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Overweight and Obesity Summary of National Institutes of Health Report By James L. Holly, MD Your Life Your Health *The Examiner* January 23, 2003

The National Institutes of Health has published a report on obesity entitled, "Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults." Most of the following information is taken from that report. You can read the entire report by downloading it from

http://www.nhlbi.nih.gov/guidelines/obesity/ob_home.htm.

It will not surprise anyone to learn that if you should read the entire 90+ page report that you will discover the following:

- 1. Americans are fat.
- 2 Americans are fat because they eat too much and they eat the wrong foods and they are not active enough.
- 3. Losing weight is hard; keeping weight off is harder.

4. There is no way to lose weight other than decreasing the intake and/or increasing the calorie utilization

- 5. Pills are not the answer.
- 6. Surgery is a last resort.
- 7. The most important fact in successful weight loss is, "How important is it to you?"

NIH reports that 97 million Americans are overweight or obese. Excess weight is often accompanied by high blood pressure, high blood cholesterol, type 2 diabetes, coronary heart disease and other health problems. The total costs attributable to obesity-related disease approaches \$100 billion annually in the United States.

Overweight is defined as a body mass index (BMI) of 25-29.9 kg/m2 and obesity as a BMI of greater than 30. A BMI of 30 is about 30 pounds overweight and equivalent to 221 pounds in a six foot person and to 186 pounds in one 5 foot 6 inches tall.

Waist Size and Health Risk

The presence of excess fat in the abdomen out of proportion to total body fat is an independent predictor of risk factors and morbidity. Waist circumference is positively correlated with abdominal fat content. It provides a clinically acceptable measurement for assessing a patient's abdominal fat content before and during weight loss treatment. Men whose waists are greater than 40 inches and women whose waists are greater than 35 inches are at high risk for developing diseases related to obesity such as coronary heart disease, atherosclerotic disease, type 2 diabetes and sleep apnea.

Calories, Calories, Calories

NIH recommends a 10% reduction in body weight over six months as an initial goal for weight reduction. The report discusses dietary therapy as the first step. That therapy includes:

- 1. Decreasing saturated fat in the diet with total fat being 30% or less of total calories.
- 2. Decreasing total calories

No matter what diet a person goes on, if there is no decrease in the total calories eaten, no matter how much carbohydrates are avoided, weight will not be lost.

Physical Activity and weight reduction

Physical activity is recommended as part of a comprehensive weight loss therapy and weight control program because it:

- 1. Modestly contributes to weight loss in overweight and obese adults
- 2. May decrease abdominal fat
- 3. increases cardiorespiratory fitness
- 4. May help maintenance of weight loss

Prevention of overweight and obesity

Prevention of overweight and obesity is as important as treatment. Primary prevention of obesity should include addressing major societal contributors to over-consumption of calories and inadequate physical activity such as food marketing practices, transportation patterns, and lack of opportunities for physical activity during the workday. Childhood eating habits are important factors in adult obesity. One of the greatest gifts a parent can give a child is the taste for good, healthy food, self-control with calorie rich, nutritionally limited foods and an active life style.

What Treatments are effective?

Low-calorie diets (approximately 1,000 to 1,500 kcalories/day) can reduce total body weight by an average of 8 percent over 3 to 12 months. Low-calorie diets resulting in weight loss affect a decrease in abdominal fat. No improvement in cardiorespiratory fitness appears to occur in overweight or obese adults who lose weight on low-calorie diets without increasing physical activities. Very low-calorie diets produce greater initial weight loss than low-calories diets.

However, the long-term (greater than one year) weight loss is not different from that of the low- calorie diets.

Although lower-fat diets without targeted caloric reduction help promote weight loss by producing a reduced caloric intake, lower-fat diets coupled with total caloric reduction produce greater weight loss than lower-fat diets alone. Taken together, all of the evidence shows that lower-fat diets ranging from 20-30 percent of calories can contribute to lower caloric intake even when caloric reduction is not the focus. However, there is little evidence that lower-fat diets cause weight loss independent of caloric reductions.

Physical activity, i.e., aerobic exercise, in overweight and obese adults results in modest weight loss independent of the effect of caloric reduction. In addition, physical activity in overweight and obese adults modestly reduces abdominal fat.

The combination of a reduced caloric diet and increased physical activity produces greater weight loss than diet alone or physical activity alone. The combination of a reduced calorie diet and increased physical activity produces greater reductions in abdominal fat than either diet alone or physical activity alone, although it has not been shown to be independent of weight loss.

Behavior therapy, when used in combination with other weight loss approaches, provides additional benefits in assisting patients to lose weight short term (1 year). No additional benefits are found at 3 to 5 years in the absence of continued intervention. Some of the behavior therapies employed are "social pressure," group support, "cue avoidance." The most important behavior factor, however, seems to be patient motivation, i.e., how important is it to the patient to lose weight.

Pharmacotherapy results in weight loss in obese adults when used for 6 months to one year. However, weight loss drugs may ONLY be used as part of a comprehensive weight loss program including diet and physical activity for patients with a BMI of 30 or greater win no concomitant obesity-related risk factors or disease, or for patients with a BMI of 27 or greater with concomitant obesity-related risk factors or diseases. Weight loss produced by medication produces no improvement in a patient's lipid profile. And, weight loss medications can be associated with unintended health risks.

Surgical intervention is an option for carefully selected patients with clinically severe obesity (a BMI greater than 40 or greater than 35 with comorbid conditions when less invasive methods of weight loss have failed and the patient is a high risk for obesity-associated morbidity and mortality.

Information will not make you lose weight, but knowing why obesity is dangerous and knowing "what works" can help you make life-style changes which can work. Above all, don't try to lose weight because you feel guilty or ugly. Lose weight because it will make you feel better, live longer and avoid health problems. Remember, it is your life and it is your health.