TAKING IT TO THE MAT:

THE WRESTLER'S GUIDE TO OPTIMAL PERFORMANCE

Prepared for the NCAA

by

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The Center for Nutrition in Sport and Human Performance provides vision, education, and research in establishing sound nutritional and fitness practices associated with participation in athletic or related exercise programs.

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Bryan W. Smith, M.D. of the University of North Carolina, contributed examples of determining body weight.

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I. INTRODUCTION

Wrestling is a great sport with a long history dating back to prehistoric times. Cave drawings found in France depict wrestlers in various holds and leverage positions. Wrestling became part of the Olympic Games in Greece in about 708 BC.

Wrestling is one of the few sports where men of all sizes can compete. The sport requires strength, concentration, coordination, skill, agility, and muscular endurance. Wrestlers often seek ways to improve their performance by using the many supplements available on the market or working out in hot rooms. However, the scientifically proven way to achieve the most out of your practice is to work-out in a moderate to cool room. The sure way to energize your performance and competition is with the right diet over the entire season!

This booklet provides information on how to determine the appropriate body weight for you, why heat and dehydration work against you, and tips on how to achieve the optimal diet to unleash a championship performance!

II. ENDING DANGEROUS WEIGHT CUTTING: THE RULES

(Adapted as per NFHS wrestling rules)

- 1) Rule 1-1-2 Competition in dual meets shall be conducted by a random draw of weight classes. The draw shall take place immediately following the conclusion of weigh-ins. Subsequent matches will follow in the traditional order. In multi-dual events, the sequence determined by the draw will be followed for that day's subsequent meets.
- 2) Rule 4-4-4 At any time, the use of sweat boxes; hot showers; whirlpools; rubber, vinyl, and plastic type suits; or similar artificial heating devices; diuretics; or other methods of quick weight reduction purposes is prohibited and shall disqualify an individual from competition.
- 3) Rule 4-5-1 Contestants shall have the opportunity to weigh-in, shoulder-to-shoulder, a maximum of 1 hour before the time a dual meet is scheduled to begin. The weigh-in shall proceed through the weight classes beginning with lowest weight class.
- 4) Rule 4-5-3 Contestants shall weigh-in at the tournament site a maximum of 2 hours before the first session of the day. The weigh-in shall proceed through the weight classes beginning at the lowest weight class.

III. MAKING WEIGHT

A. WEIGHING THE OPTIONS (Adapted for high school wrestling)

Competitive equity in wrestling requires that similar sized individuals compete against one another. Many wrestlers feel they need to lose that extra body fat to cut down to a lower weight and have used unhealthy and potentially dangerous weight loss methods. The following procedures were developed to minimize health risks. These procedures are based on measurement of your body composition so if you want to lose weight it will be fat weight - not water and not muscle (which are both important for optimal performance).

Your body is composed of fat tissue, as well as, lean tissue, which includes muscle, bone, and water. The best way to lose weight and not impair performance is to lose fat tissue and maintain lean tissue. The American College of Sports Medicine and The American Academy of Pediatrics have set 7% as the minimum percent body fat for high school wrestlers to insure good health. Having less than 7% body fat can lead to serious health consequences and impaired performance. Each wrestler's percent body fat will be assessed prior to their first practice using one of the methods approved by the Athletic Association. This method is based on determining your minimal safe and healthy body weight at a percent body fat no lower than 7%, minus 3% body weight to accommodate any error in the testing. However, it is important for you to note that there is no scientific evidence that you will perform any better at 7% body fat than at 8% or 10% body fat.

B. A DELICATE BALANCE

1. Losing and Maintaining Weight

The amount of calories each person needs is quite variable and based on a person's body weight and energy expenditure. In general, no wrestler should go below 1600 calories per day. Going below 1600 calories per day will not provide you with the appropriate amount of nutrients your body needs and will lead to loss of lean body mass (LBM) or muscle mass. You will also feel week and not be able to perform at your best, both in competition as well as scholastically. Remember, 1600 calories is the **absolute minimum** amount of calories one's body needs; it is not the calorie intake you should strive for.

Any attempt at losing weight should start well before the start of the wrestling season. A weight loss of no more than 2 pounds per week will ensure you will not lose body water and lean body mass (muscle), which is critical for your performance

and maintenance of your metabolic rate. In addition, by losing weight before the season's start, you will not deprive yourself of nutrients, be better able to keep the weight off that you lost, and perform better in practice and competition, as well as scholastically.

