

# Energy Recharge Coaching: Carbohydrates - Sugar

With  
**Dr. Ritamarie Loscalzo**



**Medical Disclaimer:** The information in this presentation is not intended to replace a one-on-one relationship with a qualified health care professional and is not intended as medical advice. It is intended as a sharing of knowledge and information from the research and experience of Dr. Ritamarie Loscalzo, [drritamarie.com](http://drritamarie.com), and the experts who have contributed. We encourage you to make your own health care decisions based upon your research and in partnership with a qualified health care professional.

# Review: Sugar on a Molecular Level

## ★ Review: Sugar on a Molecular Level

- ✓ Monosaccharides
- ✓ Disaccharides
- ✓ Oligosaccharides

## ★ Why you need sugar

## ★ Where sugar comes from in diet

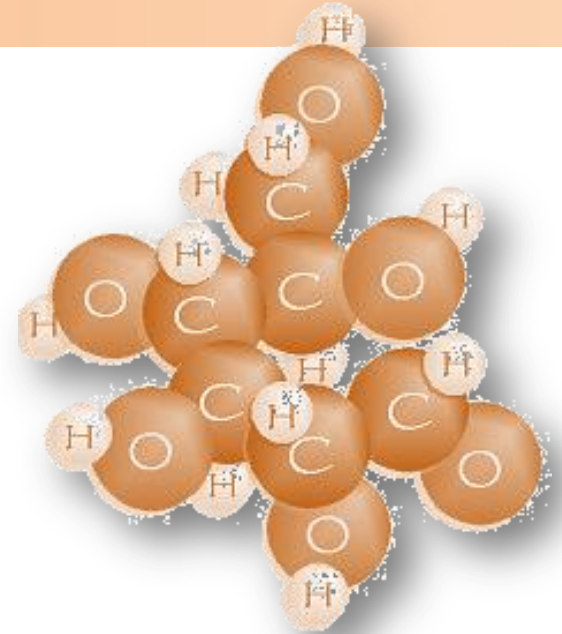
## ★ What affects rate of absorption and uptake into cells

## ★ How sugar is converted to energy

## ★ What's needed for sugar to be efficiently utilized

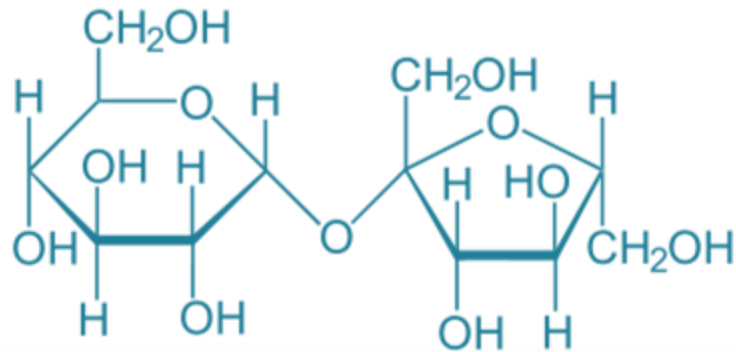
## ★ The negative effects of simple sugars

