medanta

Your Complete Guide in

Recovery from COVID-19

Your guide will cover…

COVID-19: How it spreads

COVID-19 is an infectious disease caused by the recently discovered coronavirus. The COVID-19 virus spreads primarily through droplets of saliva or discharge from the nose when an infected person coughs or sneezes. The virus enters the body via nose, mouth and eyes. Some recent studies suggest that virus may be airborne and can be spread through fine infected droplets that remain suspended in the air in closed air-conditioned environments of offices, AC cabs-buses, shopping malls and theatres due to absence of cross-ventilation, even when you are not in direct contact with an infected person.

COVID-19 transmission can be reduced by:

- Staying at home if possible, especially if you are more than 60 years or less than 5 years of age, or have comorbidities like diabetes, hypertension or chronic ailments. Avoid meeting visitors at home.
- Washing your hands and face at regular intervals with soap and water.
- Wearing a mask at all times when out of the house.
- Social distancing – keeping a distance of 6 feet from others when out of the house.
- Cleaning the frequently touched surfaces with disinfectant regularly.
- Avoiding closed spaces with central air-conditioning like offices, malls, etc. with inadequate fresh air
- Ensuring proper nutrition through balanced diet, maintaining hydration with plenty of fluids, boosting immunity through fresh fruit juices, herbal drinks and turmeric in milk.
- Daily exercise and meditation.
- Taking your daily prescribed medicines regularly. Don’t self-medicate.
- Avoid going near sick people.
- Seek medical advice whenever needed. Teleconsultations are available at Medanta. Register on Medanta eClinic or call 0124 4834566 for help.

Do's and Don't for Wearing a Mask

When you are wearing a facemask

Do secure the elastic bands around your ears

Do secure the ties at the middle of your head and base of your head

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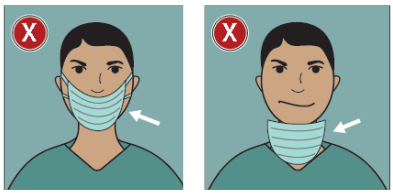
When wearing a facemask, don't do the following:



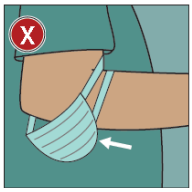
Don't wear your face mask under your nose or mouth

Don't allow a strap to hang down. Don't cross the straps

Don't touch or adjust your facemask without cleaning your hands before and after

Don't wear your face mask on your head

Don't wear your face mask around your neck



Don't wear your face mask around your arm

Do's and Don't for Wearing a Mask

When removing a facemask

Do remove your facemask touching ONLY straps or ties

After removing your mask clean your hands with 70% alcohol based hand sanitizer or soap and water

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Use of Exhalation Valve Face mask

Do not use a facemask with Exhalation valve because a mask with a valve may protect you from some pathogens in the air, but it doesn't protect the people around you from your own breath. When you wear a mask with a valve, a significant portion of your exhaled air is entirely unfiltered. Masks with valves are meant to protect from pollution.

COVID-19: How it manifests

The most commonly reported symptoms of COVID-19 are:

- Dry cough, cold, sore throat
- Fever or chills
- Fatigue, tiredness, muscle or body aches
- Headache
- Congestion or runny nose
- Shortness of breath or difficulty breathing
- Loss of appetite/taste/smell

The severity and duration of symptoms for people who have COVID-19 can vary; for most people, usually the symptoms take 7-14 days to subside. Some people may have no symptoms while others may require hospitalization to treat these symptoms. Recovery from symptoms varies from person to person. In some cases these symptoms might persist even after testing negative for COVID-19.

If you have any of these symptoms, you should consult your physician who will advise for COVID testing if indicated. If you test positive and you have mild symptoms, the doctor may advise home treatment. Else, hospitalization may be advised.

Every positive test result is also informed to government and government representatives may visit your house for checking on you and isolating the family members.

You may contact 0124-4834566 for Medanta Home care package.

Home treatment - Do's

- Stay at home all the time, unless there is a medical reason for travel.
- Practice good hand hygiene. Wash your hands for more than 20 seconds, including in between your fingers and under fingers and under your nails using plenty of soap and water. Otherwise, use an alcohol based sanitizer with more than 60% alcohol. Do this frequently, especially before you eat, after you use the restroom, blow your nose or cough, or before you touch your face.
- Cover your cough and sneeze. The best way to cough or sneeze is into your elbow.
- Stay in separate room with door closed. Use separate bathroom.
- Wipe all surfaces i.e. doorknobs, countertops, stairway railings and switches, you come into contact with. Any bleach-containing household product is effective.
- Wipe your phone with disinfectant wipes or 70% isopropyl alcohol as it touches your hands and your face often.
- Wash your hands thoroughly after handling cash or credit cards as their surface may have virus.
- Wear a facemask if you step out of your room or if someone enters your room.
- Wash your hands before you wear your mask. Only touch ear loops.
- Protect your immune system by consuming balanced diet, staying hydrated, avoiding alcohol, getting enough sleep and maintain healthy weight.
- Daily monitor symptoms such as dry cough, shortness of breath, fever >102 F, loss of taste & smell. It is good to have a finger pulse oximeter at home to monitor oxygen saturation.
- Seek medical advice for chemoprophylaxis for your family members.

