

Lesson 9: Empty Calories

“Empty calories” are foods that contain lots of added sugar and/or solid fat, and have no nutritional value. Pop, sweet tea, fruit-flavored drinks, sports drinks, energy drinks, alcohol, crackers, and chips are examples of foods that contain empty calories. Empty calories cause weight gain and high blood sugar. To maintain optimal weight and blood sugar control, it is important to avoid foods with empty calories.

In this lesson, you will learn:

- What types of food contain empty calories
- Health effects of eating empty calories
- Healthier alternatives to foods that contain empty calories
- How to choose healthy fats and oils



Challenge Yourself!

Set a Goal

Choose (kañníḡa) one of the goals below (or set your own) to try during the next month:

- ☐ I will try some of the healthier alternatives to pop, sweet tea, fruit-flavored drinks, sports drinks, energy drinks, and alcohol.
- ☐ I will adjust a favorite recipe to use healthier fats or reduce use of solid fats.
- ☐ I will read Nutrition Facts labels on my favorite foods to determine if they are high in added sugars or solid fats.
- ☐ I will create one of this month's recipes at home.
- ☐ I will: _____



What Types of Food (Wóyute) Contain “Empty Calories”?

Foods with empty calories are high in added sugar or solid fats.

Added sugar: sugars and syrups that are added when foods or beverages are processed or prepared.

Solid fats: fats that are solid at room temperature, like butter, beef fat, and shortening. Some solid fats are found naturally in foods. They can also be added during food processing or food preparation. Foods that contain solid fats are often high in saturated fat and/or trans fat.

Common foods that contain “empty calories” include:

- Pop, fruit-flavored drinks, sweet tea, sports drinks, energy drinks, and alcohol (contain added sugar)
- Sweets (for example, candies, cookies, cake, ice cream) (contain both added sugar & solid fat)
- Crackers (contain both added sugar & solid fat)
- Sweetened yogurt (contains both added sugar & solid fat)
- Chips (contains solid fat)
- Pizza (contains solid fat)
- Processed meat (for example, Vienna sausages, hot dogs, Spam) (contain solid fat)

Why should I avoid “empty calories”?

- Empty calories (from foods or drinks high in added sugar and/or solid fats) can lead to weight gain. Being overweight can contribute to heart disease, poor blood sugar control, and other chronic diseases.
 - Empty calories (from foods or drinks high in sugar) can lead to tooth decay/cavities. Tooth decay/cavities can contribute to heart disease and stroke.
 - Empty calories (from foods high in solid fats) can raise levels of “bad” cholesterol (LDL). High levels of “bad” cholesterol (LDL) can contribute to heart disease and stroke.
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Added Sugars are a Major Source of Empty Calories.

Cut Back on Added Sugars!

Be a sugar detective.



Added sugar is added by the manufacturer during processing. Check the ingredient list. If these names for added sugar are on the list, it means the food or drink has added sugar:

- Brown sugar
- Corn sweetener
- Corn syrup
- Dextrose
- Fructose
- Glucose
- High-fructose corn syrup
- Honey
- Invert sugar
- Lactose
- Malt syrup
- Maltose
- Molasses
- Raw sugar
- Sucrose
- Trehalose
- Turbinado sugar

You may see
Sugars on the
Nutrition Facts label.

Nutrition Facts			
Serving Size 1 1/4 cups			
Servings Per Container 6			
Amount Per Serving			
Calories 220		Calories from Fat 40	
		% Daily Value*	
Total Fat 4.5g			7%
Saturated Fat 0.5g			3%
Trans Fat 0g			
Cholesterol 15mg			5%
Sodium 470mg			20%
Total Carbohydrate 40g			13%
Dietary Fiber 7g			28%
Sugars 8g			
Protein 8g			16%
Vitamin A 20%		Vitamin C 60%	
Calcium 4%		Iron 10%	
*Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.			
	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2400mg	2400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Compare Labels

Sugars includes both added sugars and natural sugars. Healthy foods like fruit, 100% juice, plain milk and yogurt, and vegetables contain sugar naturally. These are not added sugars.

You can compare the amount of sugars on the label for two similar products (like two brands of strawberry yogurt). If the products have similar ingredients, the brand lower in sugars probably has less added sugar.

Read Nutrition Facts Labels to See How Much Sugar Your Favorite Foods (Wóyute) & Drinks Contain

Typically, Nutrition Facts labels report sugar in grams. You must divide by 4 to obtain the number of teaspoons of sugar per serving. **To determine how many teaspoons of sugar are in your favorite foods and drinks, use the conversion:**

4 grams of sugar equals one teaspoon of sugar



Pop, Fruit-Flavored Drinks, Sweet Tea, Energy Drinks, Sports Drinks, and Alcohol are High in Empty Calories

- What you choose to drink has large effects on your weight and blood sugar levels.
- One serving (12 ounce can) of pop has 40 grams of sugar. This is equivalent to 10 teaspoons of sugar.
- One serving (20 ounce bottle) of Gatorade has 34 grams of sugar. This is equivalent to about 8 ½ teaspoons of sugar.
- One serving (11.2 ounce bottle) of Mike's Hard Lemonade has 30 grams of sugar. This is equivalent to 7 ½ teaspoons of sugar.



Sweets are High in Empty Calories

- Eating sweets, such as candies, cookies, cake, and ice cream, may have large effects on your weight and blood sugar levels.
- 4 Oreo cookies have 19 grams of sugar. This is equivalent to about 5 teaspoons of sugar.



Crackers are High in Empty Calories

- Although some consider crackers a healthier alternative to cookies, many crackers have lots of sugar.
- 4 Ritz crackers have 4 grams of sugar. This is equivalent to 1 teaspoon sugar.



Sweetened Yogurt is High in Empty Calories

- Yogurt is often considered a healthy food, but sweetened yogurt is full of sugar. Eating sweetened yogurt may have large effects on your weight and blood sugar levels.
- 1 cup of sweetened vanilla yogurt has 33 grams of sugar. This is equivalent to 8 teaspoons of sugar.



