

Ransom Everglades Swim Team

Lecture # 2

Adjusting Caloric Needs

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Balancing Energy Intake with Expenditure

- **Energy = CALORIES**
- **Calorie Deficit** – eating fewer calories than you burn – weight loss
- **Calorie Excess** – eating more calories than you burn – weight gain
- **Calorie Balance** – eating the same calories you burn – maintain weight

Carbohydrates

- Lighter training days (shorter duration or lighter intensity) aim for 2-3 grams of carbs per pound of body weight throughout the day
- Heavier training days (longer duration or higher intensity) aim for 3-4 grams of carbs per pound of body weight throughout the day
- 1.5-2 grams of carbs per pound of body weight are recommended for off-season
- Complex Carbs are favored as they provide sustained energy (veggies, fruits, whole grains, beans, etc.)
- For recovery after a heavy workout, consume 0.5 grams of carbs per pound of body weight within 30 minutes of training – these can be simple or complex

Protein

- 1.2 – 1.5 grams per KG of body weight is recommended for both heavy and light training days
- 1.0 – 1.2 grams per KG of body weight is recommended for off season
- Protein can come from both animal and plant sources
- Meats, cheeses, yogurts, protein shakes
- Beans, lentils, nuts, nut butters
- For recovery after a heavy workout, consume 10-20 grams of protein within 30 minutes of training

Fats

- No need to adjust fat intake during training and off season as long as you consume within healthy limits
- Fat should be no more than 20 – 30% of daily calories
- Fat sources should favor plant-based mono & polyunsaturated fats – avocados, nuts, nut butters, olive oils, etc.
- Trained athletes who exercise regularly tend to use fat stores for energy easier than non-trained individuals – so consuming a little more fat is an easy way to increase calorie consumption

Male Calorie Needs


- **Off-Season Needs**
 - 11-14 years – 2500 calories/day
 - 15-18 years – 3000 calories/ day
- **In-Season Needs**
 - 11-14 years – increase by 500-750 calories
 - 15-18 years – increase by 500-750 calories

Female Calorie Needs

- **Off-Season Needs**
 - 11-14 years – 2200 calories/day
 - 15-18 years – 2200 calories/ day
- **In-Season Needs**
 - 11-14 years – increase by 400-700 calories
 - 15-18 years – increase by 400-700 calories

Other Considerations

- 2-4 servings of fruits daily – micronutrients, vitamins, minerals
- 3-5 servings of vegetables daily – micronutrients, vitamins, minerals
- Whole grains/complex carbs provide the sustained energy and more nutrients
- Lean proteins
- Healthy fats

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- <https://kidshealth.org/en/parents/feed-child-athlete.html>
 - <https://kidshealth.org/en/teens/eatrun.html>
 - <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3805623/>