

Sweetened Beverages

An outpouring of health and nutrition issues

Is your glass half empty or half full?

It's OK to be sweet



Eat, drink &besavy

Beverages. They are part of every meal, every menu, and every culture.

They play such an important role in breakfast, lunch, and dinner that they are often the first items customers order. Today, sweetened beverages are also getting attention from public health organizations and the media, as we consider how these popular drinks can affect human health.

In this issue, we will review the facts about sweetened beverages, take a look at potential health concerns, and compare trends around the globe. Our goal is to help you anticipate your customers' needs so you will be prepared to answer their questions and offer the choices to keep them satisfied.

What are sweetened beverages?

The term can apply to any beverage that contains added sugar, naturally occurring sugars, or alternative sweeteners.

Why focus on beverages?

According to a report from Euromonitor International, beverages are becoming a key traffic driver. The more you offer, the wider audience you can reach. A strong beverage portfolio can help you hit a wider range of price points without reducing your margins. It is also an effective way to boost between-meal traffic, as an attractive beverage menu can encourage customers to stop in for coffee or smoothies.



It's okay to be

SWEEt

Our preference for sweet flavors seems to be based in biology.

New research shows that young children instinctively like sweetness because it pushes them toward the energy sources they need for their high growth rate.² Furthermore, drinks like milk and 100% fruit juice contain natural sugars and also provide a source of vitamins and minerals.

Milk, chocolate milk, and hot chocolate

A good source of calcium and vitamin D, along with other vitamins and minerals.

Orange juice

Just 125ml (half cup) provides all the vitamin C you need in a day.

Fruit smoothie

Often made with fruits and vegetables, it can include a wide variety of vitamins, minerals and fiber.

Most people do not need to avoid sugar-containing beverages. We need to educate our customers to make wise beverage choices based on their nutritional needs and physical activity levels. Health care professionals and dietitians emphasize moderation and variety in beverage choices.





What about chocolate milk?

A favorite of children (and some adults), this popular drink can claim nutritional benefits along with its sweet taste.

- All milk (including the flavored kind)
 offers valuable nutrients, which include
 calcium, potassium, phosphorous,
 protein, vitamins A, D, and B12,
 riboflavin, and niacin.³
- Leading health organizations suggest that making nutrient-dense foods more palatable may improve nutrient intake.⁴
- Research shows that people who drink milk are likely to meet the dietary recommendations for many nutrients.⁵
- The American Heart Association says that adding sugars to otherwise nutrient-rich foods, including dairy products, has no adverse affects on people's weights.⁶
- Chocolate milk can help the body refuel, recover and rehydrate post exercise. The high quality protein helps build and repair muscle.⁷

A WORLDWIDE 1.S.S.I.P.

United States

Beverages provide 18 percent (385 calories) of total calories, and regular soft/other drinks contribute one-third (134 calories) of calories.⁸

Mexico

Intake of high-energy beverages doubled between 1999 and 2006 across all age groups.⁹

The World Health Organization recommends limiting the intake of added sugars and consuming 10% of energy in the form of added sugars.

New York City recently introduced a ban on sweetened drinks over 16 oz., and the mayor of Cambridge, Mass. proposed a ban on all sweetened drinks in restaurants.

Intake trends

Under pressure

Intake of sugar-sweetened beverages has increased in some countries while decreasing in other countries. It's important to look at the entire picture.

In response to some research linking sweetened drinks to health issues, governments and leading health organizations around the world are proposing new taxes or regulations to reduce or ban their consumption.



All sweeteners are not created equal?

Sugar is not the only way to sweeten a drink. Today's food operators can provide a wide range of alternative sweeteners to meet diverse customer preferences and needs.

Added sugars can be divided into two categories:

- Nutritive sugars: Added sugars like sucrose, fructose, and high fructose corn syrup
- Non-nutritive sugars: Additives that provide sweetness without a lot of calories

Health organizations are most concerned with the added sugars that provide calories without many nutrients. In parts of the world where food is abundant, using less of these added sugars is a simple easy way to achieve global health goals.

