## SAMPLE PREGAME MEAL

1 to 2 cups pasta with 1 1/2 cups tomato meat sauce
Bread
Milk (low-fat or skim)
Orange juice
Oatmeal raisin cookie
Water

If there is not enough time for a pregame meal, then a small carbohydrate snack, such as whole-wheat bread with peanut butter and banana, juice, and water, can be consumed one to two hours prior to the game.

## CALCULATING "IDEAL" WEIGHT FOR ATHLETES

There are charts and different indexes to calculate the proper weight for people of all ages. One way is to calculate **body mass index (BMI)**. BMI is a reliable indicator of total body fat, which is related to the risk of disease and death. The score is valid for both men and women, but it does have some limits:

***body mass index (BMI)***
*The medical standard used to define obesity.*

- It may overestimate body fat in athletes and others who have a muscular build.
- It may underestimate body fat in older persons and others who have lost muscle mass.

To determine BMI, weight in pounds is divided by height in inches, then divided again by height in inches and multiplied by 703.

BMI = Weight in pounds ÷ Height in inches ÷ Height in inches x 703

Example: A person weighing 210 pounds who is 6 feet tall would calculate BMI as follows:

210 pounds ÷ 72 inches ÷ 72 inches x 703 = 28.5

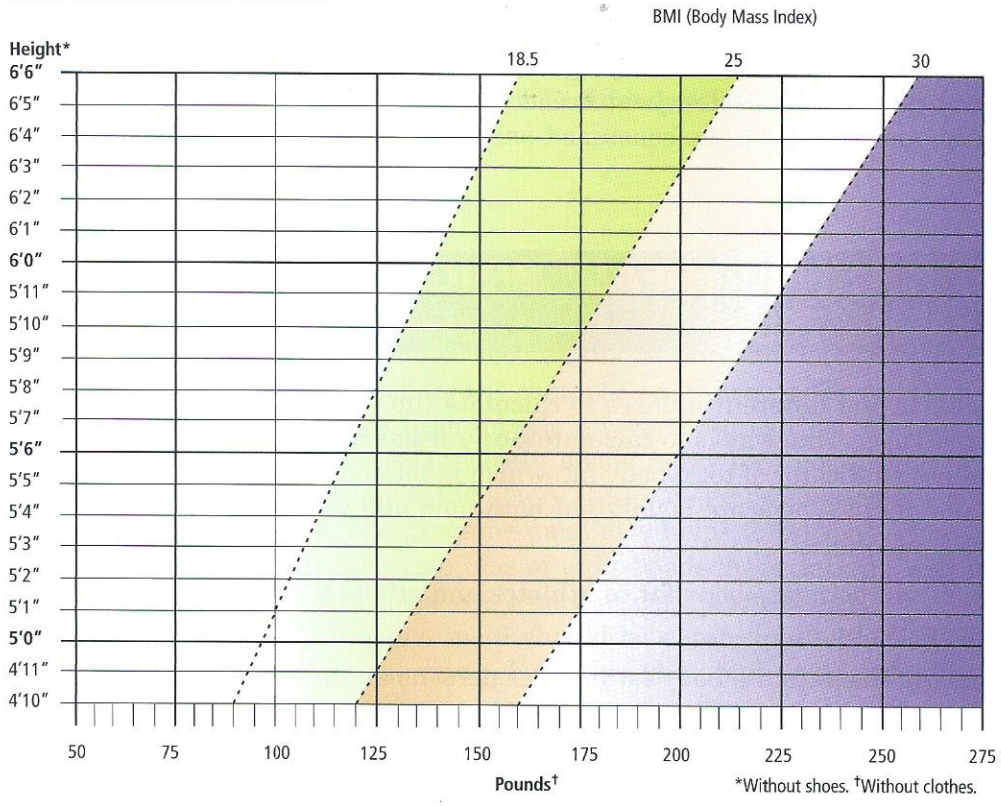
As outlined in Table 8-6:

- Normal weight= 18.5–24.9
- Overweight = 25–29.9
- Obesity = BMI of 30 or greater

One traditional method of calculating one's ideal weight is the use of a weight chart (Table 8-7). Height and weight charts are useful for comparing others of the same age and gender. Weight charts are based on a national average.

