

July 13, 2017



# Arizona Nutrition Network

## Recipe Project

## Report

Evaluation  
Strategies

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## Executive Summary

The United States Department of Agriculture (USDA) Supplemental Nutrition Assistance Program-Education (SNAP-Ed) provides nutrition education and obesity prevention programming with the goal of increasing the likelihood that SNAP-eligible families will choose healthy diet and physical activity behaviors on a limited budget. The Arizona SNAP-Ed program is called the Arizona Nutrition Network (AzNN).

The AzNN regularly provides recipes to the target audience. To more effectively accommodate the needs and interests of the target audience, AzNN contracted with Evaluation Strategies to conduct surveys to learn more about meal planning, recipe usage and selection, available ingredients, available kitchen tools, appliances, gadgets and cookware, and cooking methods. The target audience for the survey was low-income women (income <185 percent of Federal Poverty Level) residing in Arizona between 18 and 49 years old with children ages 0-11 living in their homes.

Fifty-nine percent of survey participants reported that they used recipes when cooking for their families, and 91 percent said they looked for new recipes. The most common source for finding new recipes was websites (61 percent), followed by social media (52 percent). When choosing new recipes, participants identified taste (69 percent), availability of ingredients (64 percent), and healthy ingredients (53 percent) as factors of highest importance. A variety of flavors, textures, and ingredients (48 percent), having the necessary utensils (48 percent), and the amount of time recipes required (47 percent) were also very important for almost half of the participants. Many participants commonly used all assessed cooking methods (i.e., baking/roasting, grilling, steaming, sautéing).

This report provides information that can be used by AzNN and its partners to evaluate potential recipes in terms of factors that matter to women when selecting recipes. Details are provided on what ingredients and supplies are typically available in the households of the target audience, and cooking methods that are found to be acceptable.



## Section 1: Introduction and Background

The United States Department of Agriculture (USDA) Supplemental Nutrition Assistance Program-Education (SNAP-Ed) provides nutrition education and obesity prevention programming with the goal of increasing the likelihood that SNAP-eligible families will choose healthy diet and physical activity behaviors on a limited budget. Through the Arizona Department of Health Services (ADHS), the Arizona SNAP-Ed program, called the Arizona Nutrition Network, coordinates initiatives with state-level partners and eight local implementing agencies to encourage behavioral outcomes that include increased fruit and vegetable consumption, regular physical activity, and caloric balance throughout the life cycle.

The AzNN regularly provides recipes to the target audience using multiple methods, including distribution of printed recipe cards/handouts, a recipe database on the eatwellbewell.org website, Pinterest, and email distribution. Material distribution occurs simultaneously with direct education efforts (e.g., curriculum delivery, food demonstration/taste testing, informational booths at health fairs, etc.).

Past research has explored participant and partner agency satisfaction with recipes and other social marketing materials, but has not delved into criteria to consider when creating and/or selecting recipes for use with the target audience. To more effectively accommodate the needs and interests of the target audience, AzNN contracted with Evaluation Strategies to conduct surveys to learn more about meal planning, recipe usage and selection, available ingredients, available kitchen tools, appliances, gadgets and cookware, and cooking methods. The target audience for the survey was low-income women (income <185 percent of Federal Poverty Level) residing in Arizona between 18 and 49 years old with children ages 0-11 living in their homes.

The remainder of this report is organized into two sections, methodology and results. In addition, Appendix A presents a list of detailed data tables showing the number and percent for responses to all survey questions. All tables referenced throughout the document can be found in Appendix A. Appendix B presents copies of the survey tools in English and Spanish, including screening questions and picture prompts.

## Section 2: Methodology

### Data Collection

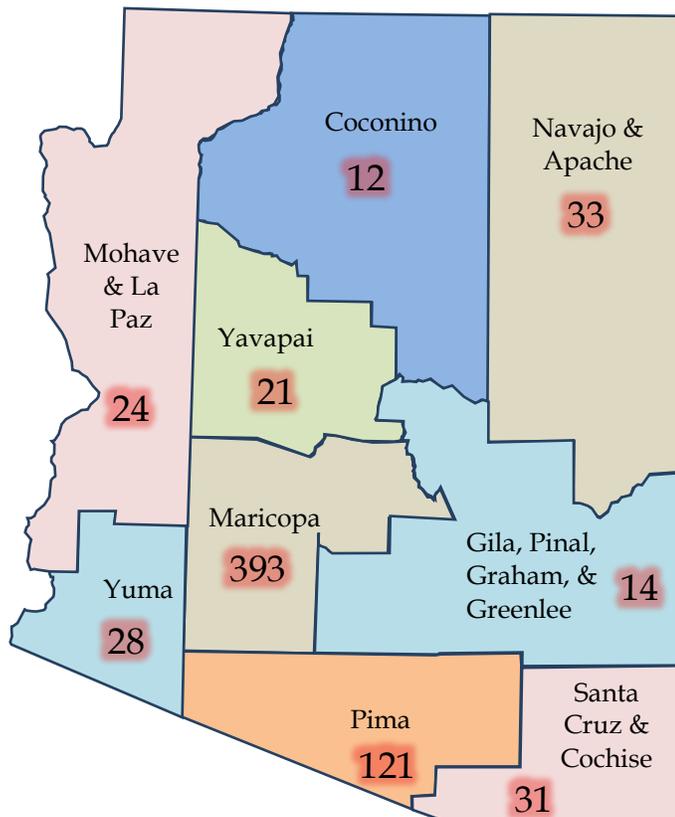
To reach the target population, intercept surveys were conducted at grocery stores, elementary schools, WIC office sites, Head Start and child care centers, health centers, and food banks. Participants were informed that participation was voluntary and would not affect their DES, WIC, other types of benefits, or their application for potential benefits. Participants were also offered a \$10 incentive in the form of a gift card to a grocery store. A screening tool was used to ensure that all participants met all study criteria (women with incomes below 185 percent of the Federal Poverty Level residing in Arizona between 18 and 49 years old with children ages 0-11 living in their homes). See Appendix B for a copy of the survey tools in English and Spanish, including the screener, interview questions, and picture prompts.

### Target Population and Sample

The United States Census Public Use Microdata Sample (PUMS) for 2015 was used to estimate the number of women who would be eligible to participate in the survey in each of the nine areas of the state. Households were identified in which there was at least one woman between the ages of 18 and 49, and one child under the age of 12, and a household income below 185 percent of the Federal Poverty Level. A sampling strategy was designed to ensure that the number of survey respondents from each area of the state was proportional to the number of eligible women in the area.

A total of 677 intercept surveys were completed at 32 sites (see Figure 1). A description of participants' characteristics follows.

Figure 1. Surveys Collected by County Area



### *Household Size*

The average household size of survey participants was 4.5. Twenty-eight percent reported a household size (including themselves) of four people. About two-thirds reported a household size of three to five people including themselves (71 percent) (see Table 1).

### *Participants' and Children's Ages*

The average age of participants was 32, with one-quarter between 33 and 38 years old, 24 percent between 28 to 32 years old, and 22 percent between 23 to 27 years old (see Table 2). Thirty-two percent of participants reported that they had at least one child under the age of 12 months; 59 percent reported they had at least one child between 1 and 4 years of age; and 64 percent of participants reported that they had at least one child between 5 and 11 years of age (see Table 3).

