1977

EC77-964 Fit or Fat? Nutrition

Alice Henneman
University of Nebraska, ahenneman1@unl.edu

Hazel Fox

Leon Rottman

Follow this and additional works at: https://digitalcommons.unl.edu/extensionhist

Henneman, Alice; Fox, Hazel; and Rottman, Leon, "EC77-964 Fit or Fat? Nutrition" (1977). Historical Materials from University of Nebraska-Lincoln Extension. 4576.
https://digitalcommons.unl.edu/extensionhist/4576

This Article is brought to you for free and open access by the Extension at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Historical Materials from University of Nebraska-Lincoln Extension by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.
FIT OR FAT? Nutrition

EXTENSION WORK IN "AGRICULTURE, HOME ECONOMICS AND SUBJECTS RELATING THERETO."
THE COOPERATIVE EXTENSION SERVICE, INSTITUTE OF AGRICULTURE AND NATURAL RESOURCES,
UNIVERSITY OF NEBRASKA-LINCOLN, COOPERATING WITH THE COUNTIES AND THE U.S. DEPARTMENT OF AGRICULTURE
LEO E. LUCAS, DIRECTOR

The Cooperative Extension Service provides information and educational programs to all people without regard to race, color or national origin.
FIT OR FAT? Nutrition

Alice Henneman
Assistant Professor in Nutrition
College of Nursing

Leon H. Rottmann
Extension Specialist (Human Development)

Hazel M. Fox
Professor and Chairman
Department of Food and Nutrition
College of Home Economics

Karen Gagen
Douglas County Extension Agent

The Problem

Why are many people overweight? What are some of the myths and excuses?

They often sound something like this: "I just don't know what it could be—I eat like a canary—All my relatives are fat—It must be my glands—If only I hadn't stopped smoking—It's all in my mouth before I know it—It's not polite to refuse food—How can I leave it when all those people are starving in India?—I was born fat—Anyway, I only eat when I'm sad or happy or depressed or contented or anxious or partying or not partying or nervous or . . ."

As the preceding paragraph indicates, weight reduction is not a simple matter. It involves a complex series of cultural, environmental, and social factors. Heredity also plays a role in influencing body size. Not all persons have the genetic potential to become a Twiggy; nor on the other hand, is it possible for everyone to develop a figure like Sophia Loren.

Fortunately, (or maybe unfortunately, if one is looking for an excuse) only a small number of people become overweight because of a glandular problem. Weight reduction and weight maintenance tend to be a lifetime occupation for many persons. The most satisfying reducing plan would appear to be one that not only represents good health practices but also that is suitable to the individual and adaptable to his or her way of life.

Three potential means for weight reduction will be discussed in this lesson: diet, behavior modification and exercise. A successful weight reduction program might include one or a combination of these methods. These methods are not represented as "cure-alls" or the answer to anyone’s weight problems. They have, however, been found to help a great many persons stay FIT and not FAT.
A Possible Solution: DIET

The most satisfactory approach to weight reduction as well as weight maintenance is to follow a diet which is safe, nutritious and attuned to the individual's tastes and lifestyle. If a person has to give up all the foods he enjoys, he probably will find it much harder to stay on a diet.

A proper reducing diet should be flexible enough so it can easily be adapted with a few modifications or additions for permanent weight control, once weight reduction has been achieved. If an individual is not retrained to eat in a more "satisfactory" manner, he may regain the weight lost when he returns to his former pattern of eating.

The person who alternately gains and loses a significant number of pounds or what Dr. Mayer of Harvard calls the "rhythm method of girth control," may be doing his body more harm than if he just stayed fat!

In order to lose about one pound, a person must have a deficit of 3,500 calories over a week's time. An intake of 500 less calories per day will lead to an approximate loss of a pound a week.

It is generally recommended that a person lose weight gradually, losing no more than one to two pounds a week. A reducing diet should not be under approximately 1,000 calories unless specifically ordered by a physician. Multivitamin-mineral supplements are often recommended by physicians because it is difficult to obtain adequate levels of nutrients when dietary intake is severely restricted. If a person does plan to go on a rigorous diet for a long time, he should do so with medical supervision.

