



# ***NUTRITION PACKET***

*“The food you eat can be either the safest and most powerful form of medicine or the slowest form of poison.”*

*Ann Wigmore*



## BASIC NUTRITION GUIDELINES

*Proper nutrition can enhance and maximize an athlete's performance potential. Likewise, a poor diet can hinder performance. Nutrition for optimal health and physical performance should always involve moderation, variety, and balance. The purpose of this packet is to provide you with some basic nutrition information to help improve your diet enabling you to perform at peak level.*

### 6 BASIC NUTRIENTS

#### 1. WATER

- The need for water before, during, and after exercise cannot be over-emphasized. Dehydration is one of the major factors that limits the body's capacity to perform strenuous exercise. Fluids should be consumed especially before thirst sets in and after a person no longer feels thirsty. Sipping throughout the day rather than drinking a lot at once is a good way to ensure proper hydration.

#### 2. CARBOHYDRATES

- Carbohydrates are an important source of fuel. However, try to limit your intake of simple carbohydrates, which are mostly sugar and lacking in fiber.
- Percent of daily calories: 50-60%
- Calories per gram: 4
- **Good sources:** Whole grain bread with fiber (rather than simply "wheat bread"), cereal high in fiber, fruit, and vegetables. The key is to look for at least 2 grams of fiber.

#### 3. PROTEIN

- The most important role of protein is to build, maintain, and repair tissue. Consuming large amounts of protein in one sitting will not increase muscle mass. Your body can only use so much at once so, for optimal use, consume protein 2-3 times a day in moderate amounts. Highly processed shakes, bars, and drinks should not be consumed. Look for natural sources of protein for optimal health and performance.
- Percent of daily calories: 20-25%
- Calories per gram: 4
- **Good sources:** Lean meats, fish, chicken, eggs, beans, cottage cheese, greek yogurt (one sitting = the size of a deck of cards for meat, or about 21 grams)

#### 4. FAT

- Some fat is essential, both in the body and as an energy source. Diets high in fat, especially saturated fat, are associated with heart disease.
- Percent of daily calories: 20-25%
- Calories per gram: 9
- **Good sources:** Avocados, walnuts and other nuts, olive oil, coconut oil, fish like salmon or halibut

#### 5. VITAMINS

- A balanced diet will provide ample vitamins but if you are going to use a multivitamin make sure it is one of good quality. For more direction on this ask your coaches.

#### 6. MINERALS

- A balanced diet will provide ample minerals.
- **FEMALE ATHLETES:** Monitor your diets to ensure you are getting enough calcium and iron; a good quality supplement for these minerals would not hurt, especially if you are a high-intensity athlete.



## **DIETARY GUIDELINES**

According to *Dietary Guidelines for Americans 2005* (U.S. Department of Health and Human Services, n.d.) a healthy diet is one that:

1. Emphasizes fruits, vegetables, whole grains, and non-fat or low-fat milk and milk products.
2. Includes lean meats, poultry, eggs, nuts, beans, and fish.
3. Is low in saturated fats, trans fats, cholesterol, salt, and added sugars.

## **3 KEYS TO HEALTHY EATING** (Clark, 1997):

1. Variety – It is important for athletes to consume a variety of foods because each food offers special nutrients.
2. Moderation – All foods can be a part of a healthy diet if they are consumed in moderation. Moderation is the key. The majority of your calories should come from healthy foods that are high in nutrients.
3. Wholesomeness – Choose as many natural foods as possible as they are more nutrient dense than highly processed foods. Consume highly processed foods such as potato chips in moderation.



