

Calvary Lutheran Seniors

Exercise and Activity in the time of COVID-19

Ken Johnson, PT
Indiana Physical Therapy
7855 South Emerson Ave., Suite W
317-889-5340

Exercise IS Medicine

Emotional Impact of Exercise

- Positive effect on stress, anxiety, and depression
- Improves sleep quality and energy levels during the day

Physical: Prevention of Disease

- Reduce risk of cardiovascular illness
- Delay onset or prevent osteoporosis (↓ fracture risk)

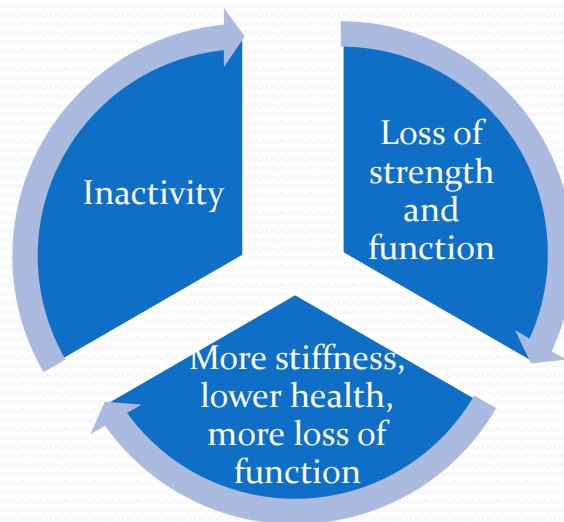
Physical: Avoid the “sick cycle”

- Cascade of disability related to gradual loss of health

Exercise IS Medicine

“Sick Cycle”

- Inactivity leads to decreased blood flow, loss of strength, and loss of function
- Loss of function leads to more inactivity which causes more stiffness, lower overall health, and more loss of function

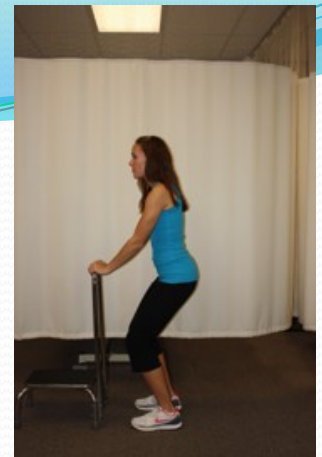


Objectives of Exercise

- Improve strength
 - Large muscle groups
 - Multiple muscle groups at one time
 - Build endurance with strengthening
 - Improves getting up from a chair, going up stairs, carrying groceries or objects around the house
- Improve balance
 - Safety first
 - Gradually challenge yourself
 - Reduces fall risk which is a major source of injuries in people over 65 years old
- Improve mobility/endurance
 - Walking
 - Short bursts of higher speed
 - Speed of walking is a factor for fall risk and injury

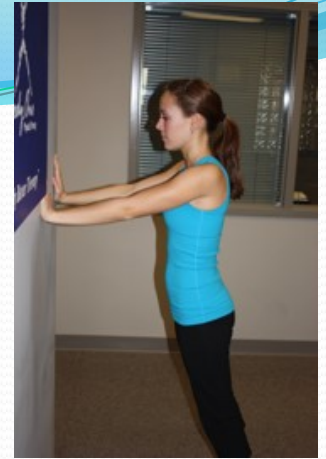
Strength

- Sit to stand with arm raise
 - Reach overhead with both arms or stretch to the side each time you stand up
 - Start: 2-3 sets of 10 repetitions or do for time (30 seconds to 1 minute)
 - Increase intensity:
 - 2-3 sets of 15-20 repetitions
 - Hold weight in each hand for the overhead reach
 - Longer time (>1 minute)
 - How many can you do in a given amount of time?
 - 10 repetitions in 30 seconds? See if you can do more next week.
 - Lower the seat you are getting up from



