



# 2012 SCHEDULE



## DIET AND NUTRITION BARSTOW FOOTBALL NUTRITION GUIDE

“This is the developmental time of your life. What will you do with your time?”

### NUTRITIONAL AREAS (servings per day)

**FRUITS:** 2-4 servings of fresh fruit (apples, bananas, oranges, grapes, cantaloupe, peaches)  
A piece of fruit is great before or after workouts.

**VEGETABLES:** 3-4 servings (broccoli, carrots, spinach, corn, greens, cauliflower, cabbage)

**STARCH/GRAINS:** 6-8 servings (rice, pasta, potato, beans, cereals, breads, muffins, pancakes)  
White foods are all fast digesting (simple) carbs that spike your insulin levels, white rice, white bread, white potato's, etc. Brown foods are slow digesting (complex) carbs that do not spike Insulin levels and provide all day energy, Brown rice, whole wheat breads, sweet potato's, etc.

**DAIRY:** 2-4 servings (low-fat milk, cheese, yogurt)

**MEATS:** 4 servings (beef {at least 85% lean}, chicken, turkey, egg whites, fish)  
The saturated fat in red meat helps keeps testosterone levels high.  
Get lean and big with FISH!

Fish such as Salmon, tuna, trout and bluefish are high in Omega 3 fatty acids.  
Omega 3's make Glycogen, which is the main source of energy for training, muscle growth and repair.  
Omega 3's also fight muscle inflammation in the body and spare the loss of Glutamine, a vital amino acid, which plays a backup role in the muscle recovery process by boosting the immune system.

**WATER:** Consume 8 cups or 64 oz.

### **BREAKFAST – “Breaking Your Fast”**

Your body is “fasting” while you sleep each night. When you wake up, your system needs a “kick start.” Breakfast is very important in maintaining blood sugar levels and keeping your metabolism running. If you are short on time each morning, plan ahead to ensure that you can eat something for breakfast. Prepare something the night before or purchase items that you can eat “on the run.”

Whole eggs add Vitamin B, which is crucial for energy production in the body and repairing DNA.  
Oatmeal is a complex carb that digests slowly, providing an excellent source of prolonged energy.

### **PROTECT MUSCLE MASS WITH PRE & POST WORKOUT MEALS**

Post Workout Meal Nutrition -?what to eat after a workout

The post workout meal (the meal you eat after a workout) is probably the most important meal of the day for anyone who is into nutrition and fitness.

### **What you should and should NOT eat after a workout.**

Simply put, aside from water (which you should already know you need) your post workout meal needs to contain 2 things, and it needs to not contain 1. You should be eating protein and carbs. You should NOT be eating fats. Fat is NOT a bad thing (when it's the "good" fat) and it is an important part of everyone's diet. However, there just happens to be a certain time when fat (good or bad) wouldn't be good to eat. This of course is in the post workout meal. Simply put, fat slows down digestion. In this case, it would be slowing down the digestion of protein and carbs. This, as you're about to find out, is the exact opposite of what you want to happen.

### **How long after my workout should I eat my post workout meal?**

Soon... really soon. As soon as you can. There is this "window of time" that exists after your workout during which it would be the most beneficial for your body to receive its post workout nutrition. Typically you'd want to try to get this meal into your body within 30 minutes.

### **Post Workout Protein**

Eating this meal soon after a workout is important, but just because you are putting the food into your body quickly doesn't actually mean the food is being digested and used by your body equally as quick. While egg whites, chicken and tuna fish are fine sources of protein that I personally eat daily, they aren't the ideal type of protein for the meal after your workout.

These foods are WHOLE foods, and the protein in whole foods digests pretty slowly. You may have eaten a high protein food in your post workout meal, but by the time the protein is digested and finally ready to be used by your body, a whole lot of time would have passed. This is why the ideal source of protein to eat after your workout is a whey protein powder mixed with some type of liquid thus creating a whey protein shake.

A whey protein shake will be digested by your body much quicker than a whole food because it will be a liquid. And, not to mention, whey protein is the fastest digesting protein there is. This is what makes whey protein pretty much the official choice of most people as their post workout meal protein source. As for how much, try to consume between 0.15-0.25 grams of protein per pound of your body weight (so a 175lb person would shoot for between 26-43 grams at this time).

### **Post Workout Carbs**

Secondly, after your workout Carbs are actually an extremely important part of your post workout nutrition. Carbs will be used by your body to restore muscle glycogen. If your post workout meal doesn't contain carbs, your body may actually instead break down muscle tissue for this same purpose. That would be a bad thing. Carbs also create an insulin spike which helps to move nutrients into your muscle tissue quicker.

