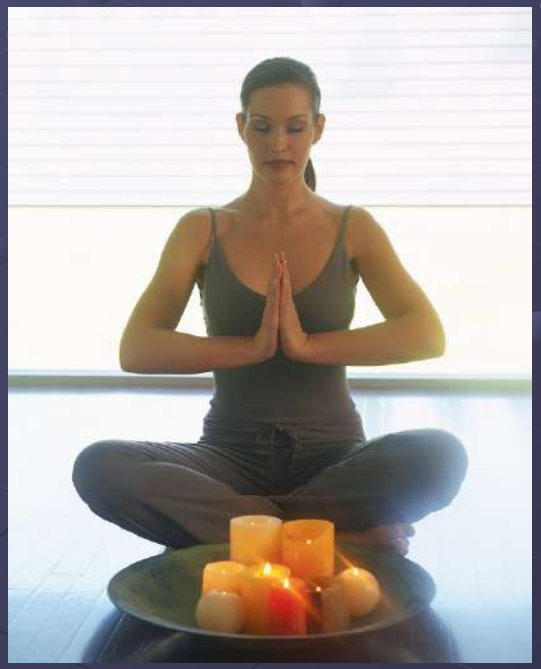
Physical Fitness for Life



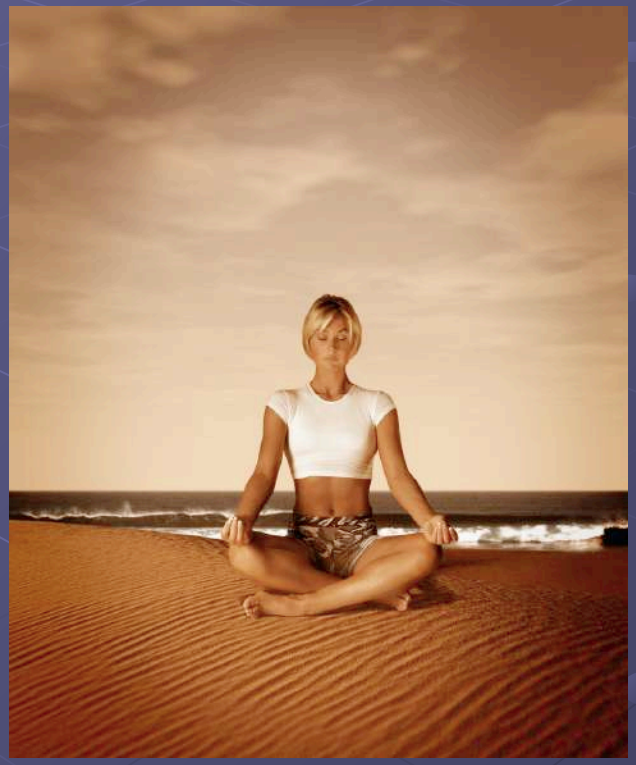
Benefits of Being Physically Active

Physical Benefits

- Heart and lungs get stronger, increases circulation.
- Lowers blood cholesterol levels.
- Strength and flexibility training makes muscles more efficient and protects against injuries
- Increases muscle to fat ratio in body.
- Increases digestive metabolism
- Burn more calories because muscle uses more calories than fat.
- Feel better, have more energy.

Benefits of Being Physically Active

Mental Benefits



- Reduces anxiety, allows you to feel calmer.
- Manage stress
- Reduces depression.
- Increases self-confidence.
- Improves self-image.
- Increases the ability to focus and learn better
- Better sleep

Benefits of Being Physically Active

Social Benefits

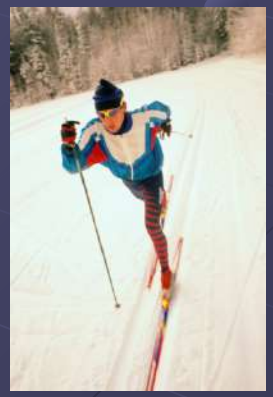
- Increased self-esteem (because of exercising) allows you to have more self confidence in meeting new people.
- Engaging in physical activity is an opportunity to socialize with others who have the same interests.
- Allows you to work together on a team.
- Develops your communication skills.

