

PRIORITIZE YOUR PROTEIN

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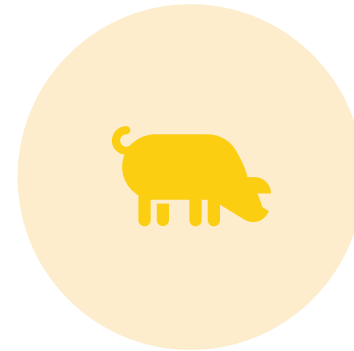
PRIORITIZE YOUR PROTEIN



WHY IS PROTEIN
IMPORTANT?



PROTEIN VS
QUALITY PROTEIN

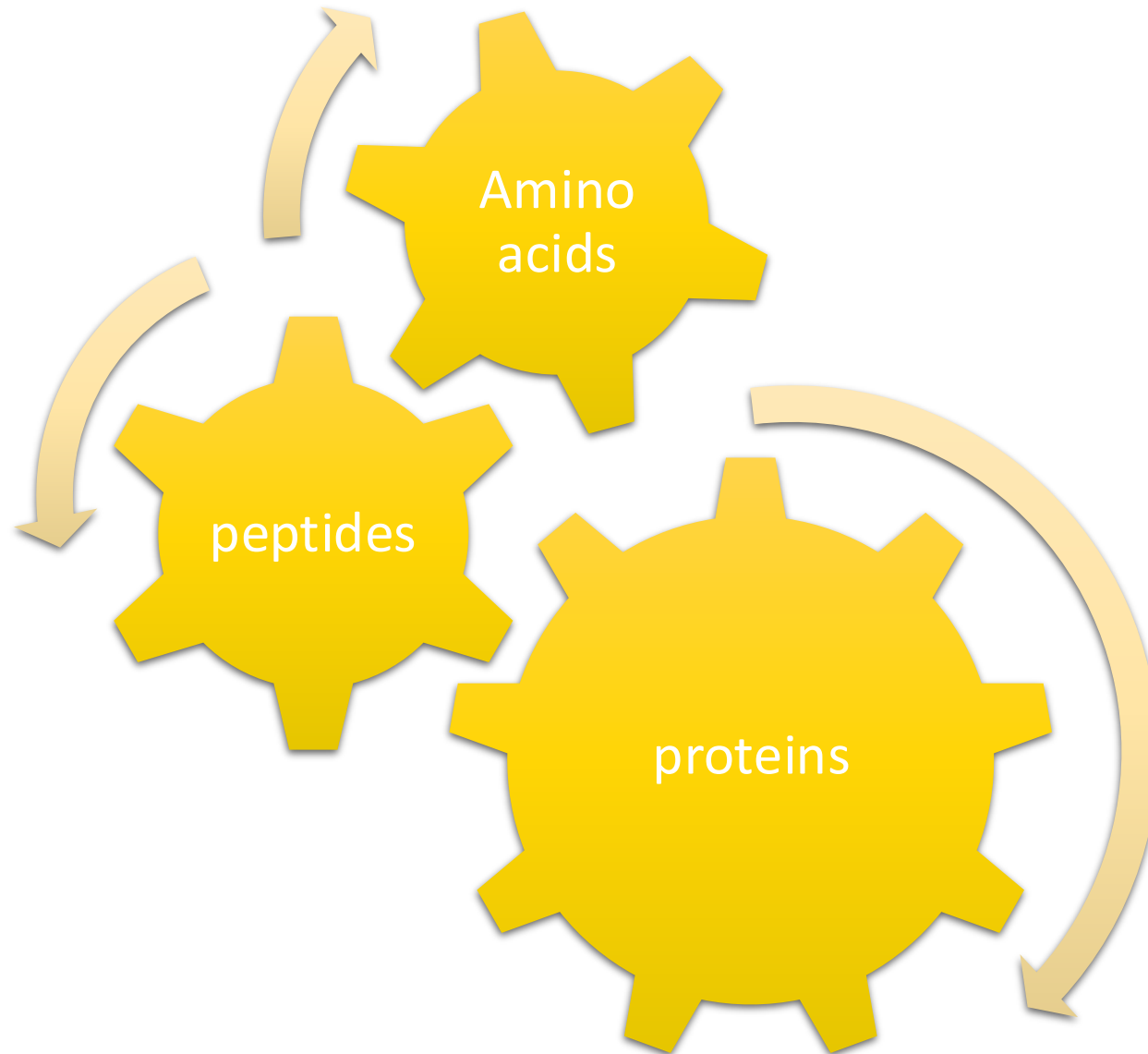


SOURCES OF
PROTEIN

WHY IS PROTEIN IMPORTANT?

