



Nutrition Simplified

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I'm Morgan!

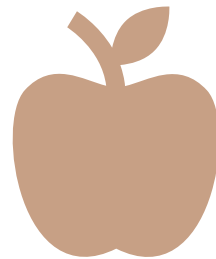
- UW-Milwaukee
- Nutritional Sciences Senior
- Club President
- Group Exercise Instructor / Swim Instructor
- Passions include = volunteering, exercising, cooking, reading, watching movies with my husband



My Mission...



Help you to understand why our
body needs food



Give you the tools to make
decisions about foods in your
everyday life



Make the word "nutrition" less
scary

What this workshop is NOT

- A promotion of "diet culture"
- A list of "good" and "bad" foods
- My next 2 presentations:
 - Dieting and Fad Diets of Today
 - Recipes & Tips for a Busy and Nutritious Lifestyle





The World of Nutrition is always...



- Changing
- Confusing
- Overcomplicated





The Basics of the Human Diet

- What is food??
 - Foods provide **nutrients**—substances that support the growth, maintenance, and repair of the body's tissues
- Macronutrients
- Vitamins/Minerals/Water



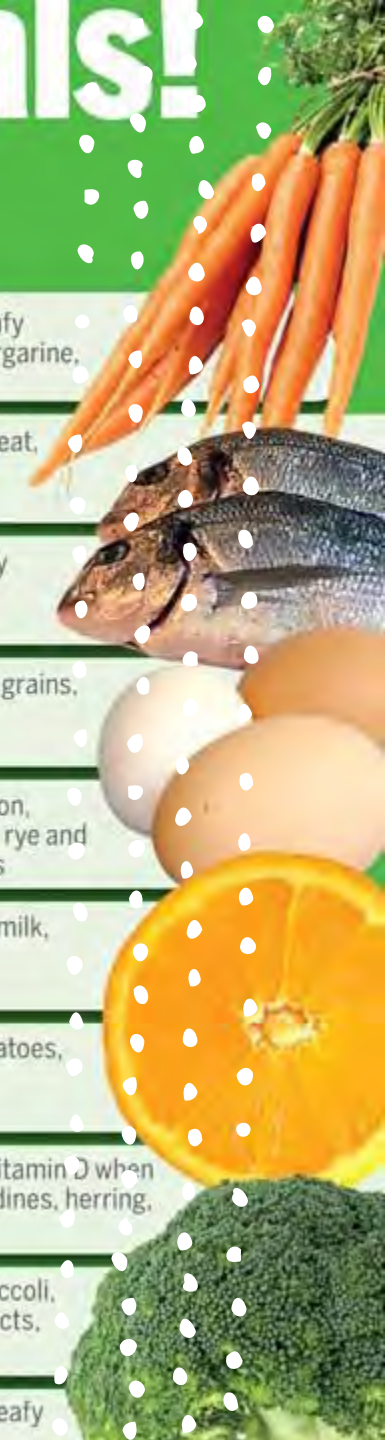
Eat your vitamins and minerals!

Vitamin/mineral	Other name	Good for	Deficiency causes	Daily intake	Get it from
A	Retinol	Eyesight, bone growth, reproduction, appetite and taste, regulating the immune system	Night-blindness	Men: 900 mcg (one millionth of a gram) Women: 700 mcg	Liver, cod liver oil, carrots, green leafy vegetables, egg yolks, enriched margarine, milk products, yellow fruits
B₁	Thiamine	Nervous system, digestion, muscles, heart, alcohol-damaged nerve tissues	Tingling in fingers and toes, confusion, difficulties in maintaining balance, loss of appetite, exhaustion and weakened powers of concentration	Men: 1.2 mg Women: 1.1 mg	Liver, yeast, egg yolk, cereal, red meat, nuts, wheat germ
B₂	Riboflavin	Growth, skin, nails, hair, eyesight, breakdown of protein, fat and carbohydrates	Itchy irritated eyes, itchy mucous membranes (nose, mouth, throat) and cracked corners of lips	Men: 1.3 mg Women: 1.1 mg	Milk, liver, yeast, cheese, green leafy vegetables, fish
B₆	Pyridoxine	Preventing skin conditions, nerve problems, helping the body absorb protein and carbohydrates	Skin inflammation	1.3 mg (seniors and pregnant women should aim higher)	Fish, bananas, chicken, pork, whole grains, dried beans
B₉	Folic Acid	Production of red blood cells, essential in first three months of pregnancy to prevent spina bifida, cleft palate or cleft lip	Tiredness due to anemia and red tongue	400 mcg (pregnant women should aim for 600 mcg)	Carrots, yeast, liver, egg, yolks, melon, apricots, pumpkin, avocado, beans, rye and whole wheat, green leafy vegetables
B₁₂	Cobalamin	Making red blood and the formation of the nerves	Tiredness and fatigue, tingling and numbness in hands/feet, memory problems and anemia	2.4 mcg	Eggs, shellfish, poultry, meat, liver, milk, cheese, fortified cereal
C	Ascorbic acid	Immune defence system, protection from viruses and bacteria, healing wounds, reducing cholesterol, cell lifespan and preventing scurvy	Tiredness, bleeding gums and slow-healing wounds	Men: 90 mg Women: 75 mg	Citrus fruits, kiwi fruit, berries, tomatoes, cauliflower, potatoes, green leafy vegetables, peppers
D	None	Strong bones and teeth	Unhealthy teeth, weakening of bones, rickets in children	600 IU (international units)	Sunlight (our bodies manufacture vitamin D when sun contacts skin), cod liver oil, sardines, herring, salmon, tuna, milk, milk products
E	Tocopherol	Fighting toxins, protecting cells from damage, supporting immune function, DNA repair and metabolic processes	Weak muscles and fertility problems	15 mg	Nuts, soya beans, vegetable oil, broccoli, sprouts, spinach, whole meal products, eggs
Ca	Calcium	Strong bones and teeth, nerve function, muscle contraction, blood clotting	Poor teeth and brittle bones	1,000 mg	Milk, cheese, butter, yogurt, green leafy vegetables

