

Guidelines for Standard Portions in Away-From-Home Settings

A PILOT STUDY TO PROMOTE APPROPRIATE PORTIONS TO MEET THE DIETARY
GUIDELINES FOR AMERICANS, REDUCE FOOD WASTE, AND INCREASE SUSTAINABILITY

Deborah A Cohen MD, MPH, Mary Story PhD, Christina Economos, PhD, Diane Ty, MBA, Shannon Martin, MPH,
RDN and Erika Estrada, MPP

Funded by NHLBI # R34HL149135

Expert Panel

Cheryl Anderson, PhD, MS, MPH

Stephanie Anzman-Frasca, PhD

Richard Black, PhD

Tracy Fox MPH, RD

Patricia Guenther, PhD RD

Lisa Harnack, PhD RD

Katie Bishop Kendrick, MS, MPH

Nicole Larson PhD, MPH, RDN

Lindsay Moyer, MS, RDN

Marion Nestle, PhD

Marian Neuhouser, PhD RD

Eric Rimm, ScD

Barbara Rolls, PhD

Linda Van Horn, PhD, RD

Table of Contents

Summary

Background and Purpose	3
Research Design and Methods	4
Table 1. Recommended Maximum Amounts for Meal Components.....	4
Table 2. Example of Meal Components and How They Meet Maximum Calorie Recommendations for a Single Meal.....	5
What We Hope to Learn.....	6

Guidelines for Standard Portions in Away-From-Home Settings

Introduction.....	7
Background.....	9
Equity Across Income Groups.....	10
Defining and Developing Guidelines for Recommended Standardized Portions.....	10
Table 1. Recommended Maximum Calorie Amounts for Meal Components.....	12
Variability in Individual Caloric Needs.....	12
Variability in Energy Density.....	13
Appetizers, Soups, and Salads.....	13
Entrees.....	14
Sides.....	15
Desserts.....	15
Beverages.....	16
Patterns of Meals	17
Rationale for Specific Portion Amounts.....	20
Implementation.....	21
Literature Cited.....	22
Appendices	24

SUMMARY

Background and Purpose

This paper describes the rationale and methods for developing and implementing a system to standardize portions of food served in away-from-home settings. Given the global obesity epidemic and its relationship to highly prevalent chronic disease, the need to improve diet quality, and the lack of progress in making any headway in reducing the overall prevalence of obesity in the United States over the past 30 years, we are proposing to test an approach that focuses on helping food service providers support individuals who are concerned about health and/or weight. In addition, standards are intended to reduce excessive portion sizes, limiting their contribution to food waste and global warming.

Eating out and ordering take-out food is a routine activity for most Americans. Although the COVID-19 pandemic has decreased this frequency due to various restrictions, the pre-pandemic share of wallet going to food prepared away from home was 54.8% in 2019.¹ Restaurants routinely serve portions that are in excess of what people need to maintain their weight, thereby providing an important source of extra calories that fuel the obesity epidemic. Most restaurants provide different portion sizes, so people cannot easily predict how much they will be served. In general, people cannot accurately judge how many calories they are being served not only because of the variability in portions but also because the density of calories in those portions varies. Most people have a limited ability to control their intake when served more than they need.^{2,3} Although it is premature to measure the effects of the existing calorie-labeling system for informing consumers about prepared foods in restaurants and supermarkets (took effect nationwide in May 2018), assessments of portion sizes in away-from-home settings by the USDA and others have confirmed that excessive portion sizes are ubiquitous.^{4,5} Thus, there is a need to help consumers who do not want to overeat when eating out and provide them with alternative options to the oversized portions available in many restaurants.

The purpose of this project is to 1) Develop a consensus among national health and nutrition experts as to what the recommended standardized portion amounts should be and how they should be measured and; 2) Pilot test in restaurants the feasibility of adopting and adhering to the standardized portions.

This proposed system of standard portions is intended to first provide a benchmark, so that portions can be served in predictable quantities wherever people obtain prepared foods, enabling them to more easily control how much they consume. Secondly, standard portions may provide a default option for consumers who want to maintain or attain a healthy weight and avoid weight gain, and/or risk becoming overweight or having obesity. By having standard portions for different elements of a meal, a person can customize their meal to meet their individual caloric needs. Even if customers do not know their individual caloric needs, obtaining standardized portions may help slow the trajectory of weight gain, as the proposed standards will likely provide fewer calories than the amounts currently served away from home. Standardizing portions is essentially a behavioral economics approach that shifts a significant part of the calculation burden from the consumer to the food provider. Our plan is to test whether foodservice providers are able to supply standard portions in an operationally efficient and profitable manner to consumers and whether customers appreciate and take advantage of the option.

Research Design and Methods

This project is funded as a planning grant by the National Institutes of Health (NIH), National Heart, Lung and Blood Institute (NHLBI), and includes conducting a pilot test in three restaurants. The pilot will evaluate whether 1) the restaurants can adhere to the recommended portions, 2) customers will be interested in choosing these standard portions, and 3) these standard portions help these customers control their energy intake in the short term. Initially, we will work with each restaurant to develop an alternative menu or menu insert, which will include items on the regular menu, but served in the recommended standard portion sizes. For this pilot we will not expect participating restaurants to alter their recipes. (However, altering recipes is an effective way to reduce energy density and is often not noticed by consumers.⁶) We anticipate that for some menu items, the portions may be less than on the regular menu, while for others, vegetables, for example, they may be more. It will be up to the customers as to what they choose, and up to the restaurant owners as to whether they will alter any prices for these standard portions.

We have reviewed the portions established by the Food and Drug Administration (FDA) in the Reference Amounts Customarily Consumed (RACC) using calorie counts published by the US Dept of Agriculture (USDA) in the USDA national nutrient database. We developed standards selecting the items listed in the RACC and then stratified by how they are typically consumed as part of a meal. We then calculated the serving sizes for lunch and dinners based on the maximum calorie limits for each meal component as listed in **Table 1**.

Table 1. Recommended maximum calorie amounts for lunch and dinner meal components

Meal component	Maximum Calories	Rationale
Total Adult Lunch/Dinner (including beverage)	700	Fits with typical daily energy (kcal) requirements of 2000-2200 calories/day and a 3-meal/day pattern.
Appetizer, soup, or salad	150	Often similar to a side dish, but calories must be less than entrée, if included in full meal.
Plain Entrée (e.g., a piece of salmon, steak, or chicken at a restaurant where mains and sides are ordered a la carte):	200	Consistent with calorie content of meat or other high-protein items
Mixed Entrée (e.g. a stew or multi-ingredient item)	350	Amount basically is plain entrée plus side, combined
Sides- non-starchy	100	Typically, low calorie.
Starchy side or non-starchy with added oils/fats	150	Based on grains and potatoes naturally being more calorie dense and often prepared with fats, etc. that add calories
Dessert	100	Based on 13.5% of daily calories as discretionary.
	50*	*Half portions can help individuals concerned about their weight.

Snack	200	Based on IOM guidelines ⁷
Non-alcoholic beverage	100	Based on calories of low-fat milk and recommendations to limit sugary beverage intake.
Alcoholic Beverage	150	Based on pre-existing standard portions of alcohol

An example of a meal that uses these standards is in **Table 2** below. Additional examples are provided in the full document.

Table 2. Example of how meal components might be combined to avoid exceeding maximum calorie recommendations for a single meal.

High variety meal	Calories
Appetizer	150
Soup or side	150
Salad or side	150
Entree	200
Half dessert	50
Non-caloric beverage	0
Total	700

Table 3. Recommended maximum calorie amounts for breakfast meal components

Breakfast component	Maximum Calories	Rationale
----------------------------	-------------------------	------------------

Total Adult Breakfast (including beverage)	500	Fits with typical daily energy (kcal) requirements of 2000-2200 calories/day and a 3-meal/day pattern.
Plain Entrée (e.g. Oatmeal, eggs,)	200	Consistent with calorie content of meat or other high-protein items
Mixed Entrée (e.g. omelet or multi-ingredient item)	350	Amount basically is plain entrée plus side, combined
Sides- non-starchy (e.g. grilled tomato)	100	Typically, low calorie.
Starchy side or non-starchy with added oils/fats (e.g. home fries)	150	Based on grains and potatoes naturally being more calorie dense and often prepared with fats, etc. that add calories
Non-alcoholic beverage	100	Based on calories of low-fat milk and recommendations to limit sugary beverage intake.

What We Hope to Learn

First, we hope to learn whether these recommended standard portions are feasible to implement in restaurants by working with chefs and creating alternative menus. At the outset, we have noted the high variability of the caloric content of items in our review of food items listed in the Reference Amounts Customarily Consumed (RACC), especially among items of the same weight and volume and even these items may not be sufficiently varied to represent a diversity of menu items across many cuisines and restaurants. Using nutrient analysis software and bomb calorimetry, we will test these portions when we implement these standards in restaurants to determine whether they actually provide the estimated calorie counts or exceed the maximum limits.

Second, we will learn whether serving staff can follow the guidelines to achieve these standard portion sizes. Third, we will learn whether customers are interested in the standard portions, and finally, we will ask customers to provide 24-hour dietary recalls after eating in the restaurants to learn whether the customers who order the standard portions end up consuming fewer calories across an entire day, not just for the meal that was ordered. While those who order the portions will likely be different from those who don't, we will evaluate whether those who order standard portions compensate by eating more food at other times, potentially defeating the purpose of these standard portions to help people to control their overall caloric intake.

Ultimately, if the concept of standard portions is feasible and is received well, we will propose a longitudinal randomized controlled trial in dozens of restaurants where it would be possible to evaluate the impact of standard portions in the general population by comparing the intake of consumers who frequent restaurants with and without the standard portions. If test of standard portions demonstrates a positive health impact, it can be adopted in restaurants nationwide.

GUIDELINES FOR STANDARD PORTIONS IN AWAY-FROM-HOME SETTINGS

Introduction

The United States is now undergoing multiple crises that affect health and well-being. Foremost is the COVID-19 crisis that has changed our habits with regards to dining out and having social gatherings. We also have the ongoing obesity epidemic and associated chronic diseases, all of which are risk factors for the most severe outcomes related to COVID-19 infections. The threats associated with global warming and climate change continue and are fueled by consumer behaviors, including food waste and dietary choices, particularly high consumption of animal products.

While multiple actions must be undertaken to mitigate all these issues, one intervention that is relatively straightforward is to establish standard portions for settings where people obtain food away-from-home, that further help individuals determine how much they should consume at any one meal or snack. Currently, most restaurants serve portions in excess of what people need to maintain a healthy weight, and portions are highly varied across different food settings. Because most people cannot accurately judge calorie content of portions just by looking, and small-chain and non-chain restaurants are not required to label calories on the menu, the availability of standard portions would enable individuals to control how much they consume. Whether people dine in or order food to go, providing the option for people to be served quantities that may reduce the risk for overweight, and subsequent development of chronic diseases, is likely to be beneficial.

These standard portion guidelines are being developed as part of a National Institutes of Health (NIH)-funded study to test their feasibility and acceptability among three restaurants and approximately 100 customers. The first phase of the study is to develop a consensus around how much of a wide variety of different foods should be served to an adult who wants to avoid over consumption. **The idea is NOT to supplant the existing generous portions that are currently served, but rather to offer alternatives to the consumers who are concerned about how much they eat, including those who want to control their weight.**

Once there is consensus around the standard portion sizes, a registered dietitian nutritionist (RDN) will work with each of the three restaurants that have volunteered to offer the standard portions. The RDN will review the existing menus and, in collaboration with the chef, select the most popular items in addition to all items that lend themselves to standard portions. An alternate menu will then be created that lists the menu items that can be ordered in the standard portion sizes. The alternate menu may also include suggestions for different meal combinations that could be served using the standard portions.