Strength

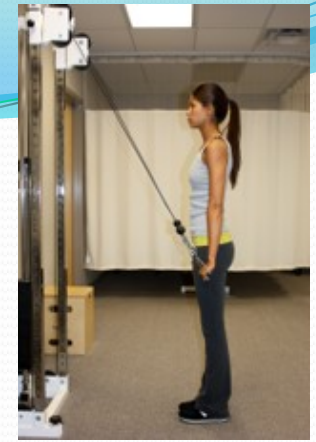
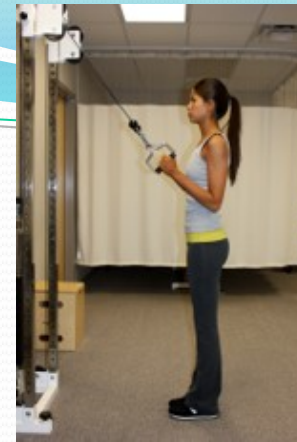
- Push-ups
 - Standing at a wall
 - Start: 2-3 sets of 10 repetitions or do for time
 - Increase intensity:
 - 2-3 sets of 15-20 repetitions
 - Increase time
 - Lower the surface you are using
 - Transition from a wall to a counter or back of a couch down to the floor if possible



<https://youtu.be/XRrjOLuv9II>

Strength

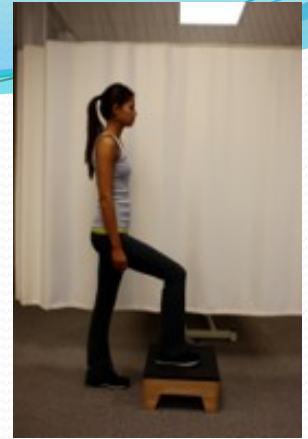
- Rowing with elastic bands
 - High position row
 - High position straight-arm pull down to your sides
 - Start: 2-3 sets of 10 repetitions or perform 10 repetitions and hold the “end position” for time (10 seconds)
 - Increase intensity:
 - 2-3 sets of 15-20 repetitions
 - Increase hold time



<https://youtu.be/vWxNb8bAjq8>

Strength

- Stair climbing
 - Single step (ie. step stool) or staircase at home
 - Start: 2-3 sets of 10 repetitions or do for time
 - Increase intensity:
 - 2-3 sets of 15-20 repetitions
 - Increase time going up and down staircase
 - How many stairs can you climb in a given amount of time?
 - See if you can do more next week.



<https://youtu.be/RFJb2FVc17M>

Strength

- Lifting
 - Proper “straight back” position while keeping your core engaged
 - Weight
 - Empty laundry basket; gradually add clothes to add weight
 - Full ½ gallon (~4 pounds) or full 1-gallon (~8 pounds) jugs
 - Start:
 - High surface which requires little bend forward
 - Manageable weight (What are typical things you have to lift on a daily basis?)
 - 1-2 sets of 10 repetitions or do for time
 - Increase intensity:
 - Lower the surface you are lifting from
 - Increase the weight you are using

<https://youtu.be/kUsUYLYHnXA>

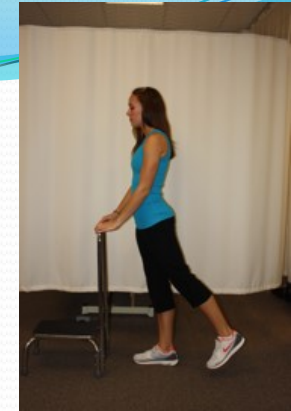
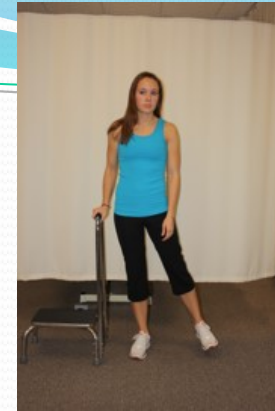
Strength

- Carrying
 - Keep your core engaged while carrying
 - Weight
 - Empty laundry basket; gradually add clothes to add weight
 - ½ gallon (~4 pounds) and 1-gallon (~8 pounds) jugs
 - Start:
 - Manageable weight (What are typical things you have to carry on a daily basis?)
 - Time or distance
 - Increase intensity:
 - Increase the weight you are using
 - Increase the time you carry or distance you carry

