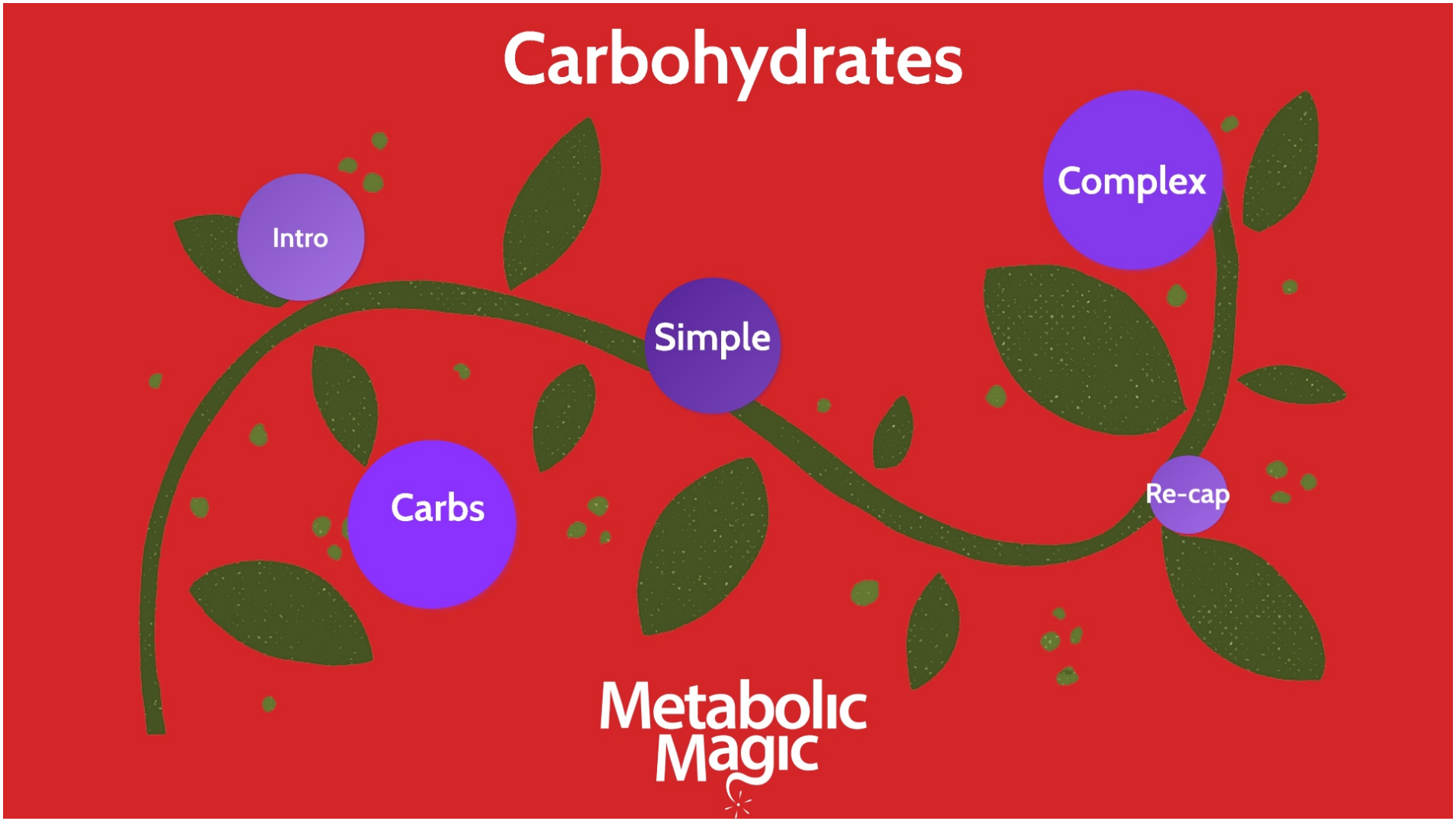
