

# Wellness 9 Midterm Study Guide / Review

**Note: This will be transferred to the notecard for the test. The test is open-notes.**

## Wellness

overall state of well-being or total health encompassing physical, emotional, social, intellectual, spiritual, and environmental needs; dynamic, must be worked towards

### Physical

physical fitness

- eating
- nutrition
- exercising
- fitness

### Intellectual/Mental

- making good decisions
- staying focused
- thinking critically

### Emotional

- happiness level
- stress level
- self-esteem
- emotional eating
- negatives

### Social

- good friends
- good family
- good communications

### Spiritual

- peaceful
- good beliefs
- good relationship with religion

### Environmental

- people around you
- air quality
- lighting
- not getting distracted

### Occupational

- being happy with what you do for a living
- participating

### Effect

- can have a positive, negative, or both effect on a person

## Wellness Continuum

shows that the better your wellness, the better you can develop; the worse it is, the quicker your death and the worse your overall problems

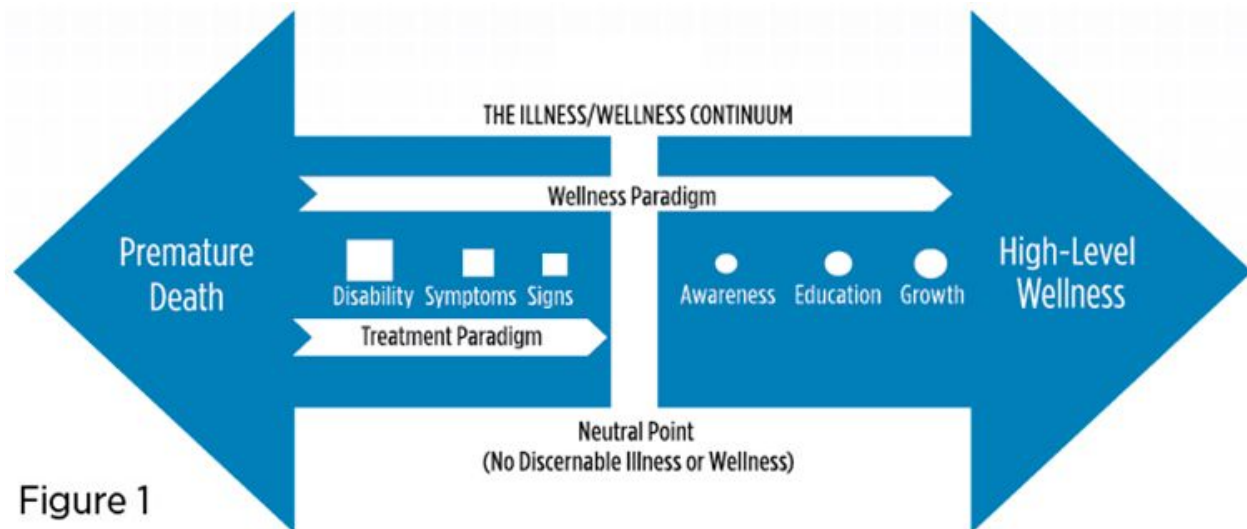


Figure 1

## Values

beliefs and ideas that are important to you that guide the way someone lives their life

- integrity
- respect
- trust
- honesty
- community
- health, fitness

can have conflict (need to prioritize)

## Support System

a group or network of people relied on for emotional, social, physical, spiritual, and intellectual support. They are used to maintain/attain your wellness; can change as people change, enter into, or disappear from your life

## Examples

- family
- internet
- friend
- coach / teacher
- counselor / advisor
- police
- God
- doctor

## Personal Fitness

### Attitudes / Media Influences

negative attitudes on physical fitness

- lack of time
- lack of knowledge
- lack of athletic ability
- lack of motivation
- media
- past experiences
- lifestyle choices

### **Health Risks**

- **6 Controllable**
  - inactivity
  - obesity
  - smoking
  - hypertension
  - high LDL
  - stress and tension
- **3 Uncontrollable**
  - age
  - gender
  - heredity / genes

### **Benefits of Exercise**

improved body appearance  
improved body image  
self-control  
enjoyment of life  
improved health  
improved life expectancy  
improved physical performance  
increased muscular endurance  
increased energy level  
increased success in school/job  
cope with stress  
sleep better

### **Physical Fitness vs. Physical Activity vs. Exercise**

physical activity: something you do  
physical fitness: something you acquire  
exercise: planned and structured with fitness as your goal

## **Components of Fitness**

### **Health-Related Fitness**

components of fitness that contribute to how well the systems of the body operate

- related to overall state of health
- essential toward contribution toward prevention of disease and promotion of health