Five Components of Health-Related Fitness

Muscular Strength

Muscular Endurance

Cardiorespiratory Endurance



Flexibility

Body Composition

Muscular Strength

The amount of force that a muscle can apply in a given contraction.

Activities requiring muscular strength – weight lifting, climbing stairs, moving furniture, carrying your backpack.

Weight training (resistance training) builds muscle fibers, making them stronger.

Muscle Endurance

Ability of the muscles to keep working (contract) over a period of time without becoming overly fatigued.

Examples of activities requiring muscle endurance – swimming, running, lifting and carrying boxes.

Cardiorespiratory Endurance

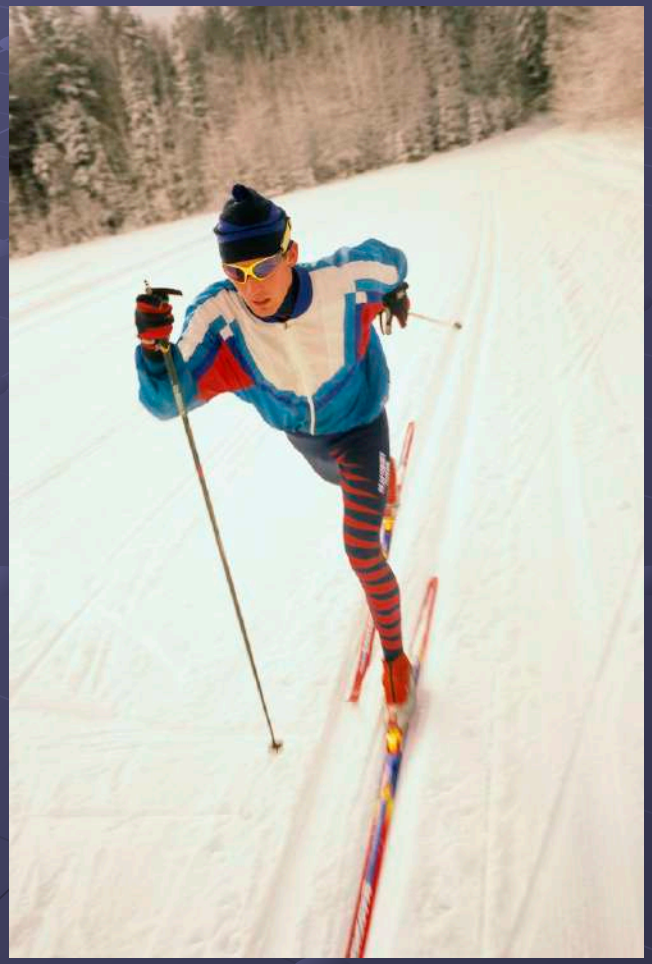
Ability of heart, blood vessels, lungs and blood to deliver oxygen and nutrients to all parts of body.

Increased cardiorespiratory endurance allows you to engage in an “aerobic” activity over a period of time.

Is the single most important component of health-related fitness.

Increases strength of heart, making it work less (heart beats slower).

Examples of activities requiring an build cardiorespiratory fitness – swimming, running, cycling, cross-country skiing, dancing. ** Any activity that will increase your heart rate to the “target heart rate zone.”*



Flexibility

- Ability of the joints to move through their full range of motion.
- Strong and healthy ligaments and tendons allows greater flexibility at joints.
- Full-range of motion type activities maintain flexibility of joints and muscles.
- Flexible joints prevents stiffness as we age.

Body Composition

Recipe for improving body composition:

Cardio Exercise + Strength Exercise + Healthy Diet = Improved Body Composition

(Cardio exercise burns fat. Muscle strength exercises builds muscle.)