## WEIGHT GAIN

*In order to gain weight you must consume more calories than you burn. Gaining solid weight requires three things: a progressive strength training program, plenty of nutritious food, and quality rest. Many athletes that struggle to maintain or gain weight assume that they need to consume more protein. The reality is that although you need to consume extra calories, those calories should come primarily from carbohydrates with fiber and healthy fats rather than extra protein. As discussed previously, the body has a limit on the amount of protein it can store at once. Spreading protein intake throughout the day (2-3 times) in moderate amounts will be the most beneficial.*

### **TIPS FOR INCREASING LEAN MUSCLE MASS:**

- Consume a large breakfast seven days a week
- Consume a snack in the morning and the afternoon
- Eat frequent smaller meals
- Increase portions at mealtime
- Get most of your extra energy from nutrient dense, high fiber foods and good fats
- Attempt to get 8-10 hours of sleep every night

### **NUTRIENT DENSE SNACK FOOD** (Riley and Wright, 2003):

- **Cold Cereal:** Choose a dense cereal such as granola, Mueslix, or variations of raisin bran and add to Greek yogurt or shakes.
- **Fruits & Vegetables:** Any type: use as a snack or add to salads, yogurt, muffins, pancakes, etc.
- **Milk:** Have with a meal or mix with Carnation Instant Breakfast as a perfect post workout snack that will help increase your daily caloric intake (M. Maguire, personal communication, November 15, 2006).
- **Sandwiches:** Choose thick, dense breads with fiber. A peanut butter and jelly sandwich is an inexpensive, healthy, and nutrient dense snack.
- **Nuts:** Peanuts, pecans, cashews, walnuts, macadamia, etc.
- **Fruit & Nut Butters:** Apples or bananas with peanut butter or almond butter makes for a convenient snack
- **Trail Mix:** Look for trail mixes with more fruits, nuts, and natural things rather than lots of chocolate or other candy



## **HIGH CALORIE BLENDER SHAKES**

If an athlete is having trouble maintaining or gaining weight, these shakes are a healthy and cost effective way to increase your calorie intake. Try to use high-calorie fruits like bananas, mangoes, red grapes, goji berries, sweet potato (cooked and cooled or raw), oats or hemp seeds. Water-rich foods like watermelon, berries and cucumbers add more bulk, but not a lot of calories.

### **Chocolate Banana Shake**

½ avacado  
 2 cups 1% milk  
 3 tbsp cocoa powder  
 1 cup 1% cottage cheese  
 3 tbs honey  
 2 tablespoon peanut butter  
 1 cup spinach  
 ½ cup oats  
 1 large banana  
 1,530 calories  
**Carb 50% Fat 30% Pro 20%**

### **Tropical Shake**

½ avacado  
 2 cup 1% milk  
 2 cups 2% plain greek yogurt  
 1 cup mango (fresh/frozen)  
 1 cup pineapple (fresh/frozen)  
 1 large bananas  
 1 cup spinach  
 ¾ cup oats  
 2 tbs coconut oil  
 1,585 calories  
**Carb 49% Fat 30% Pro 21%**

### **Harvest Shake**

2 cups 1% milk  
 2 cups greek yogurt  
 1½ cup baked sweet potato w/skin  
 2 teaspoons cinnamon  
 20 pecans  
 ¾ cup oats  
 1 cup spinach  
 2 tbs coconut oil  
 Add water if needed (to any shakes)  
 1,640 calories  
**Carb 50% Fat 30% Pro 20%**

## **Sample Weight Gain Menu** (roughly 5,000 calories, 60% carbs, 20 % protein, 20% fat)

### **Breakfast**

1 large banana  
 2 tbsp peanut butter  
 ¼ cup raisins  
 2 cups low fat milk  
 2 cups granola  
 1 lg zucchini muffin

### **Lunch**

1 pita pocket  
 6 oz. turkey breast  
 2 tbsp. light mayo  
 1 cup steamed carrots  
 1 cup greek yogurt  
 2 cups low fat milk

### **Dinner**

1 chicken breast  
 2 large potato  
 2 pats real butter  
 1 cup peas  
 2 pieces whole grain bread  
 2 cups low fat milk

### **Snack**

2 slices whole grain bread  
 2 tbsp peanut butter  
 3 tbsp jelly  
 2 string cheese sticks  
 15 almonds



## WEIGHT LOSS

*In order to lose weight you must burn more calories than you consume. It is important for athletes who want to lose weight to understand how to lose weight while still providing the body with enough energy to perform at a high level. It is possible to lose weight on a high-energy, low-calorie diet (Clark, 1997). Make sure your weight loss goals are realistic. A proper approach to losing weight and improving body composition should include proper nutrition, high intensity strength training, and cardio-respiratory exercise. Weight loss can be achieved through an emphasis on one of the above three methods. However, significant and long-term weight loss is achieved most effectively and safely through an emphasis on all three facets.*