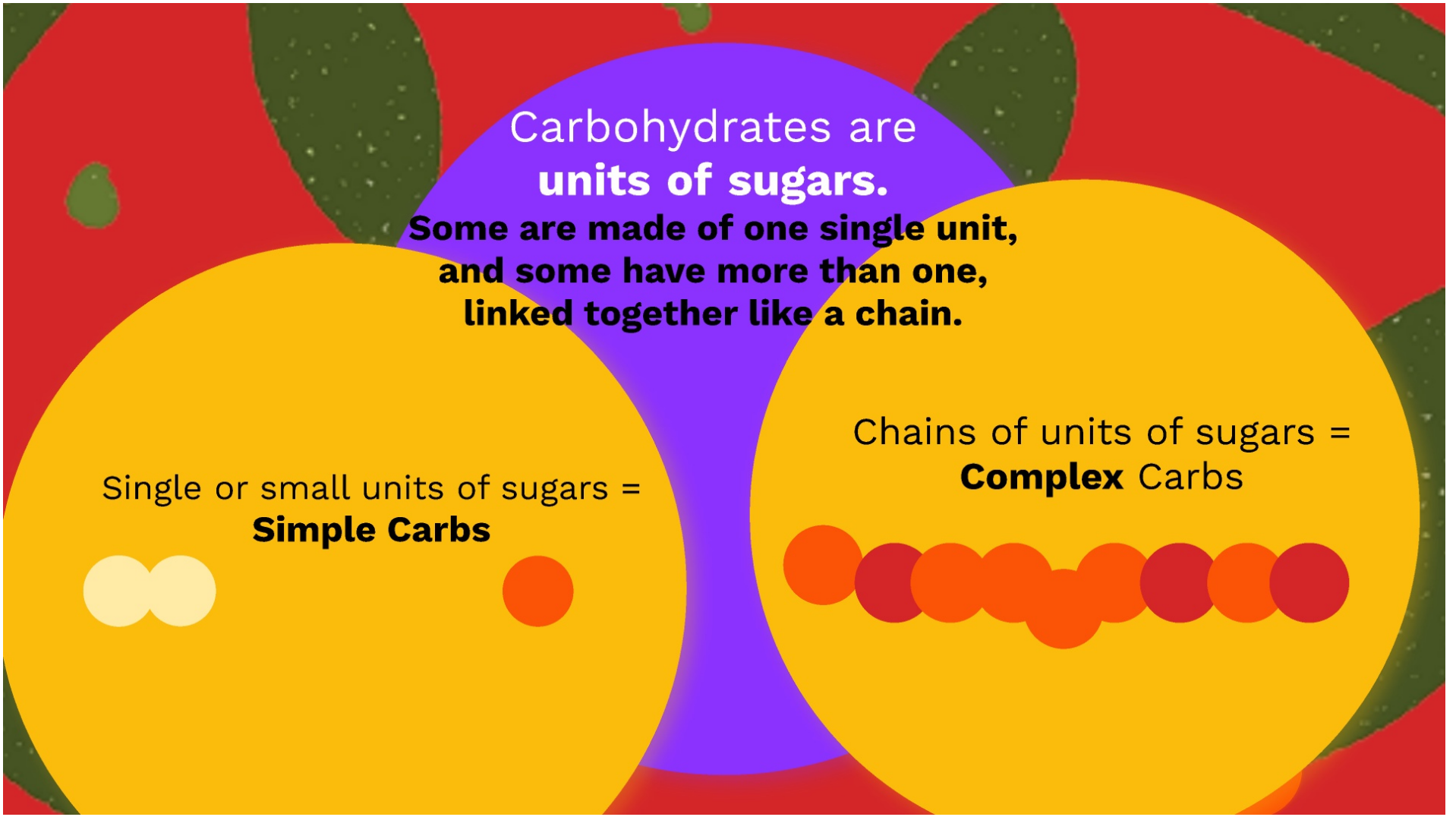

