

Systematic Rationalization Activity

	Controllable	uncontrollable
important		X
unimportant	X	X

Psychological Health

important

Abraham Maslow

Hierarchy of Needs

- physiological needs (water, clothing)
- safety
- being loved
- maintaining self esteem
- self-actualization



Highest level of growth

fulfilled human potential

- realism, ~~acceptance~~ - realistic view of world + themselves
- accept weaknesses → • Acceptance - positive self concept, high self esteem
- Internal Locus of control • autonomy - find guidance through own values, internal locus of control
- authentic - don't pretend to be something they're not
- intimacy - comfortable w/ expressing emotions
- creative - open to new experiences, like new situations

Meeting Life's Challenges

- 1 Growing Up Psychologically
 - Developing Adult Identity, having ability to interact
 - Identity crisis - lose sight of who you are
 - Developing Intimacy
 - Developing values & purpose, dictate good vs bad
- 2 Developing a Positive Self concept
 - 1 Begins in childhood
 - 2 Integration, experiences mold into self concept
 - 3 Stability, realistic view of ourselves

① Merging changes to self esteem

→ changes to self concept

- acknowledge something went wrong & start over
- deny that anything went wrong + blame someone else
 - psychological defenses
- develop a lasting negative self concept where they feel bad, unloved, ineffective

cognitive distortions
↓
make events worse than reality are

-
- ② Being Less defensive, try to be objective, reassess, make joke
 - ③ Being optimistic, recognize + dispute negative self assessments

④ Maintaining Honest communication

→ assertiveness training, yes or no

⑤ Dealing with loneliness

- recognize difference between alone & lonely, reflect

⑥ Dealing with Anger

- take control of emotions, take time to regroup

⑦ Dealing with anger in other people

- allow person to explain their position

Psychological Disorders

When emotions or irrational thoughts interfere with daily activities

result of: genetics, traumatic events, social influences

Anxiety Disorders

- Fear that is out of proportion to real danger
- Experienced on recurring basis w uncontrollable situations

most common → Simple phobia

- originate w bad experience ex) spiders, locations

Social phobia ← 15 million Americans

- fear of humiliation while being observed by others
 - ex) fear of public speaking

Panic Disorder

sudden unexpected surges in anxiety, can't escape
- rapid & strong heartbeat, shortness of breath

Agoraphobia - afraid of situation that may occur outside home

Generalized Anxiety Disorder (GAD)

Worry about ordinary future threats
Worries go unresolved + takes over
leads to ~~an~~ depression

OCD: obsession or compulsive

obsessions - persistent, upsetting thoughts

compulsions - ~~per~~ repetitive rituals ex) hand washing

→ use these rituals (compulsions) to control the anxiety the thoughts (obsessions) produce

Post Traumatic Stress Disorder

• reaction to a severely traumatic event

→ re-experiencing the trauma in dreams, nightmares, and memories

• lasts month or years

9/11 brought to spotlight

Treatments:

medication / psychological interventions

⊙ Mood disorders 21 mil americans have

- Depression

* May result from specific event but sometimes there is no obvious trigger

Symptoms: sadness, hopelessness, poor appetite / overeating

Insomnia, guilt, trouble concentrating, suicide

Dysthymic disorder - mild or moderate depression

last over 2 years

- Warning signs of suicide
- wish to be dead
 - social withdraw
 - sudden lightening of mood
 - substance abuse/eating disorders
- women attempt 3x more than men
men succeed 3x more than women

Treating Depression

depending on severity

- drug therapy, psychotherapy, electroconvulsive therapy

Mania

restlessness, excessive energy, extreme spending

Bipolar

Manic individuals who swing between manic & depressive states

- runs in family, begins mid 20s

Schizophrenia, common disorder cause is uncertain

- possible chemical + structural differences in brain
- several genes increase risks

Characteristics include:

- Inappropriate emotions, hallucinations, delusions
→ professional help necessary

