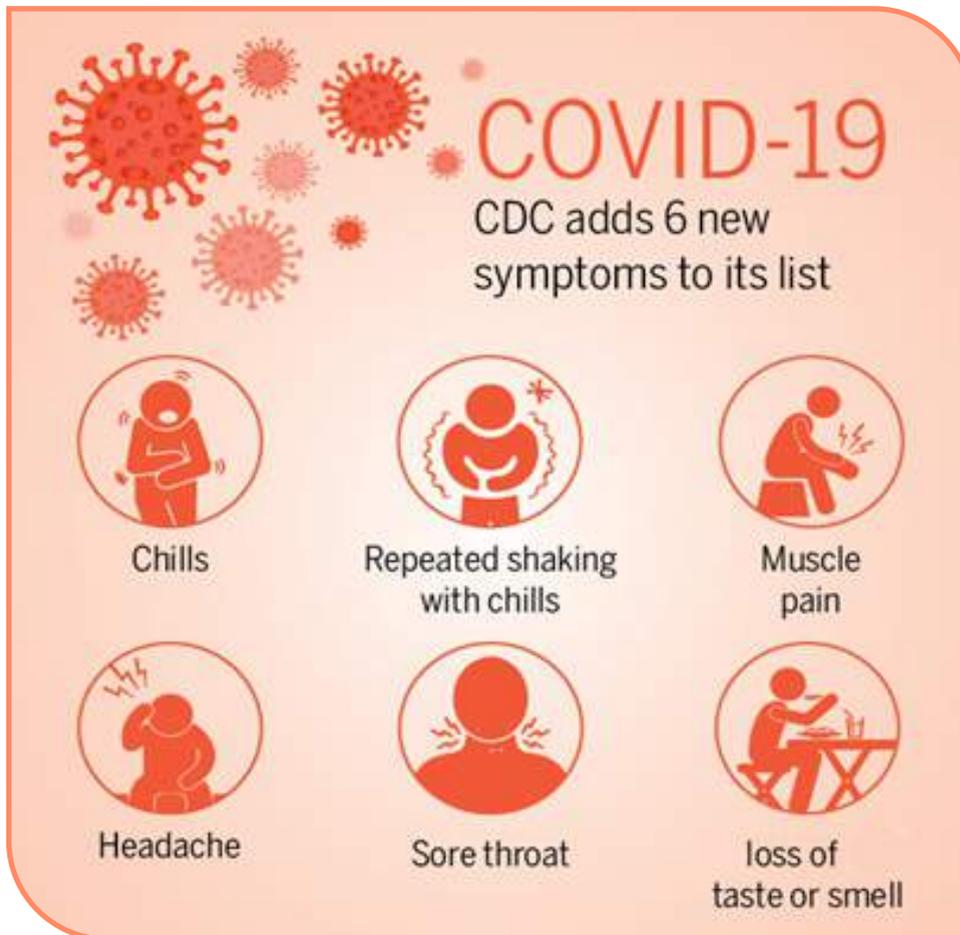


PHYSIOTHERAPY IN COVID-19

WHAT IS CORONAVIRUS (COVID-19)?

Coronavirus disease (covid-19) is caused by SARS-CoV-2. It mainly affects the lungs. It is transmitted by respiratory droplets when the infected person sneezes or coughs, by direct contact with the infected person, or contact with the contaminated objects and surfaces. The virus enters the body through nose, mouth, and eyes.

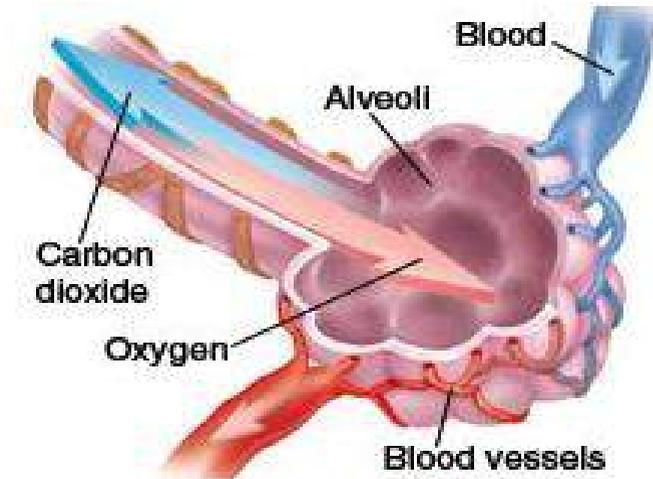
WHAT ARE THE SYMPTOMS OF COVID-19?



