

# VIRGINIA COOPERATIVE EXTENSION SERVICE

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Lesson 1  
Diet, Exercise, and Behavior Modification  
(Weight Control by Mail)

Dear Weight Control Member:

I will be corresponding with you for the next ten weeks via the Virginia Tech Extension Service Weight-Control-by-Mail Program. This program was developed by Dr. Janette Taper, Extension Specialist, Foods and Nutrition.

One lesson will be mailed to you each week. Please study the information, apply what you learn, and do the activities. There will be a written assignment accompanying most lessons. Please complete these and return them to me. I will go over them, make comments on them and return them to you as quickly as possible. This will enable me to see what type of progress you are making with the program and ways in which I can be of further help to you. I will be here to help you in any way that I can. Remember, however, that for you to be successful in the program you must have the incentive and determination to complete each lesson, apply the information learned, and complete assignments.

Each lesson will begin with an introductory letter and end with a summary checklist to help you know:

- (1) What we want you to learn - objectives
- (2) What we want you to do - activities

Those items you need to send back will be identified.

This first lesson is somewhat different in format from subsequent lessons. It is an introduction to, and a general overview of, weight control and our approach to it in the DEB (Diet, Exercise, and Behavior Modification) Program.

Again, welcome to the program. I am looking forward to working with you in this weight control program.

Sincerely,

Extension Agent

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The DEB Program (Diet, Exercise, and Behavior Modification) has been designed for overweight adults. This integrated approach to weight reduction and weight maintenance recognizes the importance of activity (energy output) as well as food intake (energy input). It uses principles of behavior modification to encourage changing actions or habits related to overeating and underactivity.

There are ten planned lessons in the program. These are listed below.

1. Introduction
2. DEB Diet Plan, RECALL Information
3. Food Nutrients, RECALL Analysis
4. Low Calorie Cooking
5. Behavior Modification I. Eating Habits
6. Behavior Modification II. Changing Eating Habits
7. Exercise I. Activate
8. Exercise II. Planned Activity
9. Fad Reduction Diets, RECALL Information
10. Eating Out, RECALL Analysis

1. What is Obesity?

Obesity is one of the major health problems in America. Our sedentary lifestyle and abundant food supply contribute to this problem. The DEB Program (Diet, Exercise and Behavior Modification) conducted by VPI & SU Extension Division is one approach to weight reduction.

- a. Define obesity. Overweight relates to weighing more than is desirable for height and build. An overweight individual may either be overfat or have highly developed musculature.

Obesity is defined as a condition in which there is an abnormal accumulation of body fat. This increase in body fat usually corresponds with a body weight at least 15 to 20 percent above ideal or desirable weight. The fat accumulation is evidenced by an increase in body size, which may be either localized or distributed throughout the body. Obesity (being overfat) is a type of overweight. For example, a football player may be overweight either because of muscle development or because of excess fat stores. If he has excess fat stores, he is obese.

- b. Why do people gain weight? It is usually a combination of many factors. It may be simple overeating, due to a lack of knowledge or concern about the nutritional values of foods. Overeating may have become a habit due to such influences as "cleaning your plate" as a child, never wanting to waste food, or "getting your money's worth" when out at a restaurant. Inactivity can contribute to overweight, especially as you get older and your caloric needs decline. Weight gain is sometimes triggered by environmental cues, such as TV commercials, magazine advertisements, cocktail parties, and even driving past fast food places! Emotional cues may also be operating, including frustration, boredom, and stress. In essence, we may be eating, not because we are hungry, but due to the mere presence or suggestion of food, or its comforting effects. Of course, we might like to believe that weight gain has been caused by some genetic or glandular problem. In actuality this is extremely rare, which is good news because it means we can do something about being overweight!

2. What Makes Obesity Undesirable?

a. Health risks are increased

- (1) There is an increased risk of developing such chronic diseases as heart disease, high blood pressure, diabetes, kidney and gall bladder disorders, and gout. Obesity carries with it an increased chance of death before the average life expectancy of approximately 70 years.
- (2) There is an increased surgical risk. The added weight of the stored fat may overwork the circulatory system. Healing of the surgical incision may also be impaired in the obese.
- (3) There is an increased risk of developing such discomforting ailments as back, leg, and feet disorders from the added burden of weight to the skeleton.

b. Social Disadvantages

Because of size, some overweight people cannot actively participate in some sports. They may feel awkward participating in certain social events. Obesity sometimes leads to social rejection by others.

c. Economic Disadvantages

Some occupations are closed to overweight persons because of public disfavor or where mobility is important. Obesity may also curtail advancement in some occupations.

3. What Are the Objectives of DEB?

Upon completion of this program you will have learned:

- a. About factors contributing to obesity (such as eating and activity habits, environmental "cues" to eat, and food selection and preparation techniques).
- b. About the positive health effects of weight loss.
- c. To share concerns of being overweight and of weight loss with others.
- d. To evaluate and restructure eating habits (such as amount of food consumed, frequency of eating, and choice of nutrient content) and activity habits.
- e. To lose 1 to 2 pounds per week until your weight goal is achieved.