Home treatment - Don’ts

- Don’t panic
- Don’t visit public areas. Don’t use public transport.
- Don’t shake hands or hug. Use an alternative greeting maintaining 6-8 feet distance.
- Don’t touch your eyes, nose, mouth or face without washing your hands
- Don’t share water, utensils, towels or bedding with family members.
- Don’t visit older relatives or community members, as they are most vulnerable. Discourage visitors.
- Don’t discontinue self-quarantine until instructed

When to seek emergency medical advice:

Monitor your symptoms regularly. If you get any one of the following, seek emergency medical care immediately:

- Worsening shortness of breath/ trouble breathing and cough
- If you are using a pulse oximeter, oxygen saturation less than 95%
- Worsening ability to concentrate/confusion
- Bluish lips or face
- A new or returning fever or persistent fever more than 101^{o} F for 3 days
- Persistent pain or pressure in the chest
- Inability to wake or stay awake

You can contact at 0124-4834566 for Emergency help at Medanta.
You can also seek a video or tele-consult.

Home treatment - Instructions for Caregivers

Mask: The caregiver should wear a triple layer medical mask appropriately when in the same room with the ill person. Front portion of the mask should not be touched or handled during use.
If the mask gets wet or dirty with secretions, it must be changed immediately. Discard the mask after use and perform hand hygiene after disposal of the mask.

Hand hygiene must be ensured following contact with ill person or his immediate environment.
Hand hygiene should also be practiced before and after preparing food, before eating, after using the toilet, and whenever hands look dirty. Use soap and water for hand washing at least for 40 seconds. Alcohol-based hand rub can be used, if hands are not visibly soiled.
After using soap and water, use of disposable paper towels to dry hands is desirable. If not available, use dedicated clean cloth towels and replace them when they become wet.

Exposure to patient: Avoid direct contact with body fluids of the patient, particularly oral or respiratory secretions. Use disposable gloves while handling the patient. Perform hand hygiene before and after removing gloves.

Avoid exposure to potentially contaminated items in his immediate environment (e.g. avoid sharing cigarettes, eating utensils, dishes, drinks, used towels or bed linen).

Food must be provided to the patient in his room.

Home treatment - Instructions for Caregivers

Utensils and dishes used by the patient should be cleaned with soap/detergent and water wearing gloves. The utensils and dishes may be re-used. Clean hands after taking off gloves or handling used items.

Use triple layer medical mask and disposable gloves while cleaning or handling surfaces, clothing or linen used by the patient. Perform hand hygiene before and after removing gloves.
The care giver will make sure that the patient follows the prescribed treatment.

The care giver and all close contact should self-monitor their health with daily temperature monitoring and report promptly if they develop any symptom suggestive of COVID-19 (fever/cough/difficulty in breathing/ loss of smell and taste).

If care giver suffers with any of these symptoms, he/ she should consult to physician immediately who will guide you for COVID testing and treatment if required.

COVID-19: Winning smaller battles

If you are recovering from COVID 19 or returned home from the hospital, you will face smaller battles every day until you get back to your routine life. During and after COVID-19 treatment, you may experience some symptoms such as:

- Low energy levels and early fatigue
- Difficulty in breathing, and becoming breathless with even a little bit of physical activity.
- Chest Congestion and excessive phlegm.
- Cough with phlegm
- Loss of appetite and altered taste in mouth
- Headaches
- Lack of concentration
- Anxiety and Fear
- Insomnia

Some of the symptoms will get better on their own, as time passes. Other symptoms will require patience and efforts from your side. However, the actual recovery may take a much longer time

People with serious complications need ICU care and ventilator support for breathing, which can take a toll on their physical as well as mental health in the longer run. In many cases, the person may need assistance to breathe even after coming off a ventilator. The patient may need a mask or a Continuous Positive Airway Pressure (CPAP) ventilator at home, which would provide the required oxygen support.

Managing your Cough

Tips to manage a dry cough:

A dry cough is likely to put greater strain on your throat. The following strategies can be used to manage a dry cough-

- Stay hydrated by drinking plenty of water (lukewarm preferably)
- Take small sips of fluids instead of taking large sips to facilitate swallowing.
- Steam inhalation is necessary to cure a dry cough. So pour hot water into a bowl and put your head over the bowl and breathe in the steam. If comfortable, cover your head and bowl with a towel. You can also use a steam inhalation machine if you have one.
- Drink warm honey and lemon or another warm drink like *kadha* to soothe irritated throat
- Salt water gargle or Betadine gargle (1 part betadine & 3 part of water) can be effective for treating a sore throat.
- If you feel the need to cough but don't have a soothing drink or water at hand, swallow repeatedly.

Tips to manage a productive cough:

A phlegmatic or productive cough can become difficult to manage since you have to spit out the phlegm-filled sputum regularly. It's also important to note that viral infections, especially COVID-19, are contagious, so proper disposal of sputum is very important. You should also ensure that the sink where you dispose of your sputum is regularly disinfected. The following strategies can be used to manage a productive cough:

- Keep yourself hydrated with lukewarm water, broths, soups, herbal teas and *kadha.*
- Take steam inhalation at least thrice a day to loosen the phlegm congested in your lungs.
- Lie on either the left or the right side, instead of lying on your back. This might help drain the phlegm faster.

- Movement makes the lungs function, and it can also move the phlegm to facilitate your spitting it out. So, try to be mobile by walking around your room.

Fatigue Management

Chronic fatigue is classified as fatigue lasting more than six weeks. The impact of fatigue is more than just lower productivity. You can manage your fatigue through following:

- Planning for demanding (physically, mentally) and repetitive tasks
- Regular staggered breaks during a day allow for both physical and mental restoration as well as social distancing
- Days off during the week
- Plan your day schedule to allow you a better plan for completing your work as well as sleep between work periods

Quit Smoking – it will help

Smoking negatively impacts lung health, inhibits the body's responsiveness to infections, and suppresses immunity. Compared to non-smokers, smokers are 2.4 times more likely to be admitted to an intensive care unit, need mechanical ventilation or die, according to a study.