Challenge Yourself!

To determine how many teaspoons of sugar are in your favorite foods,

divide the grams of sugar listed on the Nutrition Facts label by 4.

Using the Nutrition Facts labels below, figure out how many teaspoons of sugar are in each item:

Dairy Queen Chocolate Brownie Extreme Blizzard (size large)



Nutrition Facts	
Serving Size 1 blizzard	
Servings Per Container 1	
Amount Per Serving	
Calories 1120	
	% Daily Value*
Total Fat 50g	77%
Saturated Fat 28g	140%
Trans Fat 1g	
Cholesterol 100mg	33%
Sodium 800mg	25%
Total Carbohydrate 155g	52%
Dietary Fiber 6g	24%
Sugars 123g	
Protein 22g	44%

*Percent Daily Values are based on a diet of other people's secrets.

_____ grams sugar divided by 4 =
_____ teaspoons sugar (per serving)

Monster Energy Drink (single can)



Nutrition Facts	
Serving Size 1 8 fl. oz (240 mL)	
Servings Per Container 2	
Amount Per Serving	
Calories 100	
	% Daily Value*
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 180mg	8%
Total Carbohydrate 27g	9%
Dietary Fiber 0g	0%
Sugars 27g	
Protein 0g	0%

*Percent Daily Values are based on a diet of other people's secrets.

_____ grams sugar divided by 4 =
_____ teaspoons sugar (per serving)

Remember: There is more than one serving in a single can. To figure out the number of teaspoons of sugar in the whole can, you must double the number of teaspoons per serving (because there are two servings per can).

Finding Alternatives to Sugary Foods & Drinks

Add less sugar to what you eat and drink.

Leave it out or limit how much sugar, honey, and syrup you put on foods and in drinks.

Try healthier swaps for food high in added sugar.

Watch out for added sugars in these foods:	Try these instead:
Desserts (like candy, cookies, cake, and ice cream)	Fruit-based desserts with less added sugar like Fruit Tarts (Month 4, Lesson 4) or Banana Crumble (page 34). For a more low-key, weeknight dessert, serve fresh, frozen, or canned fruit, or try Apple Salad (Month 4, Lesson 4).
Sugary cereal or flavored yogurt	Add fruit to unsweetened cereal or plain yogurt. Try Yogurt Parfaits (Month 5, Lesson 5).
Drinks with added sugar (like soda, energy drinks, sports drinks, fruit drinks, sweetened coffee or tea, and chocolate milk)	Water, unflavored fat-free (skim) or low-fat (1%) milk, or small portions of 100% juice. Try mixing seltzer water with 100% juice or flavoring tap water with fruit slices and herbs.
Fruit canned in syrup or sweetened applesauce	Fruit canned in 100% juice or no sugar added applesauce. Or, try making your own applesauce with fresh apples, water, and a little cinnamon.
Jams, syrups, and sweet toppings	Instead of pancakes with syrup, try Orange Oatmeal Pancakes (Month 10, Lesson 10) and skip the syrup or just use a little. Instead of peanut butter and jelly, try peanut butter with apples or bananas, or Peanut Butter and Banana Pockets (Month 10, Lesson 10).
Convenience and prepackaged foods like pizza, pasta sauce, bottled salad dressing, and crackers	Make your own pizza (Month 2, Lesson 2), tomato sauce (page 30), and salad dressing (Month 3, Lesson 3). Look for whole grain crackers with no added sugar.



Drink to Your Health

Drink Water and Milk Often

Water and milk have fewer calories and are better for our health.

Water

- Choose tap water over bottled water. It's safe and it's free.
- Add flavor to water. Mix in fresh fruit slices or mint leaves!

Milk

- Choose fat-free (skim) or low-fat (1%) milk. It has the same amount of calcium as whole milk, but less fat and fewer calories.

Drink 100% Juice Sometimes

Juice can provide key nutrients but is high in calories and low in fiber.

100% Fruit Juice

- Check the label to be sure it's 100% juice.
- Lighten it up. Mix with seltzer water to make healthy "sodas."

Limit or Avoid Drinks with Added Sugar

Drinks with added sugar are packed with calories. They don't give you the nutrients you need.



Instead Of...	Try This
Soda or pop	Combine 100% juice and seltzer water to make healthy "sodas" with no added sugar and fewer calories.
Fruit-Flavored Drinks	Choose 100% juice. Or, flavor tap water with fresh fruit slices or mint leaves.
Sports or Energy Drinks	Replace the fluids you lose being active with water.

Know Your Fats: Some Fats & Oils Are a Major Source of Empty Calories

Fats and oils are vital to our health, but not all fats are created equal.

Fats come in two major forms:

Oils: fats that are liquid at room temperature, like canola oil, vegetable oil, and olive oil. Oils primarily come from plants.

Solid fats: fats that are solid at room temperature, like butter, beef fat, and shortening. Some solid fats are found naturally in foods. They can also be added during food processing or food preparation. Foods that contain solid fats are high in saturated fat and trans fat.

Not all foods high in fat contain empty calories. However, many foods high in saturated fat and trans fat contain extra calories that you don't need.



Know Your Fats: Unsaturated Fat, Saturated Fat, Trans Fat

It is important to know the difference between the major sources of fat (unsaturated fat, saturated fat, and trans fat) to determine if your favorite foods contain empty calories. Many foods that are high in saturated fat and trans fat are major sources of empty calories.