Food consumption studies indicate that iron, calcium, vitamin A and vitamin C are the nutrients which are most often consumed in amounts below recommended levels. Because the dieter is eating even less food than the rest of the population, it is suggested that care be taken to include foods high in these nutrients in the regular diet. Selected foods particularly high in these minerals and vitamins are given in the following chart:
FOOD SOURCES OF IRON, CALCIUM, VITAMIN A, AND VITAMIN C

<table>
<thead>
<tr>
<th>Iron</th>
<th>Calcium</th>
<th>Vitamin A</th>
<th>Vitamin C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liver, heart, kidney</td>
<td>Milk (whole, 2% or skim)</td>
<td>Liver</td>
<td>Broccoli</td>
</tr>
<tr>
<td>Lean meat</td>
<td>Cheese</td>
<td>Cantaloupe</td>
<td>Brussels Sprouts</td>
</tr>
<tr>
<td>Dry beans and peas</td>
<td>Ice Cream or Ice Milk</td>
<td>Apricots</td>
<td>Citrus Fruit and Juice</td>
</tr>
<tr>
<td>Greens</td>
<td>Collards, kale, turnip and mustard greens</td>
<td>Peaches</td>
<td>Strawberries</td>
</tr>
<tr>
<td>Molasses</td>
<td></td>
<td>Tomatoes</td>
<td>Cantaloupe</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Carrots</td>
<td>Tomato or Juice</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Broccoli</td>
<td>Raw Cabbage and Sauer Kraut</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Sweet Potatoes and Squash</td>
<td>Green Peppers</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Potatoes</td>
</tr>
</tbody>
</table>

Researchers tell us the body needs some 50 or more nutrients for good health. These nutrients work together in the body. If one nutrient is missing or in very short supply, the functions of others may be affected. Therefore, it is advisable to choose foods from a variety of food groups—meat- and protein-rich foods, fruits and vegetables and cereal and dairy products.

The individual starting a weight-reduction program should be aware that for some persons, no drop in weight will occur for perhaps two to three weeks regardless of how closely a diet is followed.

This is because as fat is withdrawn from storage sites, water may enter the cells to replace the fat and may remain there for a period of time before it is released. It is also common for a person to experience spurts of weight loss followed by a plateau when caloric intake and energy expenditure are constant.

Totie Fields, the comedienne, has stated that "the first three letters in the word diet are 'die' and at last count there were 23 million Americans who felt like doing just that, because they were on one."

Most dieters seem to believe being on a reducing diet means avoiding all "fattening foods." The fact is that all foods are "fattening." They all provide calories. If a person ate enough of any food so that he consumed more calories than he could use, he would grow fat. Unfortunately, a number of perfectly innocent foods have been labeled as caloric villains. For example, do you know which of the following foods provide the most calories?

1. Raw pear or baked potato?
2. One slice bread or 1/2 cup creamed cottage cheese?
3. 3 oz. regular hamburger or 1/2 cup macaroni and cheese?

Answers: raw pear = 100, baked potato = 90, bread = 60, 1/2 cup creamed cottage cheese = 120, 3 oz. hamburger = 245, 1/2 cup macaroni and cheese = 240.

Some of the most condemned items are "starchy" foods. The truth is that a potato or a slice of bread is similar in caloric content to a pear or an apple. On the other hand, few people refuse a second serving of hamburger at 245 calories per three ounces. Meat, they say, is not fattening!

When planning a diet, remember, however, that foods should never be evaluated strictly on the basis of their caloric values—serving size and nutrient contribution to the diet should also be considered. If a person finds it difficult to give up a particular food, it may be much better to allow small amounts of it and plan a diet around this food than to deny it entirely and increase the likelihood of going off the diet with large helpings.

Likewise, few nutrients are gained from a diet based mainly on foods such as iceberg lettuce and celery. Such foods are low in calories, but lack many important nutrients.
Since a reducing plan represents a change, these potential long-term changes might be most easily made in the reduction of what Ronald Deutsch, author of THE FAMILY GUIDE TO BETTER FOOD AND BETTER HEALTH, called "luxury" calories. Luxury calories come from food sources which offer mainly calories accompanied by little or nothing else in the way of nutrients. Excessive use of sugars and fats often represents an indulgence in "luxury" calories. For example, one teaspoon of butter or margarine provides approximately 35 calories, as does one tablespoon of jelly. A person using an additional teaspoon of butter or margarine and a second tablespoon of jelly would be adding 70 calories to his diet, enough to represent a weight gain of one pound in 50 days if the rest of his diet and level of exercise remained constant. For many people, a simple reduction or elimination of such types of "luxury" calories would be sufficient to cause weight loss. The following sample menus show how one could reduce caloric content of a meal to approximately a third of the original level by representing a lower sugar and fat intake. The nutrient intake from both menus would be comparable.