The GOOD News: While it is difficult to undo all the damage from years of smoking, positive results from quitting tobacco are immediate, starting the second the lungs are no longer exposed to toxic chemicals. Within 20 minutes of stopping smoking, heart rate and blood pressure drop; after 12 hours, the blood's carbon monoxide level drops; after two weeks, circulation improves and lung function increases; and after one month, cilia, which move mucus out of the lungs, begin to regain normal functioning.

Taking care of your emotional wellbeing

The experience of having COVID-19 can be very stressful with fear and anxiety. The disease may impact your emotional wellbeing along with your physical wellbeing. Psychological impact of infection can vary from immediate effects, like:

- Fear and worry about your own health and the health of your loved ones, your financial situation or job, or loss of support services you rely on
- Fear of social stigma
- Irritability, anger, confusion
- Frustration, loneliness
- Denial, anxiety, depression, insomnia, despair

How to cope with this stress?

Here are some things which you can do cope up the stress, fear and anxiety:

- Take a break from constant watching the news or limit the time for news
- Stay connected with your loved ones over audio or video calls
- Re-live your hobbies which you enjoy doing
- Take adequate rest
- Maintain healthy diet
- Do light exercises as your condition permits
- Do not hide your illness
- Speak accurately about the risk from COVID-19, based on scientific data and latest official health advice
- Share positive stories of those who have recovered from COVID-19

Maintaining a Healthy Diet

Good nutrition is very important before during and after an infection. While no foods or dietary supplements can prevent COVID-19 infection, maintaining a healthy diet is an important part of supporting a strong immune system

Eat a variety of foods to ensure adequate intake of important nutrients

- **Energy-rich foods**: These foods are a source of carbohydrates that provides energy to the body. It includes cereals (wheat, rice, maize, etc), fats/oils, sugars

- **Body building foods**: These foods provide protein to the body. Pulses (all dals, beans, legumes), animal foods (eggs, meat, poultry, fish), milk and milk products. Requirements of proteins also increase during infection for the proliferation of immune cells and the synthesis of chemical compounds

- **Protective foods**: These foods are the sources vitamins and minerals that play a significant role in immunity. Seasonal fruits and vegetables (dark green leafy, yellow and orange coloured, citrus, and other fruits). Vitamin A, vitamin E, vitamin C, minerals such as zinc, copper, iron, selenium are known to influence the immune responses.

Maintaining a Healthy Diet

Immunity Boosters: Ayurvedic Immunity Promoting Measures:

- Drink herbal tea / decoction (Kadha) made from Tulsi (Basil), Dalchini (Cinnamon), Kalimirch (Black pepper), Shunthi (Dry Ginger) & Munakka (Raisin) - once or twice a day. Add Jaggery (natural sugar) and / or fresh lemon juice to your taste, if needed.
- Golden Milk- Half tea spoon Haldi (turmeric) powder in 150 ml hot milk - once or twice a day.
- Add Ginger and Garlic to cooking
- Drink warm to normal water and keep hydrated

Healthy Tips:

- Do not skip meals and divide your daily calories in to 5-6 small meals
- Use whole grain cereals, whole grams and pulses, whole wheat porridge, whole wheat bread, oats etc. to incorporate fiber in your diet
- Supplement wheat with whole channa and do not sieve flour (wheat and channa 4:1 ratio). Mix rice with whole grams or dals in a ratio of 1:1 to incorporate fiber
- Consume at least 4-5 servings of fresh green vegetables and fruits/day
- Use olive /canola/ rice bran / soy /mustard oil. Change oils in couple of months.
- Almonds, walnuts, flax seeds are good sources of antioxidants include in everyday diet
- Water intake: 2 litres/day
- Limit intake of excess salt, processed and preserved foods
- Avoid eating from out
- Restrict alcohol, tobacco and smoking

Maintaining a Healthy Diet

An adult with no pre-existing disease and with no co-morbities (like hypertension, diabetes, chronic kidney disease, cardiac disease) have a 2000 calorie diet plan.
Persons with any co-morbity and any underlying condition should take consultation from professional (Doctor/ Dietician/ Nutritionist) for their individualized diet plan.

24 hour food intake (For reference)			
Foods	**Wight (g)**	**Calories**	**Protein**
Cereals- Whole wheat atta/ porridge/ Whole wheat bread/ brown rice/ oats	180	630	18
Milk low fat- 3% (Toned)	500	302	17
Curds (low fat milk)	240	145	8
Paneer (low fat milk) OR	75	217	12
*Egg White	2	32	8
*Fish/ lean chicken	60	150	14
Legumes (with husk)	75	240	15
Fruit (seasonal)	400	160	-
Vegetable A (tori, lauki, capsicum, brinjal, cauliflower, spinach, mustard, tomato)	250	40	3
Vegetable B (Peas, beans, carrot, pumpkin, ladies finger, onion, radish)	200	64	4
Cooking oil	20 ml	180	-
Sugar (honey, jiggery, jam, jelly)	15	60	-

