Module 10, Lesson 9 Handout:
Macro Basics

It's important for most people to eat a balanced diet with a mix of carbohydrates, protein and fat and this is especially important for athletes. Carbohydrates are the body's main source of energy and the preferred source of fuel. Protein is important for building and maintaining muscle and for muscle recovery. Fat can be used as energy during prolonged, low-intensity aerobic exercise in combination with glucose and it's also important for recovery due to its anti-inflammatory properties.

Though counting macros isn't always necessary (or easy!), some athlete clients, especially those with serious training and competition goals, might be really into it and find it helpful for staying on track with their nutrition plan. Daily intake can be tracked by counting macronutrients through a food journal or app.

Let's go through how to do it and then look at an example client.

To determine the target amounts of carbohydrate, protein and fat grams a client should eat per day, start by calculating estimated daily caloric needs, which will vary by account age, gender and activity level. You can use an online calculator for this.

For athletes, the general recommendation for macronutrients are:

- 45 - 65% of calories from carbohydrate
- 20 - 35% of calories from fat
- 10 - 35% of calories from protein

Take the total daily caloric needs and figure out the percentage of calories from each macronutrient.

Next, do some division. There are 4 calories per gram of carbohydrates and protein and 9 calories per gram of fat. This will give you the number of grams you want to aim for from each macronutrient. If you use a range, you can stick with a target that's in the middle, with a little wiggle room.

Here's an example:

1. **Start with caloric needs**

   Example client calculated caloric needs: 2400 calories per day

2. **Then do percentages of calories from each macronutrient**

   - 1,080 - 1,560 calories from carbohydrate
   - 480 - 840 calories from fat
   - 240 - 840 calories from protein

3. **Next, divide calories by grams**

   Carbohydrate: 1,080 calories / 4 calories per gram = 270 grams

   1,560 calories / 4 calories per gram = 390 grams

   Fat: 480 calories / 9 calories per gram = 53 grams

   840 calories / 9 calories per gram = 93 grams

   Protein: 240 calories / 4 calories per gram = 60 grams

   840 calories / 4 calories per gram = 210 grams

4. **You can use a target number in the middle of these ranges and allow for a little wiggle room, keeping in mind this is not a perfect science. Work with the client to adjust targets as needed based on the individuals progress and experience**

   - Targets for example client:
   - Carbohydrate: 330 grams
   - Fat: 73 grams
   - Protein: 108 grams

The client can use these numbers as their targets for the day and track their macronutrient intake in their food journals or through an app. Yes, this does take more time and effort than simply jotting down what you're eating, so this method is typically recommended for clients who *need* to be *this* specific for their goals.

The good thing about counting macros is that the quality of what you eat matters. You're forced to choose somewhat higher quality, nutrient dense foods when you're counting your macros when compared to simply counting calories. After a while, the client might get the hang of their meal plan and not need to count anymore.