



Heart Rate Variability (HRV)

Movement and Health: The Relationship

Heart Rate Variability (HRV) is a measure that assesses the variations in time intervals between successive heartbeats. This metric offers valuable insights into the adaptability of the autonomic nervous system in various circumstances, serving as a key indicator of overall health and cardiovascular function. A higher HRV, signifying more time between heartbeats, is generally preferable as it indicates a quicker recovery from stress and the heart's ability to return to its normal rhythm after being accelerated due to factors like exercise, stress, or illness. It serves as a measure of how effectively the body manages stress, encompassing physical exertion and other stressors. Read more about HRV values here.

Numerous factors can influence HRV, including:

- Stress
- Hormone levels
- Poor dietary habits
- Sedentary lifestyle
- Inflammation
- Mental health conditions such as anxiety, depression
- Respiratory conditions like asthma
- Cardiac issues such as heart disease and arrhythmias
- Metabolic conditions like diabetes
- Advancing age
- Sleep disturbances
- Certain medications





Heart Rate Variability (HRV) Movement and Health: The Relationship

In the context of recovery from long COVID and long vax, particularly concerning exercise, the following information is pertinent:

Long COVID/Long Vax Recovery and Exercise: Some individuals endure lingering symptoms like fatigue, breathlessness, and heart irregularities. Engaging in a structured and gradual exercise regimen, overseen by healthcare professionals, can offer notable benefits. Physical activity plays a vital role in enhancing cardiovascular function, boosting vitality, and alleviating symptoms progressively. For some patients, exertion can lead to a relapse of symptoms. Patients need to identify the activity level beyond which their symptoms worsen, and then aim to stay below that level of activity. Consult with your managing healthcare provider if you need assistance identifying your activity boundaries. Never push yourself too hard and let your body be your guide.

The monitoring of HRV proves to be a valuable instrument for individuals recuperating from long COVID/ long vax. By tracking autonomic nervous system functionality and overall well-being, HRV analysis can provide insights into recovery progress. An enhancement in HRV levels might signal advancements in the recovery process.





Heart Rate Variability (HRV)

Exercise Styles

Individualized Exercise Plans: Tailored exercise regimens should be customized to accommodate the specific symptoms and constraints of each individual. These plans should commence at a gentle and feasible level, gradually intensifying as the person's capacity improves. What may be appropriate for one individual could prove excessive for another.

Aerobic Exercise: Engaging in activities like walking, stationary cycling, or swimming can significantly enhance cardiovascular health and endurance during the recovery from long COVID or long vax symptoms. These exercises also contribute to increasing Heart Rate Variability (HRV).

Strength Training: Incorporating strength training routines can aid in rebuilding muscle strength and stamina that may have diminished during illness or periods of inactivity resulting from long COVID or long vax. Enhanced muscle function can bolster overall physical well-being.

Breathing Exercises: Techniques such as diaphragmatic breathing and paced breathing can assist individuals with long COVID and long vax in managing symptoms like breathlessness, while potentially influencing HRV by inducing relaxation. Additional information on breath work can be found here.







Beginner fitness

Lower Body





Sit to Stand

Start standing with a chair behind you. Slowly control your descent to sit down. Return to standing without using your hands. To make this more challenging, tap the chair lightly then immediately stand.





Reverse Lunge

With your hands on a chair in front of you, take one step back and lower your back knee straight down towards the floor without tapping your back knee on the ground. Return to standing with both feet together. Alternate sides.





Calf Raise

Stand with your hand on a chair or stable surface. Lift up onto your toes, then slowly lower your heels to the floor.





Bridge

Lay on your back with both knees bent and feet flat on the floor hips width distance. Keeping your back straight, lift your hips from the floor. Slowly lower back down.





Lateral Step Up

Stand to one side of a step or stool. Place the foot closest to the step, on the step. Lift your back foot from the floor to perform the step up. Slowly lower back to the starting position.



Beginner fitness Core



Modified Plank

With your knees and elbows on the floor, lift your hips from the floor so that your back and hips make a straight line. Hold this position for 20-40 seconds.





Heel Tap

Lay on your back with your hips and knees bent to 90 degrees. Alternating sides, tap one heel to the floor and then the other. Keep your low back pressing into the floor.