Carbohydrates
Intro
Complex
Simple
Carbs
Re-cap
Metabolic
Magic

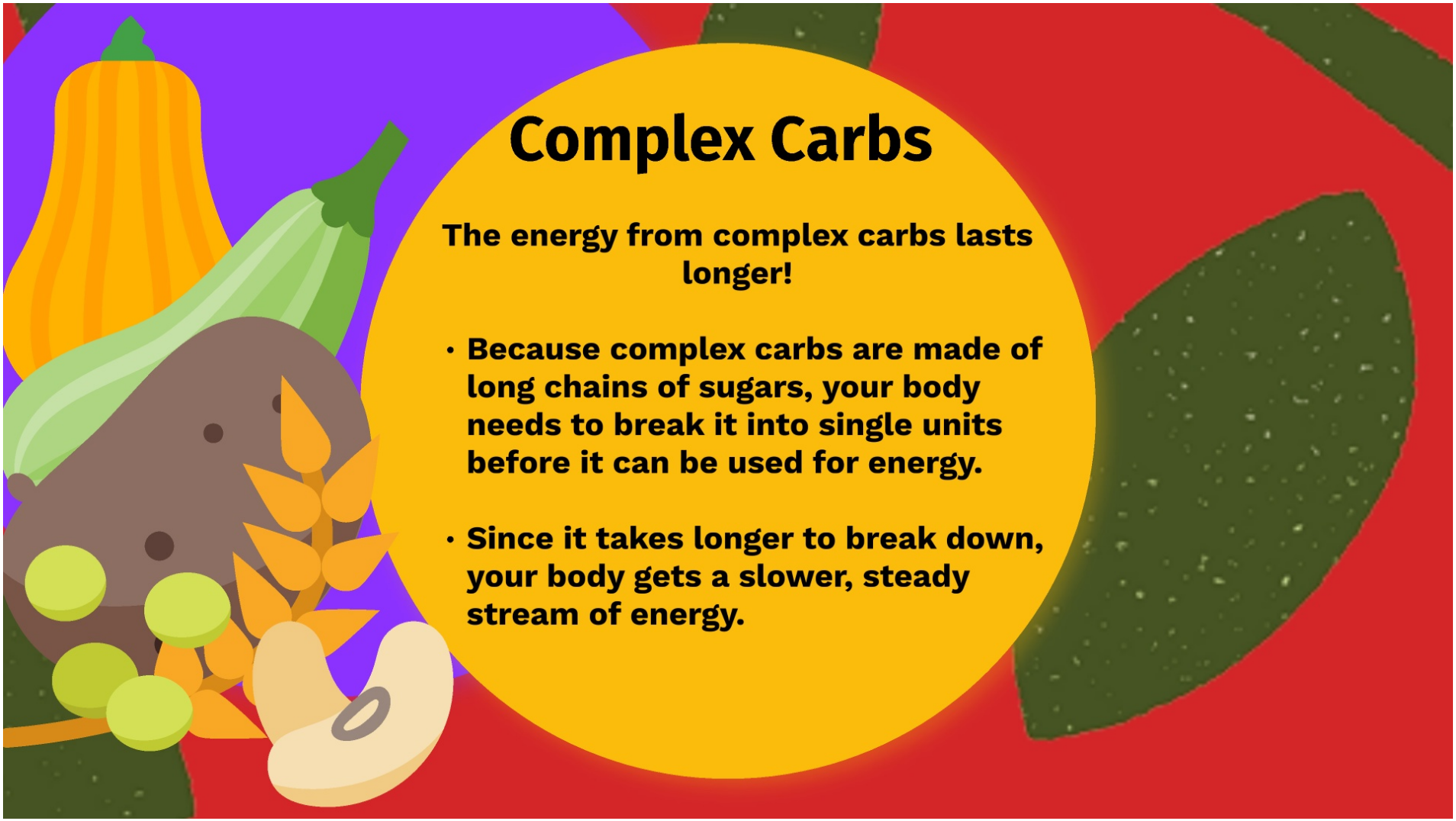
Carbohydrates and Energy