Getting Help

books, writing in journal, peer counseling

66 multiple choice

Exam next Tuesday

HFJKnew.org

Alcohol Guest Speaker

Feb 16

Cig guest speaker

Feb 23

1.3 billion smokers worldwide (47% M, 12% F)

45 mil in US

*men are more successful in quitting

399,000 die from smoking

Health consequences

+4,000 chemicals, 200 toxins, 60 carcinogens

→ cancer, cardiovascular, respiratory

water turns to honey through veins

* 1/3 of all tobacco users die prematurely

lose contact inhibition, cells grow rapidly

hydrogen cyanide → paralyze cilia, ~~no~~ cause coughing

→ Light cigs ~~are~~ could be worse b/c deeper draw

compensatory smoking - take longer drags to stay

Average smoker smokes 25/day

8-14 mg of nicotine

→ flue → air cured tobacco in cigars, don't need to inhale

igs are
pulmonary
absorption

Takes 6 months to 1 1/2 yr to become addicted

IN EXAM → children take < 1 week to become addicted

Nicotine releases dopamine

→ ammonia allows nicotine to be absorbed 100x faster

Chap 8

Alcohol & Intoxication

2/25

Nature of alcohol

psychoactive ingredient = Ethyl Alcohol (only consumption)

- Beer 3-6% alcohol/volume
- malt liquor 6-8%
- table wines 9-14%
- fortified wines 20%
- hard liquor 45-50%

Proof Value

2 x % of concentration

Ingestion

- 7 calories/gram, ave drink has 100-120 cal

Absorption

20% ingested from stomach → blood

75% absorbed in small intestines

5% absorbed along GI track

- carbination increases rates of absorption

- artificial sweeteners ↑

- food slows rate

- drinks w/ higher concentration absorbed slower

Metabolism + Excretion

transported through blood stream

easily moves through biological membranes, ~~effects~~ effects neurotransmi

2-10% is not metabolized

main site is liver

alcohol readily crosses the blood brain barrier

- alcohol ingested by young is damaging (25 yrs)

Alcohol Intake & BAC

Blood alcohol concentration (BAC)

- a measure of intoxication
 - body weight
 - % of body fat (fat people have higher BAC)
 - gender, men have more enzyme, women more body fat
Women have ↑ BAC
- Balance of ~~rate~~ alcohol absorption + rate of metab.
• absorbing alcohol quicker than metabolized = ↑ BAC

Influenced By:

- Genetic factors, cannot change
- Drinking behavior

Effects on Health

Depend on individual, circumstances & amount of alcohol consumed

stimulant

→ BAC 0.03% - 0.05%, relaxation, release of inhibition

pressant

→ at 0.1%, major reduction in sensory & motor functioning

at 0.2%, cannot function

at 0.35%, coma & death

- sharp drop in internal temp

- change in sleep patterns

- worsens sleep apnea

Hangover caused by

toxins alcohol breakdown, dehydration, & hormones

- alcohol poisoning, passing out very dangerous → role on side so don't choke on vomit
- combining drugs + alcohol → leading cause of drug deaths
- injuries & violence
- alcohol + sex

50% rape

Drinking & Driving

Most @ risk

1/3

- young people (21-24)
- motorcyclists
- those w/ previous DWI conviction

p. 180

Effective Preventive Measures

- enforcing .08% BAC laws, legal drinking age laws, 0 tolerance laws for drivers < 21 years old
- revoking drivers licenses
- sobriety checkpoints
- implementing health promotions & community based approaches
- mandatory substance abuse assessment treatment

Effects of chronic use

Digestive system

- liver function (cirrhosis) healthy liver → scar tissue
- pancreas inflammation (pancreatitis)

