

PROPER FUELING & WEIGHT CONTROL

PART I



PONTIAC INDIAN WRESTLING



IS POP WORTH IT?

1- 20 OZ BOTTLE OF POP = 300K/CAL *** 3,500 K/CAL = 1 LBS***

300 K/CAL X 7 DAYS = 2,100 K/CAL PER WEEK

300 K/CAL PER DAY X 30 DAYS (MONTH) = 9,000 K/CAL PER MONTH

2.5 LBS A MONTH

9,000 K/CAL MONTH X 6 MONTHS = 54,000 K/CAL

15.5 LBS 6 MONTHS

9,000 K/CAL PER MONTH X 12 MONTHS = 108,000 K/CAL PER YEAR

31 BS A YEAR

1- 20 OZ BOTTLE DIET POP = 2 K/CAL

2 X 1 DAY = 2 KCAL

2 X 7 DAYS WEEK = 14 KCAL

2 X 30 DAYS MONTH = 60 KCAL

60 X 6 MONTHS = 360 KCAL

60 X 12 MONTHS YEAR = 720 KCAL

A Male Athlete's Guide to Proper Fueling

1. Daily calorie goal

Weight in pounds \times 20-27 or weight in kilograms \times 44-59 = number of calories per day for weight maintenance

As a guideline:

~~20 to 28~~ calories per pound (44-50 calories/kg) for weight-class or appearance sports such as wrestling and gymnastics, for precision sports such as baseball and golf, or for athletes who need to lose weight

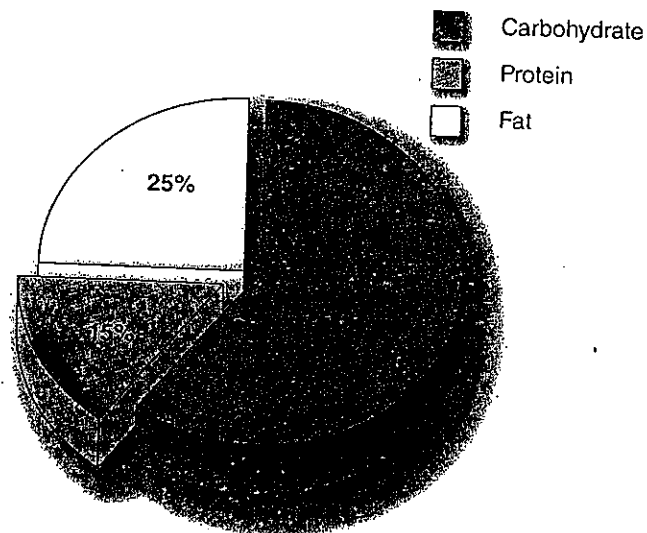
20 to 25 calories per pound (44-55 calories/kg) for football

20 to 27 calories per pound (44-59 calories/kg) for cross country, tennis, swimming, basketball, soccer, lacrosse

* [Weight (pounds) \times 23 or weight (kg) \times 50] - 300 calories for weight loss

* [Weight (pounds) \times 23 or weight (kg) \times 50] + 500 calories for weight gain

2. Composition of the diet for optimal performance



Carbohydrate: 55 to 60 percent Protein: 15 to 20 percent Fat: 20 to 30 percent

Because a gram of carbohydrate or protein has 4 calories and a gram of fat has 9, you can calculate the daily requirements for carbohydrate, protein, or fat like this:

Carbohydrate requirements in grams = $.60 \times$ daily calories divided by 4

Protein requirements in grams = $.15 \times$ daily calories divided by 4

Fat requirements in grams = $.25 \times$ daily calories divided by 9

Example for Male Athletes

A 180-pound (82 kg) athlete would need 4,140 calories per day: weight in pounds \times 23 or weight in kilograms \times 50, which would be made up of the following:

- Carbohydrate needs: $.60 \times 4,140$ divided by 4 = 620 grams of carbohydrate
- Protein needs: $.15 \times 4,140$ divided by 4 = 155 grams of protein
- Fat needs: $.25 \times 4,140$ divided by 9 = 115 grams of fat

General Recommendations for Males

Weight (lb. (kg))	Calories	Carbohydrate selections	Protein selections	Fat selections
130 (60)	2,990	9	5.5	8.5
140 (64)	3,220	9.5	6	9
150 (68)	3,450	10	6	9
170 (77)	3,910	11.5	8	11
180 (82)	4,080	12	8	11
190 (86)	4,270	13	8	11.5
200 (91)	4,600	14	8.5	12

Refer to the lists of carbohydrate, protein, and fat food choices. The selections shown contain the following quantities of nutrients: carbohydrate food choices contain 50 grams of carbohydrate; protein food choices contain 20 grams of protein; fat-containing food choices contain 10 grams of fat.

To construct a diet for optimal performance, circle the choices you like from each list and try to eat a food from each category every time you eat.

Carbohydrate

One large bagel
 1 1/3 cups pasta (1 1/2 fist-sized portion)
 1 1/2 cups rice
 2 cups (60 g) Cheerios
 A large low-fat fruit muffin
 2 cups (450 g) oatmeal
 1 cup (255 g) applesauce
 A large baked potato
 1 1/3 cups corn
 Five fig bars
 3 cups of grapes
 2 English muffins
 Four 4-inch (10 cm) diameter pancakes
 1 cup (110 g) pudding
 Three handfuls of pretzels
 2 cups (480 ml) juice
 1 1/2 cups (260 g) frozen yogurt
 32 ounces (1 l) sports drink
 Two packets of flavored oatmeal
 25 animal crackers
 Two bananas
 Two apples
 2 cups of grapes
 10 large marshmallows
 2 ounces (60 g) licorice
 3/4 cup (82 g) granola
 Two cereal bars
 20 jelly beans
 16 ounces (480 ml) lemonade or fruit punch
 1 1/2 cups (45 g) sweetened cereal
 One bag microwave low-fat popcorn
 One Pop-Tart
 15 vanilla wafers
 1/2 cup (80 g) raisins

Protein

Chicken (computer mouse-sized portion)
 Beef (computer mouse-sized portion)
 Fish (computer mouse-sized portion)
 3 ounces (90 g) canned tuna
 3/4 cup (170 g) cottage cheese
 One large soy burger
 1 1/4 cups pinto beans
 Three slices of cheese
 Four thin slices of lunch meat
 Three eggs
 One large hamburger or turkey burger
 3/4 cup (180 ml) egg substitute
 10 ounces (300 g) tofu

Fat

1 tablespoon peanut butter
 1/4 cup (35 g) nuts
 Two pats butter
 2 teaspoons mayonnaise
 2 teaspoons oil
 Two strips bacon
 2 tablespoons cream cheese
 1 tablespoon regular salad dressing
 4 tablespoons sour cream
 2 tablespoons light salad dressing

High-Fat and High-Carbohydrate Foods

Try to limit! Not as performance boosting!

Doughnuts
 Ice cream
 Most cookies
 Chocolate
 Chips
 French fries

Double-Duty Foods

Carbohydrate + protein
 Yogurt 8 oz (230 g) container = 50 grams carbohydrate + 12 grams of protein
 Sports bars: Clif Bar, PowerBar, GatorBar
 Certain beverage supplements: Gatorade Nutrition Shake, Boost, Carnation Instant Breakfast
 Milk: 16 ounces (480 ml) chocolate milk = 50 grams carbohydrate, 16 grams protein
 Cheese pizza (two slices) = 80 grams of carbohydrate, 16 grams of protein

A Female Athlete's Guide to Proper Fueling

1. Daily calorie goal

Weight in pounds \times 15-20 or weight in kilograms \times 33-44 = number of calories per day for weight maintenance

As a guideline:

~~16 to 17 calories per pound (35-37 calories/kg)~~ (33 calories/kg) for weight-class or appearance sports such as crew and ~~gymnastics or other sports that require low weight~~

16 to 17 calories per pound (35-37 calories/kg) for sports such as volleyball, tennis, and throwing sports

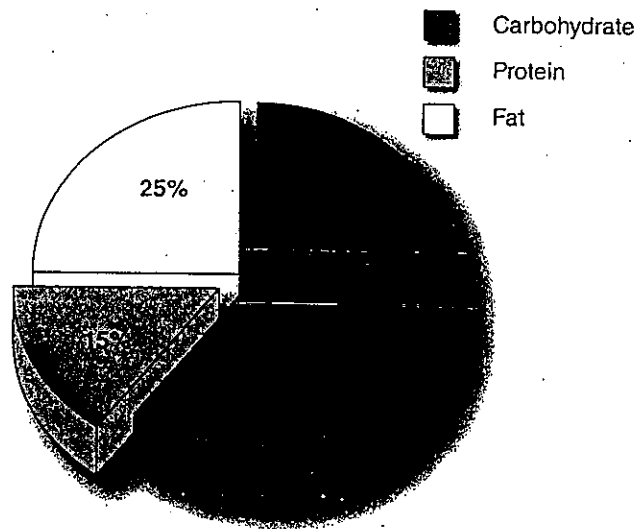
18 to 19 calories per pound (39-42 calories/kg) for track and field, basketball, and swimming

20 calories per pound (44 calories/kg) for cross country, soccer, and field hockey

[Weight (pounds) \times 20 or weight (kg) \times 44] - 300 = calories for weight loss

[Weight (pounds) \times 20 or weight (kg) \times 44] + 500 = calories for weight gain

2. Composition of the diet for optimal performance



Carbohydrate: 50 to 60 percent Protein: 15 to 20 percent Fat: 20 to 30 percent

Because a gram of carbohydrate or protein has 4 calories and a gram of fat has 9, you can calculate the daily requirements for carbohydrate, protein, or fat like this:

Carbohydrate requirements in grams = $.60 \times$ daily calories divided by 4

Protein requirements in grams = $.15 \times$ daily calories divided by 4

Fat requirements in grams = $.25 \times$ daily calories divided by 9

Example for Female Athletes

A 130-pound (60 kg) athlete would need 1,950 to 2,600 calories per day (weight in pounds \times 15-20 or weight in kg \times 33-44), which would be made up of the following:

- Carbohydrate needs: $.50$ to $.60 \times$ 1,950 to 2,600 divided by 4 = 243 to 390 grams of carbohydrate
- Protein needs: $.15$ to $.20 \times$ 1,950 to 2,600 divided by 4 = 73 to 130 grams of protein
- Fat needs: $.20$ to $.30 \times$ 1,950 to 2,600 divided by 9 = 43 to 87 grams of fat

General Recommendations for Females

Weight, lb (kg)	Calories	Carbohydrate selections	Protein selections	Fat selections
100 (45)	1,500-2,000	7.5-12	4-7	3-6
110 (50)	1,650-2,200	8-13	4-7	4-7
120 (55)	1,800-2,400	9-14	4.5-8	4-8
130 (60)	1,950-2,600	9.5-15	5-8.5	4.5-8.5
140 (64)	2,100-2,800	10-15	5-9	5-9
150 (68)	2,250-3,000	11-18	5.5-10	5-9.5
160 (73)	2,400-3,200	12-19	6-10.5	5.5-10
170 (77)	2,550-3,400	13-20	6.5-11	5.5-11
180 (82)	2,700-3,600	13.5-21	7-11.5	6-12
190 (86)	2,850-3,800	14-23	7.5-12	6-12.5
200 (91)	3,000-4,000	15-24	8-12.5	6.5-13

Refer to the lists of carbohydrate, protein, and fat food choices. The selections shown contain the following quantities of nutrients: carbohydrate food choices contain 25 grams of carbohydrate; protein food choices contain 15 grams of protein; fat-containing food choices have 10 grams of fat.