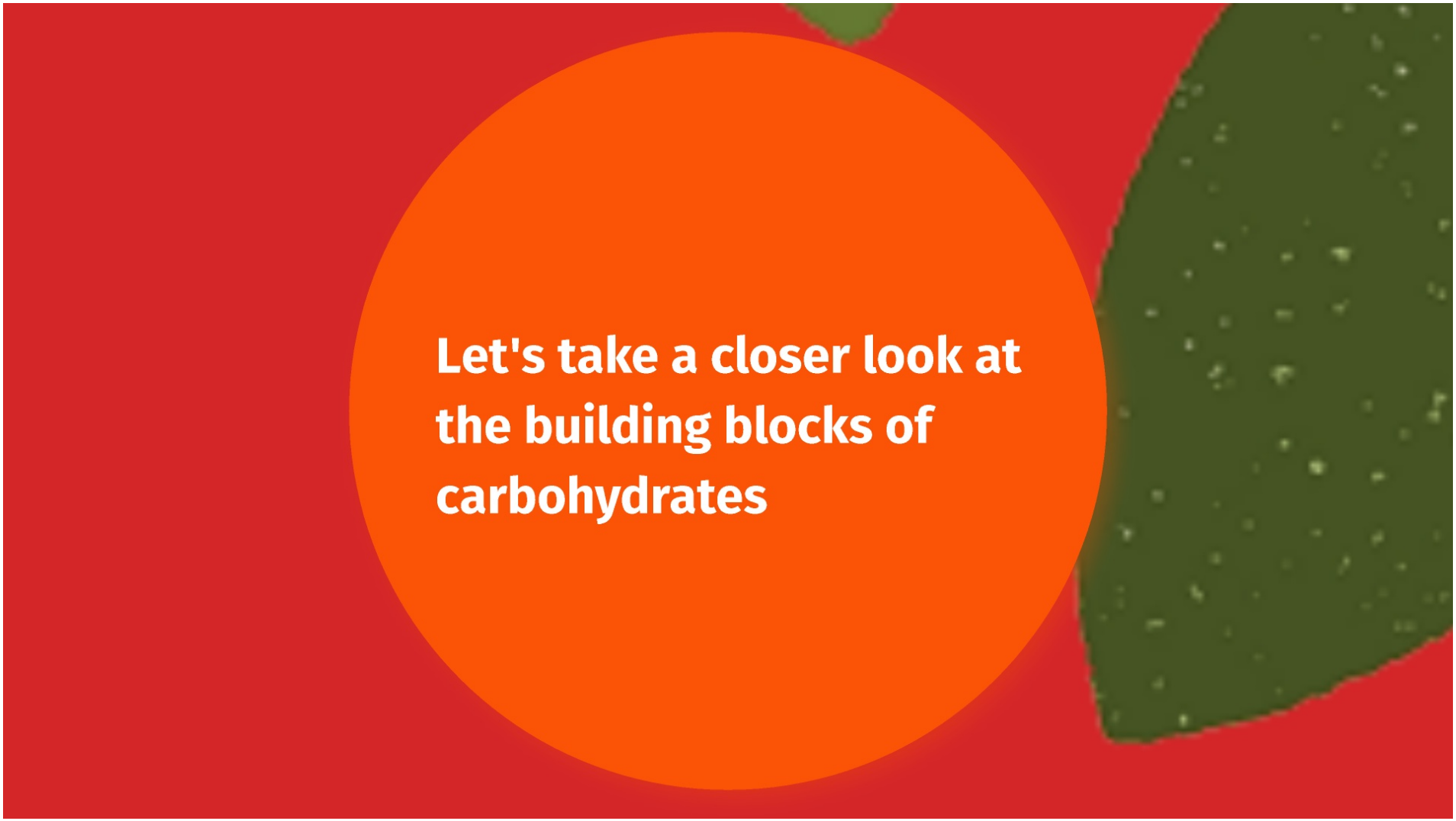
All the things you do every day require **energy**, from walking to class to dancing to simply breathing.

