Life is sweet. Keep it balanced.

Registered Dietitian Toolkit

the Sugar association

Real Sugar

The Sugar Association supports the Dietary Guidelines for Americans (DGA) and shares the goal of moving Americans toward healthier dietary patterns.

To support this goal, the Sugar Association is committed to providing science-based educational resources to registered dietitian nutritionists (RDNs) to increase awareness of the DGA recommendation that added sugars account for no more than 10% of total energy intake and to increase understanding of the role sugar plays in healthy dietary patterns.

Contents

As an RDN, you understand better than many people how important it is to take a balanced approach to healthy lifestyles, including by getting the right nutrients, avoiding extremes and making room for joy and occassional indulgences.

Our consumer research has found that 81% of consumers say it is important to know the intake guidelines for sugar, but just 15% are able to correctly state the recommendation. When consumers know the DGA recommendation, they have greater confidence in managing their sugar intake.

That's why we're sharing here some sugar basics and more detailed data to help you answer some of the most common questions about sugar in the diet and to support conversations with your clients and key audiences. You'll also find downloadable infographics and social media content throughout. Look for the download button.

In a world that too often leans toward extreme approaches to eating, we aim to support balance – which simply means "not extreme" – because the evidence and our nutritional compasses tell us that a balanced diet is a healthy diet.

Warmly,

Courtney

P. Courtney Gaine, PhD, RD
President and CEO
The Sugar Association

Balanced and Sweet
At a Glance

Based on building healthy dietary patterns that include enough recommended food groups and stay within calorie limits, the 2020-2025 Dietary Guidelines for Americans (DGA) recommend limiting added sugars to up to 10% of total calories (50 grams or 12 teaspoons of added sugars per day in a 2,000-calorie diet).

When Americans understand this recommendation, they have greater confidence in managing their sugar intake. Some simple facts about sugar can help consumers keep life balanced and sweet (in moderation!).

What are added sugars?

The U.S. Food and Drug Administration (FDA) first defined added sugars in 2014. The definition includes sugars added to foods during processing or sugars packaged for consumers to add to foods and beverages on their own (like table sugar, brown sugar, honey or maple syrup, etc.). Added sugars do not include naturally occurring sugars that are found in milk, fruits, and vegetables or low- and no-calorie sweeteners.

Sugar's role in a healthy dietary pattern

Sugar has long had a place in a balanced diet by adding flavor and functions that help people enjoy a wide variety of foods. Because of this, the Dietary Guidelines for Americans recommendations allow for up to 10% of total calories per day to come from added sugars as part of a healthy dietary pattern.

In addition to improving the palatability of many foods with important nutrients, sugar has several significant functions in foods. Even in foods that don't taste sweet, a little sugar helps balance bitterness and acidity, enhance fruit flavors, adds bulk, contribute to smooth and creamy textures, increase shelf-life and more.

All these functions make reducing or replacing sugar in foods a lot more complicated than "just adding less" or swapping one new ingredient in. Removing sugar from foods often requires adding multiple new ingredients. There are consequences of reducing sugar that may surprise people. Like, reduced sugar products do not necessarily have fewer calories. The topic of sugar reduction is complicated, made more so by the fact most consumers do not want to replace sugar with artificial sweeteners, and many have a hard time recognizing artificial sweeteners on product labels.

Did you know?

The Daily Value (DV) for added sugars is based on the Dietary Guidelines recommendation. It is the only DV not based on a Dietary Reference Intake (DRI) – because a DRI has not been established for total or added sugars.

Do all sources of added sugars have the same impact on health?

Scientific evidence consistently shows that a healthy lifestyle based on moderation, a variety of food choices and physical activity tends to lead to the best outcomes compared with simply cutting out or adding one ingredient or another. Decades of evidence does not show adverse outcomes of sugar intake when sugar is consumed in moderation and within calorie needs.