To construct a diet for optimal performance, circle the choices you like from each list and try to include a food from each category every time you eat.

Carbohydrate

- 1/2 large bagel
- 1 cup pasta (fist-sized portion)
- 3/4 rice (fist-sized portion)
- 1 cup (30 g) plain Cheerios
- A low-fat fruit muffin (tennis ball size)
- 1/2 cup (127 g) applesauce
- A 4-inch (10 cm) baked potato
- 2/3 cup corn
- Three fig bars
- 1 1/2 cups grapes
- One English muffin
- Two 4-inch (10 cm) diameter pancakes
- 1/2 cup (110 g) pudding
- Two handfuls of pretzels
- 1 cup (240 ml) juice
- 3/4 cup (175 g) frozen yogurt
- 16 ounces (480 ml) sports drink
- One packet flavored oatmeal
- 15 animal crackers
- One large banana
- One large apple, pear, or orange
- One granola bar
- 10 large marshmallows
- 1 ounce (30 g) licorice
- 1/3 cup (41 g) granola
- One Nutri-Grain cereal bar
- 10 jelly beans
- 16 ounces (480 ml) lemonade or fruit punch
- 3/4 cup (23 g) sweetened cereal
- 1/2 bag of microwave low-fat popcorn
- Eight vanilla wafers
- 1/4 cup (40 g) raisins

Protein

- Chicken (palm-sized portion)
- Beef (palm-sized portion)
- Fish (palm-sized portion)
- 2 ounces (60 g) canned tuna
- 1/2 cup (112 g) cottage cheese
- One soy burger
- 1 cup pinto beans
- Two slices of cheese
- Three slices of lunch meat
- Two eggs
- Hamburger or turkey burger (size of a mayonnaise jar lid)
- 1/2 cup (180 ml) egg substitute
- 8 ounces (250 g) tofu

Fat

- 1 tablespoon peanut butter
- 1/4 cup (35 g) nuts
- Two pats butter
- 2 teaspoons oil
- 2 teaspoons mayonnaise
- Two strips bacon
- 2 tablespoons cream cheese
- 4 tablespoons sour cream
- 1 tablespoon regular salad dressing
- 2 tablespoons light salad dressing

High-Fat and High-Carbohydrate Foods

Try to limit! Not as performance boosting!

- Doughnuts
- Ice cream
- Most cookies
- Chocolate chips
- French fries

Double-Duty Foods

- Carbohydrate + protein
- Yogurt 8 ounces (230 g) = 50 grams of carbohydrate + 12 grams of protein
- Sports bars: Clif Bar, PowerBar, GatorBar
- Certain beverage supplements: Gatorade Nutrition Shake, Boost, Carnation Instant Breakfast
- Milk: 16 ounces (480 ml) chocolate milk = 50 grams of carbohydrate, 16 grams of protein
- Cheese pizza (two slices = 80 grams of carbohydrate, 16 grams of protein)

TABLE 2.9

Ratings for Food Choices

Best	Ratings for Food Choices		
	Carbohydrate	Protein	Fat
	Whole-grain breads	Very lean ground beef	Olive oil
	Brown rice	Pork	Canola oil
	Pasta, white or whole wheat	Veal	Sunflower oil
	Rice	Lamb	Safflower oil
	Barley	Venison	Soybean oil
	Quinoa	Poultry	Corn oil
	Tortillas	Fish	Peanut oil
	Oatmeal	Shellfish	Mayonnaise
	Corn	Soy foods	Nuts
	Whole-grain cereal	Beans	Nut butters
	Whole-grain crackers	Eggs	Seeds
	Fruits	Low-fat milk	Olives
	Vegetables	Low-fat yogurt	
	Baked potatoes	Low-fat cheese	
		Low-fat cottage cheese	
	White bread	Low-fat ham	Light salad dressings
	Pretzels	Lean ground meat	Light mayonnaise
	Low-fat crackers	Fish canned in oil	Reduced-fat peanut butter
	Low-fat granola bars	Low-fat hot dogs	Light butter
	Cereal bars	Sliced cheese	
	Low-fat muffins	Light margarine	
	Baked chips		
	Fruit juice		
	Pastries	Fried meats	Butter
	Chips (not baked)	Sausage, bacon	Margarine
	Candy	Pepperoni	Cream sauces
	French fries	Burgers	Creamy salad dressing
	Soda	Salami, bologna	Fat-free salad dressings
	Fruit drinks		

Food Frequency Form

In a week, how often do you eat or drink the following foods and beverages? Place a check in the appropriate column.

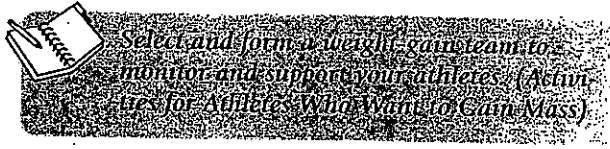
Foods and beverages	Daily	Three or four times a week	One or two times a week	Less than weekly
White bread				
Whole-wheat bread*				
Unsweetened cereal*				
Sweetened cereal				
Pasta				
Rice, brown*				
Baked or mashed potatoes*				
French fries				
Fruit*				
Cooked vegetables*				
Salad*				
Chips				
Cookies				
Beef, lean*				
Pork, ham, or bacon				
Sausage, pepperoni, bologna or salami				
Poultry*				
Fish or shellfish*				
Cheese, low-fat or light*				
Yogurt*				
Eggs*				
Beans*				
Nut butter*				
Soy foods*				
Nuts*				
Butter or margarine				
Salad dressing				
Juice, 100 percent fruit*				
Milk, low-fat*				
Sports drinks				
Carbonated beverages				
Coffee or tea				
Water*				

* Items are the healthiest carbohydrate, protein, and fat sources.

From L. Bonci, 2009, *Sport Nutrition for Coaches* (Champaign, IL: Human Kinetics).

FIGURE 2.6 Food frequency form.

it every day. You may want to have your athletes sign a student-athlete weight contract. In this contract they acknowledge that it is their responsibility as a team member to maintain a healthy weight and that they agree to seek treatment if they need help in doing this. (Figure 5.8 on page 75 is an example of such a contract.



Practitioners should encourage their efforts at modifying their diet and lifestyle to improve body composition and reduce excess body fat. They should set realistic goals, which are easier to achieve, and provide encouragement and support to help them stay on track. For example, a goal of gaining three to five pounds (1.4-2.3 kg) in a month is more realistic than focusing on the 30 pounds (14 kg) that the athlete is trying to gain. An athlete who gains even a little weight might notice that she feels stronger and less fatigued during practice and is able to recover more quickly. Some athletes may report that their clothes don't hang off their bodies once they've put some weight on. Gaining weight is not going to happen overnight, and the recommendations that you make at the outset may need to be modified over time.

Have your athletes take some baseline measurements and track their progress. Some athletes experience an increase in the size of the chest, biceps, or

thighs without a change in weight, and they become discouraged, assuming they have done something wrong. This is precisely why it is so important to have many different outcome measures rather than just the number on the scale.

A reasonable expectation for weight gain is one-half pound (.23 kg) per week. Your athletes also need to understand that everybody responds differently to resistance training. This is in part attributable to sexual maturation and the presence of hormones that help an athlete to increase mass. The athlete may see very little change in body size in a month's time, but after three months it would be reasonable to expect an increase of up to one-half inch (1.3 cm). To keep your athletes motivated and engaged in gaining mass, suggest that they keep a chart as shown in figure 6.3.

Chest and arm circumference will not change overnight, but your athletes may be surprised at how well they are doing when they start to monitor the changes. For instance, you may have an athlete who adds one-half inch (1.3 cm) to the size of his upper arm over a three- to four-month period, yet his weight may not change much.

Weight gain is best accomplished over a season, when the athlete has time to devote to eating and living smart. Make sure that you or whomever you designate as the point person has regular meetings with the athlete to make sure he is making forward progress. Even athletes who don't gain a lot of weight will still improve their fueling and hydration

Monitoring Body Changes Chart

Measure	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Weight												
Chest												
Waist												
Hips												
Thigh												
Calves												
Upper arms												

From L. Bonci, 2009, *Sport Nutrition for Coaches* (Champaign, IL: Human Kinetics).

FIGURE 6.3 Monitoring body changes chart.