In a previous study, meals that followed standard portions were devised in collaboration with a dozen food trucks in Los Angeles.⁸ Food servers were able to use measuring cups and kitchen scales to serve the appropriate quantity. The process was both acceptable and feasible and yielded 50 different meals that met the USDA “Choose My Plate” guidelines.⁹

Our present goal is NOT to interfere with preparation or recipes, rather to intervene on the quantity served to the customers who request these standard portions. Ideally, some items especially for fruits and vegetables might be increased for certain customers, while other servings may be smaller (especially for entrees and desserts) or not offered on the menu (e.g. sweetened beverages). Decreasing energy density of items served could allow for larger portions. Some items may not change at all. Again, these are only alternatives and

would not eliminate the existing restaurant preparation or serving practices which would remain in place. Some restaurants already offer items that include appropriately-sized portions, and may or may not be identifying them as such.

Initially, the goal is to identify barriers and facilitators for making the standard portions available and to also understand consumer perceptions of these options. We seek to find out whether consumers like or appreciate the option of ordering standard portions. Among those customers who do order standard portions, we hope to determine whether they end up consuming fewer calories than customers who do not order them.

In summary, this pilot study is a first step to exploring the feasibility and acceptability of having an option of a standard portion. The goal is to enable predictability for consumers who can leverage this information to control their food intake. The process will likely require multiple iterations and refinements to discover the best strategy for implementation. Ultimately, once we define the best standard portion guidelines, the hope is that all restaurants will be able to offer standard portions as an option on their menus, so that no one will need to worry about whether dining out will undercut their desire to maintain a healthy weight or undermine their health goals. Moreover, while broad policy changes are needed in multiple sectors to stop climate change, we expect that with increasing use of standard portions there will be less food waste, which will reduce greenhouse gases, contributing to meeting sustainability goals.

Background

More than 70% of Americans over the age of 2 are now overweight or have obesity. Simulations of the trajectory of the U.S. obesity epidemic suggest that by 2030, without any interventions, nearly 50% of Americans will have obesity.¹⁰ Overweight and obesity are the underlying causes of multiple chronic diseases, which are among the primary drivers of increasing health care costs.¹¹ Currently, approximately 50% of Americans are trying to eat less to control their weight,¹² given that weight gain is a consequence of consuming more calories than are burned in physical activity.¹³ Currently, restaurants typically serve quantities of food with calories that are in excess of what most people expend, leading to an association between dining out and being at a higher risk of overweight or obesity.¹⁴⁻¹⁷ Databases documenting the calorie counts of food served away from home confirm that the calories served in commercial establishments usually exceed what is recommended in the Dietary Guidelines for Americans.^{9,18-20}

During these past few decades, dramatic changes in the food environment and food behaviors have occurred. Today, food eaten or prepared away from home constitutes a substantial share of all food consumed. In the United States, from 1962 to 2019, spending on food away from home rose from 27 percent to nearly 55 percent of all food dollars.^{1,21,22} About one-third of the average person's daily calories now come from food purchased for consumption outside the home.^{18,23} On average, families with an income greater than 300% of the federal poverty guidelines eat away from home 5.5 times per week, while those earning an income equal or less than the federal poverty line eat food away from home 4.2 times per week, indicating the high levels of exposure across the US population, regardless of income.²³ Millennials are choosing more prepared foods and dining out more than any other age group,²⁴ disproportionately increasing their risk for overweight and obesity.

In order to support Americans in their quest to optimize their health, we aim to offer guidelines to enable restaurants to more easily serve portions of food that are appropriate for consumption at one sitting for an adult and therefore reduce the risk of overconsumption. These guidelines are suggested as a start towards improving public health and are intended to enhance current practices involving the wide variety of serving sizes available across different food settings. For example, patrons who order a side of fried potatoes, may be served portions that range from 100 calories to more than 1000 calories, depending on the restaurant.²⁵ When people are served larger quantities, they tend to eat larger quantities.²⁶ If standard portions become available, consumers can more accurately predict how much they will be served and thus how much to eat. Standard portions will help empower individuals to control how much they consume, without the burden of having to calculate calories and assess their contribution to daily intake. Standard portions could become a default choice for persons who want to control their intake and maintain or achieve a healthy weight. It will function in a similar vein as the Nutrition Facts Panel, required on packaged foods by the Food and Drug Administration (FDA) as a guide to consumers, but be applicable to prepared foods ready to eat.

There is already evidence that consumers of all ages want healthier meals away from home,²⁷ and the largest growth in the restaurant industry has been in healthier options.²⁸ One experiment to reduce portion sizes in restaurants was couched in the idea of activating consumer self-control. Schwartz et al found that when servers asked customers if they wanted to downsize portions of three starchy side dishes at a Chinese fast-food restaurant, 14–33 percent of customers accepted the downsizing offer, whether or not they were given a

discount. Overall, those who accepted smaller portions did not compensate by ordering more calories in their entrées, and the total calories served to them were, on average, reduced by more than 200.²⁹

Equity across income groups

Standardizing portions will also lead to greater equity, reaching those who might benefit the most. If only restaurants that cater to high-income customers served portions that are appropriate, while those that serve lower-income customers always serve excessive portions, there will continue to be disparities in BMI by income level. If all restaurants had an option for standard portions, the opportunity to control one's intake and weight could be more equal among all populations, regardless of income. Some restaurants may even decide to make standard portions the default option.

Developing guidelines for standardized portions and maximum calorie amounts for meal components

These guidelines are intended to augment, not replace traditional restaurant menus or portion sizes. They aim to help restaurants consider offering alternative menus that cater to customers who want to eat healthy, are concerned about their weight, and/or who want to reduce their risk of diet-related chronic diseases. We envision that restaurants can prepare menus offering foods that are traditionally served, along with the option of including standard portion guidelines, with no or minimal difference in the preparation, but primarily a change in the quantity served. The alternative menu could include items that lend themselves to the weight and volume measures that the new standard portions prescribe. For this pilot study, consideration of price changes will be left to the restaurants. They may decide to either charge the same price or offer a discount, as they deem appropriate, to account for any differences in the cost of labor and ingredients.

Standardized portions are an important consideration for individuals concerned about their weight, as multiple research studies have documented that the quantity of food consumed is directly related to the quantity that is served.³⁰⁻³³ By using serving sizes that prevent overconsumption, particularly of nutrient-poor, calorie-dense foods, consumers who like to eat out but are concerned about their weight can feel protected by not risking excess calorie intake and significant weight increase that exacerbate risk for chronic disease. Currently, people who dine out consume more calories than when preparing and consuming the same meals at home.^{18,19} Many diet-related health outcomes like certain cancers and musculo-skeletal problems are associated primarily with obesity, rather than food quality,³⁴ so while food quality is important, food quantity served, in and of itself, is a critical target in promoting health.

Our methods build on the socio-cultural practices associated with a meal, in which there can be many courses served. The basic tenets of our approach are below:

- Given that the typical American consumes three meals per day and the average calorie requirement is about 2000 calories, we started with the premise that 700 calories should be the benchmark for the maximum calorie content of any single meal.³⁵
- Based on the Choose My Plate guidelines for a 2000-calorie diet, and assuming that the daily amounts recommended by the USDA can be roughly divided into three meals, one meal should include 1 cup of vegetables, ½ cup of fruit, no more than 3 oz of lean protein, 1 cup of milk or dairy equivalent, and 2 oz grains that are at least 50% whole grains.⁹

- Based on The Food Service Guidelines for Federal Facilities,³⁶ and the National Academy of Medicine guidelines regarding school foods,⁷ the recommended calorie count for snacks is 200 calories.^a

There may be variation in the population as to how calories are divided across meals and snacks, but this template is being used as a starting place to guide decisions. By dividing the maximum calories across meal components, customers have freedom to pick those items which suit their individual preferences and still obtain appropriate portions.

To help managers of food retail outlets determine the quantity of food to be served, we define portions using volume and weight measures. This is provided to approximate calorie counts for the convenience of most restaurants that lack the resources to hire a dietitian. While volume and weight measures are not precise for quantifying calories, this provides a practical and achievable approach toward limiting quantities of nutrient-poor foods and optimizing quantities of nutrient-rich foods. Currently, Americans consume an excess of nutrient-poor foods, insufficient nutrient-rich foods and excessive quantities of sugary beverages.³⁷

These guidelines are intended to launch pilot studies that can assess whether the portions we recommend will actually achieve the target calories and test the feasibility and acceptability of standard portion sizes and whether people can better control their intake when they eat food prepared away from home. The guidelines are also designed to encourage consumers to order fruits and vegetables at each meal, necessary to improve diet quality for most Americans.

The maximum calorie amounts we recommend for different components of a meal take into account meal service traditions in the United States. While breakfast may not frequently be divided into courses, a single lunch or dinner meal may have several courses: appetizers, soups, salads, entrees, sides, desserts and beverages. The quantity of any food served will be related to its role in a meal. We therefore have set maximum portion sizes for each of these components. Below in Table 1 we discuss the rationale for each of the choices:

^a Snack standards: contain ≤ 200 mg sodium per package; 0 grams of *trans* fat; Have as the first ingredient a fruit, a vegetable, a dairy product, or a protein food; or be a whole grain-rich grain product; or be a combination food that contains at least $\frac{1}{4}$ cup of fruit and / or vegetable and Calorie limit: ≤ 200 calories; Saturated fat limit: $< 10\%$ of calories Exemptions: Reduced-fat cheese and part skim mozzarella; nuts, seeds and nut / seed butters; and dried fruit with nuts / seeds with no added nutritive sweeteners or fats. Sugar limit: $\leq 35\%$ of weight from total sugars in foods. Exemptions: Dried / dehydrated whole fruits or vegetables with no added nutritive sweeteners; dried whole fruits or pieces with nutritive sweeteners required for processing and / or palatability; products consisting of only exempt dried fruit with nuts and / or seeds with no added nutritive sweeteners or fats.