- Refers to the ratio of lean body tissue (muscle and bone) to body fat tissue.
- Healthy body has high lean body mass to fat ratio.
- Woman naturally have more fat than men.
- Muscle tissue burns more calories than fat tissue.
- Fat tissue is necessary for warmth and protection.
- Too much fat tissue increases the risk of diseases such as heart disease and diabetes.
- Being over weight (overly fat) puts unnecessary stress on joints.

Planning Your Fitness Program

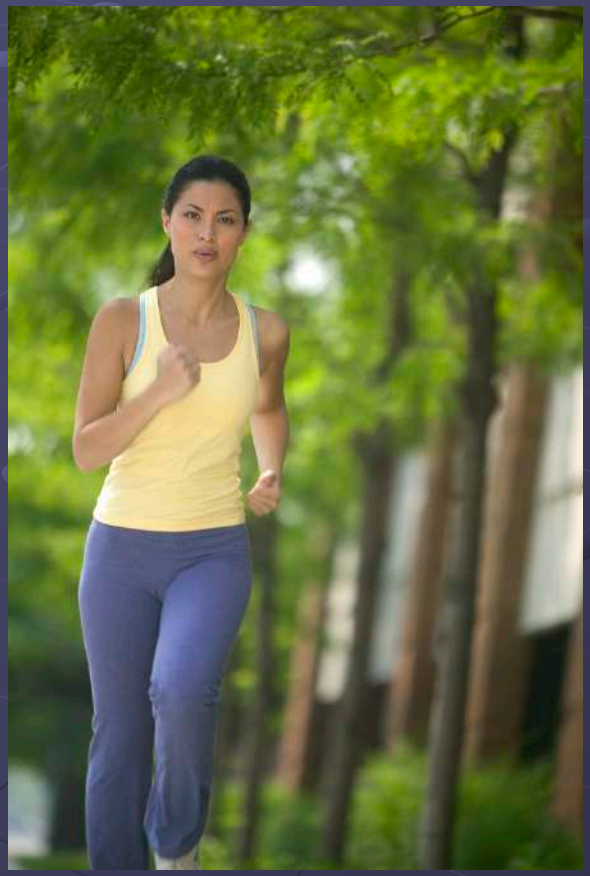
Before you start, ask yourself . . .

If you have any health concerns, consider talking to your doctor before you begin your fitness program.

Are you healthy? You may want to get a physical exam first.

Decide what types of activities you like to do. (Your are less likely to quit if you like what you do).

How much does the activity cost? (Can you afford the membership, equipment, etc.)?



Designing Your Fitness Program

A good fitness program should include all of the following:

Determine Your Resting Heart Rate (RHR)

Calculate Your Target Heart Rate Zone

Assess Your Fitness Level

Set Your Fitness Goals

Keep Track of Your Progress

Getting FITT

Four important parts of fitness training include:

F – *frequency* (how often)
I - *intensity* (how hard)
T – *time* (how long)
T – *type* (kind or type of activity)

For exercise to be effective (to see results), it must be a specific type of activity that is done enough times per week, and it must be done hard enough and long enough.

Developing Your Cardiorespiratory Endurance (guidelines)

Frequency – Exercise must be performed 3-5 times a week.

Intensity – Measured as % of your maximum heart rate (MHR). If training at 85% of MHR less time - 20 minutes per day. If training at 50-60% of MHR, 60 minutes per day.

Time – 20 – 60 minutes per day (depending o intensity).

Type – Any aerobic activity that keeps heart rat within your target rate zone.

Developing Muscle Strength and Muscle Endurance (guidelines)

Frequency – Weight (resistance) train 2 – 3 times per week for each muscle group.

Intensity – Select a weight you can safely lift at least 8 X, but no more than 12 X. Do 1-3 sets of 8-12 repetitions of all major muscle groups. (May rotate during week).

