EAT TO COMPETE®  
10 Sport Nutrition Tips for the College Rower

1. You must know how many calories your body requires each day in order to maintain your stamina, speed, endurance, and ideal competitive body weight! Too few calories will result in slower recovery, slower times, and possibly poor health.

Males – (body weight x 15) + training load  
Females – (body weight x 13) + training load  

Calories “burned” during one hour of rowing

<table>
<thead>
<tr>
<th>Body weight</th>
<th>Calories</th>
</tr>
</thead>
<tbody>
<tr>
<td>100lb</td>
<td>457</td>
</tr>
<tr>
<td>120lb</td>
<td>548</td>
</tr>
<tr>
<td>140lb</td>
<td>640</td>
</tr>
<tr>
<td>160lb</td>
<td>732</td>
</tr>
<tr>
<td>180lb</td>
<td>823</td>
</tr>
</tbody>
</table>

2. How much carbohydrate, protein, & fat do you need each day? The volume is relative to your body weight and activity level.

- Carbohydrate for medium-high intensity training and competition (exceed 65% VO2 Max… mainly muscle and liver glycogen stores. These stores are limited to roughly 2000 total carbohydrate calories.
  a) Carbohydrate Requirements: 3 to 5 grams per pound of body weight (females 3.5/lb & males 4.5/lb body wt)
  b) Best Carbohydrate sources: Whole grain breads, pastas and bagels, baked potatoes, rice, tortillas, pita breads, muffins, pancakes, waffles, fruits, and vegetables. Two slices of bread have 26 grams of carbohydrate. One cup of cooked rice has 41 grams of carbohydrate; one banana has 26 grams of carbohydrate.

- Fat is needed for low–moderate intensity and long duration training and events (less than 65% VO2 Max…50% fat and 50% carbohydrate used for energy) Fat stores are unlimited 40,000 – 80,000 fat calories as adipose tissue.
  a) Fat Requirement: ½ gram per pound body weight
  b) Best Fat Sources: Oils (olive, canola, corn, soybean, etc.) 1 TBSP = 12 grams of fat
  c) 17 potato chips has 9 grams of fat; one Big Mac has 27 grams of fat

- Protein is essential for the development, building, and repairing of all body tissue. Also serve as enzymes for all metabolic processes. Protein is a poor source of stored energy. Even when all carbohydrate stores are depleted, the most protein contributes for energy is 5-15%.
  a) Protein Requirements: ½ to 1 gram per pound of body weight (ideally ¾ gram / lb body weight)
  b) Best Protein sources: lean beef, chicken, turkey, fish, pork, egg whites, soy products, beans, low fat milk & yogurt. Four (4) oz. serving of meat, poultry, pork or fish provides 28 grams of protein. One 8 oz. cup milk / yogurt = 10 g protein

3. A MUST!!! Eating before early morning workouts. 30 to 45 minutes before eat small serving (100-200 calories) of carbohydrate. 2 slices bread = 150 calories; 16 oz. Gatorade = 100 calories; One Pop-Tart = 210 calories; One energy/breakfast bar = 150-250 calories; One banana = 115 calories; ½ large bagel = 150 calories; one packet of gel/GU = 90 –110 calories. Also, always leave for practice/training with a minimum of 32 oz. of H20 or sport drink mix.

4. A MUST!!! During workouts… 8 oz. of fluid every 15 minutes or 32 oz. per hour of rowing. Limit fluids during to water & sport drinks. General fluid replacement tips… If training 1 hour/day, you need a total of 3 quarts of fluids (water, juices, sport drinks etc). For each additional hour of training add one quart of fluid to your total requirements.
5. During ½ day and full day rowing events/regattas, it is essential that the rower pack at least 800 – 1000 calories of easily digested / nutrient dense foods & beverages. Ideally, you want to eat small 80 – 100 calorie portions every 30-60 minutes while at an event. This may sound like a lot of food however; you would eat this same volume if you were sitting at home on the couch watching TV. You must be sure to eat small portions frequently! Good choices… plain slices of bread (2 sl = 150 cal), soft pretzel = 175 cal., sport energy bar = 200-250 cal, ½ PBJ = 175 cal, ½ bagel = 150 cal., 16 oz sport drink = 100 cal.

6. A MUST!!! After work-outs for ideal recovery… 300 calories of starch (carbohydrates) and 100 calories of protein within 30 to 60 minutes following end of training. Try to eat another 300 to 400 calories within another 2 hrs. Repeat with small (300 –600 calorie meals) every 3 hours throughout the day. YOU NEED TO REPLACE YOUR MUSCLE GLYCOGEN! (Your fuel tanks) During each small meal be sure to include 15 –20 grams of protein.

7. Best “fast foods” & Snack Foods– Subway Sandwiches (light on the oil, mayo, cheese, & chips); Wendy’s Grilled Chicken Sandwiches, Baked Potatoes, Salad/ Pasta Bar, Milk, Frosty; Pizza Hut Thick Crust / Single Cheese Pizza, Breadsticks, Salad Bar, & Spaghetti & Meatballs. Great snacks throughout the day… breakfast & energy bars, yogurt, fruits, hard & soft pretzels, peanut butter & jelly, bagels w/ Lite cheese, tortillas filled w/ turkey, peanut butter crackers, and fruit juices.

8. Avoid trying to lose any significant amount of weight during the competitive rowing season. Losing weight (more than 2 lb/week) May result in early fatigue. Remember…to lose weight; you typically need to reduce your caloric intake. However, too few calories mean too little fuel for the muscles before, during, and after training & competition.

9. Supplement the diet with a minimum of a Multi Vitamin and Mineral tablet. This tablet should have 100% to 200% of the RDA for most nutrients. For those abstaining from dairy products, you may want to add a calcium supplement. Most adult men and women need 1000 – 1300 mg of dietary calcium. One 8 ounce serving of milk or yogurt provides 300 mg. Therefore, 3 to 4 servings of dairy per day offers you your calcium requirements.

10. Variety…Variety…Variety is the key to acquiring all the needed nutrients (carbohydrates, fats, protein, vitamins, and minerals). * Check out the “Free Nutrition Tips” page on our web site for more details regarding your nutritional needs!

About the Speaker/Author... Tim Wierman is President of Nutrition Education Services, Inc. and creator of EAT TO COMPETE “The Athlete’s Sports Nutrition Program”. Mr. Wierman holds a Masters Degree in Nutrition Education and is a member of the American Dietetic Association.. Tim is a nationally recognized speaker, published sports nutrition author, and active triathlete. He has been a guest speaker at more than 175 colleges, high schools, clubs and professional conferences including...

EAT TO COMPETE Services Include...
- Item 100 - EAT NOW Online Services “Every Athlete’s Tool for Nutrition On the Web”
- Item 103 - Athlete’s Sports Nutrition CD
- Item 104 - Athlete’s Sports Nutrition Guidebook
20% - Online Discount Code: row2007

www.EatToCompete.com
1-800-692-5579