

Chapter 23

Medicines and Drugs

Lesson 1 – The Role of Medicines

1. What are medicines?

- Drugs that are used to prevent disease or other conditions.

2. What are drugs?

- Substances other than food that change the structure or function of the body or mind.

3. Name 4 broad categories of medicines.

- Help prevent disease.
- Fight pathogens or infectious agents that cause disease.
- Relieve pain.
- Help maintain or restore health and regulate body systems.

Lesson 1 - continued

4. List 2 types of medicines that prevent disease.

- Vaccines.
- Antitoxins.

5. Explain how vaccines work.

- Contain weakened or dead pathogens that stimulate your body to produce specific antibodies. Once produced, they give your body long lasting protection.

6. List 3 types of medicines that fight pathogens.

- Antibiotics, antivirals, and antifungals.

Lesson 1 - continued

7. What is an analgesic?

- Pain reliever.

8. What are 3 reasons aspirin should be taken with care?

- Irritate the stomach.
- Cause dizziness and ringing in ears.
- Children are at risk of developing Reye's Syndrome.

9. What is the recommended analgesic for children?

- Acetaminophen.

Lesson 1 - continued

10. List 4 categories of medicine that help maintain or restore health.

- Allergy medicines.
- Body-regulating medicines.
- Antidepressant/antipsychotic medicines.
- Cancer treatment medicines.

11. Define the term side effects with respect to medicines.

- Reactions to medicine other than the one intended.

<https://www.youtube.com/watch?v=eSdNMRtvq5g>

<https://www.youtube.com/watch?v=z0KFkQNFxsk>

Lesson 1 - continued

12. In the first column below, list 3 types of interaction that medicines can have in your body. In the 2nd column, describe the interaction.

Additive interaction

- Medicines work together in a positive way.

Synergistic effect

- Interaction of 2 or more medicines that results in a greater effect than when the medicines are taken alone.

Antagonistic effect

- Effect of 1 medicine is canceled or reduced when taken with other medicines.

Lesson 1 - continued

13. What is tolerance to a medicine? What is reverse tolerance?

- Tolerance – the body becomes used to the effect of the medicine.
- Reverse tolerance – body requires less of the substance to produce the desired effect.

14. What is withdrawal?

- Occurs when a person stops using a medicine on which he/she has a chemical dependence.

15. List 4 possible symptoms of withdrawal.

- Nervousness, insomnia, headaches, and vomiting.

Lesson 1 - continued

16. List the 2 ways in which medicine is released to the public in the United States.

- Prescription medicine.
- Over the counter medicine.

17. When the FDA approves a medicine, what does this tell consumers?

- The medicine is safe to use as directed.

18. Give 1 example of misuse of a medicine.

- Giving prescription medicine to someone for whom it was not prescribed.

Lesson 1 - continued

19. List 1 guideline for safe use of medicines.

- Never place medicine in an unlabeled container.

Lesson 2 – Drug Use – A High-Risk Behavior

1. Define the term substance abuse.

- Any unnecessary or improper use of chemical substances for nonmedical purposes.

2. Define the term illegal drugs.

- Chemical substances that people of any age may not lawfully manufacture, possess, buy, or sell.

3. What is illicit drug use?

- Use or sale of any substance that is illegal or otherwise not permitted.

Lesson 2 - continued

4. List 3 reasons some teens try drugs.

- Peer pressure.
- See drugs being glamorized.
- Trying to escape.

5. What is one serious consequence that can occur because street drugs are not monitored for quality, purity, or strength?

- Results can be unpredictable.

6. What are the risks when drug use involves injecting substances through a needle?

- Risk of contracting Hepatitis B and HIV.

Lesson 2 - continued

7. What is an overdose?

- Strong sometimes fatal reaction to taking a large amount of a drug.

8. In the 1st column below, name 4 physical and mental consequences of substance abuse. In the 2nd column, describe to explain each consequence.

Tolerance

- More of the drug is needed for the same effect.

Psychological dependence

- You believe you need the drug to feel good or function normally.

Lesson 2 - continued

Physiological dependence

- You have a chemical need for the drug.

Addiction

- Persistent, compulsive use of a harmful substance.

9. List 3 consequences that substance abuse can have on a teen's life in addition to physical and mental risks.

- Harm family.
- Damage friendships.
- Academic and athletic performance decline.

Lesson 2 - continued

10. List 2 consequences of drug use to the individual other than the effects on physical and mental health.

- Substance abuse is major factor in violent crime.
- Accidental and intentional deaths.

11. List 2 consequences of drug use for babies and children of drug users.

- Babies can be born addicted.
- Children are at risk for neglect and abuse.

12. List 2 costs to society of drug abuse.

- More people in jail due to drug related crimes.
- Rising health care costs.

Lesson 3 – Marijuana, Inhalants, and Steroids

1. What is marijuana?

- Plant whose leaves, buds, and flowers are smoked for their intoxicating effects.

2. What are 2 pathways marijuana uses to affect the mind?

- THC bonds with nerve cells in brain, altering its function.
- Raises dopamine levels resulting in an intense feeling of well-being.

<https://www.youtube.com/watch?v=IHX7zQrBEG8>

Lesson 3 - continued

3. List 10 serious health risks posed by marijuana use.

- Hallucinations.
- Paranoia.
- Impaired short term memory.
- Bloodshot eyes.
- Increased risk of lung cancer.
- Weakened immune system.
- Increased appetite/weight gain.
- Impaired concentration/coordination.
- Decreased ambition.

Lesson 3 - continued

4. List 2 possible social and legal consequences to marijuana use.

- Arrest/incarceration.
- Exclusion from extra curricular activities/loss of eligibility for federal student loans.