Pre-Event Eating

It would be great if athletes had three to five days to rest and fuel optimally prior to competition. Reality dictates that for many sports, tournaments or invitationals consist of all-day activity or back-to-back days, and practices are two per day. If the athlete has never eaten a food before, they don't know how their body is going to react. Nothing puts a damper on sport performance like a digestive issue. Caution your athletes to [redacted] if they have never used them before:

When it comes to pre-event eating, tell your athletes to [redacted] If they have never eaten a food before, they don't know how their body is going to react. Nothing puts a damper on sport performance like a digestive issue. Caution your athletes to [redacted] if they have never used them before:

- [redacted] in large doses: Energy drinks can be loaded with caffeine.
- [redacted]. They can cause bloating.
- [redacted] (e.g., bran): These cereals take too long to empty from the digestive tract.
- [redacted] Beans may cause bloating, gas, and a feeling of heaviness, so your athletes will need to experiment with the amount consumed to determine tolerance levels.
- [redacted] such as broccoli, cabbage, and coleslaw: These can cause gas and bloating and do not provide enough calories for activity.
- [redacted] such as pepperoni, salami, hot dogs, sausage, and bacon: These foods can take too long to empty from the stomach.
- [redacted] such as fried chicken and French fries: These can take too long to empty from the stomach.
- [redacted] such as raisins, apricots, and dried plums: In large quantities, they can have a laxative effect (but a small amount may work well).
- [redacted] They are high in fructose, which is used by the liver as a fuel source and takes too long to convert into available muscle fuel.

Eating the right foods and staying properly hydrated before an event can make the difference between winning and losing. The timing of meals is also important. Here are some recommendations for pre-event eating, on the night before and the day of the event, including the time of day the event is held.

Night Before an Event

The night before an event, have your athletes [redacted]

- An [redacted] or a [redacted] in the [redacted]
- An evening meal that's about [redacted] Here are some examples:
 - Pasta with marinara sauce (if tolerated), olive oil and garlic, or a small amount of margarine and Parmesan cheese and a slice or two of bread
 - A turkey or ham hoagie
 - Stir-fry with chicken or beef and vegetables over a lot of rice
 - Fajitas with chicken or beef, lettuce, and salsa, and rice on the side
 - Thick-crust plain or vegetable pizza

If the team is traveling and eating out, pick a restaurant with a varied enough menu to satisfy the majority of the team's food preferences. A buffet is always a good bet to satisfy the vegetarians as well as the meat eaters on your team.

[redacted] is the option, suggest to the athletes that they [redacted]

- Grilled chicken sandwich and a baked potato
- Fajitas or soft tacos and rice
- Turkey, chicken, or ham and cheese hoagie with baked chips



Teach your athletes to select familiar, nutritious offerings when eating out before an event.

- A burger or grilled chicken sandwich and a shake
- Bagel sandwiches and juice
- Wrap sandwiches and lemonade
- Low-fat shakes and smoothies

Athletes should eat something about [redacted] and drink about 16 to 24 ounces (480-600 ml) [redacted] to top off fluid requirements. When you travel, either provide snacks for the team or suggest that each athlete pack snacks. Better yet, arrange an evening meeting solely for the purpose of making sure that everyone on your team eats something before going to bed. Appoint a snack coach to make sure that every athlete brings her fluid bottle and snacks on the trip.

If your athletes are at home or go out for an evening snack, they can choose perishable items such as these:

- Low-fat shake
- Soft-serve ice cream, sorbet, sherbet, or fruit ice
- A smoothie
- Chocolate milk
- Yogurt
- Pudding

Here are some items that travel well and can be packed in athletes' bags:

- Cereal bars
- Popcorn
- Cereal
- Bagel with peanut butter
- Crackers
- Pretzels
- Dried soup packets

Day of the Event

On the day of the event, ask your athletes to [redacted] these amounts:

- [redacted] (480-600 ml) of [redacted]
- [redacted] (480 ml) [redacted] or a [redacted]

Serve meals or ask athletes to eat meals such as the following, depending on how close the meal is to the event:

[redacted] before an event

- Turkey, ham, tuna, or roast beef sandwich and soup
- An omelet
- Scrambled eggs and toast
- A grilled chicken sandwich or a turkey burger
- Yogurt and a bagel
- Spaghetti with sauce, olive oil and garlic, or a small amount of margarine

[redacted] hours before an event

- Cereal and milk
- Bagel with a small amount of peanut butter or a slice of cheese
- English muffin with jelly and a small amount of margarine
- Waffles or pancakes with syrup
- High-carbohydrate sports bar such as Clif Bar, LaraBar, Odwalla Bar, or PowerBar

[redacted] before an event

- 8 ounces (230 g) yogurt
- 10 ounces (300 ml) fruit smoothie
- Handful of crackers
- Cereal bar or granola bar

Smoothie Recipe

It is easy to make a smoothie rather than buy one ready to drink, but this requires a blender.

Smoothie recipe

- 4 ounces (115 g) yogurt
- 4 ounces (120 ml) skim milk
- 1/2 cup fruit (fresh or frozen) or a small banana

Or

- A packet of instant breakfast
- 8 ounces (240 ml) low-fat milk
- 1/2 cup frozen fruit or a small banana

Athletes who are traveling and have early-morning events should pack some snacks to eat when they wake up, to get some fuel into the body. Consider doing a bag check to see if your athletes have come prepared! If you can, work with your high school or college food service department to put together a list of portable snacks, such as these:

- Dry cereal
- Cereal bars
- Trail mix
- Granola bars
- Bagels
- Crackers
- Pretzels
- Sports bars

Time of Day of the Event

The optimal meal for a given event may depend on the time it is held. Here are suggestions for various times of the day.

For morning competitions The athlete should eat a meal three hours before the competition. He should eat something with carbohydrates, such as the following:

- A small muffin with a glass of milk
- A smoothie or breakfast shake and a slice of toast with jelly
- Cereal and milk
- One or two waffles with syrup

The athlete should also drink 16 ounces (480 ml) of fluid at this meal.

For midday events (1 p.m.) Athletes have the opportunity to eat a meal before the competition, so encourage them to eat breakfast.

Meal at 8 a.m.

- Cereal
- Cereal bar and yogurt
- Smoothie and toast with jelly
- Waffles, French toast, or pancakes with syrup
- 16 ounces (480 ml) fluid

Meal at 10:30 to 11:00 a.m.

- A 6-inch (15 cm) hoagie with turkey, ham, cheese, roast beef, or light tuna or chicken salad
- An omelet with a bagel or a low-fat muffin

- A bowl of oatmeal with fruit
- 16 to 20 ounces (480-600 ml) fluid

Athletes who have ~~an empty stomach~~ before events can choose a ~~light meal~~ as their ~~second meal~~ of the day, such as the following:

- A smoothie
- Yogurt
- High-carbohydrate sports drink
- Sports bar and 16 ounces (480 ml) fluid
- Soup with noodles and meat or poultry

For evening events (7 p.m. or later) on a weekday Athletes can ~~eat breakfast~~, have lunch between noon and 1 p.m. (~~this should be a large meal~~), and take a ~~mid-afternoon snack~~ around 5 p.m.

Lunch

- Pasta with marinara sauce and bread
- Baked chicken with rice, rolls, and vegetables
- Stir-fry with lots of rice
- A hoagie with pretzels or baked chips and fruit
- 16 to 20 ounces (480-600 ml) fluid

Mid-afternoon snack

- A peanut butter and jelly sandwich and milk
- Cereal and milk
- Sports bars
- Peanut butter crackers and milk
- 16 to 20 ounces (480-600 ml) fluid

For evening events (7 p.m. or later) on a weekend Athletes can ~~eat breakfast~~ around 11 a.m. or noon, have a ~~mid-afternoon snack~~, and then have a ~~snack~~.

Major meal

- Pasta
- Chicken, potatoes, vegetables, rolls
- Stir-fry
- Fajitas
- 16 to 20 ounces (480-600 ml) fluid

Snack

- A few crackers
- A cereal bar
- A granola bar
- A handful of cereal
- 16 ounces (480 ml) fluid

For all-day events Because turnaround time is minimal between events, the goal is to have athletes eat small amounts of easily digestible foods that are available all day, such as these:

- Dry cereal
- Cereal bars
- Pretzels
- Cut up fruit
- Yogurt
- Cheese sticks
- Trail mix, Chex mix, or mix of cereal, pretzels, and chocolate chips

You can also have the following foods available:

- Honey wands or sticks—These are made of crystallized honey and are sold at places like Sam's Club, Costco, and Trader Joe's. They are not messy or sticky and not overly sweet, so they are palatable.
- Gels (such as Gu or Clif Shot)—Gels come in foil packages and are single-serving portions of carbohydrate. They are available at sporting goods stores, supermarkets, and on-line but are fairly pricey.
- Gelatin—Use 4-ounce (112 g) containers of Jell-O, or find a parent who is willing to make gelatin cubes, which can be a refreshing source of carbohydrate on a hot day.
- Sugar cubes—Five or six cubes constitute a serving. They are available at grocery stores and are not overly sweet.

Although athletes may think about the need to eat during all-day events, what about sports with breaks, such as soccer, basketball, hockey, and football? Most athletes do not eat a lot before they play, and meals are usually four to five hours before competition, so the athlete may feel strong at the beginning of competition but may tire quickly.

This can be accomplished by consuming more than just water at breaks. A better choice is a sports drink. As a longtime soccer mom, I have cut up my share of oranges for halftime, but most soccer players won't eat enough orange wedges to get adequate fuel or fluid. You can offer orange wedges with a sports drink, but because time is limited, I suggest gels, honey sticks, sugar cubes, or sports drinks instead.

Postexercise Eating

Your athletes will always have more training sessions in a week than competitions, so **postexercise eating** plays an essential role in helping the athlete recover quickly so that she can get out there and do it again the next day. Timing is the key factor in expediting recovery and assisting in muscle tissue repair. Athletes need to be reminded about the importance of fueling after exercise and making this a priority. Make sure that before they shower, text message, put on the i-Pod, or drive home from practice, they eat to replete! Cool-down is a perfect time to have your athletes stretch and eat something. This way, you know they've refueled!

Tell your athletes "within 15." You want them to eat something containing calories within 15 minutes of finishing practice to naturally replace muscle glycogen stores. If they don't, they will need up to 24 additional hours to recover, and they do not have that kind of time!

Some athletes will tell you they are too tired to eat during this period of time and are not hungry anyway; they may tell you that they will eat when they are hungry, but that is too late. **Don't let them find that out the hard way!** Figure 3.1 illustrates the need to bracket athletic activity with food and fluid.