- Humans are 60% water and half of the remaining 40% is protein!
- Muscle, ligaments, tendons
- Bones, fingernails, hair
- liver, brain, heart
- Hormones
- Immune system
- neurotransmitters





QUALITY PROTEIN

20 amino acids

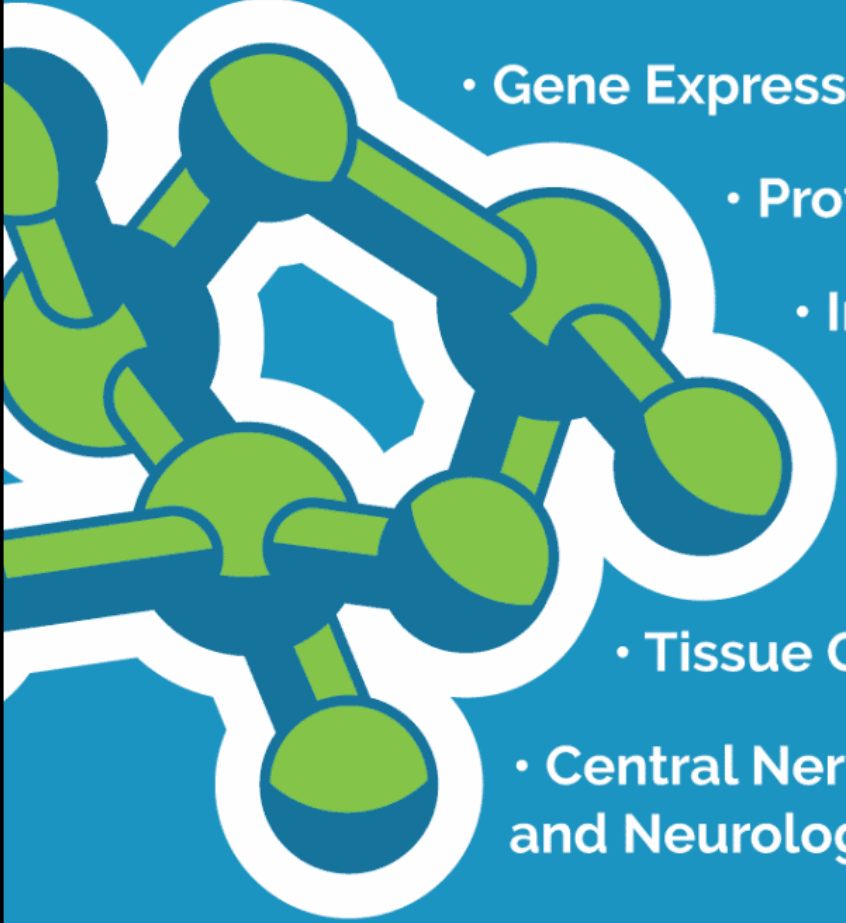
9 essential AA

11 Nonessential AA

The amounts of certain essential AA are critical to the quality of the protein

MPS=muscle protein synthesis

THE MANY FUNCTIONS OF AMINO ACIDS

- 
- Gene Expression Regulation
 - Protein Synthesis
 - Immune Health
 - Detoxification
 - Gut integrity
 - Tissue Growth and Repair
 - Central Nervous System and Neurological Function



WHY IS PROTEIN SO IMPORTANT?

Protein is involved in almost every major function of our bodies

The 9 Essential Amino Acids & Their Functions



Histidine supports the central nervous system, enhances immunity, and assists in tissue repair, maintenance of pH, and synthesis of hemoglobin.



Isoleucine promotes muscle recovery and repair, aids in blood clotting and wound healing, and regulates energy and blood sugar levels.



Leucine enhances muscle recovery and stamina, stimulates growth hormone production and the release of insulin, promotes growth and repair of bone tissue, and speeds wound healing.



Lysine assists muscle tissue growth and repair, aids in the synthesis of collagen and the absorption of calcium, boosts the immune system, and helps ward off viruses.



Methionine initiates protein synthesis, detoxes the body of lead and mercury, helps the liver metabolize fats, assists in the absorption and bioavailability of selenium and zinc, and acts as one of the main sources of sulfur in the body.



Phenylalanine acts as the precursor of tyrosine and plays a potential beneficial role in depression, vitiligo, multiple sclerosis, Parkinson's disease, attention deficit-hyperactivity disorder, and rheumatoid arthritis.



Threonine acts as a precursor of serine and glycine, helps form collagen and elastin, assists in preventing fat accumulation in the liver, helps build strong bones and tooth enamel, promotes wound healing, and helps maintain the integrity of gastrointestinal mucosa.



Tryptophan acts as a precursor of niacin as well as serotonin, which assists in promoting self-esteem, helps prevent heart disease and osteoporosis, and aids in the regulation of sleep, appetite, vasoconstriction, vasodilation, memory, and learning.



