

Food and Fitness

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Where Do Total Calories Come From?

Calories are the sources of energy that are provided to the body. The body requires sources of energy to function. The definition of a calorie, according to the National Cancer Institute, is a measurement of energy content of food.



As aging occurs, the amount of calories tend to decrease in comparison to the younger population. When talking about calories, the amount each person needs is based on a combination of factors; age, gender, height, weight, and activity level are the top factors in determining how many calories a person needs. Sometimes equations are used to determine each person's individual needs for calories. The government averages out calorie needs for men and women based on their age group as a guide. However, everyone's calorie needs are different.

Both foods and beverages can provide calories. Calories come from carbohydrates, proteins, and fats. These three add up to total calories and are called macronutrients. The hardest part is consuming the right amount of calories. Not eating enough calories results in weigh loss while eating an excess amount of calories results in weight gain.

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Where Do Total Calories Come From?

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Food labels clearly identify how many grams of carbohydrates, proteins, and fats are in the foods and beverages we consume. The food label is a good place to start for understanding packaged items and calorie content.



Carbohydrates—Each gram of a carbohydrate contains 4 calories. Carbohydrates are sugar molecules or broken down into sugar molecules. Carbohydrates are found in dairy products, grain products, fruits, and starchy vegetables when it comes to the food groups. Protein food and non-starchy vegetables are either low or free from carbohydrates. Sweetened beverages, desserts, and candies are other places to find carbohydrates that falls outside of the food groups. The main purpose of carbohydrates is to provide the body with glucose which is then converted into energy.

Protein—Each gram of protein contains 4 calories. Proteins are made up of compounds that are called amino acids. Protein foods are important for building tissue, muscle, and body maintenance. The protein food group is made up of foods like meat, poultry, fish, eggs, nuts, seeds, and legumes.

Fat—Each gram of fat contains 9 calories. Fats contain the highest amount of calories per gram. Fats are important for providing energy, absorbing fat soluble vitamins, and for supporting cell function. Fats also protect the body's organs and regulate the body's temperature.

Eating food should be a combination of for health benefits and for enjoyment. Some foods are high in calories and low in nutrients. These foods are called nutrient dense foods. You may have heard the term empty calories with those kinds of foods. Nevertheless, it is important to have a balance of carbohydrates, proteins, and fats for the human body to function normally. Any diet that requires one to eliminate any of these macronutrients should be discussed with a dietitian.



1 Medium
Apple or Banana



1/2 TBSP Nut Butter
+ 1/2 Banana



2 Egg Whites + Low Fat
Cheese + Spray Oil



3 Cups
Popcorn



15
Almonds/Cashews



1/2 Cup Low Fat
Greek Yoghurt
+ 1/2 Cup Berries



8 Baby Carrots
+ 2 TBSP Hummus



3 Multigrain Crackers
+ Low Fat Cheese



Cheese Quesadilla
1 Low Carb Tortilla + Low
Fat Cheese + Spray Oil



1/2 Scoop Protein Powder +
1 Cup Almond Milk (no sugar)



Chili Lime Shrimp
10 Shrimp, 1TBSP Lime Juice
1/2 TSP Chili Powder



Grilled Chicken Lettuce
Wrap with low-fat cheese



1/4 Medium Avocado
Guacomole



Bean Salad
1/3 Cup Beans + Veggies



Granola Bar

Vegetable—Rhubarb

Rhubarb is a botanical vegetable that is not very commonly used in the United States. However, the United States classifies rhubarb as a fruit. It is assumed, because of the way it looks, that rhubarb belongs in the same family as celery, but it is not. Rhubarb actually belongs in the family of buckwheat.

Rhubarb is a perennial and is considered to be easy to grow at home. The plant requires very little care and usually is not susceptible to diseases or pests. In the United States, rhubarb season falls between the months of April and July. Rhubarb can be grown year round, but if you are looking for it in the grocery store this is the time you are most likely to find it.

The plant grows tall pink stocks with leaves at the top. The leaves of rhubarb are poisonous. The leaves contain a substance called oxalic acid. If the leaves are consumed, it can cause a number of issues like kidney stones, kidney failure, vomiting, nausea, diarrhea, abdominal pain, etc. Noting that rhubarb leaf poisoning is considered to be a rare occurrence.