Make food and beverages readily available to athletes so that refueling is not an afterthought. **Your athletes need to bring a hand of peanut butter or water bottle containing a powdered sports beverage to practice.** They should also have nonperishable food in their bag such as granola or cereal bars, a small bag of cereal, some pretzels, trail mix, or a package of peanut butter crackers. At the high school level, parents and booster clubs can supply the postgame snacks. At the university level, handing a bottle of water or sports drink and a sports bar to athletes after

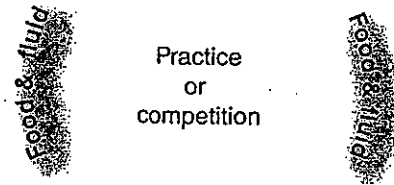


FIGURE 3.1 Emphasize the importance of eating and drinking before and after every practice and every competitive event.

workouts, or having food available and visible, can be a great reminder to refuel.

There has been some recent research on the benefit of chocolate milk as a recovery beverage (Karp et al. 2006). However, milk must be stored at a temperature of 40 degrees F or colder to prevent harmful bacteria from growing in the milk. If coolers are available, consider a sports shake, chocolate milk, smoothies, or yogurt for postexercise repletion.

When your athletes exercise in cold weather, consuming warm foods after exercise can expedite blood flow to the extremities. Hot cocoa, instant soup, or instant oatmeal can provide a warming, nourishing postexercise fuel. This can be helpful for skaters and ice hockey players or during cold-weather football and soccer practice. Consider getting the high school booster clubs involved; at the collegiate level, consider working with your food service department.

As a sports dietitian, I often am asked whether athletes can have fruit as long as they also consume another carbohydrate source to expedite muscle glycogen recovery. Orange juice and pretzels, or a banana with a granola bar, would be fine. Listed in table 3.2 are 50-gram carbohydrate equivalent food choices.

For athletes who don't want something sweet, suggest Chex mix, Goldfish crackers, or pretzels—about a cup and a half of any of these.

Specific amino acids such as glutamine and arginine may hasten the body's ability to resynthesize glycogen after exercise (Ivy et al. 2002; Varnier et al. 1995; Yaspelkis and Ivy 1999). In addition, (Levenhagen et al. 2002). These studies suggest a more rapid recovery from exercise with but the body still needs more carbohydrate than protein. Chocolate milk, trail mix, a peanut butter sandwich, or a high-carbohydrate sports bar would all work well.

Remind your athletes that they do not have to consume a full meal in the 15 minutes after exercise. They can wait until they are hungry to eat, but the meal should still have a significant amount of carbohydrate, so a steak, salad, or chicken wings alone is not going to cut it. Breads, pasta, or rice should be part of this meal to help the athlete to recover fully. The most important consideration is for your athletes to eat a little something right after each bout of exercise.

TABLE 3.2

Foods That Contain 50 Grams or More of Carbohydrate

Food	Amount	Carbohydrate (g)
Sweetened cereal	.2 cups (60 g)	54
Pretzels	Two handfuls	60
Gatorade energy drink	8 oz (240 ml)	78
Bagel with jelly	4-oz (112 g) bagel, 1 tbsp jelly	52
Clif Bar	One	52
Gatorade Bar	One	49
Nutri-Grain Bar	Two	52

Preparing for Battle

The yearly training cycle for wrestlers includes three distinct phases, and an optimal nutrition strategy should target specific goals for each one.

By Susan Kundrat

Susan Kundrat, MS, RD, CSSD, LDN, is President of Nutrition on the Move, Inc., based in Urbana, Ill., and consults with athletes from the University of Illinois, Northwestern University, and Bradley University. She and sports dietitian Michelle Rockwell, MS, RD, CSSD, recently launched RK Team Nutrition (www.rkteamnutrition.net), providing sports nutrition handouts, training, and workshops for health professionals who work with athletes.

At first glance, wrestling seems like such a simple sport: It's just you, your opponent, and the mat, and the objective is very straightforward. But anyone who has worked with wrestlers knows it's much more complicated than that. Success depends on a special combination of strength, power, agility, quickness, coordination, endurance, mental toughness, and tactical skill.

Nutrition planning for wrestlers has a very similar dynamic—what seems basic can actually be quite complex. To support optimal performance, a wrestling nutrition program must be versatile enough to account for different phases of the training year—"bulking up" versus "leaning out"—and managed closely enough to deliver desired weight loss without sacrificing valuable lean muscle.

In my 15 years of experience planning nutrition programs for wrestlers at successful NCAA Division I programs, I have developed strategies to help wrestlers go into every match well nourished, well hydrated, and fully energized. In this article, I'll lay out my goals for each phase of the training year, explain what dietary adjustments can be made to achieve them, and provide some sample menus and meal ideas that have worked well for my athletes.

OFF-SEASON: BULKING UP

During the off-season and the months leading up to fall workouts, wrestlers generally focus on making strength gains by maximizing lean muscle mass. They typically spend fewer hours on the mat and more in the weightroom. From a nutrition perspective, that means they must consume enough total calories to support muscular hypertrophy, with a special emphasis on protein consumption every day.

Let's take a closer look at the top priorities for this time of year:

Calories. When looking to add muscle, wrestlers should take in at least 500 calories per day above their standard maintenance needs. For example, if a wrestler is training two hours per day in the off-season, he would require at least 20 calories per pound of body weight per day (3,300 calories for a 165-pound wrestler). Add 500 to that for lean muscle building, and you get a total of 3,800 calories per day.

An intense strength training program typically results in a robust appetite, so this energy intake goal shouldn't be difficult for most wrestlers to achieve. I recommend eating several small meals throughout the day, and supplementing with snacks before and after workouts to maximize lean muscle gains.

Protein. Wrestlers can benefit from up to one gram of protein per pound of body weight per day when training to add strength. Protein consumption should be spread throughout the day to maximize muscle building, with the greatest attention paid to foods eaten before and after hard workouts—consuming protein at these times minimizes natural protein loss and maximizes muscle recovery.

Including proteins from a wide variety of whole food sources ensures that athletes take in a broad spectrum of amino acids, creatine (which occurs naturally in many foods), and other key nutrients. Some excellent protein sources are eggs, milk products, red meats, white meats, beans, peas, nuts, seeds, and whole grains.

Carbohydrates. Wrestlers should consume at least 50 to 55 percent of their energy in the form of carbohydrates (2.0 to 2.5 grams of carbs per pound of body weight per day), especially during periods of heavy training. For a 165-pound wrestler eating 3,800 calories per day, this means a minimum of 1,900 calories of carbs (475 grams) on a daily basis. There are many well-known and healthy sources of carbs, including whole wheat pasta, fruits and vegetables, lean dairy products, and legumes.

Fat. During strength building, wrestlers should get at least 15 to 20 percent of their energy from fat—for our 165-pound wrestler, that means 63 to 84 grams of fat and 570 to 760 calories from fat per day. With an adequate training volume, this amount won't lead to unwanted fatty weight gain, but it will support optimum muscle growth and overall health. Foods high in omega-3 fatty acids are the best choices, since they can help decrease inflammation (which may result from heavy training) and aid in muscle recovery. Some good examples include salmon, tuna, walnuts, and flax seeds.

Phase One in the "On the Menu" sidebar (at the end of this article) shows a sample day's meal plan that would allow a typical 165-pound wrestler to meet all the nutrition goals I've outlined for muscle building. Note that protein-rich choices are included pre- and post-workout, and that I've added "extra water" with each meal to emphasize proper hydration.

PRESEASON: LEANING OUT

In the two months or so before the start of the competitive season, it's critical for wrestlers who need to lose weight to follow a practical, sound plan for dropping body fat. This should begin with an initial weigh-in and body composition analysis. Based on the athlete's starting weight, you can then set specific goals and benchmarks that can help ensure safe weight loss.

The most important thing to monitor for wrestlers' weight management is the rate of loss: An athlete should never lose more than 1.5 percent of their body weight per week. Shedding pounds faster than that can raise serious health concerns, and once the season begins, both the NFHS and the NCAA have rules prohibiting weekly weight loss beyond 1.5 percent. There are also limits in both high school and college for minimum body fat percentage: High school wrestlers at NFHS-governed schools cannot drop below seven percent overall body fat during the season, and NCAA wrestlers must stay at or above five percent.

Returning to our 165-pound wrestler, let's assume his body composition analysis reveals 12 percent body fat. Since he is a college student, he wants to be near the NCAA minimum of five percent, which would set his minimum weight at 153 pounds. By losing between one percent and 1.5 percent of his body fat per week over an eight-week preseason, he could easily achieve his goal and compete in the 157-pound class.

One important note: Five percent is the minimum healthy body fat percentage for college-age wrestlers, but that doesn't mean it's the goal most wrestlers should strive for. Many find they have more energy and perform better at a higher body fat percentage—in fact, one study of NCAA champion wrestlers found their average body fat to be around 8.5 percent. Rather than focus on a set minimum, it's much better to talk with athletes regularly about their energy level, their overall performance, and how they feel while they're losing weight. This can help them find their own optimal body fat percentage.

So how can a wrestler safely lose weight? The goal is to drop adipose tissue (fat) while retaining muscle mass and lean tissue, so the best strategy is to lower caloric intake but maintain adequate protein consumption. Using the formula introduced earlier, the 165-pound wrestler would need 3,300 calories for maintenance—but now, instead of adding calories for muscle growth, we'll take some away for weight loss. Subtracting 750 calories per day, for a total of 2,550, would result in about 1.5 pounds of weight loss per week. Over the course of two months, that would bring our athlete down to his legal minimum of 153 pounds.

The calorie reduction should come from adjustments to carbohydrate and fat intake, with protein consumption holding steady at about one gram per pound of body weight per day. In addition to preventing lean muscle loss, protein also enhances feelings of satiety, making the athlete less likely to feel chronically hungry as he scales back his daily caloric intake.

Phase Two in the "On the Menu" sidebar (at the end of this article) is a sample day's meal plan for fat loss. Post-workout fueling remains unchanged, since a quality recovery shake at this time can help protect lean muscle mass.

IN-SEASON: MAKING WEIGHT

During the season, wrestlers can optimize their nutrient stores and perform at a higher level by avoiding large fluctuations in weight. Because hydration status accounts for most weight change in a typical week, athletes should aim for consistency in hydration at all times.

Short-term weight loss ("weight cutting") through dehydration causes losses in glycogen and lean muscle tissue, which can have several negative health and performance effects—it may take 24 to 48 hours after a period of dehydration to replenish muscle glycogen and body fluid levels. This is another area where governing bodies have stepped in to help keep athletes safe: At both the college and high school levels, weigh-ins must occur when the wrestler is in a hydrated state as measured by a urine test of specific gravity.