Cardiovascular system

Benefit →

- moderate doses may reduce risk of HD

- higher doses elevates BP, weaken heart muscle

Cancer

- mouth, throat, larynx, esophagus

- liver cancer

- breast cancer

* 5 drinks + smoking increases chance 50x

(cardiac myopathy)
inflamed heart

Brain Damage

- heavy drinkers show evidence of brain damage

- loss of grey & white matter, reduced blood flow, slower metabolism

Mortality

- alcoholics lose 15 yrs

1st trimester

Effects on alcohol on Pregnancy

CROSSES placenta & can harm fetus

- Fetal alcohol syndrome (FAS)
 - physical abnormalities
 - mental impairment
- * one of most preventable disease
- ARND
 - learning & behavioral disorders

consumption during nursing passes into breast milk

Possible Health Benefits of alcohol

No benefit under age of 35

- among older people
 - light to moderate drinkers may live longer
 - good effects on cholesterol
 - helps blood from clotting
- Moderate drinking 2/day for men 1/day women

Alcohol Abuse vs Dependence

- alcohol abuse - recurrent use that has negative consequences
- alcohol dependence - more extensive problems, tolerance, withdraw
 - binge drinking → bringing BAC to or above .08 within 2 hours (5 drinks)

* students ~~3-7~~ 3-7 x more likely to engage in risky behavior

Alcoholism

regular daily intake of large amounts / during periods of stress

→ tolerance / withdraw (DT, seizures)

social & psychological effects

causes → genetics, personality disorders, troubled households

Tabacco

Health Hazards

Tar - brown, sticky mass ~~are~~ created when chemicals condense

ex. formaldehyde

carcinogens - cancer causing ingredient

Cocarcinogens - substance that works w a carcinogen to cause cancer

smoke contains carbon monoxide - deadly gas in car exhaust

displaces oxygen in red blood cells, impairs vision

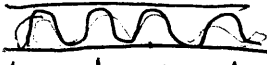
hydrogen cyanide - paralyze silia, cause coughing

poison

ammonia - boosts amount of addictive nicotine delivered by cigarettes, absorbed 100x faster

arsenic - poisonous substance

Light & low tar. cigarettes

compensatory smoking 

→ people who switch to lite take deeper drags and smoke more

Menthol

absorb more / metabolize slower. Anesthetic effect causes deeper inhale + holding it in longer

Immediate effects of smoking

- dizziness, faintness, rapid pulse, cold, clammy skin, nausea, vomit, diarrhea

* can excite or tranquilize NS depending on dose

→ stimulates cerebral cortex, discharges adrenaline, inhibits formation of urine, depresses hunger

leading cause of death

Long term effects

CHD, coronary heart disease.

- results from atherosclerosis → fatty deposits form on the inner walls of heart causing stiffness + narrow
- ↓
- causes heart attack when blood flow is blocked
- irregular heartbeat

leading cause of death in women

Lung + other cancers

- trachea, mouth, pharynx, esophagus...

Chronic Obstructive Pulmonary Disease

- stress placed on lungs can damage lung function
 - Emphysema, lungs lose elasticity
 - chronic bronchitis, inflammation of bronchial tubes
 - chronic cough, shortcut to lung cancer

Environmental Tobacco Smoke (second hand smoke)

Mainstream smoke - smoke inhaled by smokers

85% Sidestream smoke - enters atmosphere from burning end of cig
• 2x more tar & nicotine b/c not filtered