## ★ Alternatives to sugar for satisfying your sweet tooth

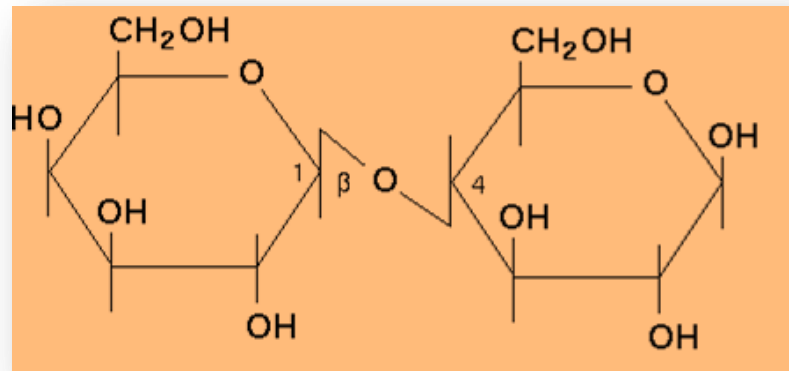


# Disaccharides

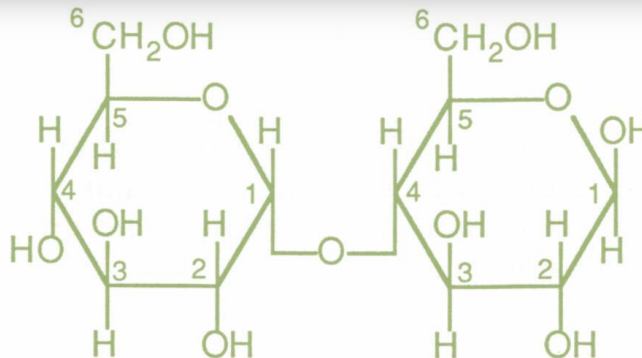
Sucrose



Lactose

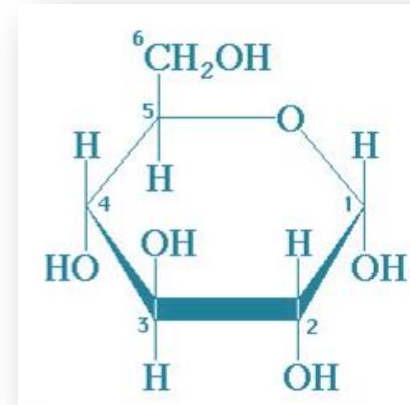
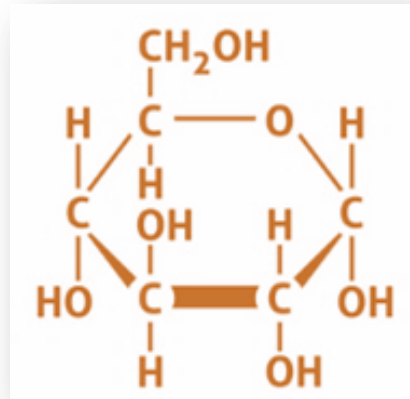


Maltose

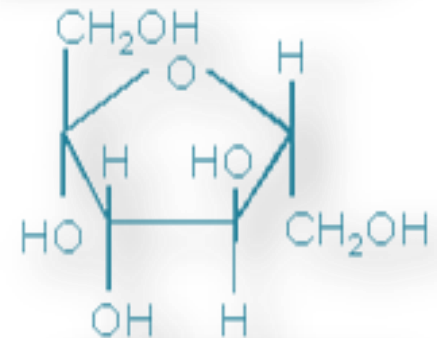
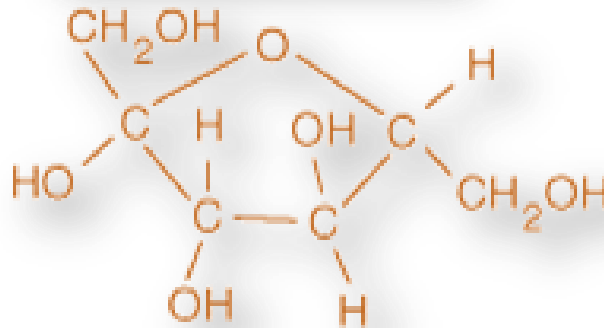


# Monosaccharides

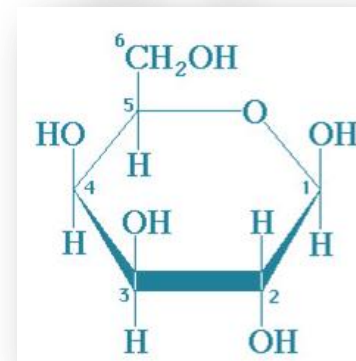
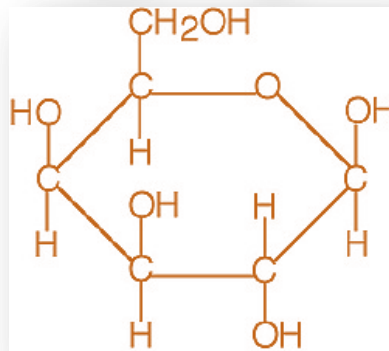
## Glucose