Table 1. Recommended maximum calorie amounts for meal components

Meal component	Maximum Calories	Rationale
Total Adult Meal (including beverage)	700	Fits with typical daily energy requirements of 2000-2200 calories/day and a 3-meal pattern.
Appetizer, soup, or salad	150	Often similar to a side dish, but calories must be less than entrée, if included in full meal.
Plain Entrée (e.g., a piece of salmon, steak, or chicken at a restaurant where mains and sides are ordered a la carte):	200	Consistent with calorie content of meat or other high-protein items.
Mixed Entrée (e.g. a stew or multi-ingredient item)	350	Amount basically is plain entrée plus side, combined
Side,- non-starchy	100	Typically low-calorie, but may have added fat/sauces.
Starchy side or non-starchy with added oils/fats	150	Based on grains and potatoes naturally being more calorie dense and vegetables often prepared with fats, etc. that add calories
Dessert	100 50*	Desserts are typically high in added sugars and/or fats. The limit is based on recommendations that added sugars amount to <6% of daily calories. ²⁰ *Half portions can help individuals concerned about their weight.
Snack	200	Based on IOM guidelines. ⁷ Snacks should be low in saturated fats and added sugars.
Non-alcoholic beverage	100	Based on calories of 1% low-fat milk and recommendations to limit sugary beverage intake.
Alcoholic Beverage	150	Based on pre-existing standard portions of alcohol. ³⁸

Variability in individual caloric needs

While the 2000-calorie diet is considered an average for Americans, most people require either greater or fewer calories to maintain or achieve their ideal weights. Just as each person knows what size clothes they wear or what their height, weight or blood pressure is, each person can determine what their daily caloric needs are, based on their gender, activity level, and height and weight goal. Once someone knows their caloric needs, they can use the standard portions sizes as a means by which to determine what and how much to eat. For example, someone who wants to lose weight quickly could order a mixed entrée for 3 meals a day and would consume about 1000 calories. An athlete running marathons who wants to consume 1000 calories per

meal, could order an appetizer, a mixed entrée, a starchy and non-starchy side, an alcoholic beverage and a dessert. The primary goal is to have a predictable benchmark to allow consumers to gauge more accurately how much they are eating. Even if people don't know their daily caloric needs, routinely using standard portions when dining out will likely reduce the trajectory of weight gain, as in most cases, the standard portions will have a lower caloric value than the portions most restaurants typically serve.

Variability in Energy Density

While we have assigned caloric values to each of the foods based on the USDA Food Data Central Database, we recognize that there will be variability in energy density for similar items across food settings, depending on the recipes and how much fat and water are incorporated into any product. We have averaged across different products in each category, but recognize an average is not what will be present in the field. We will be examining variability in our piloting phase, to assess the extent that calories deviate from the recommended maximums by verifying caloric contents of products claiming to fit within the limits set for each category.

(Calories shown are from the USDA Food Data Central database. Amounts may vary depending on cooking methods. Calories are rounded to the nearest 5 for under 50 calories, to the nearest 10 thereafter)

Appetizers, soups and salads:

We have set a calorie maximum to 150 calories for these three components, typically served ahead of the main course. Examples of appetizers include:

Appetizer	Quantity	Calories
Bruschetta slice (58 cal/slice)	2	120
Guacamole (¼ cup=88 calories) and chips (60 calories)	.25 cup guacamole 0.5 oz chips	150
Stuffed mushroom (73 cal/piece)	2	150
Cocktail hot dog (70 cal/piece)	2	140
Potstickers/ Steamed Dumplings	2	150
Soup*		
Chicken noodle soup*	1 cup	150
Pea soup	1 cup	150
Minestrone with noodles*	1 cup	150
*Calories can vary widely depending on the ratio of noodles and other additions to soup.		

Salad		
Mixed greens with dressing (dressing is about 72 cal/tbsp)	2 tbsp dressing 2 cups greens	150
Caesar salad	1 cup	160
Cole slaw	4 oz	150

Entrees: We have divided entrees into items that could be considered a la carte and include primarily a single ingredient. Single ingredient means that other than spices and oils, there are no additional ingredients. Entrees that are breaded or deep-fried with coatings would not be considered single ingredient. The recommendation is a maximum calories of 200.

Single Ingredient Entrees:

Examples:

Single Ingredient Entree	Quantity	Calories
Chicken breast	3 oz	160
Chicken drumstick	1	160
Chicken thigh	1	210
Salmon fillet	3 oz	180
Steak	3 oz	150
White fish	3 oz	110

Multi-ingredient entrees like stew:

Because stews may contain more ingredients, an additional 150 calories are added to account for these in the entrée. The extra ingredients may include a starchy component. The calories suggested for this type of entrée are up to 350.

Examples:

Mixed Ingredient Entrée with more than one food item	Quantity	Calories
Beef Stew	1 cup	300
Chili (beef)	1 cup	280
Veal Parmigiana	6 oz	340
Fried Chicken, breast	4 oz	290

Soft Chicken Tacos (corn tortillas)	2	350
Stir-fry: Chicken & Broccoli	1 cup	220
Pizza (cheese)	1 slice (3.8 oz)	290

Sides are divided to starchy and non-starchy

Non starchy sides: We have set the maximum calories for a non-starchy side to 100 calories. Although sides that are prepared steamed or boiled will have well under 100 calories, if they are prepared roasted or sautéed and have added fat or oil, the calorie content may be higher.

Starchy sides and non-starchy sides with sauces/oils: The American pattern of meals typically include grains like rice or a starchy vegetable like potato. The recommended maximum calories is 150 calories, based on their high calorie content. Sometimes non-starchy vegetables may be prepared with cheeses or cream, so these are also included in this category, due to the added calories.

Non-starchy side	Quantity	Calories
Broccoli	1 cup	35
Carrots	1 cup	55
Green beans	1 cup	45
Starchy side/non-starchy with added ingredients		
Mashed potatoes	0.5 cup	170
French fries	1.7 oz	150
Rice	6 oz	150
Pasta	6 oz	160
Bread/butter	Slice + pat butter	140

Desserts: Desserts tend to be very calorie dense and high in sugar and fats. Given that the new recommendation is that no more than 6% of daily calories be comprised of added sugars²⁰ (total of 120 calories in a 2000-calorie diet), we came up with a rounded 100-calorie maximum, considering that there are nutrients other than sugar in most desserts. (This is stricter than with the 2015 Dietary Guidelines, which recommended limiting calories for other uses to 13.5% or 270 calories in a 2000-calorie diet.³⁹) Because many people like to conclude their meal with just a small taste of something sweet, we also recommend that desserts be prepared in 50-calorie (individual-sized) portions as well as 100-calorie portions. Restaurants may want to expand their dessert menus with berries or other fruits that are likely to be below the 100 calorie maximum.

Desserts	Quantity	Calories
Brownie	.75 oz	100
Cheesecake	1 oz	90
Apple Pie	1.5 oz	100
Ice Cream	3 oz	100

Beverages: These are divided into alcoholic and non-alcoholic caloric beverages. There are no limits on non-caloric beverages.

Non-alcoholic beverages: While water should be the beverage of choice for most meals, low-fat or nonfat milk is also considered a healthy option. Sugar sweetened beverages like colas and other carbonated drinks or beverages with added sugar with more than 40 kcal/8 oz serving should not be considered as acceptable beverages to serve as part of a meal that adheres to the standard portions, even if the beverage quantity is reduced to 100 calories. Sugar-sweetened beverages should never be considered as a standard beverage.

Beverage	Quantity	Calories
Milk 1% fat (or skim/nonfat)	8 oz	100 (80)
Coconut water	12 oz	70
Coffee with 2 individual creams	8 oz	40
Teas (unsweetened)	8 oz	0
Non-caloric flavored waters	8 oz	0
Water	8 oz	0

Alcoholic beverages

There are already standards for portions of alcoholic beverages:

Alcoholic Beverage	Quantity	Calories
Beer	12 oz	150
Wine	5 oz	120
Spirits	1.5 oz	100

PATTERNS OF MEALS

Below we show examples of how the different components can be included to stay within the maximum meal calorie guidelines. Water or other non-caloric beverage is the default where a caloric beverage is not listed.

High variety meal	Calories
Appetizer	150
Soup	150
Salad	150
entrée	200
Half dessert	50
Non-caloric beverage	0
Total	700

Classic meal	Calories
Appetizer, soup or salad	150
entrée	200
Non-starchy side	100
Starchy side	150
Dessert	100
Non-caloric beverage	0
Total	700

Meal with alcohol	Calories
Mixed entrée	350
Non-starchy side	100
Alcoholic beverage	150
Dessert	100
Non-caloric beverage	0
Total	700

Meals with caloric beverage	Calories
Mixed entrée	350
Starchy side	150
Non-starchy side	100
Non-alcoholic beverage	100
Total	700

Because 36% of consumers rarely or never order appetizers⁴⁰ and 50% rarely or never order desserts,⁴¹ consumers have the option of ordering double portions of entrees, as in the examples below, and still stay within the recommended maximum of 700 calories per meal. However, this may not be realistic if customers then have to pay double for their meal.

We included examples of meals that may not be nutritionally optimal, but still allows consumers flexibility to eat the foods they may want, yet not consume excess calories.

Just the meal (double portions)	*
Mixed entree	350
Mixed entree	350
Non-caloric beverage	0
Total	700

Meat and potatoes (double plain entrée)	
Plain entree	200
Plain entree	200
Starchy side	150
Starchy side	150
Non-caloric beverage	0
Total	700

Examples of meals ordered in standard portions:

Item	Quantity	Calories
Burger/bun	3 oz meat, burger, ketchup	450
Fries	1.75 oz	150
Milk 1%	8 oz	100
Total		700

Item	Quantity	Calories
Pizza	4 oz	350
Salad	2 tbsp dressing	150
Milk 1%	8 oz	100
Total		600

Item	Quantity	Calories
Salad	2 tbsp dressing	150
Spaghetti	6 oz	150
Meatballs/sauce	3 oz	200
Broccoli	1 cup	35
Cheesecake	1 oz	90
Water	8 oz	0
Total		625

Item	Quantity	Calories
Chicken Fajitas	3 oz	200
Tortillas (corn)	2	120
Rice	6 oz	150
Beans	6 oz	150
Zucchini	1 cup	25
Water	8 oz	0
Total		645

Rationale for specific portion amounts:

Protein

Because many portion sizes have already been established based upon nutritional requirements rather than calories, we tended to select these sizes as default. For example, foods high in protein, meat and fish were capped at 3 oz regardless of the calorie count, given that daily protein needs are about 5 oz. per person. This is consistent with current sustainability guidelines to reduce greenhouse gases and improve health.⁴²

However, for high fat meats we limited the portion size to 2 oz, so as not to exceed calorie maximums for plain entrees. Although fish tends to be well below the calorie cap for a plain entrée, we still limited the portion size to 3 oz per serving. Although eggs and egg whites are also below the calorie maximums, we limited these to 2 eggs per serving. Other items where calories are otherwise low, like smoked fish or soups, were given smaller portions so as to limit exposure to high levels of sodium.

Soups

In order to be consistent with the standard portions of soup for appetizers and entrees, which are 8 and 12 oz respectively, we had a maximum default of 8 oz for appetizers and 12 for entrees, even if a larger quantity would be within the maximum calorie limits. This decision is related to standard tableware sizes. Soups that exceeded the calorie limit were reduced to a portion that would be consistent with the guidelines of no more 150 calories for appetizers, and 350 for mixed entrees.

Vegetables

While plain vegetables have very few calories and may not reach the calorie maximum for a non-starchy side, we put a suggested maximum portion size as 2 cups for non-leafy vegetables, and 4 cups for leafy greens, mainly based on volume and the practicality of serving that much on a single plate.

Cheese

We limited the serving size to 1 oz, in line with RACC portion sizes. This also takes into consideration the high caloric density and high levels of saturated fat.

Cakes, Cookies, Candy and Desserts

These items were all calculated based on a maximum calorie content of 100 calories. Although, these are sometimes consumed as snacks, where the calorie maximum is 200 calories, given their nutrient-poor quality, we recommend keeping the portion consumed at any single sitting to be 100 calories or less.