Maintaining a Healthy Diet

FOOD EXCHANGE	
Cereal Exchanges: Each Exchange contains 15 g carbohydrates, 70 calories and 2 g proteins • Chappati(20 g atta): 1 in no • Cooked Rice(75 g): ½ bowl • Idli: 1 medium size • Bread (30g): 1 large slice • Potato (75g): 1 medium size • Cornflakes (20g): 1 ½ table spoon • Noodles cooked (75g) : ½ bowl • Biscuits: 2 in nos	**Meat Exchange:** Each Exchange contains 7g proteins, 75 calories and 5 g fat • Chicken: 25 g • Fish : 30-40 g • Egg whole : 1 medium • Sausage: 20 g • Mutton : 40 g • Ham : 20 g
Milk Exchange (240 ml): Each Exchange contains 12 g carbohydrates, 145 calories, 8 g proteins and 7 g fat • Milk *(240 ml): 1 glass • Curd* (240g): 2 bowls • Cottage Cheese *(Paneer) : 50 g • Skimmed Milk powder (45g): 3 tablespoons • Khoa (30g): 2 tablespoon *Milk /Curd/Paneer: 3% fat milk	**Pulses and Legumes Exchanges:** Each Exchange contains 15 g carbohydrates , 80 calories and 5 g proteins • Moong (25g raw): 1 bowl cooked • Arhar (25g raw): 1 bowl cooked • Rajmah (25g raw): 1 bowl cooked • Lobia (25g raw): 1 bowl cooked • Soya Nuggets: 20 g 1 Bowl: 125- 150g
Fruit Exchange: Each Exchange contains 10 g carbohydrates and 40 calories • Orange (100g): 1 medium • Apple (90g) : 1 small • Pear (90g) : 1 small • Banana (40g) : ½ medium • Mango (60g) : 1 slice • Water-melon (300g) : 1 large slice • Papaya (120g) : 1-2" slice • Guava (100g) : 1 medium	**Vegetable Exchange:** Vegetables are broken into 3 groups as follows: A Group (100g-1bowl) 3 g carbohydrates, 16 calories and 1 gm proteins : Cabbage, Spinach, Mustard greens, cauliflower, Brinjal, Capsicum, Lauki, Tori B Group (100g- 1 bowl) 6 g carbohydrate, 32 calories and 2 g proteins : Peas, Green beans, Carrots, Pumpkin, Bhindi, Onions, Radish C Group (Roots & Tubers- 25 g)) 5 g carbohydrate, 20 calories- Sweet potato, Colocassia, Beet root, Yam
Fat/Oil Exchange: Each Exchange contains 5 g fat, 45 calories • Oil (vegetable) 5 g : 1 tsp • Ghee, Vanaspati 5 g : 1 tsp • Butter 5g : 1 tsp • Cream 10g : 2 tsp • Nuts: Almonds(5), walnut(2), Peanuts (10)	**Sugar Exchange:** 20 calories • Sugar 5 g :1 tsp • Jaggery (Gur) 25 g

* Adapted from: Gopalan C.Nutritive Value of Indian Foods, NIN, ICMR 2011

Post COVID-19: Regaining your strength

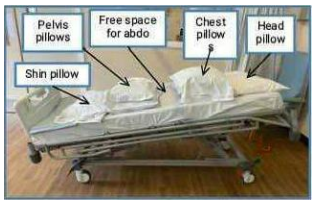
Due to the damage caused by the virus to the lungs and other organs, the body takes time to recover and get back to its former state. You should reach out an occupational therapist for help in adjusting to your new energy levels and limitations. Additionally, some of the things that could help are

- Taking support from your family members and friends.
- Take gradual steps towards regaining strength.
- Re organizing some things in your life so they require less energy over the next few weeks and months while you recover. Organizing daily routines to allow completion of essential activities when you have most energy.
- Keep frequently used items in easily accessible places.
- Don’t plan multiple activities for same day as it may cause fatigue. Keep low pace for doing activities so as to sustain energy level throughout the activities.
- Prioritize the activities- do only those which are absolute necessary. Eliminate unnecessary tasks and steps of activity.
- Eating a balanced protein- rich diet, with at least five daily servings of different fruits and vegetables.
- Give plenty of rests in between the activities.
- Store items at convenient level of height so as to avoid excessive stretching. Keep optimum height of all work place surfaces.
- Facilitate bathing by using shower seat/ hand held shower head.
- Breathe easily and properly during the activities. Don’t do strenuous activities which cause lot of physical exertion.
- Doing breathing exercises regularly.

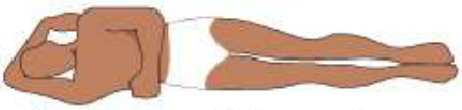
Breathing Exercise

Self- Awake Proning:

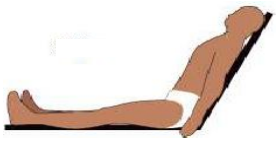
1. 30 minutes- 2 hours: laying on your belly. If patient is on oxygen support then oxygen should not be removed in this position, turn head to left/ right side & continue O_2 support. Place the pillows under the head, chest and pelvis for support but abdomen should not be compressed



2. 30 minutes- 2 hours: laying on your left side

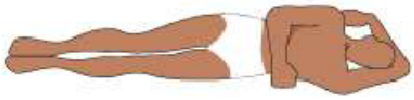


3. 30 minutes- 2 hours: sitting up



4. 30 minutes- 2 hours: laying on your left side

5. Then go back to position 1: lying on your belly



Breathing Exercise

Pranayam- Alternate Nostril Breathing:

1. Close the right nostril with thumb. Breath in left nostril – 4 count

2. Close the left nostril as well and retain the breath to a count of 16

3. Release the right nostril and exhale fully through it to a count of 8

4. Keeping the left nostril closed, inhale through the right to a count of 4

5. Close both nostrils and retain the breath to a count of 16

6. Release the left nostril and exhale to a count of 8 to complete

Chest Exercise

Incentive Spirometry:

