
Module 3: Special Considerations

Introduction

In earlier modules, you learned some basics about nutrition. There are other issues related to foods that you need to take into consideration when planning your lifestyle, including weight management, vegetarian diets, food allergies and reliable nutrition resources.

Weight Management

Weight management is a growing problem in the U.S. The National Health and Nutrition Examination Survey (or NHANES) reported:

- 1/3 of adults in the U.S. are overweight.
- Slightly more than one-third are obese.
- 14% of children ages 2 – 5 years are overweight.

Definitions

- **Overweight** – having extra body weight from muscle, bone, fat or water.
- **Obese** – having a high amount of extra body fat.
- **Morbidly obese** – having such a high amount of extra body fat that it's life-threatening.

Body Mass Index (BMI)

- Measures weight in relation to height.
- Gives a general estimate of body fat.
- Gauges for risk of disease. (higher the BMI, the higher the risk for disease).

BMI Limitations

While BMI is a fairly accurate guideline for estimating body fat, it has its limitations.

- Sometimes overestimates body fat in very muscular athletes.
- Underestimates body fat in older people with loss of muscle mass.
- Since we're not all alike, the link between BMI and body fat tends to vary with age, gender, and ethnicity.

BMI Weight Status

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|-------------------------|---|
| • Underweight | Below 18.5 BMI |
| • Normal healthy weight | 18.5 – 24.9 BMI |
| • Overweight | 25.0 – 29.9 BMI |
| • Obese | 3.0 and higher BMI (above 40 is extremely obese). |

Factors Affecting Weight

- Environment.
- Family history.
- Genetics.
- Metabolism.
- Behavior.
- Habits.

Ways to Prevent Obesity

While some factors such as family history can't be changed, there are steps you can take to help prevent obesity for yourself or for your family.

- Make sure to follow a healthy diet.
- Monitor calories and fats in foods.
- Increase physical activity.
- Limit sedentary activities such as surfing the Internet, playing video games, or watching TV.

Energy Balance

You can stay at a steady weight if you maintain an energy balance. Your body needs a certain level of energy on a daily basis for basic energy needs.

- The Basal Metabolic Rate, (BMR) – the level of energy that is needed for base-level physical activity and involuntary processes, like food digestion, breathing and heart pumping.
- To achieve perfect energy balance – the calories taken in or eaten equal the calories used in daily activities.
- Energy balance – weight remains steady.
- Positive energy balance – the calories taken in are greater than the calories used, which leads to weight gain.
- Negative energy balance – the calories taken in are less than the calories used, resulting in weight loss.

Weight Loss

- The healthiest way to lose weight is to eat a healthy diet while increasing activity.
- Avoid fad diets that claim quick and amazing results.
- Any diet that results in a loss of more than two pounds per week is too fast and aggressive.
- If your body does not have time to adjust to your new weight and new way of eating, it is likely that you will regain the weight.
- Once you reach your target weight, you can maintain that weight by eating the same well balanced diet with slightly larger portions.

Weight Loss Plan

Physical activity is the key to maintaining a healthy body weight for both adults and children.

- Adults should have at least 30 minutes of moderate intensity physical activity most days of the week.
- Exercise can be done at one time or in short periods throughout the day.
- The key to good health is to increase your heart rate and burn calories.

Eating Disorders

Some people may try to strictly regulate their diet, which may result in an eating disorder.

- No clear cause for eating disorders – can be traced to an ordinary weight loss diet, a traumatic life event, or general stress.
- Three main types of disorders – anorexia nervosa, bulimia, and binge eating.

Treating Eating Disorders

- All three types of eating disorders require medical attention as they can become serious if not treated.
- As many as 5 – 20% die from medical complications.
- If you suspect you or someone you know has an eating disorder, you need to refer or see a primary care physician immediately.

Eating Disorder Signs
<ul style="list-style-type: none">• Denial of hunger, refusal to eat, eating tiny portions.• Abnormal weight loss.• Changes in mood, insecurity, and depression.• Poor body image, seeing themselves as fat.• Compulsive, excessive exercising.• Constipation, missed periods, nausea or bloating after eating.• Fine, downy hair on the arms and face.• Overuse of laxatives or diuretics.