## Fructose

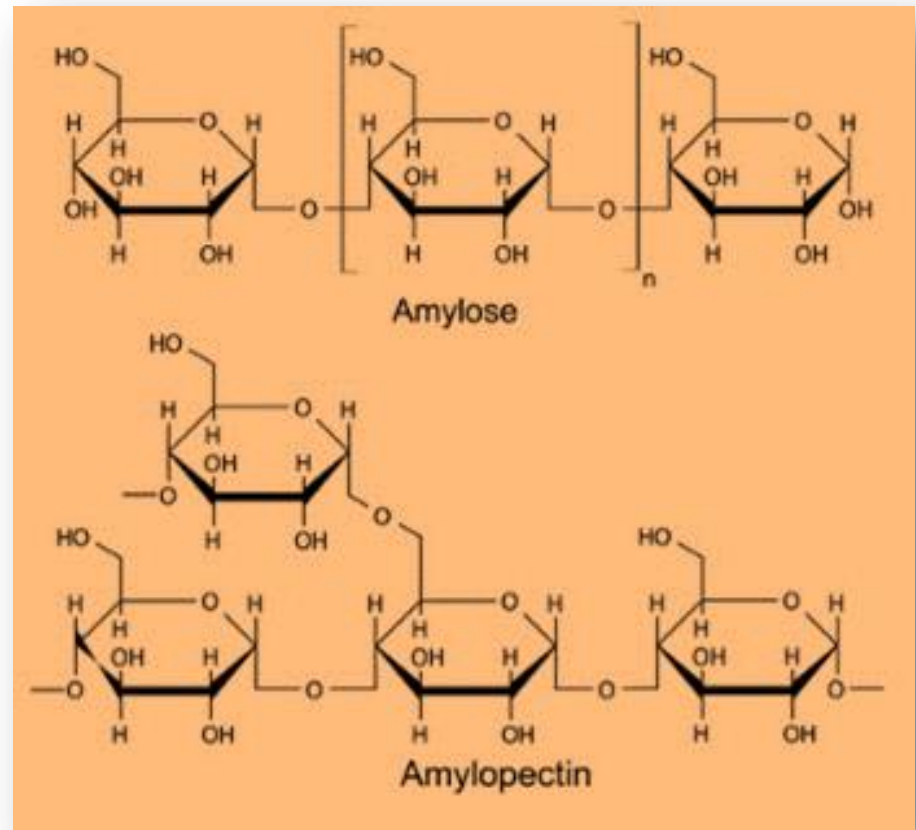
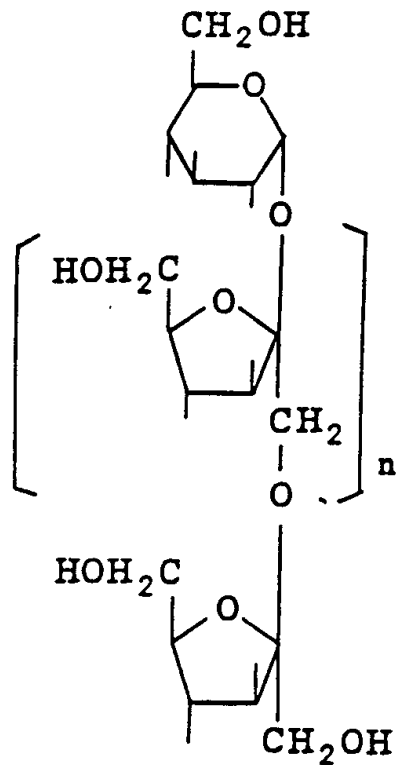


