

Nutrition & Wellness

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Overview

- What is Nutrition and Why is Nutrition Important?
- Essential Nutrients
- MyPlate Guidelines & Healthy Diet Recommendations
- Practical Ways to Add Nutrient-Rich Foods & Beverages to Your Daily Diet
- Physical Activity
- BMI & Overweight/Obesity Statistics in the US

What is Nutrition?

- * Nutrition is the study of food and how food nourishes our bodies and influences our health
- * Nutrition is a critical part of health and lifestyle development
- * It provides vital nutrients for survival
- * Helps the body function & stay healthy



Why is Nutrition Important?

- * Nutrition contributes to overall wellness:
 - * The absence of disease
 - * Physical, Emotional, & Spiritual Health
- * Nutrition helps prevent certain types of health conditions and diseases

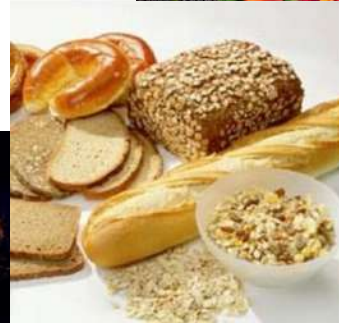


Essential Nutrients

- * Food is composed of macronutrients and micronutrients
- * **Macronutrients:**
 - * Provides calories, energy, and structure to the body
 - * Includes Carbohydrates, Protein, and Fat
- * **Micronutrients:**
 - * Do not provide calories, but rather, serve as critical functions for the body
 - * Includes vitamins and minerals
- * Water

Carbohydrates

- * Primary role is to provide energy to the body; especially fuel for the brain
 - * Even at rest, the body requires energy to do functions such as maintain body temperature, digest food, & keep the heart beating
- * Food sources containing carbohydrates offer a variety of vitamins and minerals as well
 - * Sources of Carbohydrates include mainly plant-based foods: grains, potatoes, corn, beans, & fruits, (& dairy)
- * 45-65% Daily Calorie Intake



Protein

- * Provides structure to the muscles and bones in the body
- * Needed for growth, development, repair, and maintenance of body tissue
- * Helps immune cells fight inflammation and infection
- * Repairs tissue when damaged
- * Is made up of amino acids
- * Can be found in both animal and plant-based foods including soybeans, nuts, beans, & legumes

- * For healthy adults, the recommended daily protein intake should be about 0.8 grams/day
- * 10-35% Daily Calorie Intake



Fat

- * Typically viewed as negative, but fats provide healthful benefits to the body including:
 - * Provides structure to the cells
 - * Insulation to help maintain body temperature
 - * Cushions internal organs to prevent damage
 - * Essential for absorbing fat-soluble vitamins
- * Sources of dietary fat include oils, butter, margarine, nuts, meat, fish, and dairy products
 - * Goal: Replace foods higher in saturated fats with leaner protein sources and foods higher in unsaturated fats
 - * 20-35% Daily Calorie Intake
<10% from saturated fat



Vitamins

- * Support energy production and bodily processes
- * Help with wound healing and bone formation
- * Promote eye and skin health
- * Supports immunity
- * Two types of Vitamins:
 - * Water Soluble (Vitamins C, B Vitamins, & Folic Acid)
 - * Fat Soluble (Vitamins A, D, E, & K)
- * Sources of vitamins include fruits, vegetables, meat, and fortified products



Minerals

- * Helps maintain cardiovascular health
- * Provides structure to the skeleton & teeth
- * Needed for proper fluid balance in the body
- * Aids in building muscle tissue
- * Major minerals in the body include:
 - * Sodium, Calcium, Potassium, & Magnesium
- * Sources include fruits, vegetables, fortified products, meat, and dairy products



Water

- * The human body is made up of mostly water (~60%)
 - * Every cell in the body contains water!
- * Water is crucial for the body to work correctly including functions such as:
 - * Regulates body processes
 - * Aids in nutrient absorption
 - * Regulates body temperature
 - * Lubricates joints and cushions the brain & spinal cord
- * How much water should the average person consume?
 - * 30-35mL per kg body weight/day