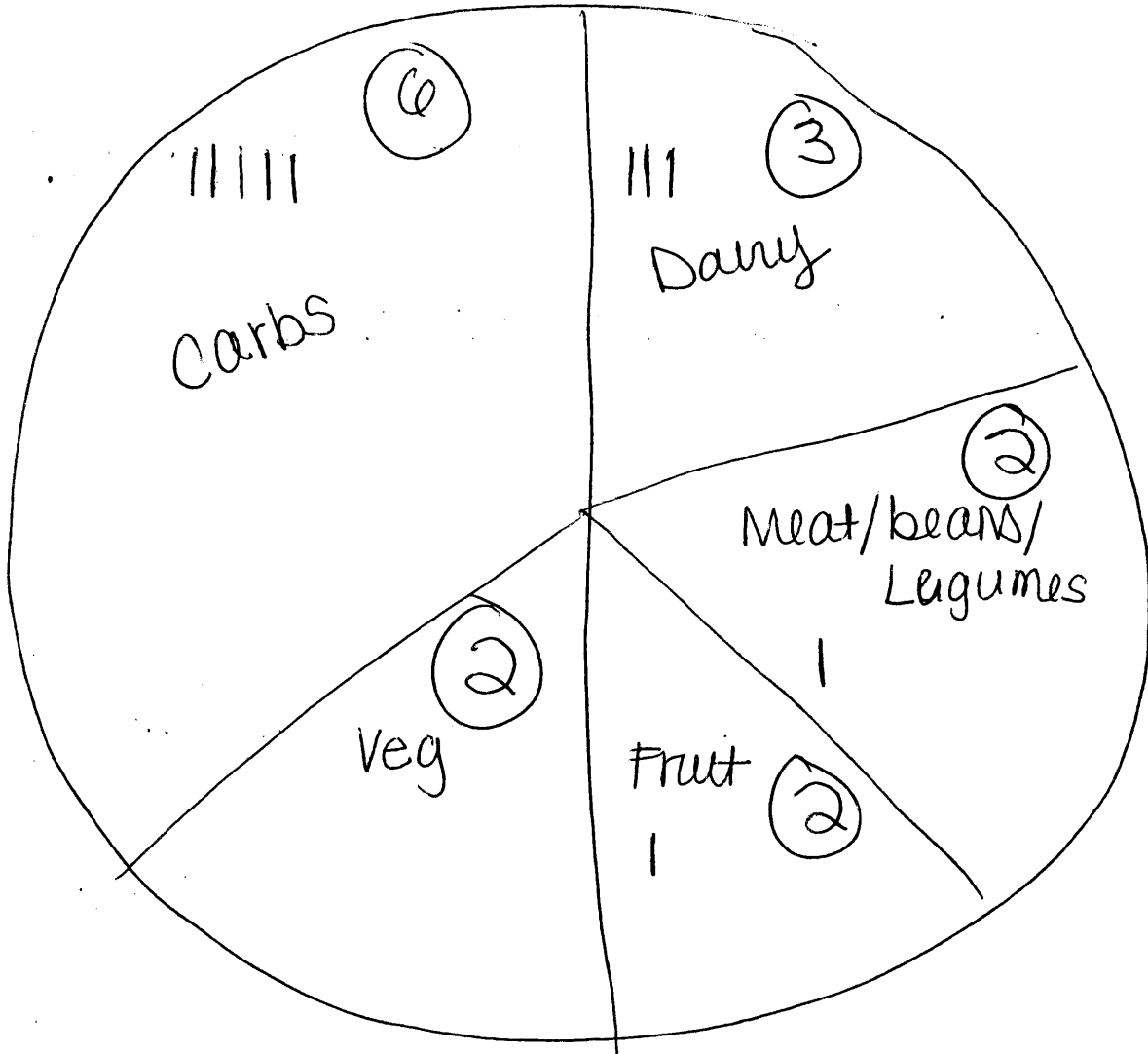
Effects

non smokers exposed develop coughs, headaches, nasal discomfort, & eye irritation

- infants more likely to die of SIDs
- causes asthma

Nutrition Guest Speaker

3/4



Nutrition Basics

3/9/10

Body requires 45 essential nutrients
broken down in 6 categories

- Macro - proteins, fats, carbs
- micro - vitamins, minerals, water

Fuel Potential. KiloCalories

- 1 Kcalorie = amount of heat it takes to raise the temp of fluid 1° C

- 2000 kcal/day

- 1000 kcal = 1 kcal

3 supply energy

fat \rightarrow 9 cal/g

protein \rightarrow 4 cal/g

carb \rightarrow 4 cal/g

Proteins

form muscle, bone, blood, enzymes, hormones, & cell membrane

Twenty common amino acids

- 9 essential, 11 nonessential

Complete proteins provide all essential amino acids

* Most animal proteins are complete

* Most plant proteins are incomplete

Recommended Amounts

• 8g / kilogram of body weight

• 10-35% of total caloric intake

• average 15-16%

2/3 comes from animal sources

Fats or Lipids

- stored energy
- provides insulation
- supports & cushions organs
- helps absorb fat soluble vitamins
- fuel the body during rest & light activity
- add flavor & texture to food