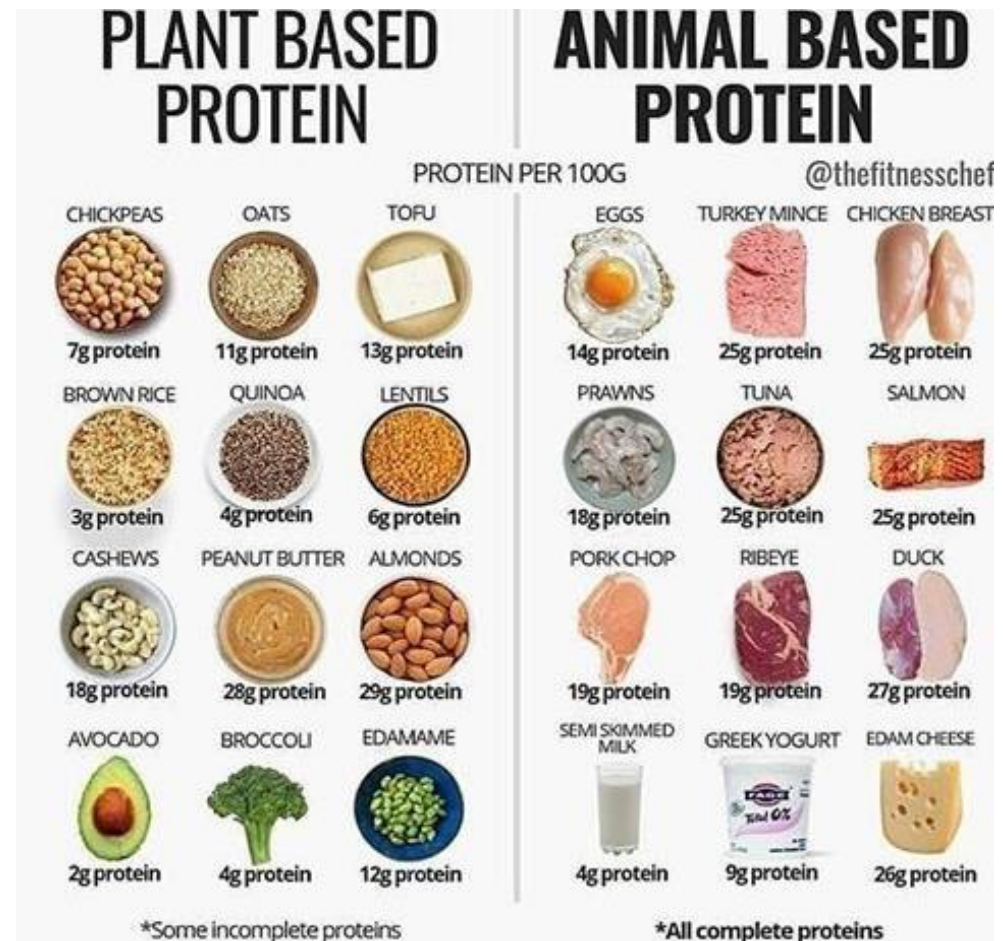
Valine helps maintain the body's nitrogen balance, supports the immune and central nervous systems as well as normal cognitive function, and aids in muscle metabolism, tissue repair, and blood sugar control.

WHY IS PROTEIN IMPORTANT?

EAA are critical for our bodies to function optimally

SOURCES OF PROTEIN

- Complete Proteins- contain all 9 EAA
- Incomplete Proteins-don't contain all 9 EAA
- RDA recommends 0.8
- Exercise demands more protein intake
- Timing protein intake is important
- 30 grams of complete protein 3 times a day
- Digestive enzymes, Betaine HCL, ACV aid in the digestion of protein