	Unsaturated Fat	Saturated Fat	Trans Fat
Are these fats good for you?	Yes <ul style="list-style-type: none"> • Lowers “bad” cholesterol (LDL) • Lowers your risk of heart disease & stroke • Provides fats your body needs 	No <ul style="list-style-type: none"> • Raises “bad” cholesterol (LDL) • Raises your risk of heart disease & stroke 	No <ul style="list-style-type: none"> • Raises “bad” cholesterol (LDL) • Lowers your “good” cholesterol (HDL) • Raises your risk of heart disease & stroke
Which foods contain these fats?	<ul style="list-style-type: none"> • Avocados • Mayonnaise and oil-based salad dressings • Nuts • Peanut butter • Olives • Seeds • Soft margarine (liquid, spray, or tub) • Vegetable oils (olive oil, canola oil, sunflower oil) • Fatty fish, like salmon 	<ul style="list-style-type: none"> • Beef fat (tallow & suet), chicken fat, pork fat (lard) • Cream & milk • Dairy products (butter, regular full-fat cheese, cream cheese, sour cream) • Dairy desserts (ice cream, pudding) • Grain-based desserts (brownies, cakes, cookies, doughnuts, pastries, pies, sweet rolls) • Fast food • Meats & poultry • Processed meats (Vienna sausages, hot dogs, Spam) • Savory snacks (chips, crackers, microwave popcorn) 	<ul style="list-style-type: none"> • Coffee creamer • Fast food • Frozen pizza • Grain-based desserts (brownies, cakes, cookies, doughnuts, pastries, pies, sweet rolls) • Store-bought frosting • Refrigerated dough products (biscuits, cinnamon rolls) • Savory snacks (crackers, microwave popcorn) • Vegetable shortening & stick margarine
How much should you eat each day?	Most of the fat you eat should be unsaturated	Limit the amount of saturated fat you eat each day to less than 10% of your total calories. Choose unsaturated fats instead	Avoid trans fat

Check the Nutrition Facts Label to See What Types of Fat are in Your Favorite Foods (Wóyute) and Drinks



Taking a Closer Look at Unsaturated Fat

Nutrition Facts

Serving Size 1 package (272g)

Servings Per Container 1

Amount Per Serving

Calories 300 Calories from Fat 45

% Daily Value*

Total Fat 5g 8%

Saturated Fat 1.5g 8%

Trans Fat 0g

Polyunsaturated Fat 1.5g

Monounsaturated Fat 1g

Cholesterol 30mg 10%

Sodium 430mg 18%

Total Carbohydrate 55g 18%

Dietary Fiber 6g 24%

Sugars 23g

Protein 14g

Vitamin A 80%

Vitamin C 35%

Calcium 6%

Iron 15%

* Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs:

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Saturated Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Unsaturated fats can reduce the risk of developing heart disease when eaten in place of saturated fat.

What They Are

Unsaturated fats are found in higher proportions in plants and seafood, and are usually liquid at room temperature. Monounsaturated fat and polyunsaturated fat are two kinds of unsaturated fats.

Where They Are Found

Unsaturated fats are in a variety of foods, including:

- Avocados
- Mayonnaise and oil-based salad dressings
- Nuts, Olives
- Fish
- Seeds
- Soft margarine (liquid, spray, and tub)
- Sunflower and olive oils

What They Do

- Unsaturated fats provide calories and help the body absorb certain vitamins, cushion and insulate the body, and support many body processes.
- Unsaturated fats contribute vitamin E to the diet.

Health Facts

- When eaten in place of saturated fat, unsaturated fats can lower levels of total cholesterol and “bad” cholesterol (LDL) in the blood. **This can reduce the risk of developing heart disease.**
- The Dietary Guidelines for Americans recommends consuming less than 10% of your calories per day from saturated fat by replacing saturated fat with unsaturated fats.
- Although unsaturated fats can have a beneficial effect on your health, they are still a concentrated source of calories. Therefore, they should be eaten in place of saturated fat (rather than added to the diet).



Action Steps

For Replacing Saturated Fat with Unsaturated Fats

Use the **Nutrition Facts label** as your tool for replacing saturated fat with unsaturated fats. The Nutrition Facts label on food and beverage packages shows the amount in grams (g) and the Percent Daily Value (%DV) of total fat and saturated fat in one serving of the food.

- ☐ Cook and bake with liquid oils instead of solid fats (such as butter, lard, and shortening).
- ☐ Try fish and plant sources of protein (such as soy products and unsalted nuts and seeds) in place of some meats and poultry.
- ☐ Sprinkle slivered nuts on salads instead of bacon bits, or snack on a small handful of unsalted nuts or seeds rather than chips or salty snack foods.
- ☐ Instead of using creamy salad dressings, make your own flavorful dressings with vinegar and oil.

Taking a Closer Look at Saturated Fat

Nutrition Facts

Serving Size 1 package (272g)

Servings Per Container 1

Amount Per Serving

Calories 300 Calories from Fat 45

% Daily Value*

Total Fat 5g 8%

Saturated Fat 1.5g 8%

Trans Fat 0g

Polyunsaturated Fat 1.5g

Monounsaturated Fat 1g

Cholesterol 30mg 10%

Sodium 430mg 18%

Total Carbohydrate 55g 18%

Dietary Fiber 6g 24%

Sugars 23g

Protein 14g

Vitamin A 80%

Vitamin C 35%

Calcium 6%

Iron 15%

* Percent Daily Values are based on a 2,000 calorie diet.
Your Daily Values may be higher or lower depending on
your calorie needs:

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Saturated Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Saturated fat can increase the risk of developing heart disease.

Saturated fat is a nutrient to get less of.

What It Is

Saturated fat is found in higher proportions in **animal products** and is usually **solid at room temperature**.

Where It Is Found

- Beef fat, chicken fat, and pork fat
- Cream, whole milk, and 2% milk
- Butter, cheese, cream cheese, sour cream, and ice cream
- Desserts (puddings, brownies, cakes, cookies, doughnuts, pies, and rolls)
- Fast food
- Meats and poultry
- Nuts
- Processed meat (bacon, hot dogs, lunch meats, Spam, and sausages)
- Coconut, palm, and palm kernel oils
- Chips, crackers, and microwave popcorn
- Candy
- Shortening and stick margarine

What It Does

- Saturated fat provides calories and helps the body absorb certain vitamins, cushions and insulates the body, and supports many body processes.