A recent analysis of controlled feeding trials showed that excess energy intake at high doses of sugar-sweetened beverages (≥20% energy or ≥100g/day), other sugary beverages and mixed sources of sugars leads to moderate increases in adiposity. Most other sources, including sweetened cereal grains and bars and sweetened dairy, show no adverse effect even at high doses and irrespective of energy control. In fact, some sources of added sugars, like flavored milk, are associated with increased nutrient adequacy.

While there has been a drastic reduction in intake of calorically sweetened beverages in the past 20 years, beverages are still the primary source of added sugars in the diet, contributing 35% of calories from added sugars. Also among the top sources of added sugars are foods that contain important nutrients such as fiber, vitamins and minerals like breakfast cereals, flavored milk and yogurt.

What does a daily diet with 10% of calories from added sugars look like?

Here's one example! (Based on a 2,000-calorie diet)

Breakfast

- **0 grams** added sugars — Coffee, milk or juice (no added sugar)
- **8 grams** added sugars — Oatmeal (2 teaspoons of brown sugar)

Lunch

- **6 grams** added sugars — Turkey sandwich on whole-grain bread
- **0 grams** added sugars — Fresh fruit and raw vegetables

Snack

- **0 grams** added sugars — Mixed nuts
- **9 grams** added sugars — Yogurt (5.3 ounces)

Dinner

- **3 grams** added sugars — Spaghetti and meatballs (½ cup of sauce)
- **3 grams** added sugars — Salad with dressing (2 tablespoons)

Dessert

- Chocolate chip cookie
- **15 grams** added sugars

DOWNLOAD

Added Sugars:

What are they and why are they added to foods?

Sugar (or sucrose) has been part of the human diet throughout time, whether intact in fruits and vegetables or in the familiar extracted and crystallized form.

The term “added sugars,” however, is relatively new. In 2014, the The Food and Drug Administration (FDA) first defined added sugars as those sugars that are added to foods during processing or sugars packaged for consumers to add to foods and beverages on their own (like table sugar, brown sugar, honey or maple syrup).[1] Added sugars do not include naturally occurring sugars that are found in milk, fruits and vegetables or low- and no-calorie sweeteners.

According to FDA’s definition, the following are all examples of added sugars:

- Agave nectar
- Brown rice syrup
- Brown sugar
- Coconut sugar
- Concentrated fruit juice
- Confectioner’s powdered sugar
- Corn syrup
- Fructose
- Glucose
- High-fructose corn syrup
- Honey
- Maple sugar
- Molasses
- Nectars
- Raw sugar
- Rice syrup
- Sucrose
- Sugar
- White granulated sugar

Sugar’s Functional Roles in Food Beyond Sweetness

	FLAVOR ENHANCER/ BALANCER, AROMA	BULK	TEXTURE/ MOUTHFEEL	SHELF-LIFE/ MICROBIAL STABILITY	FERMENTATION	FREEZING POINT DEPRESSION	COLOR	MOISTURE RETENTION
Dairy Products	●	●	●		●			
Whole-Grain, Fiber-Rich Breads & Cereals	●	●	●	●	●		●	●
Breads	●	●	●	●	●		●	●
Bakery Products	●	●	●	●			●	●
Salad Dressings, Rubs and Sauces	●	●	●	●				
Preserves & Pickling	●	●	●	●				
Jams & Jellies	●	●	●	●			●	
Canned Fruits & Vegetables	●	●	●	●			●	
Prepared Foods	●	●	●	●			●	●
Beverages	●	●	●	●				
Frozen Beverages	●	●	●			●		
Fermented Beverages	●	●	●		●			
Ice Cream	●	●	●			●		
Confectionery	●	●	●	●			●	●

? Can alternatives replace sugar’s functionality?

There is no substitute for sugar. As a functional ingredient, sugar can’t simply be replaced by another single ingredient.

Why are sugars added to foods?