Fiber

- * Provides fullness after meals
 - * Helps lower cholesterol
 - * Helps prevent constipation
 - * Helps keep blood sugar levels within a healthy range
 - * It is found naturally in plant foods
 - * Good Sources of fiber include:
 - * Eating the skin/peel of fruits and vegetables
 - * Beans and Lentils
 - * Whole Grains
 - * Nuts & Seeds
- Refined or processed food = lower fiber content
- * Women need about 25 grams of Fiber/day
 - * Men need about 38 grams of Fiber/day



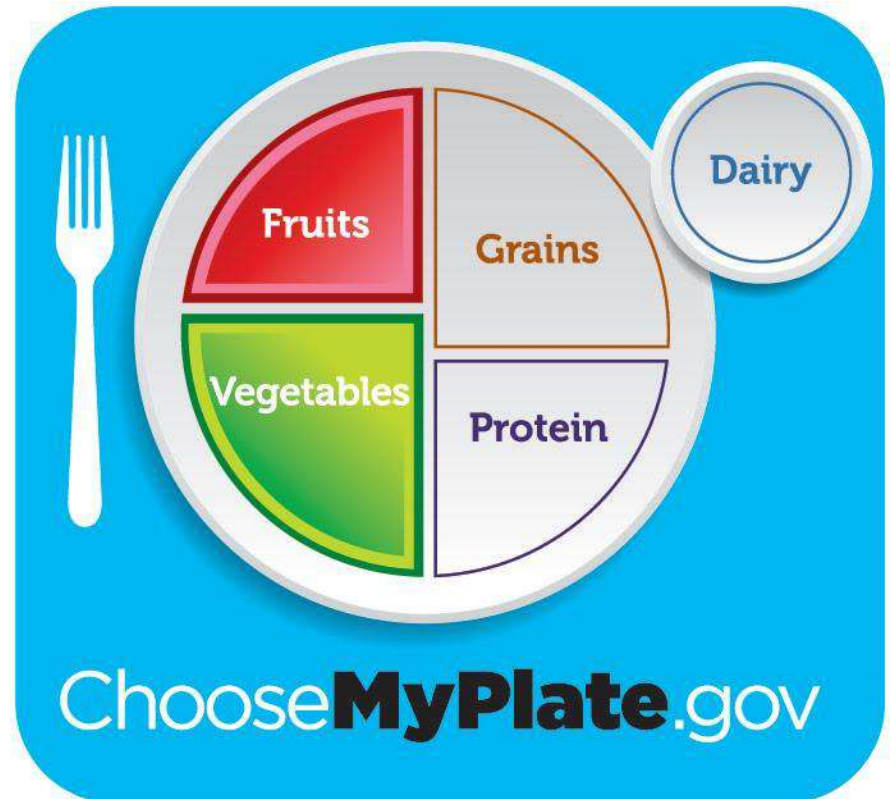
Prebiotics & Probiotics

- * Prebiotics and Probiotics work together to support gut health!
- * Probiotics are live cultures that change or repopulate intestinal bacteria to help maintain gut health.
 - * This “good” bacteria can be found in fermented foods such as yogurts, kefir, cheeses, sauerkraut, pickles, etc.
- * Prebiotics feed the probiotics to promote growth of the helpful bacteria in the gut
 - * Sources include fruits, vegetables, and whole grains



MyPlate Guidelines

- * Introduced in 2011
- * Icon serves as a reminder for healthy eating



Healthy Diet & MyPlate Recommendations

1. Balance Calories

- * 30 calories/kg
- * 3,500 calories = one pound of body fat

2. Enjoy Food, but Consume Less

- * Take your time when eating to fully enjoy the food you're consuming
- * Let your body tell you when you're hungry or when you've had enough

