NEED OF
EXERCISE
FOR
HEALTHY
LIFE



Give you more energy



Give you more energy



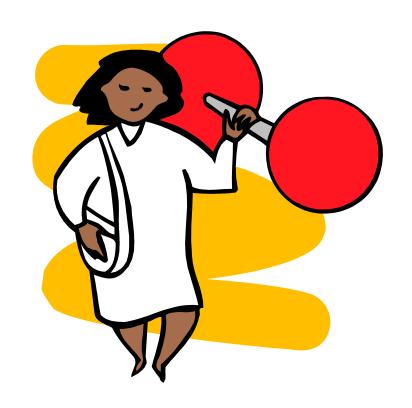
Help you lose weight and keep it off



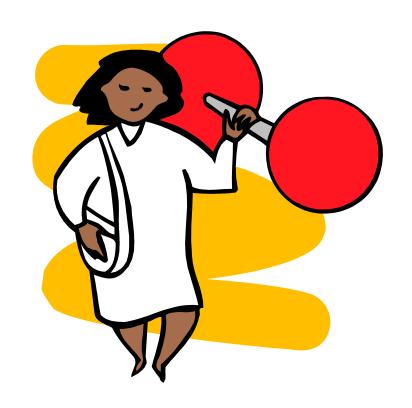
- Increase flexibility and strength
- Slow bone loss
- Provide better quality of life



■Build muscle



■Build muscle



- Lift your mood
- Treat depression



Reduce stress and anxiety



Improve blood glucose control

(lowers A1C)



## Exercise have effect on..

- > Cardiovascular system
- ➤ Muscular & Skeletal System
- > Respiratory system
- ➤ Nervous System
- **≻**Endocrine System

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## Benefits Of Moderate Exercise And Diabetes

- Benefits Of Exercise
- 1) Weight Loss
- 2) Lower Blood Pressure
- 3) Reduce Risk for Heart Disease
- 4) Improve Cholesterol Ratios
- 5) Control Blood Sugar
- 6) Reduce Back and Joint Pain
- 7) Improve Balance
- 8) Reduce Medications
- 9) Increase Self Confidence
- 10) Reduce Risk For Fall



## Physical Activity is Important

Wondering why physical activity is so important?

Regular activity is a key part of managing diabetes along with proper meal planning, taking medications as prescribed, and stress management.

When you are active, your cells become more sensitive to insulin so it can work more efficiently. Your cells also remove glucose from the blood using a mechanism totally separate from insulin during exercise.

So, exercising consistently can lower blood glucose and improve your A1C. When you lower your A1C, you may be able to take fewer diabetes pills or less insulin.

Physical activity is also important for your overall well being, and can help with many other health conditions.

### Benefits of Regular physical activity

Lowers blood pressure and cholesterol

Lowers your risk for heart disease and stroke

Burns calories to help you lose or maintain weight

Increases your energy for daily activities

Helps you sleep better

Relieves stress

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# Benefits of Regular physical activity

Strengthens your heart and improves your blood circulation

Strengthens your muscles and bones

Keeps your joints flexible

Improves your balance to prevent falls

Reduces symptoms of depression and improves quality of life

In patients with type 2 diabetes, physical activity may improve insulin sensitivity and assist in diminishing elevated blood glucose levels into the normal range.

### How to make exercise a lifetime activity

Pick activity that is enjoyable and uses most muscles

Vary duration, intensity

Group classes

Music

Walk the dog!

Set goals—health, appearance, cholesterol

Transient effect (about 72 hrs) so requires regular activity

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## Forms of Exercises

- **Aerobic Exercises**
- Strengthening Exercises
- Stretching/Resistance
  Exercises
- Relaxation Exercises
- Mobility Exercises

## Aerobic Activity

- Walking briskly
- Bicycling
- Jogging/running
- Stair climbing
- Swimming
- Water exercise

#### Resistance Activities

☐ Increase muscle strength

□ Prevent falls

☐ Increase mobility

☐ Improve blood glucose control



## Stretching

- Improves your balance and coordination
- Makes you more flexible
- Reduces stiffness
- Reduces your risk of injury



## How Can You Begin?

Choose activity (example: brisk walking)

