Exercise

An active lifestyle is extremely important for the cystic fibrosis (CF) population, with benefits including increased lung function and overall quality of life. People with CF who keep fitter are shown to cope better with the impact of CF, have fewer infections and generally have healthier lives.

Exercise can also

- Assist with airway clearance by helping to clear mucus from the lungs, slowing the rate of decline in lung function
- Preserve muscle strength and function
- Increase body mass
- Improve appetite
- Improve the ability to perform activities such as cleaning and shopping etc.
- Increase bone density and improve posture
- Improve exercise capacity, making it easier to keep active

The benefits are not only physical, with improvements often seen in self-esteem and emotional wellbeing as well as decreased anxiety and depression, all of which affect adherence with other treatments.

Exercise does not replace your usual airway clearance, both should be used together. Huffing should be included when exercising to maximise the benefits of airway clearance. Exercise may make you cough more so make sure you have rests when needed.

Types of exercise and their benefits

Aerobic training involves exercises that raise your heart rate, through repetitive movement of large muscle groups, and can be either weight bearing (walking or hiking) or non-weight bearing (biking or swimming). This type of exercise is particularly beneficial as it helps to clear mucus from the airways. Regular aerobic training helps make everyday life easier, by improving overall endurance for carrying out day to day tasks.

Resistance training increases the power and tone of muscles and builds bone density. It can be done using free weights, your own body weight (plyometrics) or with elastic resistance. Many people with CF have low bone mineral density, predisposing them to fractures. Weight training is particularly beneficial in increasing bone strength and preventing osteoporosis and fractures. It can also be beneficial in increasing chest mobility and strength, which aids in the removal of mucus from the airways, as well as making everyday tasks easier.
**Flexibility and core strengthening** exercises help to lengthen muscles and tendons, and improve or maintain the flexibility of muscles and can include stretching, yoga and pilates. Keeping the spine, ribcage and shoulders flexible assists in breathing and maintaining good posture, as well as helping preserve full movement of the joints and muscles around this area.

**Exercising safely**
Always discuss your activity levels with your CF team. There may be things you need to consider to make sure you are getting the most benefit from your exercise program. Some things to consider may include:

**Weight loss** – aerobic exercise burns more calories so make sure you increase your calorie intake to avoid losing weight.

**Continence** – exercise puts more strain on your pelvic floor muscles, so you may need to modify or avoid some exercises if this is an issue for you. See Pelvic Floor First link below for more information about protecting your pelvic floor during exercise.

**Oxygen** – some people may benefit from using oxygen when they exercise as this can allow you to exercise for longer at a higher level. Your CF physio may recommend checking your oxygen levels when you exercise to make sure you are in the safe range.

**Injuries** – you may be more prone to injuries if you have joint or bone issues.

**CF Related Diabetes (CFRD)** – if you have CFRD you will need to monitor your blood sugar levels when exercising.

**Dehydration** – make sure you drink plenty of fluids before, during and after exercise. You may also need to take a salt supplement if it is hot or you are sweating.

**Useful Resources**

- Pelvic Floor First [www.pelvicfloorfirst.org.au](http://www.pelvicfloorfirst.org.au)