



WHAT IS PERFORMANCE NUTRITION?

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Performance nutrition is a mindset, a lifestyle. It is an intentional approach to eating to optimize health, performance and recovery.

As an athlete, your nutritional status will do one of three things: elevate your performance, keep you status quo or limit your potential. Small changes you make today will make a big difference one month from now, three months from now, and one year from now.

WHEN TO EAT – PATTERNING

Patterning is a huge part of optimizing your diet. There IS a big difference between taking in 3,000 calories and 300 grams of protein in two meals per day (say lunch and dinner), and taking in the same calories and protein in six meals and snacks timed effectively throughout the day.

Your body's response to the calories and protein will be very different in each scenario. Whether your goal is to lose body fat, or add a few pounds of lean muscle mass (or just maintain your current body composition), patterning should not be compromised.

TWO FEEDINGS PER DAY

By eating loads of food only twice per day, your body will spend most of the day in a state of low blood sugar and will be forced in to overdrive to process the oversized feedings. Your brain will trigger the production of catabolic hormones that break down muscle post-exercise, rather than shifting in to "building" mode from a great post-workout recovery shake or snack. Your body will store fat much more easily like a Sumo wrestler.

FIVE-TO-SIX FEEDINGS PER DAY

Your body works much more efficiently and your energy levels will be stabilized when you eat every 2-3 hours throughout the day. Your blood sugar and appetite will be normalized throughout the day, while optimizing your metabolic rate. You provide an environment where muscle tissue is repaired and synthesized effectively.

It does make a difference how and when you eat!



WHAT TO EAT – NUTRIENT DENSITY

So, if you're going to eat you may as well choose foods that will do something for you. We like to say that every meal or snack is an opportunity to impact your health and performance so why not maximize the "bang?"

- Accelerate the repletion of fuel (glycogen)
- Improve immune function
- Accelerate healing
- Stimulate protein synthesis (essential for muscle growth) over nutrient-empty foods that do nothing but provide calories.

Think about the foods you turn to most often.

- Are you eating them out of habit?
- Are you eating them because you've never bothered to give nutrition much thought?
- Take the top 10 foods you eat most and look at the ingredients that are in them. Can you pronounce everything in the ingredient list? Are there more than five ingredients?
- Is there any fiber?
- Any protein?
- Any healthy fat?
- How much sugar?

Start evaluating what you're putting in to your body. As your most-prized possession, your body deserves the best. Start giving it high-quality nutrients found in whole foods and it will serve you well. Improve the quality of the foods you eat.

EMPTY CALORIES

Many athletes' diets contain too many empty calories. Empty calories come from foods that have lots of calories, but few vitamins and minerals. Examples include:

- Candy
- Soda
- Sugary Cereal
- Fried Foods
- Sour Cream
- Cream Cheese
- Desserts

HIGH-QUALITY FOODS

High quality foods contain lots of nutrients for not as many calories. Examples include:

- Lean meats – Chicken, turkey, fish
- Whole grains – Whole wheat bread, oatmeal, brown rice, bran cereal



(muscle synthesis) after exercise. Since these changes are acute, some lasting only a few hours, pre- and post-exercise meals are critical for optimizing anabolism and minimizing catabolism.

Remember, not everyone's plate will look exactly the same. Avoid comparing and get what *your* body needs at every meal. Every meal should include high-quality protein, nutritious (fiber-rich) carbohydrates, plenty of vegetables, healthy fats, and ample fluids. If you have special needs, allergies, or religious preferences, see a nutrition professional for guidance.

SEVEN HABITS OF CHAMPIONSHIP EATERS

- Be a 24-hour athlete
- Eat whole foods
- Drink (more) water
- Eat every 2-3 hours
- Eat a veggie and/or fruit with every meal & snack
- Eat protein with every meal & snack
- Eat healthy fat at every meal

HIGH PERFORMANCE NUTRITION CHECKLIST

Ask yourself these questions, answering yes, rarely or no

- Eat breakfast everyday — as soon as possible after I wake up
- Plan meals and snacks so I eat every 3-4 hours during the day to properly fuel my body
- Eat high-quality carbohydrates and protein 3-4 hours before practice to fuel my muscles ahead of time, have a protein snack on my way to lifts
- Maximize recovery nutrition after intense workouts by eating or drinking within 30 minutes of completing exercise
- Balance my plate at meals with 1/3 protein (meat, beans, eggs, fish, cottage cheese, tofu) and 2/3 carbohydrates (whole grains, fruits, vegetables, milk, yogurt) plus good fats
- Include "good fats" in my diet that may help with recovery including nuts, seeds, avocado, nut butters, canola and olive oil, and oil-based dressings
- Eat or drink at least three high-calcium sources a day (one cup of milk, one cup of yogurt, one slice of cheese, one cup of calcium-fortified orange juice)
- Eat at least two servings of fruit and three cups of vegetables a day to boost the nutrient density and antioxidant content of my diet
- Stay well-hydrated by drinking fluids throughout the day and at least eight ounces for every 15 minutes of hard exercise
- Make smart beverage choices a majority of the time — water, 100 percent fruit juice, unsweetened and herbal teas, two-percent milk