Here is a formula you can use to estimate your caloric needs:

1. Take your body weight and multiply it by 10:

Example: If you weigh 125 pounds; 125 pounds x 10 = 1250 calories.

2. Multiply the number you get by 1.7:

 $1250 \times 1.7 = 2125$ calories per day you need to maintain your body weight of 125 pounds (Remember, this is an estimate and you may need more than 2125 calories to maintain your body weight at 125 pounds.)

3. If you wish to decrease your body weight:

Decrease your caloric intake from 250 to 500 calories per day, and increase your workout time. You will be able to safely lose 1 to 2 pounds per week, be able to maintain this body weight, and maintain optimal performance.

2. Avoiding Unhealthy Weight-Loss Practices

In the past, there have been unhealthy practices wrestlers used to lose body weight. Most of those methods were used for rapid weight loss. Those unhealthy weight-cutting practices often resulted in impaired performance and health, **and even death**. These methods are not recommended (some are banned by the high school wrestling rules) and should be discouraged by all those involved in the sport of wrestling.

Yo-Yo Dieting:

By having cycles of fasting then eating (typically binge eating), your body will store more body fat, and it will be more difficult to lose body weight. Additionally, it places a great stress on your body every time you starve it then re-feed it with great quantities of food.

Starvation/Fasting:

When you fast, or do not eat at all, your body uses your muscle mass first, not your fat mass, which leads to impaired performance. In addition, with each fast, your body actually gets better at storing fat, in order to prepare itself for your next fast. So, starvation not only leads to muscle loss, impaired performance, and increase fat

mass deposition, but also leads to a lower metabolic rate, which makes it more difficult to lose body weight with each cycle.

Diet Pills/Laxatives:

Use of diet pills, which can contain products that increase your heart rate and blood pressure to dangerous levels, are not safe and should be avoided. Laxatives also have a dehydrating effect and are not safe and should also be avoided.

Dehydration:

Dehydration is a result of not taking in enough fluids. Wrestlers who lose weight improperly are typically dehydrated. An easy way to know if you are dehydrated is to observe the amount and color of your urine. Small amounts, and dark urine, are indicators of dehydration.

Dehydration has a number of negative effects, which include decreased muscular strength and endurance, decreased blood flow in your body, and a decreased ability to regulate your body temperature.

Dehydration is often a result of spitting, diuretics ("water pills") which can impair the proper functioning of your heart and kidneys, sitting, and/or exercising, in a steam room or sauna/exercising in plastic suits. The use of diuretics and saunas or steam room can cause very rapid dehydration, leading to electrolyte imbalances, and/or heat stroke, and even death.

IV. ENERGIZING YOUR PERFORMANCE

A. FUELING UP: USING THE PRINCIPLE OF SPORTS NUTRITION

Based on the amount of calories you require, you now need to determine the amount of calories you should get from carbohydrates, protein, and fat. All three of these "macro-nutrients" are important for your performance.

Too many wrestlers focus on consuming carbohydrates and protein, while cutting fat from their diet. However, cutting all fat from the diet will impair performance since it is used as an energy source, as well as, in many other bodily functions. **Getting the right balance of carbohydrates, protein, and fat is important for peak performance**.

Carbohydrates CHO

Carbohydrates are used for energy even when you are not exercising. For optimal performance, it is important that your glycogen stores (stored form of carbohydrate in your body) are replenished after each workout. The optimal time to replenish your glycogen stores is during the two hours following a practice. This is not to say that you should only eat after practice, but after practice, high carbohydrate foods will help to give you the edge of increased glycogen stores, and prepare your body for your next workout or match.

The amount of carbohydrates you typically need is about 60% of your total caloric intake. For simplicity, if you eat 2,000 calories a day, 60% of that is 1,200 calories from carbohydrates, which is equal to 300 grams of carbohydrates. Good sources of carbohydrate (CHO) include:

CHO	Approximate Grams
1 cup Pasta	40
1 cup Mashed potatoes	32
2 slices Whole wheat bread	24
12 ounces Skim milk	18
1 cup Cereal	20 to 80
1 piece Fresh fruit	15
8 ounces 100% fruit juice	15

Glycemic Index

The glycemic index refers to the effect foods have on your blood sugar (glucose) levels. The faster and higher a food makes your blood sugar rise, the higher its glycemic index. Maintaining an adequate blood sugar level means you will have optimal energy be able to maintain, or improve, your ability to focus on wrestling. Adequate blood sugar levels mean adequate energy for performance.

