

Off-Season Nutrition: Improving your Power-to-Weight Ratio

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Introduction

The triathlon off-season is here. Does your off-season represent inactivity? Have you identified specific areas you need to improve in? Do you have an off-season triathlon training plan? More to the point do you have an off-season nutrition plan?

During the off-season, you do need time for recovery especially if you've had a busy and hopefully fruitful triathlon season. For the majority of triathletes, however, the recovery period need not last for more than 4 weeks. Therefore, after the first month of the off-season it is time to develop and execute an off-season triathlon training and nutrition plan! If you're serious about improving your triathlon performance for the next season, the off-season is the best time to work on specific areas of your performance development program (PDP). The majority of triathletes, for example, would benefit from improving their power-to-weight ratio (PWR). The off-season is the optimal time to do this, and nutrition plays a major role in this improvement!

Power-to-Weight Ratio

PWR is the power a person generates divided by their body weight. Although less important in the swim due to buoyancy, PWR is an important predictor of running and especially cycling performance. It is also known as strength-to-weight ratio. You can raise your PWR by becoming lighter and maintaining or gaining muscular strength or as I like to say, by becoming leaner and meaner! Many triathletes can improve their PWR simply by decreasing their percentage of body fat, while maintaining lean mass, through "effective weight loss" (EWL). The prescription for EWL involves a controlled-calorie nutrition plan, low-to-moderate intensity aerobic exercise, and resistance or strength training.

Body Weight

Are you at the right weight for optimal performance? It is necessary to contemplate this question as you enter the off-season. If you think you may need to shed a few pounds, be aware that just losing weight does not always translate into improved performance. In fact, if not done properly, drastic weight loss can lead to a compromised immune system and decreased energy and strength. I strongly oppose using standard weight tables to determine the appropriate body weight for triathletes. Body weight represents the combined weight of

adipose (fat) tissue, muscle tissue, bone tissue and water. All of these components must be taken into account when assessing body weight. Standard weight tables give no valuable insight into these parameters. Therefore, focus your attention on your body composition rather than your body weight.

Body Composition

As previously stated, the human body is composed mainly of fat, muscle, and bone tissue and water. Individuals vary greatly in their genetic propensity for the amount and proportion of fat, muscle, and bone tissue, as well as baseline percentage of body water. Therefore, there is not a simple equation for the "ideal" body composition for triathletes. Although the optimal body fat percentage range for most elite male triathletes is from 5% to 10% and from 10% to 15% for females, this does not mean you have to be in this range to perform at your best. However, if your percentage body fat is well out of these ranges then you are an excellent candidate for an off-season nutrition plan which includes EWL. To determine what your body composition should be, you should enlist the professional services of a respected and experienced triathlon coach and/or sports nutritionist. He or she will help you determine the best method to evaluate your body composition and work with you to optimize your body composition to perform at your peak.

Effective Weight Reduction

There are smart and sensible ways to lose body fat. On the other hand, there are many harmful and unrealistic ways to accomplish this goal too! Restrictive and extreme diets are not recommended. These include just about every fad diet in the marketplace. The most tried and tested approach is adhering to an eating style that emphasizes healthy foods at a calorie level that produces gradual, effective weight loss. Healthy weight loss is defined as - to 2 pounds per week.

Timing of meals

Does the timing of your meals matter? The answer is a resounding yes! To maximize your metabolic rate meals should be no more than five hours apart. When you go longer than five hours between meals the human body goes into conservation mode physiologically. Eating three meals with one or two snacks daily will keep your metabolic engine cranking. I cannot emphasize enough how important it is to evenly spread your caloric intake throughout the day.

Controlled-calorie nutrition plan

Calories do count. It is important to determine the appropriate number of calories to induce

healthy weight loss. Refer to the nutrition guidelines and tips for a quick and easy method to estimate a mild EWL calorie range. The key is to maintain a mild calorie deficit. Severely restricting your calorie intake in an effort to accelerate weight loss will bring about muscle loss and thereby reduce your PWR. This is also true of fad diets which are low in carbohydrate and high in protein and/or fat. Achieving the proper macronutrient fuel mix is a key facet to meeting the needs of an off-season exercise regimen.

