

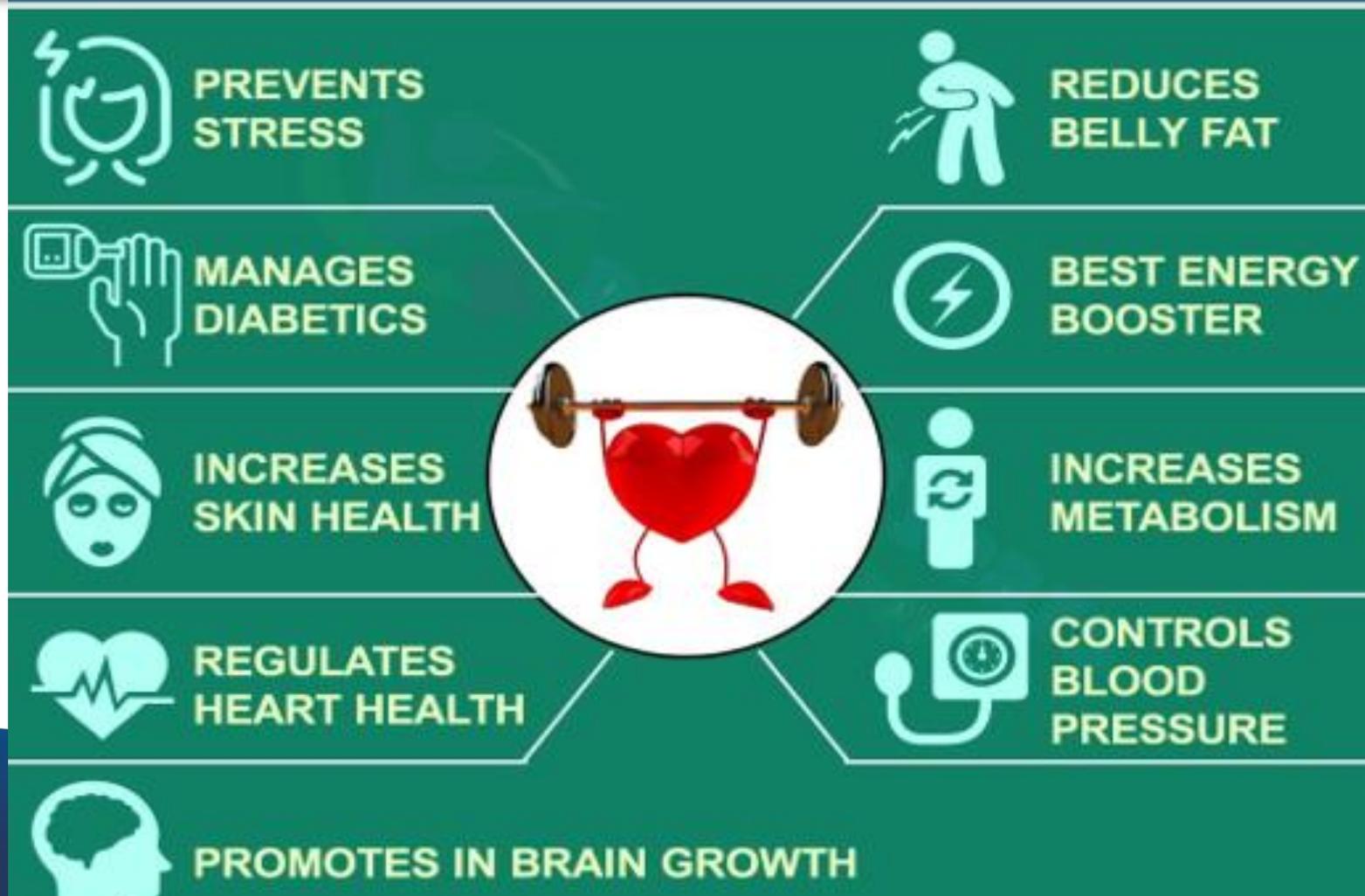
Integrative Health Center Optimal Health Class Series

MEETING # 3 –PHYSICAL ACTIVITY, EXERCISE & STRESS



Benefits of Exercise

- ✓ Helps mental health, cognitive function, sleep quality
- ✓ Cancer prevention, immune function, lowers BP
- ✓ Extends lifespan



COMPONENTS OF FITNESS FOR HEALTH



CARDIORESPIRATORY ENDURANCE

Our ability to perform an activity, with our heart rate elevated, for a certain amount of time.