Snacks and Snack Bars

We are adopting the definition of snacks as that used by the Food Service Guidelines for Federal Facilities. These are: All packaged snacks contain ≤ 200 mg sodium per package; have 0 grams of *trans* fat; have as the first ingredient a fruit, a vegetable, a dairy product, or a protein food; or be a whole grain-rich grain product; or be a combination food that contains at least $\frac{1}{4}$ cup of fruit and/or vegetable; calorie limit: ≤ 200 calories; and saturated fat limit: $< 10\%$ of calories. Exemptions: Reduced-fat cheese and part skim mozzarella; nuts,

seeds and nut / seed butters; and dried fruit with nuts/seeds with no added nutritive sweeteners or fats. Sugar limit: $\leq 35\%$ of weight from total sugars in foods. Exemptions: Dried / dehydrated whole fruits or vegetables with no added nutritive sweeteners; dried whole fruits or pieces with nutritive sweeteners required for processing and/or palatability; products consisting of only exempt dried fruit with nuts and/or seeds with no added nutritive sweeteners or fats.

Items that do not meet these guidelines will be considered desserts and calorie content limited to 100 calories per serving.

Snack bars were kept at the RACC standards, since these are usually already pre-prepared by a manufacturer and not by a restaurant.

Other benefits

The standard portions will allow for more variety in meal patterns. It will also allow individuals to maintain healthy eating patterns. Standard portions will be health promoting and not only be a choice among those who are weight conscious.

IMPLEMENTATION

The tables in the Appendix list the major categories of food and include subcategories where the calorie counts of the categories differ by at least 50 calories. All calorie information is from the USDA Nutrient Database and are rounded to the nearest 10, given our lack of precision. All the items are based on the FDA's 2016 RACC.

The tables include the appropriate weight and/or volume measures that should be used to serve each item in the standard portion. Based on the recipes that may include larger amounts of energy dense ingredients than standard recipes, or for a variety of cuisines not included in the database, an RDN may be needed to consult to determine whether the recommended portions apply.

As servers become more familiar with the standard portions, they will more easily plate the appropriate amounts. Serving implements that represent the appropriate volumes (e.g. a 6 oz ladle for a pot of rice), will also simplify consistency in providing the standard size. For items that need to be weighed, pre-portioning the items will also facilitate adherence and accuracy. Many restaurants likely already have the capacity for standard portioning because of its usefulness for 1) adhering to menu labeling standards and 2) cost control.

Literature Cited

1. USDA-ERS. Food Prices and Spending <https://www.ers.usda.gov/data-products/ag-and-food-statistics-charting-the-essentials/food-prices-and-spending/#:~:text=U.S.%20food%2Daway%2Dfrom%2D,from%2050.1%20percent%20in%202009>. Published 2020. Accessed.
2. Rolls BJ, Morris EL, Roe LS. Portion size of food affects energy intake in normal-weight and overweight men and women. *Am J Clin Nutr*. 2002;76(6):1207-1213.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Citation&list_uids=12450884
3. Hollands GJ, Shemilt I, Marteau TM, et al. Portion, package or tableware size for changing selection and consumption of food, alcohol and tobacco. *The Cochrane database of systematic reviews*. 2015;9:CD011045.10.1002/14651858.CD011045.pub2
4. Eckert Matzembacher D, Brancoli P, Moltene Maia L, Eriksson M. Consumer's food waste in different restaurants configuration: A comparison between different levels of incentive and interaction. *Waste Manag*. 2020;114:263-273.10.1016/j.wasman.2020.07.014
5. McCrory MA, Harbaugh AG, Appeadu S, Roberts SB. Fast-Food Offerings in the United States in 1986, 1991, and 2016 Show Large Increases in Food Variety, Portion Size, Dietary Energy, and Selected Micronutrients. *J Acad Nutr Diet*. 2019;119(6):923-933.10.1016/j.jand.2018.12.004
6. Patel AA, Lopez NV, Lawless HT, Njike V, Beleche M, Katz DL. Reducing calories, fat, saturated fat, and sodium in restaurant menu items: Effects on consumer acceptance. 2016;24(12):2497-2508.10.1002/oby.21684
7. IOM. *Nutrition Standards for Foods in Schools:Leading the Way Toward Healthier Youth*. Washington, D.C.: The National Academies Press;2007.
8. Cohen DA, Colaico B, Martinez-Wenzl M, Montes M, Han B, Berry SH. Can Latino food trucks (loncheras) serve healthy meals? A feasibility study. *Public Health Nutr*. 2017:1-7.10.1017/S1368980016003475
9. USDA. MyPlate Plan: 2000 calories, Age 14+
https://www.choosemyplate.gov/resources/MyPlatePlan/MyPlatePlan_2000cals_Age14plus. USDA. Choose My Plate Web site. Published 2020. Accessed.
10. Ward ZJ, Bleich SN, Cradock AL, et al. Projected U.S. State-Level Prevalence of Adult Obesity and Severe Obesity. *N Engl J Med*. 2019;381(25):2440-2450.10.1056/NEJMsa1909301
11. Tremmel M, Gerdtham UG, Nilsson PM, Saha S. Economic Burden of Obesity: A Systematic Literature Review. *International journal of environmental research and public health*. 2017;14(4).10.3390/ijerph14040435
12. Martin CB, Herrick KA, Sarafrazi N, Ogden CL. Attempts to Lose Weight Among Adults in the United States, 2013–2016. *MMWR*. 2018.
13. Hall KD, Chen KY, Guo J, et al. Energy expenditure and body composition changes after an isocaloric ketogenic diet in overweight and obese men. *Am J Clin Nutr*. 2016;104(2):324-333.10.3945/ajcn.116.133561
14. Ayala GX, Rogers M, Arredondo EM, et al. Away-from-home food intake and risk for obesity: examining the influence of context. *Obesity (Silver Spring, Md)*. 2008;16(5):1002-1008.
<http://search.ebscohost.com/login.aspx?direct=true&db=cmedm&AN=18309297&site=ehost-live>

15. McCrory MA, Fuss PJ, Hays NP, Vinken AG, Greenberg AS, Roberts SB. Overeating in America: association between restaurant food consumption and body fatness in healthy adult men and women ages 19 to 80. *Obes Res.* 1999;7(6):564-571.
16. Jeffery RW, French SA. Epidemic obesity in the United States: are fast foods and television viewing contributing? *Am J Public Health.* 1998;88(2):277-280.
17. Hornick BA, Krester AJ, Nicklas TA. Menu modeling with MyPyramid food patterns: incremental dietary changes lead to dramatic improvements in diet quality of menus. *J Am Diet Assoc.* 2008;108(12):2077-2083. <http://search.ebscohost.com/login.aspx?direct=true&db=cmedm&AN=19027412&site=ehost-live>
18. Lin BH, Frazao E. Away-from-home foods increasingly important to quality of American diet. *ERS/USDA.* 1999;<http://www.ers.usda.gov/Publications/AIB749/>.
19. Rosenheck R. A systematic review of a trajectory towards weight gain and obesity risk. *Obes Rev.* 2008;9(6):535-547.
20. USDA. Scientific Report of the 2020 Dietary Guidelines Advisory Committee https://www.dietaryguidelines.gov/sites/default/files/2020-07/ScientificReport_of_the_2020DietaryGuidelinesAdvisoryCommittee_first-print.pdf. In: USDA, ed2020.
21. Variyam JN. Nutrition Labeling in the Food-Away-From-Home Sector: An Economic Assessment. <http://www.ers.usda.gov/publications/err4/err4pdf>. 2005.
22. USDA-ERS. <http://www.ers.usda.gov/data-products/food-expenditures.aspx> Table 10—Food away from home as a share of food expenditures. In:2016.
23. Saksena. MJ, Okrent AM, Anekwe TD, et al. *America's Eating Habits: Food Away From Home* <https://www.ers.usda.gov/webdocs/publications/90228/eib-196.pdf?v=1045.6>. USDA, Economic Research Service;2018.
24. Kuhns A, Saksena M. Millennials Devote Larger Shares of Their Grocery Spending to Prepared Foods, Pasta, and Sugar and Sweets Than Other Generations <https://www.ers.usda.gov/amber-waves/2017/december/millennials-devote-larger-shares-of-their-grocery-spending-to-prepared-foods-pasta-and-sugar-and-sweets-than-other-generations/>. *Amber Waves.* 2017.
25. MenuStat Methods <http://menustat.org/>. In. New York, NY New York City Department of Health and Mental Hygiene; 2015.
26. Hollands GJ, Shemilt I, Marteau TM, et al. Portion, package or tableware size for changing selection and consumption of food, alcohol and tobacco <http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD011045.pub2/pdf/abstract>. *The Cochrane Library.* 2015(9). doi:10.1002/14651858.CD011045.pub2.
27. Anzman-Frasca S, Mueller MP, Lynskey VM, Harelick L, Economos CD. Orders Of Healthier Children's Items Remain High More Than Two Years After Menu Changes At A Regional Restaurant Chain. *Health Aff (Millwood).* 2015;34(11):1885-1892.10.1377/hlthaff.2015.0651
28. Kissel C. Healthier Fast Food: Why This Trend is on the Rise <https://www.vitacost.com/blog/food-nutrition/nutrition/healthier-fast-food-why-this-trend-is-on-the-rise.html>. Published 2015. Accessed.
29. Schwartz J, Riis J, Elbel B, Ariely D. Inviting consumers to downsize fast-food portions significantly reduces calorie consumption. *Health Aff (Millwood).* 2012;31(2):399-407. <http://www.ncbi.nlm.nih.gov/pubmed/22323171>.
30. Rolls BJ, Roe LS, Beach AM, Kris-Etherton PM. Provision of foods differing in energy density affects long-term weight loss. *Obes Res.* 2005;13(6):1052-1060.
31. Rolls BJ, Roe LS, Kral TV, Meengs JS, Wall DE. Increasing the portion size of a packaged snack increases energy intake in men and women. *Appetite.* 2004;42(1):63-69. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Citation&list_uids=15036784
32. Rolls BJ, Roe LS, Meengs JS. Larger portion sizes lead to a sustained increase in energy intake over 2 days. *J Am Diet Assoc.* 2006;106(4):543-549. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&dopt=Citation&list_uids=16567150

33. Rolls BJ, Roe LS, Meengs JS. The effect of large portion sizes on energy intake is sustained for 11 days. *Obesity (Silver Spring)*. 2007;15(6):1535-1543.10.1038/oby.2007.182
34. NCI. Obesity and Cancer <https://www.cancer.gov/about-cancer/causes-prevention/risk/obesity/obesity-fact-sheet>. Published 2017. Accessed.
35. Cohen DA, Bhatia R, Story MT, et al. Performance Standards for Restaurants: A New Approach to Addressing the Obesity Epidemic http://www.rand.org/pubs/conf_proceedings/CF313.html. 2012; Santa Monica, CA.
36. Workgroup FSGF. Food Service Guidelines for Federal Facilities. In: Services DoHaH, ed. Washington, DC2017.
37. Bachman JL, Reedy J, Subar AF, Krebs-Smith SM. Sources of Food Group Intakes among the US Population, 2001-2002. *J Am Diet Assoc*. 2008;108(5):804-814.
38. NIAAA. What Is A Standard Drink? <https://www.niaaa.nih.gov/what-standard-drink>. Published 2020. Accessed.
39. USDA. Dietary Guidelines for Americans 2015-2020 Eighth Edition <https://health.gov/our-work/food-nutrition/2015-2020-dietary-guidelines/guidelines/>. In: USDA, ed2015.
40. Statista. How often do you order appetizers? <https://www.statista.com/statistics/659195/share-of-consumers-by-how-often-they-order-appetizers-us/#:~:text=U.S.%20consumers%20were%20asked%20how,that%20they%20always%20order%20appetizers>. Published 2016. Accessed.
41. Statista. How often do you order desserts? <https://www.statista.com/statistics/659198/share-of-consumers-by-how-often-they-order-desserts-us/>. Published 2016. Accessed.
42. Willett W, Rockstrom J, Loken B, et al. Food in the Anthropocene: the EAT-Lancet Commission on healthy diets from sustainable food systems. *Lancet*. 2019;393(10170):447-492.10.1016/S0140-6736(18)31788-4