Real sugar has been used in recipes for generations, often for reasons that go far beyond its sweet flavor. Sugar plays many key functional roles — for example, it contributes to texture, color and browning and extends shelf-life. It can also improve the palatability of some nutrient-dense foods.

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Keeping Added Sugars in Perspective

The 2020-2025 DGA[2] provide advice on what to eat and drink to meet nutrient needs, promote health and prevent disease.

Total Calories Per Day

85%

of calories are needed per day to meet **food group recommendations** healthfully, in nutrient-dense forms

Vegetables · Fruit · Grains · Dairy · Protein

15% of calories are available for other uses (including added sugars and saturated fat)

Limit

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The DGA recommend that Americans over age 2 years limit calories from added sugars to less than 10% of total calories per day – that's 200 calories in a 2,000-calorie reference diet, equivalent to 50 grams or 12 teaspoons of added sugars per day. This recommendation is based on the idea that consuming more than 10% of calories from added sugars may make it difficult to meet nutrient needs while staying within calorie limits.

Sugar Is a Carbohydrate

Carbohydrates, including starches and sugar, are the primary source of energy for the human body. They are essential to fueling the body and the function of its central nervous system because most of them are broken down into glucose. Sugar is one type of carbohydrate, sucrose, that breaks down into two components, glucose and fructose, when it is digested.

81% of consumers say it's important to know the intake guidelines for added sugars.[3]

58% of consumers report that knowing the intake guidelines for added sugars increases their confidence in managing their sugar intake.[3]

Added sugars intake targets by calorie level

Total Caloric Intake	Added Sugars Intake Target			
	Calories	Grams	Teaspoons	Percent of Total Calories
1,400	140	35	9	10%
1,600	160	40	10	10%
1,800	180	45	11	10%
2,000	200	50	12.5	10%
2,200	220	55	14	10%
2,400	240	60	15	10%
2,600	260	65	16	10%
2,800	280	70	17.5	10%

1 teaspoon of real sugar
has
15 calories
and weighs
4 grams

Added Sugars on the Nutrition Facts Label

Having access to added sugars information on the Nutrition Facts label increases consumer awareness of the quantity of added sugars in foods.

The goal of the FDA's Nutrition Facts label is to "ensure consumers have access to the information they need to make informed decisions about the foods they eat."[4]

- When FDA began requiring added sugars on the Nutrition Facts Label, the agency explained: "The FDA recognizes that added sugars can be a part of a healthy dietary pattern. But, if consumed in excess, it becomes more difficult to also eat foods with enough dietary fiber and essential vitamins and minerals and still stay within calorie limits."[4]

For everyone trying to attain a balanced diet, it's important to look at how each food and beverage fits into *an entire day's intake*. Focusing *only* on the Nutrition Facts label for *an individual product* or *one nutrient* does not often accurately address a person's overall dietary goals.

TOTAL SUGARS	includes the number of both naturally occurring sugars and sugars added for sweetening or other functional purposes.
ADDED SUGARS	includes all caloric sweeteners added to foods, including white granulated sugar, honey, corn syrup, coconut sugar and others.
PERCENT DAILY VALUE	states how much a nutrient in a single serving of food contributes to a daily diet, based on a target of 2,000 calories per day.

5 THINGS TO KNOW ABOUT SUGAR

REAL SUGAR IS MADE FROM SUGAR CANE AND SUGAR BEETS[5] grown on farms.

SUGAR ADDS FLAVOR that helps people eat a wide variety of foods, plus it has many other important functions.

SUGAR IS A SOURCE OF GLUCOSE, a primary fuel for the body.

THE DIETARY GUIDELINES FOR AMERICANS RECOMMEND LIMITING ADDED SUGARS to 12 teaspoons or 50 grams per day.*[2]

> *Sugar has **15 calories per teaspoon** and **4 calories per gram**.*

*Based on 2,000-calorie diet

SUGAR GOES FROM PLANT TO PRODUCT IN JUST FOUR SIMPLE STEPS: it is extracted from the plant, washed with water, crystalized and dried.

