*September 2023*

# PROTEIN

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# Today's Objectives

(1) To review protein’s role in our health.

(2) To provide individuals with an understanding of why *excessive* protein intake could potentially be harmful to our health.

(3) To help identify our estimated individual protein needs.

(4) To provide tips for meal planning to meet protein (and other nutrients) needs.

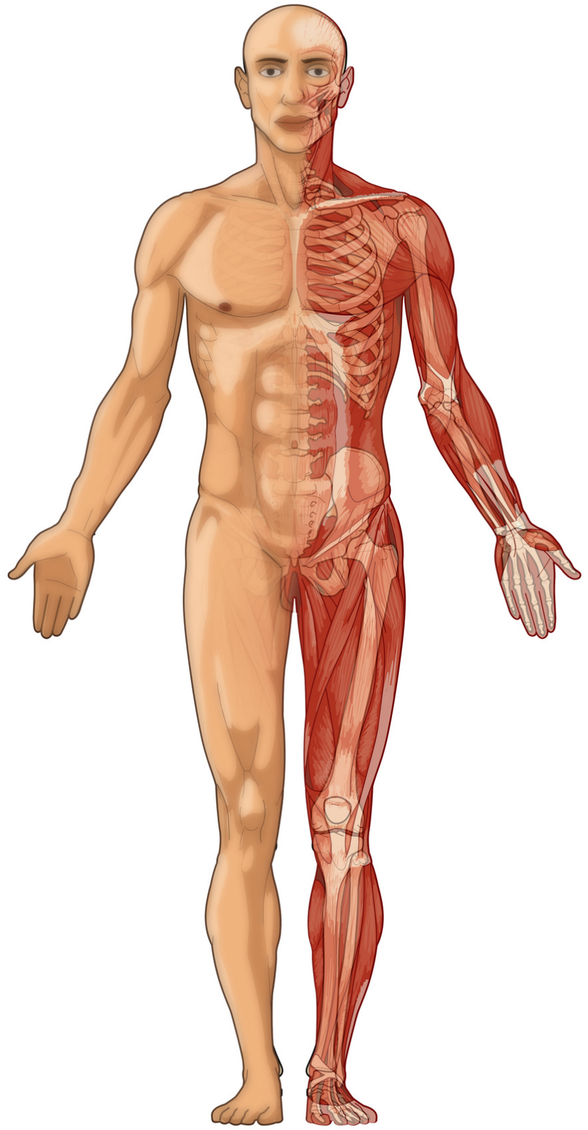
# Protein

Required for building, maintenance and repair of tissues within our body.

# Protein & Human Health

- Component of muscle and bone
  - Essential for the body’s structure & movement

- But also…
  - Protect health (i.e. antibodies)
  - Aid in reactions (i.e. enzymes)
  - Coordinate activities (i.e. hormones)
  - Work as carriers (i.e. oxygen)
  - Cell maintenance & replacement
  - Building new cells (especially infancy, childhood, pregnancy)



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Only 3% of Americans don’t get enough protein.
Only 3% of Americans meet fiber recommendations.

# Bone Health & High Protein

High protein diets (particularly high in animal products) increases calcium losses through the urine.

Include calcium-rich plant-foods such as: dark leafy greens, vegetables, beans, nuts and seeds.

# Cancer & Protein

Recent studies suggest that lower protein diets may reduce the risk of cancer development.

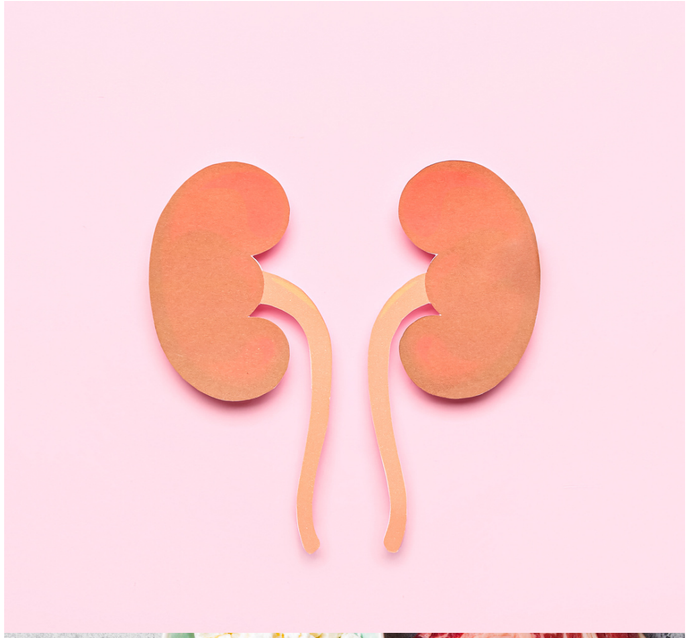
Per a 2014 study, adults between 50 and 65 years old, who followed a diet high in protein were four times as likely to die from cancer compared to those consuming lower amounts of protein.