### *Ethnic and Racial Identification*

Almost three fourths (73 percent) of participants identified as White; 6 percent identified as Black or African American; 3 percent identified as American Indian/Alaskan Native/Native American; 1 percent identified as Native Hawaiian or Other Pacific Islander; less than 1 percent identified as Multi-racial and as Asian (see Table 4). Two-thirds of survey participants reported that they identified as Hispanic (67 percent) (see Table 4).

### *Monthly Household Income*

Average monthly household income of participants was reported as \$2,079.68. About one half of participants (49 percent) reported a monthly household income of \$2,470 or less, followed by 16 percent who reported between \$2,471 and \$3,108, and 4 percent who reported between \$3,109 and \$3,747 (see Table 5).

### *Food Assistance Programs*

Overall, 78 percent of participants reported that someone in their family received food assistance of some kind (see Table 6). Forty-six percent of participants received WIC, 44 percent received SNAP, and 37 percent had a child on the Free and Reduced-Price School Meal program. Three percent reported receiving some other kind of food assistance (see Table 7).

## Section 3: Results

### Meal Preparation in Participants' Homes

Participants were asked questions about how often they cooked for their families in their homes, and about responsibility for meal preparation and planning.

#### *Frequency of Cooking*

More than three-quarters of survey participants reported that they cooked for their family five to seven days per week (78 percent), while most of the rest said they cooked three to four days per week (18 percent) (see Table 8).

#### *The Person Responsible for Meal Preparation*

Ninety-four percent of survey participants reported that they, personally, were responsible for meal preparation, 5 percent said that someone else was, and 1 percent said that they were responsible with someone else (see Table 9).

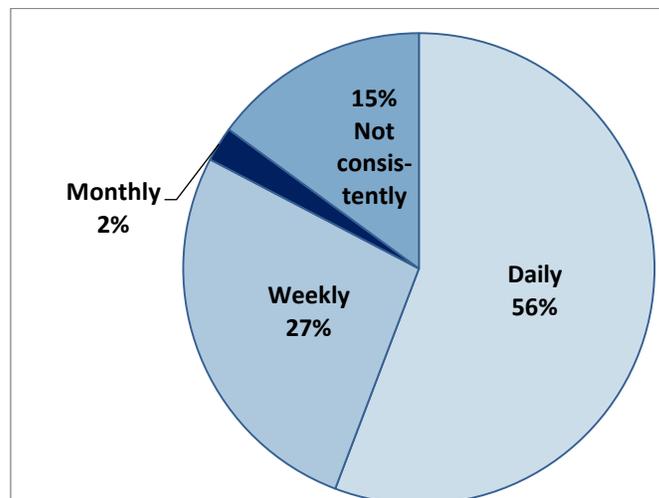
#### *Meal Planning*

More than three-fourths of survey participants reported that they or someone in their household planned meals (82 percent). Seventeen percent of participants reported that no one in their home planned meals (see Table 10).

#### *Frequency of Meal Planning*

Of those who responded that meals were planned, 56 percent reported that they or someone in their home planned meals daily, and another 27 percent indicated that they or someone in their home planned meals weekly (see Figure 2 and Table 11).

Figure 2. Frequency of Meal Planning



## Use of Recipes by Participants

Survey participants were asked about their recipe use and if applicable, the reasons for not using them.

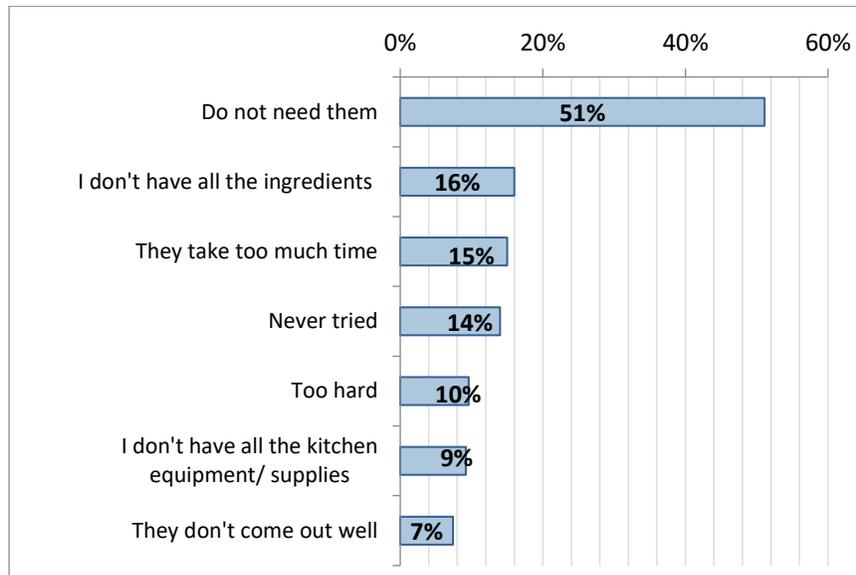
### Use of Recipes when Cooking

More than half of survey participants reported that they used recipes when cooking (59 percent) (see Table 12).

### Reasons for Not Using Recipes

Among the 40 percent of participants who reported that they did not use recipes, 51 percent reported that they did not need them. Figure 3 lists the reasons participants reported for not using recipes, in descending order by frequency (see Table 13). Participants could select more than one response; consequently, values did not add up to 100 percent.

Figure 3. Reasons for Not Using Recipes



### Frequency of Recipe Usage

Only 7 percent of participants reported always using recipes when cooking for their families. The largest number of participants reported that they used recipes some of the time (72 percent) or most of the time (21 percent). Less than 1 percent said they never used them (0.3 percent) (see Table 14).

## Search for New Recipes by Participants

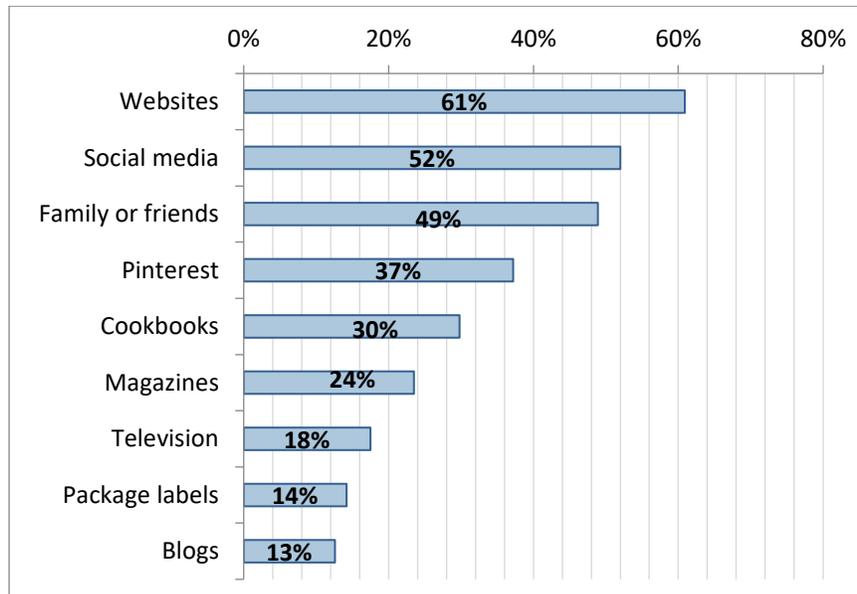
### Number of Survey Participants who Search Recipes

Of those survey participants who used recipes, 91 percent reported that they looked for new recipes. Nine percent of survey participants reported that they did not look for new recipes (see Table 15).

