

# Optimize Your Performance Through Nutrition

By Andy Harnsberger

There have been many comparisons of percussionists to athletes. We use many of the same muscles that an athlete might use. We need to have muscular control, flexibility, and endurance, all the same qualities an athlete needs to be successful. We read articles about how to stretch and warm up properly, just as an athlete would. However, athletes that are striving to improve their performance also rely heavily on proper nutrition to provide them with endurance, muscular efficiency, and mental acuity.

As artists, we are constantly striving to find things that will give us an edge and improve our performance. We work on a variety of practice techniques, attend workshops, and read books or articles that will give us insight into the mind of the performing musician. But we tend to ignore some of the most basic and essential things that will help us excel.

Many percussionists, and musicians in general, underestimate the importance of proper nutrition for maximum performance. For many musicians, the average day consists of one or two meals: lunch and/or dinner, with a steady supply of caffeine or other stimulants to make it through the day. If we use performance athletes as our example, we realize we are not giving ourselves a realistic opportunity to live up to our potential.

Sports nutrition in its most basic form isn't rocket science. You need to make sure you are eating often enough, and getting enough quality calories from your food so that you can maintain high energy levels throughout the day. Make sure your intake of vitamins and minerals is adequate to support your active lifestyle, and eat "clean" foods that will allow you to keep mental focus all day long. In short, consume high quality "macronutrients" such as, proteins, carbohydrates, and fat sources every day to optimize your performance.

## PROTEINS

Protein has long been considered a muscle-building macronutrient, particularly important for strength-building and endurance athletes. However, it is also essential for muscle maintenance, muscular control, and the repair of the body's cells. It is a major component of all muscles and is necessary for the production of antibodies, which fight against infection and illness, and is the main nutrient that keeps our

hair shiny and healthy, our nails strong, our skin elastic, and our bones sturdy and healthy. Adequate amounts of protein will aid with muscle memory, recovery from injury, and adding longevity to our performing careers.

Some good examples of high-quality proteins are eggs, fish (such as salmon or tilapia), poultry (turkey or chicken breast without the skin), and lean beef. If you are vegetarian, try quinoa (pronounced "keen-wah"), a whole grain that is a complete source of protein. Vegetarians can also try beans, lentils, legumes, soy products (such as tofu), and protein powder supplements.

## CARBOHYDRATES

The most important benefit of carbohydrates is that they provide instant energy to the body. According to the U.S. Department of Agriculture Dietary Guidelines for Americans, 45 to 65 percent of your daily calories should come from carbohydrates. They are the body's primary source of energy. Not only do our muscles require carbohydrates for energy, but our brains require carbohydrates to function properly, and the same can be said for our cardiovascular and nervous systems.

A diet consisting of complex carbohydrates such as starchy vegetables (sweet potatoes, brown rice), beans, legumes, whole grains, and cereals (oatmeal, cream of wheat or rice) will help increase reaction time and memory performance. Strive for a balance of fruits, leafy vegetables, and starches.

## FATS

Dietary fat is one of the three macronutrients, along with protein and carbohydrates, which provides energy for your body. There are numerous types of fat, and some are better for you than others. Fats to avoid are "saturated fat" and "trans fat." Fats that are considered healthy are "monounsaturated" and "polyunsaturated."

While all types of monounsaturated and polyunsaturated fats are good for you, Omega-3 fats are especially beneficial. Brain tissue is extremely rich in these vital nutrients, which help to ensure normal nerve-cell function. The brain does not function optimally if it is deprived of them.

Research indicates that fats play a significant role in cognitive function (memory, problem-solving abilities, etc.) as well as emotional health. Getting more omega-3 fatty acids in

your diet can help you battle fatigue, sharpen your memory, and balance your mood. They have also been shown to reduce inflammation throughout the body. This helps repair the swelling that accumulates in the hands and wrists during practice sessions. It can also help you heal if you have been diagnosed with carpal tunnel syndrome or similar disorders.

Omega-3 fats are fatty acids that are essential to health, but your body can't make them. You can only get omega-3 fats from food. Salmon, herring, and other fish are good examples of where to find Omega-3s. If you are a vegetarian or you don't like fish, you can still get your omega-3 fix by eating algae, walnuts, flaxseeds or flaxseed oil, or by taking a fish oil supplement.

## WATER

Although not a macronutrient, water is crucial to your health. Water comprises 75% of our body and almost 90% of our brain. If you want your muscles and brain to function optimally, you must stay hydrated. Health advocates all agree that it must be pure water, not other drinks that many people count toward their water consumption. Juice, soda pop, caffeinated beverages, and alcohol are all diuretics and cause you to lose water. Therefore for every drink you have that is in the diuretic category, you must drink one more glass of pure water.

A drop of just 2% in body water causes short-term memory problems and significant difficulties with concentration. Proper hydration will keep you mentally alert and focused throughout the day, and will also provide you with sustained energy. Water generates electrical and magnetic energy in every body cell, providing a natural power boost. Through drinking adequate water, the body is provided the best tool to continually do away with harmful toxins. This helps to keep a person in peak condition both physically and mentally.

## CLEAN EATING

When describing clean eating, it's important to point out what clean eating is not. Clean eating is not a diet, although it is a great way to reduce body fat, lose weight and keep it off while maximizing your physical and mental performance. There are a few easy principles to follow:

1. Eat a small meal every two to three hours

(five to six small meals per day) to keep blood sugar level and prevent hunger. This may seem like a lot at first. But remember, you are eating smaller portions. If you really have a hard time with this, prepare your regular three meals and a snack for the day, and divide lunch and dinner in half. You've instantly got six small meals.