It's easy to teach athletes to self-assess hydration status by monitoring their urine throughout the day. Frequent trips to the bathroom and relatively clear urine is good, while infrequent trips and darker color is a sign they need to drink more fluids. Encourage wrestlers to drink on a schedule before and during workouts, as fluid loss through sweat may exceed two liters per hour during hard exercise. Carrying a water bottle to classes and refilling it throughout the day is one simple and effective way to improve hydration habits.

Aside from consistent hydration status, weight maintenance should be the primary goal for in-season wrestlers. Addressing any weight issues in the preseason eliminates the burden of attempting weight loss during competitive cycles, so the athlete can focus simply on avoiding unwanted weight gain or loss.

One of the best ways to maintain weight consistency during the season is to avoid binge eating, so I encourage wrestlers to eat smaller meals several times a day. In addition to helping prevent overeating, this strategy maximizes available energy for workouts and matches. It also enhances recovery, especially if the athlete is working out (training, competing, or otherwise physically active) more than once a day. Going into every workout with fuel on board is essential for optimal performance, and that can be achieved by eating a snack or small meal every three hours or so throughout the day.

Another way to promote weight consistency is by adjusting the energy density of an athlete's meals. Wrestlers are very physically active during their sport season, so they may be tempted to turn those frequent, smaller meals into frequent, larger ones. To avoid excess calorie consumption, you can help them find ways to boost total food volume without piling on too many calories.

Low-calorie fruits and vegetables, such as strawberries, cucumbers, carrots, broccoli, cauliflower, and spinach are inexpensive and can be eaten in larger quantities without breaking the calorie budget. Foods with high water content, such as oranges, melons, green beans, and celery are also great choices.

Lastly, smart protein consumption throughout the day can also boost satiety and prevent overeating to assist in weight maintenance. Keeping the goal of one gram of protein per pound of body weight per day, wrestlers should focus on spreading that protein out across several meals. For instance, they might have an egg or two with breakfast, choose lunchtime sandwiches with moderate amounts of meat, have a handful of nuts with a post-workout snack, and eat an evening meal with a serving of beans as a side dish. Protein in liquid form, such as that found in protein shakes, is less effective than solid protein in promoting satiety, so I recommend that athletes focus on whole food sources whenever possible.

A FINAL WARNING

Strength building and weight management—the two major emphases of nutrition planning for wrestlers—are perennial hot topics in the nutritional supplement marketplace. There are literally hundreds of products available on store shelves and over the Internet claiming to offer a shortcut to fat loss, bigger muscles, and extra energy. So when talking to wrestlers about their nutrition and performance goals, supplements and their risks should always be part of the discussion.

Nutritional supplements raise concerns ranging from safety to effectiveness to contamination, but for a wrestler looking for fast results, the marketing hype may be difficult to resist. Your message needs to be clear: Virtually every performance or body goal the athlete wants to take a supplement for can be achieved more naturally through a sound dietary plan.

In most cases, once athletes see their performance improving after making appropriate nutritional changes, the allure of supplements is much less of a problem. With a comprehensive nutritional strategy tailored for each phase of wrestlers' yearly calendar, they'll find themselves fueled, energized, and ready to perform at their best.

Sidebar: ON THE MENU

Below are sample menus for two different phases of a wrestler's year: muscle building, which typically occurs in the off-season; and weight loss, which, if necessary, should occur in the two months leading up to the start of the competitive season.

The menu for Phase One contains roughly 3,800 calories, 550 grams of carbohydrates, and 100 grams of fat. The menu for Phase Two contains roughly

2,550 calories, 380 grams of carbohydrates, and 45 grams of fat. Both menus contain about 165 grams of protein or one gram of protein per pound of body weight (these were prepared for a 165-pound wrestler), since consistent protein intake is a key to building and protecting lean muscle.

Phase One: Muscle Building

Breakfast:

2 whole wheat bagels with
peanut butter
1 small banana
2 cups of 100 percent orange juice
Extra water

Lunch:

3 soft tacos
1 side of beans
1 side of rice
Extra water

Pre-Workout Snack:

1 cup of homemade trail mix with nuts, seeds, dried fruit, and granola
Extra water

Post-Workout Snack:

1 recovery shake (250-300 calories)
Extra water

Dinner:

High-Protein Salad Dinner*
2 slices of whole grain bread
2 chocolate chip cookies
Extra water

Snack:

2 cups of whole grain cereal
1 cup of skim milk
Extra water

*High-Protein Salad Dinner: 3 cups baby spinach salad + 4 boiled egg whites + 1 cup cooked chicken breast + 1 cup mandarin oranges + 1 cup shredded carrots + 2 tablespoons fat-free Italian dressing.

Phase Two: Weight Loss

Breakfast:

Egg Scramble Breakfast*
Extra water

Lunch:

1 grilled hamburger on a bun
1 single-serving bag of baked chips
1 apple
Iced tea or water

Pre-workout snack:

1 light yogurt cup
1 small banana
Extra water

Post-workout:

1 recovery shake (250-300 calories)
Extra water

Dinner:

"Super" Vegetable Soup Dinner**
Extra water

Snack:

Peach smoothie: 2 cups skim milk + 1/2 cup light frozen yogurt + 1 cup
unsweetened frozen peaches + ice
Extra water

*Egg Scramble Breakfast: 1 cup egg substitute + 2 cups chopped green peppers,
onions, and tomatoes + 1 slice whole grain toast with jam + 1 cup fresh
strawberries.

***"Super" Vegetable Soup Dinner: 1 can (2 cups) low-fat vegetable bean soup +
2 cups canned green beans (added to soup) + 1 mini whole grain bagel, toasted
with 1 ounce mozzarella cheese + 4 ounces shaved deli turkey + 1 orange.

We welcome your feedback on this article. Please e-mail us at:

amfeedback@momentummedia.com

Tags:

***DIETING
MADE THAT
MUCH
EASIER...***

-“The **MIND** must be willing, even if the body is **NOT**”!

-c2-

*Wrestlers need to RUN 3-5 miles or 33 minutes
Everyday!

No such thing as a day off.

“There is no such thing as a diet! What there is, is a change in the way and what we do eat. It is all in the matter of re-educating yourself, body, and mind...”

Grapplers and Parents:

Congratulations on your start to becoming a better person. Wrestling is the hardest sport there is and you have chosen to take that challenge. This says a lot about your character as a person and an athlete. Wrestling is a sport which involves physical, mental, and nutritional aspects. All three aspects co-exist with each other. You are going to find out that it is going to take total dedication to the program by you, your parents, and anyone else in your life to reach your fullest potential.

NUTRITION: The only person who is responsible for this is you the wrestler! No one should be needing to stand over your shoulder all the time to make sure you are eating and drinking the right things. **IT IS YOU!** Your parents and other people in your life are not responsible for what you eat and drink. Parents, we ask your help to guide and support your child on his quest to becoming the best person/wrestler that he can be. This means that we ask that you support the eating, drinking, and training habits your son needs to become the best he can be. Here are some **NUTRITIONAL** points that we ask our wrestlers to do **ALL THE TIME**...

1) Stay away from **POP!** This will set the wrestler back a full week on the mat by drinking just **ONE** pop. It is not the caffeine in the pop, it is the **CARBONATION**.

2) Drink water **ANYTIME** you would like. Drinking water is critical because it avoids dehydration. Water should be **75-80%** of the **WRESTLER'S** diet. Juices, V-8, milk, Gatorade/Powerade (**NO ALL-SPORT**) and tea are acceptable in **MODERATION**. Keep in mind that these liquids contain more mass because of calories, so be smart on how much you consume. **BE SMART!**

3) An example of a perfect meal is **A** (as in one) TV dinner. This is because the dinner contains a meat, potato = carbohydrate, vegetable and some dinners contain desert = other. All food groups are hit, if the athlete eats this meal and drinks milk = dairy. If you are having trouble not being full after the dinner, then drink 1-2 glasses of **WATER** 5 minutes **BEFORE** you eat. This will give you the feeling of being full. (***THE LAST CALORIES IN ARE THE FIRST CALORIES OUT WHEN LOSING WEIGHT!***)

4) Along with this eating habit, we are asking that the wrestlers run **3-5** miles a day. **EVERYDAY!** The 3-5 miles a day will help the wrestler **MAINTAIN** his weight, increase cardiovascular intake and promote mental toughness. When it comes time to lose weight, adding layers of clothes and running a few miles will get the wrestler to weight with no problem.

The coaching staff's feeling is that, if the athlete knows that he is training harder than his opponent, then he will have that much more of **THE EDGE!** "The harder you work, the luckier you get!" If you have any questions about this letter, please feel free to contact Coach Christenson,

Again, Congratulations:

WRESTLING COACHING STAFF

The first place to lose weight is in your head.

To be successful at weight loss and keeping it off, you will have to change some old habits. When you're tempted to get off your program, to make an unhealthy choice, it's important just to step back, take a deep breath, and think about what is really important to you – focus on your goals.

Good “fat-free vs. bad “fat-free”

A thick brownie covered with nuts may say “sugar free” on the label – but did you know it contains a three-day supply of saturated fat? And some sugar free candies contain more fat and calories than their regularly sweetened counterparts.

The bottom line: Read the labels and understand how to interpret it. Use common sense. And don't expect a few nice-sounding buzzwords to take the place of wholesome nutrition and daily physical activity.

Your body's rinse cycle: How to wash your fat down the drain

Obviously, what you eat is critical to your weight-loss success. You need to drink 6-8 eight ounce glasses of water every day. Water aids your metabolism and digestion. And as your body is getting rid of fat, a regular flow of water in and out of the body helps clean your cells of toxins and waste.

Drink 8 glasses of water every day to flush toxins and waste from your body.

- Keep a water bottle with you and drink frequently throughout the day.
- Have water with meals instead of soft drinks; -2 glasses of water with each major meal adds up to 6 of the 8 glasses required.

It is important to drink plain water – coffee, tea, or soft drinks don't count. After all you are trying to cleanse your body; you wouldn't fill your washing machine with coffee and expect your clothes to get clean!