### Recipe Sources

Information about where participants found recipes is presented in Figure 4. Of those who reported that they looked for new recipes, the largest number of participants reported looking on websites (61 percent), followed by social media (52 percent), and asking family or friends (49 percent). Participants could select more than one recipe source; consequently, responses did not total 100 percent (see Table 16).

Figure 4. Recipe Sources



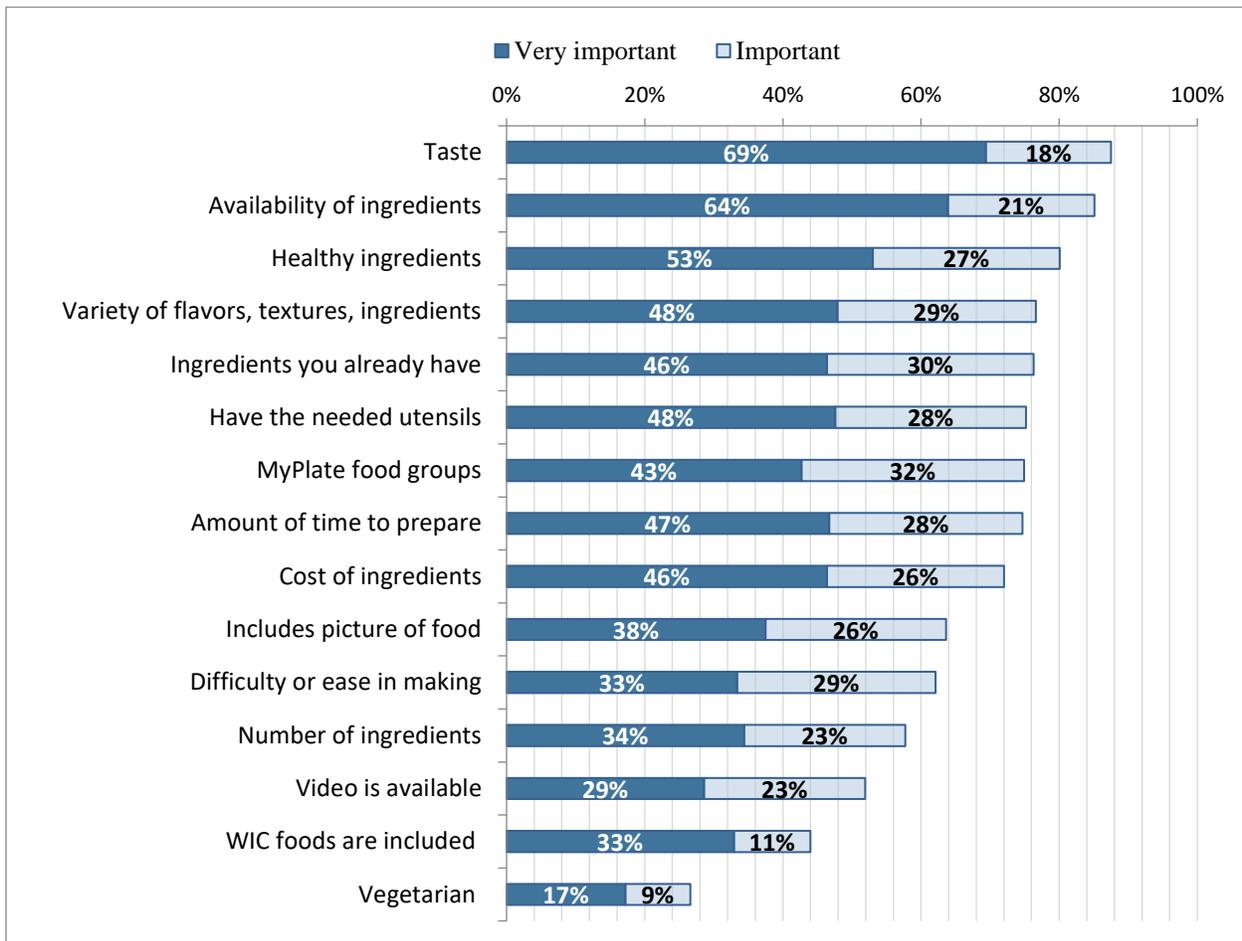
### Recipe Formats

Seventy-two percent of participants said they looked for written recipes and 61 percent looked for videos (see Table 17).

## Factors in Recipe Selection

Participants who reported that they used recipes were asked to rate certain factors in terms of how important they were in selecting a recipe. Taste was most often rated as either very important or important, followed by availability of ingredients, and healthy ingredients. Figure 5 shows the percent of participants who said that each of the factors rated was very important or important, sorted in descending order by the sum of those two ratings (see Table 18).

Figure 5. Importance of Factors in Recipe Selection



## Comfort with Ingredient Substitutions

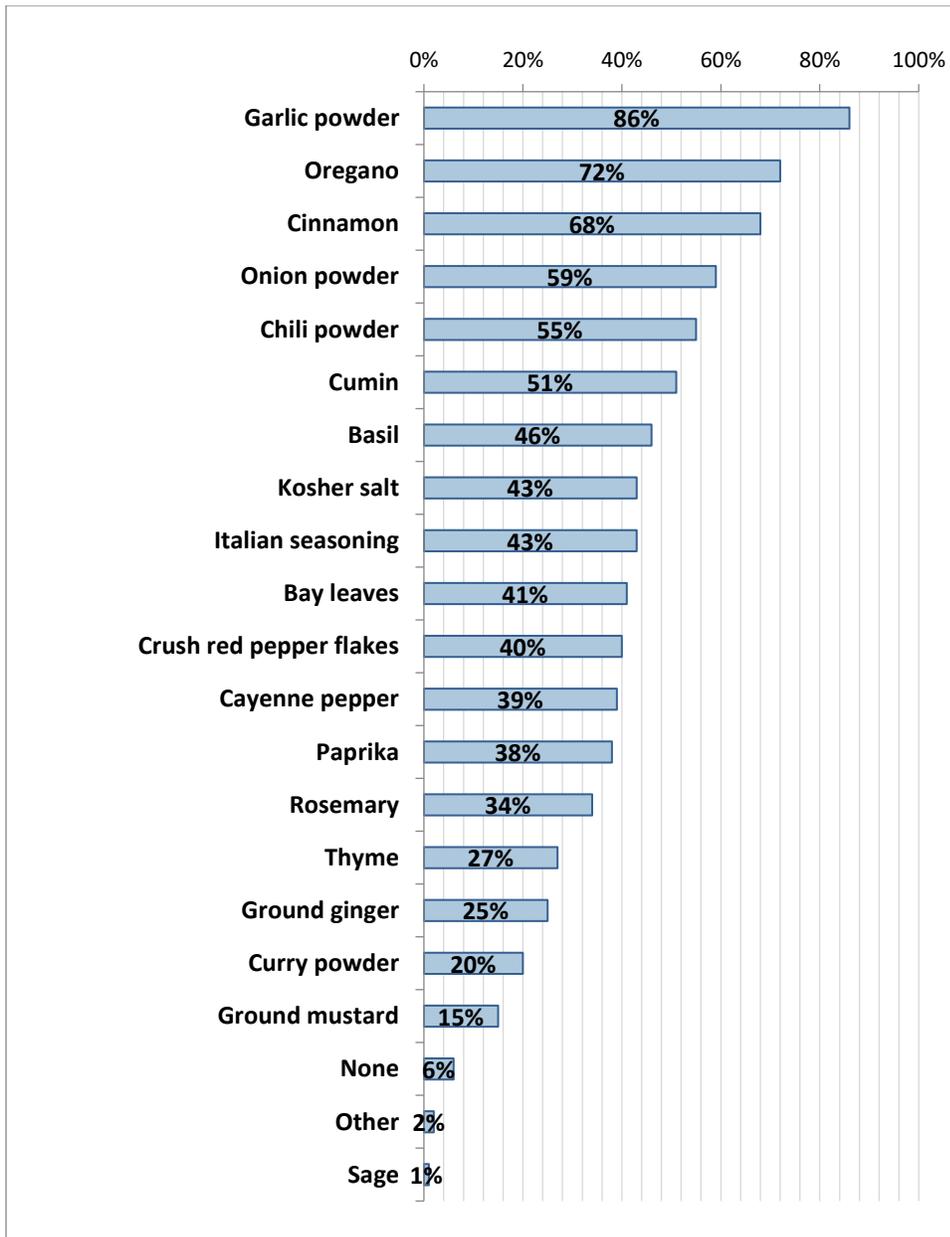
Of those participants that used recipes, 90 percent reported that they were either very comfortable with substituting ingredients (49 percent) or somewhat comfortable (41 percent) (see Table 19).