## Galactose



# Oligosaccharides

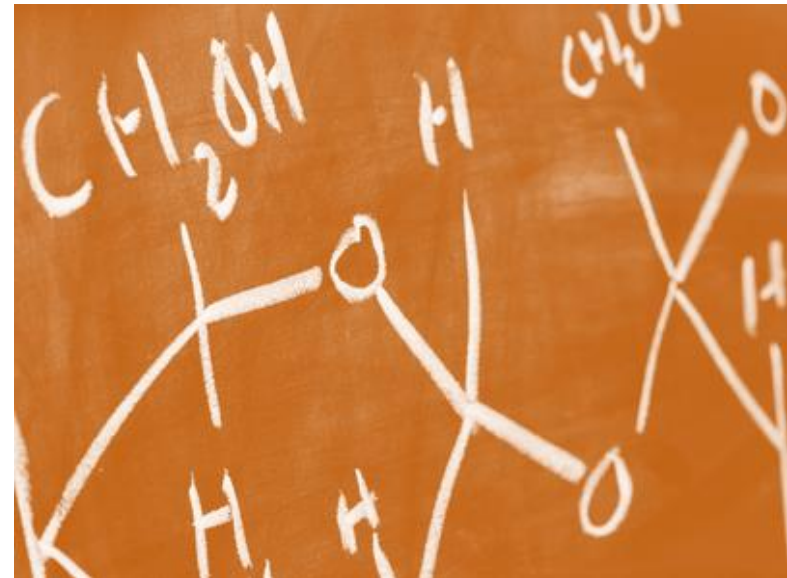
## Fructooligosaccharides



# Why You Need Sugar

## ★ Energy

- ✓ For optimal cellular growth and repair
- ✓ For gland and organ function
- ✓ For mental clarity, attention, and focus
- ✓ For steady moods
- ✓ For having fun
- ✓ For meaningful relationships
- ✓ For achieving success in your chosen career



# Where Sugar Comes From In Foods

## Best Sources (Complex)

- ★ Green leafy vegetables
- ★ Rainbow colored vegetables
- ★ Root vegetables and tubers
- ★ Fruit
- ★ Whole, non-gluten grains
- ★ Legumes
- ★ Nuts and seeds



## Less Desirable Sources (Simple)

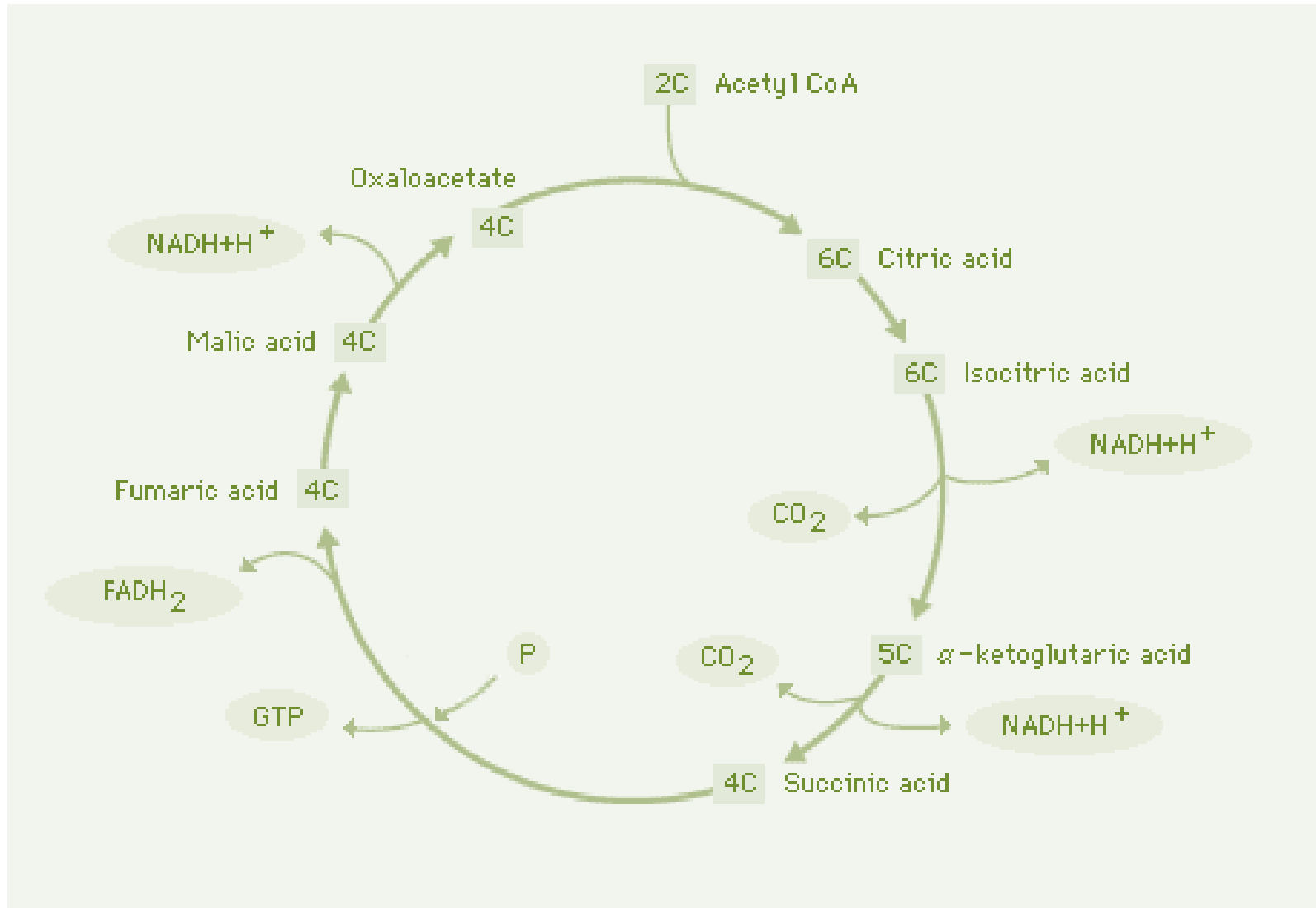
- ★ Table sugar (sucrose)
- ★ Fructose
- ★ Glucose syrup
- ★ High-fructose corn syrup
- ★ Maple syrup
- ★ Agave nectar
- ★ Coconut nectar
- ★ Palm sugar
- ★ Honey
- ★ Refined grains