Rhubarb stocks can be eaten cooked or raw. The stocks are pink and have a tender yet tart flavor. Often rhubarb is used in many baked goods. It even has the nickname “pie plant” since it is commonly associated with being in pies. Rhubarb is known mostly for being in food items like pies, crisps, sauces, cookies, bars, and cakes, but can be used in other dishes like stews.

As far as nutrition is concerned, rhubarb is low in calories and fat. Rhubarb contains dietary fiber, vitamin A, vitamin K, potassium, manganese and calcium.

Rhubarb is considered to be a very versatile plant. Since rhubarb season is approaching, keep an eye out and give it a try.



Caloric Ratio Pyramid [What is this?](#)

Caloric Ratio Pyramid for Rhubarb, raw		
This feature requires Flash player to be installed in your browser. Download the player here.		
78%	8%	14%
Carbs	Fats	Protein



NutritionData's Opinion

[What is this?](#)

Weight loss: ★★★★★

Optimum health: ★★★★★

Weight gain: ★★☆☆☆

The good: This food is low in Saturated Fat and Sodium, and very low in Cholesterol. It is also a good source of Magnesium, and a very good source of Dietary Fiber, Vitamin C, Vitamin K, Calcium, Potassium and Manganese.



Nutrition Facts

Rhubarb, raw

Serving size: 1 cup, diced (122g) ▼

NUTRITION INFORMATION

Amounts per 1 cup, diced (122g)

Calorie Information

Amounts Per Selected Serving		%DV
Calories	25.6 (107 kJ)	1%
From Carbohydrate	19.9 (83.3 kJ)	
From Fat	2.0 (8.4 kJ)	
From Protein	3.7 (15.5 kJ)	
From Alcohol	0.0 (0.0 kJ)	

Protein & Amino Acids

Amounts Per Selected Serving		%DV
Protein	1.1 g	2%

[More details ▼](#)

Vitamins

Amounts Per Selected Serving		%DV
Vitamin A	124 IU	2%
Vitamin C	9.8 mg	16%
Vitamin D	~	~
Vitamin E (Alpha Tocopherol)	0.3 mg	2%
Vitamin K	35.7 mcg	45%
Thiamin	0.0 mg	2%
Riboflavin	0.0 mg	2%
Niacin	0.4 mg	2%
Vitamin B6	0.0 mg	1%
Folate	8.5 mcg	2%
Vitamin B12	0.0 mcg	0%
Pantothenic Acid	0.1 mg	1%
Choline	7.4 mg	
Betaine	~	

[More details ▼](#)

Carbohydrates

Amounts Per Selected Serving		%DV
Total Carbohydrate	5.5 g	2%
Dietary Fiber	2.2 g	9%
Starch	~	
Sugars	1.3 g	

[More details ▼](#)

Fats & Fatty Acids

Amounts Per Selected Serving		%DV
Total Fat	0.2 g	0%
Saturated Fat	0.1 g	0%
Monounsaturated Fat	0.0 g	
Polyunsaturated Fat	0.1 g	
Total trans fatty acids	~	
Total trans-monoenoic fatty acids	~	
Total trans-polyenoic fatty acids	~	
Total Omega-3 fatty acids	~	
Total Omega-6 fatty acids	121 mg	

[Learn more about these fatty acids and their equivalent names](#)

[More details ▼](#)

Minerals

Amounts Per Selected Serving		%DV
Calcium	105 mg	10%
Iron	0.3 mg	1%
Magnesium	14.6 mg	4%
Phosphorus	17.1 mg	2%
Potassium	351 mg	10%
Sodium	4.9 mg	0%
Zinc	0.1 mg	1%
Copper	0.0 mg	1%
Manganese	0.2 mg	12%
Selenium	1.3 mcg	2%
Fluoride	~	

Recipe—Strawberry-Rhubarb Cobbler with Granola Streusel

Ingredients

Filling

- 3 cups quartered fresh strawberries
- 3 cups sliced fresh rhubarb or thawed frozen rhubarb
- 1/4 cup granulated sugar
- 1 tablespoon cornstarch
- 1 tablespoon lemon juice
- 1/4 teaspoon salt