Bird/Dog

Starting on your hands and knees keep your back flat and your abdominals engaged while you reach one hand out in front of you and the opposite foot straight back. Alternate sides.





Alternating Chest Fly

Lay on your back with your hips and knees bent to 90 degrees. Hold light weights (or water bottles) straight up towards the ceiling. Alternate lowing one hand to the side towards the floor with your elbow straight, then back towards the ceiling. Alternate sides.





Alternating Leg Lowering

Lay on your back with your legs straight and feet towards the sky. Lower one leg down towards the floor while keeping your low back pressing into the ground. Lift this leg back up and alternate sides.



Beginner fitness Upper Body





Standing Row

Attach a resistance band to a stable surface. Hold the end of the band and pull your elbows back while squeezing your shoulder blades together. Keep your neck relaxed.





Biceps Curl

Hold weights or water bottles with your elbows straight and palms facing forward. Bend your elbows and lift the weights towards your shoulders.





Wall Push Up

With your hands on the wall at shoulder height, take one step back. Lower your chest towards the wall by bending your elbows. Keep your hips and back straight (don't let your hips dip towards the wall).





Triceps Pull Down

With a band anchored to a stable surface at about eye level, hold the ends of the band with your elbows bent. Next straighten your elbows while keeping your arms by your side.





Pull Aparts

Hold two ends of a band with your arms straight out in front of you. Pull your arms apart (out to the side) against the resistance of the band, then return to neutral.



Intermediate fitness

Lower Body





Goblet Squat

Hold a dumbbell at chest level. With your feet slightly wider than hips width, bend your knees and push your hips back into a squat. Return to standing.





Romanian Dead Lift

Stand on one leg and hold a dumbbell in the opposite hand. Hinge forward at the waist while keeping your back flat and sending the opposite foot straight behind you. Return to standing.





Monster Walk

With a band around your ankles, lower slightly into a shallow squat position. Take 10-15 steps to one side against the resistance of the band, then 10-15 steps back to the starting position.





Walking Lunge (option to hold weights by your side). Step forward with one foot and bend your knees, lowering the back knee towards the floor without tapping it on the floor. Return to standing and immediately step forward with the opposite foot to repeat. Walk out about 15 - 20 steps.





Lateral Lunge (option to hold weight in goblet position).

Step to one side and bend into the knee you stepped with, pressing your hips back. Return to standing.



Intermediate fitness

Core





Bicycle

Lay on your back and lift both feet from the floor. With your hands behind your head alternate bringing one elbow to the opposite knee, then switch.



Forward Plank

With your forearms flat on the ground and elbows directly below your shoulders, lift your hips from the floor. Do not allow your back to arch. Hold for 20 - 45 seconds.



Lateral Plank

With one elbow on the ground just below your shoulder, lift your hips, making a straight line from your head to your toes.

Hold for 20 - 45 seconds.





Russian Twist

While sitting, slightly lean back while keeping your back straight and lift your feet from the floor. Using the strength in your abdomen, rotate your trunk left then right. Increase difficulty by holding a weight and decrease difficulty by keeping your feet on the ground.





Supine Leg Raise

Lay on your back and lift your feet up towards the sky. Press you low back into the floor and slowly lower both legs to hover from the ground. Return to the starting position and repeat.



Intermediate fitness

Upper Body





Bent Over Row

Hold weights in both hands. Slightly bend your knees and lean forward with your elbows straight and reaching towards the floor. Keeping your back flat. Bring your elbows in towards your side while squeezing your shoulder blades together.





Serratus Clock

Start with a band around both hands as shown and your hands on the wall at shoulder height and width (elbows slightly bent). Keep one hand steady and slide the opposite hand up the wall to the 1 o'clock position, then back to the start position, then the 5 o'clock position





Skull Crusher

While laying on your back, reach both weights up towards the sky with elbows straight. Next bend your elbows bringing the weights towards your shoulders. Press your elbows straight again and repeat.





Quadruped T

Hold weights in each hand and come onto your hands and your knees with your back flat. Keep one hand down while lifting the opposite hand straight out to the side with your elbow straight.





Arnold Press

Hold weights in each hand. Bring your arms straight out to the side with your elbows bent and weights towards the sky. Press the weights above your head straightening your elbows. This can be performed in kneeling or standing.



