



## Lesson 4—The Power of Protein

### Introductory Habit for the Week

Welcome to Lesson 4, The Power of Protein! In this lesson, you are going to learn all about dietary protein: What it is, why you need it, why it's different and unique compared to carbohydrate and fat foods, and how it boosts your metabolism to help you fight unnecessary body fat. You'll also learn all about vegetarianism and how you can still get adequate protein in your diet if you choose to omit animal sources of protein. Regardless of the types of protein you choose to eat, you will learn why you want more dietary protein on your plate versus less and how it can help you achieve a healthy, lean body.

***For this week, your nutrition habit is to have a protein source at every meal or snack you eat during the day.***

You've probably heard more than once that foods high in protein, such as fish and chicken, are helpful for building and maintaining lean muscle mass and boosting your metabolism. Yet the thought of eating chicken and steak all day long, in order to get protein at every meal, makes you want to gag. Plus, the price of meat and fish can be quite high, and your wallet can afford only so many luxuries.

Here's some good news: You don't have to eat meat, fish, or poultry with EVERY meal and snack. Instead, you can make vegetable-based proteins, such as hummus and nuts, a large part of your healthy eating plan and still end up looking fit and fabulous. However, unless you're a vegetarian, try not to eat these vegetable-based proteins every time you eat, because you won't be able to meet your goal intake of 30 to 40% of your calories from protein-based foods, which is what we recommend for a lean body.

### Full vs. Partially Full Proteins

To make it easy, we're going to differentiate the protein containing foods into ones that are FULL of protein and ones that are PARTIALLY full of protein. Foods that are FULL of protein provide most of their calories from protein and much less from fat or carbohydrate.

These foods also tend to contain all the essential and non-essential amino acids that your body needs each day to build and repair all the different proteins in your body. PARTIALLY FULL protein sources have less protein and more carbohydrates and fat, and they tend not to contain all the essential and non-essential amino acids.

**Your goal is to eat at least 3 or more of your meals from the FULL protein list and 2 to 3 of your meals from the PARTIAL protein list.** The guideline is to have at least one of these choices every time you eat, but if you have both in one meal, that's perfect, too.

Another benefit of choosing a variety of protein choices is that this will help you get in a wide variety of healthy fats in your diet. Despite what you've heard, animal fats, such as the ones found in steaks, are not necessarily unhealthy or fattening. Monounsaturated fats, like those found in olive oil, have been shown to be good for the heart. Well, did you know that half the fat found in a steak is the beneficial monounsaturated fat oleic acid? A steak contains 50% monounsaturated fats, 46% saturated fats and 4% polyunsaturated fats. So the fat composition of a steak is actually very good for your body. And since you will be eating grass-fed steak, it will contain a nice portion of the very heart-healthy omega-3 fats, as well.

### Servings and Sources

A typical serving portion of animal proteins such as meat, chicken, or fish is at least 3 ounces. A typical serving of cheese is about 1 to 2 ounces. A typical serving of eggs is 2.

All meat and dairy products should ideally be from grass-fed, pasture-raised, and organic animals. Fish and seafood should be ideally wild-caught. If you can't find these options, make the best choices from what you have available. Try to avoid proteins that are deep-fried, covered in breading, drenched in heavy or sugary sauces, highly processed (hot dogs, generic beef burgers), and loaded with preservatives (nitrates, nitrites). Raw fish (sushi) and raw meats are okay in moderation if they are from reputable sources.

Try to eat fish two times per week if not more, but limit the following high-mercury fish to no more than 1-2 times per month, because mercury is toxic to the body:

HIGH-MERCURY FISH	
HIGH	VERY HIGH
Canned Albacore Tuna Spanish Mackerel Fresh/Frozen Tuna Grouper Marlin Orange Roughy	King Mackerel Swordfish Shark Gulf Tilefish Tuna Sushi/Bluefin Tuna

## Recommended FULL Protein Choices

- ❖ Beef and Bison (Buffalo): 3 ounces cooked = 22-27 grams protein
  - Jerky, nitrate/nitrite free
  - Lean ground
  - Steaks, round
  - Tenderloin, lean
- ❖ Cheese, Low-Fat: 1 ounce = 4-7 grams protein (choose Organic if possible)
  - American
  - Brie
  - Camembert
  - Cheddar
  - Cottage
  - Feta
  - Goat cheese
  - Mozzarella
  - Swiss
- ❖ Eggs, whole, omega-3: 2 large = 12 grams protein
- ❖ Fish: 3 ounces cooked = 21-26 grams protein
  - Catfish
  - Cod
  - Eel
  - Halibut
  - Pike
  - Salmon, canned and fresh
  - Snapper
  - Tilapia
  - Trout
  - Tuna, fresh
  - Tuna, canned in water
- ❖ Lamb: 3 ounces cooked = 22-27 grams protein
- ❖ Milk & Yogurt: 1 cup = 8-24 grams protein (choose Organic Dairy)
  - Cow's Milk
  - Goat's Milk
  - Yogurt, plain (no added sugars or artificial sweeteners)
  - Greek Yogurt, plain (no added sugars or artificial sweeteners)

