

BENEFITS OF EXERCISE ON THE RESPIRATORY SYSTEM

Increases the Respiratory Rate

Exercise is nothing but an elevated physical activity, due to which the muscles in the body utilize more oxygen and produce excess carbon dioxide. The lungs need to work harder to cater to this oxygen demand, as well as to eliminate the excess carbon dioxide. Hence, the breathing rate of a person increases from about 15 breaths per minute when at rest, to about 40 - 60 breaths per minute during a workout.

Increases the Tidal Volume

The tidal volume refers to the amount of air inhaled and exhaled in one breath. With exercise generating excess carbon dioxide, and with the requirement of more oxygen, the breathing rate elevates immediately after exercising. This elevated breathing rate increases the tidal volume as well.

Increases the Rate of Gas Exchange

There is a continuous exchange of oxygen and carbon dioxide that takes place in the lungs. While exercising, the breathing rate increases, and the rate of gas exchange between the alveoli and capillaries is also maximized to supply oxygen and remove excess carbon dioxide.

These immediate effects of exercise increase pulmonary health and provide many long-term benefits, which are described below.

How Does Exercise Make You Healthy?

Regular exercise has several beneficial effects on your body that can improve the function of your musculoskeletal system, your cardiovascular system, your respiratory system, your metabolism, and even your brain.

Musculoskeletal benefits of regular exercise:

- Exercise increases the size and strength of your muscle fibers.
- Exercise increases the strength of your ligaments and tendons.
- Exercise increases the number and density of the capillaries that supply blood to your skeletal muscles.
- Exercise increases the number and the size of the mitochondria (the power plants) in your muscle tissue, which allows your muscle to burn more energy.

Cardiovascular benefits of regular exercise:

- Exercise improves your overall cardiac function, so that you can pump more blood with each heart beat.
- Exercise reduces your blood pressure, especially if you have essential hypertension.

- Exercise improves your overall vascular function.
- Exercise helps to prevent atherosclerosis.

Respiratory benefits of regular exercise:

- Exercise improves your lung capacity.
- Exercise increases the blood flow to your lungs, allowing the lungs to deliver more oxygen into the blood.

Metabolic benefits of regular exercise:

- Exercise increases your muscles' ability to burn fat more efficiently.
- Exercise increases the mobilization of fatty acids into the bloodstream, from your fat deposits. (These last two effects of regular exercise "tune" your metabolism into more of a fat-burning machine.)
- Exercise reduces your triglyceride blood levels.
- Exercise increases your HDL cholesterol (good cholesterol).
- Exercise reduces insulin resistance.

Other benefits of regular exercise

- Exercise improves your immune function, which reduces your chance of getting some infections.
- Exercise appears to reduce your chances of getting breast cancer, pancreatic cancer, and certain other gastrointestinal cancers.
- Exercise helps to prevent gallstones.
- Exercise helps to prevent the physical and cognitive declines of aging.
- Exercise reduces your risk of Alzheimer disease.

Given all the physiologic benefits it produces, it is easy to see how regular exercise can help to prevent cardiovascular disease.

In addition to the direct beneficial effects of exercise on the heart, regular exercise also improves several important cardiac risk factors. Exercise lowers blood pressure, helps prevent obesity, reduces triglyceride levels, increases HDL cholesterol levels, and improves insulin resistance (and thus helps to prevent or even reverse metabolic syndrome). An exercise routine has even been shown to be helpful in achieving smoking cessation.

Regular exercise is one of the most beneficial habits you can develop for your overall health, well-being, and longevity.

Benefits

- Deeper stronger easier breathing
- Reduced anxiety and the effects of trauma
- More energy

- Improved posture and Remote Slumping Sickness
- Increased stamina
- Pain reduction
- Shortened recovery times
- Reduced tension
- Reduce or eliminate blow back pain
- Improved blood circulation
- Improved cellular oxygenation
- Improved muscle tone
- improved blood sugar balance
- Improved blood pressure

- Improved brain function and memory
- Improved sleep incl. back sleeping without snoring
- Weight training guidance
- Altitude training guidance
- Exercise With Oxygen Training and Oxygen Enhanced Exercise and rest training guidance
- TurboOxygen training guidance
- Sports performance enhancement
- Improved voice for singing or speech including improvement in register, timbre, prosody, pitch and volume
- Improved meditation and calming
- Mental focus with relaxed concentration
- Focused energetic calm
- Emotional balance
- Weight loss or gain as preferred
- Difficult cases Sleep challenges:

- Those wishing not to or are unable to use mechanical breathing devices would require a minimum of three days to a one week intensive.
- Severe SOB (shortness of breath) I've had clients who could not step up a curb but after our program ended up walking a mile.
- Spasmodic Dysphonia, Vocal Chord Dysfunction (VCD) and general voicing challenges.