Triglycerides - glycerol molecule w 3 fatty acids

- saturated → solid @ room temp (animal prod) - red meats
- unsaturated → liquid @ room temp - whole milk
- olive oil - cheese
- hot dog

monounsaturated
polyunsaturated

Hydrogenation: process that turns unsaturated fat to solid saturated

- ~~atoms~~ improve texture
- last longer
- deep fried / fast food / processed
- changes fatty acids to trans fat



• raise bad & lower good cholesterol

Cholesterol

waxy substance found in blood & cells

→ need for synthesis of cell membranes, vit D, hormones
can't dissolve in blood

must be transported to/from cells by carriers called lipoproteins

TWO TYPES:

- HDL (good) high density lipo-protein
 - helps transport cholesterol out of arteries
 - protects against heart attack
- LDL (bad) low density
 - transports cholesterol to organs & tissue
 - high levels can slowly build up in arteries
 - formation of plaque makes arteries less flexible

Fats & Health

- Saturated & ^{trans fats} trans fats raise LDL, may lower HDL
- Unsaturated fats lower LDL
- Monounsaturated fat may raise HDL & protect against cancer
- Omega-3 fatty acids (polyun.) reduce blood clots, blood pressure, + heart attack risk
- Recommended Intake 20-35% of total calories

Protect your health

Ensure appropriate intake

choose unsat. fats instead of saturated & trans fats

1. Reduce intake of meat & full fat dairy products
2. Reduce intake of deep fried foods + baked goods made w/ hydrogenated oils
3. use liquid oils (olive or canola) for cooking
choose tub or squeeze margarines

Carbs

Supply energy to body cells, provide fuel to brain, nervous system, blood, muscles during high-intensity exercise

TWO GROUPS:

- simple carbs - provide sweetness to food
 - sucrose (table sugar)
- complex carbs - starches & most dietary fiber
 - grains
 - legumes
 - tubers
- Digestion
 - Mouth + small intestines
 - break down to glucose



Refined v Whole Grains

eat

- Whole grains contain inner layer (germ), middle layer (endosperm), + outer layer (bran)
 - During processing - germ & bran removed leaving starch of endosperm
- Refined grains have same calories, less fiber, vit, + minerals
- Whole grains take longer to digest - make you feel fuller longer
 - reduce risk of heart disease, stroke, high BP, diabetes, cancers

Glycemic Index + Response

GI - measure of how the ~~digestion~~ ingestion of a particular food affects blood glucose levels

- Quick rise in glucose & insulin levels = high GI
 - high GI may increase appetite, risk of diabetes and Heart disease

low GI = unrefined fruits, veggies

average american consumes 200-300 grams
45-65% of total daily intake

Fiber

Dietary

Functional

Total - sum of both

✓ Soluble (viscous) fiber vs. Insoluble fiber

dissolve in water,
makes you feel fuller

↙ bulk, bulk to feces,
digestive
regularity

Fiber

Sources - all plant substances

→ reduce risk of diabetes, HD, GI disorders, colorectal cancer

recommended intake:

38 g for men

25 g for women

Vitamins

Organic (carbon-containing) substances required in small amounts to promote specific chemical reactions (catalysts) within a living cell

→ 13 vitamins

4 • Fat soluble → A, D, E, K

9 • Water soluble →

Function - help chem. reaction take place, unleash energy stored in carbs, proteins, & fats

- produce red blood cells, maintaining systems
- antioxidants, preserve healthy cells

Sources:

human body doesn't manufacture most vitamins
abundant in fruits, veg, greens

Minerals

- Inorganic

- helps regulate body function, aid in growth, maintain body tissue, catalyst for energy release

• 17 essential minerals

• major minerals - 100 mg or more

→ calcium, phosphorus, magnesium, sodium, potas., chloride

• trace minerals - minute amounts

→ copper, fluoride, iodine, iron, zinc

commonly lack calcium, iron, pot., mag.