So, now that you know you need them after a workout, what kind do you need? Well, you know all about good carbs and bad carbs by now, right? Funny enough, this is actually the only time when "good carbs" and "bad carbs" switch roles. This doesn't mean start eating cookies, this just means that typical good carbs (whole wheat bread, brown rice, etc) contain fiber, and fiber slows down their digestion. This is actually what makes them "good" any other time of the day. But by now you know the post workout meal is all about speed. And when it comes to speed, simple carbs beat complex carbs.

A food like a baked potato is an okay choice for a carb source after a workout. However, just like protein, whole foods in general aren't really the most ideal choice at this time. This is where a little something called dextrose comes in. Dextrose is not a supplement... it's actually just a type of sugar. I know, I'm basically saying you should eat sugar. While that would be insane any other time of the day, your post workout meal is the one exception. Along with whey protein, dextrose has also become almost an official choice for a post workout carb. Most people should look to consume somewhere between 0.25-0.4 grams of carbs per pound of their body weight from dextrose (a 175lb person would shoot for between 40-70 grams).

### **SUPPLEMENTS:**

The five Best Supplements: ?Whey Protein Powder, Fish Oil,? Creatine, L-Glutamine, Multivitamin. Everyone wants to know what the best supplements are. What are their benefits? What do they do? Are they safe? Are there any side effects? Do they REALLY work? What brand is the best? Which supplements are the best for weight loss? What about building muscle? What about overall health in general?

However, before I do, there are 2 very important facts I need to explain. First, the key to losing fat, building muscle, or just improving your body or health in any way is a combination of a proper diet plan and a proper workout program. The best supplements in the world won't do a thing if you don't get the important stuff right first.

Having said all of that, let's get to what you came here for. Here are my recommendations for the 5 best supplements:

### **1. Whey Protein Powder**

What I'm really recommending here is protein supplements in general (whey protein powder, casein powder, protein bars), but I'm singling out whey protein powder as my favorite of them all.

Whey Protein is especially beneficial the first thing in the morning and after workouts. A Blend of Whey and Casein proteins are best for during the day and at bedtime.

Quite simply, muscle can NOT be built (or even maintained) without eating a sufficient amount of protein on a daily basis. That fact right there makes it the single most important nutrient in the diet of anyone looking to build any amount of muscle. And for the people more interested in losing weight, consuming enough protein each day will help ensure the weight you lose is fat, not muscle.

For all of these reasons and more, protein supplements are one of the few types of supplements that are backed by proven science. Simply put, protein is important for various reasons, and protein supplements give you a quick, simple and convenient way to ensure you consume enough each day.

### **2. Omega 3 Fish Oil**

This list of the "best supplements" isn't in any specific order. But, if it was, fish oil would be #1 on the list. It's one of the very few supplements I recommend to everyone, whether they workout or not.

### **3. Creatine**

Creatine is one of the ONLY muscle building supplements on the market that actually works. This isn't just an opinion, either. It's been one of the most studied supplements of the last decade, and the scientific proof is definitely there to back up its effectiveness.

### **4. Multivitamin**

Just like fish oil, a multivitamin is one of the few supplements that should be taken by everyone, even if you have no interest at all in diet or fitness. The reason why is simple. Multivitamins contain the essential vitamins and minerals the human body requires on a daily basis to keep us healthy and functioning at our best (which is where it indirectly helps with fat loss and muscle gain).

### **5. L-Glutamine**

L-Glutamine has some research showing that it may help with everything from protein synthesis, to immune function, to intestinal health, to workout recovery. It may also have some anti-catabolic benefits, which means it may help prevent your body from burning muscle tissue for energy and instead use only stored body fat.

### **HOW TO GAIN WEIGHT**

You need to eat more food. Even then, gaining weight may not be easy for some athletes. If you are training hard, you may burn up everything you eat and then some.

A pound of body weight equals 3,500 calories. To gain even 1 pound, you need to eat 3,500 more calories than your body uses. You can realistically and safely gain about 1 pound per week. Doing so means eating an extra 500 calories or so each day. The actual number of calories needed depends on such factors as age, gender, muscle mass, exercise level, metabolism, and climate.

