

Disclaimer: This Guide is not specific medical advice, and should not be used in place of treatment from a qualified medical professional. Neither John Dowless B.S. or Cultivate Performance shall be held liable for any damages caused by dietary changes.

## HOW MUCH SHOULD I BE EATING?

### **STEP 1**

Determining how much to eat each day can be challenging for athletes. Most athletes are highly active, and need to consume a relatively large amount of calories to fuel their bodies.

The first step in determining how much you need to eat is to calculate your Resting Metabolic Rate (RMR). Below is a link to an online calculator to help you determine your RMR.

## **CLICK HERE**

### STEP 2

The second step is to take the number you calculated as your RMR & multiply it by your activity factor.

Activity factor:	1
Sedentary = 1.2 (little or no exercise)	ħ
Lightly active = 1.375 (light exercise/sports	1
1-3 days)	1
Moderately Active = 1.55 (moderate	
exercise/sport 6-7days)	
<b>Very Active</b> = 1.725 (hard exercise everyday or exercising 2x/day)	
Extra Active = 1.9 (hard exercise	
2+times/day; training for long endurance event)	

Stress Factor: Minor Injury (ankle sprain, dislocation) = 1.2 Minor surgery = 1.2 Clean wound, bone fracture = 1.2 Infected wound = 1.5 Major trauma (UCL surgery) = 1.5 Severe Burn = 1.5



## EXAMPLE ATHLETE

Gender: Male Age: 15 Height: 5ft, 8in Weight: 160lbs

RMR = 2009 kcal/day

Most athletes will fall in the **lightly active or moderately active category**. For many athletes, this number will be above what they are already eating. This number is a good measurement of the amount of calories you will need to perform at your best and properly recover.

Activity factor: lightly active (RMR x 1.375)

**Caloric needs**: 2009 x 1.375= **2,762 kcal/day** 

#### **Goal**: Gain weight

**New daily caloric goals**: 2,762 kcal/day + 500 calories = 3262 kcal/day

Use the **My Fitness Pal app** to track your calorie intake. This number is just a guide to get into a routine. **Once you understand** how much food you need to be eating to reach your goals you don't need to continue to track calories daily.

X

# STEP 3 (OPTIONAL)

## GAINING/LOSING WEIGHT

If you have a goal to gain or lose weight, you will need to slightly change this number to reach your goals. It's important that you don't go more than 300-500 calories outside of your caloric needs.

Goal- Gain Weight: add 300-500 calories

Goal-Lose Weight: subtract 300-500 calories

## WHAT SHOULD I BE EATING?

Now what exactly should I be eating within these calories? One way to break-up food content is by macronutrients. There are 3 types of macronutrients: **Protein, Fat, and Carbohydrates**. Each of these are very important to a quality diet. Here is list of quality choices for each group:

## FAT

PROTEIN

## PROTEINS

We all know protein helps repair and build muscle, but the body also uses amino acids. which it aets from protein, to help produce hormones and digestive enzymes.

#### Meats:

#### Fish:

Salmon\*

• Tuna

• Shrimp

• Tilapia

Cod

- Ground Beef
- Steak
- Chicken
- Ham
- Turkey
- Pork
- Bison

#### **Animal products:**



• Whole Fat Dairy Products (yogurt\*, milk, cheese, butter)

\*eating fermented foods daily has been shown to aid in digestion



## CARBOHYDRATES

Carbs help fuel our bodies for long athletic events. Carbs are the main source of energy for many athletes.

#### Vegetables:

- Broccoli
- Squash
- Potatoes
- Corn
- Carrots
- Collard greens
  Bananas
- Peppers
- Brussel sports
  Cherries
- Tomatoes
- Green beans Avocado
- Beats
- Asparagus

#### Fruit:

- Apple
- Grapes
- Dates
- Oranges
- Kiwi
- Mangoes
- Pomearanate

#### \*Omega-3s play crucial roles in brain function. arowth and development, & inflammation.

## FAT

Many athletes do not consume enough quality fat sources. Consumption of quality fats helps to support immune function.

- Peanuts
- Peanut butter
- Avocado
- Coconut
- Cashews
- Pecan
- Pistachios
- Olive oil (extra virgin)
- Coconut oil
- Avocado oil

# IN GENERAL, I RECOMMEND MOST ATHLETES EAT:

20-40% PROTEIN 20-40% FAT 40-60% CARBS

As you can see, these are very wide ranges. Here are a few things to consider when determining your macronutrient needs:



Chia seeds

Sesame seeds

- Almonds

- Walnuts

## Oils:

Locally grown organic honey is a great sweetener to add to your diet.

