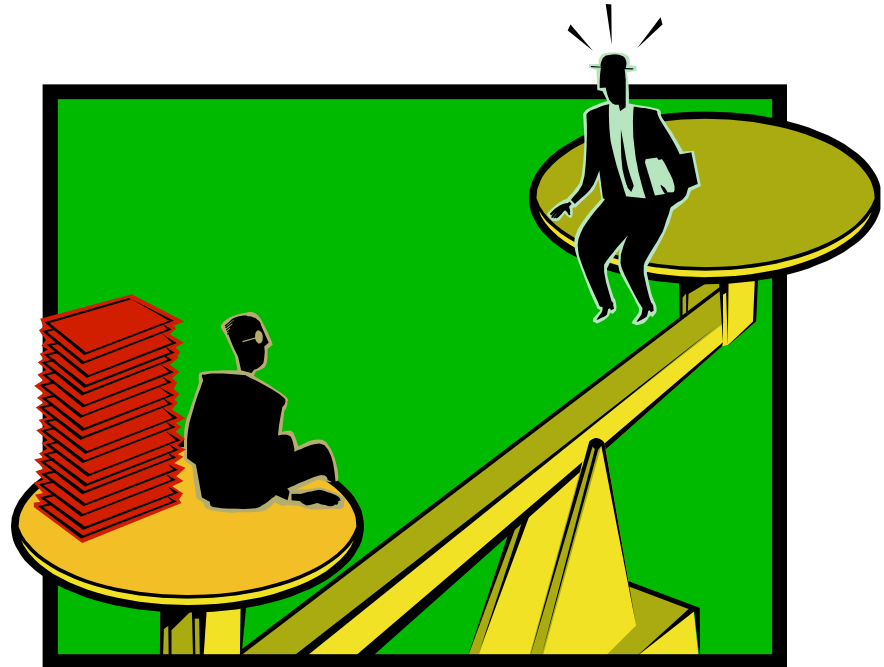


Psycho-Education for Patients and Family Members

# **Session 3: Alcohol and Recovery (1)**

# Alcohol in the Brain

- Alcohol upsets a delicate balance between chemical systems that *stimulate* and chemical systems that *inhibit* functions of the brain and body.



# Adaptation

Adaptation  Dependence

Absence  Withdrawal Symptoms

# Withdrawal Symptoms

- Seizures
- Tremors
- Nausea
- Auditory or visual hallucinations
- Insomnia
- Agitation
- Confusion

# Delirium Tremens

- Rapid heart rate
- Increased body temperature
- Tremors
- Loss of ability to control muscle movement
- Increased blood pressure
- Abnormally fast breathing
- Sweating
- Altered mental status
- Hallucinations
- Cardiovascular collapse and death

# Incidence by Gender and Age

- More men report being current drinkers than do women.
- The rate of alcohol *dependence* is also lower for women than for men.
- The incidence of heavy alcohol use is highest among young adults.

## Question:

- *What are the effects of alcohol to the body?*
  - *At the beginning*
  - *Later*
  - *After long-term drinking*

# Initial Effects of Alcohol

- Feelings of euphoria
- Talkativeness, sociability
- Lowered inhibitions





# Later Effects

- Sedation and drowsiness
- Trouble with balance
- Impaired peripheral vision
- Delayed reaction time
- Slurring of words
- Vomiting
- Sleeping
- Possible blackout

# Long-Term Effects

*Heavy drinking over time damages the:*

- Liver
- Digestive system
- Cardiovascular system
- Immune system
- Endocrine system
- Nervous system

# Long-Term Effects

## Liver

- Alcoholic hepatitis
- Cirrhosis



# Long-Term Effects

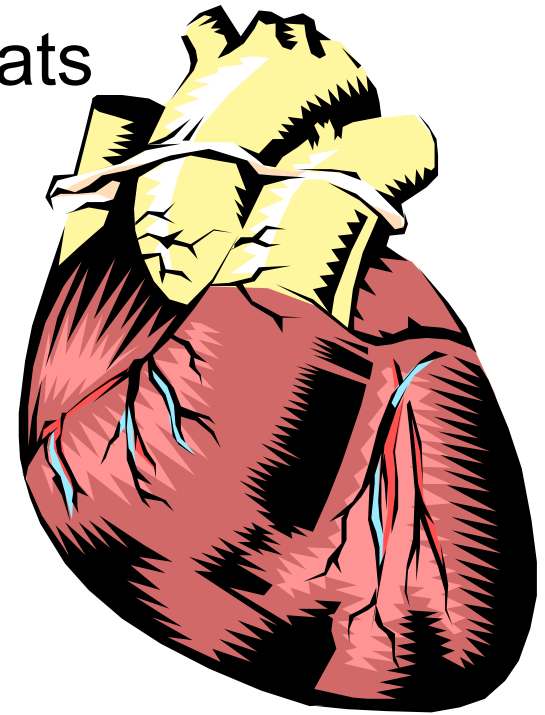
## Digestive System

- Inflammation of the esophagus
- Esophageal cancer
- Enlarged blood vessels in the esophagus (often fatal)
- Pancreatitis
- Cancers of the throat, colon, rectum

# Long-Term Effects

## Cardiovascular System

- Serious heart disease
- Irregular and/or weak heartbeats
- High blood pressure
- Increased risk of stroke
- Damaged platelets/increased risk of bleeding



# Long-Term Effects

## Immune System

- Damaged white and red blood cells
- Increased risk of infectious disease
- Immune system attack on the body

# Long-Term Effects

## Endocrine System

- Diabetes
- Altered release of reproductive hormones, growth hormone, and testosterone
- Decreased testicle and ovary size
- Disrupted sperm and egg production
- Sexual dysfunction in both men and women

# Long-Term Effects

## Nervous System

- Peripheral neuropathy
- Wernicke's syndrome
- Korsakoff's syndrome
- Loss of mental function
- Reduced brain size
- Changes in the function of brain cells





## Question:

- *What are possible behavioral problems caused by alcohol?*

# Behavioral Effects

- Domestic violence and child abuse
- Accidents
- Family problems
- Strained relationships with colleagues
- Absence from or lateness to work
- Loss of employment because of decreased productivity
- Committing or being the victim of violence
- Driving under the influence and arrests