How to go about it :

There are three basic ways to increase the number of calories you eat. You can:

1. eat larger portions at each meal
2. eat more meals each day
3. have nutritious snacks between meals

### **Tips to Consider**

• To ensure the greatest recovery and muscle building, eat within 30 - 45 minutes after weight training. This snack should include carbohydrates & protein – ideally the snack would be about 80% carbohydrates & 20% protein. If you do not like eating right after a workout, then drink a protein shake or a similar drink. The benefit from the post-

workout snack is 3 times higher if consumed IMMEDIATELY after the workout.

- Do not only rely on just adding protein to your diet. While protein is important to muscle recovery & growth, your body needs the fuel provided by extra carbohydrates. Any extra protein that the body cannot use will either be excreted as waste or stored as fat..
- Eat higher calorie foods; just make sure the fat content isn't too high – a good rule of thumb is to limit or avoid foods with 6 or more grams of fat per 100 calorie-serving.
  - Add calories to milk by adding instant breakfast mixes, powdered milk, or other flavorings.
  - Increase the caloric density of foods by adding peanut butter, honey, or other spreads.
- Select a high-calorie, healthy dessert. Examples include oatmeal-raisin cookies, carrot cakes, muffins, and sweet breads.
- Understand that some of the weight gain may be in the form of fat. However, you must make sure that your weight gain is as lean as possible to ensure that you retain your speed and athleticism.

### **HOW TO LOSE WEIGHT & MAINTAIN YOUR ENERGY LEVEL**

1. Consume a diet high in COMPLEX carbohydrates (bread, cereals, pasta, rice, potatoes, fruits, vegetables). Weight is often gained by eating too many foods with SIMPLE carbohydrates (sugars, sodas, desserts).
2. Continue to drink water. The body needs water and any “water weight” that is lost always comes back.
3. Try to reduce unnecessary calories from your diet each day, but avoid reducing your intake too much – losing weight too quickly may result in a loss of muscle mass & can be harmful to your body.
4. Decrease the fat in your diet. Fat has twice as many calories per gram as carbohydrates or protein. Limit the amounts of butter, margarine, oils, dressings, mayonnaise, and grease.
5. Avoid low carbohydrate/high fat diet fads. When you come off such a diet, the weight usually comes right back.
6. Eat several smaller meals throughout the day. This helps keep the body's metabolism running at a faster pace, constantly burning fat. People with deviations in their energy balance have the highest body fat %.
7. NEVER SKIP BREAKFAST – the body needs energy after sleeping during the night.
8. Eat slower. Eating fast results in eating more.
9. Avoid junk foods – they have little/no nutritional value and are high in fat.

### **WHAT EVERYONE SHOULD KNOW ABOUT WATER**

#### **Benefits of Water**

Water is an important nutrient for athletes. Water makes up 60% of your total body weight and 70% of your muscles. The most important thing to remember about water is that it cools your body. As your body temperature increases, you sweat; when the sweat evaporates, your body cools down.

#### **Dehydration**

If you begin a physical activity without enough water in your body or if you do not replace the water that is lost to sweat, you may become dehydrated. Once you become dehydrated, you can no longer sweat and rid your body of the heat that builds up when you exercise – your muscles lose their ability to function properly and your body loses its ability to cool down.

Dehydration can be very dangerous. Some of the first symptoms include thirst, clammy skin, chills, throbbing heartbeat, and nausea. When you become more dehydrated, you may develop a headache, cramps, shortness of breath, and/or dizziness. At the most serious level of dehydration, you can experience hallucinations, visual and/or hearing problems, a swollen tongue, and/or kidney failure.

#### **Steps to Avoid Dehydration**

1. Drink plenty of cool water before, during, and after practice and competition as a preventive measure. Cool water is absorbed faster than warm water. On average, an athlete should drink at least 64 ounces of water each day. During particularly active periods or during times when the weather is extremely hot or humid, you may need to drink more than what is recommended here.
2. **DO NOT RELY ON THIRST.** The feeling of thirst lags behind your actual need for water. If you wait to drink only after feeling thirsty, your water intake is already behind, and you will likely become dehydrated.
3. Drink water every 15 minutes during activity (the frequency and volume of water needed will depend on the activity and climate).
4. Avoid soda, coffee, and tea before practice or games. These are diuretics, which draw water out of the body.
5. Drink at least 8 ounces of water or a sports drink for each pound that is lost during exercise.
6. Check your urine. It should look clear or lightly yellow (like lemonade). If it is dark (or looks like apple juice), you are dehydrated and in need of water.
7. If you are trying to lose weight, **SPORTS DRINKS**, (Gatorade, Power ade, etc) are **NOT** good for you at any time other than during or immediately after a workout. Their function is designed to replace electrolytes lost during exercise through sweat. At any other time of day they are just additional carbs, sugars and salt.