## Table 8-6 Body Mass Index

**ARE YOU AT A HEALTHY WEIGHT?**




BMI measures weight in relation to height. The BMI ranges shown above are for adults. They are not exact ranges of healthy and unhealthy weights. However, they show that health risk increases at higher levels of overweight and obesity. Even within the healthy BMI range, weight gains can carry health risks for adults.

**Directions:** Find your weight on the bottom of the graph. Go straight up from that point until you come to the line that matches your height. Then look to find your weight group.

**Healthy Weight** BMI from 18.5 up to 25 refers to healthy weight.

**Overweight** BMI from 25 up to 30 refers to overweight.

**Obese** BMI 30 or higher refers to obesity. Obese persons are also overweight.

Source: *Report of the Dietary Guidelines Advisory Committee on the Dietary Guidelines for Americans*, 2000.

**Table 8-7 Weight Chart**

| WHAT IS YOUR IDEAL WEIGHT? | | | |
|---|---|---|---|
| MEN | | WOMEN | |
| Height | Weight (in pounds) | Height | Weight (in pounds) |
| 5'2" | 115–121 | 4'11" | 93–100 |
| 5'3" | 120–129 | 5'0" | 98–102 |
| 5'4" | 125–137 | 5'1" | 103–106 |
| 5'5" | 130–145 | 5'2" | 106–112 |
| 5'6" | 135–153 | 5'3" | 109–118 |
| 5'7" | 140–161 | 5'4" | 112–124 |
| 5'8" | 145–169 | 5'5" | 115–130 |
| 5'9" | 150–177 | 5'6" | 118–136 |
| 5'10" | 155–185 | 5'7" | 121–142 |
| 5'11" | 160–193 | 5'8" | 124–148 |
| 6'0" | 165–201 | 5'9" | 127–153 |
| 6'1" | 170–209 | 5'10" | 130–158 |
| 6'2" | 175–217 | 5'11" | 133–163 |
| 6'3" | 180–225 | 6'0" | 136–168 |

## CONCLUSION

Athletic performance can be attributed in part to a sound understanding of nutritional principles. Proper nutrition can reduce the likelihood of injury and allow the athlete to perform at a higher level. Understanding these principles will help the athlete make informed choices.

Disordered eating is an extreme expression of food and weight issues experienced by many individuals, particularly girls and women. These disorders include anorexia nervosa, bulimia nervosa, and binge eating. These disorders cause very dangerous behaviors that result in health problems.

As athletes become aware of the nutritional components of the food they eat, they will have fewer problems associated with poor nutrition.

## REVIEW QUESTIONS

1. Explain how energy is used to maintain body functions.
2. Briefly explain the seven food components and nutrients.
3. What is insulin and how is it used by the body?
4. A person requires 2,800 kcals each day to maintain weight. How many true calories is this?
5. What foods are monosaccharides, disaccharides, and polysaccharides found in?
6. How are food proteins converted into amino acids?
7. How can you limit the amount of fat in your diet?
8. What are vitamins and why are they important for the body?
9. What is the difference between fat-soluble and water-soluble vitamins?
10. Why is severe mineral deficiency unusual in the Western world?
11. How much water will your body naturally lose each day?
12. Why is prehydration important before exercise or athletics?
13. How are the DRVs for energy-producing nutrients calculated?
14. Why was the Food Guide Pyramid developed?
15. List the nutritional guidelines developed by the USDA and HHS.
16. What are the differences and similarities between the U.S. Food Guide Pyramid and the Mediterranean, Asian, and Latin American diet pyramids?
17. What are the six food groups in the USDA Food Guide Pyramid?
18. What is nutritional quackery?
19. List some of the methods girls and women use to lose weight.
20. What are the dangers of anorexia nervosa and bulimia?
21. What percentage of males have disordered eating?
22. How do you calculate BMI? Calculate your BMI, showing how you came up with this number.

## PROJECTS AND ACTIVITIES

1. Track your dietary intake for one day. Include everything you consume, including water. Be sure to list the quantities of the foods and drinks you consume as closely as possible. After compiling your list, determine the amount of each of the food components you consumed during the day. How does your list compare with the DRVs developed by the National Academy of Sciences?
2. Create a food pyramid typical of the types of foods teenagers eat today.