- Berries





CARBS





#### Grains:

- 100% whole grain bread and bread products (pasta, bagels, muffins, wraps, etc.)
- Oats
- Barley
- Rice
- Quinoa
- Beans



Injuries: Injured athletes need to increase protein consumption. Protein is needed to help heal wounds and rebuild tissue. If adequate amounts of protein are not consumed within the diet, the body will begin to break down muscle to get the nutrients it needs to heal properly. Every athlete should be getting at least 1.4 to 2.0 grams of protein per kg of body weight per day. Injured athletes may need to consider consuming 2.0-3 grams of protein per kg of body weight per day.

Extended time spent practicing/ training or in-season: When athletes are in season or they are spending an extended period of time practicing & training, they may want to consider increasing carbohydrate intake. Having a sufficient amount of carbs to fuel long periods of exercise can be very important for athlethes.



**Variability:** Having variety in your diet is very important. Eating the exact same thing everyday is unsustainable. Some days you might have have higher amount of one macronutrient than others, and that is OK.

Example: 73kg athlete (160lbs) 73x 1.4- 2.0= 102- 146 grams of protein per day

## **TOP 3 RULES TO LIVE BY WHEN PICKING** WHAT FOOD TO EAT

## ONE

#### Eat real foods & LIMIT PROCESSED FOODS

If you couldn't eat it 100 years ago, you probably shouldn't be eating it now. This includes the vast majority of fast-food restaurants. Purchase foods as close as possible to their natural state. Take the time to buy these items from the grocery store and cook them on your own. Many of the quality food choices listed above are over processed by fast-food restaurants and can lose much of their nutritional benefit.

> Always read the labels on foods and try to limit the amount of items you consume containing:

- Sugar and other sweeteners (high fructose corn syrup, glucose, sucrose, dextrose)
- Soy (or Soy lecithin)
- Certain vegetable and seed oils (soybean oil, palm oil, canola oil, corn oil, sunflower oil)

THREE

## Consistency is key

A plan without adherence is just a dream. Set proper expectations from the beginning. You will notice changes in how you feel and perform almost immediately just from eating more clean whole foods. However, it can take months and even years to see real results on the scale. Life will happen, and some weeks you won't be able to stick to your plan. The important part is you have a plan that you can adjust as you go.



#### Plan Ahead

You should have a pretty good idea of what you will be eating for the majority of the week. Taking the time to sit down and plan out 1-2 meals a day for the week can make a huge difference. Here are a few helpful meal prep tips:

- Make a list of the foods you will need, and go to the grocery store before the week begins. It might be hard to gauge exactly how much food you will need to purchase to start, but you will quickly get the handle of it after a few weeks.
- Pre-cook all of your meats. Store all of your meats for the week in containers and add it to your meals as needed.
- Cook meals in large batches. Make 2-5 servings worth of something instead of just 1.
- Use Pinterest to find meal planning recipes.

### \*IF YOU FAIL TO PLAN, YOU PLAN TO FAIL

## THE IMPORTANCE OF MICRONUTRIENTS

Micronutrients are the vitamins and minerals our bodies need to function properly. By eating a variety of fruits and vegetables, we can consume much of our micronutrient needs through our diet. Here is a list of several micronutrients, and why they are important to health and performance:

Magnesium and Potassium are two very important micronutrients for hydration.

Sources of magnesium: almonds, cashews, spinach, avocados, pumpkin seeds and many different types of legumes

**Sources of potassium**: watermelon, banana, coconut water, and potatoes are great options





#### Pasture-raised eggs:

While conventional and free range eggs are still a great option, eggs from pasture-raised chicken contain significantly more nutrients. Pasture-raised eggs are a great source of Vitamins A, D, and E, as well as very important omega 3 fatty acids. Vitamins A, C, D, and E are important for immune support and reducing inflammation.

Bell peppers, carrots, broccoli, orang<mark>es</mark>, berries, cantaloupe, mangos, extra virgin olive oil, avocado oil, etc.

.

Other great sources of micronutrients.