## Items Typically Stocked and/or Used by Participants

### Dried Herbs and Seasonings

The largest number of participants reported that they used garlic powder (86 percent), followed by oregano (72 percent), and cinnamon (68 percent). Figure 6 shows the percent of participants who chose each dry herb or seasonings, in descending order of frequency (see Table 20 for an alphabetical listing of ingredients). Participants could select multiple responses; consequently, responses did not total 100 percent.

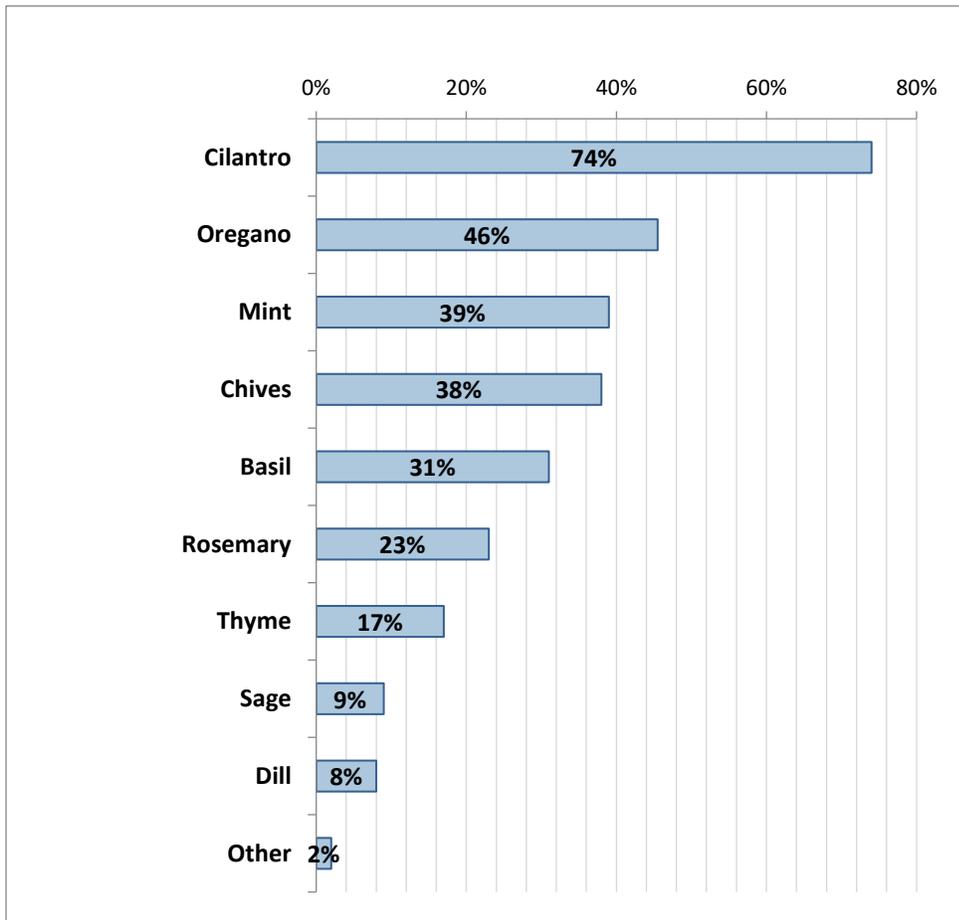
Figure 6. Dried Herbs and Seasoning



### Fresh Herbs

Eighty-three percent of participants reported that they used fresh herbs when preparing food (see Table 21). Three-quarters of all participants reported that they often used cilantro (74 percent), followed by oregano (46 percent), mint (39 percent), and chives (38 percent). Figure 7 shows the percent of participants who chose each fresh herb, sorted in descending order of frequency (see Table 22 for an alphabetical listing of responses by herb). Participants could select multiple responses; consequently, responses did not total 100 percent.