# Getting Sugar Into Cells

- ✓ Insulin
- ✓ Healthy Insulin Receptors
- ✓ Nutrients



# Converting Sugar into Energy



# Negative Effects of Simple Sugars

- ★ Blood sugar imbalances leading to insulin resistance, diabetes

- ★ Dental cavities

- ★ Decreased immunity

- ★ Accelerated cancer cell growth

- ★ Premature aging

- ★ Mental decline – Alzheimer's



- ★ Depletion of B vitamins and other nutrients required for energy production

- ★ Intestinal distress

- ★ Candida and other organism overgrowth

- ★ Mood swings

- ★ Addiction

- ★ ...many, many more

# Assessing Your Tolerance To Various Sugars

## ★ Home Testing

Check your blood sugar for several hours after eating a variety of foods

## ★ Lab Testing

- ✓ Fasting blood glucose
- ✓ Hemoglobin A1C
- ✓ Fructosamine
- ✓ Insulin



# Nutrition Facts

**Serving Size:** About (20g)

**Servings Per Container:** 16

	Amount Per Serving	% Daily Value*
<b>Total Calories</b>	60	
Calories From Fat	15	
<b>Total Fat</b>	2 g	3%
Saturated Fat	1 g	4%
Trans Fat	0 g	
<b>Cholesterol</b>	0 mg	0%
<b>Sodium</b>	45 mg	2%
<b>Total Carbohydrates</b>	15 g	5%
Dietary Fiber	4 g	17%
Sugars	4 g	
Sugar Alcohols (Polyols)	3 g	
<b>Protein</b>	2 g	
Vitamin A		0%
Vitamin C		0%
Calcium		2%
Iron		2%

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

**Ingredients:** Wheat flour, unsweetened chocolate, erythritol, inulin, oat flour, cocoa powder, evaporated cane juice, whey protein concentrate, corn starch (low glycemic), natural flavors, salt, baking soda, wheat gluten, guar gum

# Best Alternatives To Sugar For Satisfying Your Sweet Tooth

- ★ Stevia: Green plant
  - ✓ **fresh is best,**
  - ✓ *then green powder,*
  - ✓ *then sweet leaf concentrate*
- ★ Lohan: Chinese herb
- ★ Erythritol: Sugar alcohol
- ★ Chicory root inulin: Maybe – test
- ★ Yacon: Maybe – test