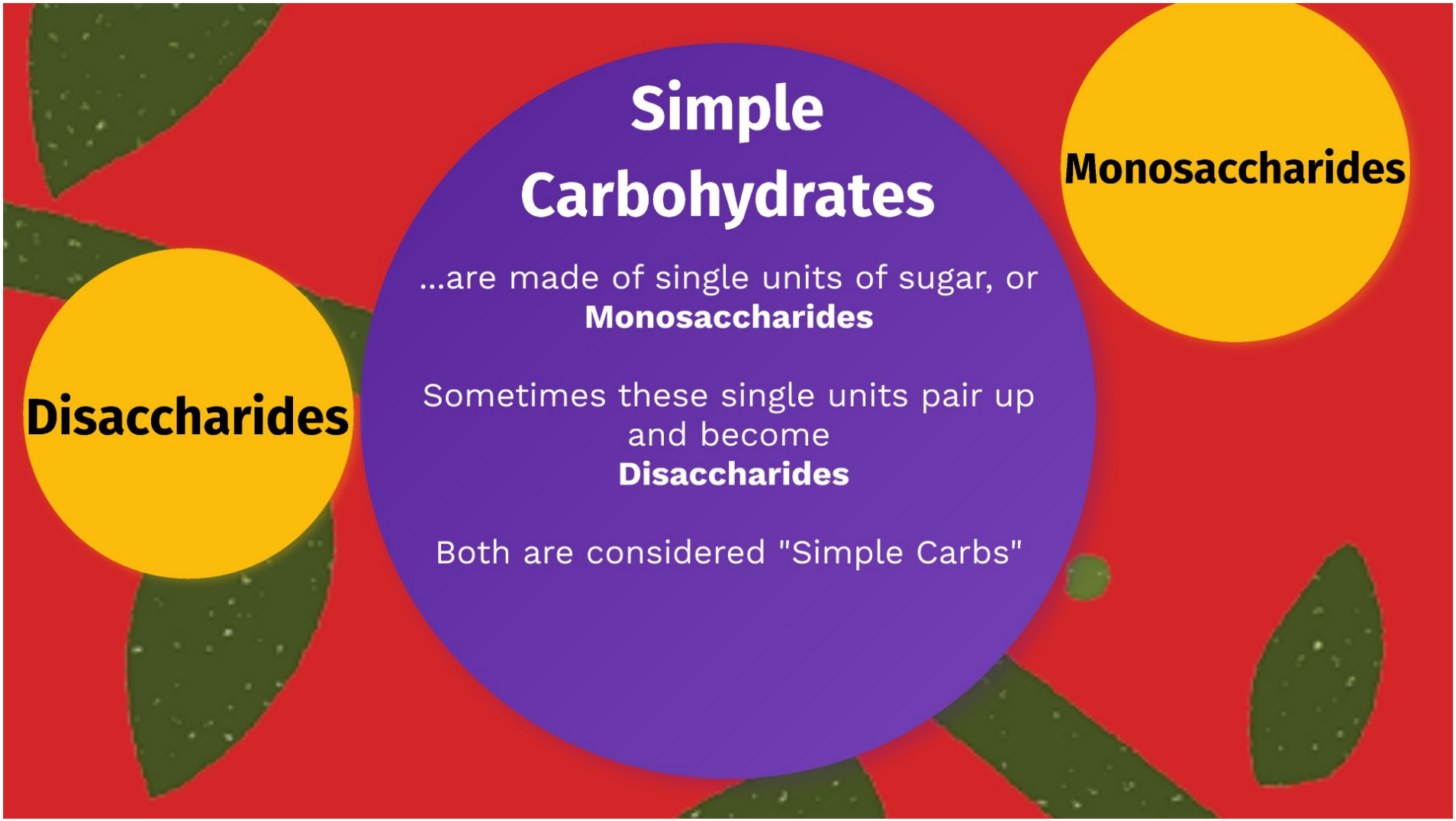
This energy mostly comes from an important **macronutrient** called carbohydrates, or carbs.


Carbohydrates are
units of sugars.
Some are made of one single unit,
and some have more than one,
linked together like a chain.
Single or small units of sugars =
Simple Carbs
Chains of units of sugars =
Complex Carbs


Simple Carbs
• Your body can only use single units of sugars for energy. (Anything bigger and it needs to break it down first.)
• Simple carbs give you **fast energy.** Your body can use that food for energy right away!
• Fast energy means your body uses it up quickly too.


Complex Carbs
The energy from complex carbs lasts longer!
• Because complex carbs are made of long chains of sugars, your body needs to break it into single units before it can be used for energy.
• Since it takes longer to break down, your body gets a slower, steady stream of energy.


Let's take a closer look at the building blocks of carbohydrates


Simple Carbohydrates
...are made of single units of sugar, or Monosaccharides
Sometimes these single units pair up and become Disaccharides
Both are considered "Simple Carbs"
Monosaccharides
Disaccharides

Mono-saccharides
(Single units of sugars)

1. Glucose

This sugar unit circulates in the blood. It is also called "blood sugar".

