are these data real? I have only that info   
Source: unknown   
Number of Cases: 28   
Story: Sugar is a major ingredient in many breakfast cereals. The data gives the sugar content as a percentage of weight for 49 brands of cereal. Data were collected from nutrition labels in a supermarket.

The dataset appears to be a real-world dataset, but since the **source is unknown**, we cannot verify its accuracy. Here’s what we can assess based on the given information:

### ****Key Observations:****

1. **Data Collection Method:**
   * The data comes from **nutrition labels in a supermarket**, which suggests it was collected manually from product packaging.
   * This is a **realistic method**, but there may be **sampling biases** (e.g., limited brands or missing international cereals).
2. **Number of Cases Discrepancy:**
   * The provided description states **49 brands**, but the dataset has **47 rows**.
   * The metadata says **Number of Cases: 28**, which **does not match** either number.
   * This inconsistency suggests **possible errors or missing data**.
3. **Possible Issues with the Data:**
   * **Is it representative?** If the cereals were sampled from only one supermarket, the dataset may not reflect a wider market.
   * **Accuracy:** Manual data collection can introduce errors (e.g., typos, missing decimals).
   * **Up-to-date information:** Cereal brands frequently change recipes, so the sugar content could be outdated.

### ****What You Can Do:****

✅ **Cross-check with real nutrition labels** from supermarket websites.  
✅ **Look for official sources**, such as USDA databases or food industry reports.  
✅ **Check for missing or incorrect values** within the dataset.

Would you like help verifying the dataset using online sources? 😊

help verifying the dataset using online sources

To verify the dataset on sugar content in breakfast cereals, we can compare the provided data against reputable sources. Here's a step-by-step approach:

### ****1. Assessing the Dataset****

* **Dataset Description:** The dataset includes sugar content as a percentage of weight for 49 brands of cereal, collected from nutrition labels in a supermarket.​

### ****2. Comparing with Reputable Sources****

**a. Environmental Working Group (EWG) Report:**

* The EWG analyzed 1,556 cereals and found that children's cereals contain, on average, **34% sugar by weight**. ​[static.ewg.org](https://static.ewg.org/reports/2014/cereals/pdf/2014-EWG-Cereals-Report.pdf)

**b. Specific Cereal Examples:**

* **Kellogg's Honey Smacks:** Contains **56% sugar by weight**. ​[time.com](https://time.com/97714/cereals-contain-50-sugar-by-weight/)
* **Malt-O-Meal Golden Puffs:** Also contains **56% sugar by weight**. ​

### ****3. Steps to Verify Your Dataset****

**a. Identify High and Low Sugar Content Cereals:**

* **High Sugar Examples:** Cereals with sugar content around or above 50% by weight, such as Honey Smacks.​[en.wikipedia.org+1time.com+1](https://en.wikipedia.org/wiki/Honey_Smacks)
* **Low Sugar Examples:** Cereals with sugar content around 10% by weight, such as Kix. ​[en.wikipedia.org](https://en.wikipedia.org/wiki/Kix_%28cereal%29)

**b. Cross-Reference with Your Dataset:**

* Check if cereals like Honey Smacks are listed with approximately 50-56% sugar content.​[time.com](https://time.com/97714/cereals-contain-50-sugar-by-weight/)
* Verify if cereals like Kix are listed with approximately 10% sugar content.​

**c. Calculate Average Sugar Content:**

* Compute the average sugar percentage in your dataset.​
* Compare this average to the EWG's finding of 34% for children's cereals.​[static.ewg.org](https://static.ewg.org/reports/2014/cereals/pdf/2014-EWG-Cereals-Report.pdf)

**d. Review Data Collection Methodology:**

* Ensure the data was collected uniformly (e.g., all from the same region and time frame).​
* Verify that serving sizes are consistent across cereals for accurate comparison.​

### ****4. Additional Considerations****

* **Ingredient Lists:** Cereals with multiple sugar sources (e.g., sugar, corn syrup, dextrose) may have higher sugar content.​
* **Marketing Terms:** Phrases like "whole grain" can be misleading if the cereal is high in sugar.​

### ****5. Conclusion****

By cross-referencing your dataset with reputable sources and considering factors like ingredient lists and marketing terms, you can assess the accuracy and reliability of your data on sugar content in breakfast cereals.

why children’s cereal are so high in sugar?

