

Medications

Welcome to the Medications class. This is the eleventh class on your way to becoming more a healthier you. (Slide 1)

Objectives (Slide 2)

- Understand why we take medicines.
- Learn how to take medications properly.
- Recognize possible food and medicine interactions.
- Understand certain medications that relate to certain diseases.

Importance of Medications (Slide 3)

Medicine can be a wonderful tool to help someone heal from a sickness. Medicine can cure pains and aches and many, many other problems. Yet for all the good medicine can do, there are some special situations that can happen when taking medicine that can cause you to become very sick. This is called a drug interaction.

Taking Medication Properly (Slide 4)

Medications should always be taken according to the directions given by the doctor.

- Always report possible reactions:
 - Changes in weight
 - Loss or gain of weight
 - Changes in taste
 - Nausea, diarrhea, vomiting

Medications

- Always report if taking:
 - Other medicines
 - Home remedies
 - Vitamin or mineral supplements

How Medications Affect Foods (Slide 5)

- Affects the functions and structure of the digestion tract
- Affects the absorption & excretion of certain vitamins and minerals
- May alter appetite

Who Is at the Greatest Risk (Slide 6)

- Elderly
 - Usually these individuals are taking many drugs at once (polypharmacy). They also may have an altered mental status and not take the drugs properly. This population also may be chronically ill which also increases the risk.
- Chronically Ill patients
- Individuals that are malnourished
- Pregnant/lactating women
- Infants
- Individuals who don't take their medicine as advised
 - Anyone who doesn't take their medicine as advised by the doctor is at a higher risk for drug interactions.

Affects on the GI Track (Slide 7)

Medications

- Stomach
 - NSAID: Aspirin, ibuprofen (Advil, Motrin)
- Intestines
 - Some antibiotics

The Strength of Medicines (Slide 8)

- The strength of certain medicines may be increased with foods
 - Coumadin
 - Vitamin K
 - When more of this drug is available to the body, bleeding can take place. Vitamin K should be monitored to aid in the clotting process.
 - Grapefruit & Blood Pressure medications
 - Interactions are thought to occur due to the flavonoid *naringen* found within. Avoid grapefruit while taking calcium channel blockers & cholesterol lowering medications.

Vitamin & Minerals (Slide 9)

- Some medicines changes the ability of the body to use (metabolize) vitamins & minerals
 - Dilantin
 - Folic Acid
 - Antibiotics
 - Calcium, Magnesium, Iron, Zinc

Medications

- Cholesterol Lowering medicines
 - Vitamin A, D, E, K
- Protonix; Zantac
 - Vitamin B12, Thiamin, Iron

Excretion (Slide 10)

- Altered Removal of Nutrients
 - Diuretics (Example: Lasix)
 - Sodium, Potassium, Chloride, Magnesium, Calcium

Special Considerations (Slide 11)

- Appetite Changes
 - Increase
 - Some antidepressants: Elavil
 - Periactin
 - Megase
 - Corticosteroids: Example: Prednisone

Special Considerations (Slide 12)

- Appetite Changes
 - Decrease
 - Amphetamines (Dexadrine, Adderall)
 - Alcohol
 - Cisplatin

Special Considerations (Slide 12)

- Changes in Taste
 - Anti-cancer
 - Diuretics
 - Drugs for Parkinson's Disease

Foods that may interact with Medications (Slide 14)

- Alcohol
- Aspartame
- Caffeine
- Lactose (Found in Milk)
- Licorice
- Saccharin
- Tartrazine (Food Dye Yellow # 5)
- Tyramine

Alcohol (Slide 15)

- Reduces ability to absorb Thiamin & B12
- May cause enhanced effects to the Nervous System in the presence of certain drugs.
- Enhances liver damage
- Enhances GI bleeding

Caffeine (Slide 16)

- Increases heart rate

Medications

- Restricts the blood vessels in the brain
- Acts as a Diuretic
- Foods containing Caffeine:
 - Coffee
 - Tea
 - Soft Drinks
 - Chocolate

Tyramine (Slide 17)

- Harmful effects in combination with MAO inhibitors
- May cause HTN crisis → can be fatal!
- Foods:
 - Aged Cheese
 - Aged Meats
 - Soy Sauce and other soy products
 - Fava Beans
 - Sauerkraut
 - Tap Beer
 - Banana peel

Pregnancy & Medicines (Slide 18)

- During pregnancy and breastfeeding **ALL** medications, herbs, or vitamin/mineral supplements **MUST** be evaluated by the doctor!!!

Common Medicines for Diabetes (Slide 19)

- Actose & Avandia

Medications

- Must take with insulin
- May alter lipid levels
- Metformin (Glucophage)

Insulin (Slide 20)

- See chart on screen

Common Medicines for Kidney Disease (Slide 21)

- Iron
 - Used to treat anemia
- Diuretics
 - Thiazide
 - May increase glucose levels
 - Lasix
 - Diuretics help to reduce the concentration of Sodium, Potassium, Chloride
- Kayexalate
 - Lowers potassium levels
- Calcitrol
 - Regulates Calcium & vitamin D levels

Common Medicines for Hypertension (Slide 22)

- Diuretics
- Beta-Blockers

Medications

- May decrease good cholesterol, increase triglycerides, increase blood sugar

Common Medicines for High Cholesterol (Slide 23)

- Statins (Lipitor, Zocor)
 - Grapefruit: naringenin: not found in all citrus foods
 - Caution with fresh grapefruit or juice and Seville oranges
 - Increases the ability for medicine to enter bloodstream
 - May raise risk of side effects

Conclusion (Slide 24)

Medication can be very beneficial when used properly. Always consult your doctor before taking any medication (this includes any herbal or vitamin/mineral supplement). If you notice any side effects, talk to our doctor immediately.

Thank you for your time and attention!