Appendix
Recommended Standard Portions
Table of Contents

Table I. Appetizers.....	2
Table II. Plain Entrees.....	5
Table III. Mixed Entrees.....	7
Table IV. Non-starchy Sides.....	9
Table V. Starchy Sides.....	11
Table VI. Desserts.....	13
Table VII. Snacks.....	15
Table VIII. Beverages (Non-Alcoholic).....	17
Table IX. Alcoholic Beverages.....	18
Table X. Toppings and Miscellaneous.....	19

Table I. Appetizers

All calorie information is from the USDA Nutrient Database (footnotes refer to number of items averaged)

Item	RACC Standards 2016		Proposed New Standardized Portion Sizes	
	Reference Amount (RACC)	Estimated Calories of RACC portion	Appetizer/Soup/Salad (g) 150 Calorie Maximum	Appetizer/Soup/Salad (oz) 150 Calorie Maximum
Appetizers				
Bean dip ⁴	2 tbsp	50	90 g	3.2 oz
Breaded mozzarella sticks ⁶	85 g	323	39 g	1.4 oz
Cheese quiche	85 g	309	41 g	1.5 oz
Cocktail hotdog	85 g	268	48 g	1.7 oz
Crab cakes	85 g cooked	173	74 g	2.6 oz
Dairy-based dip (e.g. Artichoke dip)	2 tbsp	100	45 g	1.6 oz
Dumplings/pot stickers/wontons	85 g	150	85 g	3.0 oz
Egg rolls	85 g	211	60 g	2.2 oz
Fried shellfish	85 g cooked	206	62 g	2.2 oz
Guacamole	2 tbsp/30g	50	90 g	3.2 oz
Hummus	2 tbsp/30g	53	85 g	3.0 oz
Macaroni and cheese ⁷	1 cup/240 ml	380	95 g	3.4 oz
Mini bagel pizza	85 g	202	63 g	2.3 oz
Mini quesadilla: chicken, steak or cheese ⁷	85 g	247	52 g	1.8 oz
Mini sandwich, e.g. Burger sliders	85 g	217	59 g	2.1 oz
Potato skins	70 g	280	38 g	1.3 oz
Potato skins	85 g	340	38 g	1.3 oz
Salsa	2 tbsp/30g	10	2 tbsp/30g	2 tbsp/30g
Shrimp (i.e. Shrimp cocktail)	85 g cooked	103	85 g	3.0 oz
Smoked or pickled fish, shellfish, or game meat; fish or shellfish spread	55 g	60	55 g	2.0 oz
Spinach quiche	85 g	251	51 g	1.8 oz
With meat, poultry, or fish quiche	85 g	328	39 g	1.4 oz

Item	Reference Amount (RACC)	Estimated Calories of RACC portion	Appetizer/Soup/Salad (g) 150 Calorie Maximum	Appetizer/Soup/Salad (oz) 150 Calorie Maximum
Soups				
<i>Broth Based</i>				
Albondigas/ meatball soup ²	245 g	206	178 g	6.4 oz
Beef and Vegetables	245 g	148	245 g	8.8 oz
Chicken or Turkey Noodle Soup	245 g	147	245 g	8.8 oz
Chicken tortilla	245g	281	131 g	4.7 oz
Clam chowder- Manhattan	245 g	140	245 g	8.8 oz
Gumbo soup ⁴	245 g	160	230 g	8.2 oz
Hot and sour	245 g	90	245 g	8.8 oz
Minestrone Soup/ Tomato vegetable type	245 g	87	245 g	8.8 oz

Miso Soup ³	245 g	60	245 g	8.8 oz
Vegetable noodle/ pasta fagioli	245 g	154	239 g	8.5 oz
<i>Cream Based/Cheese-based</i>				
Baked potato Soup/ Potato & Cheese soup	245 g	184	200 g	7.1 oz
Broccoli Cheddar ⁴	245 g	248	148 g	5.3 oz
Clam chowder- New England ⁵	245 g	255	144 g	5.1 oz
Corn chowder ⁵	245g	260	141 g	5.0 oz
Cream of Chicken with wild rice ⁴	245 g	221	166 g	5.9 oz
Creamy tomato soup	245 g	200	184 g	6.6 oz
French onion soup	245 g	378	97 g	3.5 oz
Lobster bisque ³	245 g	284	129 g	4.6 oz
<i>Legume type and pureed soups</i>				
Bean soup ⁵	245 g	176	209 g	7.5 oz
Butternut squash soup ⁶	245 g	102	245 g	8.8 oz
Chili: vegetarian no toppings	245 g	263	140 g	5.0 oz
Chili-with meat - no toppings	245 g	383	96 g	3.4 oz
Lentil soup (vegetarian or with ham)	245 g	137	245 g	8.8 oz
Split pea soup	245 g	152	242 g	8.6 oz
Split Pea with Ham soup	245 g	195	188 g	6.7 oz

	Reference Amount (RACC)	Estimated Calories of RACC portions	Appetizer/Soup/Salad (g) 150 Calorie Maximum	Appetizer/Soup/Salad (oz) 150 Calorie Maximum
Dressings				
Balsamic Vinaigrettes	2 tbsp/30 ml	100	2 Tbsp	2 Tbsp
Bleu Cheese Dressing-148	2 tbsp/30 ml	148	1 Tbsp	1 Tbsp
Caesar Dressing-160	2 tbsp/30 ml	160	1 Tbsp	1 Tbsp
Honey Mustard-145	2 tbsp/30 ml	145	1 Tbsp	1 Tbsp
Italian Dressing - 70	2 tbsp/30 ml	70	2 Tbsp	2 Tbsp
Light Italian 30	2 tbsp/30 ml	30	2 Tbsp	2 Tbsp
Olive Oil-240	2 tbsp/30 ml	240	2 tsp	2 tsp
Ranch Dressing- 130	2 tbsp/30 ml	130	1 Tbsp	1 Tbsp
Thousand Island Dressing-118	2 tbsp/30 ml	118	1 Tbsp	1 Tbsp

	Reference Amount (RACC)	Estimated Calories of RACC portion	Appetizer/Soup/Salad (g) 150 Calorie Maximum	Appetizer/Soup/Salad(oz) 150 Calorie Maximum
Salads				
Caesar Salad - no dressing	100 g	71	150 g	5.4 oz
Cobb salad- no dressing	100 g	99	150 g	5.4 oz
Greek Salad- no dressing	100 g	42	150 g	5.4 oz
Lettuce salad with assorted vegetables (e.g. Tomato, carrot), no dressing	100g	21	150 g	5.4 oz
Lettuce salad with egg, cheese, carrot, tomato, no dressing	100 g	69	150 g	5.4 oz

Side salad - all vegetables- no dressing	85 g	9	300 g	10.7 oz
Spinach salad- no dressing	100 g	81	150 g	5.4 oz
Tomato and cucumber salad with oil and vinegar	100 g	81	150 g	5.4 oz

² Two items averaged to obtain average calories, ³ Three items averaged to obtain average calories, ⁴ Four items averaged to obtain average calories, ⁵ Five items averaged to obtain average calories, ⁶ Six items averaged to obtain average calories, ⁷ Seven items averaged to obtain average calories

Table II. Plain Entrees

Item	RACC Standards 2016		Proposed New Standardized Portion Sizes	
	Reference Amount (RACC)	Estimated Calories of RACC portion	Plain Entree (g) 200 Calorie Maximum	Plain Entree (oz) 200 Calorie Maximum
Breakfast Foods				
Breakfast cereals, ready-to-eat, weighing 20 g or more but less than 43 g per cup; high fiber cereals containing 28 g or more of fiber per 100 g	40 g	104	40 g	1.4 oz
Breakfast cereals, ready-to-eat, weighing 43 g or more per cup; biscuit types	60 g	207	60 g	2.1 oz
Breakfast cereals, ready-to-eat, weighing less than 20 g per cup, e.g., plain puffed cereal grains	15 g	57	15 g	.54 oz
Croissants, butter medium	55g	223	49 g	1.8 oz
Crumpet, medium	55g	106	103 g	3.7 oz
Egg foo young	110 g	135	163 g	5.8 oz
Egg substitute	50 g	24	100 g	3.6 oz
Egg whites	50 g	26	100 g	3.6 oz
Eggs (all sizes)	50 g	71	100 g	3.6 oz
Omelet - cheese	110 g	224	98 g	3.5 oz
Omelet - cheese and meat	110 g	263	84 g	3.0 oz
Scone	55g	194	57 g	2.0 oz
Scrambled egg	110 g	189	116 g	4.2 oz
Sugar-sweetened cereal ⁵	55 g	212	55 g	2.0 oz
Entrees Typically Used for Lunch and Dinner				
Beef ribs	85 g	298	56 g	2.0 oz
Boiled /canned beans no liquid ³	90 g	122	148 g	5.3 oz
Bologna	85 g	262	56 g	2.0 oz
Chicken breast- without skin	85 g	126	85 g	3.0 oz
Chicken breast: roasted with skin	85 g	167	85 g	3.0 oz
Chicken drumstick, roasted with skin	85 g	183	85 g	3.0 oz
Chicken drumstick, without skin	85 g	146	85 g	3.0 oz
Chicken or turkey salad	100 g	229	87 g	3.1 oz
Chicken thigh, roasted with skin	85 g	210	85 g	3.0 oz

Chicken thigh, without skin	85 g	177	85 g	3.0 oz
Crab cakes	85 g cooked	173	85 g	3.0 oz
Egg salad	100 g	257	78 g	2.8 oz
Fatty fish like salmon	85 g cooked	175	85 g	3.0 oz
Filet mignon	85 g	227	56 g	2.0 oz
Fish salad: tuna	100 g	191	105 g	3.7 oz
Fried fish	85 g cooked	194	85 g	3.0 oz
Fried shellfish	85 g cooked	206	85 g	3.0 oz
Fried tofu	85 g	230	74 g	2.6 oz
Ground turkey 85% lean	85 g	153	85 g	3.0 oz
Ham	85 g	138	85 g	3.0 oz
Hamburger 80% lean	85 g	231	85 g	3.0 oz
High fat animal flesh: most USDA prime cuts of beef, ribs, bacon, hot dogs, sausage, spareribs, lunch meat (e.g. bologna, pastrami, salami)	85 g	300		
Hummus	2 tbsp/30g	53	113 g	4.0 oz
Lamb	85 g	183	85 g	3.0 oz
Lean animal flesh: poultry without skin, Cornish hen, ham, Beef- loin and round cuts, flank steak, venison, rabbit, squirrel	85 g	165	85 g	3.0 oz
Lean white fish like tilapia	85 g cooked	109	85 g	3.0 oz
Lentils	90 g	104	173 g	6.2 oz
Medium fat animal flesh: most beef, ground beef, roasts, steaks, most pork products, most lamb, chicken with skin, ground turkey	85 g	225	85 g	3.0 oz
Regular tofu	85 g	65	170 g	6.0 oz
Salami	85 g	219	56 g	2.0 oz
Sausage	85 g	292	56 g	2.0 oz
Shellfish salad: crab or lobster or shrimp	100 g	187	107 g	3.8 oz
Shrimp (i.e. Shrimp cocktail)	85 g cooked	103	85 g	3.0 oz
Sirloin steak, lean only, broiled	85 g	155	85 g	3.0 oz
Smoked or pickled fish, 10shellfish, or game meat 9; fish or shellfish spread	55 g	60		3.0 oz
Spareribs (pork)	85 g	225	56 g	2.0 oz
Tempeh	85g	164	104 g	3.7 oz
Tuna canned in oil, drained	85g	168	85 g	3.0 oz
Tuna canned in water, drained	85 g	73	85 g	3.0 oz