### **TIPS FOR SUCCESSFUL WEIGHT LOSS** (Clark 1997):

- **Write down what you eat and drink in a day and why:** Evaluate your eating habits focusing on potentially fattening habits. Make sure food is consumed for fuel rather than entertainment, comfort, or stress relief.
- **Become aware of meal timing:** Eating early in the day will help prevent you from becoming too hungry and overeating later in the day.
- **Learn your calorie budget:** Know how many calories you can take in and still lose weight.
- **Subtract 20% of your total calorie needs:** Most people try to cut back too much, get hungry and end up ditching their diet.
- **Divide your calorie budget into 3 parts of the day:** Try to consume an equal amount of calories for each part of the day.
  1. Breakfast/Snack,
  2. Lunch/Snack
  3. Dinner/Snack.
- **Read food labels:** Use food labels to familiarize yourself with the foods that you eat most often.
- **Eat slowly:** It takes time for your brain to receive the signal that you are full.
- **Eat your favorite foods regularly:** Don't deny yourself your favorite foods or you will end up binging on them. Just eat smaller portions of your favorite foods.
- **Keep away from food sources that tempt you:** Try not to keep unhealthy foods on hand.
- **Post a list of 10 pleasurable activities that require no food:** It is important to have other things to do when bored, stressed, or depressed so you don't eat to relieve those symptoms.
- **Each week, plan a day off from dieting:** Allowing yourself 1 day off will help keep you on your diet the other 6 days of the week.



## **NUTRITION BEFORE, DURING & AFTER EXERCISE/COMPETITION**

### **Pre-Exercise/Competition Nutrition:**

*There is no right or wrong answer about what to eat before exercise or competition. However, what you eat or don't eat beforehand can affect your performance. Having fuel to get through a grueling practice or to perform your best in competition is very important. A quality pre-exercise/competition meal will provide hydration, satisfy your hunger, fuel your muscles, and help settle your stomach (Clark, 1997).*

#### **The following are some simple tips for eating before exercise or competition:**

1. Choose foods that you are comfortable with and that won't cause stomach problems: bagels, bananas, apples, pasta, and granola bars work well for many people.
2. Drink extra fluids to hydrate your body.
3. Limit high fat proteins such as cheese, hamburgers, and steak.
4. Allow adequate time for food to digest – everyone is different in how soon before exercise or competition that they can eat.
5. Don't try any new foods prior to competition unless you have practiced with them and can predict the outcome.

### **Nutrition During Exercise/Competition:**

*It is important for all athletes to stay hydrated during exercise/competition by drinking plenty of fluids. Water works well for most athletes. If you are participating in endurance exercise/competition that lasts more than 60-90 minutes, a tournament, or day-long event, you will also want to consume carbohydrates to provide energy and maintain electrolyte levels (Clark, 1997).*

#### **Suggestions of carbohydrates to consume:**

1. Have a sports drink and a banana or have a sports bar and some water.
2. For the day-long event or tournament, have a nutrition plan in mind so you don't end up eating the hot dogs, chips, doughnuts, and other junk food that is usually available.

### **Post Exercise/Competition Nutrition:**

*Your top priority following exercise/competition is fluid replenishment. Good choices for fluid replacement include water and sports drinks in moderation (try to pair them with water rather than drinking more than one bottle). Ideally within 15 minutes following your workout you should consume some carbohydrate rich food and also some protein (Clark, 1997).*

Something as simple as chocolate milk provides the proper ratio of carbohydrates, protein, and fat for a perfect post-exercise snack.