Health Facts

Saturated Fat Continued

- Most of us exceed the recommended limits for saturated fat in the diet.
- Saturated fat can raise the levels of total cholesterol and “bad” cholesterol (LDL) in the blood. **This can increase the risk of developing heart disease.**
- The *Dietary Guidelines for Americans* recommends consuming **less than 10% of calories per day from saturated fat** by *replacing* saturated fat with unsaturated fats.

Action Steps

For Reducing Saturated Fat in Your Diet

Use the **Nutrition Facts label** as your tool for reducing consumption of saturated fat. The Nutrition Facts label on food and beverage packages shows the amount in grams (g) and the Percent Daily Value (%DV) of saturated fat in **one serving** of the food.

The Daily Value for saturated fat is **less than 20 g per day**. This is based on a 2,000 calorie diet — your Daily Value may be higher or lower depending on your calorie needs.

- ❑ Choose foods with a lower %DV of saturated fat. Aim for less than 100% of the Daily Value for saturated fat each day. And remember:
 - 5% DV or less of saturated fat per serving is low
 - 20% DV or more of saturated fat per serving is high
- ❑ Look for sources of saturated fat on ingredient lists. Some examples are: beef fat, butter, chicken fat, cream, pork fat, shortening, coconut oil, palm oil, and palm kernel oil.

Tip: Ingredients are listed in descending order by weight - the closer an ingredient is to the beginning of the list, the more of that ingredient is in the food.

- ❑ Choose lean cuts of meats and poultry. Before or after cooking, trim or drain fat from meats and remove poultry skin.
- ❑ Try seafood and plant proteins (beans, peas, soy products, unsalted nuts, and seeds) in place of some meats and poultry.
- ❑ Substitute fat-free (skim) milk, low-fat (1%) milk, or soy milk for whole milk.
- ❑ Switch from stick margarine to soft margarine (liquid, spray, or tub).
- ❑ Cook with canola and olive oils instead of butter, lard, and shortening.
- ❑ Try baking, broiling, grilling, or steaming. These cooking methods do not add extra fat.
- ❑ Instead of using creamy salad dressings, make your own flavorful dressing with vinegar and olive oil.
- ❑ Limit desserts (cakes, chips, chocolate candies, cookies, crackers, ice cream, and puddings).
- ❑ Consume less often and smaller portions of foods and beverages that are higher in saturated fat.
- ❑ When eating out, request to see nutrition information, and choose options that are lower in saturated fat.

Nutrition FactsServing Size 1 package (272g)
Servings Per Container 1**Amount Per Serving****Calories** 300 **Calories from Fat** 45**% Daily Value*****Total Fat** 5g **8%****Saturated Fat** 1.5g **8%****Trans Fat** 0g**Cholesterol** 30mg **10%****Sodium** 430mg **18%****Total Carbohydrate** 55g **18%****Dietary Fiber** 6g **24%****Sugars** 23g**Protein** 14g**Vitamin A** **80%****Vitamin C** **35%****Calcium** **6%****Iron** **15%*** Percent Daily Values are based on a 2,000 calorie diet.
Your Daily Values may be higher or lower depending on your calorie needs:

	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Saturated Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Trans fat can increase the risk of developing heart disease.

Trans fat is a nutrient to get less of.

Taking a Closer Look at Trans Fat

What It Is

Trans fat is an unsaturated fat, but it is structurally different than unsaturated fat that occurs naturally in plant foods. Trans fat has detrimental health effects and is not essential in the diet.

Where It Is Found

Trans fat formed naturally is found in small amounts in some animal products, such as meats and dairy products.

Trans fat formed artificially during food processing is found in partially hydrogenated oils used in a variety of foods, including:

- Coffee creamer
- Fast food
- Frozen pizza
- Desserts (cakes, cookies, and frozen pies)
- Ready-to-use frostings
- Refrigerated dough products (biscuits and cinnamon rolls)
- Crackers and microwave popcorn
- Shortening and stick margarine

What It Does

Partially hydrogenated oils are used by food manufacturers to improve the texture, shelf life, and flavor stability of foods. Partially hydrogenated oils should not be confused with “fully hydrogenated oils,” which are solid fats that contain very low levels of trans fat.

Health Facts

- About half of the *trans* fat we consume is from partially hydrogenated oils.
- *Trans* fat increases the level of “bad” cholesterol (LDL) and decreases the level of “good” cholesterol (HDL) in the blood. **This can increase the risk of developing heart disease.**
- The *Dietary Guidelines for Americans* recommends keeping the intake of trans fat **as low as possible** by limiting foods containing **partially hydrogenated oils**. Eating foods with even small amounts of trans fat can add up to a significant intake over time.



Action Steps

For Reducing Trans Fat in Your Diet

Use the **Nutrition Facts label** as your tool for reducing consumption of trans fat formed during food processing. The Nutrition Facts label on food and beverage packages shows the amount in grams (g) of trans fat in one serving of the food.

Trans fat has no Percent Daily Value (%DV), so use the amount of grams (g) as a guide.

- ☐ Look for partially hydrogenated oils on the ingredient list on a food package.
- ☐ Switch from stick margarine to soft margarine (liquid, spray, or tub).
- ☐ Cook with canola and olive oils instead of butter, lard, and shortening.
- ☐ Try baking, broiling, grilling, or steaming. These cooking methods do not add extra fat.
- ☐ Limit desserts and savory snacks (cakes, cookies, crackers, and microwave popcorn).
- ☐ Choose lean cuts of meats and skinless poultry.
- ☐ Substitute fat-free (skim) milk, low-fat (1%) milk, or soy milk for whole milk.
- ☐ When eating out, request to see nutrition information, and choose options that don't contain trans fat.

Make the Healthier Choice: Alternatives to Foods (Wóyute) that Contain Empty Calories

High in Empty Calories	Healthier Alternative
Sweetened apple sauce	Unsweetened apple sauce
Regular ground beef (75% lean)	Lean (80-85% lean) or extra lean ground beef (95% lean)
Banquet chicken or other fried chicken	Baked chicken breast without skin
Sugar-sweetened cereals (Froot Loops, Cinnamon Toast Crunch, etc.)	Unsweetened cereals (Cheerios, Raisin Bran, etc.)
Whole milk	Fat-free (skim) or low-fat (1%) milk
Sweetened yogurt	Plain (unsweetened) yogurt





Food Selection Tips From the CRST Diabetes Program

Know your portion size. It matters and is part of keeping track of your total carbs, fat, sodium, and calories.