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- Use additional supplements wisely, making sure they are needed, backed by solid research, and contain no banned substances
- Prioritize sleep so my body has a chance to recover and repair on a consistent basis — at least 7-8 hours per night
- Consider nutrition to be an integral component of my training program

If the majority of your answers are rarely or no, you need a performance nutrition overhaul. Make an appointment to meet with your performance coach as soon as possible.



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- Fruit – apples, oranges, bananas, strawberries, blueberries,
- Vegetables – broccoli, dark greens, sweet potatoes, peppers, spinach, etc.

THE BOTTOM LINE ON NUTRIENT DENSITY

- Limit empty calorie foods
- Increase high quality foods
- Even choices such as white bread, white rice, and pasta are not the best way to maximize your nutrient intake
- A good rule of thumb when searching for the highest nutrient dense foods is to “Eat a rainbow often.”

PROTEIN

Protein **MUST** be present in every meal and snack. Protein **MUST** be consumed before, during and after your workouts. When it comes to choosing protein foods always choose lean and low-fat options. Before, during and after exercise your body needs fast-absorbing protein found in whey protein (naturally present in milk).

Typical needs are roughly 75 percent of your body weight. One gram per pound is the maximum that can be put to use toward protein synthesis. Eating more than this contributes to total calories for the day, but not to further muscle building or tissue repair.

Muscle protein synthesis is maximized by consuming protein very near to strength training sessions, making it essential that athletes provide their body with protein before *and* after every lift.

CARB-PROTEIN PAIRING

Consuming protein with carbohydrates and a small dose of fat leads to better gains in lean muscle mass. Examples include chocolate milk, regular yogurt or hard-boiled egg with fruit, Greek yogurt with banana, peanut butter and jelly sandwich.

ANIMAL PROTEINS

Vegetarians can meet their daily protein needs without supplements, however, animal sources of protein contribute to superior gains in mass and strength over plant sources. Very lean meats are quite nutritious and, when prepared properly, can be low in saturated fat. Dairy proteins such as Greek yogurt, milk and eggs work equally well.

REAL FOOD

So far, there is nothing better than whole foods at providing the body with the protein it needs to adapt to hard training. In addition to protein, whole food sources supply many other nutrients the body needs to recover.



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Calculating your protein needs is essential as an athlete. Depending on your training volume or phase of training, your protein requirements need to change.

SLEEP

The most underrated area of performance is sleep. Not getting enough sleep affects reaction time, speed, fine motor skills and endurance.

Your body does significant work in the areas of muscle growth and repair while you sleep. If you are not getting enough sleep, you are compromising your recovery and your ability to add muscle mass.

Athlete training requires a minimum of 8-9 hours of sleep. Establish a regular routine by getting up at approximately the same time each morning and going to bed at approximately the same time each night — ideally within 30 minutes of the same time each morning and night.

Avoid foods at night that contain caffeine (coffee, tea, chocolate, and soft drinks). Avoid large, heavy meals before bed. It will ramp up your digestive system and make it difficult to fall asleep.

SUPPLEMENTS

It's easy to be tempted by the wide variety of potions, pills and powders on the market today. By now, you understand there is no "magic pill" that comes in a bottle and no substitute for hard work. Make a great diet and healthy lifestyle your competitive edge.

Understand that some supplements are legal, safe, and potentially beneficial to your performance, but there are many that are not legal, safe, and effective. Supplements sold over the counter may contain banned substances by the NCAA. "All-natural" does not mean that it is safe and legal for the NCAA and store clerks are not knowledgeable about NCAA rules and regulations. Just because the label on the bottle does not list any banned substances does not mean they aren't present in the supplement.

PRE, DURING & POST EXERCISE FUELING

Fueling around your workout/practice will help you maximize your performance during practice or workouts as well as promote recovery and lean muscle mass gains. When implemented properly and consistently, strategic pre- and post-workout nutrition can greatly increase training quality and effectiveness.

Exercise causes many changes in the body. First, there is a significant increase in blood flow to working muscles. There is also a sharp increase in adrenaline. These changes favor catabolism (muscle breakdown) during exercise and anabolism