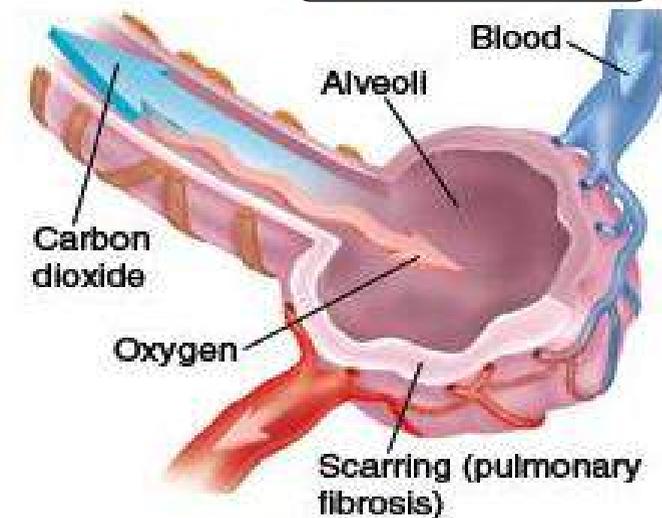
- Fever
- Fatigue
- Cough
- Sore throat
- Runny nose
- Diarrhoea
- Abdominal pain
- Vomiting
- Myalgia
- Shortness of breath
- Loss of smell and loss of taste

HOW COVID -19 AFFECTS THE LUNGS?

Corona virus affects your lungs, causing fluid to be filled in air sacs and causing fibrosis, not allowing oxygen exchange.



Normal air sac



Fibrosed air sac

HOW CAN PHYSIOTHERAPY HELP IN COVID -19 PATIENTS?



POSITIONS TO RELIEVE BREATHLESSNESS

- If you feel breathless adopt these positions:
- Fix your arms to a support so that it helps to breathe.