High glycemic index foods may enhance performance in athletes and can be useful during and after work outs or competitions. Low glycemic index foods may be helpful prior to sports activity. If you want to "experiment" with different types of carbohydrates, do so during practices, not competition. High glycemic index foods include waffles, bagels, white bread, rice cakes, graham crackers, Rice Krispies*, Cheerios*, watermelon, baked potatoes, mashed potatoes, carrots, honey. (* Indicates brand names, commercially available products.)

Moderate glycemic index foods include orange juice, Gatorade*, rice, oatmeal, Grape Nuts*, wheat crackers, whole wheat bread, pineapple, raisins, bananas, grapes.

Low glycemic index foods include pasta, peas, chickpeas, lentils, baked beans, peanuts, pears, oranges, sweetened yogurt, apple juice, skim milk. (* Indicates brand names, commercially available products.)

Depending on digestibility, low glycemic index foods may be consumed 30-60 minutes before you workout. If you are going to experiment with high and low glycemic index foods, do so at practices, not during competition.

Protein

Protein is another important macronutrient which is involved with providing ones body with energy. **Protein is mostly involved in muscle mass and other important metabolic functions in your body.** If you eat too little protein, a lot of negative consequences can occur to your health and definitely to your performance.

A typical amount of protein required for an athlete is about .5 to .9 g protein per pound of body weight. So, **if you weigh 140 pounds**, **you will require anywhere from 70 g to 126 g of protein per day**. You can also figure out your protein needs as a percentage of your total caloric intake. For example, if you consume 2,000 calories per day, 15% of 2,000 is 300 calories, which is 75 g of protein (there are 4 calories of protein per gram; thus, $300 \div 4 = 75$). By watching portion size and choosing cuts of meat that have less fat you will be able to stay within your caloric requirements.

Good sources of protein include:

PROTEIN	Approximate grams
2 scrambled eggs	12 g
12 ounces skim milk	8 g
2 slices American chees	e 13 g
3 oz baked chicken brea	st 25 g
3 oz baked fish (flounder	r) 21 g
1 cup cooked pasta	6 g
3 oz hamburger	21 g
3 ounces tofu	12 g
3 oz vegetarian burger	18 g
2 TBSP. peanut butter	8 g
1 bagel	7 g

Fat

Fat has been given a bad rap in the last few years. Too many people have become "fat phobic. They believe is low fat is good, no fat is better! That is definitely not true! Fat is required for a number of metabolic processes in your body and is especially important in supplying energy. Also, fat provides taste to foods helps you feel less hungry later. Some fat with each meal is important in helping you achieve your performance goals.

The amount of fat you need is about 20% to 30% of your total caloric intake. If you were consuming 2,000 per day, your fat intake range would be about 400 to 600 calories from fat. This is about 44 to 67 grams of fat.

By watching portion size at meals you will be able to stay within your caloric requirements. For health reasons, the best choices of fat are monounsaturated, like using olive or canola oils. The second best choices are polyunsaturated fats, like soybean and safflower oils. Finally, consume saturated fats the least in your diet; these include palm oil, butter, palm kernel oil, coconut oil and hydrogenated oils of any kind.

Good sources of fat include:

FAT	Approximate grams
1 TBSP. olive oil	14 g
1 TBSP. canola oil	14 g
1 TBSP. soybean oil	14 g
12 ounces 1% milk	7 g
1 TBSP. safflower oil	14 g
2 TBSP. peanut butter	16 g
3 ounces lean broiled be	ef 9 g

(Note that some high protein foods also contain fat.)

B. YE OLDE WATERING HOLE: ACHIEVING ADEQUATE HYDRATION

Water is the most important nutrient. If the body becomes dehydrated, the metabolic processes slow down and don't work as well. When you are dehydrated, an exercise or practice will "feel" difficult. Wrestlers sometime confuse this heavy feeling with having a "good" workout. This is just the opposite of what really happens! Dehydrated cells don't allow you to put forth your maximum effort. In fact, a 1% to 2% loss of body weight due to fluid loss can cause a 15% to 20% decrease in performance!

Signs of dehydration include rapid heart rate, weakness, excessive fatigue, and dizziness. **Dehydration can be dangerous.** Exercising or practicing in a dehydrated condition can lead to heat stoke, muscle breakdown, kidney failure, and even death.

Points to remember about hydration:

- 1) If you drink adequate amounts of water or other fluids you will feel better and perform better.
- 2) Fluids should be ingested 2 hours before (20 oz) and during (8 oz every 15 to 20 min) practice for optimal performance.
- 3) Thirst is a late sign of dehydration. Your performance could decrease as much as 10% before you feel thirsty. Start drinking

fluids even before you get thirsty.