Set a long-term goal - at least 30 minutes a day, 3-5 days a week

Buy comfortable walking shoes

- Get a partner
- Set short-term goal for one week



## Gradually Increase Activity

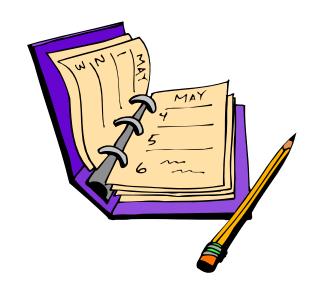
#### **Beginning Exercisers:**

First Week - 3 times a week

■ Morning: Walk 5-10 minutes

Lunch: Walk 5-10 minutes

After dinner: Walk 5-10 minutes



Keep track of how long and how far you walk each day

## **Keep Track of Your Steps**

#### Use a pedometer

- Keep track of how many steps you normally take in a day for one week
- Gradually add 500-1,000 steps a day
- Set a goal of at least 3,000 to
  - 4,000 steps more than your baseline



## Vary Your Activities

Monday	Tuesday	Wed	Thursday	Friday
Walk	Swim/ Water Aerobics	Walk	Swim/ Water Aerobics	Walk
Monday	Tuesday	Wed	Thursday	Friday

Exercise

Dance class

Exercise

Dance Class

Exercise Bike

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Exercise

Dance class

Exercise

Dance Class

Exercise Bike

## Reward Yourself

- Use non-food rewards for reaching goals such as:
  - New book
  - ☐ Ticket to a movie
  - □ New clothes or walking shoes
  - ☐ Get-away weekend



#### Time to be utilized

Mild
 20 to 30 minutes

Moderate 30 to 60 minutes

High Over 60 minutes

## **Exercising With Diabetes Complications**

- If you have diabetes complications:
  - An exercise stress test is recommended
  - □ Don't consider diabetes a barrier to exercise
    - Most moderate lifestyle activities are safe
    - Some activities may need to be modified

## **Exercising With Diabetes Complications**

- If you have diabetes complications:
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  - Don't consider diabetes a barrier to exercise
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### **Exercising With Heart Disease**

#### **Caution:**

- Very strenuous activity
- Heavy lifting or straining
- Exercise in extreme cold or heat

#### **Choose:**

Moderate activity such as walking, swimming, biking, gardening

Moderate lifting, stretching

## **Exercising with Hypertension** (high blood pressure)

#### Caution

- Very strenuous activity
- Heavy lifting or straining

#### Choose

Moderate activity like:

walking

weight lifting with light weights

stretching

Make sure your blood pressure is in control first

## Exercising with Retinopathy (eye disease)



#### **Caution**

- Strenuous exercise
- Heavy lifting and straining
- High-impact aerobics, jogging
- Bending your head below your waist – toe touching

#### Choose

Moderate, low-impact activities:

walking

cycling

water exercise

Moderate daily chores that don't require lifting or bending your head below your waist

Exercising with Nephropathy (kidney disease)

#### **Caution**

Strenuous activity

#### Choose

Light to moderate activity like walking, light housework, gardening, water exercise

# Exercising with Neuropathy (nerve disease)

#### **Caution**

- Weight-bearing, high impact, strenuous, or prolonged exercise:
  - □jogging/running
  - □ step exercise
  - jumping
  - exercise in heat/cold

Choose

Low impact, moderate activities:

biking

swimming

chair exercises

stretching

light to moderate daily activities

Check feet after exercise

### **Exercise Safely**

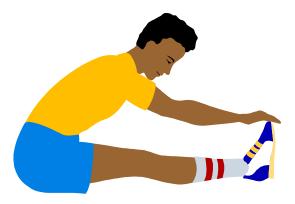
- Check your blood glucose before and after exercise
- Don't exercise if your blood glucose is too high or too low
- Carry carbohydrate to treat low blood glucose if you are at risk

## **Exercise Safely**

- Stop exercising if you feel pain, lightheaded, or short of breath
- Avoid strenuous activity in extremely hot, humid, or cold weather
- Wear proper shoes for the activity to reduce the risk of injury

