

# Importance of Nutrition

### How Proper Nutrition Can Help You Increase Energy, Improve Metabolism & Speed Recovery

We understand how active our clients are both in and outside of Vicious. Our goal should be to lead a healthy, fit, athletic lifestyle. Whether you are taking a Spin class, or lifting in our Strength room it can be easy to get carried away by the music and the energy in the room and challenge your body with a physically exhilarating workout. But it's also easy to exhaust yourself and impede your recovery rate and fitness progress - if you don't make healthy lifestyle choices in several areas. While a busy schedule can be exhausting, much of the fatigue you notice from day to day may be related to poor dietary habits.

## The Importance of Caloric Intake Before, During, and After Training Sessions

#### **Before Exercise**

Your basic needs for an energetic training session and quick recovery are to be calorically fueled and well-hydrated. If you are not calorically fueled before workouts, you will dip into your glycogen reserves and catabolize muscle tissue for energy. This causes post-exercise fatigue, extends recovery time and increases the physical stress of exercise.

If you try to eat and then exercise, you may suffer from a variety of digestive difficulties when blood leaves your stomach (where it should be for proper digestion) and flows into your extremities to fuel your working muscles.

Depleting yourself through training sets up a host of dietary and metabolic problems, including energy level fluctuations, frequent cravings for sugar, delayed muscle recovery, inefficient fat burning and a slowed metabolism. This is the reason why many diligent exercisers eat carefully and still can't shake off excess body fat.

The difficulty of eating and then working out poses a serious dilemma for active exercisers. While many turn to high-sugar energy bars and sweetened sports drinks, this is not ideal nourishment. Sugar provides no nutritional value and can lead to gastric distress when consumed before exercise. Excess sugar consumption can cause fluctuations in your energy level and appetite that extend throughout the day.

It is essential to consume easy-to-digest calories before every training session, particularly morning sessions. Overnight, your body is essentially in a fasting state, with liver glycogen depleted over 50% merely from sleeping. If you exercise on an empty tank, you will further deplete your energy stores. This will cause a slowdown in your metabolic rate, your body's survival mechanism against what it perceives to be starvation.

Ideal foods to consume before a workout include fruits, which have a high water content and are easy to assimilate, complex carbohydrates like oatmeal, brown rice, and nutritionally balanced meal powders.

#### After Exercise

If you don't consume nutritious calories after training, you miss the "Window of Opportunity" for muscle recovery. Scientific studies have proven that your muscles are most receptive to glycogen reloading, nutrient utilization and tissue resynthesis in the one-hour period after completion of exercise. If you wait longer than an hour to refuel, your muscles will "shut off" and be less able to benefit from the nutrients you ingest. Recovery time will be lengthened and your injury risk increased.

During this one-hour period after vigorous exercise, your appetite is often suppressed due to elevated body temperatures and flowing endorphins. While many exercisers can easily consume a high-sugar beverage or snack after training, other nutrient requirements are often neglected, particularly protein. Most dietary protein sources are difficult to prepare and digest and are thus neglected during the window of opportunity. When you fail to consume the required amount of protein after exercise (this varies according to your weight and exercise duration), your muscle recovery is severely inhibited.

Excellent sources of protein include dairy products like eggs and milk, fish, organic chicken or beef and powdered protein supplements. It is estimated that your protein requirements as an active exerciser can be as high as one gram per pound of lean bodyweight daily. For example, if you weigh 140 pounds at 15% body fat (21 lbs fat), your lean body weight is 119 lbs. Thus, you need to consume 119 grams of protein per day, a total of 476 protein calories.

In addition, you need to consume adequate amounts of all nine essential amino acids every day. Essential amino acids are those that must be supplied from your diet because your body cannot manufacture them on it's own. A protein source that contains all the essential amino acids is called a "complete" protein.

### The Importance of Eating a Healthy Diet

Most of us know how to eat healthy. A moderate diet of fruits, vegetables and other natural foods is the key to good health. Yet millions of well-informed consumers are still overweight, overtired and overstressed as a result of their unhealthy dietary choices. Many people fail to distinguish between health and fitness, exercising diligently then turning around and fueling their bodies with poor nutrition.

Fitness is merely the ability to perform a particular activity, like taking a challenging Spinning class. Health involves an overall state of well being, including a nutritious diet and a sensible physical training program.

The fast pace of modern life interferes with sensible eating. The temptation to eat quick, cheap, fast food is overwhelming. Then as consumers suffer the consequences of lazy, unhealthy eating habits, they turn to a quick fix in the form of regimented calorie restrictive diet.

Diets don't work for numerous reasons. Some of the main ones are the inconvenience of eating highlyregimented, impractical meals, depriving yourself of foods that you naturally crave, or dangerously restricting your caloric intake, which only slows your metabolism and inhibits fat metabolism. These and other tactics force you to dramatically alter your lifestyle while compromising realistic chances of long-term success. Becoming healthy and fit requires a commitment to eliminate bad habits and establish new ones, changes that will last a lifetime. Feedback is always immediate in that each day you practice good habits you will feel better and your body will function better.

The best way to eat a healthy diet is to become deeply attuned to your natural appetite. We have an innate sense of what types of foods and how much we need to eat to fuel us optimally, yet we habitually ignore this due to emotional and environmental factors. When we eat, natural foods, we feel physically more energetic and vital than when we binge on junk food. When we artificially restrict our intake of calories, we disturb the appetite center on our brain, which leads to binges and unhealthy obsessions with food.

### Foods to Avoid

The first category is refined carbohydrates like simple sugars (soft drinks, processed fruit juices, candy, desserts, many energy bars) and white flour products (pasta, white bread, white rice, many packaged foods). Excess consumption of simple sugar can inhibit fat burning, cause blood sugar fluctuations, stress the adrenal glands, and provide no nutritional value.

The second category of food to avoid is hydrogenated fats, which are used in many processed and packaged foods. Examples include margarine, cookies, candies, crackers, cakes and deep fried food. These foods inhibit the function of the aerobic system and are a primary cause of diet-related heart disease and cancers.T

he use of caffeine should be minimized or avoided due to the stressful effect it has on your adrenal glands. Caffeine is a powerful artificial stimulant that will deplete your body's natural energy levels, hamper your ability to cope with stress and increase the accumulation of fatigue. Also, the diuretic effect of caffeine can cause dehydration and the alkaloids can inhibit efficient digestion.

Spinning Instructor Manual Appendix D1.1 Nutrition