

# 1 | Carbohydrates

Glucose, Cellulose, Lactose, etc. etc.

## 1.1 | Structures of Carbs

- Carbs have **6 carbons**.
- Carbon chain with Hydrogen and Hydroxide
- Dissolves well in water because of the slightly positive hydrogen and the slightly negative OH

So, if you see a hexagon carbon ring, you are probably looking at a carbohydrate

You could take many "simple sugars" (glucose, for instance) and chain them to build wonderfully complicated things (fiber!). To see how that happens: KBhBIO101StructuresofCarbs

## 1.2 | Uses of Carbs

- Mitochondria
  - Actually not strictly part of a cell!
  - Another organism (technically an organelle)
    - \* Could move
    - \* Could replicate
  - Breaks down stored carbs (glycogen) into glucose and then eventually smaller elements
- Cell tagging
  - As an authentication systems
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## 1.3 | The Carbs Debate

- Fructose worse? Better? No difference?
- Experiments differ
  - Generally found no differences
  - Some found fructose to be a bit more obesity causing