How to grocery shop

The perimeter of the grocery store is where you are going to find nearly all of the best food – the fresh vegetables and fruits, the whole grains and lean meats. Along the aisles in the center of the store you will find processed and packaged foods. *Processed foods are made to last weeks and sometimes months before they begin to breakdown – to the contrary, you want to pick foods that can be utilized by your body quickly.*

Vegetables and fruits: choose **fresh** over frozen over canned.

Fresh vegetables and fruits nearly always *contain more vitamins and minerals, more fiber*. Frozen foods lose some of their freshness, flavor, and nutrients but are convenient. Canned foods are often higher in sodium and sugar content, and nutrients tend to dissolve into the liquid in the can.

Many people are in the habit to skip meals. If you are trying to lose body fat, ***skipping meals will work against you***. Any time you skip a meal, you are setting yourself up for a “hunger surge” in which you might start *craving the wrong foods*.

MEALS TO EAT

- 1) Tuna Sandwich – 2 slices whole wheat bread, lettuce, sliced tomato, ½ cup water-packed tuna mixed with 1 tablespoon lowfat mayonnaise
Mixed Green Salad with veggies and fat-free dressing
- 2) Teriyaki Steak – marinated 3 oz flank steak with bottled Teriyaki Sauce and grill.
Brown Rice – ½ cup cooked
Green Beans - ½ cup cooked tossed with ½ teaspoon canola oil and sprinkled with 2 teaspoons sliced almonds.
Pineapple Rings – 2 juice-packed canned pineapple rings.
- 3) Turkey Sandwich – 2 slices light rye bread, 2 oz turkey breast meat, mustard, 1 tablespoon lowfat mayonnaise, lettuce, sliced tomato.
Vegetable Soup - 1 cup low fat or fat-free vegetable soup.
- 3) Chicken Vegetable Stew – 1 serving
*Canned Peaches with Maple Syrup and Cinnamon – ½ cup juice-packed peaches with 1 teaspoon maple syrup and cinnamon to taste.
- 4) Open Face Lox and Bagel – ½ bagel, 2 oz smoked salmon, 1 oz fat-free cream cheese, sliced tomato, sliced red onion.
Coleslaw – 1 cup packaged shredded cabbage (slaw mix) mixed with 1 tablespoon lowfat mayo. and 1 teaspoon vinegar, salt and pepper to taste.
- 5) Roast Turkey – 3 oz skinless turkey breast meat.
Yams – ½ cup mixed with ¼ cup crushed pineapple and 1 teaspoon brown sugar.
Asparagus – 4 oz tossed with 1 teaspoon canola oil.
- 6) Mandarin Spinach Salad with Grilled Chicken – 2 cups torn fresh spinach, 2 oz grilled skinless chicken breast, 1 tablespoon each: water chestnuts, chopped green onions, sliced red pepper and pine nuts. Toss with 1/3 cup mandarin oranges and fat-free dressing.
- 7) Fish Filets in Oranges Sauce – 1 serving
Brown Rice – ½ cup cooked rice made with chicken broth in place of water.
Broccoli Spears – 4 oz or ¾ cup tossed with 1 teaspoon canola oil.

- 8) Salad Nicoise – 2 cups torn romaine lettuce, ½ cup water-packed tuna. ¼ cup defrosted frozen green beans, 2 artichoke hearts, ½ sliced tomato, red onion slices, 4 black olives and fat-free or lowfat Honey Dijon Dressing.
- 9) Quick Italian Chicken over Pasta – 1 serving (recipe provided).
Brussel Sprouts – ½ cup cooked.
Tropical Fruit Salad – ½ cup canned in light syrup.
- 9) Curried Shrimp Salad – 2 cups torn romaine lettuce, ½ cup small cooked shrimp (fresh, canned or frozen/defrosted), 1/3 cup sliced cucumber, red onion slices, 1 tablespoon chopped peanuts and 2 tablespoons raisins. Add ¼ teaspoon curry powder to fat-free dressing and pour over salad.
- 10) Turkey Burgers - 1 serving (recipe provided).
Vegetable Soup – 1 cup lowfat or fat-free vegetable soup.
- 11) Spinach Mushroom Scramble – in non-stick skillet, scramble ½ cup fat-free egg substitute (or 4 egg whites), 3 oz frozen spinach (defrosted and squeezed dry) and 1/3 cup sliced canned mushrooms. Serve with 2 tablespoons fresh salsa, 1/8 of an avocado and a tortilla.
- 11) Spicy Steak and Vegetable Grill – 1 serving (recipe provided).
Brown Rice – ½ cup cooked (try Quick Brown Rice).
Baked Apple Slices – 1 serving (recipe provided).
- 12) Southwest Salad – 2 cups torn romaine lettuce, 2 oz cubed cooked turkey breast meat seasoned with Mexican Seasoning Blend, ¾ oz fat-free tortilla chips, 2 tablespoons each canned corn and black beans. Serve with 2 - 3 tablespoons fresh salsa mixed with Mexican Seasoning Blend and 1/8 of an avocado.
- 13) Chicken Dijon with Spinach Sauted with Garlic – 1 serving (recipe provided)
Brown Rice – ½ cup cooked (try Quick Brown Rice).
Assorted Cubed Melon – 1 cup.
- 14) Salmon Salad Sandwich – 2 slices light rye bread (40 calories each), lettuce and tomato, 2 oz water-packed salmon mixed with 2 teaspoons lowfat mayonnaise, 1 teaspoon Dijon mustard and 2 tablespoons chopped dill pickle. Mixed Green Salad with veggies and fat-free dressing.
- 15) Chicken Fajitas – 1 serving (recipe provided).
Canned Pears with Ginger – ½ cup juice-packed pears.
- 16) Chef Salad Supreme – 2 cups torn red leaf lettuce, 1 oz cubed skinless chicken breast, 1 oz cubed lean ham, 2 tablespoons garbanzo beans, ½ oz shredded fat-free cheese, chopped green onion, sliced red pepper, 2 tomato slices and 1

tablespoon roasted pumpkin seeds (pepitas); fat-free dressing. Dried Figs – 2 medium.

- 17) Oven Fried Fish with Mustard Dill Sauce – 1 serving (recipe provided).
Mashed Potatoes – ½ cup, made from instant potatoes, made with chicken broth in place of milk, replace butter with olive oil using half the amount called for.
Broccoli Spears – 4 oz.
- 18) Bean Burrito – 1 large fat-free tortilla filled with ¼ cup fat-free spicy refried beans, 1 tablespoon shredded fat-free cheddar cheese, 1/8 of an avocado and fresh salsa.
Mixed Green Salad with veggies and fat-free dressing.
- 19) Garlic Shrimp Stir-Fry – 1 serving (recipe provided)
Canned Peaches with Cinnamon and Maple Syrup – ½ cup juice-packed peaches with 1 teaspoon maple syrup and cinnamon.
- 20) Pineapple Tibbits – ½ cup juice-packed, or if desired blend pineapple tidbits or 2 tablespoons frozen pineapple juice concentrate in

SNACKS

- 1) Banana – ½ medium Frozen Yogurt – 4 oz nonfat/any flavor
- 2) Strawberries – 1 ½ cups
- 3) Fruited Yogurt – 1 cup nonfat/any flavor.
- 4) Applesauce – ½ cup unsweetened
- 5) Mango – ½ medium fresh or ¾ cup cubed fresh or frozen
- 6) Orange – 1 medium fresh, or if desired 2 tablespoons frozen orange juice concentrate
- 7) Pineapple Tidbits – ½ cup juice-packed
- 8) Mixed Berries – ¾ cup fresh or frozen
- 9) Banana – ½ medium
- 10) Raspberries – 1 cup fresh or frozen
- 11) Mango – ½ medium fresh or ¾ cup cubed fresh, frozen
- 12) Applesauce – ½ cup unsweetened
- 13) Frozen yogurt – 4 oz nonfat/any flavor
- 14) Fruited Yogurt – 1 cup nonfat/any flavor

RECIPES

CHICKEN VEGETABLE STEW:

- 2 teaspoons canola oil
- 12 oz skinless, boneless chicken breast, cut into 2 inch pieces
- 1 cup fat-free chicken broth
- 1 teaspoon Italian Seasoning Blended
- 1 teaspoon seasoning salt
- 1 medium onion, cut into 8ths
- 6 celery stalks, cut into 2 inch pieces
- 3 carrots, cut into 1 inch pieces
- 3 medium white rose potatoes, cut into 1 inch pieces

DIRECTIONS:

Brown chicken in oil in large saucepan. Add chicken broth, seasoning and vegetables. Cover and cook over medium to low heat until chicken and vegetables are done, about 40 minutes.

FISH FILETS IN ORANGE SAUSE

- 1 pound orange roughly or other mild white fish
- 2 tablespoons frozen orange juice concentrate, defrosted
- 1 tablespoon rice vinegar or lemon juice
- ¼ cup low sodium soy sauce
- 1 teaspoon garlic powder
- 1 tablespoon cornstarch (dissolved in 2 tablespoons of water)
- 1 tablespoon fruit-juice sweetened orange marmalade
- 2 tablespoon sliced almonds

DIRECTIONS:

Place fish filets in a 2 quart glass baking dish; set aside. In a 2 cup glass measuring cup, combine orange juice concentrate, rice vinegar, soy sauce and garlic powder; microwave on high for 45 seconds and stir well. Pour half the mixture over fish filets; reserve remaining for sauce. Cover fish and refrigerate for 15 minutes or longer.

In a 375 degrees oven, bake fish filets in marinade for 10 – 15 minutes, until fish flakes. Remove fish from pan juices. Add dissolved cornstarch and marmalade to reserved sauce; cover and heat in microwave on high for 1 to 2 minutes or until thickened. Top fish with sauce and sprinkle with sliced almonds.

QUICK ITALIAN CHICKEN

12 ounces skinless, boneless chicken breast, cut into 2-inch pieces
2 cups marinara/spaghetti sauce without added oil
1 (4 ounce) can mushroom pieces, drained
1 teaspoon Italian Seasoning Blend
2 cups cooked pasta
Fat-Free Grated Parmesan Cheese

DIRECTIONS

Place chicken breasts in a single layer in an 8-inch square glass-baking dish. Stir mushrooms and seasoning into sauce, and spoon on top of chicken pieces. Bake at 350 for 25 to 30 minutes or until chicken is no longer pink inside. Place chicken on top of pasta, sprinkle lightly with parmesan.