- 4) Continue to ingest fluids after practice to rehydrate. Weigh yourself before and after practice; any decrease in body weight is due to a loss in water from the body. Drink 2 cups of fluid for every pound of body weight lost.
- 5) One easy way to monitor your hydration status is to check the color of your urine. Light yellow urine indicates good hydration and dark yellow indicates dehydration.
- 6) Avoid alcohol and caffeinated beverages because they will promote dehydration. Carbonated beverages will decrease the amount of fluid you are able to consume.
- 7) Avoid soft drinks because the added sugar in the drinks will slow down absorption.
- 8) Cold drinks are absorbed faster and also serve to cool the body to promote optimal performance.
- 9) Avoid fruit juices in large amounts at one time because they can cause diarrhea. However, 100% fruit juices are a healthy drink and should be consumed as part of your fluid intake throughout the day.

10) Water is an appropriate fluid for hydration and rehydration. A sport drink is also fine, and the small amount of carbohydrate in a sport drink can provide you with quick energy during long practices or competitions.

C. FACT OR FICTION: BEING SMART ABOUT NUTRITIONAL SUPPLEMENTS

Many nutritional supplements are marketed to improve performance or to build muscles and lose fat. However, most of these supplements have never been proven effective and could be harmful to health or performance. Nutritional supplements are often advertised using deceptive and/or misleading claims. They can be marketed without the Food and Drug Administration (FDA) review of safety or effectiveness so many claims are unsubstantiated. The contents of these "so-called" performance boosters may not be represented accurately on the list of ingredients and can contain impurities or banned substances. These substances could cause a student-athlete to test positive on a drug test.

Protein and amino acid supplements: Athletes ingest a sufficient amount of protein to build muscle without taking these supplements. **Ingesting more protein will not build more muscle**, but will be metabolized by the body. Often these protein supplements are combined with special enzymes or special protein formulations, like whey protein. None of these additives have ever been proven effective, and they are expensive.

Selected amino acid supplements are purported to increase growth hormone. However, studies have found that manufacturer recommended doses do not increase growth hormone or muscle mass. Moreover, ingesting only selected amino acids can affect the absorption of other essential amino acids, impairing health and performance.

Vitamin and mineral supplements: Most scientific evidence shows that consuming selected vitamins and minerals will not enhance performance. Moreover, megadoses of these selected micronutrients have been found to be harmful.

Carnitine, herbal extracts, and special enzyme formulations, as well as other substances naturally occurring in foods do not provide any benefit to performance. Some herbal supplements, like Ma Huang, contain ephedrine which is a drug banned by the NCAA. Ephedrine is a stimulant and is sometimes combined with caffeine and aspirin by athletes who want to lose weight. The FDA has warned that ephedrine has potentially harmful side effects such as tremor and disturbance in heart function. Combining ephedrine with caffeine and aspirin will increase the risk of these side effects.

Vanadyl Sulfate (vanadium) is a non-essential trace mineral that has insulin-like effects. It has not been found to increase muscle mass.

Creatine may enhance short-term, high -intensity exercise. However, the verdict is still out on the safety of creatine supplements, especially over long periods of time. Creatine can increase body weight, predominantly due to water retention, which would probably be disadvantageous for wrestlers who are trying to maintain a low body weight.

HMB (beta-hydroxy-beta-methyl butyrate) is a metabolite of the amino acid leucine. Only one study found that HMB increased muscle mass and strength and reduced muscle breakdown during resistance training. Additional studies are needed to confirm the results of only one study. Possible long-term consequences are not known.

NOTE: Many high tech nutritional supplements may seem to be effective at first, but this is likely a *placebo* effect - if an athlete believes these substances will enhance performance he/she may train harder or work more efficiently. In other words, it is the athlete's training and not the supplement that is responsible for enhanced performance. **Ultimately most nutritional supplements are ineffective, costly, unnecessary, and potentially dangerous.**

D. BEFORE THE WHISTLE BLOWS

1. Preparing for Training & Competition

Just as no two wrestlers perform exactly alike, so too, the optimal caloric need for each wrestler, even in the same weight class, may be different. Yes, caloric need depends on size but there are many other physiological influences (basal energy expenditure, lean body mass, other daily activities in addition to wrestling, etc.) in determining caloric needs for optimal wrestling performance.

