

Chapter 10

Nutrition for Health

1. The Importance of Nutrition
2. Nutrients
3. Healthy Food Guidelines
4. Nutrition Labels and Food Safety

#Onedaylwokeup #Doppitup

Lesson 1 — The Importance of Nutrition

Why Nutrition Matters

Nutrition is the process by which your body takes in and uses food. The food you eat provides **nutrients** — substances your body needs to grow, repair itself, and produce energy measured in **calories**. During your teen years, what you eat now shapes your health for decades to come.

A healthy diet helps you:

- ✓ Maintain a healthy weight
- ✓ Stay mentally alert and energized
- ✓ Reduce your risk of cardiovascular disease, type 2 diabetes, stroke, certain cancers, and osteoporosis

What Influences Your Food Choices?

<p>■ ■ Hunger</p>	<p>The physical drive to eat — your body signaling it needs fuel. When truly hungry you may feel tired, lightheaded, or unable to concentrate.</p>
<p>■ Appetite</p>	<p>The psychological desire for food — that feeling when you smell fresh cookies even though you just ate.</p>

■■■■■ Family & culture	The foods your family cooks and traditions you grew up with strongly influence preferences.
■ Time & money	Busy schedules push people toward fast, convenient foods; cost is a major factor in buying decisions.
■ Advertising & social media	Food companies spend billions to influence choices. Food trends and influencer diets now shape what people try — not all reliable.

Emotional eating — eating when stressed, bored, lonely, or sad instead of truly hungry — can lead to weight gain over time. Recognizing the pattern is the first step to changing it.

Lesson 2 — Nutrients

The Six Essential Nutrients

Three nutrients provide energy: **carbohydrates**, **proteins**, and **fats**. Three perform other essential functions: **vitamins**, **minerals**, and **water**.

■ Carbohydrates	Your body's main energy source. Get 45–65% of daily calories from carbs. Simple (sugars), complex (starches), and fiber. Teen boys need ~38g of fiber/day; girls ~26g. Great sources: whole grains, fruits, vegetables, legumes.
■ Proteins	Build and maintain cells and tissues. Made of amino acids — 9 essential ones must come from food. Animal proteins are 'complete'; eat a variety of plant foods to get all you need. Teen boys need ~52g/day; girls ~46g.
■ Fats	Essential for brain development, vitamin absorption, and energy. Choose unsaturated fats (olive oil, nuts, avocados, fish) over saturated. Trans fats — largely banned by the FDA — should be avoided entirely.
■ Vitamins	Regulate body processes. Water-soluble (C, B vitamins) need regular intake; fat-soluble (A, D, E, K) are stored. Teens especially need Vitamin D: 15 mcg (600 IU)/day for bone health.

■ Minerals	Calcium (1,300 mg/day for teens) builds bones; iron carries oxygen; magnesium and phosphorus support energy and muscle function. Getting enough calcium now prevents osteoporosis later.
■ Water	Essential for every body function. Teen girls need ~9 cups/day; boys ~13 cups. If you feel thirsty, you've already waited too long. Limit caffeinated drinks — they dehydrate.

Lesson 3 — Healthy Food Guidelines

MyPlate — Your Practical Guide

In 2011, the USDA replaced MyPyramid with **MyPlate** — a simple dinner plate divided into four sections with a small dairy circle on the side. **The big message: make half your plate fruits and vegetables.** This single change can dramatically improve the nutritional quality of any meal.

■ Grains	Make at least half your grains whole grains.
■ Vegetables	Aim for variety: dark green, orange, beans/peas, and starchy veggies.
■ Fruits	Fresh, frozen, canned, or dried. Whole fruit is preferable to juice.
■ Protein Foods	Meat, poultry, seafood, eggs, beans, nuts, seeds, soy. Choose lean options.
■ Dairy	Milk, yogurt, cheese. Choose low-fat. Aim for 3 cups/day or calcium-fortified alternatives.