DOWNLOAD

Sugar in Balance

PRACTICE AREA: MEDIA AND COMMUNICATIONS

Surely you're asked frequently to evaluate products, share an opinion and distill the science about sugar in the diet. Here are some key facts that can help as you educate about how to approach sugar and balance in the diet.

What is balance?

Balance, by definition, means "not extreme," and it's an important component of building a healthy lifestyle. Thinking about sugar in balanced diets includes understanding that sugar adds flavor and has functions that help people enjoy a wide variety of foods. Because of this, the Dietary Guidelines for Americans (DGA) recommend that healthy dietary patterns can include up to 10% of daily calories from added sugars (that's 50 grams or 12.5 teaspoons).[2]

Sugar Is a Partner in Nutrient Delivery

HIGH-FIBER CEREAL

Sugar cuts the bitter flavors of high-fiber cereal, making it more enjoyable to eat.

STRAWBERRY YOGURT

A little sugar cuts the acidity and enhances the sweetness of the strawberries in calcium-rich yogurt.

CANNED VEGETABLES

A little sugar helps maintain the color and texture of canned vegetables and increases shelf-life, making them an accessible and enjoyable option for meeting food group needs.

SALAD DRESSING

A little sugar cuts the acidity of the vinegar in salad dressing, contributes to the smooth/creamy texture, extends shelf-life and enhances the flavors of the spices as well as the other ingredients of the salad it dresses.

PEANUT BUTTER

A little sugar enhances the flavor and extends the shelf-life of protein-packed peanut butter.

PRE-PACKAGED SNACKS

A little sugar increases the shelf-life of many pre-packaged healthy snack options.

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Replacing sugar's flavor and function often requires adding several other ingredients. Reducing sugar does not necessarily reduce calories or improve a food's nutrient package. Learn More

What does the 10% target for added sugars look like?

Through the course of a day, added sugars may play a role in many nutritious foods, like yogurt and whole-grain bread, as well as in treats that – in moderation – can be part of a balanced diet and lifestyle.

In a 2,000-calorie diet, the DGA recommend limiting added sugars to 200 calories, 50 grams or 12.5 teaspoons. Remember, the recommendation applies to the overall diet, not individual products. Here's an example of what an individual could eat in a day and stay within this recommendation:

Sample Foods and Added Sugars Values	Grams of Added Sugars
Coffee, milk or juice (no added sugar)	**0 g**
Oatmeal (2 teaspoons of brown sugar)	**8 g**
Turkey sandwich, whole-grain bread	**6 g**
Fresh fruit	**0 g**
Raw vegetables	**0 g**
Crunchy granola bar (1 bar)	**6 g**
Yogurt (5.3 ounces)	**9 g**
Spaghetti and meatballs (1/2 cup of sauce)	**3 g**
Salad with dressing (2 tablespoons)	**3 g**
Ice cream (2/3 cup)	**14 g**
Total	**49 g**