- ❖ Pork: 3 ounces cooked = 22-27 grams protein
  - Chops
  - Lean Ground
  - Ham, low sodium
  - Tenderloin, lean
  - Canadian style bacon
- ❖ Ostrich: 3 ounces = 30 grams protein
- ❖ Poultry: 3 ounces cooked = 21-26 grams protein
  - Chicken and Turkey: breasts, ground, tenderloins, thighs, wings
  - Duck
- ❖ Shellfish: 3 ounces cooked = 21-26 grams protein
  - Clams
  - Crab, not imitation
  - Lobster, not imitation
  - Mussels, Oysters
  - Scallops, Shrimp
- ❖ Whey protein powder (natural): 1 scoop = 22 to 30 grams protein
- ❖ Rice protein powder: 1 scoop = 22 to 25 grams protein
- ❖ Hemp protein powder: 1 scoop = 22 to 25 grams protein (Hemp Pro 70 from Manitoba Harvest is a great choice)

## Recommended PARTIALLY FULL Protein Choices

- ❖ Falafel: 3 ounces = 11 grams protein
- ❖ Hummus: 1/3 cup = 5 grams protein
- ❖ Beans and Legumes (these also count as recommended carbohydrate sources)

Most beans (black, pinto, lentils, split, etc.) have about 7-10 grams of protein in ½ cup cooked

- Adzuki
- Black
- Black-eyed
- Chickpeas
- Fava
- Great Northern
- Kidney
- Lentils
- Lima
- Navy
- Pink
- Pinto
- Soybeans, whole: ½ cup = 14 grams protein
- Split peas
- Refried beans, organic, no added fats: ½ cup = 6 grams protein
- White

❖ Nuts and Seeds (these also count as recommended fat choices)

- Almonds, considered the king of nuts: ¼ cup = 6 grams protein
- Brazil nuts: ¼ cup = 5 grams protein
- Cashews: ¼ cup = 5 grams protein
- Chia seeds: 2 tablespoons = 3 grams protein
- Flax seeds: 2 tablespoons = 3 grams protein
- Hemp seeds: ¼ cup = 12 grams protein
- Hazelnuts: ¼ cup = 4 grams protein
- Macadamia nuts: ¼ cup = 3 grams protein
- Pecans: ¼ cup = 3 grams protein
- Peanut butter, natural: 2 tablespoons = 7 grams protein
- Pistachios: ¼ cup = 6 grams protein
- Pine nuts: ¼ cup = 5 grams of protein
- Pumpkin seeds: ¼ cup = 8 grams of protein
- Sesame seeds; ¼ cup = 6 grams of protein
- Sunflower seeds: ¼ cup = 6 grams of protein
- Walnuts: ¼ cup = 4 grams of protein

## Quick Protein Recipes

Follow some of these delicious recipes to reach your weekly nutrition habit and boost your protein intake. These three are especially good for snacks or healthful desserts.

### **Peanut Butter Flax Fudge Bars**

#### Ingredients

- 4 scoops chocolate whey protein powder
- 2/3 cup flax meal
- 4 tablespoons chunky natural peanut butter
- 1/4 cup water

#### Preparation

- 1) Mix everything together in a large bowl and start stirring. It may not seem like enough water, but keep stirring, and it will eventually become a sticky blob of dough.
- 2) If you have to, add some water 1 tablespoon at a time to mix everything.
- 3) Divide the mixture into four equal portions. Put each portion into separate pieces of plastic wrap, shaping into a bar within the wrap. It's easier to shape them by laying plastic wrap in one side of a small casserole dish, pressing the dough into the natural shape of the dish.
- 4) Put the bars into the fridge, or store them in the freezer.
- 5) Eat them chilled, frozen, or right out of the bowl if you're feeling impatient.

### **Blueberry Bran Protein Muffins**

#### Ingredients

- 1 cup oat bran
- ½ cup flax meal or ½ cup rolled oats
- 4 scoops whey protein powder, flavor of your choice
- 1 teaspoon cinnamon
- 1/4 teaspoon salt
- 1 ½ teaspoon baking powder

- 3 omega-3 eggs
- 2 tablespoons flax seed oil
- 2/3 cup frozen blueberries
- 1 teaspoon vanilla extract
- 2/3 cup water

### Directions

- 1) Mix the dry ingredients together in a large bowl.
- 2) Mix the eggs, oil, blueberries, vanilla extract, and water in a separate bowl.
- 3) Add the wet ingredients to the dry ingredients.
- 4) Stir until mixed well. Add more water if needed.
- 5) Scoop mixture into a muffin pan coated with cooking spray.
- 6) Bake at 350° F for 10 to 12 minutes. Don't cook these too long or they will come out hard and very dry.
- 7) Makes 6- 8 medium muffins.