These subjects also had a 75 percent greater mortality risk overall.

# High Protein & Kidneys

When protein is consumed, nitrogen is released into the bloodstream or is digested and metabolized. Nitrogen must be detoxified by the kidneys.

**Long-term, high protein consumption increases an individual's risk for reduced kidney function.**



# Saturated Fat & MS

Higher intake of saturated fat (such as found within meat, milk, butter, and eggs) is associated with a higher prevalence of MS.

Perhaps related to cholesterol concentrations and conversion of fatty acids to EPA & DHA.

# Protein Recommendations

per kg of body weight

- Healthy Adult - 0.8 g
- Older, Healthy Adult - 1.0 - 1.2 g
- Pregnancy
  - 1st Trimester - 0.8 g
  - 2nd & 3rd Trimester - 1.1 g
- Cancer & Chronic Disease - 1.0 - 1.5 g
- Menopause - 1.2 g/kg

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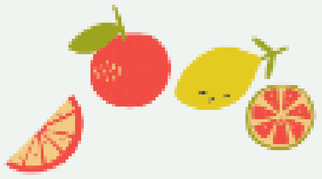
# **Calculating Protein Needs:** An Estimation

Weight in pounds / 2.2 = Weight in kg

Weight in kg x Protein Estimation = Grams of Protein/Day

140 lb / 2.2 = 63.6 g protein per day



**FRUIT**


EXTRAS - FATS



| NON-STARCHY VEGGIES | LEGUMES | WHOLE GRAIN/ STARCHY VEGGIE |
|---|---|---|
| Dark, leafy greens | Black Beans | Brown Rice |
| Broccoli | Tofu | Quinoa |
| Cauliflower | Tempeh | Barley |
| Brussel sprouts | Edamame | Farro |
| Cabbage | Kidney Beans | Sweet Potato |
| Carrots | Lentils | Any Potato |
| Green beans | Navy Beans | Butternut Squash |
| Summer squash | Chickpeas | Acorn Squash |

# Sample Day - 98 g

## 180 lb woman in menopause

***Breakfast: PB Oats with Berries***

½ cup (dry) rolled oats - 5 grams protein
1 cup unsweetened soy milk - 7 grams protein
1 tablespoon ground flaxseed - 1.5 grams protein
1 tablespoon chia seeds - 2 grams protein
1 tablespoon peanut butter - 8 grams protein
½ cup fresh berries - 0.5 grams protein

(24 grams protein)

***Snack:***
½ cup roasted, crispy chickpeas - 7 grams protein

# Sample Day - 98 g

## 180 lb woman in menopause

***Lunch: Salad with Vegan Ranch & Black Beans + Toast***

1 cup spinach - 1 gram protein
1 cup romaine lettuce - 0.5 grams protein
½ cup black beans - 7.5 grams protein
½ cup cooked quinoa - 4 grams protein
¼ avocado - 1 gram protein
½ cup mixed non-starchy vegetables - 2 grams protein
1 tablespoon hemp hearts/seeds - 3 grams protein
1 tablespoon nutritional yeast - 4 grams protein
1 serving Nora Cook's Vegan Ranch Dressing (Cashew Based) - 5 grams protein
1 slice, Angelic Bakehouse sprouted bread - 5 grams protein
1 small apple - 0.5 grams protein

(33.5 grams protein)

# Sample Day - 98 g

## 180 lb woman in menopause

***Snack:***
1 ounce almonds - 6 grams protein
1 tablespoon Hu dark chocolate baking gems - 1 gram protein

***Dinner: Grain Bowl with Mixed Roasted Veggies***

1 cup cooked brown rice - 5 grams protein
1 cup roasted broccoli & cauliflower - 2 grams protein
½ cup tofu, firm - 12.6 grams protein
1 servings Nora Cooks Vegan Queso Blanco - 4 grams protein
1 serving Vegan Parm - 2 grams protein
1 peach - 1 gram protein

(26.6 grams protein)


Grab this PDF by clicking here.

# Today's Key Takeaways

## THINGS TO WORK ON

- We *need* protein, but not as much as you might think.
- Estimating your individual needs may be helpful.
- Aim to make most of your protein be sources from plants (vs. animal). If animal source, aim for low in cholesterol and saturated fat.

# Thank You

## Q&A OPPORTUNITY

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