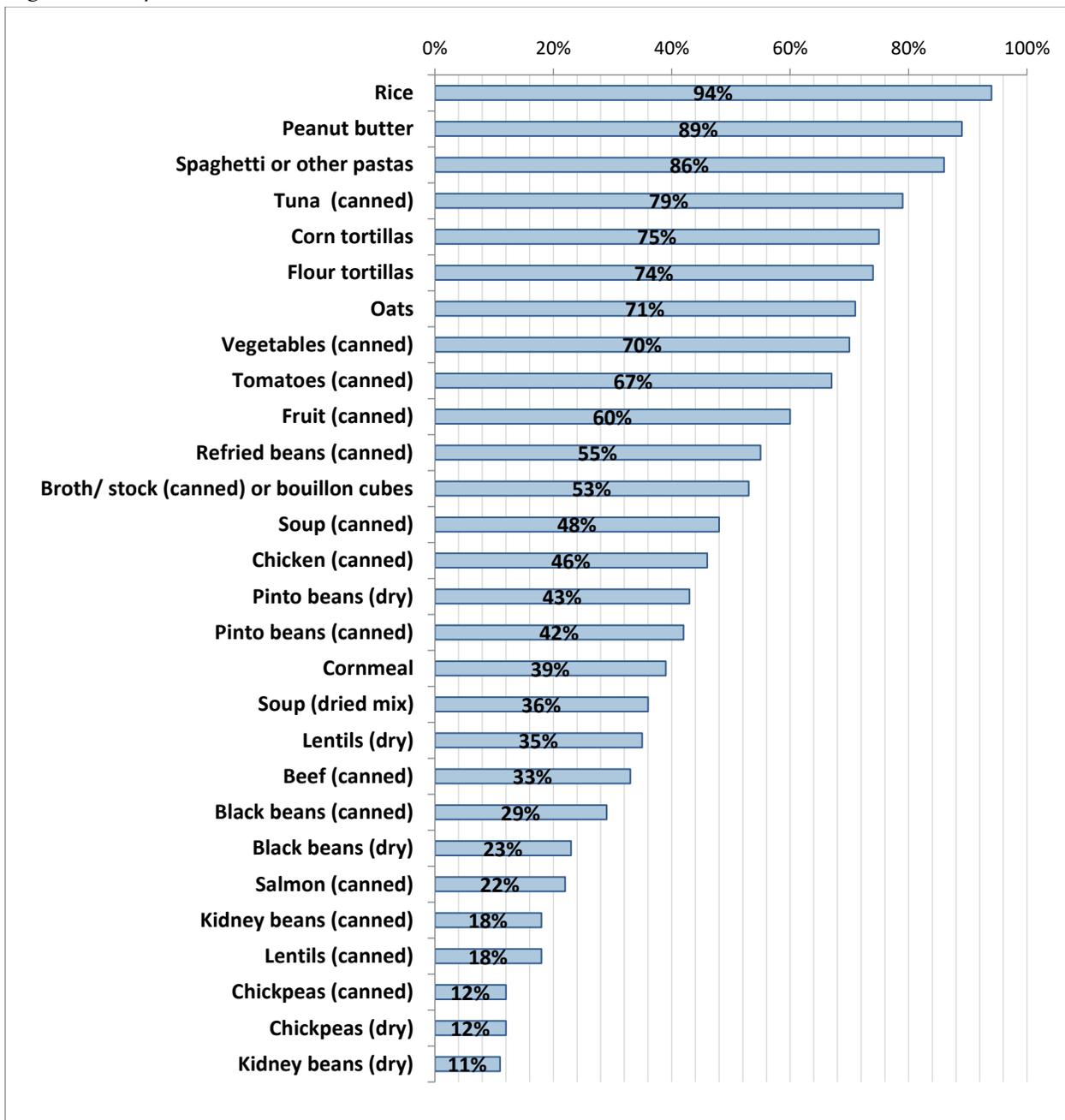
Figure 7. Most Often Used Fresh Herbs



### Cupboard Items

Rice was the item most commonly kept by participants (94 percent), followed by peanut butter (89 percent), and spaghetti or other pastas (86 percent). Figure 8 shows the percent of participants who reported having each of the items, in descending order of frequency (see Table 23 for alphabetical listing and Table 24 for a listing by subgroup of all items). Participants could select multiple responses; consequently, responses did not total 100 percent.

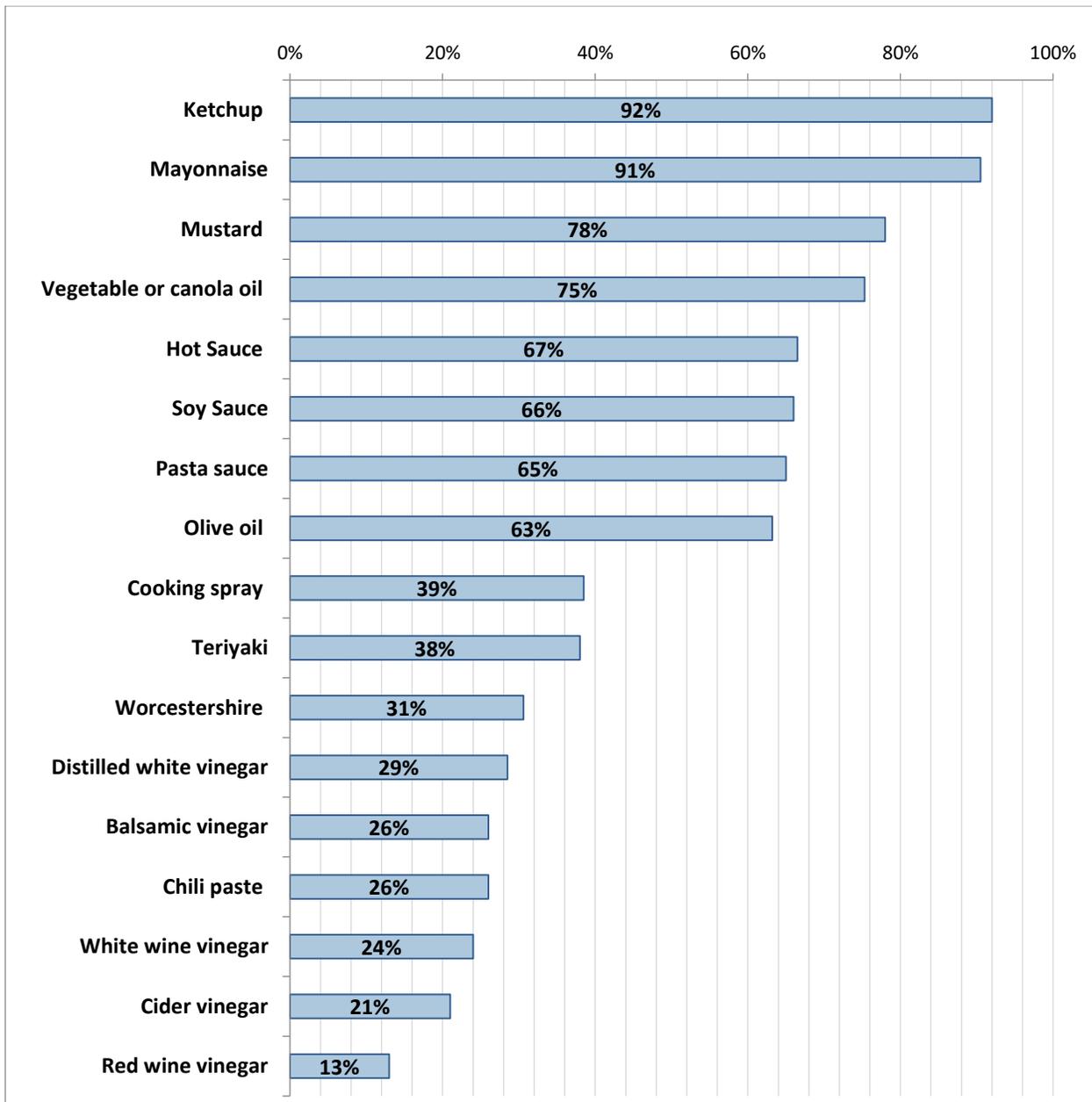
Figure 8. Cupboard Items



*Condiments, Oils, Vinegars, and Sauces*

Of the condiments listed, ketchup was most commonly kept by participants (92 percent), followed by mayonnaise (91 percent), and mustard (78 percent). Figure 9 shows condiments, oils, vinegars, and sauces in descending order of frequency (see Table 23 for alphabetical listing and Table 24 for a listing by subgroup of all items). Participants could select multiple responses; consequently, responses did not total 100 percent.