Sitting with leaning forward



Sitting with pillows



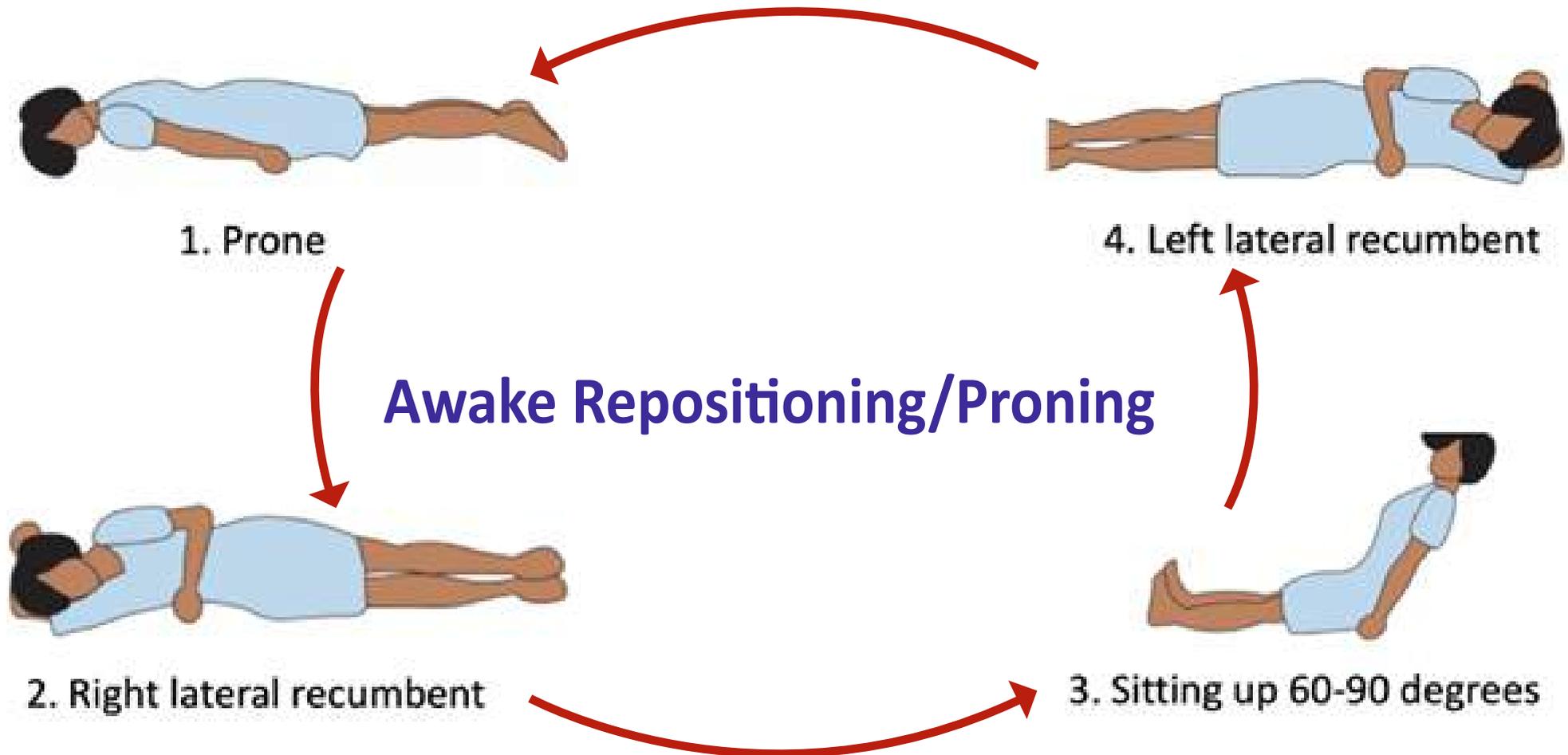
Standing with leaning forward



Standing with back support

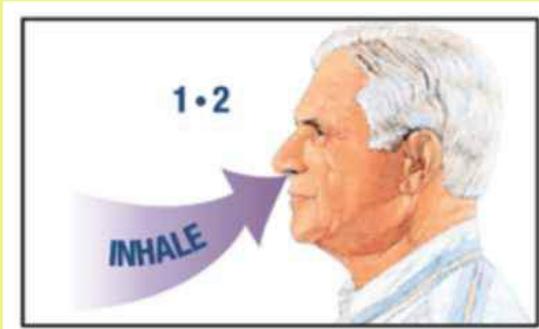
BODY POSITIONS TO HELP LUNG BREATHE BETTER:

- Maintain these positions at least for 30 mins.
- Keep changing positions.
- Sleeping on stomach helps your lungs to breathe better.
- Ask your Physiotherapist to advice the best position for you.

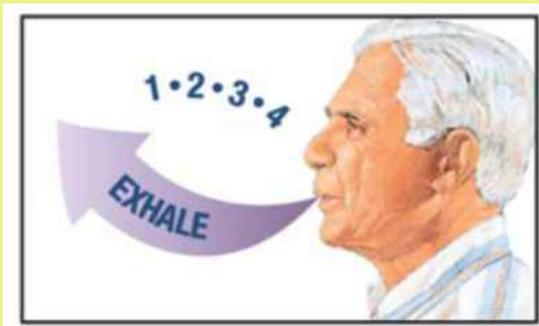


BREATHING EXERCISES TO IMPROVE AIR IN THE LUNG:

1. It is important that you breathe deep. Take slow deep breaths through your nose and breathe out through your mouth, pursing your lips like in the diagram below.



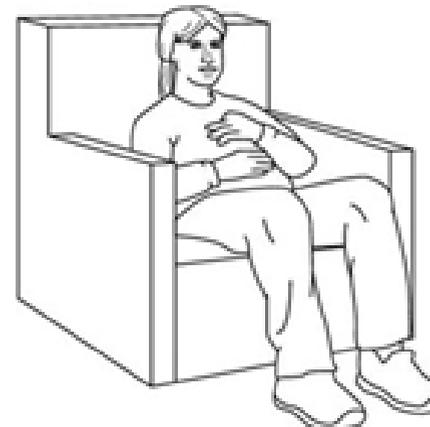
Breathe in slowly through the nostrils to the count of 1-2 (not deep, a normal breath)



Purse your lips (as if blowing out a candle) breathe out slowly through your pursed lips to the count of 1-2-3-4.