Practical Eating Tips

- ■ **Breakfast** — After 8 hours of sleep, your body needs fuel. Skipping leads to low energy and often overeating later. Quick options: oatmeal, whole-grain toast with peanut butter, eggs, or last night's leftovers.
- ■ **Smart snacks** — Keep energy steady between meals: fresh fruit, vegetables with hummus, string cheese, unsalted nuts, air-popped popcorn, or plain yogurt.
- ■■ **Eating out** — Watch portion sizes (often 2–3x what you need), choose grilled over fried, load up on vegetables, go easy on high-fat sauces, choose water over soda.

Lesson 4 — Nutrition Labels and Food Safety

Reading the Nutrition Facts Label

The FDA updated the Nutrition Facts label in 2020 with key changes:

Serving size	Now based on realistic portions — always check how many servings are in a package before calculating totals.
Calories	Shown prominently in large font.
Added Sugars	NEW in 2020 — listed separately so you can see how much sugar was added during processing vs. naturally occurring.
Calories from Fat	REMOVED — because the TYPE of fat matters more than the amount.
Vitamin D & Potassium	Now required listings (replaced Vitamins A and C) — nutrients many Americans lack.

Food Safety: Clean · Separate · Cook · Chill

About **48 million Americans** experience foodborne illness each year. Four steps keep food safe:

1	<p>■ Clean</p> <p>Wash hands with soap and warm water for 20+ seconds before and after handling food. Rinse fresh fruits and vegetables under running water.</p>
2	<p>■ Separate</p> <p>Keep raw meats, poultry, seafood, and eggs separate from other foods. Use separate cutting boards to prevent cross-contamination.</p>
3	<p>■■ Cook</p> <p>Heat food to safe internal temperatures: poultry 180°F · ground meats 160°F · beef/seafood 145°F · leftovers 165°F. Use a food thermometer.</p>
4	<p>*■ Chill</p> <p>Refrigerate perishables promptly. Never leave food at room temperature for more than 2 hours (1 hour above 90°F). Thaw in refrigerator, microwave, or cold running water — never on the counter.</p>

Food allergy vs. intolerance: A food ALLERGY is an immune reaction — can cause life-threatening anaphylaxis. A food INTOLERANCE (like lactose intolerance) is uncomfortable but not life-threatening. People with allergies must carry emergency epinephrine (EpiPen).

Chapter Vocabulary

Lesson 1

Nutrition	The process by which your body takes in and uses food
Nutrients	Substances in food that the body needs to grow, repair itself, and supply energy
Calorie	A unit of heat used to measure the energy your body uses and receives from food
Hunger	The natural physical drive to eat, prompted by the body's need for food
Appetite	The psychological desire for food

Lesson 2

Carbohydrates	Starches and sugars found in foods that provide the body's main source of energy
Fiber	A tough complex carbohydrate the body cannot digest; aids digestion and reduces disease risk
Proteins	Nutrients the body uses to build and maintain cells and tissues
Cholesterol	A waxy, fat-like substance needed for cell function; excess can increase heart disease risk
Vitamins	Compounds found in food that help regulate many body processes
Minerals	Elements found in food used by the body for various functions
Osteoporosis	A condition in which bones become fragile and break easily, often due to calcium deficiency

Lesson 3

Dietary Guidelines for Americans	Science-based federal recommendations about healthy eating and physical activity, updated every five years
MyPlate	The USDA's visual tool for healthy eating, showing a plate divided into fruits, vegetables, grains, and protein with a dairy circle on the side
Nutrient-dense	Describes foods that have a high ratio of nutrients to calories

Lesson 4	
Food additives	Substances added to food to extend shelf life, boost nutrients, or improve taste, texture, or appearance
Foodborne illness	Sickness caused by eating food contaminated with pathogens; also called food poisoning
Pasteurization	Treating a substance with heat to kill or slow the growth of pathogens
Cross-contamination	The spreading of pathogens from one food to another through improper handling
Food allergy	A condition in which the immune system reacts to proteins in certain foods
Food intolerance	A negative reaction to food that does not involve the immune system