- **Cardiovascular Endurance**
  - body's ability to sustain prolonged exercise for at least 15 minutes with an appropriate heart rate
  - most important indicator of good health
  - mile run, pacer
- **Muscular Strength**
  - amount of force a muscle can produce with a single maximum effort
  - pull-up, push-up
- **Muscular Endurance**
  - ability to sustain given level of tension for long period of time (hold contraction or repeat)
  - sit-up
- **Flexibility**
  - ability to move joints through full ROM
  - has to be specific
  - sit and reach
- **Body Composition**
  - ratio of fat to muscle and other body tissues
  - BMI
  - ranges:

	12	13	14	15
Girl	14.7-24.2	15.5-25.3	16.2-25.3	16.6-26.5
Boy	14.8-24.1	15.4-24.7	16.1-25.4	16.6-26.4

### Skill-Related Fitness

components of fitness that contribute to ability to successfully play sports

- **Agility**
  - ability to change position/direction of body in controlled manner
  - shuttle run
- **Balance**
  - ability to keep upright posture while standing still (static) or moving (dynamic)
  - stork test
- **Coordination**
  - integration of eye, hand, and foot movements
  - tennis-ball wall
- **Power**
  - ability to do strength performances at rapid pace
  - vertical jump
- **Reaction Time**
  - amount of time it takes to get moving once senses signal need to move

- ruler drop
- **Speed**
  - ability to cover distance in short time
  - 40-yard dash

## Goal Setting

### SMART

- **Specific**
  - cannot be too general
- **Measurable**
  - has to have a unit, something that can physically be measured
- **Action Plan**
  - has to have some plan, schedule, that allows the goal to happen
- **Realistic**
  - has to be achievable
- **Time Frame**
  - has to give a certain time period to complete the task

## Exercise Guidelines

### Starting Factors

- medical exam
  - get limitations from existing conditions
- fitness evaluation
  - get baselines
- SMART goals
  - set goals, see improvement

### Clothing

comfortable, move freely, cool body

sneakers: most important item for any activity

socks: prevent friction of skin against shoes (blisters)

shirt: synthetic (dry-fit material), wicking effect allows body to stay dry and “breathe”

- not dark at night
- light shirts in hot weather to better reflect sun

shorts: not too tight around thighs

### Workout Sequence

#### 1. Warm-Up

5-10 minute exercise before workout to reduce chances of injury

- a. light activity
  - i. general

- ii. specific
- b. stretch (dynamic)

## 2. Work-out

## 3. Cool-Down

10-15 minute mild exercise following vigorous exercise that allows body and heart rate and breathing and circulation to normalize, prevents blood from pooling, prevents tight muscles from become sore

- a. light activity
- b. stretch (static)

## Weather/Environmental Considerations

- **Appropriate Clothing**
- **Illnesses**
  - hyperthermia
    - increase in temperature with decrease in body fluids
      - heat cramps
        - muscles involuntarily contracting causing pain
        - not too serious
      - heat exhaustion
        - excessive sweating, dizziness, extreme weakness
        - body is inadequate
        - mildly serious
      - heat stroke
        - dry, clammy skin
        - stopped sweating, body's cooling function stopped, overworked
        - extremely serious, life-threatening
    - wear light-weight, light-colored clothing
    - drink fluids before, during, and after practice (too late when thirsty- already dehydrated)
    - check urine color
    - exercise before 10 and after 4 on hot days
  - hypothermia
    - excessive (>4°F.) in body temperature
    - hypothalamus begins to lose ability to regulate body temperature
    - frostbite is tissue damage that occurs when circulation to skin decreases so that tissue receives insufficient oxygen and nutrients
    - between 10 and 2
    - warm-up and cool-down
    - darker earlier in day
    - stay clear of icy areas
    - check outside temperature and windchill
    - stay hydrated
    - wear a scarf
    - don't overdress, but layer clothing
      - synthetic shirt, then water/wind shel

## Safety Considerations

- don't exercise if ill
- wait to exercise after eating for 2-3 hours
- run/walk against traffic, bike with traffic
- exercise with another person or in a group, carry cell phone
- stay away from remote, unpopulated areas
- wear reflectors when dark
- sunburns
  - cover skin
  - use 1 oz sunscreen
  - UVA - skin damage
  - UVB - skin burn
  - SPF 30 recommended
- ticks
  - blacklegged tick (deer tick)
  - cannot jump or fly
  - skin rash (bull's eye)
  - fever
  - headache
  - muscle and joint pain
  - swelling of joints
  - paralysis
  - avoid woody areas, perform a tick check
  - use tweezers, pull it out straight

## **Injury Treatment**

muscle soreness

- exercise at right level
- goes away after 1-2 days

blisters

- don't remove skin
- puncture with sterile needle
- apply sterile gauze

shin splints

- exercise at right level
- RICE
  - rest
  - immobilize
  - cold
  - elevate

stitch in side

- apply pressure, stretch to opposite side, breathe deeply

sprained ankle

- don't roll ankle
- RICE

## **Principles of Training**

### **Principle of Overload**

exposing body to more work and stress than normally experienced to increase fitness; dependent on the person