2. Belly Breathing: (using your breathing muscle i.e. the diaphragm):

- Sit relaxed.
- Put your hand on your stomach.
- Imagine it is like a balloon. Breathe in through your nose, your hand will move out as would a balloon.
- When you breathe out through your mouth, your hand will move inside.

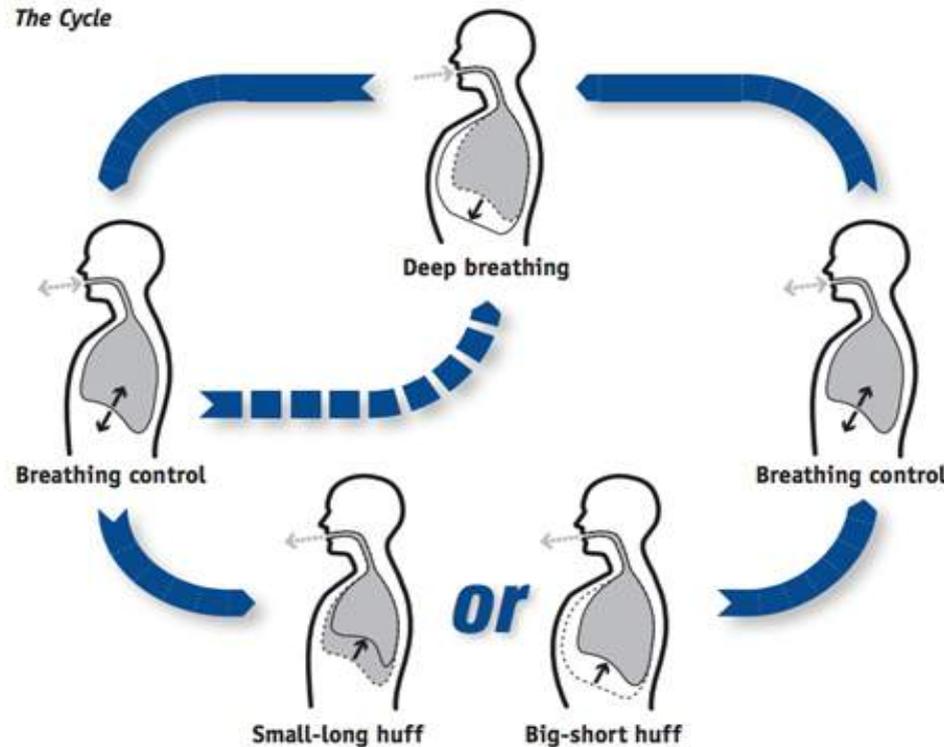


BREATHING TO REMOVE SECRETIONS OR PHLEGM FROM YOUR LUNGS: (ACTIVE CYCLE BREATHING TECHNIQUE)

It consists of three phases that together helps you to get rid of your secretions.

1. Breathing Control (Relaxed breathing): Breathe in relaxed through your nose and out through your mouth. Do not exert.
 2. Thoracic expansion (Deep breaths): Place your hands on the side of your chest. Take a deep breath in, through your nose, expanding your chest, and exhale slowly through your mouth.
 3. Huffing/Coughing: Open your mouth and make a “huh” sound.
- Repeat steps 1,2,3 for 10-15 minutes. Take rest in between if required.