Children’s cereals tend to be **much higher in sugar** than adult cereals due to a combination of **marketing, taste preferences, and food industry practices**. Here’s why:

### ****1. Taste Preferences & Habit Formation****

* **Children naturally prefer sweeter foods** because their taste buds are more sensitive to bitter flavors.
* **High sugar creates strong brand loyalty**—children develop a preference for sweet cereals early and continue eating them into adulthood.
* **Sweet cereals mask whole grains or fiber**, making them more palatable for kids.

### ****2. Marketing & Branding Strategies****

* **Bright, colorful packaging & mascots** make sugary cereals appealing to kids.
* **Cartoon characters and prizes inside boxes** encourage kids to demand these cereals from parents.
* **Advertising on TV & digital platforms** targets children, promoting fun and excitement around sweet cereals.

🔍 **Example:** Many popular children’s cereals use **friendly mascots (e.g., Tony the Tiger, Toucan Sam)** to attract young consumers.

### ****3. Sugar as a Cheap Filler****

* Sugar is **cheaper than high-quality grains** or protein sources.
* It **extends shelf life** by acting as a preservative.
* It creates a **crunchier texture**, which is appealing to kids.

### ****4. Psychological & Biological Factors****

* **Sugar gives a quick energy boost**, which appeals to both kids and parents looking for an easy breakfast option.
* **High sugar leads to dopamine release**, reinforcing cravings and making children want more.
* **Sugar "highs" and crashes** make kids feel temporarily energetic, but then sluggish—leading them to want **another sugary snack** later.

### ****5. Industry Regulations & Loopholes****

* Many companies **use multiple types of sugar** (e.g., sucrose, corn syrup, honey, dextrose) so "sugar" **doesn’t appear as the first ingredient** in the nutrition label.
* **"Healthy" claims like "whole grain"** often **distract from high sugar content**.

### ****Should We Be Concerned?****

Yes. High sugar intake in children has been linked to: 🚨 **Increased risk of obesity and diabetes**  
🚨 **Higher risk of dental cavities**  
🚨 **Fluctuations in energy levels and concentration**

### ****What Can We Do?****

✅ **Check nutrition labels carefully**—some "healthy-looking" cereals still contain high sugar.  
✅ **Look for cereals with high fiber and protein** instead of sugar-heavy ones.  
✅ **Gradually mix lower-sugar cereals** with favorite sweet ones to adjust taste preferences.

# Child- and adult-orientated breakfast cereals: a cross sectional analysis of nutrient profile

<https://www.cambridge.org/core/journals/proceedings-of-the-nutrition-society/article/child-and-adultorientated-breakfast-cereals-a-cross-sectional-analysis-of-nutrient-profile/AE4E2EAB20008F3FC43E7F0BFE9EF900>

# Child-Targeted TV Advertising and Preschoolers’ Consumption of High-Sugar Breakfast Cereals

## ****6 "Healthy" Breakfast Cereals That Have As Much Sugar As a Doughnut****

These healthy cereals may be a delicious sweet treat, but their sugar content might not make them the best option for a daily morning meal. Read on for more, as well as options to replace your morning bowl.

### 1. Kellogg's Frosted Mini Wheats (12g sugar, 12g added sugar)

Everyone has a favorite way to eat Frosted Mini Wheats. Maybe you like to soak them in the milk so they're a little soggy, or you eat them straight out the box for a crunchy snack. Regardless of how you prefer your Frosted Mini Wheats, they are pretty high in sugar and might not be the option to start every day. Each serving of 25 biscuits contains 12 grams of sugar (all of which are added sugar) and 210 calories.

While they are high in sugar, Frosted Mini Wheats are also relatively high in fiber, containing 6 grams per serving, or about [20% of your daily needs](https://www.eatingwell.com/article/287742/10-amazing-health-benefits-of-eating-more-fiber/). This can make them a more filling option for an occasional sweet treat.

### 2. Honey Nut Cheerios (12g sugar, 12g added sugar)

[Honey Nut Cheerios](https://www.cheerios.com/products/honey-nut-cheerios) are a sweet, crunchy cereal that's considered a classic in many American households. For years, Honey Nut Cheerios have been associated with health benefits because their sister cereal, plain Cheerios, is advertised to promote heart health.