Macronutrient fuel mix

Carbohydrate

Despite a reduction in training during the off-season, your calorie intake should still consist primarily of carbohydrate, as it is an immediate and primary source of fuel for muscle and brain activity. Between 50 to 60 percent of your total calorie intake should consist of carbohydrate, an amount that is significantly lower than your in-season carbohydrate intake level.

The majority of your carbohydrate food choices should consist of whole grain breads, high fiber cereals, whole wheat pasta, brown and wild rice, baked potatoes, fruits and vegetables, dried beans and lentils, as well as skim milk and yogurt.

Fat

Fat contains more than twice the calories per gram weight as compared to carbohydrate and protein. Because fat is more calorically dense, it often contributes extra, unwanted calories to your total daily calorie intake. Less than 25 percent of your daily calorie intake should come from fat. Choose very small amounts of cooking oils, spreads and salad dressings. Although nuts and nut butters are healthy food options, they are very high in fat and calories. They represent a hidden source of calories and should be limited to very small quantities as well.

Protein

Most people eat more than three to five times the amount of protein they need to maintain and even build muscular strength. To further complicate the picture many protein food sources are high in fat. To achieve a proper balance of macronutrients, protein should comprise 10 to 20% of your total calorie intake. Cut the visible fat from meats and choose lean protein foods such as skinless poultry, non-fried fish, skim milk and eggs.

General Exercise Guidelines

In addition to a mild reduction in daily calorie intake, a targeted exercise regimen is essential to improve PWR. An exercise training program which includes aerobic and resistance training

will attenuate the concomitant loss of muscle tissue. Low to moderate intensity (60-70% of heart rate max) aerobic exercise preferentially burns fat and resistance training promotes the retention of muscular strength. It is important not to overdo both modes of exercise training while limiting your daily calorie intake. Resistance training during this phase of the PDP should focus broadly on all muscle groups. It is recommended to complete 2 sets of 12-15 repetitions for each targeted muscle group of a triathlon-specific strength program before delving into the strength and power building phases of the PDP. Additionally, flexibility should be maintained and/or improved during these initial phases.

Nutrition Guidelines and Tips

The following are guidelines and tips to get your nutrition plan assembled for effective weight reduction to improve your PWR:

Determine your total caloric intake for (fat) mass reduction

- Quick method: multiply your weight in pounds by 11 and 12 and subtract 300 to 500 calories to obtain goal daily calorie intake range to promote healthy weight loss.
- Example:
200 lbs times 11 (= 2200) minus 500 = 1700
200 lbs times 12 (= 2400) minus 500 = 1900
Calorie range = 1700 to 1900 calories

Keep a food record (for at least 3 days) to evaluate and monitor your current eating habits

- Calculate your average daily calorie intake
- It is a very effective self-monitoring tool
- It will identify hidden calorie sources; it is a remedy for "food amnesia"!

Consider these easy ways to cut calories

- Limit animal protein (beef, pork, poultry and seafood) to 8 ounces or less daily
- Reduce or use very small amounts of added fats like cooking oils, spreads and dressings
- Drink zero calorie or low calorie beverages (water, flavored seltzer, diet drinks)

Eat three meals with one or two snacks daily

- Spread your calories throughout the day
- Your body operates best when it has a steady supply of fuel

- Let fruits and vegetables dominate your plate
- Choose mainly whole grain starches, avoid processed grains (sugar, white flour)

Consider taking a standard multivitamin

- Meeting vitamin and mineral needs while following a calorie-controlled eating plan coupled with exercise can be difficult
- A standard multivitamin will help you meet your daily vitamin and mineral needs
- Choose an age and/or gender specific standard multivitamin (i.e. no more than 200% of the daily value for each individual nutrient)

Maintain good hydration

- Aim for 64 to 96 ounces of fluid daily
- Carry a water bottle and drink from it throughout the day

Stay focused during the holidays

- Limit or avoid alcoholic beverages (they're high in calories!)
- Avoid being too restrictive yet regulate your food portions

Monitor your weight and body composition

- Take measurements and trend these parameters over time
- Take the time to assess your off-season needs and construct a performance development program. Give strong consideration to adhering to a nutrition plan which utilizes effective weight loss techniques to improve your power-to-weight ratio and ultimately elevate your triathlon performance!

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