The Cycle



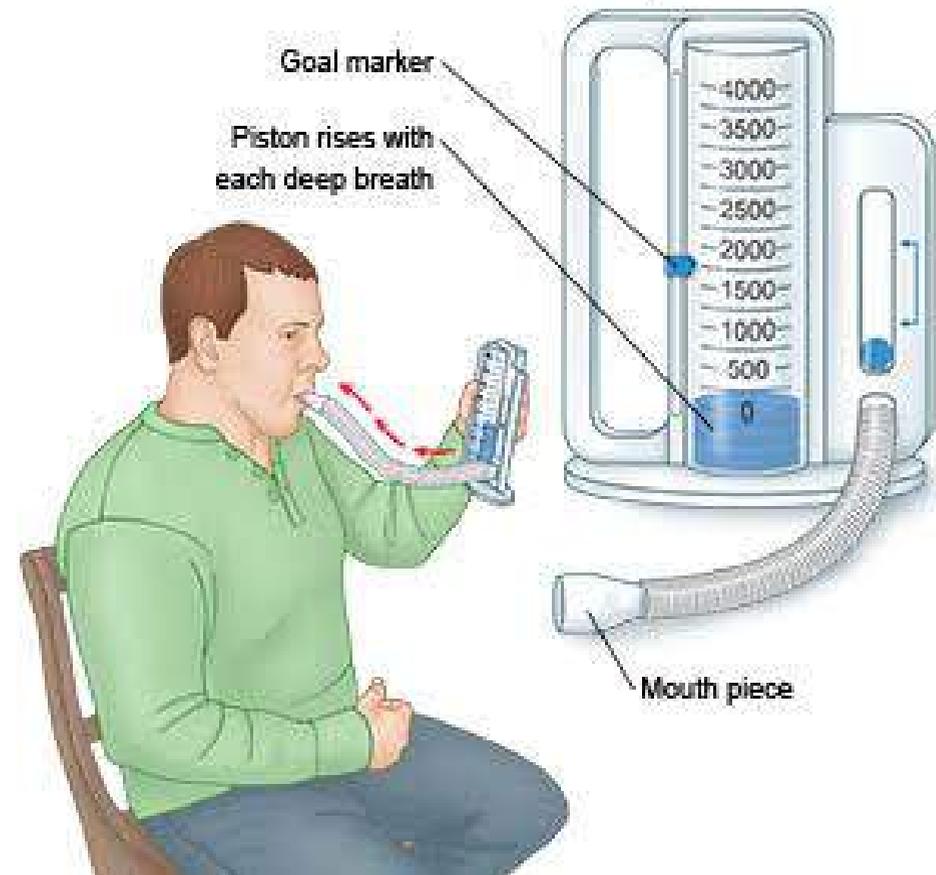
INCENTIVE SPIROMETRY:

How to use an Incentive Spirometer?

- I. Sit relaxed.
- II. Hold the instrument at eye level.

1. Place mouthpiece in your mouth.
2. Breathe in through your mouth as though sucking in through straw.
3. It will get the ball up.
4. Hold the ball for three secs.
5. Gently release.
6. Repeat it 15 times, every 2-3 hourly.
7. Consult your therapist to increase the capacity.

How to Use an Incentive Spirometer



- If you are given this device during your hospital stay, continue to use it.

PHYSICAL ACTIVITY AND MOBILITY EXERCISES:

To improve your strength and work capacity, full body exercises should be done.

- Every exercise should be repeated 10-15 times.
- Begin with one set and then progress to 2 sets.
- It should be done 3-4 times per day.



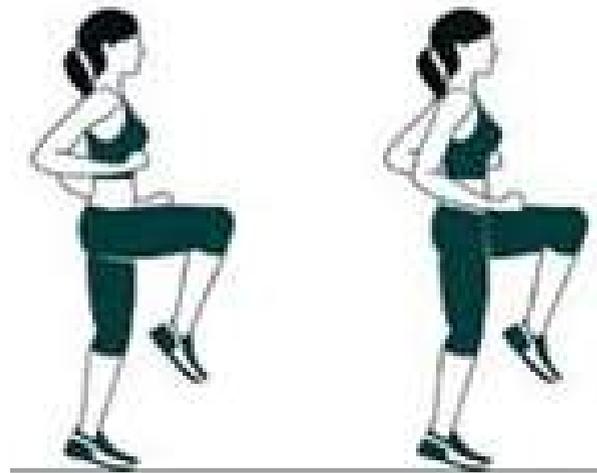
ANKLE TOE MOVEMENTS



TAKE YOUR THIGH UP ALTERNATELY (Left & Right)

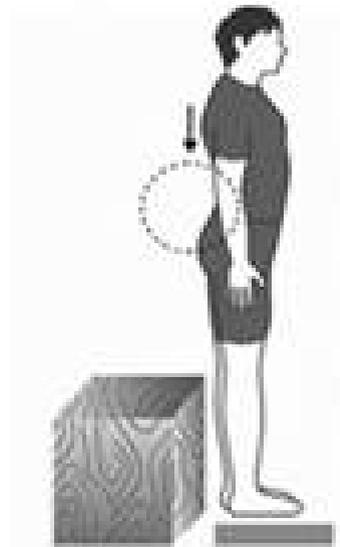


**STANDING ON ONE LEG WITH SUPPORT ATLEAST FOR 30 SEC
(Left & Right alternately)**



MARCHING (Left & Right alternately)

SIT TO STAND: You can practice sit to stand activity from a chair for a minute. Use support as needed. Your therapist will advise you on exercises for improving strength and endurance.