Combine lean proteins and complex carbohydrates at every meal. We know that muscles use carbohydrates for energy. But remember that your brain also prefers a steady supply of complex "carbs" for fuel. When the brain doesn't get its steady fuel supply, behavior and learning become more erratic. Eating lean proteins and complex carbohydrates often during the day provides a steady supply of energy to your muscles to keep them fully functional.

2. Avoid all over-processed and refined foods (especially sugar, white rice, and white flour); avoid soda and other sugary juices and drinks. These types of sugars cause mood swings and "clog" your brain, keeping it from functioning optimally.

3. Avoid saturated and trans fats; instead, consume healthy fats such as those mentioned above.

4. Follow a low-sodium diet and drink plenty of water throughout the day to ensure proper hydration. Elevated levels of sodium and lack of water are key contributors to swelling in the muscles and joints. Dehydration has also been linked to mental fatigue.

5. Avoid excessive alcohol consumption. Alcohol is another cause of dehydration, so limiting your consumption before a performance would be beneficial.

The benefits of eating clean foods are numerous. Not only will clean eating drastically improve overall health and wellness, but most clean eaters will also find that they gain a significant amount of energy and endurance. Those who eat clean also find that their new lifestyle improves sleep and mood levels, and helps them deal with stress more efficiently.

For the traveling musician unable to prepare the healthiest meal choices, there are alternatives to stopping at the closest fast food restaurant and getting a burger and fries. More and more fast food chains are offering healthy alternatives that are tasty and nutritious, such as lower-fat and lower-calorie salads and sandwiches on whole-grain bread. Forego the dressing, which usually packs a bunch of calories, fat, and sodium, and use oil and vinegar or lemon juice instead.

If you want to avoid the fast food stops altogether, prepare a travel cooler and stock it full of water, shredded chicken, fruits and vegetables, and whole-grain bread or wraps. If possible, travel with a small portable electric grill and rice cooker and you will be ready to prepare any meal. If you are bouncing from city to city and staying in hotels, try to choose places that have a refrigerator and microwave for easy food preparation. Get your choice of pre-cooked

protein, microwaveable potato, and salad from the local grocery and you're set!

Planning ahead helps you develop and maintain healthy eating habits. Get out the calendar and figure out your food needs for the week ahead. Consider stocking:

- Whole-grain breads, cereals, and pasta
- Low-fat milk, reduced-fat shredded cheese, eggs, canned tuna, dried beans
- Lean meats or your choice of protein
- Fresh or frozen vegetables; fresh fruit.
- Quick-cooking grains such as 10-minute brown rice

## NUTRITIONAL SUPPLEMENTS TO AID IN MEMORY AND BRAIN FUNCTION

These are *supplements* to your diet and should not be a substitute for proper nutrition.

**Acetylcholine:** maximizes mental ability and prevents memory loss in adults

**Dimethylaminoethanol (DMAE):** Aids in learning and memory. Not intended for everyday use. Best when used on days when you need to be more focused and alert.

**Vitamin B complex:** Needed for improved memory.

**Pantothenic acid (vitamin B5):** Needed for proper brain function

**Vitamin E:** 200 IU daily will improve blood flow to the brain

**L-Glutamine, L-phenylalanine, L-aspartic acid:** essential amino acids for normal brain function

**L-Tyrosine:** Helps sharpen learning, memory, and awareness: elevates moods and motivation

**Coenzyme Q10:** Improves brain and muscle oxygenation

**Ginkgo biloba:** increases blood flow to the brain and central nervous system, enhancing memory and brain function.

Herbs that are helpful for memory include anise, blue cohosh, ginseng, gotu-kola, and rosemary.

## OTHER NUTRITIONAL TIPS TO IMPROVE PERFORMANCE

**Pre-game meal:** Two hours before a performance eat a small meal (200–300 calories) consisting of a serving each of whole grain, fruit/vegetable, and protein. For example: a turkey, lettuce, and tomato sandwich on whole grain bread, no butter. Drink plenty of water and have water available to sip during breaks.

Low to moderate amounts of caffeine (20mg–50mg) can increase mental alertness and improve concentration. However, too much caffeine can cause excitability and nervousness, so use with caution.

Bananas are a natural beta-blocker. Eating a banana 30–45 minutes before a performance can help decrease performance anxiety or stage fright.

Here are some examples of foods that are commonly known as "brain foods," or foods

that will enhance brain function and memory: avocados, bananas, blueberries, broccoli, brown rice, brussel sprouts, cantaloupe, cheese, chicken breast, collard greens, eggs, flaxseed oil, legumes, lean protein, milk, oatmeal, oranges, peas, sweet potatoes, romaine lettuce, salmon, soybeans, spinach, fresh tuna.

Clean eating is a lifestyle that requires time, commitment, and pre-planning. It is not about deprivation, avoiding food groups, counting calories, or starvation. At its most basic, clean eating is making the healthiest food choices possible, using the macronutrients listed above. Opt for fresh fruits and vegetables, whole grains and other complex carbohydrates, and lean cuts of meat instead of processed and refined foods.

*Seek professional advice before beginning any diet program. Feel free to contact the author at [andyharnsberger1@aol.com](mailto:andyharnsberger1@aol.com) for additional information or questions.*

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