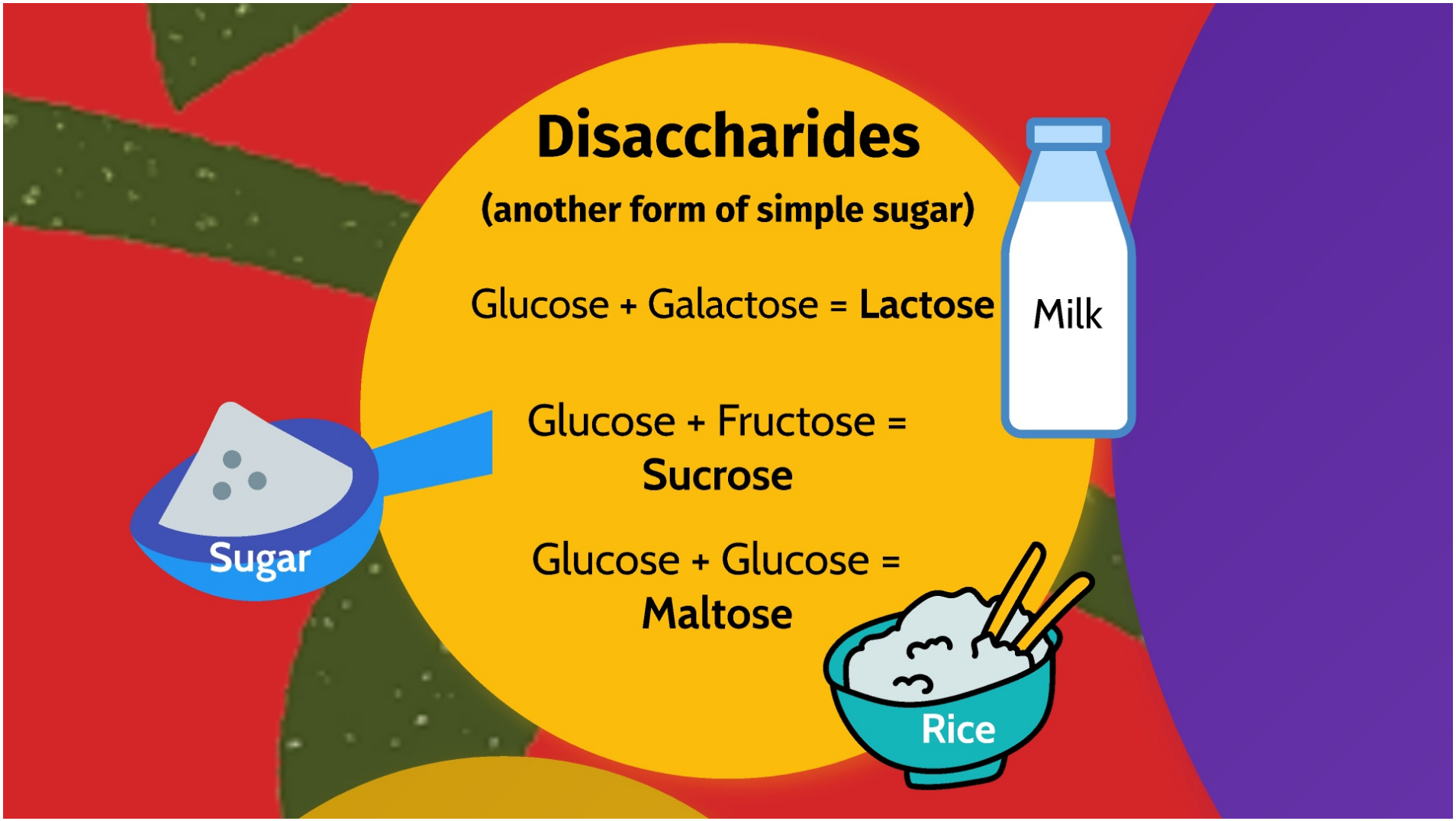
2. Fructose

It naturally occurs in fruit, milk and honey.