Beverages

- Drink more water
- Drink unsweetened drinks
- Do not drink pop
- Alcohol - Limit your alcohol consumption or don't drink at all
 - No more than 2 drinks a day for men and 1 drink a day for women
 - Light beer has less carbohydrates than regular beer

Snacks

- Instead of chips for a snack, have pork rinds (they have fat and calories, but no carbohydrates)
- Beef jerky is an excellent option
- Popcorn is a healthy snack choice
- Instead of a full size candy bar, have a small piece of dark chocolate

Talk with a registered dietitian to help you plan a healthy diet and better manage your diabetes.

Additional Tips For Lowering Intake of Empty Calories

- Read the Nutrition Facts label on all foods and drinks. Remember that sugar can be called by many different names. When a sugar or solid fat is close to first on the ingredients list, the food is high in sugar or solid fat.
- Limit the amount of sugar or solid fats used when cooking, baking, and eating.
- Avoid eating dairy and grain-based desserts (such as cakes, cookies, ice cream, and puddings) and sweets (such as candies, jams, and syrups).
- Pay attention to portion size. Consume smaller portions of foods and beverages that are higher in sugars and solids fats, or consume them less often.
- When eating out, choose low sugar and low-fat options. Ask to see the Nutrition Facts label for menu options (available in many chain restaurants). Choose options that are lower in sugars and saturated fat.
- Eat regularly. Hunger can make you crave sugar, so eat small healthy meals and snacks every 3 hours. Foods that include protein and healthy fats, such as eggs, fish, lean meats, and nuts, make you feel full longer and won't cause a spike in blood sugar.
- Curb your intake gradually. If you like sugar in your tea or coffee, slowly cut back the amount you use until you get accustomed to the less sweet taste. If you drink multiple cans of pop every day, replace with milk, sparkling water, or tap water over a few weeks.



Challenge Yourself!

Set a Goal

Choose (kañníġa) one of the goals below (or set your own) to try during the next month:

- ☐ I will try some of the healthier alternatives to pop, sweet tea, fruit-flavored drinks, sports drinks, energy drinks, and alcohol.
- ☐ I will adjust a favorite recipe to use healthier fats or reduce use of solid fats.
- ☐ I will read Nutrition Facts labels on my favorite foods to determine if they are high in added sugars or solid fats.
- ☐ I will create one of this month's recipes at home.
- ☐ I will: _____



Lighten Up

Got a favorite family recipe you can't live without? Try these tips for making your classic dishes healthier.

Start with one small change. You probably won't be able to taste the difference. Slowly try making other changes, one at a time.



1. Reduce unhealthy fats.

- Choose low-fat or nonfat versions of mayonnaise and dairy products, like milk, cheese, sour cream, and yogurt.
- Use canola oil in place of half the butter when you bake. For instance, if your recipe calls for $\frac{1}{2}$ cup butter, use $\frac{1}{4}$ cup each butter and oil. Or, if the recipe calls for the butter to be melted, try using canola oil in place of all of the butter.
- When pan-cooking, spray the skillet with non-stick cooking spray instead of coating with butter or oil.
- Bake, broil, or grill instead of frying.
- Choose full-flavored cheeses, such as sharp cheddar, Parmesan, and blue cheese, instead of mild ones. The stronger taste means you can use less and still get big flavor.

Switching from 1 cup of whole milk to 1 cup of fat-free (skim) milk saves you almost 60 calories and 8 grams of fat.

Swapping canola oil for butter lowers saturated fat by 11 grams per Tablespoon.



SPOTLIGHT ON: **Roasted Turkey and Gravy**

Skip rubbing down the turkey with butter or oil — this is not needed. For gravy, pour pan drippings into a measuring cup or bowl. Place in the freezer about 20 minutes. The fat will rise to the top. Skim it off before using in your gravy.



SPOTLIGHT ON: **Mashed Potatoes**

Use half the amount of butter. Try fat-free (skim) milk, buttermilk, or yogurt in place of cream or whole milk. Add fresh or dried herbs, such as chives or parsley, for more flavor.



SPOTLIGHT ON:

Bread Pudding

Swap fat-free (skim) or low-fat (1%) milk for whole milk or cream. Cut the amount of sugar by $\frac{1}{3}$. Use whole grain bread instead of white. Add or increase the amount of fruit. Berries, apples or pears, stone fruit, and dried fruit are all good options.

Lighten Up, Continued...

2. Lighten it up.

- Use half the amount of ingredients used to decorate or top a recipe, such as frosting, coconut, grated cheese, or breadcrumbs. Or, don't use it at all.
- Reduce the amount of sugar called for by one-third. Chances are you won't miss it.
- Use half the amount of "add-in" ingredients when baking, such as chocolate chips or dried fruit.
- Always measure your oil. Do not pour it straight from the bottle. Using an extra Tablespoon adds 120 calories to your dish.



SPOTLIGHT ON:

Tuna Noodle Casserole

Use Simple White Sauce (Month 5, Lesson 5) in place of canned soup. Use whole wheat pasta instead of white pasta. Use tuna packed in water, not oil. Add frozen peas or broccoli. Top with whole wheat breadcrumbs.

3. Add Fiber.

- Swap whole wheat flour for white flour. Start by using half white and half whole wheat. Slowly work your way up to all whole wheat flour. If the dough or batter looks a little dry, add 1 Tablespoon more liquid per cup of whole wheat flour.
- Choose whole wheat pasta or whole grain pasta blends instead of white pasta.
- Skip the white rice. Serve recipes over brown rice, barley, quinoa, whole wheat couscous, bulgur, or polenta instead.
- Use whole wheat breadcrumbs for breading, on top of casseroles, or to bind ground meat in meatloaf and meatballs.
- Leave skins on fruits and veggies like apples, pears, potatoes, sweet potatoes, zucchini, cucumber, and others when you can.