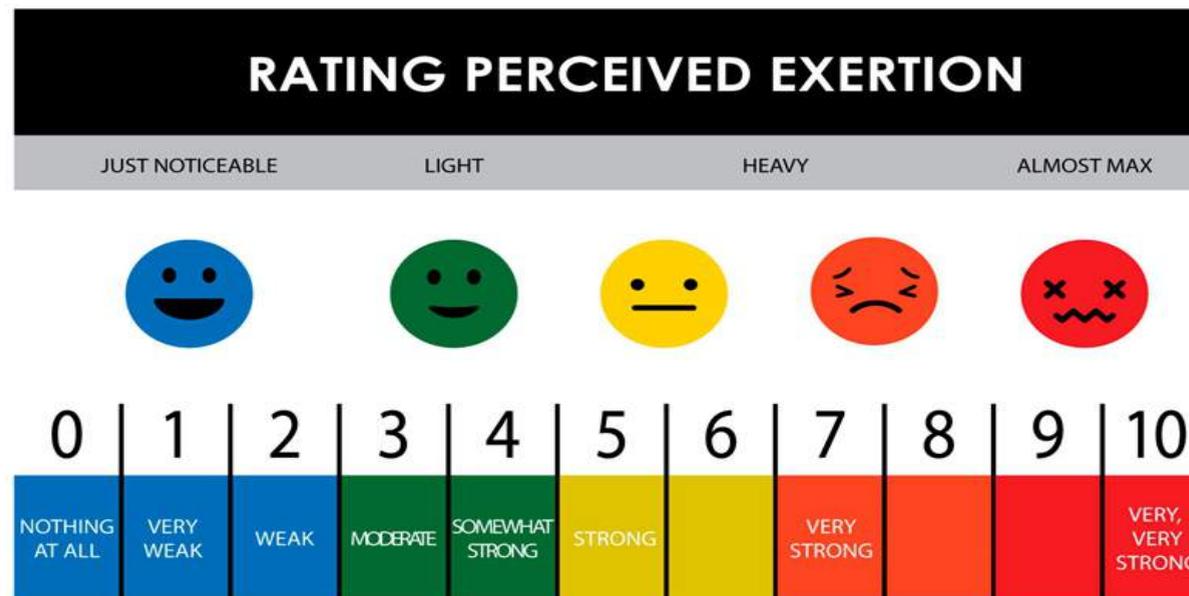


WALKING:

- Start walking in short bouts, atleast for 10 mins.
- Gradually increase walking time to 20 mins.
- Take rest pause, if needed.
- Walk frequently in the day at least 3 times.
- Feel mild to moderate exertion on scale upto 2-3 as given below.