MUSCULAR STRENGTH

Our ability to exert force during an activity.



FLEXIBILITY/MOBILITY

The range of motion around our joints.



MUSCULAR ENDURANCE

The ability of our muscles to continue to perform an activity without fatiguing.



BODY COMPOSITION

The amount of body fat, muscle, bone and other tissues that make up our body.

How much exercise is recommended?



Adults need a mix of physical activity to stay healthy.

Moderate-intensity aerobic activity*

Anything that gets your heart beating faster counts.

at least
150
minutes
a week

AND

Muscle-strengthening activity

Do activities that make your muscles work harder than usual.

at least
2
days
a week



* If you prefer vigorous-intensity aerobic activity (like running), aim for at least 75 minutes a week.

If that's more than you can do right now, **do what you can.** Even 5 minutes of physical activity has real health benefits.

Walk. Run. Dance. Play. **What's your move?**



What is optimal exercise?

Walking 60 minutes/week reduces mortality 3 %

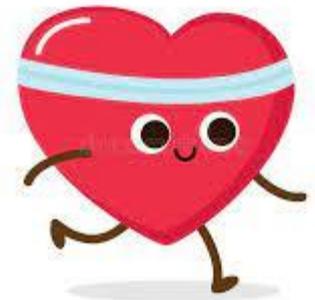
Walking 150 minutes/week reduces overall mortality by 7% (compared with being sedentary)

Walking 300 minutes/ week (42 minutes per day) reduces mortality by 14%--twice the benefit!

Walking 420 minutes /week (60 minutes per day) drops mortality by 24%.

90 minutes per day? ...Better still.

More than 90 minutes? Not enough data.



...Do steps per minute change benefits of exercise?

Observation study of 4840 healthy adults over 40, for 10 years.

- Those who walked more than 12,000 steps per day had 35% of the mortality of those who walked less than 4,000 steps per day.
- Speed (Number of steps per minute) did not significantly lower mortality.

Take away

- Any exercise is good. More is better.
- Walking or equivalent vigorous activity (biking, gardening, kayaking, etc) at 90 minutes per day is optimal.

More on cardio...



In summary...



Goal	Time per Week	Type of Activity
 For good health	2 hours and 30 minutes	Moderate-intensity aerobic activity (i.e. brisk walking) every week and muscle-strengthening activities at least 2 days a week that work all major muscle groups*
	OR	
 For even better health or more weight loss	1 hour and 15 minutes	Vigorous intensity aerobic activity (i.e. jogging or running) every week and muscle-strengthening activities at least 2 days a week that work all major muscle groups*
	OR	
 For even better health or more weight loss	5 hours	Moderate-intensity aerobic activity (i.e. brisk walking) every week and muscle-strengthening activities at least 2 days a week that work all major muscle groups*
	OR	
 For even better health or more weight loss	2 hours and 30 minutes	Vigorous intensity aerobic activity (i.e. jogging or running) every week and muscle-strengthening activities at least 2 days a week that work all major muscle groups*
	OR	

* All major muscle groups includes legs, hips, back, abdomen, chest, shoulders and arms.

Muscular Strength & Endurance

Recommendations:

Muscle-strengthening physical activity at least 2 days a week for adults.

→ Exercises should aim to reach all major muscle groups and be of moderate or high intensity.

Muscular Strength:

Muscular strength is the amount of force you can put out or the amount of weight you can lift.

→ Resistance training, weights, body weight exercises, bands

Muscular Endurance:

Muscular endurance is how many times you can move that weight without getting exhausted.

→ Increasing number of repetitions, length of time

Benefits:

Increases Bone Density.

Improves Body Composition. Increases Metabolism.

Improves Physical Fitness. Prevents Injury.

Balance, Flexibility & Stretching

Flexibility

Allows full range of motion (ROM) around a joint

- Prevents imbalances ,improves muscular efficiency
- Protects against overuse and injury, improves posture