Using whole wheat flour instead of regular white flour adds 13 more grams of fiber per cup.

Use stale whole wheat bread to make breadcrumbs. Chop bread as finely as possible with a knife. Or, tear into pieces and pulse in a blender until crumbs form. Use as is or toast crumbs in a skillet over medium heat until light brown. Freeze in an airtight container until ready to use.

Lighten Up, Continued...

4. Go lean on protein.

- In recipes like tacos and chili, swap half the meat for beans. You'll add fiber and reduce unhealthy fats.
- Watch your portions. About a pound of meat for every 4 people is a good serving size. Add more filling veggies to the meal.
- Choose ground meats labeled 93% lean or leaner. Drain fat after cooking.
- Trim all visible fat and remove skin from meat and poultry before cooking.
- Use chicken or turkey sausage instead of pork sausage.
- Choose seafood and non-meat sources of protein at least 2–3 times per week. Non-meat sources of protein include: beans, lentils, peanut butter, nuts, seeds, and soy products like tofu and edamame.



SPOTLIGHT ON:

Fettuccine Alfredo

Saute plenty of minced fresh garlic and add to Simple White Sauce (Month 5, Lesson 5). Use whole wheat pasta instead of white pasta. Use poached chicken breast. Add veggies, like broccoli, cauliflower, peas, or carrots, to boiling pasta water during the last few minutes of cooking.

5. Watch the sodium.

- Use low-sodium or no-salt-added canned goods or condiments, such as beans, vegetables, tomatoes, broths, soy sauce, and ketchup. Rinse canned beans and veggies before using.
- Reduce the amount of salt in baked goods to ½ teaspoon per batch.
- Season with herbs and spices instead of salt. See Month 1, Lesson 1 for tips. Or, kick up flavor using orange, lemon, and lime zest or juice.
- Measure salt before adding to your dish. An extra ¼ teaspoon salt has about 600 mg of sodium, more than a quarter of the recommended daily maximum for an adult!



Make Your Own Muffins

Muffins make a great grab-and-go breakfast or snack

Make a large batch on a day you have some extra time. Then pull one out to take on the go! Follow these steps to make 12 muffins.



Directions

1. Preheat oven to 400°F.
2. Coat a 12-cup muffin pan with non-stick cooking spray. Or, use muffin liner cups.
3. Make muffin dry mix: In a large bowl, whisk together 1½ cups whole wheat flour, 1 cup all-purpose flour, 1½ teaspoons baking powder, and ¼ teaspoon salt. Add **Optional Dry Flavorings**.
4. Make muffin wet mix: In a medium bowl, whisk together 2 large eggs, 1 cup fat-free (skim) or low-fat (1%) milk, ⅔ cup brown or granulated sugar, 2 Tablespoons melted unsalted butter, 2 Tablespoons canola oil, and 1 teaspoon vanilla extract. Add **Optional Wet Flavorings**.
5. Add wet mix to dry mix. Stir until just combined. Fold in **Fruits and Veggies** and **Optional Add-Ins**.
6. Bake muffins until a toothpick inserted in the center comes out with just a couple of moist crumbs attached, 20–25 minutes.
7. Let cool in the pan for 10 minutes. Remove from pan and let cool completely.

See next page for muffin ad-ins!



Make Your Own Muffins, Continued...

Optional Add-ins

Optional Dry Flavorings (1-1½ teaspoons total)	+	Optional Wet Flavorings	+	Fruits and Veggies (2 cups total)	+	Optional Add-Ins (up to ½ cup total)
Ground cinnamon		½ teaspoon coconut or almond extract		Fresh or frozen (not thawed) berries		Dried fruit, such as raisins, cherries, currants, or cranberries
Ground nutmeg		1 Tablespoon lemon, lime, or orange zest		Diced or mashed bananas		Toasted chopped or slivered nuts
Ground allspice				Diced mango or pineapple		Mini chocolate chips
Ground ginger				Shredded apples or pears		Shredded unsweetened coconut
Pumpkin pie spice				Shredded carrots, zucchini, or parsnips		



Try these combos!

Spiced Banana-Nut Muffins

Add ½ teaspoon each ground cinnamon, nutmeg, and allspice to the dry mix. Combine wet and dry mixes. Stir in diced bananas and chopped pecans.

Zucchini-Raisin Muffins

Add 1 teaspoon ground cinnamon to the dry mix. Combine wet and dry mixes. Stir in zucchini and raisins.

Blueberry-Ginger Muffins

Add 1½ teaspoons ground ginger to the dry mix. Combine wet and dry mixes. Stir in blueberries.



Chef's Notes

- To freeze leftover muffins, wrap each one in plastic wrap. Place in an airtight container. Freeze up to 1 month.
- Use up fruits and veggies that are starting to get too ripe.
- To make bread instead of muffins, coat a loaf pan with non-stick cooking spray. Bake at 375°F for 50–60 minutes.

Raspberry-Lime Fizz

Serves 5, 1 cup per serving



Ingredients

- 1 cup cranberry-raspberry juice
- 4 cups seltzer water
- 1 large lime

Directions

1. In a large pitcher, mix cranberry-raspberry juice with seltzer water.
2. Rinse lime and cut in half. Squeeze juice from each half into the pitcher, discarding seeds.
3. Mix well before serving.

Nutrition Facts

Serving Size 1 cup
Servings Per Recipe 5

Amount Per Serving

Calories 30 Calories from Fat 0

% Daily Value*

Total Fat 0g 0%

Saturated Fat 0g 0%

Trans Fat 0g

Cholesterol 0mg 0%

Sodium 5mg 0%

Total Carbohydrate 8g 3%

Dietary Fiber 0g 0%

Sugars 7g

Protein 0g

Vitamin A 0% • Vitamin C 25%

Calcium 0% • Iron 0%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.