Topping

- 1/4 cup lightly packed brown sugar
- 1/2 cup old-fashioned rolled oats
- 1/3 cup whole-wheat flour
- 1/4 cup unsalted butter, softened

Directions

1. To prepare filling: Preheat oven to 350 degrees F. Coat an 11-by-7-inch baking dish with cooking spray.
2. Combine strawberries, rhubarb, granulated sugar, cornstarch, lemon juice and salt in a large bowl; transfer to the prepared baking dish.
3. To prepare topping: Combine brown sugar, oats, flour and butter in a medium bowl; stir until thoroughly combined. Crumble the topping evenly over the strawberry-rhubarb mixture.
4. To prepare topping: Combine brown sugar, oats, flour and butter in a medium bowl; stir until thoroughly combined. Crumble the topping evenly over the strawberry-rhubarb mixture.

Brain Exercise

Don't Just Exercise Your Body, Workout Your Brain!

Easter Sudoku

DIRECTIONS: Fill in the grids so that each horizontal row contains each letter exactly once, each vertical column contains each letter exactly once, and each subgrid contains each letter exactly once.



SPROUT

S					T
		O		S	
	T	R	P		
	P				U
					O

BASKET

	B	T			S
	A			B	
			T		K
K		A			
	T	E			

SPRING

		N			
I			R		
				S	
	R		G		I
		I	N		
				G	

DUCKLINGS

	C			U	G	L	
		K	S	L		U	
U		N					I
							K
L					K	I	
K		U					S
					C	L	I
C	U	I	K		L	S	
			G		N		U

TULIPS

			U		T
	T	I		S	
	L				
		T	L		
I				L	S



April 2023

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1 April Fool's Month
2 National Peanut Butter and Jelly Month	3 Find a Rainbow Day	4 Walk Around Things Day	5 Deep Dish Pizza Day	6 National Burrito Day	7 Good Friday	8 Zoo Lover's Day
9 Easter Sunday	10 National Siblings Day	11 National Pet Day	12 Grilled Cheese Sandwich Day	13 Scrabble Day	14 National Pecan Day	15 Husband Appreciation Day
16 Mushroom Day	17 National Cheeseball Day	18 Pet Owners' Independence Day	19 National Garlic Day	20 Look Alike Day	21 Kindergarten Day	22 Earth Day
23 Lover's Day	24 Pigs in a Blanket Day	25 National DNA Day	26 National Pretzel Day	27 Tell a Story Day	28 Arbor Day	29 International Dance Day
30 National Raisin Day						

Monthly Observances

- ♦ Global Astronomy Month
- ♦ International Guitar Month
- ♦ Keep American Beautiful Month
- ♦ Lawn and Garden Month
- ♦ National Card and Letter Writing Month
- ♦ National Frog Month
- ♦ National Humor Month
- ♦ National Kite Month
- ♦ National Pecan Month
- ♦ National Poetry Month
- ♦ National Welding Month
- ♦ Stress Awareness Month



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Brain Exercise Answers

SPROUT

S	R	P	O	U	T
T	U	O	R	S	P
P	O	S	U	T	R
U	T	R	P	O	S
O	P	T	S	R	U
R	S	U	T	P	O

DUCKLINGS

I	C	S	N	K	U	G	L	D
D	G	K	S	L	I	U	C	N
U	L	N	C	G	D	K	I	S
G	I	D	L	U	S	N	K	C
L	S	C	D	N	K	I	G	U
K	N	U	I	C	G	D	S	L
N	K	G	U	S	C	L	D	I
C	U	I	K	D	L	S	N	G
S	D	L	G	I	N	C	U	K

BASKET

E	B	T	K	A	S
S	A	K	E	B	T
A	E	B	T	S	K
T	K	S	A	E	B
K	S	A	B	T	E
B	T	E	S	K	A

SPRING

R	P	N	S	I	G
I	G	S	R	P	N
N	I	G	P	S	R
S	R	P	G	N	I
G	S	I	N	R	P
P	N	R	I	G	S

TULIPS

L	P	S	U	I	T
U	T	I	P	S	L
I	L	P	S	T	U
S	U	T	L	P	I
T	S	L	I	U	P
P	I	U	T	L	S

This newsletter is created by Kathrine J. Clark, MS, RD, LD, Nutrition Consultant to the West Virginia Bureau of Senior Services.