5. What are inhalants?

- Substance whose fumes are sniffed or inhaled to give a mind altering effect.

6. List 4 common inhalants.

- Glue/spray paints.
- Aerosols/lighter fluid.

Lesson 3 - continued

7. List 4 effects of inhalants on the body.

- Permanent brain damage.
- Increased risk of cardiac arrest.
- Suffocation.
- Death.

<https://www.youtube.com/watch?v=392jFOsvpoQ>

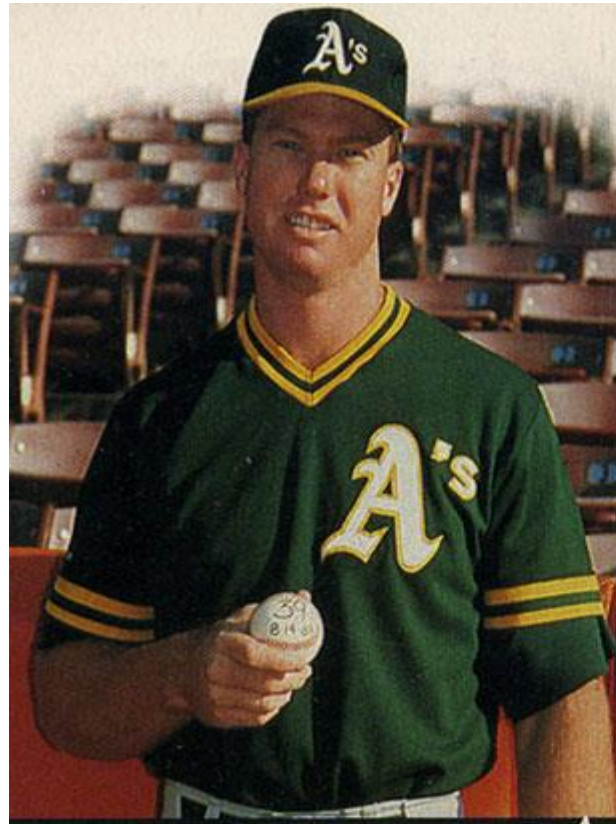
8. What are anabolic-androgenic steroids?

- Synthetic substances that are similar to the male sex hormone testosterone.

Lesson 3 - continued

9. What are the effects of steroid use?

- Mood swings.
- Increased risk of injury (tendons/ligaments).
- Paranoia.



Lesson 3 - continued

10. What is paranoia?

- Irrational suspiciousness or distrust of others.

11. What other problems could occur because of illegal steroid use?

- Take other drugs to combat side effects.
- Contaminated needles.
- NO BASEBALL HALL OF FAME!

Lesson 4 – Psychoactive Drugs

1. What are psychoactive drugs?

- Chemical that affect the central nervous system and alter brain activity.

2. List the 4 main groups of psychoactive drugs.

- Stimulants.
- Depressants.
- Narcotics.
- Hallucinogens.

Lesson 4 - continued

3. Define the term stimulants.

- Drugs that speed up the central nervous system.

4. List the effects of the following stimulants.

- Cocaine – euphoria, depression, fatigue, paranoia, heart problems, physiological dependence, malnutrition, and death.

<https://www.youtube.com/watch?v=q45g-LFm4Fw>

<https://www.youtube.com/watch?v=b8qvmFBgPg4>

- Amphetamines – euphoria, twitching, irregular heartbeat, increased body temperature, paranoia, and heart damage.

Lesson 4 - continued

- Methamphetamine – memory loss, heart and nerve damage, increased tolerance, and addiction.

<https://www.youtube.com/watch?v=wNhINODtA0>

5. What are depressants?

- Drugs that tend to slow down the central nervous system.

6. List the effects of the following depressants.

- Barbiturates – reduced heart rate and blood pressure, fatigue, confusion, reduced respiration, and death.

Lesson 4 - continued

- Tranquilizers – depression, fever, irritability, loss of judgement, and dizziness.

7. What are the 2 date rape drugs?

- Rohypnol and GHB.

<https://www.youtube.com/watch?v=L6r9ITMaVtw>

8. What are narcotics?

- Specific drugs that are obtainable only by prescription and are used to relieve pain.

9. Name 3 examples of common narcotics.

- Morphine.
- OxyContin.
- Codeine.

Lesson 4 - continued

- Heroin – is a highly addictive narcotic that is processed from morphine.

<https://www.youtube.com/watch?v=JL68QZww7D4>

https://www.youtube.com/watch?v=PM6tz_pVt-s

10. What are the effects of narcotics?

- Euphoria, drowsiness, constipation, shallow breathing, coma, and death.

11. What are hallucinogens?

- Drugs that alter moods, thoughts, and sense perceptions including vision, hearing, smell, and touch.

Lesson 4 - continued

<https://www.youtube.com/watch?v=bdh3Em-fAEo>

12. What are the effects of hallucinogens?

- Overloads sensory controls in the brain.
- Hallucinations, impaired judgement, and increased heart rate.

13. List 3 hallucinogens.

- PCP.
- LSD.
- Ketamine.

Lesson 4 - continued

14. What are designer drugs?

- Synthetic substances meant to imitate the effects of hallucinogens and other dangerous drugs.

15. List 2 serious effects of using Ecstasy?

- Depression/paranoia.
- Long term damage to brain cells.

<https://www.youtube.com/watch?v=2J8ORsBuM5U>

16. List 4 possible consequences of poor judgement that occurs as a result of illegal drug use.

- Unintentional injuries, car accidents, violence, STD's, unplanned pregnancy, and suicide.