Vegetarians

People with restricted diets sometimes find it a challenge to get enough vitamins and nutrients. In vegetarian diets, people:

- Mainly eat food that comes from plants.
- Limit or avoid animal products.

Four Types of Vegetarian Diets

- Strict Vegetarians – eat strictly plant food, no animal products (no eggs, dairy, milk, etc.).
- Lacto-vegetarians – eat plant foods and milk products (no meat or eggs).
- Lacto-ovo-vegetarians – eat plant foods, milk products, and eggs.
- Pescatarians - eat fish, plant foods, milk products, and eggs.
- Semi-vegetarians (flexitarian) – eat plant foods, eggs, milk products, small amounts of fish and poultry.

Nutritional Adequacy of Vegetarian Diets

A well-balanced vegetarian diet:

- Can help prevent and treat disease.
- Is safe during pregnancy, breastfeeding, infancy, and childhood.
- Includes a wide variety of foods.
- Includes enough protein, and vitamins B12 and D, calcium, iron and zinc.
- Includes low-fat protein foods like beans, lentils and tofu.
- Doesn't overload on high-fat cheeses to replace meat.

Food Allergies

Occur because the immune system has response to protein in a food.

The term is often misused – only 4-5 % of reactions are true allergies.

Symptoms of an allergic reaction

- Occurs immediately or up to 72 hours after eating.
- Reactions include - itching, hives, rash, vomiting, diarrhea, abdominal pain, swelling of the face and eyes.
- Respiratory reactions include – shortness of breath, cough, runny nose, and wheezing.
- Diagnosis may be inaccurate because symptoms can mimic common illnesses.
- Food allergies can be life-threatening.

Food Intolerance

- People often confuse food allergies with food intolerance.
- A food intolerance reaction doesn't involve the immune system.
- It occurs when the body is not able to digest a certain component in food.
- Common food intolerances include – lactose intolerance and reactions to MSG (a food additive).

Treatment

- Food Allergies – avoid the food causing the allergy.
- Food Intolerance – may tolerate minimum amount of food causing the intolerance.

Food Allergies in Children

- Food allergies are more common in children due to their immature digestive system.
- Children are likely to outgrow food allergies (but some may last a lifetime).
- Food allergies should be diagnosed by a health care provider (if you suspect a child has food allergies, refer a client to his or her health care provider).

Treatment of Food Allergies

After being diagnosed with a food allergy, you should:

- Avoid the problem food.
- Substitute other foods to ensure proper nutrient intake.
- Read food labels for hidden allergens.

Top 8 Allergy-Causing Foods
For more information about food allergies, visit https://acaai.org/allergies/types/food-allergy <ol style="list-style-type: none">1. Cow's milk2. Eggs3. Peanuts4. Fish5. Shellfish6. Wheat7. Soy8. Tree nuts (peanuts, walnuts, etc.)

Lactose Intolerance

- Lactose is a sugar found in milk.
- Lactase is the enzyme that the body uses to breakdown lactose.

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- Lack of or decreased amounts of lactose enzyme result in undigested lactose.
 - Undigested lactose causes gas, bloating, and/or diarrhea.

Reliable Nutrition Information

Nutrition information is everywhere! It is important to recognize reliable sources of nutrition information. These include:

- Nutrition departments of local hospitals, medical centers and clinics
- Reputable consumer groups
- Scientific and professional associations
- Government agencies
- The Extension service
- Nutrition departments of accredited colleges and universities

Summary

You just learned about basic nutrition concepts, such as identifying weight management through tools including calculating Body Mass Index (BMI), factors for weight gain and maintaining energy balance. We examined symptoms and treatment for three types of eating disorders: anorexia nervosa, bulimia and binge eating. We described the four types of vegetarian diets: strict, lacto-vegetarian, lacto-ovo-vegetarian, pescatarian and semi-vegetarian, and the key elements for providing adequate nutrients in those diets. We discussed the differences between food allergy and food intolerance, along with symptoms and treatment. And finally, we examined lactose intolerance and discussed its identification and treatment. This completes the basic nutrition course. Congratulations!