## Whole fat grass fed dairy products (milk, yogurt, butter, etc.):

Whole fat diary products are vastly superior to low fat and fat-free options. Taking away the fat from these products also takes much of its vitamin content. On top of that, whole fat grass fed diary products contain higher amounts of Vitamin A, Vitamin K, and Omega 3's than whole fat grain-fed diary products.

## WHAT SHOULD I BE DRINKING?

There are hundred's of products today advertising as sports drinks that give you energy and keep you hydrated. However, many of these drinks are packed with sugar. These drinks tend to give a very short burst of energy and then a quick crash. High amounts of sugar can actually cause dehydration as well.

You should also avoid "zero calorie" sports drinks. Many of these drinks contain artificial sweeteners like **Sucralose** and **Dextrose**, which have been shown in recent studies to increase glycemic response. Glycemic response is the effect that food or drink has on blood sugar levels after consumption. The "zero calorie" sports drinks aren't much better than their sugar-containing counterparts. As boring as it is, water should be your go to for hydration. Here are some other options:

- Fruit juices with pulp
- Pomegranate juice
- Tart cherry juice
- Coconut water



Adding in ¼ of a teaspoon of Sea Salt or <u>Pink Potassium</u> <u>Cave Salt</u>to your drinking water can also be a great way to make sure you are getting the electrolytes you need.

### **EXAMPLE MEAL PLANS**

))

Here are 3 example meal programs ranging from 3000 to over 4000 calories. Feel free to mix and match these meal meal plans to fit your needs and food preference.

### EXAMPLE MEAL PROGRAM: ATHLETE #1

**Age**: 16

Height: 5"10

Current weight: 150

Goal weight: 180

**Estimated time to reach goal:** 6-9 months

#### • Omlet

- pasture raised eggs : 3
- pork sausage: 4oz
- shredded cheese: ¼ cup
  - Oatmeal
- sprouted rolled oats: 1/2 cup
- sun dried Dates: 5
- strawberries: 1/2 cup

### SNACK

BREAKFAST

 <u>Perfect bar</u> (dark chocolate chip)- 1 In a rush? <u>Overnight oats</u> can be a great premade option.

If your goal is to gain weight, choosing calorie dense foods is a must. Making sure you eat often by snacking between meals is also very important.

Daily calorie goal: - 3200-3500 calories

#### HERE IS A LIST OF FOODS THAT ARE DENSE IN CALORIES:

- nuts & nut butters
- avocados
- whole fat dairy products (milk,yogurt, cheese, etc.)
- beef, pork, or fish
- eggs
- many different fruits (dates, bananas, etc.)
- 100% whole grain bread and bagels
- extra virgin oil olive and avocado oil

### LUNCH

- Chicken breast: 6-8 oz
- Brown Basmati rice: <sup>1</sup>/<sub>2</sub> cup
- Red bell pepper,chopped: 1

### SNACK

- Whole milk yogurt: 3/4 cup
- Blueberries: 1/2 cup

### DINNER

- Tacos
- 100% whole wheat tortillas: 2
- 85% lean ground beef: 6-8 oz
- pineapple: ½ cup
- black beans: ½ cup

### SNACK

- Smoothie
- whole milk: 1 ½ cups
- banana (frozen): 2
- spinach: 2 cups
- mango chunks (frozen): 1 cup

### EXAMPLE MEAL PROGRAM: ATHLETE #2

#### **Age:** 14

**Height:** 5'5

Current weight: 120

Goal weight: 160

**Estimated time to reach** goal: 9-12 months

**Food allergies:** lactose intolerant

Daily calorie goal: 2800-3100

### BREAKFAST

#### • Toast

- <u>Dave's Killer Bread:</u> 2 slices - strawberry jelly (no high fructose corn syrup): 2 tbsp - banana: 1

- peanut butter (no sugar added): 2 tbsp

- Uncured thick sliced bacon: 3 slices
- Orange Juice: 8oz

### SNACK

• Cashews: 1/2 cup

### LUNCH

#### • Burger

- Beef burger patty, 85% lean: 6 oz
- 100% whole wheat bun: 1
- baked white or sweet potato: 1

### SNACK

- <u>Epic Bar (Beef): 1</u>
- **Apple:** 1

### DINNER

- Spaghetti
  Banza chickpea pasta: 4oz
- beef meatballs: 6oz
- tomato sauce: 1 cup
- spinach: 2 cups

### EXAMPLE MEAL PROGRAM: ATHLETE #3

**Age** 18

**Height:** 6'4

Current weight: 220

**Goal weight:** maintain current weight/ fuel body for peak performance

**Caloric needs:** 3800- 4100

**Notes:** recovering from major elbow surgery (increase protein)

#### Pancakes

- Kodiak Power Cakes pancake

mix: 1 cup

- 100% pure maple syrup: ¼ cup
- strawberries: 1/2 cup
  - Eggs: 2
- grated cheese: ¼ cup

### SNACK

LUNCH

#### • Albacore tuna: 1 can

• 42g of protein in one 7oz can!