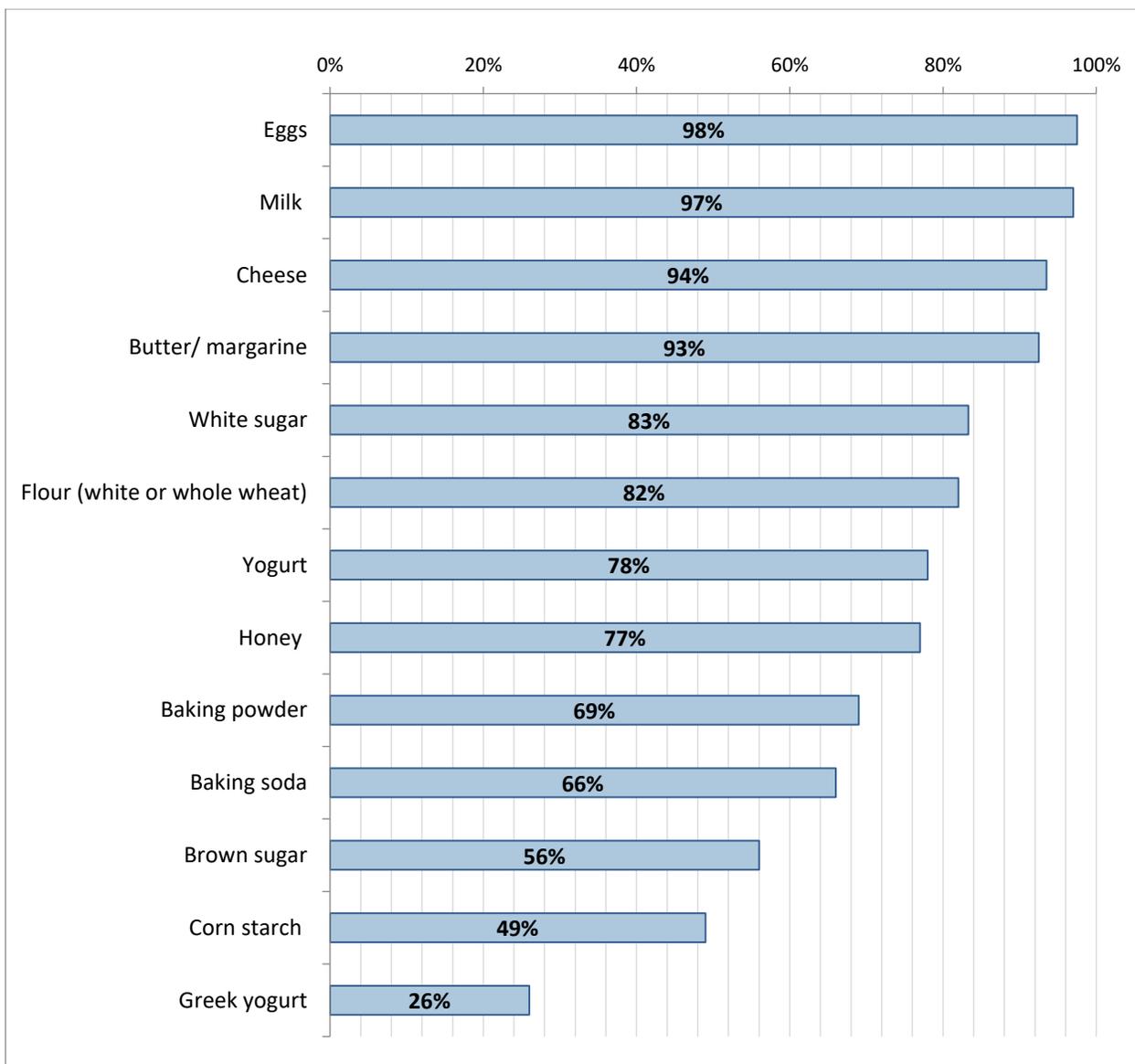
Figure 9. Condiments, Oils, Vinegars, and Sauces



### Baking and Refrigerated Items

Information about the baking and refrigerated items participants routinely kept is presented in Figure 10. The largest number of participants reported that they had eggs (98 percent), followed by milk (97 percent), and cheese (94 percent). Figure 10 lists items in descending order of frequency (see Table 23 for alphabetical listing and Table 24 for a listing by subgroup of all items). Participants could select multiple responses; consequently, responses did not total 100 percent.

Figure 10. Baking and Refrigerated Items



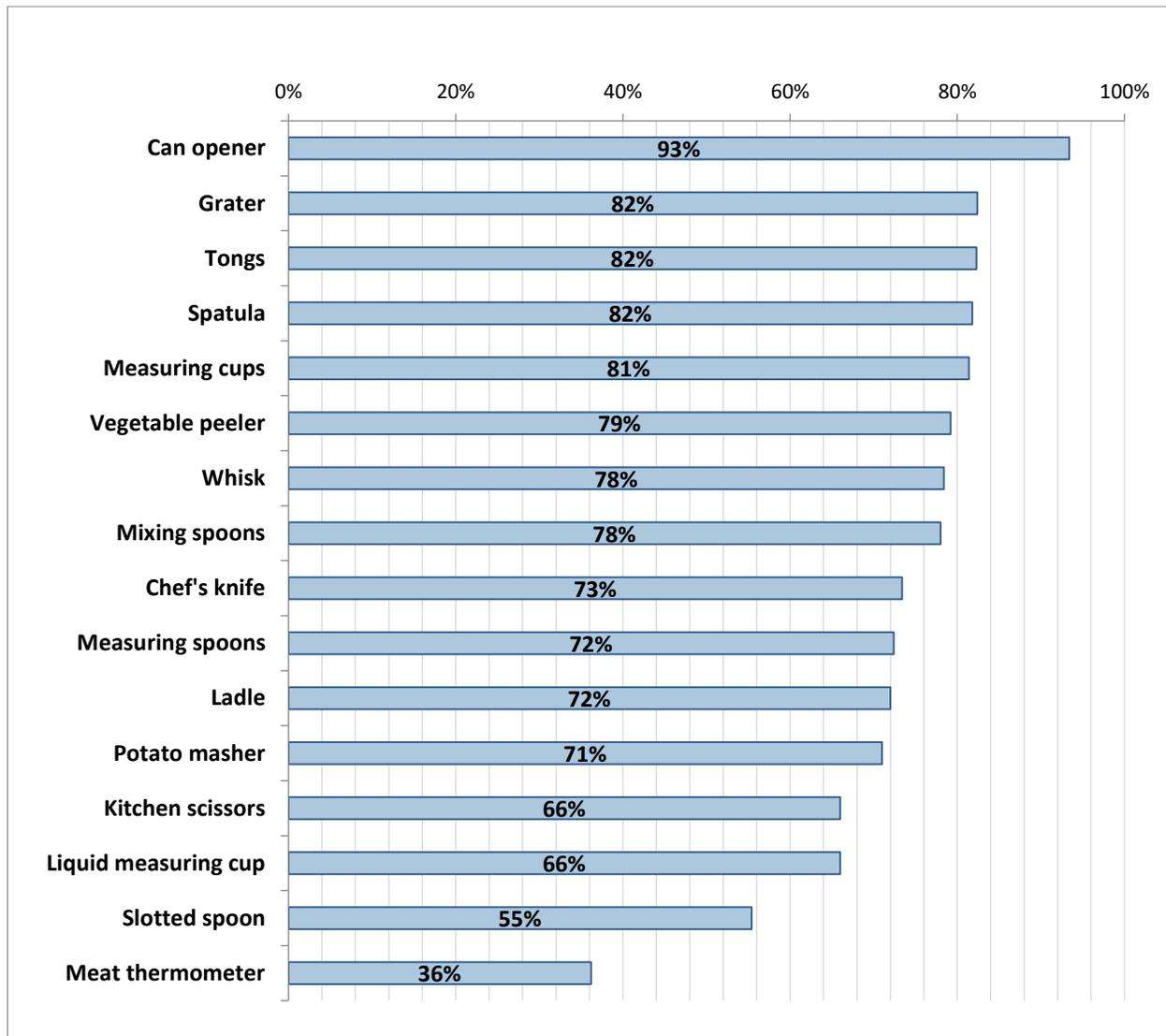
## Food Preparation Tools

Participants were asked what food preparation tools they had in their kitchen. Tools were divided into the following subgroups: kitchen tools, small appliances, kitchen gadgets, and cookware.