Vitamin A is fat-soluble, meaning it sticks in your body much longer than water soluble vitamins such as C

Fortifying flour with folic acid in Canada has resulted in a dramatic decrease in neuroblastoma, an early and very dangerous cancer in young children

Sunscreen absorbs ultraviolet light and therefore decreases the skin's ability to produce Vitamin D



Why eat
nutrient dense
foods
throughout a
life span?



- Prevent disease
- Boost energy
- Maintain a healthy weight
- A million other reasons

Why do my peers eat nutritionally dense foods?

"It's like getting more bang for your buck - more nutrients (macros, vitamins, minerals) for less calories. Higher nutritional value for less energy/calorie input" -Jen G.

"I eat nutrient dense food because it makes me feel like I can work and concentrate better on the things I do every day" - Sabrina T.

"I eat nutrient dense foods because they're easy to prepare and make me feel better mentally/physically. Once you start eating your vegetables regularly, you'll notice how bad you feel when you don't." - Zach L.





Calorie Needs



- **Energy needs** based on height, weight, age, gender, physical activity...
- [Myfitnesspal.org](https://myfitnesspal.org)
- Excess energy is stored as body fat (more on this in a bit)



Acceptable Macronutrient Daily Ranges (AMDR)

- **Carbs:** 45-65% (4 calories/gram)
- **Fat:** 20-35% (9 calories/gram)
- **Protein:** 10-15% (4 calories/gram)
- All macronutrients are necessary





Macronutrients

FALSE: carbs are bad

FALSE: fats are bad

FALSE: I should only eat protein

TRUE: we need all 3 for metabolic function



What about Weight?



- Eating foods that are low in nutrient density makes it difficult to get enough nutrients without exceeding energy needs and gaining weight.
- "Good" and "bad" foods

What should I eat?

- **Vegetables of all types**—dark green; red and orange; beans, peas, and lentils; starchy; and other vegetables
- **Fruits**, especially whole fruit
- **Grains**, at least half of which are whole grain
- **Dairy**, including fat-free or low-fat milk, yogurt, and cheese, and/or lactose-free versions and fortified soy beverages and yogurt as alternatives
- **Protein foods**, including lean meats, poultry, and eggs; seafood; beans, peas, and lentils; and nuts, seeds, and soy products
- **Oils**, including vegetable oils and oils in food, such as seafood and nuts



What should I limit?

- **Added sugars**—Less than 10 percent of calories per day starting at age 2. Avoid foods and beverages with added sugars for those younger than age 2.
- **Saturated fat**—Less than 10 percent of calories per day starting at age 2.
- **Sodium**—Less than 2,300 milligrams per day—and even less for children younger than age 14.
- **Alcoholic beverages**—Adults of legal drinking age can choose not to drink, or to drink in moderation by limiting intake to 2 drinks or less in a day for men and 1 drink or less in a day for women, when alcohol is consumed. Drinking less is better for health than drinking more. There are some adults who should not drink alcohol, such as women who are pregnant.



It's a lifestyle...

- Sound nutrition does not depend on the selection of any one food. Instead, it depends on the overall eating pattern—the combination of many different foods and beverages at numerous meals over days, months, and years.





This sounds hard...



- Tips for LIVING
 - Find nutrient dense foods that you ENJOY
 - Drink water
 - Determine your calorie needs
 - Put your blinders on for nutritional noise
 - Distinguish between real hunger and emotional hunger
 - Maintain balance- **restriction doesn't work**

A woman with dark hair, wearing a white long-sleeved shirt and red pants, is captured in mid-air, performing a jump. Her arms are raised, and her legs are spread wide. The background is a solid red wall above a grey floor. The text "Feel free to reach out!" is overlaid in white on the red wall.

Feel free to reach
out!

Still confused? Here's some
takeaways:

- we eat nutritionally dense foods in order to fuel our body with what it needs to function; this includes: all macronutrients, vitamins and minerals
- a calorie = a unit of energy
- foods don't make you gain weight, excess calories do
- while food is fuel, it is also a huge part of life, culture, and enjoyment

Please email me!
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A little bit
about next
time...

- "Diet culture" and fad diets such as...
 - Ketogenic Diet
 - Paleo Diet
 - Mediterranean Diet
- "Yo-Yo Dieting"
- Intuitive Eating

References

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