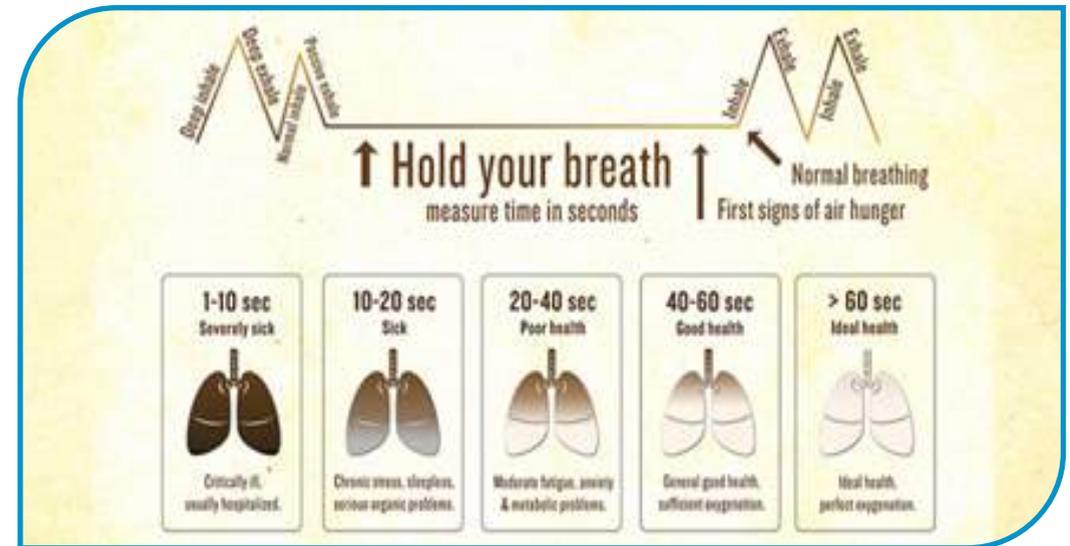
This scale asks you about your difficulty in breathing and level of exertion. You should be able to talk or sing comfortably. It starts from 0 where you experience no difficulty and ends at 10 where you experience maximal difficulty in breathing. Assess your exertion accordingly.



TESTING YOUR CAPACITY:

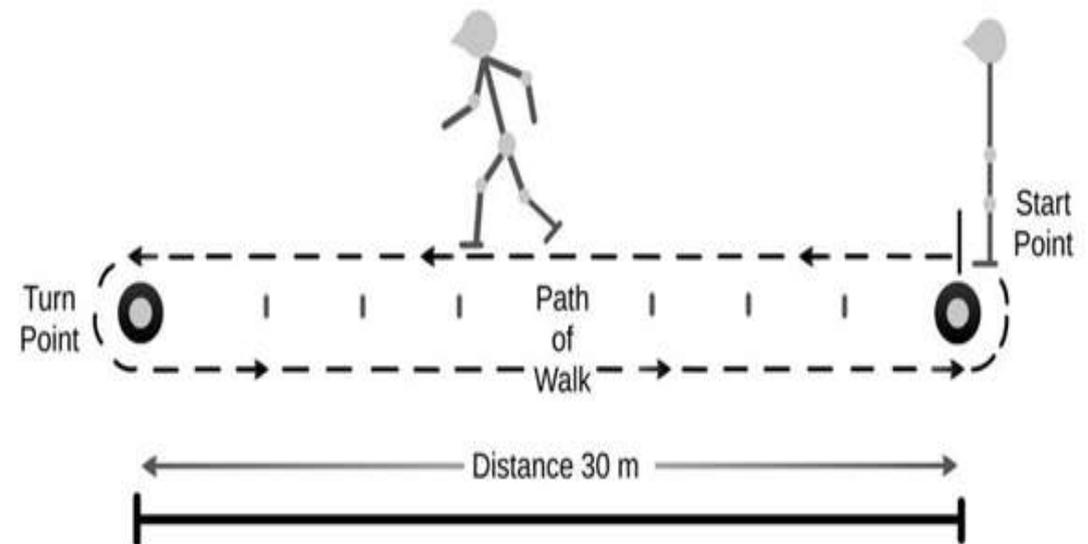
1. Breath Holding capacity:

- Test yourself by counting aloud, without stopping yourself to breathe.
- Or Try holding your breath.
- Singing, humming or reading aloud are good breathing exercises for your lung.



2. Testing Your walking capacity:

- The physiotherapist performs a simple test called six minute walk test. It tests the capacity to carry out daily routine.
- Ideally, one should be able to walk atleast 300 - 400 meters in six minutes.



CONSERVING YOUR ENERGY:

It is important to understand the needs of your body and your own energy levels. Conservation of energy can be done by:

1. Planning
2. Prioritizing
3. Pacing
4. Positioning



Conserving energy is basically 4 P

Plan :

- Activities and work need to be planned. Avoid unnecessary exertion.

Prioritise :

- Do important first. Do difficult task when energy levels are good.

Pace :

- Take adequate rest in between any 2 task.