## SUPPLEMENTS

*Currently, the supplement/ergogenic aid industry is a multi-billion dollar industry. More fraud exists in the area of supplements than any other segment of the fitness industry. Multivitamins are helpful in topping off a balanced diet but should not be used to make up for a lack of dietary discipline. The important thing with multivitamins is that you find a good one, along the lines of the multi's from Lifetime or Melaleuca. You can always bring the bottle or label in and ask if you aren't sure about the quality of one you are considering or already taking. There are a lot of multivitamins that are not worth your time, where you would be better off not taking one than wasting your money. **Ladies: Calcium absorption is priceless at this time of your body's bone development... Take advantage of making strong bones for the years ahead because you won't get that chance again.***

### **POSITION STATEMENT ON SUPPLEMENT USE**

The Tornado Force Strength & Conditioning staff strongly encourages caution when using supplements, and would prefer if you limit supplementation to a good multivitamin and possibly a calcium/magnesium supplement for the ladies. **NEVER HESITATE** to ask a coach if you are unsure of a supplement, or if you want reassurance that you are doing the best thing possible for your developing athletic potential.

### **DO YOU....**

- Eat a large breakfast daily where you consume roughly 25% of your daily caloric needs
- Eat frequent small meals throughout the day
- Eat from all the food groups
- Restrict your intake of fat to 25% of daily caloric intake
- Eat plenty of fruits and vegetables (at least 3 times a day, **especially** your veggies)
- Drink at least 8 glasses of water per day
- Consume a nutritious snack between meals
- Consume a carbohydrate rich snack within 15 minutes of finishing a practice or workout
- Get at least 8 hours of sleep each night

**If you answered no to any of these questions these are simple changes that you can make to improve your diet and enhance your athletic performance.**

### **Examples of 'good' vitamins:**

Shaklee: Vitalizer; Douglas Laboratories: Liquid Multivitamin, Ultra Preventative X (only need 4 vitamins, not the recommended 8), Cal/Mag 1001 (ladies!); Nutriline (Amway): Nutrilite Daily Multivitamin; Melaleuca: Vitality (Men's/Women's); Puritan's Pride: One Daily (Men's/Women's)

### **Examples of 'not so good' vitamins:**

Centrum, One A Day, Nature's Way, Theragran, or any generic brands from chain stores like Target or Walgreens





## NUTRITION FAQ's

### **Should I be using protein powder?**

Before exploring protein powders, there are a few basic things you need to know about how your body processes them. If the protein powder is loaded with junk in the ingredients that you cannot pronounce, STAY AWAY. You are better off eating real protein like lean meats, cottage cheese or greek yogurt than ingesting things your body can't process. Also, your body has a limit to the amount of protein it can process at once. If you want to take advantage of this, spread out protein consumption to three times a day (ladies limit is usually around 20-25 g's at once, guys around 25-30 g's at once). Over consumption of protein can actually end up hurting some of your organs.

### **Should I be taking a pre-workout supplement for energy in my workouts?**

NO. Stay clear of any type of pre-workout drinks or supplements, including energy drinks. Caffeine changes your body's physiology (how it functions) for exercise in a way that doesn't help you maximize the gains you are looking for. Caffeine is also a diuretic, meaning it pulls water out of your system and makes you dehydrated. These forms of false energy also have a very negative affect on your body's ability to produce its own natural energy. If abused enough, your body will greatly reduce its own energy production and rely on you to take in the false energy. It's not good news if you reach this state - you will constantly be tired no matter how much you sleep (if you are even able to sleep) and it can take a long time to recover from.

### **Which is better for replacing fluids - water or sports drinks?**

Whether you should drink water or a sports drink depends upon how long your athletic even lasts. If you are participating for 90 minutes or more, a drink with 10-18 grams of carbs (if it's more intense, like a soccer or football game on a really hot day, closer to 18 grams helps) will be best. However, drinks with more than 18 grams of carbs per 8oz of fluid will delay you from absorbing the fluid and can cause dehydration, cramps, nausea or diarrhea. Try sports drinks during practice first instead of trying them for the first time on the day of your event.

### **Can I cut back even more on calories to really lose weight quickly?**

Unfortunately doing this is detrimental to your training. There is a fine line between how many calories you absolutely need and how many you can cut back on. If you cut back too much (below 1200 calories including what you burned working out), your body goes into starvation mode and starts shutting things down so it can survive. This means it will lower your metabolism, shut down your energy production and cause early fatigue to set in.