Table III. Mixed Entrees

Items here are general and the names may not reflect all the ingredients in the recipes

Item	RACC Standards 2016		Proposed New Standardized Portion Sizes	
	Reference Amount (RACC)	Estimated Calories of RACC portion	Mixed Entree (g) 350 Calorie Maximum	Mixed Entree (oz) 350 Calorie Maximum
Albondigas/ meatball soup ²	245 g	206	416 g	14.9 oz
Baked potato Soup/ Potato & Cheese soup	245 g	184	466 g	16.6 oz
Bean soup ⁵	245 g	176	487 g	17.4 oz
Beef and Vegetables	245 g	148	490 g	17.5 oz
Beef or pork enchilada	195 g	327	209 g	7.5 oz
Beef stew ⁶	1 cup/240 ml	218	385 g	13.0 oz
Broccoli Cheddar ⁴	245 g	248	346 g	12.3 oz
Burritos: beef ² -	140 g	323	152 g	5.4 oz
Burritos: Been without meat ²	140 g	286	171 g	6.1 oz
Burritos: Chicken ³	140 g	281	174 g	6.2 oz
Butternut squash soup ⁶	245 g	102	490 g	17.5 oz
Cabbage, Chinese Salad with dressing	100 g	203	172 g	6.2 oz
Caesar Salad - no dressing	100 g	71	300 g	10.7 oz
Cheese enchilada	195 g	418	163 g	5.8 oz
Cheese quiche	140 g	509	96 g	3.4 oz
Cheese: regular or original crust ⁴	195 g	468	146 g	5.2 oz
Chicken enchilada	195 g	292	234 g	8.3 oz
Chicken or Turkey Noodle Soup	245 g	147	490 g	17.5 oz
Chicken tortilla	245 g	281	305 g	10.9 oz
Chili: vegetarian no toppings	245 g	263	326 g	11.6 oz
Chili-with meat - no toppings	245 g	383	224 g	8.0 oz
Clam chowder- Manhattan	245 g	140	490 g	17.5 oz
Clam chowder- New England ⁵	245 g	255	336 g	12.0 oz
Cobb salad- no dressing	100 g	99	300 g	10.7 oz
Corn chowder ⁵	245 g	260	330 g	11.8 oz
Cream of Chicken with wild rice ⁴	245 g	221	388 g	13.9 oz
Creamy tomato soup	245 g	200	429 g	15.3 oz
Dumplings/pot stickers/wontons	85 g	150	198 g	7.1 oz
Fish with cream or white sauce	140 g cooked	164	299 g	10.7 oz
French onion soup	245 g	378	227 g	8.1 oz
Greek Salad- no dressing	100 g	42	300 g	10.7 oz
Gumbo soup ⁴	245 g	160	490 g	17.5 oz
Hash: mixed meat dish ⁴	1 cup/240ml	333	252 g	8.5 oz

Hot and sour	245 g	90	490 g	17.5 oz
Lentil soup (vegetarian or with ham)	245 g	137	490 g	17.5 oz
Lettuce salad with assorted vegetables (e.g. Tomato, carrot), no dressing	100g	21	454 g	16.2 oz
Lobster bisque ³	245 g	284	302 g	10.8 oz
Macaroni and cheese ⁷	1 cup/240 ml	380	221 g	7.5 oz
Minestrone Soup/ Tomato vegetable type	245 g	87	490 g	17.5 oz
Miso Soup ³	245 g	60	490 g	17.5 oz
Pancake, blueberry or with fruit (8" diameter)	110 g	208	185 g	6.6 oz
Pancake, plain or buttermilk (8" diameter)	110 g	256	150 g	5.4 oz
Pancake, with chocolate chips (8" diameter)	110 g	242	159 g	5.7 oz
Pizza: avg thin crust cheese pizza	195 g	592	115 g	4.1 oz
Deep pan cheese	195 g	530	129 g	4.6 oz
Meat- deep crust	195 g	545	125 g	4.5 oz
Meat thin crust ³	195 g	524	130 g	4.7 oz
Meat; regular or original ²	195 g	509	134 g	4.8 oz
Veggie original/regular crust	195 g	416	164 g	5.9 oz
Veggie: deep	195 g	461	148 g	5.3 oz
Veggie: thin crust ²	195 g	394	173 g	6.2 oz
Pizza rolls ²	195 g	578	118 g	4.2 oz
Plain French toast, 1 regular slice	110 g	269	143 g	5.1 oz
Plain waffle	85 g	263	65 g	2.3 oz
Pot pies ⁵	1 cup/240ml	541	155 g	5.3 oz
Ravioli, cheese and spinach-filled, no sauce	140 g	211	140 g	5.0 oz
Ravioli, cheese-filled, no sauce	140 g	248	140 g	5.0 oz
Ravioli, meat-filled, no sauce	140 g	264	140 g	5.0 oz
Sandwiches, all types	140g	357	137 g	4.9 oz
Shrimp with lobster sauce	140 g	216	227 g	8.1 oz
Spaghetti with sauce ⁶	1 cup/240ml	377	223 g	7.5 oz
Spinach quiche	140 g	413	119 g	4.2 oz
Spinach salad- no dressing	100 g	81	300 g	10.7 oz
Split Pea Soup	245 g	152	490 g	17.5 oz
Split Pea with Ham soup	245 g	195	440 g	15.7 oz
Taco or Tostada Salad with meat	100 g	178	197 g	7.0 oz
Vegetable noodle/ pasta fagioli	245 g	154	490 g	17.5 oz
With meat, poultry, or fish quiche	140 g	540	91 g	3.2 oz

Table IV. Non-starchy Sides

Item Non-starchy Sides	RACC Standards 2016		Proposed New Standardized Portion Sizes	
	Reference Amount (RACC)	Estimated Calories of RACC portion	Non-starchy Side (g) 100 Calorie Maximum	Non-starchy Side (oz) 100 Calorie Maximum
Asparagus	85 g	19	300 g	10.7 oz
Bacon	85 g	459	19 g	0.7 oz
Banana	140 g	124	113 g	4.0 oz
Bean salad: black bean	100 g	109	92 g	3.3 oz
Broccoli	85 g	30	283 g	10.1 oz
Carrot	85 g	30	283 g	10.1 oz
Cheddar and other hard cheese	30g	121	25 g	0.9 oz
Cheese used primarily as ingredients, e.g., dry cottage cheese, ricotta cheese	55 g	96	57 g	2.0 oz
Cheese, cottage: low-fat 1%	110 g	79	113 g	4.0 oz
Cheese, grated hard, e.g., Parmesan, Romano	5 g	21	24 g	0.9 oz
Coleslaw	100 g	159	63 g	2.2 oz
Corn	85 g	82	104 g	3.7 oz
Cottage cheese with fruit	100 g	97	103 g	3.7 oz
Cranberry relish	70g	91	77 g	2.7 oz
Cranberry salad	120 g	139	86 g	3.1 oz
Cranberry sauce	70 g	106	66 g	2.4 oz
Cream cheese	30g	105	29 g	1.0 oz
Dried, e.g., jerky	30 g	123	12 g	0.4 oz
Egg substitute	50 g	24	208 g	7.4 oz
Egg whites	50 g	26	192 g	6.9 oz
Eggs (all sizes) 8	50 g	71	70 g	2.5 oz
Fruit cocktail (if canned in syrup)	100 g	70	100 g	3.6 oz
Fruit salad w/ dressing or mayo or marshmallows	100 g	230	43 g	1.6 oz
Fruit salad, no dressing	100 g	53	189 g	6.7 oz
Fruit salad, with whipped topping	100 g	139	72 g	2.6 oz
Fruit variety low-fat yogurt	170 g	173	98 g	3.5 oz
Fruits used primarily as ingredients, avocado	50 g	80	88 g	3.1 oz
Gelatin salad	120 g	61	120 g	4.3 oz
Grapes	140 g	97	144 g	5.2 oz
Green beans	85 g	30	283 g	10.1 oz
Guacamole	2 tbsp/30g	50	60 g	2.1 oz
Hummus	2 tbsp/30g	53	57 g	2.0 oz
Lettuce salad with egg, cheese, carrot, tomato, no dressing	100 g	69	145 g	5.2 oz
Most fruits, berries, melons (average)	140 g	65	215 g	7.7 oz

Olives 10	15 g	25	15 g	0.5 oz
Pasta salad	140 g	301	47 g	1.7 oz
Peas in pods (snow, sugar snap)	85 g	36	236 g	8.4 oz
Pickle relishes	15 g	20	15 g	0.5 oz
Pickles and pickled vegetables, all types 10	30 g	4	30 g	1.1 oz
Plain low-fat yogurt	170 g	107	159 g	5.7 oz
Potato salad	140 g	239	59 g	2.1 oz
Sausage	85 g	292	29 g	1.0 oz
Scrambled egg	110 g	189	58 g	2.1 oz
Side salad - all vegetables- no dressing	85 g	9	300 g	10.7 oz
	1/4			
Sprouts, all types: Fresh or canned	cup/32g	3	32 g	1.1 oz
Summer squash/ zucchini	85 g	14	300 g	10.7 oz
Tomato and cucumber salad with oil and vinegar	100 g	81	123 g	4.4 oz
Watermelon	280 g	84	333 g	11.9 oz

Table V. Starchy Sides

Item Starchy Sides	RACC Standards 2016		Proposed New Standardized Portion Sizes	
	Reference Amount (RACC)	Estimated Calories of RACC portion	Starchy Side (g) 150 Calorie Maximum	Starchy Side (oz) 150 Calorie Maximum
Bagel	55 g	148	56 g	2.0 oz
Baked beans	130 g	122	111 g	4.0 oz
Biscuits, plain or buttermilk, prepared from recipe	55 g	233	35 g	1.3 oz
Boiled /canned beans no liquid ³ (avg of pinto, black, garbanzo)	90 g	122	111 g	4.0 oz
Candied sweet potato	140 g	230	91 g	3.3 oz
Cheese, 1 cup	30 g	147	31 g	1.1 oz
Chex traditional snack mix	30 g	124	36 g	1.3 oz
Chips: Cheetos type- puffed cheese snack	30 g	161	28 g	1.0 oz
Chips: Fritos	30 g	161	28 g	1.0 oz
Chips: potato	30 g	160	28 g	1.0 oz
Chips: tortilla	30 g	142	32 g	1.1 oz
Chips: tortilla, flavored	30 g	156	29 g	1.0 oz
Chips: Veggie chips	30 g	140	32 g	1.1 oz
Corn bread	55 g	255	32 g	1.2 oz
Corn tortilla, medium	55 g	120	69 g	2.5 oz
Cracker, sandwich type, peanut butter filled, 1 cup	30 g	148	30 g	1.1 oz
Croutons	7 g	28	38 g	1.3 oz
English muffin	55 g	125	66 g	2.3 oz
Flour tortilla	55 g	165	50 g	1.8 oz
French fries per USDA, Carl's Jr	70 g	206	51 g	1.8 oz
Fried corn tortilla taco shell	30 g	143	31 g	1.1 oz
Fried flour tortilla taco shell	30 g	146	31 g	1.1 oz
Graham, 1 large rectangle	30 g	129	35 g	1.3 oz
Grains, e.g., rice, barley, plain	140 g prepared; 45 g dry	181	116 g	4.1 oz
Hard bread stick- 1 medium- approx. 4-3/4" long	15 g	62	37 g	1.3 oz
Hash browns	70 g	185	57 g	2.0 oz
Hush puppy, one	55 g	163	51 g	1.8 oz
Lentils	90 g	104	130 g	4.6 oz
Macaroni and cheese ⁷	1 cup/240 ml	380	95 g	3.2 oz
Mashed potato with or without gravy	140 g	158	133 g	4.7 oz
McDonalds, Costco	70 g	192	55 g	2.0 oz
Melba toast	15 g	58	39 g	1.4 oz

