non-metropolitan area.

3. Results

A. Refrigerator Thermometer Ownership

B. Recommended Refrigerator Temperature

C. Refrigerator Cleaning Practices

4. Discussion

USAID and FDA aim to encourage consumers to use a refrigerator thermometer and bring refrigerated food to a recommended temperature of 40°F or below to fully benefit and avoid the associated health risks. Nearly one-quarter of respondents reported that they did not know what the recommended temperature was or how to use it correctly. To improve food safety education messages, the American Dietetic Association (ADA), in collaboration with Food Insight and the Centers for Disease Control and Prevention (CDC), recommended that the remaining population be advised to purchase refrigerators with digital thermometers and to install them in an internal part of the refrigerator freezer. However, many consumers do not use a thermometer to monitor refrigerator temperatures as recommended, and make decisions about food safety based on their own experiences (Mead et al., 1999). Therefore, we conducted a national survey of consumer refrigerator practices to examine the levels and determinants of consumer refrigerator practices among the US population, which also include pregnant women, to understand their refrigerator practices, the reasons they do or do not use thermometer, and the relationship between their demographic characteristics and refrigerator practices.