- Milo of Crotona, the “grandfather of overload”
- **FIT Variable Chart**

	<b>Cardiovascular Endurance</b>	<b>Flexibility</b>	<b>Muscular Endurance</b>	<b>Muscular Strength</b>
<b>Frequency</b>	3-5 d/w	3-7 d/w	2-6 d/w (alternate)	2-6 d/w (alternate)
<b>Intensity</b>	60-90% THR	mild tension	30-50% 1RM	60-90% 1RM
<b>Time</b>	15-60 minutes	15-30 seconds 2-3 sets	12-20 reps 3 sets	5-8 reps 3 sets

### **Principle of Progression**

progressively increasing the level of exercise so that improvement in physical fitness will continue; body adapts, so overload must be kept at more than “normal”

### **Principle of Specificity**

specific training effects result from specific type, method, or type of exercise; doing specific exercises to improve specific components of physical fitness in specific body parts; different for every part

## Flexibility

### **Application of the Principles of Training**

to improve flexibility must stretch soft tissue farther than accustomed to  
gradually increase mild tension point  
stretching exercises will only improve flexibility in the joints you stretch

### **Benefits**

increase circulation  
prevent injury  
reduce chance of low back pain  
relieve emotional tension  
improve body position for sports  
facilitation of strength development

### **Types of Stretches**

static: slowly moving muscle to its stretch point and holding position for 15-30 seconds, safest; best for cooldown  
dynamic: moving through full ROM in slow, continuous, controlled manner; best for warm-up  
ballistic: bouncy, jerky movements using the body’s momentum; only for extreme athletes; not recommended  
isostatic: keeping tension throughout the whole stretching exercise (even when muscle relaxed)

### **Safety Considerations**

warm-up before stretching  
communicate when doing partner stretches  
stretching is individual  
go to mild tension (not mild pain)  
stretch both sides of joint and body



## Stretches

1. modified hurdlers stretch: hamstrings, adductors
2. elevated hamstring stretch: hamstrings
3. partner hamstring stretch: hamstring, gluteus
4. standing quadriceps stretch: quadriceps, hip flexor
5. partner quadriceps stretch: quadriceps, hip flexor
6. lying quadriceps stretch: quadriceps, hip flexor
7. kneeling anterior tibialis stretch: anterior tibialis
8. partner anterior tibialis stretch: anterior tibialis
9. spinal twist/pretzl: spinal erectors, abductors
10. tensor T: spinal erectors
11. angry cat: spinal erectors
12. partner knee to chest: spinal erectors
13. shoulder and chest stretch: deltoids, pectoralis
14. arm across chest: deltoid
15. door/corner stretch: pectoralis, deltoid
16. partner tug of war: deltoid, latissimus dorsi
17. calf wall stretch: gastrocnemius
18. step calf stretch: gastrocnemius
19. triangle calf stretch: gastrocnemius
20. partner calf stretch: gastrocnemius, hamstring
21. latissimus overhead stretch: latissimus dorsi, deltoid
22. standing lateral side bends: lateral trunk
23. mid-back stretch: mid back, lateral trunk
24. press up: rectus abdominis, spinal erectors
25. forearm stretch: forearm
26. tricep stretch: tricep
27. bicep door stretch: bicep
28. neck stretch: trapezius, neck
29. trapezius stretch: trapezius
30. piriformis stretch: piriformis, gluteus
31. butterfly: adductor
32. partner adductor stretch: adductor

## Healthy Decisions

### STAR Decision-Making Process

Stop

Think

- prevent impulsive decisions

Act

Reflect

- prevent future impulsive decisions

### Various Drugs

- **Tobacco**

- #1 preventable cause of death
- active ingredient: nicotine
- thousands of carcinogens
- stimulant
- **Alcohol**
  - easy to obtain
  - active ingredient: ethanol
  - depressant
- **Marijuana**
  - active ingredient: THC
  - 2 carcinogens, thousands of times stronger than those in tobacco
  - cannabinoid
- **Prescription Drugs**
  - “pharming parties” are when teens go and exchange pharmaceuticals when they meet
- **Drug Facts**
  - Connecticut vs. National Averages
  - Males vs. Females

### **Healthy vs. Unhealthy Relationships**

should not get too physical - would be abuse

Ray Rice was not a healthy relationship

Tiger Woods made bad decisions, not healthy relationships

### **Bacterial vs. Viral STIs**

bacterial:

- chlamydia
- gonorrhea
- syphilis

viral:

- HIV
- HPV
- hepatitis (B)
- herpes

### **Preventative Techniques**

- condoms
- lubricants
- universal precautions