Chef's Notes

- Pour over ice and garnish with a lime wedge.
- Replace cranberry-raspberry juice with any 100% juice you prefer.
- For more fruit flavor, increase juice or decrease seltzer water.
- Add thin slices of lemon, lime, or orange for more flavor.
- If you do not have a large pitcher, prepare in a large bowl. Use a measuring cup or ladle to serve.

Tomato Sauce

Serves 6, 1/2 cup per serving



Ingredients

- 1 medium onion
- 4 cloves garlic
- 1 medium carrot
- 1 Tablespoon canola oil
- 1 teaspoon dried basil
- 1/2 teaspoon dried oregano
- 1/4 teaspoon salt
- 1/2 teaspoon pepper
- 1 (28-ounce) can crushed tomatoes, no salt added

Directions

1. Peel and rinse onion, garlic, and carrot.
2. Dice onion. Shred carrot using a grater. Mince garlic.
3. In a medium pot over medium heat, heat oil. Add onion, garlic, and carrot. Cook until onion is soft, about 3 minutes.
4. Add basil, oregano, salt, pepper, and tomatoes. Bring to a boil.
5. Cover and reduce heat. Simmer for 15 minutes.

Nutrition Facts

Serving Size 1/2 cup
Servings Per Recipe 6

Amount Per Serving

Calories 80 Calories from Fat 20

% Daily Value*

Total Fat 2.5g 3%

Saturated Fat 0g 0%

Trans Fat 0g

Cholesterol 0mg 0%

Sodium 150mg 7%

Total Carbohydrate 13g 5%

Dietary Fiber 4g 14%

Sugars 4g

Protein 3g

Vitamin A 30% • Vitamin C 2%

Calcium 2% • Iron 0%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.



Chef's Notes

- Add ground turkey or lean ground beef to make a meat sauce. Cook meat and drain fat. Add veggies and proceed with recipe.
- Make a double batch of sauce. Freeze extra for later use.
- Add diced zucchini, peppers, mushrooms, or other vegetables if you like.
- Try adding 1-2 Tablespoons of balsamic vinegar with the spices for a different flavor.
- Serve over whole grain pasta. Or, use in place of canned tomato sauce in other recipes.

Apple Sauce

Makes 8 servings

Ingredients

- 3 pounds cooking apples*
(9 medium) cored,
quartered
- 1 cup water
- 1 teaspoon cinnamon
(optional)



**Varieties for cooking include:
Braeburn, Granny Smith, Golden
Delicious, Jonathan, Jonagold, McIntosh, Rome Beauty*

Directions

1. Wash apples. Cut in quarters and remove core.
2. Combine ingredients in saucepan.
3. Bring to a boil; reduce heat. Cover and simmer for 8 to 10 minutes or until apples are tender; add more water if necessary.
4. Remove from heat.
5. Mash with potato masher or process in blender or food processor to desired texture.
6. Serve warm or chilled. Stir before serving.

★ *This recipe was adapted to lower the sugar content.*

Nutrition Facts	
Serving Size 1/2 cup (242.98g)	
Servings Per Container 8	
Amount Per Serving	
Calories 102	
	% Daily Value*
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 0mg	0%
Total Carbohydrate 22g	7%
Dietary Fiber 5g	20%
Sugars 17g	
Protein 1g	2%

*Percent Daily Values are based on a 2,000 calorie diet.



Chef's Notes - Make it Quick!

In a microwave-safe mixing bowl, combine ½ of each of the ingredients above. Cover bowl with wax paper. Microwave 10 to 12 minutes, stirring twice. Mash or blend. Makes 4 servings.

Apple Crisp

Serves 10, 1 piece (1/10 of crisp) per serving

Ingredients

- 5 medium apples
- ¾ cup light brown sugar, packed and divided
- ½ cup whole wheat flour, divided
- ½ teaspoon ground cinnamon
- Non-stick cooking spray
- ½ stick (2 ounces) cold, unsalted butter
- 1½ cups quick oats

Optional Ingredients

¼ teaspoon ground nutmeg



Directions

1. Preheat oven to 350°F.
2. Rinse and cut apples in half, lengthwise. Remove any stems. Cut out center core of apple that contains the seeds. Do not peel.
3. Place apples cut side down. Use a sharp knife to cut apples into ⅛-inch slices.
4. In a large bowl, combine sliced apples, ¼ cup of brown sugar, 1 Tablespoon of flour, cinnamon, and nutmeg, if using. Mix well.
5. Spray 9-inch square baking dish with non-stick cooking spray.
6. Pour apple mixture into baking dish. Spread evenly.
7. Dice butter into smaller cubes, using a sharp knife. In a medium bowl, combine remaining brown sugar and flour, oats, and butter. Mix with hands until crumbly.
8. Spread oat and flour mixture over apple mixture. Bake uncovered on middle rack of oven for 40 minutes or until top is lightly browned or bubbly.
9. Let sit for 15–20 minutes before serving.

Nutrition Facts	
Serving Size 1/10 of apple crisp	
Servings Per Recipe 10	
Amount Per Serving	
Calories 220	Calories from Fat 50
% Daily Value*	
Total Fat 6g	8%
Saturated Fat 3g	15%
Trans Fat 0g	
Cholesterol 10mg	3%
Sodium 5mg	0%
Total Carbohydrate 41g	15%
Dietary Fiber 3g	11%
Sugars 26g	
Protein 3g	
Vitamin A 4%	Vitamin C 6%
Calcium 2%	Iron 6%
*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.	



Chef's Notes - Make it Quick!

- Use any apples you like. Or, try a mix of apples for different textures and flavors.
- Top with low-fat vanilla frozen yogurt if you like.
- Use other fruits, such as peaches, pears, or berries, when in season.