Non-nutritive sweetener safety

Non-nutritive sweeteners, also known as artificial sweeteners, are food additives designed to duplicate the taste of sugar without all the calories. Sugar substitutes have been widely used across the food industry for the past 30 years, especially in diet and low-calorie products. Their increased use has also been particularly important for people with diabetes and those interested in reducing their risk of dental caries.

Many nutritionists recommend that consumers can safely enjoy a range of nutritive sweeteners and nonnutritive sweeteners when consumed within an eating plan that is guided by nutrition recommendations.

Aspartame is perhaps the most thoroughly researched additive. While its safety has been consistently demonstrated, adverse effects ranging from rash to cancer continue to be attributed to it. Serious scientific evaluation could not substantiate any of these claims,¹⁵ which is why it is allowed in foods today. While cyclamate is approved in 55 countries around the world, it was banned in the U.S. in 1969 and has not yet been reapproved.

Common non-nutritive sweeteners

Acesulfame potassium

Sucralose

Neotame

Saccharine

Aspartame

Neohesperidine

Cyclamate

A Comparison of Common Sweeteners

Sweetener	Source	Culinary Tips
Sucrose/ Table sugar (natural)	Sugar cane and sugar beets	Rim a glass with table sugar to provide an interesting contrast to tart drinks like lemonade.
Fructose (natural)	Fruits and honey	Experiment with honeys sourced from crops such as orange trees or blueberries to provide flavor differences for hot tea.
High fructose corn syrup (artificial)	Enzymatic treatment of corn starch	While most carbonated soft drinks contain HFCS, some brands are replacing it with natural sugars. Experiment to see what your customers prefer.
Sucralose (artificial)	Synthetic mix of sucrose and chlorine	Sold under the Splenda® brand name, it's often used to sweeten diet carbonated drinks.
Aspartame (artificial)	Modified amino acids	120-200 times sweeter than sugar, it allows you to provide sweetness by adding much less.
Stevia (natural)	South American plant extract	30-300 times sweeter than sugar, it can be used sparingly in hot or cold drinks.
Agave nectar (natural)	Heart of the agave plant	Sweeter than sugar, it also dissolves very easily in cold drinks. Just a little goes a long way.
Luo han guo (natural)	Monk fruit extract	Traditional Chinese medicine attributes longevity to this low-calorie sweetener, which can be used to flavor herbal teas.

HOW SWET?

210 Calories

How it all stacks up

The sugar stacks shown here demonstrate the total amount of added and intrinsic sugars in a serving of various beverages. (Some choices contain both.) It is important to note that added sugars and intrinsic sugars are not the same. They play different roles in nutrition, and foods and beverages should not be judged by any one ingredient or nutrient.

150 Calories

160 Calories

O Calories 15 Calories 15 Calories

Cola

Orange juice

Orange soda

Water, coffee tea, etc.

Coffee with sugar

Seltzer with a dash of fruit juice

Sports drink

90 Calories

Counting calories? Count the nutrients, too.

Some of the criticism surrounding sweetened beverages results in consumers choosing them instead of 100% juice and milk products. While the calorie count of these beverages may be similar, their nutrient contribution should not be overlooked. In fact, 100% juice, milk, and flavored milk are nutrient-packed, offering many nutrients that are essential for health.