TURKEY BURGER

Burgers:

12 oz ground turkey breast meat
½ cup bread crumbs
½ cup chopped green onion
2 tablespoons barbecue sauce
1 teaspoon Worcestershire sauce
¼ teaspoon seasoning salt
8 slices light rye bread lettuce, tomato slices

DIRECTIONS:

In large bowl, combine all burger ingredients; mix well. Shape into four burgers; place on a non-stick baking sheet and bake at 375 for about 15 minutes or until browned and thoroughly cooked or grill 4 to 5 minutes per side. Make sandwich with burgers, bread, lettuce and tomatoes.

OVEN FRIED CHICKEN

- 12-oz skinless chicken breast filets, cut into 3-inch pieces
- ¼ cup nonfat milk
- 1 egg white, lightly beaten
- 1 cup corn flake crumbs
- ½ teaspoon onion powder
- 1/8 teaspoon white pepper

DIRECTIONS:

In shallow bowl, mix milk and egg white. In plastic bag mix crumbs and seasonings. Dip each piece of chicken in milk and egg white mixture, and then shake in seasoned crumb mixture.

Place chicken pieces in single layer on non-stick baking sheet. Bake in oven 400 for 20 minutes, or until chicken is browned and no longer pink inside.

SPICY STEAK AND VEGETABLE GRILL

Marinade:

- ¼ cup low sodium soy sauce
- ¼ tsp. garlic powder
- 1/8 - ¼ tsp. Black/or red pepper.
- 12 oz well trimmed flank steak
- 1 1/2 lbs. Vegetables cut into large strips such as fresh zucchini, mushrooms (preferably Portobello), and red bell pepper

DIRECTIONS:

To make marinade, combine soy sauce, garlic and pepper. Place meat and vegetables in shallow pan; pour marinade over meat and vegetables.

Let marinade sit for 15 minutes or longer. Place drained meat and vegetables on hot grill; cook over medium-high heat for 5 minutes, or until golden brown on bottom. Turn, cook on other side until meat is desired doneness and vegetables are golden brown. Slice steak thinly on the diagonal and serve with vegetables.

BAKED APPLE SLICES

3 medium apples, peeled, cored and sliced into eighths
2 tablespoons frozen apples juice concentrate, defrosted
Cinnamon to taste

DIRECTIONS:

Place apple slices on large microwave-safe plate. Brush apple slices with apple juice concentrate and sprinkle with cinnamon. Microwave on medium-high for about 3-6 minutes or until apple slices are soft.

CHICKEN DIJON OVER SPINACH SAUTE

12 oz skinless, boneless chicken breast, cut into 2-inch pieces
¼ cup Dijon mustard
1 tablespoon honey
2 teaspoons canola oil
1 teaspoon garlic powder
1 pound fresh baby spinach

DIRECTIONS:

Place chicken breast in a single layer in an 8-inch square glass-baking dish. In a small bowl, mix mustard, lime juice and honey. Spread mixture on top of chicken pieces. Bake @ 375 for 15 to 25 minutes or until chicken is no longer pink inside.

In a skillet, heat oil, add garlic and spinach; stir-fry until spinach is wilted. Place chicken on top of spinach; spoon sauce over chicken.

CHICKEN FAJITAS

2 tablespoons fat-free chicken broth
1 pound skinless, boneless chicken breast tenders, cut into thin strips
1 cup sliced onion
1 cup thinly sliced red, yellow and green peppers
1 tablespoon low sodium soy sauce
2 teaspoons lime juice
1/3 cup fresh salsa
4 (6-7inch) corn or fat-free flour tortillas, warmed
1/2 cup medium avocado, sliced
1/4 cup fat-free grated cheddar cheese
Additional salsa

DIRECTIONS:

In large non-stick skillet, over medium high heat, add chicken broth, chicken, onion and peppers; stir-fry for about 6 minutes, until chicken is cooked. Add soy sauce, lime juice, and salsa; cover and simmer for 5 minutes for flavors to blend. Serve with tortillas, avocado, grated cheese and additional salsa.

OVEN FRIED FISH WITH MUSTARD DILL SAUCE

3/4 cup bread crumbs
1/2 teaspoon seasoning salt
2 tablespoons nonfat milk
1 egg white
1 pound fish fillets (mild white fish)
1/4 cup lowfat mayo
2 teaspoons Dijon mustard
1/2 teaspoon onion powder
1/4 teaspoon dill

DIRECTIONS:

Place breadcrumbs and seasoning salt in plastic bag. Mix milk and egg white in shallow bowl; dip pieces of fish one at a time into mixture, then place in bag with crumb and shake to coat all surfaces. Place fish on non-stick baking sheet and bake at 425 for about 15 minutes or until coating is lightly browned and fish flakes easily.

Mix mayo, mustard, onion powder and dill. Serve with fish.

GARLIC SHRIMP STIR-FRY

2 tablespoons canola oil
3 tablespoons minced garlic
1 (14 oz) package frozen sugar snap peas
½ cup red pepper, diced
1 pound cooked medium-size shrimp
3 tablespoon or to taste low sodium soy sauce
1 tablespoon cornstarch dissolved in 2 tablespoons water
¼ cup chopped green onions
2 cups cooked thin spaghetti noodles

DIRECTIONS:

In wok or deep fryer pan, stir-fry garlic in oil over medium high heat until lightly browned. Stir in sugar snap peas and red pepper, cover pan and "steam" until vegetables are desired doneness (about 5 min.). Uncover, stir in cooked noodles, cooked shrimp, soy sauce and cornstarch mixture. Continue to stir-fry until all ingredients are hot and sauce has thickened, about 1 to 2 minutes. Sprinkle with chopped green onions. If desired serve with additional soy sauce.

Here are some things you athletes can do to reduce your calorie intake:

1. Limit or get rid of foods and beverages they can do without:
 - High-calorie beverages
 - Large portion sizes of anything
 - Condiments such as mayonnaise, salad dressing, butter, and margarine
2. Right-size plates, mugs, and glasses, and consider using small spoons or salad forks instead of soup spoons and larger forks.
3. Add foods that require more work:
 - Food that has to be chewed
 - Food that has to be cut
 - Hot foods that take more time such as soup and oatmeal
4. Add liquid-based foods and foods with a high moisture content to meals, because they increase satiety:
 - Stew
 - Chili
 - Soup
 - Unsweetened applesauce
 - Salads
5. Space meals out:
 - Have the salad or soup and then the sandwich instead of both together.
 - Have the salad first and then the meal.
6. Create an eating environment that is conducive to success:
 - Include foods that make one feel more full for a longer period and are nutrient rich:
 - Fruits
 - Vegetables
 - Beans
 - High-fiber cereals
 - Have fewer tempting foods around.
 - Include foods that are easily portioned:
 - One half of a chicken breast
 - A piece of string cheese
 - A container of yogurt
 - A piece of fruit
 - A 100-calorie snack pack
 - A snack-size bag of microwave popcorn

7. Replace easy-to-eat large-volume foods with finite portions:

<i>Instead of</i>	<i>Choose</i>
crackers out of the box	a package of peanut butter crackers
several scoops of ice cream	an ice cream sandwich
cookies	a cereal-sized bowl of sweetened cereal with milk

8. Focus on times of the day when it's difficult to control eating instead of the whole day.
9. Eat breakfast. Studies show that breakfast eaters are lighter and burn calories more efficiently!

Because high school athletes are in a time of rapid growth, they must not cut calories too much. Athletes need to eat enough for activity, basic body needs, and growth. Consuming too few calories will not help your athletes to reach their goals.



Talk with athletes about how to decrease their number of calories eaten daily. (Adapted for Athletes Who Want to Lose Fat)

Seek Referrals

Helping athletes reach their weight goals requires a lot of time and effort on your part as well as the athletes'. It is hard to be the team coach and the nutrition coach. Seek out dietitians in your area, and consider having one talk to your team about healthy eating and achieving weight goals. You can find registered dietitians through your local hospitals. Dietitians in private practice are listed in the phone book or online, or go to the American Dietetic Association Web site, www.eatright.org, and follow the Find a Dietitian link. Dietitians charge a fee for this kind of service; perhaps the school's booster club would underwrite the cost. In some cases, health care insurance will cover the costs of nutrition counseling. This might include athletes who have not only weight issues but also health issues such as diabetes and hypertension (see more on these issues in chapter 9).



Develop a list of dietitians and other health professionals in your area to whom you could refer your athletes. (Adapted for Athletes Who Want to Lose Fat)

Food Diary for Losing Weight

Time	Food and beverages consumed	Amount consumed	Time spent eating or drinking	Activities while eating or drinking	Calories consumed
					Total:

From L. Bonci, 2009, *Sport Nutrition for Coaches* (Champaign, IL: Human Kinetics).

FIGURE 5.5 Food diary for losing weight.

Food Patterns

Another essential step is to get your athletes to focus on what they are eating so that they can identify food patterns, that is, foods that they eat frequently or not at all, and foods they find hard to stop eating.

Instruct your athletes to use figure 5.6 on pages 66-67 to identify the foods they eat frequently, foods

they find too tempting or eat too much of, and foods they never consume. They should place an X in the appropriate columns.

After your athletes complete this chart they will have a good idea of the items they consume most regularly as well as those that they rarely eat. If an athlete notices that he is only picking high-calorie

Getting Lean and Ripped at the Same Time

You may have athletes who want to both increase muscle mass and decrease body fat; do they need to eat differently than those who are trying only to increase muscle mass or only to lose body fat? First they need to prioritize their goals. If they have a little extra around the middle or on the hips, it is probably more important to work on decreasing body fat than adding size to the biceps. Remind your athletes that muscle doesn't turn to fat or fat to muscle, but they will still look and probably feel better no matter whether they focus on the muscle mass increase or the body fat decrease. We can't just look at a number on a chart or the scale to determine which to focus on.

If your athlete increases the amount of time spent lifting, there is a chance that his weight may not change at all, even though he may look more "cut" or toned. The reason is that muscle is more dense and weighs more than fat. So your athletes need to assess progress by noticing how their bodies are changing and how clothes are fitting, not just by the number on the scale.

If an athlete tries to decrease body fat by cutting large number of calories and exercising excessively, she may end up not only burning fat but also losing muscle mass. Remember, exercise is catabolic, requiring fuel for the muscles. If an athlete has a higher energy output (through excess exercise) compared with energy intake (food consumed), the body may have to use its own muscle as a fuel source during exercise.