#### **Sweat**

In order for your body to cool down during exercise, two things must happen: you must sweat and the sweat must evaporate from your skin. When the weather is hot and the humidity is high, it becomes more difficult for the sweat to evaporate from your skin and you may become overheated. Follow these tips when exercising in hot, humid weather:

1. Wear the lightest clothing & equipment possible. Dri-fit and Under Armor shirts really aid in cooling the body. Low-cut socks allow more sweat to evaporate than higher socks.
2. Avoid working out in dark clothing – darker colors absorb more of the sun and make it more difficult to cool the body.
3. Also avoid wearing extremely long or excessively baggy clothing – as it gets wet, it becomes heavier and leads to more sweat loss.

#### **DON'T FEAR LATE NIGHT FEEDING**

In the 7-9 hours you sleep every night your body is more or less in a fasting state, taking amino acids from your muscles to fuel your brain in the absence of food – not an ideal situation since your goal is to pack on muscle.

The key is ingesting a slow digesting protein source with a moderate amount of fat so amino acids feed your muscles gradually through the night. At bedtime, consume something such as: 1 cup of fat free cottage cheese, 1-2

tablespoons peanut butter, an ounce of walnuts or almonds, 2-3 tablespoons of flaxseed oil. Healthy fats in peanut butter, nuts, and flaxseed oil will help slow the absorption of protein further.

**SOMETIMES DOING NOTHING IS THE BEST THING FOR YOU – REST!**

This "recovery time" is approximately 8 hours of sleep each night and that is each and every night not 10 hours tonight and 6 tomorrow because that does not work.

There are five stages of sleep and if you are like most people leading stress filled lives you never make it past stage 1 or 2.

During Specific Adaptation to Imposed Damage your body builds your muscles bigger and stronger so that when you workout again your muscles will be ready.

While you are in deep sleep your body is working hard to repair and build your muscles that were damaged during workouts.

**HYDRATION**

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In accordance with the recommendations of the American College of Sports Medicine (2007), the following summary is provided to help guide parents and coaches with safe and appropriate fluid replacement during exercise...

Hydration (daily water balance) = Net difference between water gain and water loss.

Water Sources: Beverages and Foods Water Losses: Breath, Urine, Sweat

**Fluid Replacement Guidelines**

Before Exercise:

Goal-to start physical exercise normally hydrated with adequate salts (sodium, potassium).

1. Slowly drink beverages with food, or a small salted snack, at least 4 hours before exercising.
2. If the child doesn't produce urine, or if urine is dark or highly concentrated, drink more beverages about 2 hours before the event.
3. Note: Hyper- (or over) hydration with fluids such as sugar containing sports drinks is not advised. Over hydrating with water can actually be detrimental as well. Let the child's ability to produce adequate, light yellow urine 1-2 hours prior to exercise be your guide.

**During Exercise:**

Goal-to prevent excessive dehydration (which is a loss of greater than 2% of total body weight from water deficit) and to prevent adverse changes in body salts.

1. Periodic fluid breaks throughout exercise are needed.
  2. Composition of fluids to be consumed:
    - a. Water is preferred initially (first 1-2hours)
    - b. Sports drinks, if used, are helpful after 1st hour of intense exercise
    - c. Sports drinks should contain approximately 20-30meq/L sodium, 2-5meq/L potassium, to replace salts lost in sweating and 5-10% carbohydrate to sustain energy for exercise performance. Read Labels!!
  3. Football players in full uniform have some of the highest reported fluid and salt losses of any athletes; even more so than distance runners!
    4. Note: To customize your child's fluid replacement schedule, monitor body weight changes before and immediately after exercise to determine if adequate fluids are being consumed during exercise. A greater than 2% loss in body weight signals dehydration and the coaches need to know if this is occurring.

a. For example,

Pre-activity weight=100lbs (100%)

Post-activity weight=97lbs (97% of original weight)

Then, your child has lost 3% of his body weight from mostly fluid and salt losses and is dehydrated.

**After Exercise:**

Goal-to fully replace any fluid or salt losses from exercise.

1. Consume a normal meal or salted snack with a sufficient volume of water to restore normal salt and hydration levels.
2. Drink (gradually over the next few hours) about 1 liter of fluid for every two pounds of body weight lost during exercise.