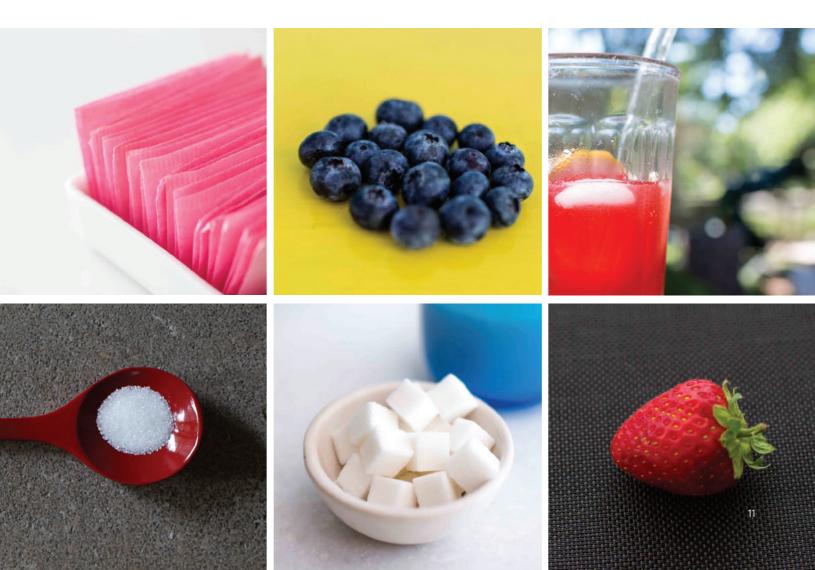
Understanding this can empower your consumers to make informed choices and enjoy a more balanced life.

By paying attention to nutrient density, we can choose food and drinks that provide more nutrients in each calorie. With the rise in obesity levels, many people are searching for ways to cut calories from their diets, but the real goal should be managing the intake of calories that do not offer additional nutrients. Adding 100% juice and milk to your menu board provides nutrient-dense options to help your guests get more from each calorie.

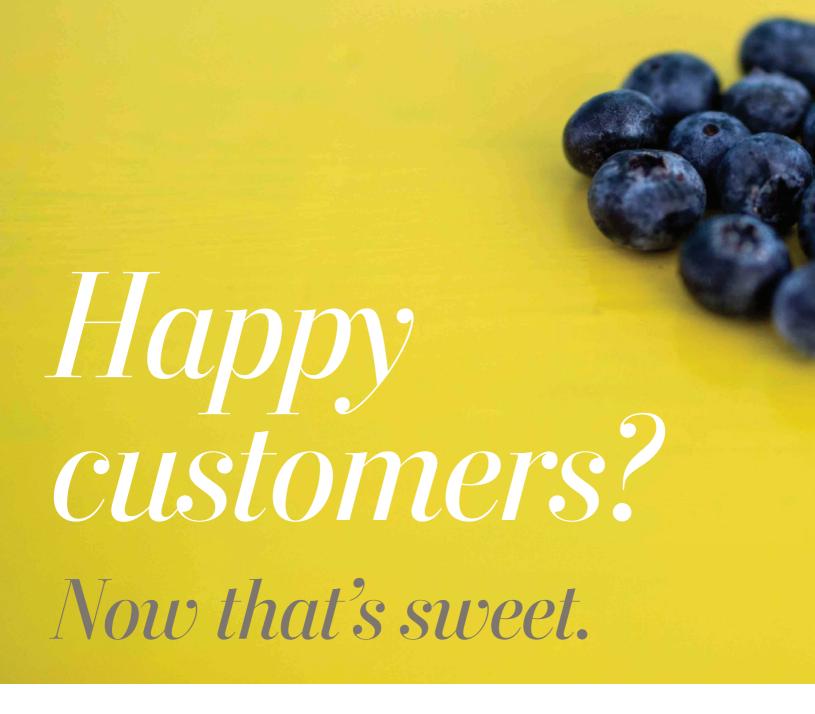
Added sugars: Often criticized for adding calories without nutrients, these beverages can still play an important role by helping a drink meet the consumer's needs for taste, hydration, or enjoyment.

Intrinsic sugars: Found naturally in juices and milk, these sugars come with additional nutrients, such as protein, vitamins and minerals, whose value cannot be ignored.

When building your beverage menu, consider what you are serving with the sugar in your beverages, and what consumer need they meet.







As a foodservice operator, you have several ways to keep your consumers happy and healthy, while meeting local regulations, too. Try these tips:

On the menu

- Offer a variety of serving sizes, allowing people to control their own intake.
- Offer smaller sized servings for petite appetites or thirst.
 Remember to price all sizes fairly so oversized drinks do not cost less than smaller servings.
- Serve drinks unsweetened when possible, giving each customer options to customize based on their own tastes and dietary needs.
- Dress it up: Add sliced fruit or cucumbers to water for a refreshing, nearly sugar-free drink.
- Make various alternative sweeteners available.