3. Avoid Oversized Portions

- * Use a smaller plate, bowl, and/or drinking glass
- * Portion out food/meals

4. Foods to Consume More Often

- * Consume more fruits, vegetables, whole grains, leaner protein sources, & low-fat dairy products

5. Make Half Your Plate Fruits and Vegetables

- * Choose lots of variety and color

Healthy Diet & MyPlate Recommendations

6. Switch to Fat-Free or Low-Fat Milk

- * Same amount of calcium and other nutrients as whole milk
- * Or make the switch to milk substitutes

7. Make Half Your Grains Whole Grains

- * Make the switch to whole grain bread, brown rice, oats, & whole grain pastas, etc.

8. Foods to Consume Less Often

- * Limit intake on foods high in solid fats, added sugars, and sodium (processed foods, sweets/desserts, fast food, etc.)

9. Compare Sodium in Foods

- * Choose products lower in sodium including canned soups, canned vegetables, and frozen meals
- * Recommended Sodium Intake should be less than 2,300mg/day
- * Labels: 5% DV or less = Low Sodium 20% DV or above = High Sodium

10. Drink Water Instead of Sugary Drinks

- * Cut calories by drinking water or unsweetened beverages

Practical Ways to Add Nutrient-Rich Foods & Beverages to Your Daily Diet

- * When making oatmeal for breakfast:
 - * Use low-fat or fat-free milk instead of water
 - * Add in nuts or fruit for extra nutrition
- * Make sandwiches on whole-grain bread
 - * Add sliced avocado, tomatoes, cucumber for some extra veggies!
- * When dining out, choose entrées such as salad with grilled chicken or seafood with an oil-based dressing
- * Top foods with chopped nuts and seeds to get extra crunch, flavor, and nutrients
- * Keep vegetables washed, cut, and ready to eat in the refrigerator for easy convenience



Physical Activity

- * Helps reduce risk of chronic diseases
 - * Raises heart rate
 - * Improves blood circulation
 - * Reduces stress
 - * Lowers blood sugar and A1C
- * How much exercise is needed to help prevent diseases?
 - * 150 minutes/Week of moderate-intensity aerobic physical activity
- * How to increase physical activity at home and/or at work?
 - * Park further away from your building
 - * Make it a point to stand at your desk throughout the day
 - * Take a brisk walk after lunch
 - * Go for a walk in the afternoons instead of watching TV