# Alternatives To Sugar: Products

## ★ **Zero:**

Organic erythritol

## ★ **Lakanto:**

Lohan and erythritol

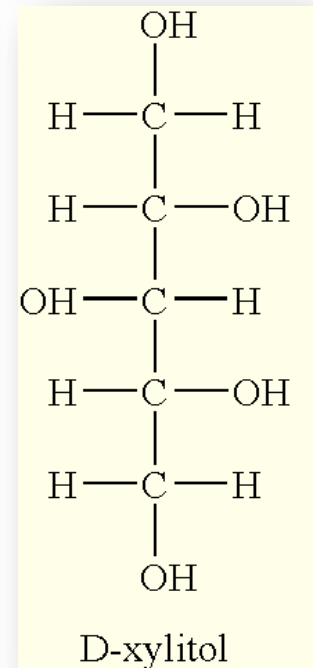
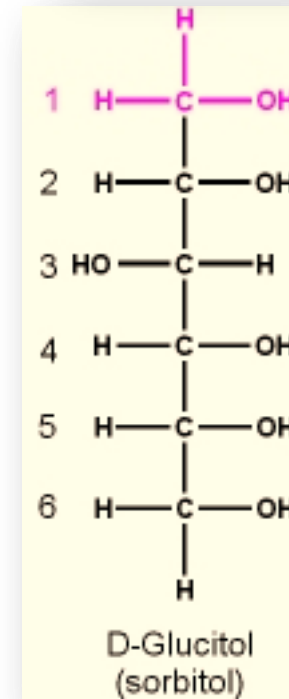
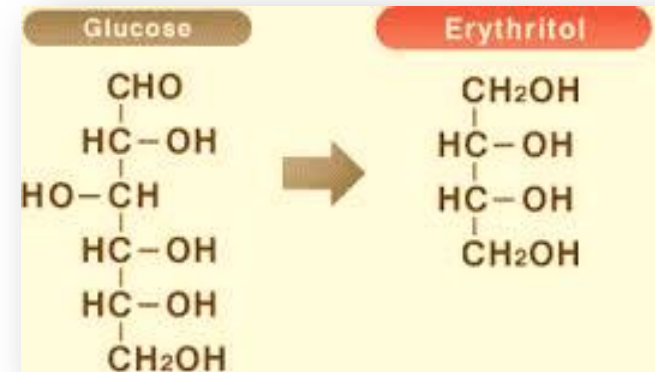
## ★ **Just Like Sugar:**

Chicory root



# Sugar Alcohols

- ★ Also known as polyols
- ★ Do not contain ethanol
- ★ Sweetness similar to sucrose
- ★ Fewer calories than sugar
- ★ Naturally occurring and chemically derived
- ★ Do not raise blood sugar



# Sugar Alcohols Compared

Name	Sweetness relative to sucrose	Energy (kcal/g)	Sweetness per food energy, relative to sucrose
<b>Erythritol*</b> (4 carbon)	0.812	0.213	15
<b>Mannitol</b> (6 carbon)	0.5	1.6	1.2
<b>Sorbitol</b> (6 carbon)	0.6	2.6	0.92
<b>Xylitol</b> (5 carbon)	1.0	2.4	1.6
Compare with: <b>Sucrose</b>	1.0	4.0	1.0

*\* Erythritol is by far the best choice, sorbitol the worst*

# Erythritol

- ★ Most absorbed in the small intestine and excreted unchanged in the urine and feces
- ★ About 10% enters the colon - does not normally cause laxative effects
- ★ Free of side effects in regular use
- ★ Doses over 50 grams (1.8 oz) can cause nausea and stomach rumbling
- ★ More difficult for intestinal bacteria to digest than other sugar alcohols, so it's less likely to cause gas or bloating
- ★ Naturally occurring in pears, melons, grapes, mushrooms, wine, soy sauce, and cheese



## Smart Sweet Erythritol 4.5lbs

by Smart Sweet

★★★★★ 1 customer review

Price: \$36.50 + \$6.91 shipping

Note: Not eligible for Amazon Prime.

In Stock.

Ships from and sold by Global Sweet Polyols, LLC.

- All Natural, Free of GMO, Gluten, Wheat, Soy & Corn
- Zero Calories, Zero Glycemic Index
- Safe for Diabetics, High Digestive Tolerance
- 70% as Sweet as Sugar