<https://youtu.be/DokUttvqqkc>

Balance

- Standing on one leg
 - Marching
 - Side kicks
 - Back kicks
- Start: perform each movement for a given amount of time (10-30 seconds)
- Modifications
 - Finger-tip touch and/or touch the foot down with each step
 - Hover over the surface and touch only when needed
 - Don't touch with your hands or foot during entire set



https://youtu.be/WPk_I6jdvQ

Flexibility and Mobility

- Prayer stretch (Child's pose)
 - 10 times, hold 10 seconds
- Prone press-up (Cobra)
 - 10 times, hold 5-10 seconds
- Lying back rotation stretch
 - 5-10 times each direction, hold 10 seconds
- Hamstring stretch
 - 5 times, hold each 10-15 seconds



<https://youtu.be/jmIH6BN0auc>

Endurance

- See “Increase intensity” recommendations above
 - Performing longer periods of time for Sit to stand or Stair climbing
 - Challenge yourself for repetitions in a given amount of time on Sit to stand or Stair climbing
 - How many can you do in 30 seconds or a minute?
 - This is a great way to show progress over a few weeks.
 - Carry weight for longer periods of time

Endurance

- Walking is a great endurance-building activity
 - Time and pace are factors that can be modified
 - Outside when it is safe and weather permits
 - You can socialize with others and exercise together when outside
 - Time is easier to track than distance
 - Inside your house
 - Laps if you have an area to do this
 - Time
 - Can be part of an exercise cycle

Exercise Cycle

Every Minute On the Minute (EMOM)

- Choose one strength, one balance, one stretch, and one endurance activity to perform for 1 minute each.
- Set a timer for 1 minute and perform each exercise for the full minute
- Cycle through the exercises 3-5 times which amounts to 12-20 minutes (4 exercises for 1 minute each, $3x = 12$ minutes, $5x = 20$ minutes)
- You can mix and match different exercises each cycle or different exercises each day to address multiple muscle groups over the course of time.

Example EMOM

- Cycle 1 = 4 minutes
 - Strength = sit to stand for 1 minute
 - Balance = marching 30 sec on one leg, 30 sec on the other leg
 - Stretch = Prayer stretch
 - Hold down position for 10 sec
 - Come back up for 5 sec
 - Repeat for 1 minute
 - Endurance = walk around your house for 1 minute

<https://youtu.be/SULIY1S6GsY>

Example EMOM

- Cycle 2 = 4 minutes (total 8 minutes)
 - Strength = rowing with elastic for 1 minute
 - Balance = side kicks 30 sec on one leg, 30 sec on the other leg
 - Stretch = Rotation stretch
 - Rotate one direction for 10 sec
 - Rotation other direction for 10 sec
 - Repeat back and forth for 1 minute
 - Endurance = carry appropriate weight around your house for 1 minute

Example EMOM

- Cycle 3 = 4 minutes (total 12 minutes)
 - Strength = stair climbing for 1 minute
 - Balance = back kicks 30 sec on one leg, 30 sec on the other leg
 - Stretch = Prone press-up stretch
 - Press into up position and hold for 10 sec
 - Come back down and rest for 5 sec
 - Repeat for 1 minute
 - Endurance = walk around your house for 1 minute

Example EMOM

- Cycle 4 = 4 minutes (total 16 minutes)
 - Strength = wall push-ups for 1 minute
 - Balance = stand on one leg for 30 sec and then switch to stand on the other leg for 30 sec
 - Stretch = Hamstring stretch
 - Hold for 30 seconds on each leg
 - Endurance = walk around your house for 1 minute

Example EMOM

- Cycle 5 = 4 minutes (total 20 minutes)
 - Strength = lifting appropriate weight from appropriate surface height for 1 minute
 - Balance = stand on one leg for 30 sec and then switch to stand on the other leg for 30 sec
 - Stretch = Favorite stretch
 - Appropriate hold and relax time
 - 1 minute total
 - Endurance = walk around your house for 1 minute

Indiana Physical Therapy

- Exercise-based interventions
 - Progressive balance training activities
 - Progressive lower extremity strengthening exercises
- Recommendations and proper instruction with assistive devices such as canes and walkers
- Vestibular Rehabilitation
 - Properly evaluate and treat episodes of dizziness or vertigo (“spinning”) when changing positions or during activities

Thanks for listening!!

- Please feel free to ask me any questions regarding exercise, strengthening, balance, or Fall Prevention strategies.
- You can also contact me via email at kjohnson@indianapt.com or you can call my office at 317-889-5340 to set-up an appointment.