The sample training menus that follow are designed to meet the **minimum** caloric needs for each weight indicated. They provide approximately .86 gram (g) of protein per pound of body weight. You are the best judge of your caloric needs based on your performance. Even at your lightest weight, you still need adequate energy, vitamins and minerals. So, if your workouts are sluggish and training is taking a toll, leaving you feeling fatigued for the rest of the day, it may be that you are consuming too few calories.

I. Sample Training Diets:

A.Sample Diet I – Wrestler with an approximate weight of 125 lbs. - Approximately 2125 Calories; 62% carbohydrate (329 g); 20% protein (108 g); 18% fat (42 g)

Breakfast

1 ½ cups of cold cereal
2 - 8 oz. glasses of skim milk
1 slice whole wheat toast with 1 tbsp. peanut butter & 1 tbsp. jam
2 - 12 oz. glasses of water

Mid-morning

8 oz. low fat fruit-flavored yogurt 16 oz. of water

Lunch

2 oz. turkey, **or** roast beef, **or** ham, **or** tuna sandwich with lettuce on multi-grain bread (no cheese; reduced fat mayo)

Salad with nonfat dressing **or** carrot or celery sticks

3/4 oz. pretzels

2 - 12 oz. glasses of water

Pre-practice fuel

(about 1 ½ - 2 hours before practice)
1 cinnamon raisin bagel
8 oz. 100% fruit juice
16 oz. of water

Post-practice recovery

(within 15 minutes after practice ends) 16 oz. of pineapple juice or sports drink

Dinner

6 oz. Skinless chicken
1 cup brown rice
1 cup cooked vegetables
1 cup salad with 2 tbsp. low-fat dressing
1 dinner roll
2 - 12 oz. glasses of water

Evening Snack

4 oatmeal cookies 8 oz. of skim milk

B. Sample Diet II - Wrestler with an approximate weight of 145 lbs. -

Approximately 2670 Calories; 62% carbohydrate (414 g); 20% protein (134 g); 18% fat (53 g)

Breakfast

3/4 cup cooked hot cereal with 1 tbsp. raisins2 - 8 oz. glasses of skim milk2 - 12 oz. glasses of water

Mid-morning

1 bagel with 1 tbsp. peanut butter 16 oz. water

Lunch

3 oz. turkey, **or** roast beef, **or** ham, **or** tuna sandwich with lettuce on multi-grain bread (no cheese; reduced fat mayo)

Salad with nonfat dressing **or** carrot or celery sticks

2 - 12 oz. glasses of water

Pre-practice fuel

(about 1 ½ - 2 hours before practice)
2 fig bars
16 oz. of water

Post-practice recovery

(within 15 minutes after practice ends) 8 oz. of pineapple juice or sports drink

Dinner

3 cups of cooked Pasta with ¼ cup meat sauce & ¼ cup grated cheese
1 cup cooked vegetables
2 slices Italian bread
2 - 12 oz. glasses of water

Evening Snack

1 cup chocolate frozen yogurt 8 oz. skim milk

C. Sample Diet III - Wrestler of approximate weight of 197 lbs. -

Approximately 3349 Calories; 62% carbohydrate (519 g); 20% protein (168 g); 18% fat (67 g)

Breakfast

1 ½ cups cold cereal

2 - 8 oz. glasses of skim milk

2 slices whole-wheat toast with 1 tbsp. peanut butter and 1 tbsp. jam

2 scrambled eggs

1 banana

8 oz. grape juice

2 - 12 oz. glasses of water

Mid-morning

1 - 8 oz. container of fruit-flavored yogurt

1 apple

16 oz. of water

Lunch

3 oz. turkey, **or** roast beef, **or** ham, **or** tuna sandwich with lettuce on multi-grain bread (no cheese; reduced fat mayo)

Salad with nonfat dressing or carrot or celery sticks

3/4 ounce of pretzels

2 - 12 oz. glasses of water

Pre-practice fuel

(about 1 ½ - 2 hours before practice)

1 cinnamon raisin bagel

8 oz. of 100% real fruit juice

16 oz. Water

Post-practice recovery

(within 15 minutes after practice ends)

16 oz. pineapple

juice or sports drink

Dinner

6 oz. Skinless chicken

1 cup cooked brown rice or 1 cup mashed

potatoes

1 cup cooked vegetables

1 cup salad w/ 2 tbsp. Ranch dressing

1 dinner roll

2 - 12 oz glasses of water

Evening Snack

4 oatmeal cookies (medium size)

8 oz. of skim milk

E. ROAD WARRIORS: Eating on the Road

Menus at Fast Food Restaurants are always changing. However, the following are your "BEST BETS" when eating out.