Time – About 30 – 60 minutes each session.

Type – Weight lifting, sit-ups, chin-ups, any resistance-type activity.

Increasing Flexibility (guidelines)

Frequency – 3 – 5 days a week. *(For best results, stretch daily).*

Intensity – Stretch muscles, and hold 15-30 sec. Repeat 3-5 X.

Time – 15 – 30 minutes per session.

Type – All body parts but emphasis may depend on muscles used in cardio activity to prevent injury. Yoga, Tai-Chi, Pilates.

Fitness Plan Example

MONDAY

Cardio *Strength* *Flexibility*

F (M, W, F, Sat)X Mon. – Sat
(frequency)

I 60% of MHRX all muscles
(intensity) hold 15 sec.

T 60 minX 15 min.
(time)

T joggingX stretching on mat
(type)

Fitness Plan Example

Tuesday

	Cardio	*Strength*	*Flexibility*
	(Tue, Thur, Sun)		
F	X 2-3 x per wk.		6 x per wk.
I	X 3 sets, 12 repsall muscles		
hold 15 sec.			
T	X45 min.20 min.		
T	X weight trainingon mat		
		(upper body, core)	

Determining Your Resting Heart Rate (RHR)

Significance of Resting Heart Rate and fitness:

- As cardiorespitory fitness increases, RHR will go down.
- As cardiorespitory fitness increases, recovery rate (time) will drop faster.

Ideally RHR should be taken first thing in morning ***before*** getting out of bed.

RHR should be taken when you are very relaxed.

Take pulse in your neck with fingers – not thumb.

Count the total number of beats in 60 seconds.

(Average RHR for teens ages 13-19 is 50-90 bpm beats per minute).

Calculating Your Target Heart Rate Zone

Your target heart rate zone is the range which your heart must beat in order to gain the maximum cardiorespiratory health benefits from exercise.

Your target heart rate zone is normally between 60 and 85 percent of your maximum heart rate.

Your maximum heart rate (MHR) is the maximum number of times your heart should beat per minute while doing any physical activity.

Calculating Your Maximum Heart Rate

Determine your MHR by subtracting your age from 220.

Example: 220 – 15 = 205 bpm

220 – 14 = 206 bpm

220 - 13 = 207 bpm

Calculating your Target Heart Rate Zone

Multiply your MHR by 60 percent (0.6) and 85 percent (0.85) to calculate your target heart rate zone.

Example: 205 X .6 0 = 123 bpm

205 X .85 = 174 bpm

(bpm for person age 15)

How to build and maintain cardiorespiratory fitness:

- Exercise (move) non-stop 15-30 minutes or more
- Exercise no less than 3x per week
- Activity must raise and keep heart rate between 123 bpm and 174 bpm

Section 3: Exercising the Safe Way

Most common sport injuries involve injuries to muscles, tendons, ligaments, bones

Acute – sudden onset, injury (pain) happens immediately

Chronic – injury has gradual onset, long-term effects

Both may require medical attention

Avoiding Sport Injuries

Get Conditioned – get in shape before you begin sport training

Warm Up, Cool Down – increases blood flow, heart rate, decreases next day stiffness

Stretch – important

part of warm up and

cool down

Avoiding Sport Injuries, cont . . .

Avoid Dehydration – drink water before, during, after training (stop activity if dehydrated – lightheaded, weak, muscle spasms.

Avoid Overtraining – avoid too hard, too fast, too long – give proper rest to body

Avoid Overuse Injuries – repetitive activity stresses bones, muscles, tendons or muscles

Fitness Tips:

Set realistic goals

Choose activities you enjoy

Start out slow, build a strong base

Listen to your body – don't over do it

Eat healthful diet – fruit, vegetables, grains, seeds, nuts, water

Avoid drugs, dietary supplements

Rest, rest, rest

If not having fun, find another physical activity you enjoy

Have fun!