Black Bean Brownies

Serves 16, 1 brownie per serving



Ingredients

- Non-stick cooking spray
- 1 (15-ounce) can black beans or 1¾ cups cooked, cooled black beans
- 3 large eggs
- 3 Tablespoons canola oil
- 1 teaspoon vanilla extract
- ½ cup packed brown sugar
- ⅓ cup cocoa powder

Optional Ingredients

½ cup chocolate, peanut butter, or butterscotch chips, or chopped nuts

Directions

1. Preheat oven to 350°F. Coat a 9-inch square baking dish with non-stick cooking spray.
2. In a colander, drain and rinse beans.
3. In a large bowl, use fork to whisk eggs, oil, and vanilla. Add beans and mash with fork until beans are barely visible (this can take 5 minutes or more of mashing). Stir in sugar and cocoa. Blend with a rubber spatula until mixed. If using, stir in chips or nuts now.
4. Pour batter into the baking dish. Bake until a knife inserted in the center of the brownies comes out clean, 25–30 minutes. Let cool completely.
5. Cut into 16 squares.

Nutrition Facts

Serving Size 1 brownie
Servings Per Recipe 16

Amount Per Serving

Calories 90 **Calories from Fat** 35

% Daily Value*

Total Fat 4g **5%**

Saturated Fat 0.5g **3%**

Trans Fat 0g

Cholesterol 35mg **12%**

Sodium 15mg **1%**

Total Carbohydrate 12g **4%**

Dietary Fiber 2g **7%**

Sugars 7g

Protein 3g

Vitamin A 0% • Vitamin C 0%

Calcium 2% • Iron 6%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.



Chef's Notes - Make it Quick!

- If you have a blender, you can use it to make these brownies. Add eggs, oil, and vanilla to blender and pulse to mix. Add beans and blend until pureed and smooth, 1–2 minutes. Be sure to scrape down the sides of the blender with a rubber spatula once or twice. Add sugar and cocoa. Blend until mixed, about 1 minute. If using, add chips or nuts and pulse once or twice to mix. Pour batter into baking dish. Bake as directed in step 4.

Banana Crumble

Serves 10, $\frac{1}{10}$ of crumble and
1 Tablespoon topping per serving

Ingredients

- 4 large bananas
- 2 cups mixed fresh berries
- Non-stick cooking spray
- 5 Tablespoons whole wheat flour, divided
- 1 cup old-fashioned rolled oats
- $\frac{1}{4}$ cup light brown sugar, packed
- 1 teaspoon ground cinnamon
- Pinch of salt
- 4 Tablespoons cold unsalted butter
- $\frac{2}{3}$ cup nonfat plain yogurt
- 1 Tablespoon honey

Nutrition Facts

Serving Size $\frac{1}{10}$ of crumble
and 1 Tablespoon topping
Servings Per Recipe 10

Amount Per Serving

Calories 180 **Calories from Fat** 50

% Daily Value*

Total Fat 6g **8%**

Saturated Fat 3g **15%**

Trans Fat 0g

Cholesterol 15mg **5%**

Sodium 45mg **2%**

Total Carbohydrate 32g **12%**

Dietary Fiber 4g **14%**

Sugars 17g

Protein 3g

Vitamin A 4% • Vitamin C 25%

Calcium 4% • Iron 6%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.



Directions

1. Preheat oven to 400°F.
2. Peel and slice bananas in half lengthwise.
3. Rinse berries and pat dry.
4. Spray 9-inch square baking dish with non-stick cooking spray. Place the banana halves flat side down in the baking dish.
5. Toss berries with 1 Tablespoon flour. Sprinkle berries over the bananas.
6. In a medium bowl, add 4 Tablespoons flour, oats, sugar, and spices. Stir to blend.
7. Cut cold butter into little pieces. Add to bowl. Using your fingers, quickly blend the butter into the dry ingredients until the mixture is crumbly.
8. Spread the crumbly mixture over the fruit in an even layer. Press down slightly.
9. Bake about 10–15 minutes, or until the crumble is firm and golden in color.
10. While crumble bakes, stir together yogurt and honey in a small bowl to create a lighter version of whipped cream.
11. When crumble is done, spoon 1 Tablespoon of the yogurt and honey topping over each serving.



Chef's Notes - Make it Quick!

- When berries are not in season, use frozen berries. Before adding, bring berries to room temperature and drain off any liquid. Use reserved berry liquid to flavor sparkling water or club soda for a naturally sweet, low-calorie drink.
- If using whole strawberries, cut in half or slice before using.

Salmon Pasta Bake

Serves 9, 1/9 of recipe per serving



Ingredients

- 2 cups whole wheat penne pasta
- 2 medium green onions
- 1 (14½-ounce) can pink salmon in water
- 1 cup frozen peas
- 1 cup nonfat or low-fat plain yogurt
- 2 teaspoons dried dill or dried parsley
- ¼ teaspoon salt
- ¼ teaspoon ground black pepper
- ½ cup Parmesan cheese, grated

Directions

1. Preheat oven to 400°F.
2. Boil the pasta according to package directions. Drain in a colander. Run under water until cool to the touch, to keep noodles from sticking together.
3. Rinse and finely chop green onions.
4. Drain canned salmon. In a large bowl, mix salmon, pasta, green onions, peas, yogurt, dill or parsley, salt, and black pepper.
5. Transfer pasta mixture to a 9-inch square baking dish.
6. Sprinkle Parmesan cheese over pasta mixture. Bake 25-30 minutes, until bubbling and golden.

Nutrition Facts

Serving Size 1/9 of recipe
Servings Per Recipe 9

Amount Per Serving

Calories 180 **Calories from Fat** 40

% Daily Value*

Total Fat 4.5g **6%**

Saturated Fat 1.5g **8%**

Trans Fat 0g

Cholesterol 35mg **12%**

Sodium 310mg **13%**

Total Carbohydrate 22g **8%**

Dietary Fiber 3g **11%**

Sugars 3g

Protein 15g

Vitamin A 8% • Vitamin C 4%

Calcium 15% • Iron 10%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.



Chef's Notes - Make it Quick!

- Try using 1 (12-ounce) can low-sodium tuna in water instead of the salmon.
- Kick up the flavor by adding a pinch of ground cayenne pepper to the pasta mixture. Or, top with hot sauce when served.