Energy Needs for Wrestlers

Wrestling expends a high level of calories! Do you know how many calories you burn per hour of wrestling (drilling + live wrestling)?

<table>
<thead>
<tr>
<th>Weight (lbs)</th>
<th>1 hour</th>
<th>2 hours</th>
<th>3 hours</th>
<th>4 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>125 lbs</td>
<td>342</td>
<td>684</td>
<td>1026</td>
<td>1368</td>
</tr>
<tr>
<td>150 lbs</td>
<td>408</td>
<td>816</td>
<td>1224</td>
<td>1632</td>
</tr>
<tr>
<td>175 lbs</td>
<td>477</td>
<td>954</td>
<td>1431</td>
<td>1908</td>
</tr>
<tr>
<td>200 lbs</td>
<td>546</td>
<td>1092</td>
<td>1638</td>
<td>2184</td>
</tr>
<tr>
<td>225 lbs</td>
<td>615</td>
<td>1230</td>
<td>1845</td>
<td>2460</td>
</tr>
</tbody>
</table>


Estimating Your Calorie Needs

Maintaining your Weight
A simple formula to determine your calorie needs to maintain your weight while wrestling 2 hours/day:

\[ \text{Weight (lbs)} \times 20 \text{ calories/lb} \]

150 lbs x 20 calories/lb = 3000 calories/day to maintain weight while wrestling

Decreasing Body Fat
If you want to reduce your body weight, you can simply decrease your caloric intake below your maintenance needs by 250-500 calories/day paired with working out. This will yield 1-2 lbs/week of fat loss, which will help to maintain muscle mass and keep your metabolism elevated. Weight loss of greater than 2 lbs/week likely reflects a loss of muscle mass and body water, a decrease in resting metabolic rate, and can result in increased body fat. This will be detrimental to your performance. Weight loss goals should be achieved during the offseason and fine-tuned during preseason.

Increasing Muscle Mass
To gain muscle mass, simply increase your caloric intake by 500-1000 calories/day above your maintenance calorie goals. This should occur during the offseason.

Calorie Guidelines

<table>
<thead>
<tr>
<th>Weight</th>
<th>Total Calories/day to Maintain Weight</th>
<th>Total Calories/day to Lose Weight (reduce by 250-500 calories/day)</th>
<th>Total Calories/day to Gain Weight (add 500-1000 calories/day)</th>
</tr>
</thead>
<tbody>
<tr>
<td>125 lbs</td>
<td>2500 calories</td>
<td>2000-2250 calories</td>
<td>3000-3500 calories</td>
</tr>
<tr>
<td>150 lbs</td>
<td>3000 calories</td>
<td>2500-2750 calories</td>
<td>3500-4000 calories</td>
</tr>
<tr>
<td>175 lbs</td>
<td>3500 calories</td>
<td>3000-3250 calories</td>
<td>4000-4500 calories</td>
</tr>
<tr>
<td>200 lbs</td>
<td>4000 calories</td>
<td>3500-3750 calories</td>
<td>4500-5000 calories</td>
</tr>
<tr>
<td>225 lbs</td>
<td>4500 calories</td>
<td>4000-4250 calories</td>
<td>5000-5500 calories</td>
</tr>
<tr>
<td>250 lbs</td>
<td>5000 calories</td>
<td>4500-4750 calories</td>
<td>5500-6000 calories</td>
</tr>
</tbody>
</table>

Created by Kim Tirapelle, MS, RD, CSSD  kmtirapelle@gmail.com
Carbohydrate Needs for Wrestlers

• The base of every wrestler’s diet should include carbohydrates, consisting of approximately 50-60% of total calories consumed. This is a minimum of 2.5 grams of carbohydrates per pound of body weight per day. Carbohydrates are the main source of energy for your muscles during wrestling.  
• Carbohydrates are crucial to consume at every meal and snack, as well as both before and after workouts. This will help to replenish the muscle glycogen (the stored form of carbohydrate in the body) you are using during wrestling.  
• Aim to consume both carbohydrates and protein within 30 minutes to 1 hour post-workout.  
• During workouts, consuming carbohydrates from a sports drink will be helpful to provide energy to your muscles, and replenish the electrolytes you are losing in your sweat. Aim for 30-60 grams of carbohydrate per hour of exercise. This is approximately 16 oz of Gatorade/hour.