Stretching

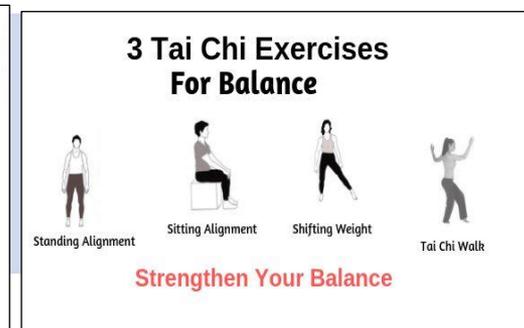
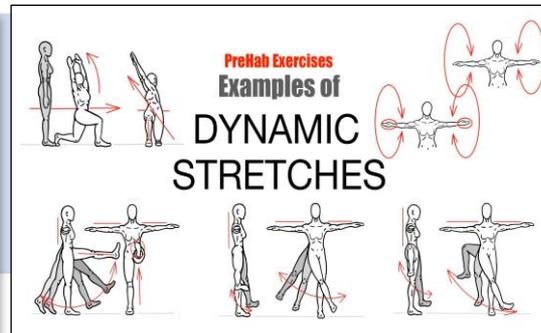
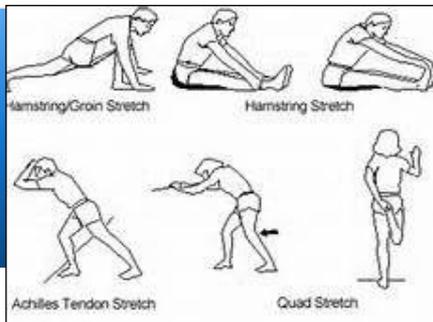
1. Static: 20 seconds or more; low force & long duration
2. Active Isolated:1-2 sec., 5-10 repetitions
3. Dynamic: 3-10 seconds, 10 repetitions

Balance

Improves dynamic joint stabilization

- Enhances performance & recovery, prevents injury
- Prevents falls & improves posture & coordination

Examples:



Can we over exercise?



Over training will cause impaired mitochondrial function and decreased performance.

- With extreme exercise “powerhouse” function, glucose tolerance & performance declined
- Exercises need to vary for age and injuries



Physical activity for adults and older adults

- | | | | |
|----------------------------|------------------------|----------------------------|------|
| ♥ Benefits health | Reduces your chance of | Type II Diabetes | -40% |
| ZZ Improves sleep | | Cardiovascular disease | -35% |
| ✉ Maintains healthy weight | | Falls, depression etc. | -30% |
| 🧠 Manages stress | | Joint and back pain | -25% |
| 😊 Improves quality of life | | Cancers (colon and breast) | -20% |

Some is good, more is better Make a start today: it's never too late Every minute counts

Be active

at least **150** minutes moderate intensity per week
increased breathing able to talk

OR

at least **75** minutes vigorous intensity per week
breathing fast difficulty talking

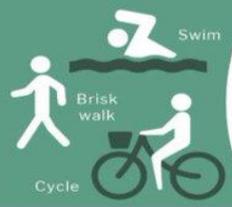
or a combination of both

to keep muscles, bones and joints strong

Build strength

on at least **2** days a week

Gym Yoga Carry heavy bags



Minimise sedentary time

Break up periods of inactivity



Bowls Tai Chi

Dance

For older adults, to reduce the chance of frailty and falls

Improve balance

2 days a week

UK Chief Medical Officers' Physical Activity Guidelines 2019



Metabolism & Weight Loss



BMR: Basal Metabolic Rate
=depends on height weights,
muscle mass

1 Lb. muscle=burns 7-10 calories
1Lb. fat= burns 2-3 calories

In general... to burn 1# fat one
needs to have a 3500 calorie
deficit (this is – 500 calories/day)

Starvation/low calorie diets can
affect your mitochondria (power/
metabolism)

Exercise Resources



Local Resources:

YMCA, cardiac rehab,
Planet Fitness, Anytime
Fitness, Superior Athletic

Walking/ Groups:

Rogue Valley Hikers,
MeetUp.org

Local Trails:

Bear Creek/ Rogue
River Greenway,
Table Rock, Lithia
Park, your
neighborhood

Web Resources:

YouTube, MyPlate,
Les Mills, AARP

... RCH and each
other??

Medford YMCA

12 WEEKS TO A HEALTHIER YOU

- Free to JCC patients with a Provider referral
 - Referral pads from JCC
- Wellness sessions, nutrition, personal training & workouts
- Classes are via Zoom
- Work-outs and personal training is at the Y
- Currently 24 people are allowed in the Y at one time.

Membership

- 1/3 of the usual rate for JCC patients (\$13 per month for 1 person)
- Special rates for Silver and Fit Medicare participants (not all Medicare Advantage Plans or Supplements participate)
 - Also available at the Ashland YMCA
 - <https://www.silverandfit.com/> to check eligibility