- Put the mouthpiece in your mouth and close your lips tightly around it. Do not block the mouthpiece with your tongue
- Inhale slowly and deeply through the mouthpiece to raise the indicator. Try to make the indicator rise up to the level of the goal marker.
- When you cannot inhale any longer, remove the mouthpiece and hold your breath for at least 3 seconds
- Exhale normally
- Repeat these steps in a day as advised
- Keep a log of the highest level you are able to reach each time. This will help healthcare providers see if your lung function improves

The Balloon Exercise:

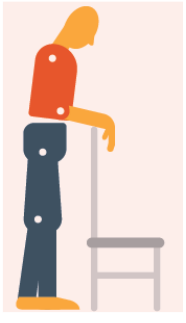
You can practice this simple exercise by blowing up a certain number of balloons each day. Blowing balloons works out the intercostal muscles that are responsible for spreading and elevating your diaphragm and ribcage. This allows your lungs to take in oxygen during inhalation and expel carbon dioxide as you exhale. The more oxygen you supply to the body during exercise, the longer you will last without becoming breathless and fatigued.

Positions to ease breathlessness

High side lying:
Lying on your side propped up by pillows, supporting your head and neck, with your knees slightly bent.

Forward lean sitting:
Sitting at a table, lean forwards from the waist with your head and neck resting on the pillow, & your arms resting on the table. You can also try this without the pillows.

Forward lean sitting: (no table in front)
Sitting on a chair, lean forwards to rest your arms on your lap or the armrests of the chair.



Forward lean standing:
While standing, lean forwards onto a windowsill or other stable surface.

Standing with back support:
Lean with your back against a wall and your hands by your side. Have your feet about a foot away from the wall and slightly apart.

RELAX!

Relax. You deserve it, it is good for you, and it takes less time than you think.

When we relax, the flow of blood increases around our body gives us more energy. It helps us to have a calmer and clearer mind which aids positive thinking, concentration, memory and decision making.

You may choose any of the relaxation techniques from following based on your interest:

- Take a deep Breath
- Do meditation
- Be present, take a break from all other things and be present in the moment like enjoying each bite of food
- Reach out to your social network
- Laugh out Loud
- Listen to your favourite music
- Doing exercise in any form which you like walking, yoga etc.

“find that peaceful place inside you”

Resuming your physical activities after coronavirus

Post COVID-19 you may feel fatigued for a few weeks of longer even after other symptoms resolve and can make physical activity difficult.
At the beginning of your physical activity, you will be able to do a lot less first and gradually build up to do what you were doing beforehand.

You should start with low intensity activity and gradually move towards more intense activities. Athletes should hold off on resuming regular training for at least 10 days from symptom onset and seven days from symptom resolution.

But if you are just feeling a little more short of breath than usual, get tired more quickly, or cough a little, you should focus on gradually increasing the duration of your physical activity as you get stronger.

Resuming your physical activities after coronavirus

Exercise is an important part of recovery after a severe COVID-19 illness. Exercise can help to:

- Improve fitness
- Reduce breathlessness
- Increase muscle strength
- Improve balance and coordination
- Improve your thinking
- Reduce stress and improve mood
- Increase confidence
- Improve your energy

These simple rules will help you exercise safely:

- Always warm-up before exercising, and cool down after exercising
- Wear loose, comfortable clothing and supportive shoes
- Wait at least an hour after a meal before exercising
- Drink plenty of water
- Avoid exercising in very hot weather
- Exercise indoors in very cold weather

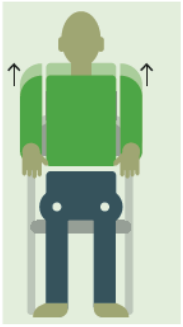
If you feel any of the following symptoms, do not exercise, or stop exercising, and contact your healthcare professional:

- Nausea or feeling sick
- Dizziness or light headedness
- Severe shortness of breath
- Clamminess or sweating
- Chest tightness
- Increased pain

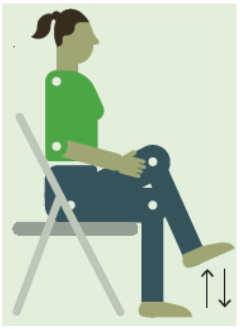
Resuming your physical activities after coronavirus

Warm-up exercises

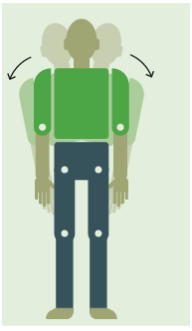
Warming up prepares your body for exercise to prevent injury. Your warm-up should last around 5 minutes, and at the end you should feel slightly breathless.



Shoulder shrugs: Slowly lift your shoulders up towards your ears and then down again

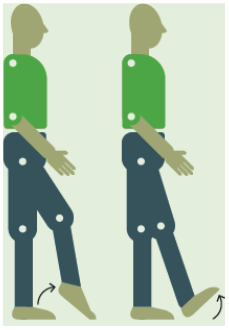


Knee lifts: Lift your knees up and down slowly, no higher than your hip, one at a time



Side bends: Start with your body straight & your arms by your sides Slide one arm, then the other, a short way towards the floor, bending sideways

Shoulder circles: Keeping your arms relaxed by your side or resting on your lap, slowly move your shoulders round in a circle forwards, & then backwards



Ankle taps: Firstly, using one foot, tap your toes and then your heel on the ground in front of you; repeat with the other foot

Ankle circles: Using one foot, draw circles with your toes; repeat with the other foot

Resuming your physical activities after coronavirus

Fitness exercises

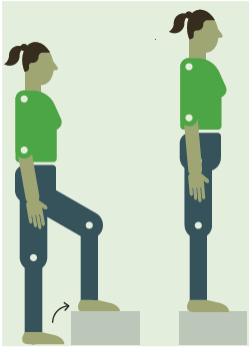
You should aim to do fitness exercise for 20-30 minutes, 5 days each week.