Carbohydrate Guidelines

<table>
<thead>
<tr>
<th>Weight</th>
<th>Grams of carbohydrates to consume per day</th>
<th>Grams of carbohydrates to consume 2 hours pre-workout</th>
<th>Grams of carbohydrates to consume immediately post-workout</th>
</tr>
</thead>
<tbody>
<tr>
<td>125 lbs</td>
<td>313 grams</td>
<td>110 grams</td>
<td>45-85 grams</td>
</tr>
<tr>
<td>150 lbs</td>
<td>375 grams</td>
<td>135 grams</td>
<td>50-102 grams</td>
</tr>
<tr>
<td>175 lbs</td>
<td>438 grams</td>
<td>157 grams</td>
<td>60-120 grams</td>
</tr>
<tr>
<td>200 lbs</td>
<td>500 grams</td>
<td>180 grams</td>
<td>68-136 grams</td>
</tr>
<tr>
<td>225 lbs</td>
<td>563 grams</td>
<td>202 grams</td>
<td>77-153 grams</td>
</tr>
</tbody>
</table>

Foods Rich in Carbohydrates:

- Fruit- 1 medium piece = 15 grams
- Milk, skim or 1%, 8 oz = 15 grams
- Pasta, cooked 1 cup = 45 grams
- Yogurt, 6 oz = 20 grams
- Rice, cooked 1 cup = 45 grams
- Corn or peas, ½ cup cooked = 15 grams
- Bread, 2 slices= 30 grams
- Granola bar = 15-25 grams
- Cereal, 1 cup = 20-40 grams
- Vegetable, 1 cup raw or ½ cup cooked = 5
- Baked potato, 6 oz = 30 grams
- Gatorade/Powerade, 8 oz = 14 grams
- Mashed potatoes, 1 cup = 30 grams
- 100% fruit juice, 8 oz = 15 grams

Protein Needs for Wrestlers

• Protein is crucial for muscle growth, recovery, and other functions in your body such as immune function.  
• Wrestlers need to consume between 0.5-1 gram of protein per pound of body weight per day.  
• Protein intake should remain elevated when trying to reduce body weight. This will help to maintain muscle mass while losing body fat.  
• Protein should be consumed post-workout with a carbohydrate source. Ideas include chocolate milk, sports bars, deli meat or egg sandwich, yogurt cup, cereal with low-fat milk, fresh fruit smoothie, spaghetti with chicken breast, or teriyaki chicken and rice bowl.

Created by Kim Tirapelle, MS, RD, CSSD  kimtirapelle@gmail.com
Protein Guidelines

<table>
<thead>
<tr>
<th>Weight</th>
<th>Grams of protein to consume per day</th>
</tr>
</thead>
<tbody>
<tr>
<td>125 lbs</td>
<td>63-125 grams</td>
</tr>
<tr>
<td>150 lbs</td>
<td>75-150 grams</td>
</tr>
<tr>
<td>175 lbs</td>
<td>88-175 grams</td>
</tr>
<tr>
<td>200 lbs</td>
<td>100-200 grams</td>
</tr>
<tr>
<td>225 lbs</td>
<td>112-225 grams</td>
</tr>
</tbody>
</table>

Foods Rich in Protein

- Eggs, 2 scrambled = 12 grams
- Milk, skim or 1% = 8 grams
- Yogurt, low-fat 6 oz = 8 grams
- Yogurt, Greek low-fat 6 oz = 15 grams
- Milk, 1% = 3 grams
- Beef, sirloin 3 oz = 25 grams
- Fish, cod, baked 3 oz = 21 grams
- Beans, black or kidney ½ cup = 8 grams
- Nuts, walnuts or almonds 2 Tbsp = 4 grams
- Olive or canola oil, 1 Tbsp = 14 grams
- Peanut butter, 2 Tbsp = 16 grams
- Avocado, 2 Tbsp = 5 grams

Fat Needs for Wrestlers

- Fat is an important energy source (20-35% of calories) for wrestlers and should not be eliminated from the diet.
- Healthy fats such as monounsaturated fats are found in olive and canola oils, while polyunsaturated fats are found in fish and soybean oil. Saturated fats should be avoided and are found in fried foods, fast foods, butter, and processed foods.
- Omega-3 fatty acids help to reduce inflammation in the body after a hard workout and can be found in fish (tuna, salmon, halibut), walnuts, canola oil, avocados, and flax seed.
- High fat foods should be avoided pre-workout, as fat stays in the stomach longer and can delay gastric emptying and cause GI upset.

Foods Rich in Healthy Fats

- Olive or canola oil, 1 Tbsp = 14 grams
- Peanut butter, 2 Tbsp = 16 grams
- Milk, 1% = 3 grams
- Beef, sirloin, 3 oz = 9 grams
- Nuts, walnuts or almonds, 2 Tbsp = 18 grams
- Seeds, sunflower 1 Tbsp = 5 grams
- Avocado, 2 Tbsp = 5 grams