### Kitchen Tools

The largest number of participants reported that they had a can opener (93 percent), followed by a grater (82 percent), and tongs (82 percent). Figure 11 lists items in descending order of frequency (see Table 25 for alphabetical listing of all food preparation tools and Table 26 for a listing by subgroup). Participants could select multiple responses; consequently, responses did not total 100 percent.

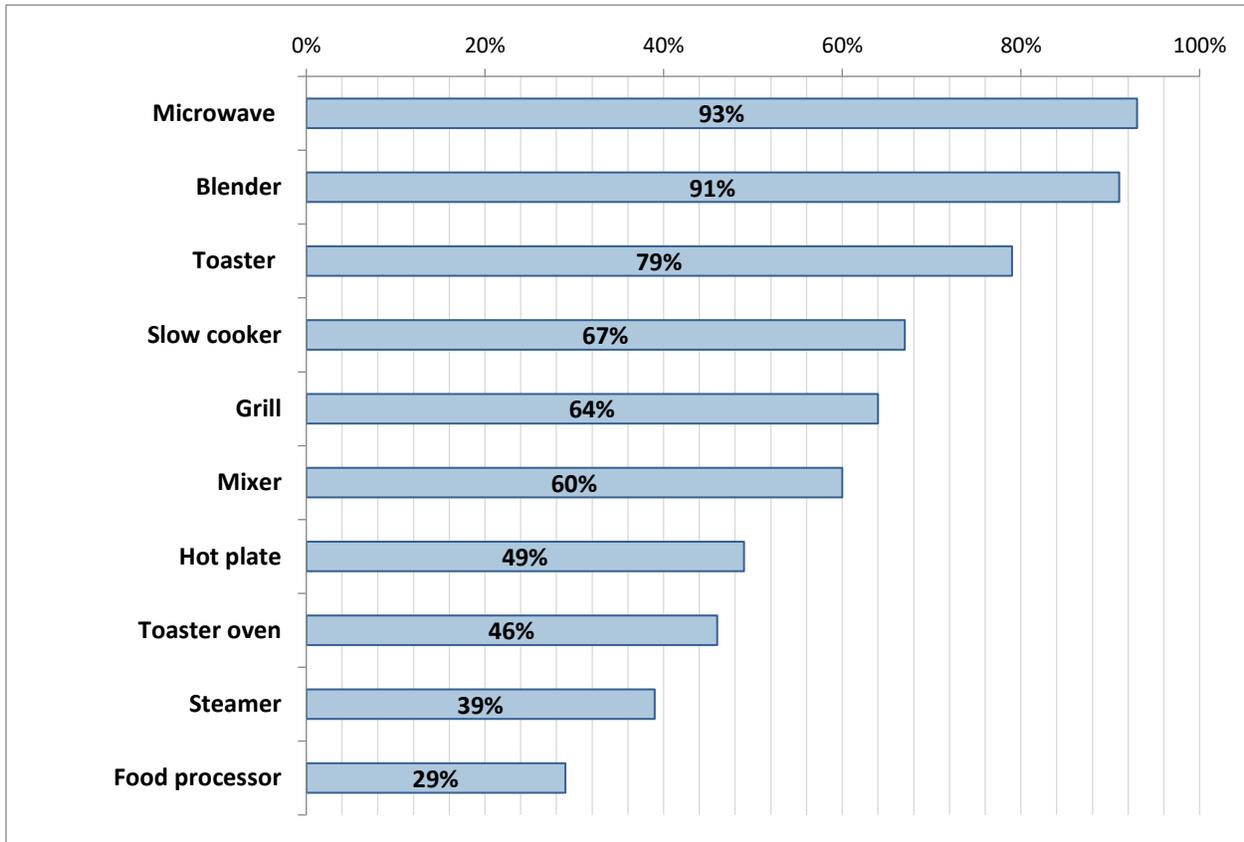
Figure 11. Kitchen Tools



### Small Appliances

The largest number of participants reported that they had a microwave (93 percent), followed by a blender (91 percent), and a toaster (79 percent). Figure 12 lists items in descending order of frequency (see Table 25 for an alphabetical listing of all food preparation tools and Table 26 for a listing by subgroup). Participants could select multiple responses; consequently, responses did not total 100 percent.

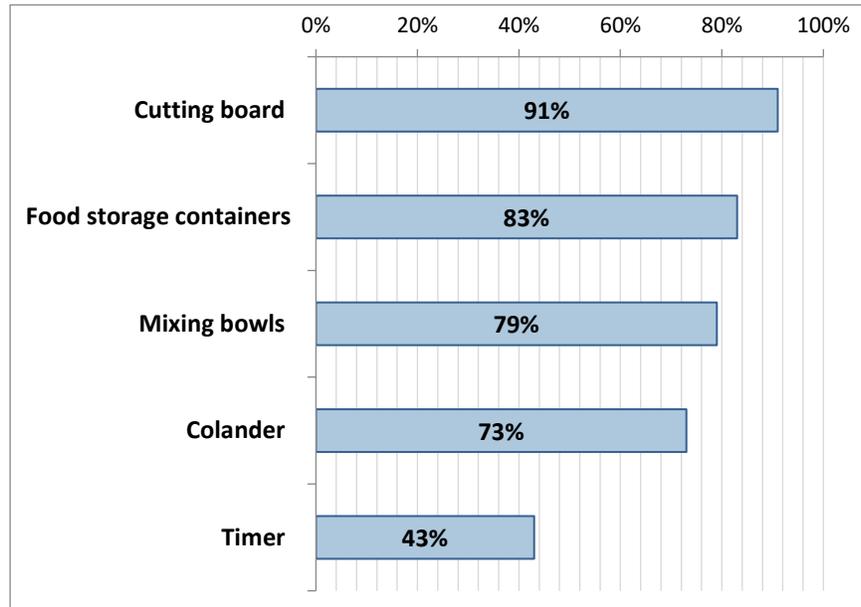
Figure 12. Small Appliances



### Kitchen Gadgets

The largest number of participants reported that they had a cutting board (91 percent), followed by food storage containers (83 percent), and mixing bowls (79 percent). Figure 13 lists items in descending order of frequency (see Table 25 for alphabetical listing of all food preparation tools and Table 26 for a listing by subgroup). Participants could select multiple responses; consequently, responses did not total 100 percent.