# **Exercise Safely**

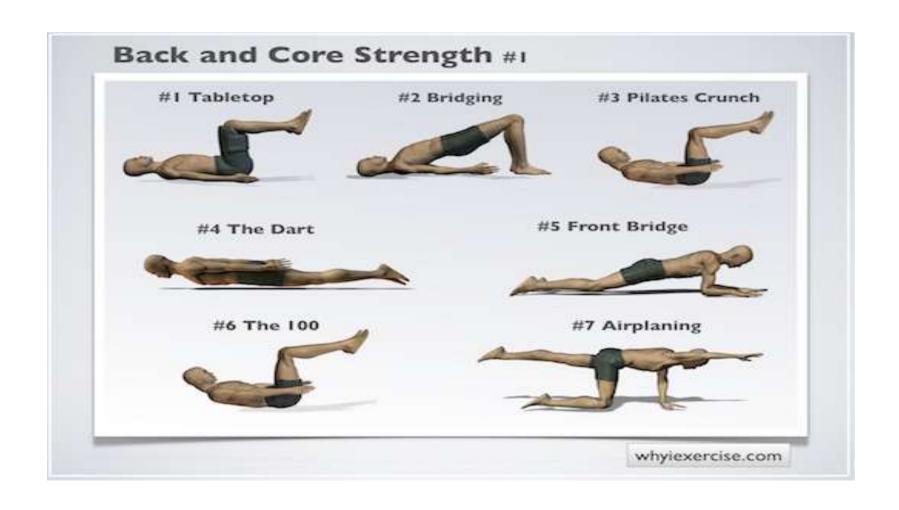
- Wear diabetes identification
- Include warm-up and cool-down sessions
- Drink plenty of fluid



### Stretching/Resistance Exercises



# Strengthening Exercises



# **Mobility Exercises**



**Neck Rotation** 





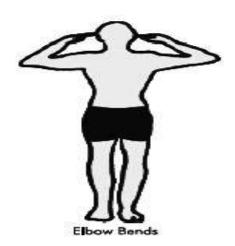
Waist Rotation



Shoulder Rotation



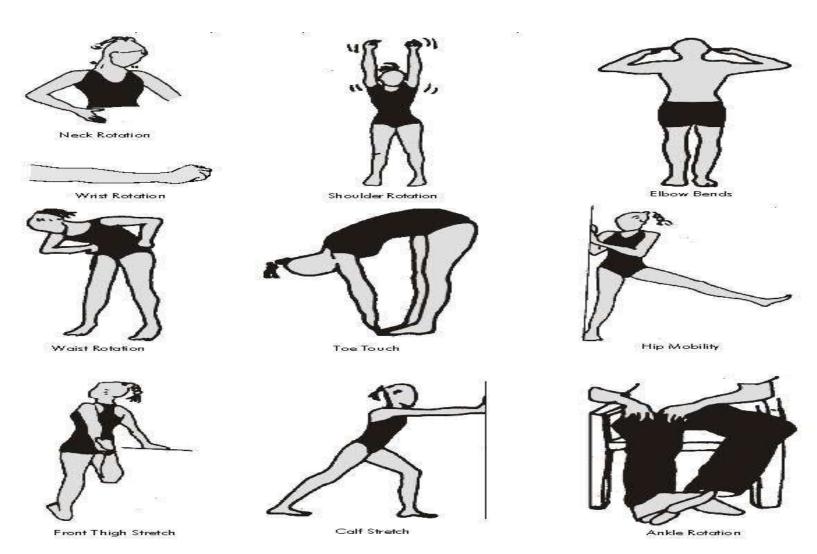
Front Thigh Stretch





Toe Touch

# **Mobility Exercises**



### **Cardio Exercises**

**Cycling** 

**Treadmill** 





# Aerobic exercises

Running

Walking





### **SWIMMING**

### **CYCLING**



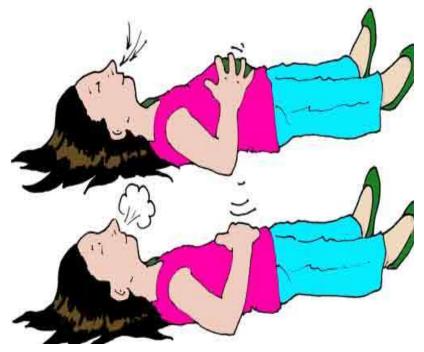


### **Relaxation Exercises**

YOGA

Deep breathing







"Don't Exercise after you are diagnosed with some problem.. Exercise daily to prevent the problem.."