No matter what the focus is, it is important to have a plan.

Tell your athletes to do the following to increase muscle mass and decrease body fat:

To increase muscle mass

- Eat enough to stimulate muscle growth.
- Eat before and after lifting.
- Eat enough protein.

To decrease body fat

- Limit serving sizes.
- Eat enough to fuel your workouts.
- ~~_____~~
- Eat enough protein.

Finally, if your athletes want to lose weight, they must be consistent with the number of meals eaten every day. ~~_____~~

~~_____~~

~~_____~~ To keep your athletes on track, suggest that they try the following tips:

- Establish an eating schedule. Think about your classes, work, practices, lessons, and all the things you do, and plan your eating around your activities.
- Eat breakfast every day.
- Eat lunch. If you don't like what is offered at school or at work, bring something with you.
- If late afternoon is your hungry time, plan to eat more at breakfast and lunch; also plan a snack to have at this time of day.
- Sit down to eat, even if you get fast food. And no eating in the car! Either eat at the restaurant or take the food home, unwrap it, put it on a plate, and take the time to eat. You'll feel much more satisfied!

There are times in your athlete's lives when they are more likely to experience weight changes. Prepuberty

is a time of increased fat and muscle mass, so the previously rail-thin athlete may now notice curves in areas that were previously flat. Injured athletes may gain weight because their appetite does not always decrease even though their exercise is curtailed, so it is extremely important to work with these athletes to prevent excessive weight gain or caloric restriction, which may delay healing. Athletes entering college may notice that they gain weight during their first semester. If you are a college coach, have a sports dietitian talk to your team about healthy eating, late-night eating, snacks, and alcohol use, because all of these can affect your athletes' weight.

Consider Diet Options

A lot of myths are floating around about food and weight gain, so let's review some common questions coaches have, then examine whether fad diets are worthwhile, and finally, consider whether weight-loss pills are worth what they cost.

Common Questions About Food

Let's look at some common questions that coaches have about food and weight loss.

Common Questions About Food and Weight Loss

What about fat-burning foods?

Sorry, but ~~there are no fat-burning foods.~~ Athletes need to eat a variety of foods to optimize performance. Even with weight loss as a goal, athletes still have to eat enough to fuel their participation in their sports. But ~~there are some foods that can help you feel full for a longer time.~~

Some foods help you to feel more full for a longer time. Part of this is the way the food tastes and the "mouth feel" as well as the comfortable feeling you get after eating a meal. It is also the "chew" factor. No one feels full after a beverage, at least not for an extended period of time, but when you eat a small steak, or a small plate of pasta, or soup and a sandwich, you need to chew, which is part of the fill factor.

Shouldn't carbohydrate intake be restricted?

~~Carbohydrate-containing foods such as fruits, vegetables, bread, rice, cereal, pasta, and sweets are all high in calories and will make you gain weight and may lead to obesity and will sabotage your weight loss efforts.~~ However, some carbohydrate-containing foods are more satisfying than others. It takes time to eat a salad if one doesn't want to choke on the lettuce! A piece of fruit requires chewing, whereas juice doesn't take any work at all. A bowl of a high-fiber cereal such as Kashi or Raisin Bran will keep one feeling full for longer than corn flakes.

The bonus of high-fiber carbohydrate is threefold:

- Some high-fiber foods take longer to eat.
- The feeling of fullness lasts longer.
- The body has to expend a few more calories to digest high-fiber foods.

Shouldn't protein be the focus?

Many athletes believe that it is necessary to eat a lot of protein if the goal is to increase muscle mass and decrease body fat. That isn't always true, and ~~it's not a lot of protein that doesn't cut it.~~

With all of the high-protein diets and products on the market, some athletes think that a high-protein diet is the best approach to weight loss. Unfortunately, these diets and foods are all too low in carbohydrate, so they may impair performance and they are incredibly monotonous as well!

Foods that contain high-quality protein are an essential part of a good body-fat reduction plan. Meat, poultry, fish, eggs, cheese, soy products, and beans such as kidney beans, navy beans, and chickpeas are all examples of protein foods that require chewing. Some require cooking, which delays the hand to mouth action, and some require the use of a knife and fork, so they take longer to eat. Beans, soy foods such as veggie burgers and soy nuts, and nuts and seeds also contain fiber in addition to protein, which makes one feel more full for a longer time.

It takes about three to four hours for protein-containing foods to leave the gut, compared with one to two hours for carbohydrate-containing foods and six hours for fat-containing foods. The longer the food takes to empty, the longer one feels satisfied and less likely to eat. This is really important when the goal is weight loss. In addition, the body uses slightly more calories to digest protein than other types of nutrients, so athletes should include some protein as part of every meal and snack.

To lose weight, low to no fat intake is best, right?

~~Weight loss is the most important goal for athletes. To lose body fat, they need to cut out all dietary fat. This makes~~
~~ing. Fat-containing foods such as butter, margarine, mayonnaise, salad dressing, oil, and~~
~~peanut butter not only make foods taste good but make one feel fuller longer. Fat-free does not~~
~~equal calorie-free, so if your athletes polish off a bag of fat-free pretzels, they are still consuming~~
~~a lot of calories and are not going to lose weight. Reduced-fat peanut butter has the same number~~
~~of calories per serving as regular peanut butter and doesn't taste as good. Some fat-free foods~~
~~actually have more calories than the regular item. In addition, fat-free foods aren't as satisfying, so~~
~~one will be more likely to eat more. Fat is a fuel source for endurance exercise, and it can improve~~
~~fat metabolism. Low-fat diets can cause increased fatigue and decreased performance.~~

To drink or not to drink: Is this a question?

~~Water is essential for most people, but it does not flush fat or curb appetite. It can make one feel~~
~~thirsty enough that the body will not burn fat as effectively. Drinking gallons of water will~~
~~not make any difference.~~

Athletes seem to forget that liquids can pack a powerful caloric punch. With beverages from Starbucks to energy drinks, carbonated beverages, and fruit juice or fruit drinks, buyer beware. It is very easy to tack on an additional 1,000 calories in beverages every day without feeling full.

Help your athletes cut calories by suggesting they limit intake of the following beverages:

- Sweetened iced tea
- Fruit juice (even though it is natural, it is still high in calories)
- Fruit drinks
- Two percent or whole milk
- Sweetened seltzer waters, unless calorie-free
- Flavored waters, unless calorie-free
- Energy drinks
- Coffee beverages such as cappuccino and lattes
- Alcohol (low-carbohydrate beer still has calories!)
 - Beer, 12 ounces (360 ml): 90-150 calories
 - Glass of wine, 4 to 5 ounces (120-150 ml): 100 calories
- Mixed drinks
 - Gin and tonic: 200 calories
 - Hurricane: 400 calories
 - Martini: 300 calories
 - Margarita: 330 calories
 - Pina colada: 300 calories
 - Rum and Coke: 360 calories

It is a much better idea to get calories from food than from fluids, because one will feel more full for a longer period of time. However, there are some low-calorie liquid choices:

- Sports drink (but only during exercise)
- Fitness waters that average 10 calories per serving
- Water
- Flavored low-calorie or calorie-free water
- Sugar-free fruit drink mix
- Sugar-free iced tea
- Herbal tea
- Tomato juice or vegetable juice
- Skim milk
- Soups like tomato soup and vegetable soup
- Sugar-free carbonated beverages
- "Light" juice or regular juice that is diluted to one part juice and three parts water



Encourage athletes who want to lose body fat to participate in only in the off-season and, under supervision of a health professional, (Off-Season Activities) for

Foods on the Road

Athletes often have to travel to competitions and end up eating at restaurant chains that may offer tempting, calorie-laden foods. Appendix A provides recommendations for eating healthy food at restaurants.

Don't Use Body Weight Charts!

Do not set weight goals for your athlete, especially goals based on body weight charts. Body weight is a combination of frame size, body shape, muscle mass, and fat content, and weight charts are not necessarily applicable to athletic bodies. It is possible for five individuals of the same height to have different, healthy body weights based on frame size and body composition.

Fad Diets: Yes, No, Maybe?

~~The Zone, South Beach, Atkins, high fiber, no sugar~~—the list of diets is endless. There are as many different diets as there are types of sports, and it seems that every day a new diet plan appears on the Internet, in newspapers or magazines, or on television. ~~Not one of these diets is designed for athletes; the calories are just too low, which means performance will suffer.~~

Just as there are clothing fads, there are diet fads. Right now, the most popular diets recommend that we eat a lot of protein and fat but cut back on bread, cereal, rice, pasta, fruits, sweets, and some vegetables. But active bodies require carbohydrate to fuel the muscles, so if your goal is to keep your ~~athlete~~ in the game, ~~they should say "No" to this diet.~~ Table 5.2 lists the different categories of diets and some of the issues that affect athletes.

Fad diets result in a drop on the scale that is usually caused by water loss because of a restriction in calories or carbohydrate intake. Most of these plans are very boring and are hard to follow when the athlete is out with friends, is traveling, or is at all-day sports events. Just eating two subs a day or drinking Slim Fast gets old fast, and if your athlete follows a beverage-only diet, she won't get the chew factor and thus won't feel satisfied for long. When athletes are tempted by any of these plans, just ask whether they could see themselves eating this way for more than a week. If the answer is no, the program isn't the right one!

Preparing for Weigh-Ins

For athletes who are in weight-class sports such as wrestling, crew, and boxing, weigh-ins can be a time fraught with worry and performance-detracting diet behaviors such as dehydration and fasting. ~~The goal is to get athletes to within one or two pounds (.38-.75 kg) of their competition weight a week before the start of season. Three or four days before a match, the following strategies can be used:~~

- Decrease sodium in the diet to help decrease fluid retention.
- Focus on low-fiber foods a couple days before weigh-ins; examples include low-fat yogurt, sugar-free Jell-O, unsweetened applesauce, and low-calorie shakes.
- Educate athletes about proper hydration strategies (see chapter 4). If they take in more fluid than they need in an attempt to lessen hunger, they may end up with more water weight, which will increase the number on the scale.

As you have probably guessed by now, for athletes there are no effective shortcuts to losing weight. You want your athletes to lose weight safely and to stay on the field.