

**Energy
Recharge
Coaching:
Carbohydrates -
Sugar**

With
Dr. Ritamarie Loscalzo



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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, 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.

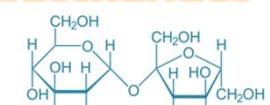
Review: Sugar on a Molecular Level

- ★ 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

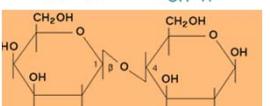
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Disaccharides

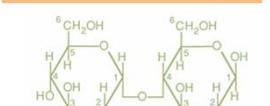
Sucrose



Lactose



Maltose



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Monosaccharides

Glucose

Fructose

Galactose

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Oligosaccharides

Fructooligosaccharides

Amylose

Amylopectin

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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

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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

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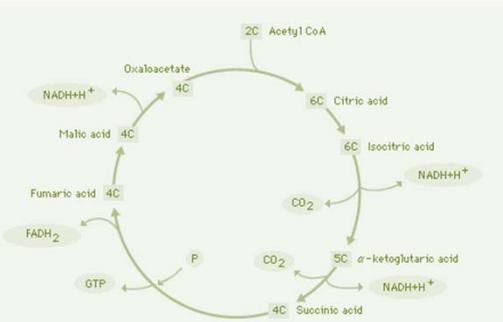
Getting Sugar Into Cells

- ✓ Insulin
- ✓ Healthy Insulin Receptors
- ✓ Nutrients



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Converting Sugar into Energy



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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



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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



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Nutrition Facts

Serving Size: About (20g)
Servings Per Container: 16

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

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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

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Alternatives To Sugar: Products

- ★ **Zero:**
Organic erythritol
- ★ **Lakanto:**
Lohan and erythritol
- ★ **Just Like Sugar:**
Chicory root

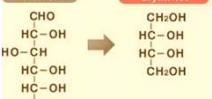


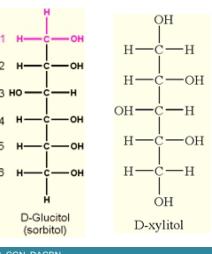
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Sugar Alcohols

- ★ 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

Glucose	Erythritol
CHO HC-OH HO-CH HC-OH HC-OH CH ₂ OH	CH ₂ OH HC-OH HC-OH CH ₂ OH





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Sugar Alcohols Compared

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

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

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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
4.5 lbs
Price: \$36.50 + \$5.91 shipping
Not eligible for Amazon Prime
In Stock
Shipped from and sold by Global Sweet Polys, LLC.
- All Natural - Free of GM, Casein, Wheat, Soy & Corn
- Zero Calories, Zero Glycemic Index
- Safe for Diabetics, High Digestive Tolerance
- 10% as Sweet as Sugar

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