## **Carrot Apple Oat Protein Muffins**

### Ingredients

- 6 egg whites plus one Omega-3 Egg
- 2 cups oatmeal plus ¼ cup oat bran
- 1/3 cup shredded carrots
- 1/4 cup diced tart green apples
- 1 tsp vanilla
- 2 tsp ground cinnamon
- 1 Tbsp maple syrup
- ½ tsp sea salt

### Directions

- 1) Preheat oven to 350° F.
- 2) Combine eggs and beat until mixed.
- 3) Combine remaining ingredients until well blended.

- 4) Drop 1/4 cup scoops onto a non-stick baking sheet sprayed with cooking spray. Alternatively, use paper muffin cups so you have less mess to clean up.
- 5) Bake for 15 to 20 minutes or until lightly brown.
- 6) Makes 6 muffins.

## Super Smoothie Recipes

These smoothies contain a full serving of protein as well as fruits, fiber, and healthful fats. In addition, they are quite delicious!

Simply blend all listed ingredients and enjoy!

**Chocolate Cherry Bliss** – 8-oz. unsweetened chocolate coconut milk, 1 scoop chocolate whey protein, 1 cup frozen dark sweet cherries, 1 tbsp milled flax seeds, 1 tbsp cacao nibs, 2 tbsp walnuts

**Apple Cinnamon & Vanilla Smoothie** – 8oz unsweetened vanilla coconut milk, 1 scoop vanilla whey protein, 1 Gala apple cored and sliced, 1 tbsp milled flax seeds, 2 tbsp coconuts, cinnamon to taste

**Chocolate, Peanut Butter, and Banana Smoothie** – 8oz unsweetened chocolate coconut milk, 1 scoop chocolate whey protein, 1 banana, 1 tbsp milled flax seeds, 1 tbsp cacao nibs, 1 tbsp natural peanut butter, ice cubes

**Vanilla Pumpkin Pie** – 8oz unsweetened vanilla coconut milk, 1 scoop vanilla whey protein, ½ cup canned pumpkin, 1 tbsp milled flax seeds, 2 tbsp walnuts, cinnamon and nutmeg to taste, ice



## Example Daily Protein Intake

Not all meals below need to be eaten. These are simply suggestions for a variety of delicious and nutritious ways to reach your daily protein requirements.

### Morning/Breakfast

- 1 slice sprouted grain bread (toasted) topped with almond butter or 1 cooked egg

WITH

- 1 Super Smoothie (see recipes)

OR

- 1/3 cup oatmeal (cooked) mixed with 1 scoop whey protein and walnuts and raisins

OR

- 2 eggs with 2 egg whites with spinach (cooked with eggs), topped with salsa and eaten with 1 small apple

### Mid-Morning Snack

- Large handful(s) mixed nuts with raisins

OR

- Plain Greek yogurt with slivered almonds and thawed out frozen, wild blueberries

### Lunch

- Mixed greens salad with plenty of chicken (or salmon, turkey, etc.), tomatoes, cucumber, carrots, olives, canned garbanzo beans, and olive oil/vinegar dressing
- Eat with 1 fresh fruit if desired

### Mid-Afternoon Snack

- Carrot Apple Protein Muffin (see recipe above)

OR

- Chicken breast dipped in hummus with veggies

**Dinner/Supper**

- Salmon with sautéed squash and a large salad topped with black beans, carrots, tomatoes, cucumber, olive oil, and balsamic vinegar

OR

- Broiled salmon with steamed broccoli and a side salad

**Evening Dessert/Snack (if desired)**

- Fresh mango with vanilla whey protein (mixed in water) and cashews

OR

- Peanut Butter Fudge Flax Bar (see recipe)

**Protein Tracking Sheet for This Week**

Please use the following table to record your intake of protein (from FULL or PARTIALLY FULL protein choices) with each meal and snack you consume each day. Aim to consume one of either type of protein every time you eat.

<b>In Each Meal Box During the Week, Record the FULL or PARTIALLY FULL PROTEIN You Ate (mark “F” for full, and “PF” for partially full). If you didn’t eat either, put an X in the box.</b>						
	<b>Monday</b>	<b>Tuesday</b>	<b>Wednesday</b>	<b>Thursday</b>	<b>Friday</b>	<b>Saturday</b>
<b>Breakfast</b>						
<b>Snack</b>						
<b>Lunch</b>						
<b>Snack</b>						
<b>Dinner</b>						