Printable Handout: Added Sugars in Common Foods

Don't Forget the Calories

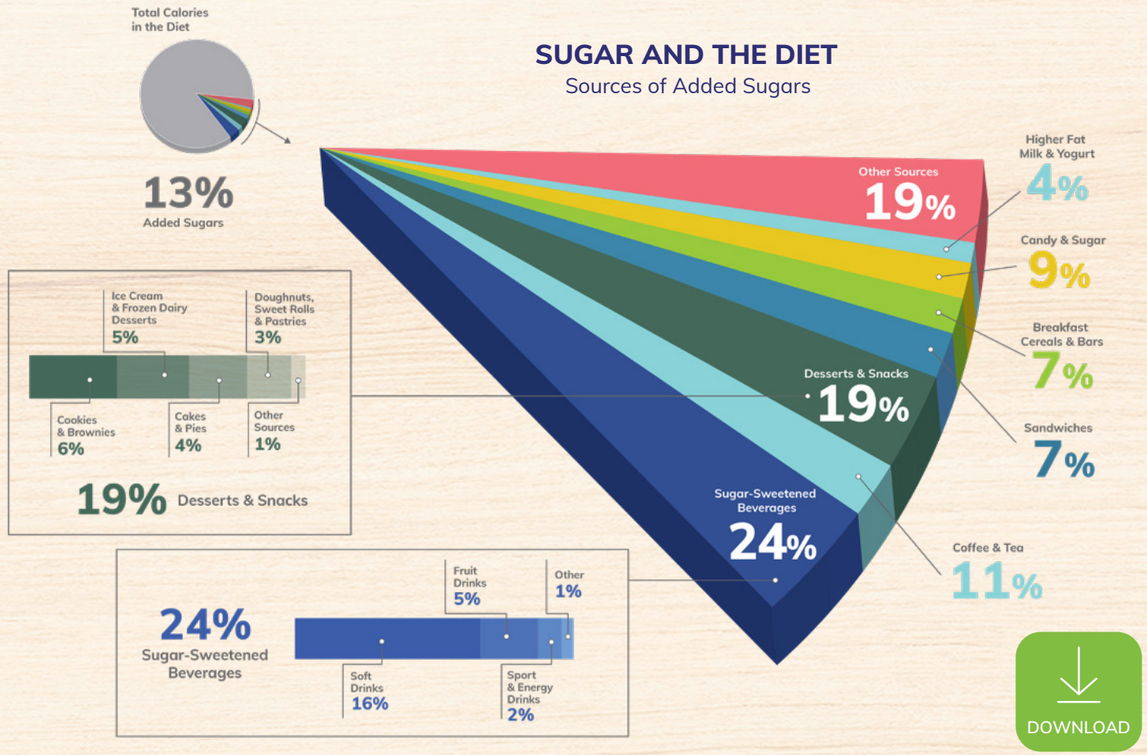
Added sugars aren't the only thing you should be paying attention to. Be sure to consider the entire nutrient package of a food, including the serving size, and the calories, saturated fat and sodium in each serving.

Grams? Calories? Teaspoons? Percent of total calories?

Consumers prefer to track added sugars in teaspoons or grams,[3] and grams and percent daily value are available on the Nutrition Facts label.

Sources of Added Sugars in the Diet[2]

Calorically sweetened beverages are the primary source of added sugars in the diet, contributing 35% of calories from added sugars. Desserts and snacks are second at 19%. Also among the top sources of added sugars in the diet are foods that contain important nutrients such as fibers, vitamins and minerals like breakfast cereals, flavored milk and yogurt.



Sugar-sweetened beverage consumption has decreased drastically in the past 20 years (down 33% from 1998 to 2019), but it is still the easiest place to cut calories from added sugars.[6]

Added Sugars Intake Is on the Decline

Since 1999, added sugars consumption has been on a significant decline in the United States, down from 18.1% reported in 1999-2000 to 12.9% reported in 2017-2018.[2,7,8]

1999-2000

18.1% of total calories
24.3 teaspoon equivalents
388 calories per day

More Than 30% Reduction

Steady Decline Over Nearly 20 Years[1,2]

This substantial decrease is still slightly above the 2020-2025 DGA recommendation of 10% of total calories from added sugars per day.[3]

2017-2018

12.9% of total calories
16.9 teaspoon equivalents
271 calories per day

What's the science on sugar and health?