Position :

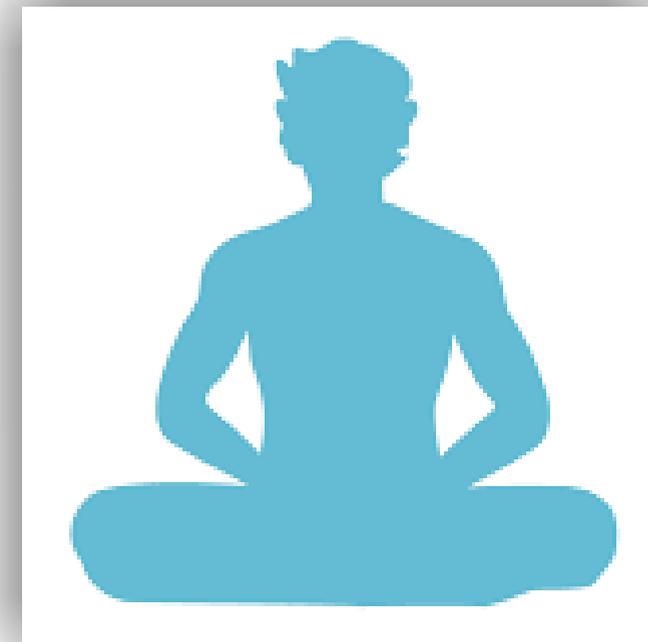
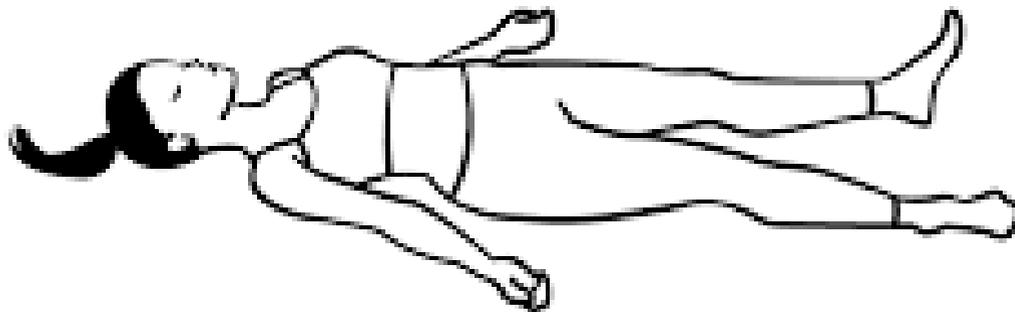
- Position yourself and items so you don't waste energy while doing any work.
- Always coordinate breathing with body movements.
- Don't hold breath anytime.



PRACTICE RELAXATION:

It is important that you allow your body and mind to relax to heal better.

1. You can listen to calming music of your choice.
2. Shavasana – lie down in comfortable position, keep your eyes closed and gently focus on your breathing.
3. You can think of a pleasant scenery or event and imagine yourself at peace. Make yourself aware of the surroundings, sounds, colours, weather and people in the scene.
4. Tell yourself that you are in good health and feel positively energized.
5. Be mindful and aware of your emotions. If you are feeling stressed or anxious, take control and reach out for the required help. Practice slow, gentle and deep breaths. Chant or concentrate on a spot or breath. Be consciously aware of things around you.



LIVE AN ACTIVE & HEALTHY LIFESTYLE

Eat a well balanced diet. Maintain adequate hydration unless advised restriction. Include fruits and vegetables in your diet. Eat small portions at frequent intervals. Try following a healthy sleep pattern and maintain active lifestyle.



Avoid addictions:



ALWAYS FOLLOW COUGH ETIQUETTE & HAND HYGIENE AS BELOW:

हे करणे टाळा.



COUGH & SNEEZE ETIQUETTE

खोकला आणि
शिकताना पाळायच्या
बाबी



**COVER WITH
TISSUE**

रुमालाने तोंड
झाका.



**WEARING
A MASK**

मास्क नियमित
वापरा.



**COVER WITH
YOUR ELBOW**

हाताच्या कोपऱ्याचा
वापर करा.

Physiotherapy School & Centre,
Seth GSMC & KEMH.



GENERAL INSTRUCTIONS:

- Do not exercise or exert after heavy meal.
- Slow down your activities, if breathless.
- Talk to friends and family.
- Report any symptoms.
- When on Oxygen, monitor closely.



Follow advice of your doctor, nutritionist & physiotherapist.
KEEP FOLLOW UP:

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