Beverages: Orange juice; low-fat, or skim, white or chocolate milk; lemonade.

Entrees: Pancakes; scrambled eggs; cereals; turkey, ham, or roast beef sub (hero, grinder); thick-crusted veggie pizza; charbroiled chicken sandwich; chicken fajita; baked potato; chili; soft taco (burrito) with rice and beans **with either**: meat sauce **or** cheese, **or** sour cream; plain hamburgers, pasta with tomato-based sauce.

Note: The A, B, C's of baked potatoes:

- (A) The skin contains most of the vitamins and minerals.
- (B) A large baked potato contains between 6 and 8 grams of protein.
- (C) 1 tablespoon of sour cream has 1/6 the fat of 1 teaspoon of butter/margarine.

Extras: Bagels; English muffin with jelly; low-fat fruit yogurt; Italian bread slices; salad; Italian dressing; salsa; BBQ sauce

OMIT: Butter; hash browns; bacon/sausage; French fries; special sauces; cheese sauces; mayonnaise; creamy dressings; tuna subs (hero, grinder); extra cheese on sandwiches, subs or pizza.

DON'T FORGET TO INCLUDE A COUPLE OF CUPS OF WATER AT EACH MEAL!

Many fast food restaurants now have "lite" options which means they have reduced the fat used in preparation and these can also be good choices.

V. QUICK TIPS

A. HIGH PERFORMANCE MEALS AND SNACKS

Choose from these foods	Slow down on these**
Breakfast	

French Toast, hot & cold cereals pancakes, fruit, toast/bread, bagels, 100% fruit juices, low-fat milk (low-fat chocolate is ok)

Donuts, bacon, pastries, fried potatoes, fried eggs, sausage, coffee

Mid-Morning Snack

Bagels, 100% fruit juices, fruit, fig Newtons*, Instant Breakfast*, low-fat milk, pretzels, breads, low-fat yogurt, Power bars*, Gatorpro*, Boost*

Pastries, high fat muffins

Lunch

Sandwiches (make triple deckers with 3 slices of bread, but **not** 2 servings of meat) turkey, lean roast beef, ham, tuna salad, fruit, lettuce salad, baked potatoes, low-fat milk, 100% fruit juice, cheese (2 slices maximum)

French fries, burgers, hot dogs, fried chicken patties, croissant sandwiches, chips, fish patties, deli meats, soda pop, punch

Pre-Practice/Pre-Competition Snack (2 hours before event)

Pretzels, low-fat yogurt, fruit, Fig Newtons*, breads, bagels, Boost*, Instant Breakfast*, Power Bars*, Gatorlode Potato chips, corn chips, cookies, candy bars, soda pop, pizza

Dinner

Chicken, fish, lean beef, rice, red or black beans, tofu, pasta, yams, breads, tortillas, salads, potatoes, vegetables, low-fat milk, 100% fruit juices

Chicken wings, steak, prime rib, fried foods, burgers, soda pop, butter, gravies, Alfredo sauce, cream sauces, cheese sauces

Evening Snack (This is not a substitute for dinner!)

The choice is yours! If you're going to eat low performance foods, this is the safest time of day to do it, if you don't have early morning practice.

B. HIGH PERFORMANCE TIPS

- 1) Remember to **drink water and 100% fruit juice** throughout the day. Thirst is **not** the first indicator of dehydration. Your body can be dehydrated long before you ever feel thirsty.
- 2) Drink water in place of pop. (Pop, especially cola-types, may promote dehydration).
- 3) Consume **real** 100% fruit juice in place of fruit juice drink, fruit juice cocktail, fruit drink, or fruit punch.

- 4) Eat fruit or pretzels in place of chips.
- 5) Eat Power Bars* in place of candy bars.
- 6) **Post-event eating is just as important as pre-event eating** to assure adequate recovery and to decrease risk of fatigue and injury over the season.
- 7) No time, not hungry, nerves before a big match? Avoid fatigue and poor focus by making it a habit to consume a liquid meal supplement like Boost*, Gatorpro* or Carnation Instant Breakfast* (mixed with skim milk or water) instead of skipping a meal or snack.
- 8) Water, Gaterlode*, and oranges, bananas, or pineapple juice WITHIN THE FIRST 15 MINUTES AFTER PRACTICE OR COMPETITION help rehydrate you, reenergize your muscles, and decrease muscle fatigue build-up over the season.