Scientific evidence consistently shows that a healthy lifestyle based on moderation, a variety of food choices and physical activity tends to lead to the best outcomes compared with simply focusing on cutting out or adding one ingredient or another.[9-12] The evidence does not show adverse outcomes of sugar intake when sugar is consumed in moderation and within calorie needs.[13-15]

Studying the impact of dietary choices on health is no simple task! Separating the contributions of specific foods from related dietary and lifestyle factors and disease states is a constant challenge for researchers. Systematic reviews of the literature have found that the effect of sugars on adiposity is dependent on both the food source and energy control.[13,15,16] A recent analysis of controlled feeding trials showed that excess energy intake at high doses (≥20% energy or ≥100 g/day) of sugar-sweetened beverages, other sugary beverages and mixed sources of sugars leads to moderate increases in adiposity. Most other sources, including sweetened cereal grains and bars and sweetened dairy, show no harmful effect even at high doses and irrespective of energy control.[13]

Similarly, some sources of added sugars, like flavored milk, are associated with increased nutrient adequacy. Other sources, such as sugar-sweetened beverages, are associated with lower nutrient adequacy.[17, 18]

Read More:

Misunderstandings About Sugar

Sugar in Balance

PRACTICE AREA: RETAIL AND SUPERMARKET

We know that you are responsible for seeing patients, educating your community and keeping customers enlightened about how to maintain a healthy and balanced dietary pattern. This is no easy task, especially considering all of the nutrition myths and fallacies that you likely encounter. Here are some common questions and answers about sugar to help you educate and battle misinformation. Educational activities found here can also help turn the science behind sugar into fun, learning experiences.

SUGAR BY THE NUMBERS

15 calories in a teaspoon

4 grams in a teaspoon

4 calories per gram

INTAKE RECOMMENTATIONS

According to the 2020-2025 Dietary Guidelines for Americans, a healthy diet includes up to 10% of calories from added sugars in nutritious foods and occasional sweets and treats. In a 2,000-calorie diet this equates to 200 calories, 50 grams, or 12 teaspoons.

Common Consumer Questions

DOWNLOAD

How much sugar can I have in a healthy diet?

Sugar plays a role in healthy, balanced diets by adding flavor and function that help people enjoy a wide variety of foods. Because of this, the 2020-2025 Dietary Guidelines for Americans (DGA) recommend that healthy dietary patterns can include up to 50 grams or 12 teaspoons of added sugars per day.[2] See page 9 for intake targets by calorie level.

How can I tell how much added sugars are in my food?

Added sugars are easy to find on Nutrition Facts labels. They are listed under Total Sugars, where you'll find the grams of added sugars per serving in the product and the percent daily value or how much that product contributes to the total recommended intake for a day. For example, a product with 7.5 grams of added sugars per serving represents 15% of the total 50-gram daily value for one day.

Why are sugars added to foods that don't even need to be sweet?

Sugar has many functional properties that range from balancing acidity or adding bulk to preventing spoilage. For example, in whole-grain, fiber-rich bread, sugar balances bitter flavors, contributes to the texture, feeds the yeast to help the bread rise, aids in browning, helps with moisture retention and increases shelf-life.

What does a diet with 10% of calories from added sugars look like?

The 10% target for added sugars intake provided by the DGA applies throughout the day or week, not as a limit to be applied to individual products. See page 13 for an example of a daily diet that achieves this target or check out this handout.

Are reduced-sugar or sugar-free options better for you?

When sugar is removed from a food, new ingredients (usually more than one) must be added to replace both the flavor and functionality of sugar. These ingredients often have the same amount of or even more calories than sugar. So, you should not assume less sugar means fewer calories.

Although many people are aiming to reduce sugar intake, most are not looking to replace sugar with artificial sweeteners commonly used in reduced-sugar or sugar-free options.[3] In fact, more than 70% of people say it is important to avoid artificial sweeteners in pantry staples like bread, yogurt, cereal and granola bars.[3]

The presence or quantity of artificial sweeteners in products is not always obvious to consumers. Learn more about the increased use of sugar substitutes in the food supply and the need to enact transparent artificial sweetener labeling here.

Find more myths and facts about sugar on this printable handout.