Off the menu

- Provide point-of-sale materials sharing simple, user-friendly information on calories, sugar content, and nutritional value of beverages.
- Share information via QR codes, tray liners, table tents, your menu, or whatever tools work best.
- Don't encourage up-sizing to larger sizes or 2 for the price of one.

How do you see it?



Liquid calories

Most nutritionists argue that the basic reason for overweight and obesity is an imbalance of calories in and calories out. Contrary to popular belief, the type of food or beverage consumed, the time of day it is consumed do not contribute to the problem. However the fact that drinks do not have to be chewed makes them easier and possibly quicker to consume, and as a result, people may take in too many calories before their bodies' built-in sensors tell them they are full.

New guidelines

The Beverage Guidance Panel, a proposed guidance system for beverage intakes, recommends that beverages with no or few calories should take precedence over beverages with more calories. Beverages were ranked according to their value in meeting daily needs.¹⁶

- 1. Drinking water
- 2. Tea and coffee
- 3. Low-fat (1.5% or 1%), skim (nonfat) milk and soy beverages
- 4. Non-calorically sweetened beverages
- 5. Beverages with some nutritional benefits (fruit and vegetable juices, whole milk, and sports drinks)
- Calorically sweetened, nutrient-poor beverages

Sources

- Euromonitor report: Beverages in consumer foodservice: what you drink is who you are. March 2012
- Monell Chemical Senses Center: www.Monell.org; Liking sweets makes sense for kids.
- National Dairy Council www. NationalDairyCouncil.org Added Sugars and Nutrition in Beverages
- 4. U.S. Department of Health and Human Services/U.S. Department of Agriculture Dietary Guidelines 2005
- Drinking Flavored or Plain Milk Is
 Positively Associated with Nutrient
 Intake and Is Not Associated with
 Adverse Effects on Weight Status in
 US Children and Adolescents Mary M.
 Murphy, MS, RD; Judith S. Douglass, MS,
 RD; Rachel K. Johnson, PhD, MPH, RD;
 Lisa A. Spence PhD, RDJ Am Diet Assoc.
 2008;108:631-639.
- Johnson RK, Lawrence JA Brands AM, et al. Dietary Sugars Intake and Cardiovascular Health: A Scientific Statement from the American Heart Association. Circulation. 2009, 120:1011-1020.
- 7. Dairy Research Institute.
- 8. What We Eat in America, NHANES 2007-2008

- Barquera S, Hernandez-Barrera L, Tolentino ML, et al. Energy intake from beverages is increasing among Mexican adolescents and adults. J Nutr 2008;138:2454-2461
- 10. Council of the European Union, March 8, 2012
- Love P, Maunder E, Green M, Ross F, Smale-Lovely J, Charlton K. South African food-based dietary guidelines: testing of the preliminary guidelines among women in KwaZulu-Natal and the Western Cape. South African Journal of Clinical Nutrition 2001;14:9-19
- Ludwig DS, Peterson KE, Gortmaker SL. Relation between consumption of sugarsweetened drinks and childhood obesity: a prospective, observational analysis. Lancet 2001;357:505-508
- 13. Beverage and Marketing Corporation
- 14. Y. Claire Wang, Pamela Coxson, Yu-Ming Shen, Lee Goldman, and Kirsten Bibbins-Domingo. A Penny-Per-Ounce Tax On Sugar-Sweetened Beverages Would Cut Health And Cost Burdens Of Diabetes. Health Aff January 2012 31:199-207
- 15. www.efsa.europa.eu
- 16. A new proposed guidance system for beverage consumption in the United States. Barry M Popkin, Lawrence E Armstrong, George M Bray, Benjamin Caballero, Balz Frei, and Walter C Willett Am J Clin Nutr March 2006 vol. 83 no. 3 529-542

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