4. Caloric Intake Calculations (348-201)

This worksheet included with this lesson tells you how to arrive at the caloric intake which should result in weight loss.

The method used gives a quick estimate of energy needs, not an exact one. You may have to recalculate if weight loss does not occur or is too rapid. Obviously, the values used are averages and there will be persons who are at intermediate levels. Some of you will need to make more realistic assessments of your activity patterns.

Remember, don't eat less than 1200 calories per day. Please send this form back to me to insure that you have made calculations correctly. I will return it to you.

5. Personal Data Sheet (348-202)

Complete the "Personal Data Sheet" and return it to me in the mail.

6. Weight and Figure Measurement Record

It is found on the reverse side of the "Personal Data Sheet." Measure height, figure measurements, and weight in stocking feet. If possible, get a family member or friend to help you make these measurements.

For the height measurement, fasten a seven-foot measuring tape to the wall. Place a ruler across the top of the head at right angles to the wall to accurately measure height.

The following are instructions for obtaining accurate figure measurements. When taking measurements, be sure the tape is held snug and taut (but not tight) against body and parallel to the floor for circumference or width measurements. Do not let the tape slide down in the front or back. (Keep this lesson as I will return the "Weight and Figure Measurement Record" to you with Lesson 10 and ask you to record your measurements again at that time.)

Chest or bust: Measure over fullest part of chest and straight across the back.

Waist: Tie string around body at smallest part to establish waistline and measure at the string (put tape measure over string). Leave string in place to facilitate measuring from waist to the point at which the hip measurement is made.

Hip: Measure at fullest part of hips, usually 7" to 9" below waist.

Bicep: Measure at fullest part of upper arm, usually 1" below armpit.

Thigh: Measure fullest part of thigh.

7. Weight Graph (348-203)

Weight loss can be charted on the Weight Graph. The dot represents your starting weight, whether that's 125 pounds or 225. Each horizontal line represents a pound; each vertical line a week. Record weight gain or loss each week for a graphic representation of weight changes.

8. Medical Form (348-204) has been sent to you.

It is recommended that you have approval from a physician before continuing in the program. This is particularly critical for persons over 35 years of age who are 20 percent or more overweight or who have cardiovascular disease or some other medical condition. Your physician should indicate any restrictions on diet and/or activity. Since activity is a part of the DEB program, it is especially important that the physician comment on this aspect. Have your doctor sign the form and return it to me.

A letter to physicians (348-205) explaining the DEB program accompanies this lesson. You may want to take this to your physician to give him/her a more in-depth explanation of the program.

The following statement is adapted from Guidelines for Graded Exercise Testing and Exercise Prescription, American College of Sports Medicine, p. 6:

MEDICAL EVALUATION FOR INCREASED PHYSICAL ACTIVITY

1. Asymptomatic Individuals Under Age 35. For asymptomatic individuals (not showing symptoms of disease), individuals less than 35 years of age who have no previous history of cardiovascular disease or are not known to have any primary coronary heart disease risk factors, the risk of an increase in habitual physical activity is usually sufficiently low for them to proceed without any special medical clearance. However, if they have any questions about their health status, develop symptoms, or have not had a medical examination during the past two years, they should consult with their personal physician.
2. High Risk or Symptomatic Individuals and Those 35 Years of Age and Older. For individuals 35 or less with a history or any evidence of cardiovascular disease or with significant combination of coronary heart disease risk factors including family history, elevated blood pressure, hyperlipidemia, diabetes, cigarette smoking, or obesity, it is recommended that a medical evaluation be obtained prior to any major increase in physical activity.

Regardless of health status, it is advisable that any adult above 35 years have a medical evaluation prior to a major increase in his exercise habits.

9. DEB Contract and Family Packet (348-206) is the last worksheet enclosed.

Family members and/or close friends can help you in the DEB program by giving praise and encouragement for maintaining the diet and activity plan. It is important that you have someone with whom to discuss the weight reduction program who will be supportive. Try to identify someone--a friend or spouse--to give this support.

A letter has been prepared for your friend or spouse explaining their role in the DEB program. There's also a questionnaire to be completed by the person as an indication of support. Ask this person to witness your signing of the DEB contract. Send the completed form to me before next week.

10. Summary

Objectives Checklist - You should now to able to:

- \_\_\_ 1. Define obesity.
- \_\_\_ 2. List factors contributing to obesity.
- \_\_\_ 3. Know undesirable effects of obesity.
- \_\_\_ 4. Select a target weight.
- \_\_\_ 5. Calculate caloric intake for maintenance and for weight loss of 1 to 2 pounds per week.

Activities Checklist

- \_\_\_ 1. Calorie Intake Calculations (348-201) RETURN
- \_\_\_ 2. DEB Personal Data Sheet (348-202) RETURN
- \_\_\_ 3. Weight Graph (348-203) KEEP
- \_\_\_ 4. Medical Approval Form (348-204) RETURN
- \_\_\_ 5. DEB Contract (348-206) RETURN