GAMERS Nutrition Clinic

Sunday, August 26th

Presented by Hammerbodies

TRAIN + EAT + SLEEP

All athletes know the importance of training. Throwing, for example, will improve a pitcher's arm strength. Building leg muscle can improve velocity. Stretching improves flexibility and reduces injury. But when you train, you break down muscle fiber. It is only when that damaged fiber is repaired and rebuilt, thicker and stronger, that improvement occurs.

Protein is necessary for building muscle—it repairs the tissue that breaks down during training. But a piece of chicken cannot become new rotator cuff fiber without vitamins, minerals, and water to assist in the process. Without taking in these essential nutrients, your body will get them by breaking down muscle tissue from somewhere else (your core, for instance) to accomplish the repair work. Proper nutrition gives your body the building blocks to repair the areas you're training, without "robbing" from other areas.

Much of this work is done when you are asleep. While you are at rest, your body is able to concentrate its efforts on processing the food you've eaten, distributing the nutrients to the areas in need, building and repairing muscle fiber, and growing. Adequate sleep, and resting between training sessions, allows your body to restore itself.

Key points: Eat right, train hard, and get plenty of sleep to get bigger, better, and stronger.

METABOLISM how your body processes food (turns it into fuel)

When you sleep at night, your body slows down because it does not exert as much energy as when you're active. If you don't eat soon after you wake up and become active, your body doesn't get the nutrients to fuel its activities. Eventually, you won't be hungry in the morning, because your body has adapted to your extended fast. It "feeds on" itself, using nutrients stored in its tissue—depleting muscle tissue of protein, for example. Similarly, your body goes through a "drought" during the night, and becomes dehydrated, causing fatigue in the morning. You can prevent this daily cycle of depletion and dehydration by eating and drinking within 30 minutes after you wake up, when your body absorbs nutrients like a sponge. This gets your metabolism out of the "slow down" mode and allows it to process food efficiently throughout your day.

Key points: Skipping breakfast defeats the purpose of training to get bigger, better, and stronger. You'll lose strength, and you won't have much energy.

NUTRIENTS

Elements (hydrogen, oxygen) or compounds (carbohydrates, proteins) used to nourish an organism.

CORE NUTRIENTS

Carbohydrates—energy

Complex—whole grain breads, cereal, tortillas, and potatoes

Simple—veggies and fruit; sugar*

***AVOID high fructose corn syrup: it's linked to cancer and diabetes.**

Carbohydrates (continued)

***AVOID enriched foods (ingredients are stripped of naturally-occurring nutrients, then "enriched" by putting nutrients back in)**

Read labels. Look for real ingredients that you can pronounce.

Ezekiel and Rudy's make good breads.

Proteins—build and repair muscle
Chicken, fish, beef, pork, dairy (nonfat or low fat), eggs

Fat—energy, brain function
Peanut butter, nuts, seeds, olive oil
Cheese (also has calcium and protein)

***AVOID hydrogenated oil (hardened oils) and saturated oils: they clog the arteries.**

Water—hydrates, lubricates joints, flushes out system, etc.

Vitamins and Minerals—nourish and maintain everything in the body
Fruit, veggies, and other foods

Ingredients are the key component to a healthy diet. In general, the less chemical additives, the better. Eat food in its natural state; homemade is usually better than prepared or processed food.

Breakfast

Begin your day by eating the heaviest meal at breakfast. It should include a carbohydrate, a protein, and a fat to kick start your metabolism and to give you sustained energy into the morning. The fat will actually satisfy your hunger longer than the protein, and although it shouldn't be overdone, it is a good nutrient to start off your day. Examples: Whole grain bagel with cheese and nonfat or low fat milk; whole wheat toast with peanut butter and an egg; homemade egg sandwich (egg, cheese, ham, English muffin); whole grain wrap with egg, cheese, turkey sausage, and peppers, etc. Include fruit with bright-colored flesh for essential nutrients (try to vary colors and eat a variety), and begin drinking your daily 8 to 12 glasses of water (8 oz. ea.).

Snacks

It's better to eat five or six times a day than to starve for hours, only to pig out later. Both the mid-morning and mid-afternoon snacks should include a small protein and carb combo, fruit or vegetables, and water. Examples: A _ sandwich and piece of fruit; a homemade protein shake; or an energy bar (made from real food, not chemicals) like Cliff, Lara, or Raw Revolution. Continue to drink water throughout the day.

Lunch

This is similar to breakfast, but since the heaviest meal is in the beginning of the day, lunch should be somewhat lighter—less fat, but still including a carb, protein, fruit/veggies, and water. Examples: honey-wheat turkey sub, carrots and tomatoes, and water; pasta with beef marinara, salad, and water.

Dinner

You need the same nutrients again for dinner, but vary the foods for the best array of nutrients. Dinner should be the lightest meal of the day as your body begins to slow down for the long fast through the night. Examples: piece of fish, wild rice, peas, and water; grilled chicken, _ baked potato, broccoli and water. If you've been drinking your water all day, you should not need to fill up before bed.

Key points: Top-load your day with a heavy meal first, then eat healthy smaller meals, progressively lighter as you move toward evening. Put a little fat in your breakfast to help you last longer into the morning.

Liquids

Most fatigue is caused by dehydration. Sodas do not hydrate the body, and caffeinated drinks actually take water from the cells. Nothing hydrates like water, and it's the only thing your body doesn't need to process. It flushes out waste and helps carry nutrients throughout your body. Sports drinks like Gatorade, PowerAde, Vitamin Water, etc. are not as beneficial as plain water because they are full of chemicals and/or sugar, making it necessary for your body to process them. If you maintain your electrolytes throughout the day and before your games by eating the right foods and staying fully hydrated, you will not need anything more than plenty of water and some fruit to replenish during the game. When playing in extreme heat, you will need about 15 oz. of water every 10-18 minutes, and a piece of fruit during the game. If you still want a sports drink—Accelerate is one of the better ones on the market.

Milk also plays an important role in the teen years. Calcium is essential for growth, strong teeth and bones, and the prevention of fractures. Calcium is present in other foods (like yogurt and broccoli), but drinking nonfat or low fat milk is a quick and easy way to ensure you're getting enough. Milk also has a variety of other essential nutrients—vitamins, minerals, and protein (which is why it helps satisfy hunger, as well as thirst). If you are lactose-intolerant, you can explore other options for getting your calcium.

FINAL THOUGHTS:

Preparation

The time to prepare for a game is throughout the week. There is no magic energy bar or sports drink that can make up for a week of poor nutrition. Eat well consistently, enjoy occasional splurges (chips, a soda, cookies), but don't make those your dietary staples. Replenish with good nutrition within 30 minutes after training, practice, or a game. Just like when you wake up in the morning, your body is a sponge for nutrients right after exerting itself for a sustained period of time.

Performance

If your eating habits have included regularly skipping breakfast, drinking sodas, and snacking on French fries or candy, in just 12 to 48 hours, you'll notice an improvement in your energy level. As you put together the three components of training hard, eating right, and getting enough rest, you'll see the difference in your performance, as you become a better athlete.

Do today what others *won't*, so you can do tomorrow what others *can't*.