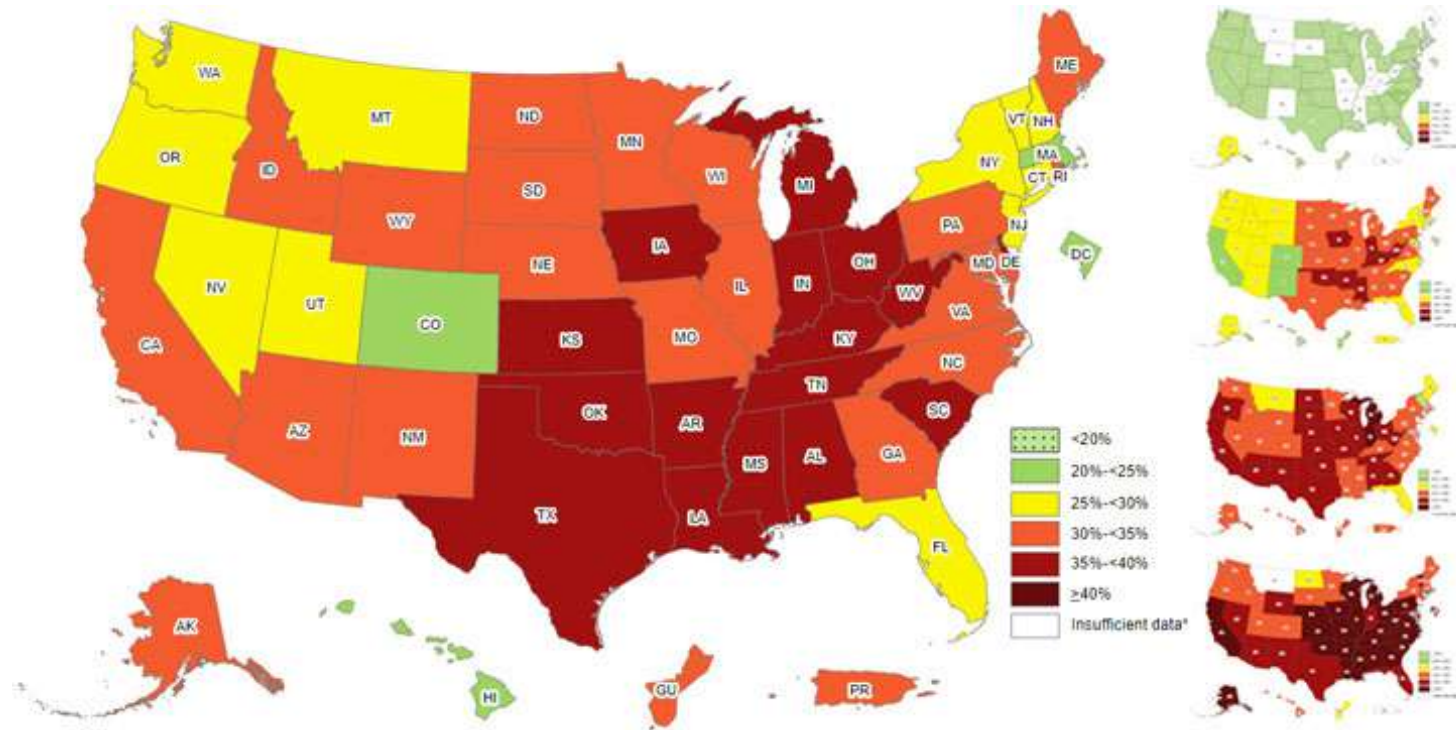
BMI Classification & Overweight/Obesity Statistics in The US

- * According to data from the 2017-18 NHANES Survey:
 - * Nearly 1 in 3 adults are overweight
 - * More than 2 in 5 adults have obesity
 - * 1 in 11 adults have severe obesity
- * BMI (Body Mass Index) used to determine data
 - * BMI is a screening tool that uses height and weight to classify weight status

WHO CLASSIFICATION OF WEIGHT STATUS	
WEIGHT STATUS	BODY MASS INDEX (BMI), kg/m ²
Underweight	<18.5
Normal range	18.5 – 24.9
Overweight	25.0 – 29.9
Obese	≥ 30
Obese class I	30.0 – 34.9
Obese class II	35.0 – 39.9
Obese class III	≥ 40

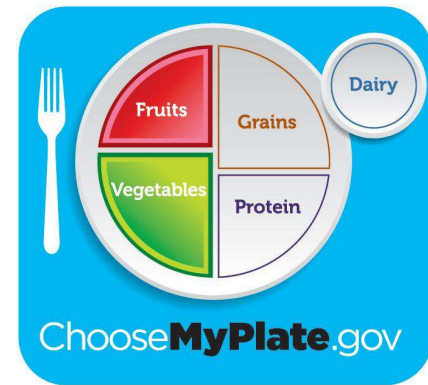
[Figure, BMI chart with obesity classifications...] - StatPearls - NCBI Bookshelf, Zierle-Ghosh
<https://www.ncbi.nlm.nih.gov/books/NBK535456/figure/article-18425.image.ft/>

Adult Obesity Prevalence Map



Summary

- * Consuming a balanced diet including fruits, vegetables, dairy, meat/protein, and whole or enriched grains helps ensure the body has the adequate nutrition needed to function properly
- * Be mindful of what you're consuming and how much you're consuming. Portion control!!
- * Get at least 150 minutes of physical activity in every week!



Questions??

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