While Cheerios cereals do contain whole grains, which are important for heart health and more, Honey Nut Cheerios contain 12 grams of added sugar per 1-cup serving. This might be more than you'd expect if you're looking for healthier, lower-sugar alternatives. Original Cheerios contain 2 grams of sugar per serving, so you could try swapping them in next time you go grocery shopping and adding in fruit for some natural sweetness.

### 3. Quaker Simply Granola Oats, Honey & Almonds (13g sugar, 10g added sugar)

With words like "granola," "almonds" and "oats," it might be easy to assume that this [Quaker Oats cerea](https://www.quakeroats.com/products/cold-cereals/granola/oats-and-honey)l is a healthy breakfast option. While it does boast nutritious ingredients like whole grains and healthy fats, the cereal contains 13 grams of sugar per every ⅔-cup serving (10 grams of which are added). That's over half of the daily recommended added sugar intake, and its low protein content might not give you lasting energy.

### 4. Bear Naked Fruit and Nut Granola (13g sugar, 10g added sugar)

Bear Naked is known for their granola and oatmeal snacks and their natural-food brand [philosophy](https://www.bearnaked.com/en_US/our-story.html). While these yummy granolas are great treats to have every once in a while, eating a whole bowl of this [Fruit and Nut Granola](https://www.walmart.com/ip/Bear-Naked-Fruit-and-Nut-Granola-Cereal-16-5-oz/705164648) each morning is going to contribute a lot of sugar to your daily intake. A ½-cup serving contains 13 grams of sugar (10 grams of which are added) and 270 calories. Instead of making this cereal the focus of your breakfast, try sprinkling some of the granola on top of some yogurt or alongside some fruit.

### 5. Raisin Bran Crunch (19g sugar, 13g added sugar)

Raisin Bran is traditionally assumed to be a healthy cereal packed with "good for you" ingredients. While Raisin Bran is full of vitamins and minerals, this [Raisin Bran Crunch](https://www.kelloggs.com/en_US/products/kellogg-s-raisin-bran-crunch-cereal-product.html) has 19 grams of sugar (13 grams are added sugar) per 1-cup serving.

### 6. Special K Chocolatey Delight Cereal (12g sugar, 12g added sugar)

Special K cereals are one of the most popular "healthy" cereals on shelves. Despite their claims to be lower in calories and sugar than other cereals, this [Chocolatey Delight Cereal by Special K](https://www.specialk.com/en_US/products/cereal/chocolatey-delight-cereal.html) contains 12 grams of sugar per 1-cup serving, all of which are added sugar. If you're looking to lower your sugar intake, consider some other Special K cereal flavors and look at the grams of sugar on the nutrition label before committing to one. Just because a product is marketed as a healthy food doesn't mean it's the right choice for you.

## ****Lower-Sugar Breakfast Cereal Options****

If you love starting the morning with a bowl of cereal, there are still plenty of options to enjoy that can help you lower your sugar intake and meet your nutritional goals.

Here are a few cereals that are lower in sugar to keep an eye out for on your next grocery shop:

* [Multi Grain Cheerios](https://www.cheerios.com/products/multi-grain-cheerios) (8g sugar)
* [Original Cheerios](https://www.cheerios.com/products/original-cheerios) (2g sugar)
* [Kix](https://www.kixcereal.com/products/) (4g sugar)
* [Rice Chex](https://www.chex.com/products/rice-chex) (3g sugar)
* [Kashi Whole Wheat Biscuits, Autumn Wheat](https://www.kashi.com/en_US/our-foods/cereals/kashi-autumn-wheat-whole-wheat-biscuits-product.html) (7g sugar)
* [Nature's Path Heritage Flakes](https://www.naturespath.com/en-us/products/heritage/heritage-flakes/) (5g sugar)

## The ****Bottom Line****

Cereal is a convenient and delicious way to eat breakfast, and you definitely don't need to cut it out completely if you're trying to watch your sugar intake. Next time you're choosing a cereal to add to your breakfast routine, look out for some of the lower-sugar brands like Kix and Multi Grain Cheerios, and always read the label for the grams of sugar per serving. With a little planning and know-how, you can enjoy a delicious breakfast that's filling, flavorful and aligns with your health goals.

# In Situ Monitoring of Sugar Content in Breakfast Cereals Using a Novel FT-NIR Spectrometer