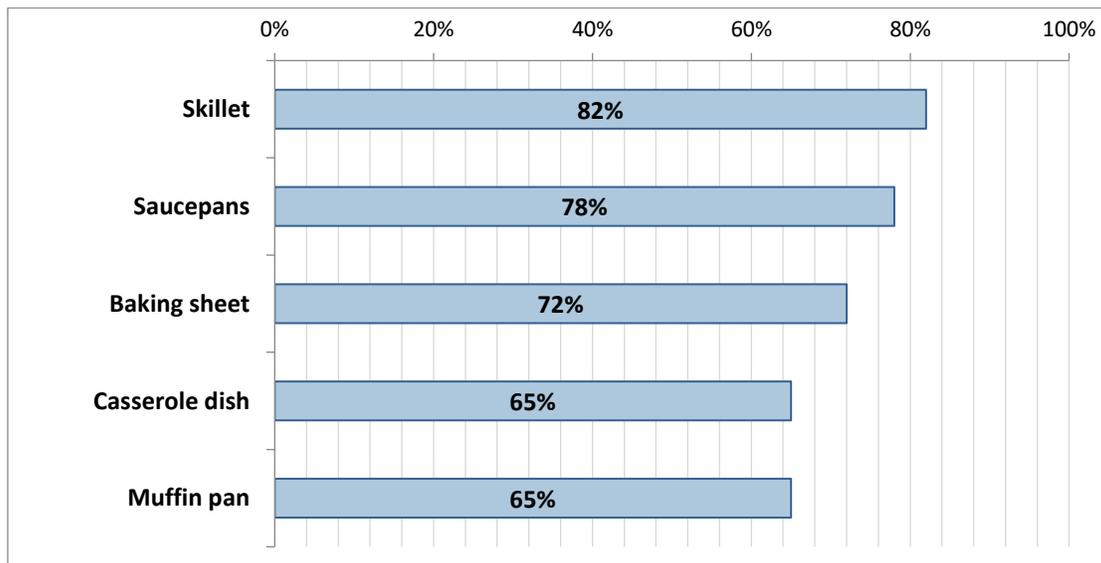
Figure 13. Kitchen Gadgets



### Cookware

The largest number of participants reported that they had a skillet (82 percent), followed by saucepans (78 percent), and a baking sheet (72 percent). Figure 14 lists items in descending order of frequency (see Table 25 for an alphabetical listing of all food preparation tools and Table 26 for a listing by subgroup). Participants could select multiple responses; consequently, responses did not total 100 percent.

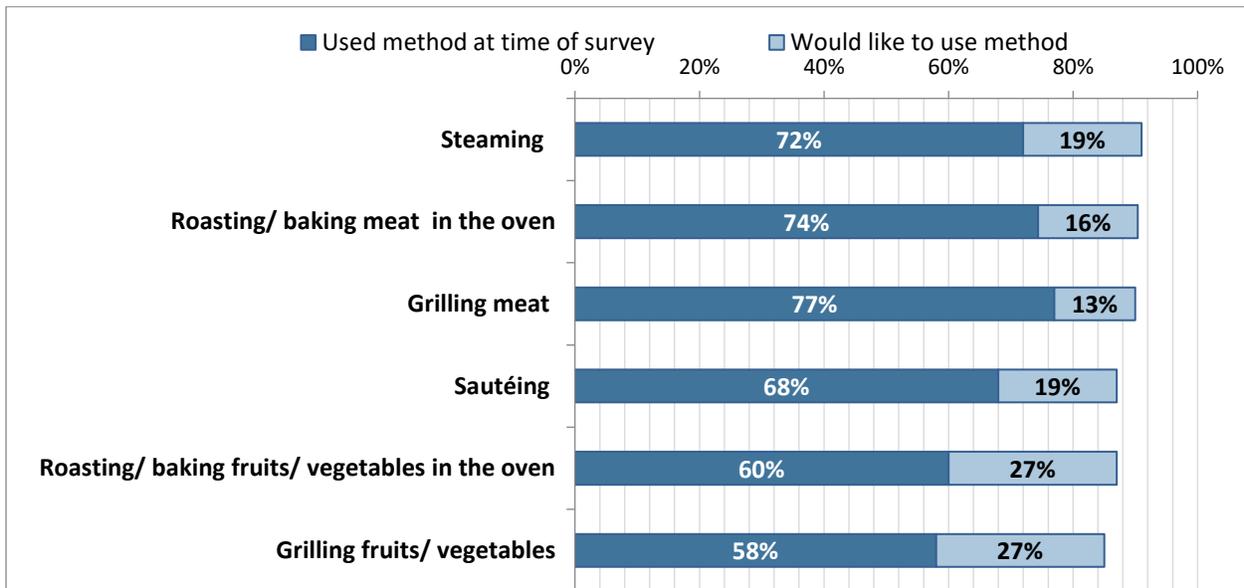
Figure 14. Cookware



## Cooking Methods

Participants were asked about cooking methods that they used at the time of survey administration. If they did not use a method, they were asked whether they would like to use it. Steaming, roasting/baking meat in the oven, and grilling meat appeared to be the most popular cooking methods, as determined by totaling the percent of participants who were either already using that method or would like to use it. Figure 15 shows each cooking method in descending order of popularity (see Table 27 for an alphabetical listing).

Figure 15. Cooking Methods



## Open-Ended Responses

Participants were asked to provide a written response to the question, “If you use recipes, what kind of recipes do you usually look for?” Of 677 participants, 72 percent ( $n = 485$ ) responded to the question. Three percent of participants stated that they did not use recipes, and 9 percent said they looked for “any” recipe. Remaining responses were classified into the following categories: audience, culturally-specific, ingredients, preferences, sources of recipes, preparation method, and type of meal. Many participants provided multiple responses spanning different categories (see Table 28 for a summary of all responses).

The **types** of recipes participants were looking for were easy/fast/simple (16 percent), healthy and nutritious (15 percent), chicken (12 percent), and Mexican (9 percent).

Under the category of **audience**, it was clear that child-friendly family dinners were important to many, as indicated by statements like, “Things my kids will like,” “Nutritious for children and adults,” and “Healthy recipes that the whole family can eat.”

**Culturally-specific** recipes were popular among some of the survey participants. Most frequently mentioned were Mexican recipes (9 percent), and Italian recipes (4 percent).

Many participants stated that they looked for recipes with certain **ingredients**. Twelve percent indicated that they looked for recipes with chicken. Pastas, meats, and vegetables were the next most popular ingredients, each mentioned by 6 percent.

Participants mentioned recipes that met a variety of **preferences**. Easy, fast, and simple recipes were strongly preferred (16 percent), as were healthy and nutritious recipes (15 percent). Participants also cared about incorporating fresh ingredients and modifying foods and recipes they were familiar with to be healthier. For example, one participant said she looked for, “Mexican food but healthier than normal with not as much oil.” Responses such as, “Cheap, healthy, and flavorful,” “Simple but good,” and “Healthy, fast, and as least complicated as possible” illustrated participants’ desire for recipes that were inexpensive, healthy, tasty, fast, and simple.

Many participants looked for recipes according to a certain **preparation method**. For example, 4 percent said they looked for baking recipes and 2 percent for crockpot recipes.

Another popular recipe category was the **type of meal**. Desserts and pastries, along with salads, were the most popular, each mentioned by 6 percent. Four percent looked for dinner/main course recipes.