Marching on the spot:

- If needed, hold onto a stable chair or surface for support, and have a chair nearby to rest
- Lift your knees one at a time

Progressing this exercise:

- Increase the height you lift your legs, aiming to reach hip height if possible
- When you might choose this exercise:
- If you cannot go outside to walk
- If you are not able to walk very far before needing to sit down



Step-ups:

- Use the bottom step of your flight of stairs
- If needed, hold on to the handrail for support, and have a chair nearby to rest
- Step up and down, changing the leg you start with every 10 steps

Progressing this exercise:

- Increase the height of the step, or speed of stepping up & down
- If your balance is good enough to do this exercise without holding on, then you can carry weights as you step up & down

When you might choose this exercise:

- If you cannot go outside
- If you are not able to walk very far before needing to sit down

Resuming your physical activities after coronavirus

Fitness exercises

You should aim to do fitness exercise for 20-30 minutes, 5 days each week.

Walking:

- Use a walking frame, crutches, or stick if needed
- Choose a route that is relatively flat

Progressing this exercise:

- Increasing the speed or distance you walk, or if accessible, include walking uphill in your route

When you might choose this exercise:

- If you can get outdoors to exercise

Jogging or cycling:

- Only do jogging or cycling if it is medically safe for you

When you might choose this exercise:

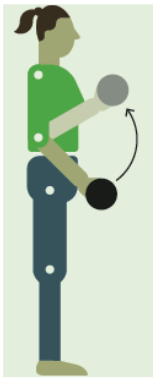
- If walking is not making you out of breath enough
- If you could jog or cycle before you became unwell

Strengthening exercises

Strengthening exercises will help improve muscles that have become weaker as a result of your illness. You should aim to do three sessions of strengthening exercise each week. Strengthening exercises will not make you feel breathless in the same way as fitness exercises. Instead, your muscles will feel like they have worked hard.

You should aim to complete up to 3 sets of 10 repetitions of each exercise, taking a short rest in between each set. Do not worry if you find these exercises hard. If you do, start with a smaller number of repetitions in each set and build up to achieving sets of 10.

Resuming your physical activities after coronavirus

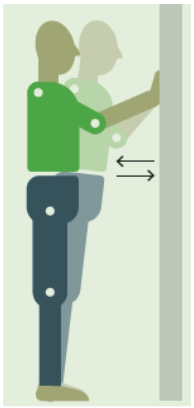


Bicep curl:

- With your arms by your side, hold a weight in each hand with your palms facing forwards
- Keep the top part of your arm stationary. Gently lift the lower part of both arms (bending at the elbows), bringing the weights up
- You can do this exercise sitting or standing

Progressing this exercise:

- Increase the weight you use while doing this exercise

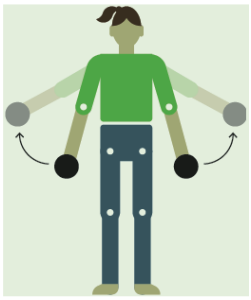


Wall push off:

- Place your hands flat against a wall at shoulder height, with fingers facing upwards, and your feet about a foot away from the wall
- Keeping your body straight at all times, slowly lower your body towards the wall by bending your elbows, then gently push away from the wall again, until your arms are straight

Progressing this exercise:

- Stand further away from the wall



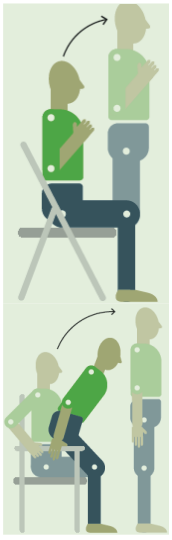
Arm raises to the side:

- Hold a weight in each hand, with your arms by your sides, and your palms facing inwards
- Raise both arms out to the side, up to your shoulder level (but not higher), and slowly lower back down
- You can do this exercise sitting or standing

Progressing this exercise:

- Increase the height that you lift your arms, but no higher than your shoulder level
- Increase the weight you use while doing the exercise

Resuming your physical activities after coronavirus



Sit to stand:

- Sit with your feet hip-width apart. With your arms by your side or crossed over your chest, slowly stand up, hold the position for the count of 3, and slowly sit back down onto the chair. Keep your feet on the floor throughout
- If you cannot stand up from the chair without using your arms, try a higher chair. If this is still too hard at first, you may push with your arms

Progressing this exercise:

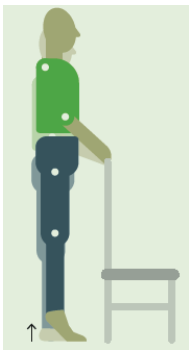
- Make the movement as slow as possible
- Perform the exercise using a lower chair
- Hold a weight close to your chest whilst doing the exercise

Knee straightening:

- Sit in a chair with your feet together. Straighten one knee and hold your leg out straight for a moment, then slowly lower it. Repeat with your other leg.