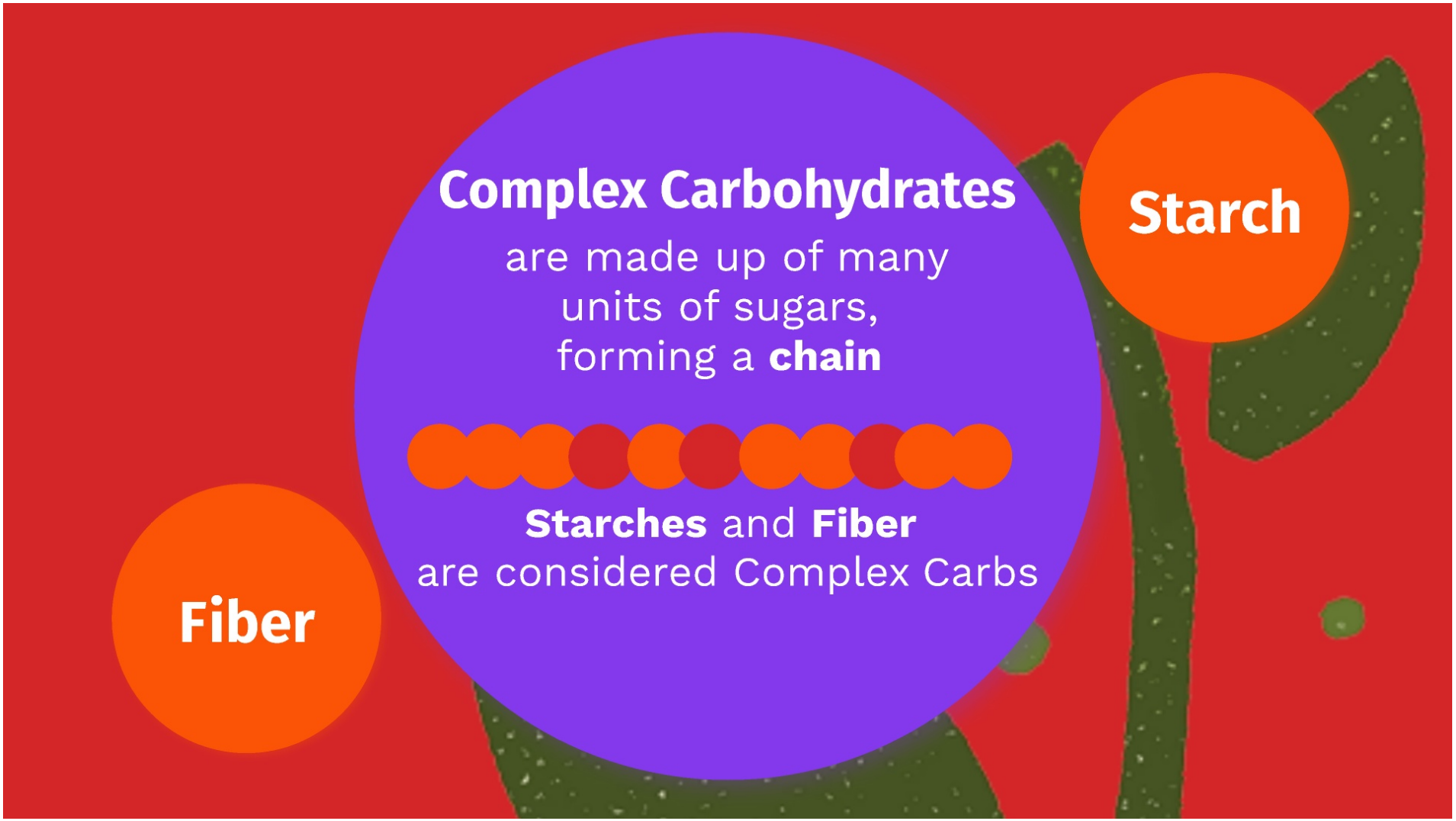
3. Galactose

It is found in milk. Similar to glucose but less sweet.


These Foods have
simple sugars in the form
of Monosaccharides
Honey
Fruit
Milk


Disaccharides
(another form of simple sugar)
Glucose + Galactose = Lactose
Glucose + Fructose = Sucrose
Glucose + Glucose = Maltose
Milk
Sugar
Rice


These Foods have simple sugars in the form of disaccharides
Yogurt


Complex Carbohydrates
are made up of many
units of sugars,
forming a chain
Starches and Fiber
are considered Complex Carbs
Starch
Fiber

Starch

Starch is your body's main source of energy!

