Body Mass Index (BMI) is a way to define overweight and obesity. The index is a mathematical formula in which a person’s body weight in kilograms is divided by the square of his or her height in meters [kg/m²]. The BMI is more highly correlated with body fat than any other mathematical ratio of height and weight; however, athletes and individuals with a high percentage of muscle may have a BMI in the overweight range because of the higher density of muscle compared to fat.

- A BMI of 18 to 25 is considered normal weight. Individuals with a BMI of 25 to 29.9 are considered overweight, and those with a BMI of 30 or more are considered obese.
- Overweight is defined as increased weight in relation to height.
- Obesity is defined as an excessively high amount of body fat or adipose tissue in relation to lean body mass.

The distribution of body fat is important from a chronic disease perspective. Those who have more body fat in the abdominal area have an increased risk for elevated triglycerides, high blood pressure and glucose intolerance. Waist circumference correlates well with chronic disease risk. A waist circumference of 40 inches (102 cm) or more in men or a waist circumference of 35 inches (88 cm) or more in women puts one at greater risk of insulin resistance and the chronic diseases associated with it.

When someone is a few pounds overweight and is motivated to lose weight, there are safe and effective methods to lose a few pounds and to maintain a weight loss.
Eating right and losing weight can be difficult. To lose weight and keep it off, changes in lifestyle and daily habits are necessary. Long-term lifestyle changes require more than simply watching what one eats and how much one exercises. It requires **changing one’s approach** (thinking, feelings and actions) to eating and physical activity.

Behavior change is one of the most widely used strategies for helping people lose weight and maintain a healthy lifestyle, and it is a key component to any weight loss approach. The average duration of behavioral treatment ranges from 18-24 weeks and results in losing about 1 pound a week. Average weight loss is about 20 pounds after six months, and it appears that group programs are more effective than individual programs. Studies demonstrate several tools that are effective in helping people make this change toward a healthy way of living. These behavior change tools focus on maladaptive eating and exercise patterns that can lead to weight gain, and they are designed to reduce the cues in our environment that predispose to weight gain. These tools help to increase awareness of eating and activity patterns, normalize eating patterns, reduce exposure to cues for unhealthy eating or activity patterns, and alter responses to difficult situations. Cognitive-behavioral strategies have also been used as a weight loss technique and offer an emphasis on traditional behavioral components as well as thought processes, emotions and attitudes related to eating and exercise behaviors.

### Making Lifestyle Change a Priority:

Making changes to last a lifetime is difficult for most people. As you plan your new weight loss strategies, stay focused. Make your health a top priority. **CHOOSE HEALTH FOR YOURSELF!**

### Establishing a Plan for Success:

Plan various strategies to help meet your weight loss goals. Commit to a start date and follow through. Determine your diet and exercise plan before you start, and consider barriers that may make it difficult for you to reach your goals.

### Setting Goals for Eating and Exercise:

This is an important technique in starting a weight loss treatment program. Setting the right goals is a critical step in improving your health.

1. Focus on more than weight loss. Set goals for calories, fat, physical activity and other modifiable behaviors.

2. Target a short-term goal of losing 1 to 2 pounds of weight a week, and establish the caloric intake and exercise amounts needed to reach this goal. Be realistic in your short-term and long-term goals. Weight loss and maintenance are life-long processes that do not occur overnight.

3. Choose effective goals that are: specific, attainable and realistic. (Walk 30 minutes five times a week, and eat 5 servings of fruits and vegetables.) You are more likely to continue your efforts if you are successful!

4. To reach your long-term goal, complete a series of smaller steps that get you closer to the ultimate prize. Remember: Nothing succeeds like success!
Keeping Track of Eating and Exercise:

Self-monitoring is considered the cornerstone of behavioral treatment. This involves observing and recording all eating and exercise behaviors, and monitoring weight. Self-monitoring is used to raise awareness of behavior patterns and to identify faulty eating and activity patterns. It can be used when you want to improve your weight loss efforts, or if you are unsure of your progress. You can think of self-monitoring as your “diary” for your diet and exercise efforts. Weighing yourself frequently can help you monitor your success, as well as help you catch any weight gain early. Weight can fluctuate some from day to day, but if weight goes up 3 to 5 pounds, it is time to redouble your efforts. Self-monitoring records can help you catch “slips” that may cause your weight to creep back up. In the most basic form, individuals record time, activating event, place and quantity of eating, and activity behaviors. Recordkeeping can also be expanded to include information on feelings associated with eating.

Avoiding a Food Chain Reaction:

Stimulus control techniques are used to modify environment influences that affect eating or activity patterns. The goal is to restrict environmental factors activate maladaptive eating or sedentary behavior. This involves learning what cues in your life seem to encourage undesired eating and then taking charge to change those cues. Many people learn what cues trigger their eating habits by completing food and exercise diaries. Techniques that help people conquer their eating triggers include: eating regular meals without skipping, eating at same time and place, changing serving and food storage techniques (use smaller plates to make portions look bigger), keeping accessible food out of sight, eating only when you are hungry and avoiding activities that encourage you to eat (like watching television).

Changing Eating and Activity Patterns:

The goal of this technique is to modify faulty eating behaviors that may interfere with feeling full or lead to overeating. Techniques used include: slowing pace of eating, reducing portion sizes, measuring food intake, leaving food on plate, improving food choices and eliminating second servings. To target exercise efforts, incorporate increased activity into your daily routine (take the stairs instead of elevator). Find extra opportunities to be active outside of your regularly scheduled exercise times. Exercise can be categorized as either programmed (regularly scheduled times of physical activity for a determined amount of time and intensity) and lifestyle (increasing energy expenditure throughout the day). Lifestyle activity has been associated with weight loss in several studies, and it provides a great alternative for the person who “hates” to exercise.

Contingency Management:

Positive reinforcement (reward) is used to stabilize and increase the maintenance of new eating and activity patterns. Rewards that you control can help you reach goals that are difficult to attain. An effective reward is one that is immediate, desirable and given based on your meeting a specific goal. Rewards can be tangible (treating yourself to a new CD) or intangible (taking time off for yourself); however, efforts should be made to eliminate all rewards centered around food.

Cognitive Behavioral Strategies:

Cognitive behavioral strategies combine the traditional behavioral treatment components with emphasis on thinking patterns that may affect eating behaviors. Many people focus on perfectionist standards, negative self-statements, unrealistic weight loss goals, justifications for eating and limited self-control. The goal of these strategies is to alter mood, unhelpful beliefs, unrealistic standards and negative evaluations that affect eating patterns. These techniques also may include stress management and assertiveness training to improve resistance to high-risk situations.

Stress Management:

Stress is a primary predictor of overeating and relapse. Stress management skills include progressive muscle relaxation, diaphragmatic breathing and meditation. The goal of stress management is to reduce arousal and provide distraction from stressful events.
References:

Foreyt, J.P., & Poston, W.S.C., Jr. (1998b). What is the role of cognitive-behavior therapy in patient manage-
ment? Obes Res, 6(Supplement 1), 18S-22S.


http://www.endotext.org/obesity/index.htm:

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