Progressing this exercise:

- Increase the time holding your leg out straight to a count of 3
- Perform the exercise more slowly



Heel raises:

- Rest your hands on a stable surface to support your balance, but do not lean on them
- Slowly rise up on to your toes, and slowly lower back down again

Progressing this exercise:

- Stand on your toes for a count of 3
- Stand on one leg at a time

Resuming your physical activities after coronavirus

Squats:

- Stand with your back against a wall or other stable surface and your feet slightly apart. Move your feet about a foot away from the wall. Alternatively rest your hands on the back of a stable chair
- Keeping your back against the wall, or holding on to the chair, slowly bend your knees a short distance; your back will slide down the wall. Keep your hips higher than your knees
- Pause for a moment before slowly straightening your knees again

Progressing this exercise:

- Increase the distance you bend your knees (remember to keep your hips higher than your knees)
- Increase the time you pause to a count of 3 before straightening your knees

Resuming your physical activities after coronavirus

Cool down exercises

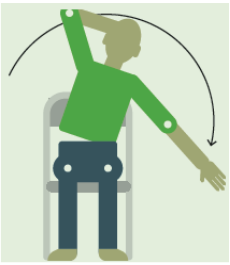
Cool down exercises allow your body to return to normal before stopping exercise. Your cool down should last approximately 5 minutes, and your breathing should be back to normal by the end.

Walking at a slower pace or gently marching on the spot, for approximately 2 minutes

Repeat the warm-up exercises to move your joints; these can be done in sitting or standing

Muscle stretches:

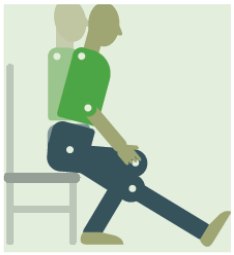
Stretching your muscles can help to reduce any soreness you may feel over the one to two days following exercise. You can do these stretches in sitting or in standing. Each stretch should be performed gently, and you should hold each one for 15-20 seconds.



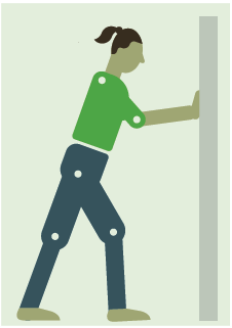
Side: Reach your right arm up to the ceiling and then lean over to the left slightly; you should feel a stretch along the right side of your body. Return to the starting position and repeat on the opposite side.

Shoulder: Put your arm out in front of you. Keeping your arm straight, bring it across your body at shoulder height, using your other hand to squeeze your arm to your chest so you feel a stretch around your shoulder. Return to the starting position, and repeat on the opposite side.

Resuming your physical activities after coronavirus



Back of thigh (Hamstring): Sit on the edge of a chair with your back straight and feet flat on the floor. Place your leg out straight in front of you with your heel resting on the ground. Place your hands on your other thigh as support. Sitting as tall as you can, bend slightly forwards at your hips until you can feel a slight stretch down the back of the leg that is stretched out. Return to the starting position, and repeat on the opposite side.



Lower leg (Calf): Stand with your feet apart and leaning forwards onto a wall or something sturdy for support. Keep your body upright and step one leg behind you. With both feet facing forwards, bend your front knee, keeping your back leg straight and your heel on the floor. You should feel a stretch in the back of your lower leg. Return to the starting position and repeat on the opposite side.

Front of thigh (Quads): Stand up and hold onto something stable for support. Bend one leg up behind you, and if you can reach it, use the hand on the same side to hold your ankle or the back of your leg. Take your foot up towards your bottom until you feel a stretch along the front of your thigh. Keep your knees close together and your back straight. Return to the starting position and repeat on the opposite side. You can also do this stretch sitting down on a stable chair: sit near the front of the chair, off to one side (so that you are only sitting on about half of the chair). Slide the leg closest to the edge off the chair and position it so that your knee is pointing down in line with your hip and your weight is through your toes. You should feel the stretch along the front of your thigh. Repeat on the opposite side.

Gaining your physical strength back...

Breathlessness Scale: This is a scale that asks you to rate the difficulty of your breathing during exercise. It starts at number 0 where your breathing is causing you no difficulty at all and progresses through to number 10 where your breathing difficulty is maximal. It is expected that you have a scale of 3-4 during exercise for it to be effective.

0	Nothing at all
0.5	Very, very slight (Just Noticeable)
1	Very Slight
2	Slight
3	Moderate
4	Somewhat Severe
5	Severe
6	
7	Very Severe
8	
9	Very, very severe (almost maximal)
10	Maximal

Managing problems with your voice

Sometime people may have difficulties with their voice after being ventilated (having a breathing tube). If your voice is raspy or weak, it is important to:

- **Keep talking when it is comfortable.** You will need to keep using your voice to make progress. If you get tired while speaking, take breaks and let your friends and family members know that you need to pause and rest your voice during conversations.
- **Do not strain your voice.** Do not whisper as this can strain your vocal cords. Try not to raise your voice or shout. If you need to get someone's attention, try making a noise with an object.
- **Take rests.** If you run out of breath while talking, be careful not to work harder. Stop and sit calmly, while focusing on your breathing. Try the breathing strategies described earlier in this leaflet. Do these until you feel ready to speak again.
- **Try humming to yourself** to practice using your voice, while being careful not to strain.
- **Use other ways of communicating,** such as writing, texting, or using gestures, if talking is difficult or uncomfortable.
- **Sip water throughout the day** to help keep your voice working.

Managing problems with attention, memory, and thinking clearly

It is very common for people who have been severely unwell, especially those who had a breathing tube in hospital, to experience new difficulties with attention, remembering things, and thinking clearly. These difficulties may go away within weeks or months, but for some people, they can last longer-term.

