

LUNCH & LEARN HIGHLIGHTS

Which Food Groups Contain Carbohydrates?

- All food groups contain carbohydrates
- Fruits, grains, and starchy vegetables are major carbohydrate sources
- Many protein sources also contain carbohydrates: soy, quinoa, peanuts, beans, dairy, etc.
 - However, meat and eggs are not a carbohydrate source
- Non-starchy vegetables, while lower in carbohydrates and calories, still have carbohydrate content



Why are Carbohydrates Important?

- The body breaks down carbohydrates into the simple sugar glucose
- **Glucose**
 - *The body's (including the brain) preferred fuel source for immediate energy
 - Carbohydrates must be broken down into glucose before they can be absorbed and used by the body for various functions
 - Used for brain function, red blood cells, and muscles for exercise
 - Oxygen/glucose must be delivered to muscle first for aerobic exercise
 - Can be stored in the liver and muscles in a complex form for later use—called glycogen
 - Excess can also be converted to adipose (fat)



Types of Carbohydrates

<u>Sugar</u>	<u>Starch</u>	<u>Fiber</u>
		

Foods can contain more than one of these types of carbohydrates

Nutrition of Some Carb-Containing Foods

- Dairy: Calcium, vitamin D, protein, B12
- Fruits and vegetables: Almost every vitamin and mineral can be found in plants except for some nutrients:
 - Vitamin B12
 - Heme iron
- Grains: Mainly B vitamins, iron, protein (especially grains like quinoa), and much more



Summary

- Macronutrient: 1 g contains 4 calories (1 g CHO=4 kcal)
- Categories: Sugar, starch, fiber
- Is the body's preferred fuel source for energy
- Carbohydrates must be broken down into glucose before being usable for energy
- Can be stored for later use as glycogen and/or converted into adipose (which can also be broken down for energy)
- 45-65% of your calories should be carbohydrate