#### • Burrito Bowl

- chicken breast, chopped: 8oz
- sour cream: 1 tbsp
- Jasmine rice: <sup>3</sup>/<sub>4</sub> cup
- bell pepper: 1
- avocado: ½

### SNACK

#### • Snack Mix`

- almonds: ¼ cup
- pistachios: ¼ cup
- flax seed: ¼ cup
- dark chocolate, 72% cacao:
- 2 tbsp

### DINNER

- Salmon: 8oz
- roasted red potatoes: 2 medium
- yellow squash: 1 medium

### SNACK

- Smoothie
- whole milk: 2 cups
  - Can be substituted for coconut or almond milk if needed
- dates: ½ cup
- almond butter: 2 tbsp

### BREAKFAST

- blueberries: ½ cup
- banana: 1 medium

# REFERENCES

Casa, D. J., Armstrong, L. E., Hillman, S. K., Montain, S. J., Reiff, R. V., Rich, B. S., Roberts, W. O., & Stone, J. A. (2000). National athletic trainers' association position statement: fluid replacement for athletes. Journal of athletic training, 35(2), 212–224.

Dayton, S., Hashimoto, S., Dixon, W., & Lee Pearce, M. (1966). Composition of lipids in human serum and adipose tissue during prolonged feeding of a diet high in unsaturated fat. Journal of Lipid Research, 7(1), 103–111. https://doi.org/10.1016/s0022-2275(20)39591-2

Suez, J., Cohen, Y., Valdés-Mas, R., Mor, U., Dori-Bachash, M., Federici, S., Zmora, N., Leshem, A., Heinemann, M., Linevsky, R., Zur, M., Ben-Zeev Brik, R., Bukimer, A., Eliyahu-Miller, S., Metz, A., Fischbein, R., Sharov, O., Malitsky, S., Itkin, M., ... Elinav, E. (2022). Personalized microbiomedriven effects of non-nutritive sweeteners on human glucose tolerance. Cell, 185(18). https://doi.org/10.1016/j.cell.2022.07.016

Smith-Ryan, A. E., Hirsch, K. R., Saylor, H. E., Gould, L. M., & Blue, M. N. (2020). Nutritional considerations and strategies to facilitate injury recovery and rehabilitation. Journal of Athletic Training, 55(9), 918–930. https://doi.org/10.4085/1062-6050-550-19

Evans, W., & Hughes, V. (1985). Dietary carbohydrates and endurance exercise. The American Journal of Clinical Nutrition, 41(5), 1146–1154. https://doi.org/10.1093/ajcn/41.5.1146

ELLIOT, T. A., CREE, M. G., SANFORD, A. P., WOLFE, R. R., & TIPTON, K. D. (2006). Milk ingestion stimulates net muscle protein synthesis following resistance exercise. Medicine & amp; Science in Sports & amp; Exercise, 38(4), 667–674. https://doi.org/10.1249/01.mss.0000210190.64458.25

Lopez-Bote, C. J., Sanz Arias, R., Rey, A. I., Castaño, A., Isabel, B., & Thos, J. (1998). Effect of free-range feeding on N–3 fatty acid and atocopherol content and oxidative stability of eggs. Animal Feed Science and Technology, 72(1–2), 33–40. https://doi.org/10.1016/s0377-8401(97)00180-6

McAfee, A. J., McSorley, E. M., Cuskelly, G. J., Fearon, A. M., Moss, B. W., Beattie, J. A., Wallace, J. M., Bonham, M. P., & Strain, J. J. (2010). Red Meat from animals offered a grass diet increases plasma and plateletn-3 PUFA in healthy consumers. British Journal of Nutrition, 105(1), 80–89. https://doi.org/10.1017/s0007114510003090