Macronutrients

FATS/LIPIDS

long-term fuel, build cell membranes & hormones

DETAILS
- energy stored in fatty acid chains, typically attached to glycerol molecule
- 9 calories per gram
- can be saturated, polyunsaturated, or monounsaturated
- processed oils are damaging (whereas whole food fats are essential)

METABOLIC OPTIONS
- burned for fuel
- used to build membranes/hormones
- stored in adipose cells

SOURCES
- animals & fish
- dairy & eggs
- nuts & seeds
- olives
- coconut
- avocado
- processed oils: corn, soy, canola, etc*

PROTEINS

build structures, hormones, neurotransmitters, & enzymes

DETAILS
- composed of amino acid (AA) chains (polypeptides)
- 4 calories per gram
- can be complete (all AAs, animal sources) or incomplete (plant sources)

METABOLIC OPTIONS
- used to build structures
- can be converted to glucose if needed
- AAs not stored (extras excreted)

SOURCES
- animals & fish
- dairy & eggs
- plants: nuts & seeds
- beans & legumes, grains

CARBOHYDRATES

quick fuel

DETAILS
- energy stored in monosaccharide chains or rings
- 4 calories per gram
- can be simple (sugar) or complex (fiber)
- carb tolerance is bioindividual
- processed sugar is damaging (whereas whole food sugars are not)
- glucose consumption impacts blood sugar and insulin levels

METABOLIC OPTIONS
- burned for fuel
- stored as glycogen (muscles & liver)
- converted & stored as fat

SOURCES
- grains
- beans & legumes
- vegetables (esp starchy)
- fruit
- dairy (lactose)
- natural sweeteners: honey, maple syrup, natural sugars, etc
- processed sugars: corn syrup, cane sugar, sucrose, etc*

**minimize consumption*

Think of macros like a campfire: carbs burn like fire-starters, fats burn like logs, and proteins are like the stool (best for structure/function, but can be burned if needed).