

Performance Nutrition for Shooting



This article will be the first in a three-part series. The goal of this article is to provide you with some basic nutrition concepts that should be understood by all athletes who would like to be competitive at an elite level. Shooting is quite different than other sports, but one basic principle remains the same: a high-performing athlete is a healthy athlete!

What you eat and drink on a daily basis will affect your immune system, your ability to concentrate during training sessions and your ability to recover from training and workouts. Believe it or not, what you ate (or didn't eat) for breakfast or lunch today will affect not only your workout today, but also your workouts next week, next month and even your next competition. Finding accurate nutrition information however, especially shooting-specific information, can be confusing. We will cover recovery and competition day nutrition in the next two articles, but for now, this article will focus on developing a sound nutrition base.

To develop a shooter's potential, training sessions should change throughout the year in order to build upon base skills previously learned. The same concept should also be applied to nutrition strategies. An athlete must first master the basics before moving on to shooting-specific

tactics. Here are the top five strategies that must be mastered in order to build a solid nutrition base from which to build.

Eat frequently

Consuming calories every 3-4 hours, starting in the morning, can improve body composition (increase lean mass/ decrease fat mass), decrease total calories consumed over a day, increase total calories burned over a day, improve blood chemistry (fats circulating in the blood) and help control appetite. Portion sizes will depend on weight and performance goals and are different for each athlete. If you are currently eating 3 meals per day, scale back lunch and dinner to accommodate a morning and afternoon snack. Most athletes tend to gain 1-2 pounds upon adopting this strategy due to poor portion control, but be patient! After a couple of weeks, portion sizes tend to adjust to eating frequency and level off. Adjust portion sizes according to weight changes.

Consume foods that contribute to a strong immune system

Antioxidant-rich foods are key! Consuming colorful fruits and vegetables (blueberries, sweet potatoes, etc.) and



whole grains (whole wheat bread, oatmeal, etc.) can decrease your chances of developing various diseases and conditions. Specific to you as an athlete is the power of these foods to boost your immune system relative to performance. Whether it's at school, work or while traveling to different competitions, shooters are regularly in contact with foreign bacterium and viruses. The best way to ensure your body is prepared to deal with these microorganisms so you don't get sick, is to build and maintain a strong immune system. Don't be that athlete that performs well in the first few competitions only to pitter out as the season goes on.

Lean proteins are also essential to a healthy immune system. Quality protein sources include seafood, lean cuts of meat & pork, poultry, legumes (beans), low-fat dairy and tofu.

Decrease intake of foods that degrade the immune system

Saturated and trans fats are found in fried foods, fast foods, ready-made baked goods, full-fat dairy products and fatty meats. The reason these fats are unhealthy is due to their pro-inflammatory properties. Diets high in these fats have been associated with high cholesterol, high LDL-cholesterol (AKA bad cholesterol) and inflammatory markers. This translates into an increased risk for cardiovascular disease. As an athlete, it's important to know that these fats are also associated with decreased endothelial function. In layman terms, this means that blood vessels lose their ability to open fully when needed, potentially limiting nutrient- and oxygen-carrying blood to muscles; not exactly advantageous to peak performance!

Luckily, nature has provided us with fats that have the opposite affect and have anti-inflammatory properties. Omega-3 and monounsaturated fats are healthier fats and can be found in cold-water fish, some nuts,





avocados and flax seeds. Substitute saturated and trans fats with omega-3 and monounsaturated fats whenever possible. Remember though, all fats have 9 calories per gram (compared to 4 calories per gram for carbohydrates and protein), so watch portion sizes.

Focus on hydration

Even moderate dehydration (weight loss of 2% of total body weight) can decrease mental performance by decreasing the ability to concentrate and decreasing movement accuracy. For a 150 lb athlete, 2% of total body weight is 3 lbs. Although a crude gauge, urine color is an effective measure of hydration status. Urine should be pale yellow; the darker the urine, the more dehydrated you are. Weighing yourself before and after training (range practice, cardio and/or strength training)

will help determine the amount of fluid that should be consumed in future sessions.

Have a plan!

As with training, an athlete should have a basic plan for the day. You wouldn't wake up in the morning and head out to the range without knowing what you were going to work on that day. If you do, you'll likely never reach your full potential as an athlete. Similarly, before you pick up a plate to serve yourself, you should know what you are going to put on it. Always look over your options and identify lean proteins, quality carbohydrates and produce so you'll know exactly what to put on your plate as you serve yourself. If you like dessert, don't leave it as an after-thought; plan for it by compensating for the calories in your meal.

The key to establishing a strong nutrition base is to set small achievable goals. It's unrealistic to think that you'll be able to re-vamp your whole diet at once. Unlike radical New Years' resolutions that fall by the wayside after a couple of weeks, your goal of improving nutrition for better performance is attainable. Even an athlete whose diet is composed primarily of fast food burgers & fries, sodas and sugary snacks can set three small goals that will affect his/her overall health and performance. Eliminating just one fast food meal



and one soda twice a week to start with can decrease calories and saturated & trans fat totals for the week. Don't fall prey to the all-or-nothing mentality. Just because you may have consumed more of a food or beverage (or type of food or beverage) than you had intended, don't allow the rest of the day to stray from your plan.

In the next article, we will discuss recovery nutrition for shooting. Until then, set three small goals with a measurable outcome and focus on those changes. Remember that successful athletes have plans! Do you?

Photos courtesy of Karen Daigle.

Giving kids a sense of teamwork, competition, confidence. And the thrill of blowing little clay targets to smithereens.



The Scholastic Clay Target Program is the fastest-growing youth shooting program. For kids, it means the chance to be part of a team while enjoying trap, skeet and sporting clays competitions at the local, state and national levels. A great confidence builder and a fun way to make new friends. For parents, it means peace of mind knowing that kids are learning important firearm safety lessons under adult supervision— while getting the chance to excel at a “grown-up” activity. For coaches and potential coaches, it means giving back – sharing knowledge and enthusiasm in a constructive Little League way. Spending time with eager kids who appreciate your time and energy. As just one of the many programs that prove we’re “always shooting for more”, the Scholastic Clay Target Program is an important part of the National Shooting Sports Foundation and its efforts to promote the sports we’re all passionate about. If you enjoy shooting, or have always wanted to learn, join us – new teams are forming every day. Call us at (203) 426-1320 or visit:

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