### OMITTING "LUXURY" CALORIES

<table>
<thead>
<tr>
<th>BEFORE FOOD</th>
<th>BEFORE CALORIES</th>
<th>AFTER FOOD</th>
<th>AFTER CALORIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fried Chicken Breast (3 oz.)</td>
<td>171</td>
<td>Baked Chicken Breast (3 oz.)</td>
<td>115</td>
</tr>
<tr>
<td>Green Beans (1/2 c.) w/margarine (1 t.)</td>
<td>57</td>
<td>Green Beans (1/2 c.) w/Lemon Juice</td>
<td>22</td>
</tr>
<tr>
<td>French Fries (20 pieces)</td>
<td>310</td>
<td>Baked Potato w/margarine (2 t.)</td>
<td>160</td>
</tr>
<tr>
<td>Jello (1/2 c.) w/salad dressing (1 t.)</td>
<td>92</td>
<td>Carrot Strips (1/2 carrot)</td>
<td>10</td>
</tr>
<tr>
<td>Slice of Bread w/margarine (2 t.) and Jelly (1 T.)</td>
<td>190</td>
<td>Slice of Bread w/margarine (1 t.)</td>
<td>105</td>
</tr>
<tr>
<td>White Cake (1/9 of 9&quot; sq.) w/Whipped Topping (1/4 c.) and Sweetened Strawberries (1/4 c.)</td>
<td>382</td>
<td>Unsweetened Strawberries (1/2 c.)</td>
<td>27</td>
</tr>
<tr>
<td>Whole Milk (8 oz.)</td>
<td>160</td>
<td>Skim Milk (8 oz.)</td>
<td>90</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1362</td>
<td>TOTAL</td>
<td>529</td>
</tr>
</tbody>
</table>

One is more likely to remain on a weight reduction diet if it doesn't mean giving up all favorite foods. However, many of those foods may be the ones providing the "luxury" sugar or fat calories which contributed to the weight problem in the first place. An additional approach to weight reduction is to consider to what degree one is willing to reduce the size of serving and/or frequency of consumption of these foods.

Remember, it takes a deficit of approximately 3,500 calories a week to lose one pound. Using this information applied to familiar foods may help with weight loss. For example, if two small cookies at 50 calories are eaten daily, reducing the number to one cookie would represent a reduction of 350 calories in a week or a loss of a pound in 10 weeks. Some further examples of possible weight loss through a reduction in the amount of frequency of intake of some common foods are given in the following chart. (Remember that this system also works in reverse. When one increases his consumption by the same amount, he will put on the corresponding weight!)
A Possible Solution: Behavior Modification

Behavior modification is an excellent method for treating obesity. The first step is typically an analysis of the individual's eating behavior. The individual is generally instructed to keep a careful food record of daily food intake and factors associated with eating, such as where, with whom, when, degree of hunger and emotional feelings. This is used to help determine what conditions can lead to appropriate eating. After an initial assessment, therapy is directed toward specific aspects of eating behavior.

One technique is shaping a more controlled rate of eating. For example, the client might be instructed to chew each mouthful slowly and thoroughly, swallow food completely before refilling the utensil with food, put his eating utensil down after every third bite and/or plan short delays during the meal.

The individual may also be advised to make eating a “pure” experience. For example, in the past, the television or reading material might be associated with eating in the absence of actual hunger. The individual may be advised to eat only at a particular place in the home at specific times.

Another recommendation that may be made is to engage in a behavior incompatible to eating whenever one has a desire for food and no actual hunger. This might include activities such as bicycling, when it is very difficult to eat at the same time.
Another goal may be to change behavior patterns so the individual must use more energy in order to engage in his usual activities. This may include using stairs instead of elevators, parking farther from work or getting off the bus a few blocks ahead of one's actual destination.

Storing food in closed containers so that it is not readily visible on the shelves of the refrigerator or kitchen cupboards is often helpful. The "out-of-sight, out-of-mind" technique works for both children and adults.

For many persons, preparing only specified amounts of food for each serving so that no more can be served is an excellent modifier. Many need to get through the shopping experience by leaving selected restricted foods in the grocery store. Each time one succeeds, the modification is closer to being made.

A Possible Solution: Exercise

Many people are not willing to take time for exercise and our modern mechanized society provides less opportunity to exercise than appears to have been available in the past. For example, the average man uses about 210 calories to walk one mile and only 27 to drive the same distance. A secretary who works six hours daily on an electric typewriter uses 450 calories less weekly than one using a standard typewriter. The Surgeon General of the United States has said that the only exercise some people get is jumping to conclusions, side-stepping responsibility, and pushing their luck!

To speed up weight reduction and improve general health, exercise should be included in a weight reduction program. Remember, too much weight is from an excess of calories. While decreased food intake will result in fewer calories, increased energy expenditure will also reduce the net amount of calories available to the body.

Contrary to popular opinion, research indicates that moderate exercise may make the hunger controls in the brain work more effectively, with the result that a person may eat less rather than more! In addition, exercise helps firm the figure, may increase energy and stamina, and provides an outlet for feelings of frustration or depression which initially may have lead to excessive eating.

A well-planned diet and a well-developed pattern of exercise represents one program in which winning comes with losing. In preventive medicine you are the one who carries the black bag. With "preventive maintenance," you can avoid possible costly repairs to the body and mind. You are the one who decides whether you are FIT or FAT.