ACTIVITY IDEAS

FOR ADULTS

- Label Reading for Added Sugars and Sweeteners
- Store Tour – Finding Added Sugars and Balance
- How Well Do You Know Sugar? Trivia Contest
- See, Feel and Taste the Difference in Different Types of Sugar
- Learning Sugar's Path: Farm to Table
- Sugar-Based Cooking and Baking Hacks

FOR KIDS

- Finding Balance with Sugar; How Much We Should Have
- Label Reading for Added Sugars and Sweeteners
- Beyond Sweetness, What Does Sugar Do?
- Demo: Making White Sugar Brown
- Where Does Sugar Come From? Demo: Sugar Beet, Sugar Cane
- Learning About Sunshine: Photosynthesis in Plants Turns Sunlight Into Energy

Sugar in Balance

PRACTICE AREA: PRIVATE PRACTICE

As has been said before, dietary moderation means different things to different people. But when it comes to what we eat, it always means making choices that fit within a healthy, balanced and enjoyable diet that works for everyone's needs. As a dietitian in private practice, you are more intensely familiar with your patients' food preferences, choices, clinical needs and successes and failures. They seek your advice for managing health conditions, breaking through weight management plateaus and finding overall balance and maintenance of a healthy lifestyle. In these cases, your clinical judgment is needed to assess the appropriate amount of sugar that can be included in a healthful lifestyle for each of your patients and educate them accordingly.

Key Communications Surrounding Added Sugars Can Include:

- Label Reading Exercises
- Caloric vs. Non-Caloric Sweetener Education
- Portion Control
- Sugar and Diabetes
- Tips for Tweaking Traditional Recipes
- Avoiding Good Food/Bad Food Dichotomies

Sugar and Diabetes

Carbohydrates, fat and protein are nutrients found in food and beverages that provide the body with calories. Carbohydrates affect blood glucose the most, making them an important factor in the management of diabetes. All carbohydrates are broken down in the body to simple sugars (glucose, fructose and galactose). Sugars and fiber are classes of carbohydrates.

Carbohydrates are found in dairy products, grains, fruits and vegetables. They are also present in greater amounts in starchy vegetables like beans, corn, peas, potatoes and squash.

Sweets have carbohydrates, too. These should be eaten occasionally and in small amounts within carbohydrate and calorie goals.

DOWNLOAD

Portion Control

Portions for discretionary calories

It's a common myth that people with diabetes have to avoid sugar entirely. Sweets in moderation and nutritious foods with added sugars can be part of a healthy diet, as long as the total carbohydrates fit within their daily goals.[19]

No measuring cups in sight? Use these everyday items instead!

½ cup
Ice cream

Lightbulb = ½ cup

1 oz
Dark chocolate

Pair of dice = 1 oz

1 tbsp
Jam, sugar, maple syrup or honey

Tip of thumb = 1 tbsp

Portion control tips

Keep portions in check with these tips and tricks!

Use smaller plates and bowls for meals and snacks.

Serve yourself using a measuring cup to know exactly how much is going on your plate.

Keep food off the counters and in your pantry. Out of sight, out of mind.

Sugar in Balance

PRACTICE AREA: SPORTS DIETETICS

As a sports dietitian, you need to ensure your athletes are ready for training, performance and recovery. That means paying careful attention to how they fuel their bodies, including their macro- and micronutrients, meal and snack timing, and the optimization of menus that can deliver.

Although athletes have differing dietary needs than the average person, the DGA's simple message of "Make Every Bite Count" applies to athletes as much as to everyone else. Here are some simple ways to explain to your athletes the role of carbohydrates in meeting their performance and energy needs.

Timing Is Everything

Knowing how sugar is broken down and used in the body allows athletes to be strategic in their timing of carbohydrate intake. When consumed before exercise, simple carbohydrates offer fast-access fuel for working muscles. During exercise, simple carbohydrates help maintain blood glucose. After exercise, foods that contain sugar can help replenish glycogen stores, aiding in recovery.