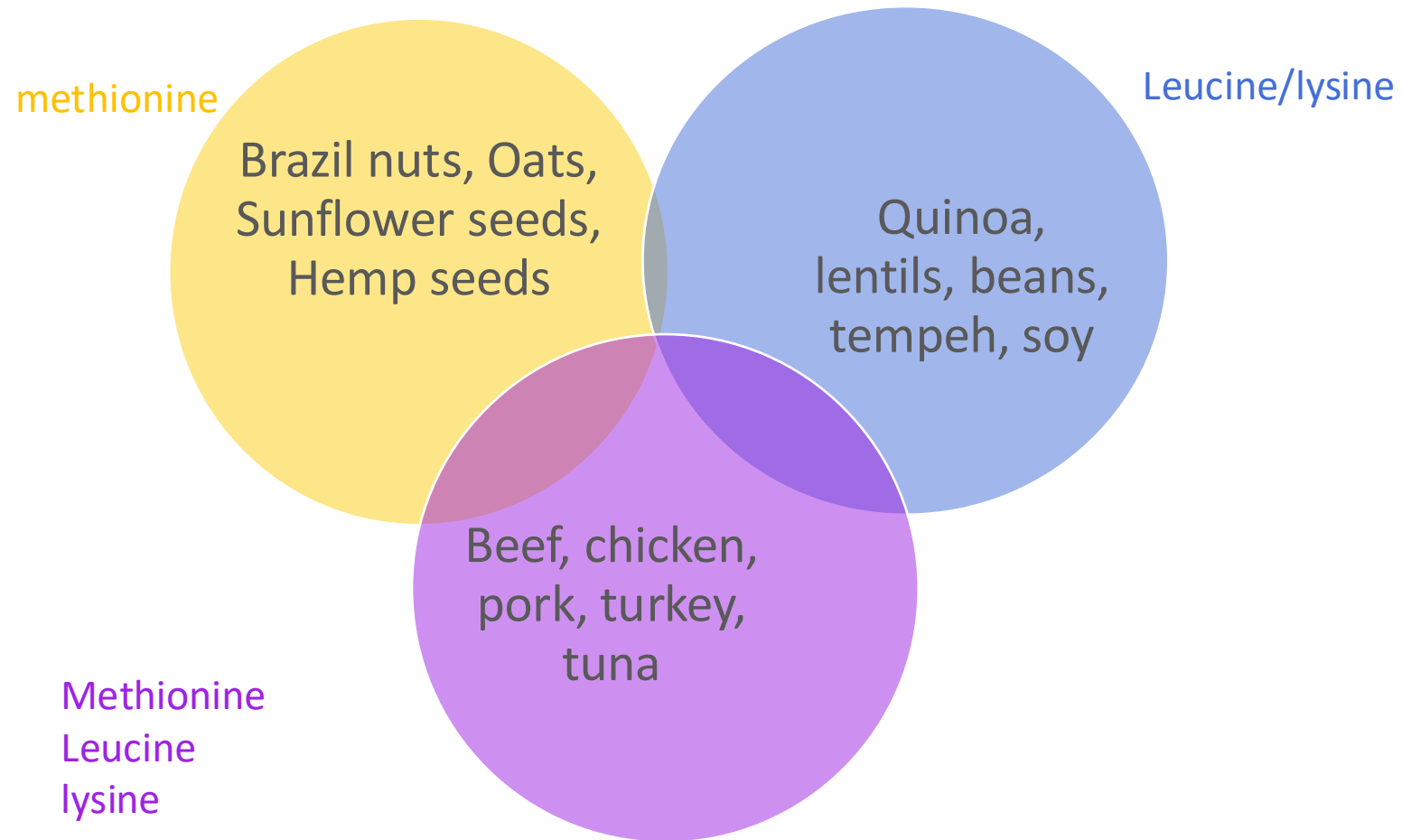


SOURCES OF PROTEIN

- **High quality protein**-sources of protein that provide all 9 EAA in quantities sufficient to stimulate and support protein synthesis
- **MPS**-muscle protein synthesis
- 3 AA enhance protein quality-Leucine, methionine, lysine
- Leucine is the KEY to active mTOR which activates MPS
- Children 0.8 grams (5-10 grams high quality protein) stimulates mTOR
- Young adults-1.7 grams
- Older adults-2.5 grams (30 grams high quality protein each meal)
- Under stress?-you'll need more per meal

Food 1 oz	Methionine g	Leucine g	Lysine g
Ground turkey	0.140	0.385	0.455
beef	0.260	0.793	0.843
Chicken breast	0.179	0.485	0.549
Large egg	0.106	0.305	0.256
White beans	0.980	0.522	0.499
tofu	0.350	0.210	0.182
tempeh	0.490	0.400	0.254

FOOD PACKED WITH 3 AA TO BUILD MUSCLE



PROTEIN POWER MOVES

- Eat your protein first-this will make sure you get you AA's that drive MPS and you'll feel fuller faster
- Before you attend an event with unhealthy choices-drink a 20 gram protein shake
- Replace salty, crunchy snack foods with protein chips or nuts
- Balance a low protein meal by throwing a packet of AA into your water. This will not only activate your muscle metabolism but will lower a blood sugar spike
- Meal prep
- Protein prioritizing-continue to eat until taken in adequate quantity of protein even if it means overeating carbs and fats
- Thermogenesis-protein has a protective effect against fat gain

BENEFITS OF PRIORITIZING PROTEIN

- Balanced blood sugar
- Increased energy
- Mental clarity
- Decreased body fat
- Improved body composition
- Reduced cravings



THANK YOU