Starch comes from plant-based foods:

Fruits, vegetables, whole grains, and beans

Fiber

Fiber is a complex carb that does NOT provide energy to your body

BUT it has some very important jobs:

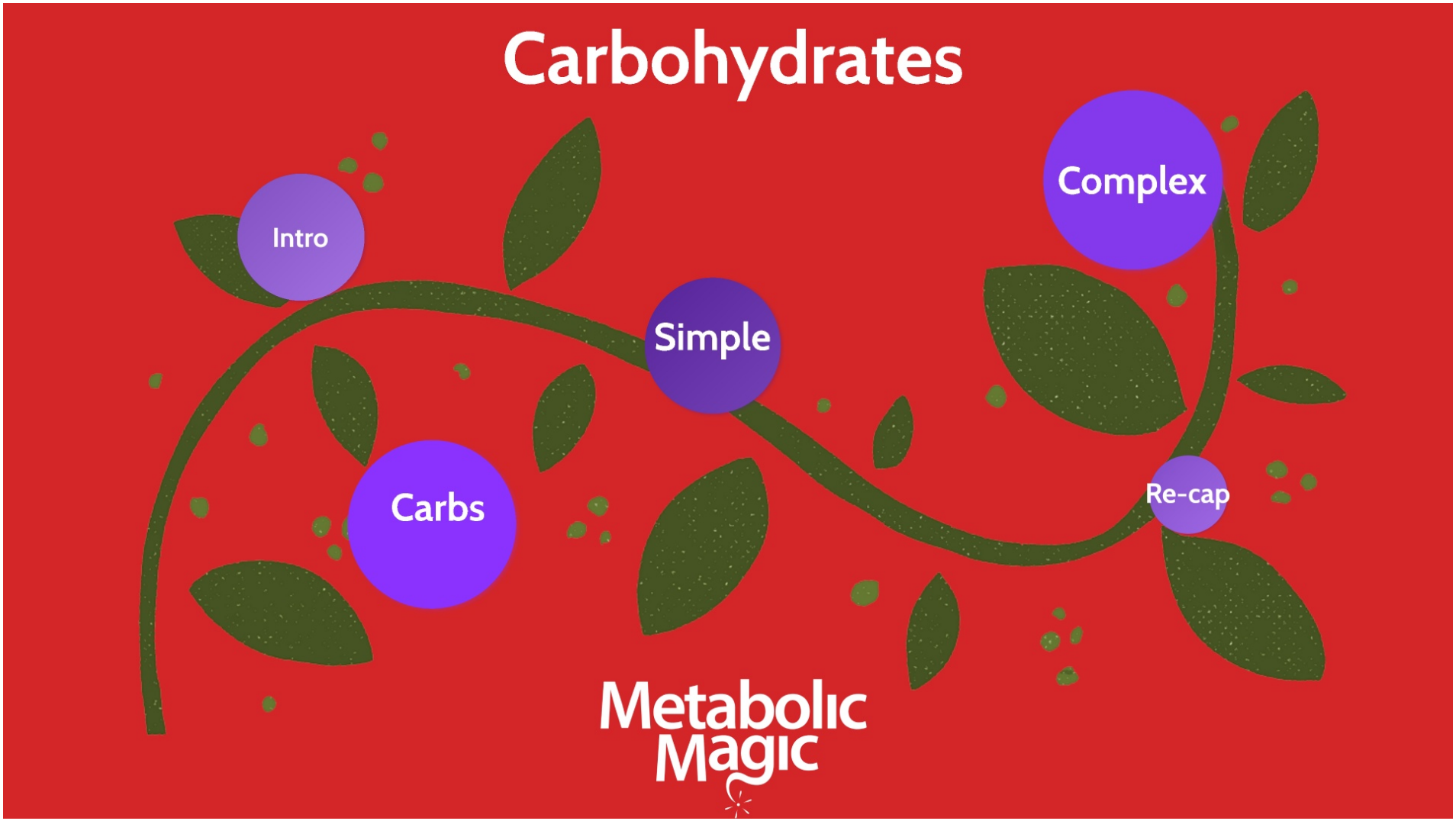
- Reduces blood cholesterol
- Stabilizes blood sugar
- Absorbs water, keeping you regular
- Helps you feel fuller after eating
- Fiber is like a broom, **sweeping toxins out of your body**

Good sources of fiber:

Fruits
Vegetables
Beans
Lentils
Whole grains
Nuts

Summary

- Everything we do requires energy, and carbohydrates are your main source of energy!
- Carbs can be either **SIMPLE** or **COMPLEX**
- **Simple carbs** provide quick energy
  - Fruits, milk, cake and soda are some examples.
- **Complex carbs** provide slow and steady energy
  - Bread, beans, and starchy vegetables such as potatoes are a few examples.
- **Fiber** is a type of complex carbohydrate that does not provide energy but has other jobs. It's "nature's broom," sweeping toxins from your body.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