It is important for you and your family to recognize if you are experiencing these difficulties, as they can have an impact on your relationships, daily activities, and your return to work or education.

If you experience these difficulties, these strategies may help:

- **Physical exercise** can help your brain recover. While this may be difficult if you are experiencing weakness, breathlessness, or fatigue, try gradually introducing gentle exercise into your daily routine. The fitness and strengthening exercises described earlier in this leaflet are a good place to start.
- **Brain exercises**, such as new hobbies or activities, puzzles, word and number games, memory exercises, and reading may help. Start with brain exercises that challenge you but are achievable and increase the difficulty as you are able. This is important for keeping you motivated.
- **Prompt yourself** with lists, notes, and alerts, such as phone alarms, that can remind you of things you need to do.
- **Break down activities** into individual steps to avoid feeling overwhelmed. Some of the strategies listed below for managing activities of daily living may also help you manage the impact of problems with attention, memory, and thinking clearly, such as adjusting your expectations and letting others help you.

It's give back time...be a Plasma Donor!

What is Plasma Therapy?

The therapy aims at using antibodies from the blood of a recovered COVID-19 patient to treat those critically infected by the virus. Plasma is a blood component that contains virus-fighting antibodies. It is like blood donation, however, in the same plasma gets separated from the blood and the remaining blood will be transferred back to your body resulting in zero blood loss. The procedure is completely harmless and the donor does not experience any pain, sickness or dizziness.

What is Convalescent Plasma?

Convalescent plasma is the liquid part of blood that is collected from patients who have recovered from the novel coronavirus disease, COVID-19, caused by the virus SARS-CoV-2. COVID-19 patients develop antibodies in the blood against the virus. Antibodies are proteins that might help fight the infection.

It's give back time...be a Plasma Donor!

Who is eligible to donate Convalescent Plasma

You can donate plasma if you are:

- Between 18-60 years of age and for women, she should be above 18 years of age and should never have been pregnant
- Weigh more 50 kgs
- Previously confirmed positive for COVID-19 by a laboratory test
- Recovered form documented infection of COVID-19 and have been symptom free for at least 14 days
- Found negative for all pre donation testing for relevant transfusion-transmitted infections
- Meeting all other blood donation criteria

How can I donate Plasma?

For donation, reach out to Blood Bank at Medanta Hospital

COVID-19: Frequent doubts that come to mind

What do I do i f my symptoms persist?

Recovery period is different from person to person. Don't worry, take advice from your consultant for further treatment and follow-up.

When is it safe for me to end isolation?

Talk to your doctor. In general, you can resume contact with other people after:

- You have had three days without fever, AND
- It has been at least 17 days since you first experienced symptoms, AND
- Your symptoms are improving.

If you have a suppressed immune system or other special conditions, your doctor may recommend a longer period of isolation and/or further testing.

When can I resume my office duty?

You can resume your work routine after:

- At least 17 days since you first experienced symptoms
- You have recovered from symptoms and regained energy levels

I was not tested again after the first COVID positive test - do I need to worry that I may still be positive and infect others?

Someone who has completed quarantine or has been released from isolation is not in the infective period and does not pose a risk of infection to other people and does not need to be tested again.

COVID-19: Frequent doubts that come to mind

Can I get re-infected with COVID-19?

Most people who are infected with the COVID-19 virus, whether or not they have symptoms, produce antibodies (proteins that fight infections) and fighter cells. For those recovered, the chances of reinfection appear to be very low in the first three months after the initial infection. And it's possible that even after that, the low levels of antibodies may be able to protect against reinfection.

Can people without symptoms transmit the virus?

Yes, infected people can transmit the virus even when they don't have symptoms. This is why it is important that all people who are infected are identified by testing, isolated, and, depending on the severity of their disease, receive medical care. These measures break the chain of transmission.

Can I get COVID infection without ever being in close contact of a COVID positive person?

Yes, you can. Recent studies indicate that COVID can spread through tiny droplets that remain suspended in the air for long. In closed spaces with inadequate ventilation, a COVID positive person can leave such tiny droplets hanging in the air which can be circulated by the air-conditioning systems. Hence, wearing a mask at all times is important.

How can we use air conditioning safely at home?

- A temperature between 24-30^{0}C should be maintained while operating ACs at home.
- While, a relative humidity level of 40% to 70% is considered to be the most suitable as it decreases problems from pathogens.

COVID-19: Frequent doubts that come to mind

- Recirculation of cool air by room air conditioners, must be accompanied by outdoor air intake through slightly open windows and exhaust by natural exfiltration.
- Centralized air conditioning should be avoided if infected and non infected persons live in the same house. Individual air conditioning units should be used in separate rooms.

Can we use room coolers (evaporative coolers):

- Yes, you can. Evaporative coolers must draw air from outside to ensure good ventilation.
- Evaporative cooler tanks must be kept clean and disinfected and the water drained and refilled frequently.
- Windows must be kept open to release humid air.
- Portable evaporative coolers that do not draw outdoor air are not recommended, since their cooling reduces with humidity rising inside the space.

Thank You!

Stay Healthy…Stay Happy

References:

- Ministry of Health & Family Welfare Guidelines
- WHO guidebook for Support for Rehabilitation Self-Management after COVID-19- Related Illness
- US- Centre for disease Control (CDC)

COVID Helpline No.

+91 124 483 4566

Email: covid19@medanta.org

Download **Medanta - eCLINIC** mobile app

www.medanta.org

*COVID-19 related consults are chargeable and available only on Medanta - eCLINIC (telemedicine)

*Not for medical emergencies

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