

FUNCTIONS IN THE BODY:

> Provides the body with energy

➤ Works together with proteins to aid growth and repair the body.

- TYPES OF CARBOHYDRATES:
- √ Starch: Polysaccharides (PASTA)

- ✓ Sugar: Monosaccharides (simple sugar)
 Glucose and Fructose (fruit sugar)
 Disaccharides (double sugar)
 Lactose (from milk) and sucrose
- ✓ NSP: Non-starch polysaccharides (banana)

MACROs

Macronutrients are types of calories. They are what our bodies convert into energy. Each macronutrient has a purpose based on its chemistry

Some foods have 1, 2, or even all 3 macronutrients

None of them are evil - they all have a job to do

Our mission is to eat a balance of each

Carbs

starch • sugar • fiber → glucose fast energy | quickly digested | fiber = GI health

Vegetables (broccoli, cauliflower, zucchini, carrots, peppers, onions, spinach, kale, lettuce, cucumber, tomatoes)

Fruits (apples, banana, berries, pears, pineapple, melon, grapes, oranges, papaya, mango)

Grains (bread, flour, cereal, oatmeal, rice, quinoa, potato, yams, plantain, pasta, bagels, tortillas, cornmeal, pancakes, waffles)

> Sugar (brown sugar, white sugar, honey, agave, juice, soda, candy) Avocado

> > crackers)

Oil

Butter

Beer Wine

Plant protein (beans / lentils, tofu, tempeh. edamame. veggie burger, auinoa)

Low fat milk / yogurt

Full fat milk / yogurt

Protein

→ amino acids digested slowly | repair | immunity | nervous system

> Lean meats (chicken, turkey, egg whites)

Low fat dairy (cottage cheese, whey protein)

Seafood (cod fish, shrimp, scallops)

Meat substitutes (tempeh, seitan)

Nuts, seeds, Dairy (cheese, cream) nut butter

High fat meat / seafood (ega volks, tuna, salmon, bacon,

Pastries (cookies, donuts, cake, muffin chocolate) sausage, beef, pork, hot dogs) Snacks (chips,

Mayo Cream cheese

saturated • unsaturated → lipid digested slowly | energy dense | hormones | flavor

Alcohol

→ acetic acid radicals (energy dense | pleasure / social)

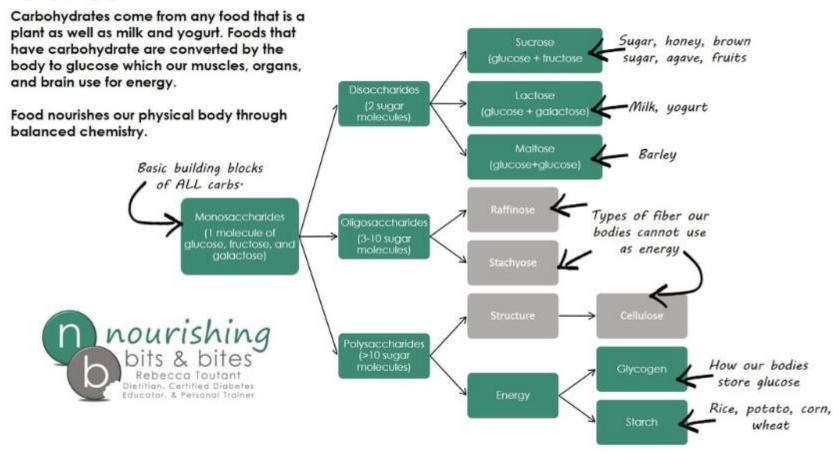
Hard liquor (vodka, rum, whiskey)



CONVERSION OF CARBOHYDRATES INTO ENERGY

Complex carbohydrates are an efficient source of energy that fuel muscle contractions. Once eaten, carbs are broken down into smaller sugars (glucose, fructose, and galactose) to be used as energy for immediate tasks. Any unused glucose will be converted into glycogen and stored in the muscles and liver for future use

Carbs



Highest

Carbohydrate

The seed portion of the plant has the most carbohydrate. This includes things like grains (rice, wheat, oats, etc), corn, peas, and beans

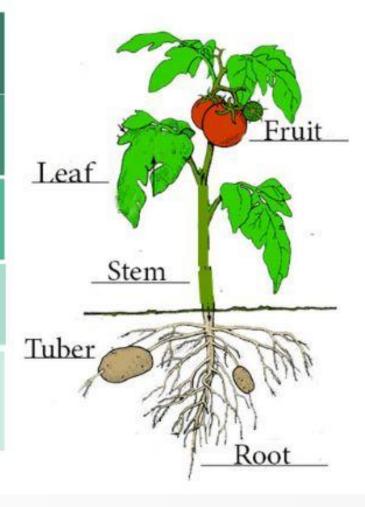
The tuber portion of the plant has the 2nd most carbohydrate. These are the swollen underground stems. This includes things like potato, yucca, taro root

The fruit portion of the plant has the 3rd most carbohydrate. This is the fleshy part that we eat. It includes things like apples, bananas, squash, berries, etc

The root portion of the plant has the 4th most carbohydrate. This is the part that is underground. This includes things like radishes, carrots, parsnips, turnips

The vegetable portion of the plant has the least carbohydrate. These are the leaves, stems, and immature flowers of plants. This includes things like cabbage, lettuce, celery, cauliflower

Lowest Carbohydrate





Orange juice



Orange juice is the liquid extract of the fruit of the orange tree, produced by squeezing oranges. It comes in several different varieties, including blood orange, navel oranges, valencia orange, clementine, and tangerine. Wikipedia

Nutrition Facts

Amount Per 1 cup (248 g) +

Orange juice

Fruit Juice

Calories 111	
	% Daily Value*
Total Fat 0.5 g	0%
Saturated fat 0.1 g	0%
Polyunsaturated fat 0.1 g	
Monounsaturated fat 0.1 g	
Cholesterol 0 mg	0%
Sodium 2 mg	0%
Potassium 496 mg	14%
Total Carbohydrate 26 g	8%
Dietary fiber 0.5 g	2%
Sugar 21 g	
Protein 1.7 a	20.

Oatmeal



Oatmeal is made of hulled oat grains - groats - that have either been ground, steel-cut, or rolled. Ground oats are also called "white oats". Steel-cut oats are known as "coarse oatmeal" or "Irish oatmeal" or "pinhead oats". Wikipedia



Nutrition Facts

Oatmeal +

Amount Per 1 cup, cooked (234 g) *

Calories 158	
	% Daily Value*
Total Fat 3.2 g	4%
Saturated fat 0.5 g	2%
Polyunsaturated fat 1 g	
Monounsaturated fat 0.9)
Trans fat 0 g	
Cholesterol 0 mg	0%
Sodium 115 mg	4%
Potassium 143 mg	~75% of the carbs
Total Carbohydrate 27 g	ome from starch
Dietary fiber 4 g	and fiber
Sugar 1.1 g	
Protein 6 g	12%

~75% of the carbs come from sugar.

- Consider the above labels comparing orange juice and oatmeal. Both have the same amount of total carbohydrate (27 grams)
- Both will create blood glucose (quick energy)
- BUT oatmeal will keep you fuller longer and create less total blood sugar
- Why? 77% of the carbohydrate in orange juice comes from sugar (21 / 27 grams).
- But in oatmeal, 77% of the total carbohydrate comes from starch (21 grams) and fiber (4 grams) - which take longer to digest. The oatmeal also has 6 grams of protein which takes longer to digest