Muffin: medium, Chocolate chip	55 g	218	38 g	1.3 oz
Muffin: medium, fruit	55 g	206	40 g	1.4 oz
Oyster, 1 cup	30 g	125	36 g	1.3 oz
Pancake, blueberry or with fruit (8" diameter)	110 g	208	79 g	2.8 oz
Pancake, plain or buttermilk (8" diameter)	110 g	256	64 g	2.3 oz
Pancake, with chocolate chips (8" diameter)	110 g	242	68 g	2.4 oz
Pastas, dry, ready-to-eat, e.g., fried canned chow Mein noodles	25 g	132	28 g	1.0 oz
Plain baked potato (any variety of potato) with nothing added, no added fat	110 g	107	154 g	5.5 oz
Plain French toast, 1 regular slice	110 g	269	61 g	2.2 oz
Plain waffle	85 g	263	48 g	1.7 oz
Popcorn: packaged ready to eat	30 g	159	28 g	1.0 oz
Potato pancakes ³	70 g	182	58 g	2.1 oz
Potato skins	70 g	280	38 g	1.3 oz
Pretzels	30 g	115	39 g	1.4 oz
Ravioli, cheese and spinach-filled, no sauce	140 g	211	100 g	3.6 oz
Ravioli, cheese-filled, no sauce	140 g	248	85 g	3.0 oz
Ravioli, meat-filled, no sauce	140 g	264	80 g	2.8 oz
Refried beans	130 g	190	103 g	3.7 oz
Refried beans with cheese	130 g	309	63 g	2.3 oz
Regular or medium slice rye bread	50 g	125	60 g	2.1 oz
Regular or medium slice sourdough bread	50 g	125	60 g	2.1 oz
Regular or medium slice white bread	50 g	134	56 g	2.0 oz
Regular or medium slice whole wheat bread	50 g	134	56 g	2.0 oz
Rice (prepared- volume)	--	--	180 cc	6.0 oz
Saltine, 1 cup	30 g	125	36 g	1.3 oz
Scone	55 g	194	43 g	1.5 oz
Snack, 1 cup	30 g	153	29 g	1.0 oz
Soft pretzel	55 g	129	64 g	2.3 oz
Soft pretzel	30 g	102	44 g	1.6 oz
Stuffed baked potato	140 g	229	92 g	3.3 oz
Stuffing	100 g	177	85 g	3.0 oz
Toaster Pastry: 1 pastry with icing	55 g	173	48 g	1.7 oz
Water biscuits, 1 cup	30 g	115	39 g	1.4 oz
Wheat, 1 cup	30 g	137	33 g	1.2 oz
White roll (soft)	50 g	140	54 g	1.9 oz
Whole wheat roll	50 g	136	55 g	2.0 oz

Table VI. Desserts

Item	RACC Standards 2016		Proposed New Standardized Portion Sizes	
	Reference Amount (RACC)	Estimated Calories of RACC	Dessert (g) 100 Calorie Maximum	Dessert (oz) 100 Calorie Maximum
Desserts				
Angel food without icing or filling-1 piece (1/12 of 10" diameter)	55 g	141	39 g	1.4 oz
Banana	140 g	124	113 g	4.0 oz
Brownies, medium- no icing	40 g	162	31 g	1.1 oz
Chocolate cake with icing or filling, 1 piece (1/10 of a 1 layer 8 or 9" diameter)	80 g	312	26 g	0.9 oz
Chocolate cream pie	125 g	441	28 g	1.0 oz
Coconut and banana cream pie	125 g	356	35 g	1.3 oz
Coffee Cake- 1 slice	55 g	211	26 g	0.9 oz
Cookie, butter or sugar, medium	30 g	139	22 g	0.8 oz
Cookie, chocolate chip, medium	30 g	148	20 g	0.7 oz
Cookie, cone shell, ice cream type, wafer or cake	15 g	64	24 g	0.8 oz
Cookie, lemon bar, medium	30 g	129	23 g	0.8 oz
Cookie, oatmeal with raisin, medium	30 g	135	22 g	0.8 oz
Cookie, peanut butter, medium	30 g	142	21 g	0.8 oz
Crepe, dessert type, chocolate-filled	110 g	172	64 g	2.3 oz
Crepe, dessert type, fruit-filled	110 g	202	55 g	1.9 oz
Danish with cheese, medium	55 g	206	27 g	1.0 oz
Danish with fruit, medium	55 g	204	27 g	1.0 oz
Danish, plain, medium	55 g	221	25 g	0.9 oz
Doughnut, cake- medium, 3-1/4" diameter	55 g	238	23 g	0.8 oz
Doughnut, cake, chocolate covered- medium, 3-1/4" diameter	55 g	249	22 g	0.8 oz
Doughnut, custard-filled	55 g	199	28 g	1.0 oz
Doughnut, custard-filled, with icing	55 g	199	28 g	1.0 oz
Doughnut, jelly	55 g	187	29 g	1.1 oz
Doughnut, raised medium, 3-3/4" diameter	55 g	231	24 g	0.8 oz
Fruit crisp (e.g. Blueberry)	125 g	319	39 g	1.4 oz
Grapes	140 g	97	144 g	5.2 oz
Mexican Sweet Roll, no topping (Pan Dulce), medium	55 g	200	28 g	1.0 oz
Mexican Sweet Roll, sugar topping (Pan Dulce), medium	55 g	205	27 g	1.0 oz
Most fruits, berries, melons (average)	140 g	65	215 g	7.7 oz
Other pastry (fruit filled)	125 g	424	29 g	1.1 oz
Pecan pie	125 g	509	25 g	0.9 oz
Pies (fruit)	125 g	288	43 g	1.6 oz
Plain cheesecake	125 g	401	31 g	1.1 oz

Plain waffle	85 g	263	32 g	1.2 oz
Pound Cake with icing or filling -1 piece (1/10 of loaf)	80 g	323	25 g	0.9 oz
Pound Cake without icing or filling- 1 piece (1/10 of loaf)	80 g	282	28 g	1.0 oz
Raisin-nut cake	125 g	513	24 g	0.9 oz
Shakes or shake substitutes, e.g., dairy shake mixes, fruit frost mixes	240 mL	500	48 g	1.6 oz
Sponge cake without icing or filling-1 piece (1/12 of 10" diameter)	55 g	159	35 g	1.2 oz
Sweet Quick type bread: banana, lemon, banana nut, 1 slice	55 g	199	28 g	1.0 oz
Sweet Quick type bread: pumpkin or carrot with raisins and /or nuts, 1 slice	55 g	165	33 g	1.2 oz
Sweet Roll with fruit, frosted, medium	55 g	208	26 g	0.9 oz
Sweet Roll with fruit, no frosting, medium	55 g	205	27 g	1.0 oz
Sweet Roll, cinnamon bun frosted, medium	55 g	249	22 g	0.8 oz
Sweet Roll, cinnamon bun, no frosting, medium	55 g	205	27 g	1.0 oz
Sweet Roll, frosted, medium	55 g	220	25 g	0.9 oz
Sweet Roll, no frosting, medium	55 g	177	31 g	1.1 oz
Turnover (e.g. Apple, berry)	125 g	438	29 g	1.0 oz
Turnover (e.g. Cherry, lemon)	125 g	383	33 g	1.2 oz
Upside down cake (all fruits)	125 g	414	30 g	1.1 oz
Watermelon	280 g	84	333 g	11.9 oz
Yellow cake with icing or filling, 1 piece (1/10 of a 1 layer 8 or 9" diameter)	80 g	303	26 g	0.9 oz

Table VII. Snacks

Item	RACC Standards 2016		Proposed New Standardized Portion Sizes	
	Reference Amount (RACC)	Estimated Calories of RACC portion	Snacks (g) 200 Calorie Maximum	Snacks (oz) 200 Calorie Maximum
Banana	140 g	124	113 g	4.0 oz
Breakfast bar	40 g	151	40 g	1.4 oz
Cashews	30 g	160	38 g	1.3 oz
Cheese, 1 cup	30 g	147	41 g	1.5 oz
Cheese: regular or original crust ⁴	195 g	468	83 g	3.0 oz
Chewing gum	3 g	11	3 g	0.1 oz
Chopped peanuts	2 tbsp/28.3g	110	51 g	
Cookie, cone shell, ice cream type, wafer or cake	15 g	64		
Cracker, sandwich type, peanut butter filled, 1 cup	30 g	148	40 g	1.4 oz
Cranberries (dried)	40 g	130	62 g	2.2 oz
Croissants, butter medium	55 g	223	49 g	1.8 oz
Crumpet, medium	55 g	106	103 g	3.7 oz
Dried, e.g., jerky	30 g	123	24 g	0.9 oz
Graham, 1 large rectangle	30 g	129	47 g	1.7 oz
Granola bar with rice cereal, 1 bar	40 g	166	40 g	1.4 oz
Granola Bar, 1 bar	40 g	189	40 g	1.4 oz
Grapes	140 g	97	144 g	5.2 oz
Hard bread stick- 1 medium- approx. 4-3/4" long	15 g	62	49 g	1.7 oz
Kellogg's Nutri-Grain Cereal Bar, 1 bar	40 g	146	40 g	1.4 oz
Melba toast	15 g	58	51 g	1.8 oz
Most fruits, berries, melons (average)	140 g	65	215 g	7.7 oz
Oyster, 1 cup	30 g	125	48 g	1.7 oz
Peanuts, almonds	30 g	170	35 g	1.3 oz
Pecans	30 g	207	29 g	1.0 oz
Pizza: Avg thin crust cheese pizza	195 g	592	66 g	2.4 oz
Deep pan cheese	195 g	530	74 g	2.6 oz
Meat- deep crust	195 g	545	72 g	2.6 oz
Meat thin crust ³	195 g	524	74 g	2.7 oz
Meat; regular or original ²	195 g	509	77 g	2.7 oz
Veggie original/regular crust	195 g	416	94 g	3.3 oz
Veggie: deep	195 g	461	85 g	3.0 oz