Sugar Is a Carbohydrate

Sugar is a simple carbohydrate. All carbohydrates are made up of one or more molecules of sugars. No matter how complex a carbohydrate is to start with, once in the body, all carbohydrates are broken down to these three simple sugars: glucose, fructose and galactose.

Carbohydrates = Fuel for the body

In fact, carbohydrates are the preferred energy source for the body because the majority provide glucose. Glucose is the fuel the brain, organs and muscles need to function and engage in everyday activities.

As a disaccharide made up of one molecule of glucose and one molecule of fructose, sugar is quickly broken down, so the glucose can be readily absorbed by cells and serve as a quick source of energy.

Other, more complex carbohydrates, such as starches, provide a more sustained source of energy like that required by endurance athletes.

The body stores carbohydrates in the form of glycogen in the liver and muscles. During exercise, the body breaks down glycogen into glucose, which is then used as fuel for the muscles.

Determining the Athlete's Carbohydrate Needs

Carbohydrates play an important role in nutrition for athletes, although individual needs will vary based on exercise type and intensity, body size and personal preferences. Working with a sports-based RDN can help athletes determine their optimal calorie intake and balance of carbohydrates, including added sugars, within their personal dietary pattern.

Sugar Is a Partner in Fueling Nutrient Delivery

GRANOLA BARS

A little sugar increases the shelf-life of many pre-packaged healthy snack options, important for athletes needing quick and convenient calories that also offer important nutrients like fiber, calcium and iron.

CHOCOLATE MILK

The sugar in low-fat chocolate milk increases the thickness of the milk and enhances the sweetness of the cocoa, making this post-workout drink with the perfect combination of carbohydrates and protein (and an excellent source of nine essential nutrients) enjoyable to drink.

PROTEIN SHAKE

In addition to providing carbohydrates that can help with muscle recovery, the sugar in protein shakes cuts the bitterness of the added vitamins and minerals making it more enjoyable to drink.

PEANUT BUTTER

A little sugar enhances the flavor and extends the shelf-life of protein-packed peanut butter.

STRAWBERRY YOGURT

A little sugar cuts the acidity and enhances the sweetness of the strawberries in the yogurt, an excellent source of calcium.

TRAIL MIX

A little sugar completes this snack providing not only sweetness alongside the protein and fiber of peanuts and raisins but also simple carbohydrates that offer a quick burst of energy when you need it.

DOWNLOAD

Additional Resources

Additional Resources for RDNs Working to Educate Children About How a Balanced Diet Is a Healthy Diet

Educational Resources for Young Children

- Variety's Mountain
- Farm to Table Coloring Book
- Dental Care Hands-on Brochure
- Resource Toolkit K-2
- Fun Facts About Sugar
- Printable Resources

Educational Resources for Older Kids

- Bite-Sized Tips on Portion Control
- Resource Toolkit for Grades 3-6
- Resource Toolkit for Grades 7-12
- Sugar Facts, Production Handouts (varied)
- STEAM Lesson Packet
- Sugar Lesson Packet
- Printable Resources

About The Sugar Association

The Sugar Association is the scientific voice of the sugar industry representing the sugar beet and sugar cane growers, processors and refiners throughout the United States. Founded in 1943, the association's mission is to monitor nutrition science, provide science-based information on sugar to consumers and health professionals, and ensure that federal nutrition and food policy regarding sugar is based on the preponderance of scientific evidence. The foundation of our efforts to support and promote sugar in moderation as a safe and useful part of a balanced diet and healthful lifestyle is grounded in the totality of high-quality scientific evidence.

Together with our members, we work to tell real sugar's story, particularly where it comes from and how it plays a vital role in so many foods and beverages that are part of nutritious, balanced and (not to be forgotten) enjoyable diets. Our goal is to cut through the confusion with facts and help people confidently understand the role of sugar in the diet and enjoy nature's oldest sweetener.

Located in Washington D.C.,
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