Veggie: thin crust ²	195 g	394	99 g	3.5 oz
Pizza rolls ²	195 g	578	67 g	2.4 oz
Prune, apricot, pear (dried)	40 g	98	82 g	2.9 oz
Saltine, 1 cup	30 g	125	48 g	1.7 oz
Scone	55 g	194	57 g	2.0 oz
Snack, 1 cup	30 g	153	39 g	1.4 oz
Soft pretzel	55 g	129	85 g	3.0 oz
Walnuts	30 g	196	31 g	1.1 oz
Water biscuits, 1 cup	30 g	115	52 g	1.9 oz
Wheat, 1 cup	30 g	137	44 g	1.6 oz

All varieties, chips, pretzels, popcorn, extruded snacks, fruit and vegetable-based snacks (e.g., fruit chips), grain-based snack mixes	Reference Amount (RACC)	Estimated Calories of RACC	Snacks (g) 200 Calorie Maximum	Snacks (oz) 200 Calorie Maximum
Chex traditional snack mix	30 g	124	30	1.1
Chips: Cheetos type- puffed cheese snack	30 g	161	30	1.1
Chips: Fritos	30 g	161	30	1.1
Chips: potato	30 g	160	30	1.1
Chips: tortilla	30 g	142	30	1.1
Chips: tortilla, flavored	30 g	156	30	1.1
Chips: Veggie chips	30 g	140	30	1.1
Popcorn: packaged ready to eat	30 g	159	30	1.1
Pretzels	30 g	115	52	1.9
Soft pretzel	30 g	102	59	2.1

Table VIII. Beverages (Non-Alcoholic)

Item	RACC Standards 2016		Proposed New Standardized Portion Sizes	
	Reference Amount (RACC)	Estimated Calories of RACC portion	Beverage (mL) 100 Calorie Maximum	Beverage (oz) 100 Calorie Maximum
Beverages (Non-Alcoholic)				
1% Low-fat Milk	240 mL	105	229 mL	8 oz
Almond milk	240 mL	60	240 mL	8 oz
Caffe macchiato, with almond, soy, nonfat, 2% or whole milk	360 mL	12	354 mL	12 oz
Cappuccino, nonfat milk	360 mL	40		12 oz
Cappuccino, whole milk	360 mL	111	216 mL	7 oz
Caramel Frappuccino-whole milk w/ whipped cream and drizzle	360 mL	260	92 mL	3 oz
Coffee or tea, flavored and sweetened: Very individual done at table (if nothing is added)	360 mL prepared	0	No limit	No limit
Cream or cream substitutes, fluid	15 mL	29	15 mL	1 oz
Cream or cream substitutes, powder	2 g	10	15 mL	1 oz
Cream, half & half	30 mL	40	15 mL	1 oz
Drink mixes (without alcohol): All other types (e.g., flavored syrups and powdered drink mixes)	Amount to make 360 mL drink (without ice)	90	360 mL	12 oz
Eggnog	120 mL	174	69 mL	2 oz
Hot Cocoa packet- just add water	240 mL	80	240 mL	8 oz
Juices, nectars, fruit drinks	240 mL	115	209 mL	7 oz
Latte, nonfat milk	360 mL	100	240 mL	8 oz
Latte, whole milk	360 mL	203	118 mL	4 oz
Mocha Frappuccino- whole milk w/ whipped cream and drizzle	360 mL	240	100 mL	3 oz
Shakes or shake substitutes, e.g., dairy shake mixes, fruit frost mixes	240 mL	500	48 mL	2 oz
Soda, lemonade, fruit punch, juice	360 mL	156	231 mL	8 oz
Soy beverage	240 mL	80	240 mL	8 oz
Sweet tea	360 mL	105	229 mL	8 oz
Sweetened cocoa powder for cold choc milk- with 1% low-fat milk	240 ml	155	155 mL	5 oz
Thai Iced tea	360 mL	196	122 mL	4 oz
Vanilla Frappuccino-whole milk w/ whipped cream and drizzle	360 mL	280	86 mL	3 oz
Vegetable juice (tomato)	240 mL	50	240 mL	8 oz
Vietnamese iced coffee	360 mL	369	65 mL	2 oz
Whole milk	240 mL	146	164 mL	6 oz
Whole milk-plain	360 mL	160	150 mL	5 oz

Table IX. Alcoholic Beverages

Item	Reference Amount	Estimated Calories	Proposed New Standardized Portion Sizes	
			Alcoholic Beverage (gm/mL)	Alcoholic Beverage (oz)
Alcoholic Beverages				
Beer	360 ml	155	360 ml	12 oz
Wine cooler	360 ml	228	240 ml	8 oz
Wine	150 ml	125	150 ml	5 oz
Spirits	45 ml	100	45 ml	1.5 oz

Table X. Toppings and Miscellaneous

Item	Proposed New Standardized Portion Sizes			
	Reference Amount	Estimated Calories	Misc./Topping (gm/mL) 30 Calorie Maximum	Misc./Topping (oz) 30 Calorie Maximum
Toppings and Miscellaneous				
Anchovy canned in oil	15 g	31	15 g	0.5 oz
Anchovy paste	15 g	30	15 g	0.5 oz
Bacon bits, imitation	15 g	64	7 g	0.2 oz
Butter	1 teaspoon/2.6g	34	2.6 g	1 tsp
Caramel dessert topping	2 tbsp/30g	110	8 g	0.3 oz
Cranberries (dried)	40 g	130	9 g	0.3 oz
Fruits for garnish or flavor, e.g., maraschino cherries 10	4 g	7	17 g	0.6 oz
Garlic paste	1 tsp/5g	30	5 g	0.2 oz
Hershey's strawberry syrup	2 tbsp/30g	100	9 g	0.3 oz
Margarine	2 teaspoon/5.2g	68	2.6 g	1 tsp
Marshmallow cream topping	2 tbsp/30g	129	7 g	0.2 oz
Peanuts, chopped	2 tbsp/28.3g	110	8 g	0.3 oz
Prune, apricot, pear (dried)	40 g	98	12 g	0.4 oz
Salt, salt substitutes, seasoning salts (e.g., garlic salt)	1/4 tsp/1.42g	0	0-1/8 tsp	0-1/8 tsp
Seasoning oils and seasoning sauces (e.g., coconut concentrate, sesame oil, almond oil, chili oil, coconut oil, walnut oil)	1 tbsp/14.3g	119	4 g	0.1 oz
Seasoning pastes (e.g., ginger paste, curry paste, chili paste, miso paste), fresh or frozen	1 tsp/5g	8	19 g	0.7 oz
Shortening	1 tbsp	115	0 g	0 oz
Spices, herbs (other than dietary supplements)	1/4 tsp or 0.5 g	0	0.5 g	¼ tsp
Spray types	0.25 g	0	0.25 g	0.01 oz
Whipped Cream topping, pressurized	2 tbsp/30g	15	60 g	2 oz
Wonton Strips, crispy onions, tortilla strips	7 g	40	5 g	0.2 oz

Item	Reference Amount	Estimated Calories	Misc./Topping (gm/mL) 30 Calorie Maximum	Misc./Topping (oz) 30 Calorie Maximum
Nuts and Seeds				
Nuts, seeds and mixtures, all types: Sliced, chopped, slivered, and whole	30g			
Cashews	30 g	160	6 g	.20 oz
Peanuts, almonds	30 g	170	5 g	.19 oz

Pecans	30 g	207	4 g	.16 oz
Walnuts	30 g	196	5 g	.16 oz

Item	Reference Amount	Estimated Calories	Misc./Topping (gm/mL) 50 calories	Misc./Topping (oz) 50 cal
Sauces, Dips, Gravies, and Conndiments				
Sauce, tartar sauce, tomato chili sauce, other sauces for dipping (e.g., mustard sauce, sweet and sour sauce), all dips (e.g., bean dips, dairy-based dips, salsa)Barbecue sauce, hollandaise	2 tbsp			
BBQ sauce	2 tbsp/30g	60	25 g	5 tsp
Butter (e.g. Lemon butter sauce)	125 g	174	36 g	1.3 oz
Cheese sauce ³	1/4 cup-57g	98	28 g	1 oz
Cocktail sauce	1/4 cup-57g	87	32 g	1 oz
Garlic dipping sauce	2 tbsp/30g	31	30 g	2 Tbsp
Gravy: mushroom	1/4 cup-57g	16	57 g	2 oz
Gravy: poultry/beef	1/4 cup-57g	30	57 g	2 oz
Hollandaise sauce ⁴	2 tbsp/30g	152	10 g	2 tsp
Honey mustard dipping sauce ⁷	2 tbsp/30g	124	12 g	2.5 tsp
Hot chili sauce; sweet chili sauce	2 tbsp/30g	30	30 g	2 Tbsp
Ranch Dipping sauce ⁵	2 tbsp/30g	128	12 g	2 tsp
Ranch, blue cheese types	30 g	145	10 g	1 tsp/0.4 oz
Sweet and sour sauce ⁵	2 tbsp/30g	52	30 g	2 Tbsp
Tartar sauce	2 tbsp/30g	120	13 g	2.5 tsp

Sauces for mixed entree (150 cal max)

Alfredo	125 g	125	130 g	5 oz
Clam sauce	125 g	250	65 g	2 oz
Marinara	125 g	66	130 g	5 oz
Meat sauce ⁴	125 g	158	103 g	4 oz
Pesto ⁴	125 g	149	125 g	5 oz
White sauce	1/4 cup-57g	92	57 g	2 oz

³ Average of 3 items

⁴ Average of 4 items

⁵ average of 5 items

⁷ average of 7 items

Item	Reference Amount	Estimated Calories	Misc./Topping (gm/mL) 30 Calorie Maximum	Misc./Topping (oz) 30 Calorie Maximum
Major Condiments, e.g. Catsup, Steak Sauce, Soy Sauce, Vinegar, Teriyaki Sauce, Marinades				
Catsup	1 tbsp/15g	15	15 g	1 Tbsp
Mayonnaise, sandwich spreads, mayonnaise-type dressings	15 g	90	5 g	0.2 oz
Soy sauce	1 tbsp/15g	8	15 g	1 Tbsp
Steak sauce	1 tbsp/15g	15	15 g	1 Tbsp
Teriyaki sauce	1 tbsp/15g	16	15 g	1 Tbsp
Vinegar	1 tbsp/15g	5	15 g	1 Tbsp

Item	Reference Amount	Estimated Calories	Misc./Topping (gm/mL) 30 Calorie Maximum	Misc./Topping (oz) 30 Calorie Maximum
Minor Condiments, e.g. horseradish, hot sauces, mustards, Worcestershire sauce				
Fruit butter	1 tbsp	29		1 tbsp
Fruit chutney	1 tbsp	50		1 tbsp
Honey	1 tbsp	64		1/2 tbsp
Horseradish	1 tbsp/15g	5	15 g	1 tbsp
Hot sauce (some are 0, highest was 5)	1 tbsp/15g	2	15 g	1 Tbsp
Jam/jelly	1 tbsp	50	1 tbsp	1 Tbsp
Marshmallows	30 g	95	10 g	0.3 oz
Molasses	1 tbsp	58		1.5 tsp
Mustard	1 tbsp/15g	3	15 g	1 tbsp
Sugar: white, brown, in the raw	8 g	31	8 g	.29 oz
Syrup- Lite	30 mL	50	18 ml	1 Tbsp
Syrup- original, maple, etc.	30 mL	105	9 ml	2 tsp
Syrup- sugar-free	30 ml	15	30g	2 Tbsp
Worcestershire sauce	1 tbsp/15g	5	15 g	1 Tbsp