

## **Strengthening the inspiratory muscles - drug free therapy for respiratory problems**

Inspiratory muscles play a vital role in the efficiency of breathing at rest and also during exercise. Weaker inspiratory muscles are usually highlighted with breathlessness, especially in the elderly. In general, we can say that the weakness of the inspiratory muscles can result from a number of causes, including disease, but a potent influence upon their condition is the amount of exercise they receive. The inspiratory muscles undertake most of the work of breathing. In contrast to our frequent observations of inspiratory muscle fatigue, majority of researches executed has never identified exercise-induced expiratory muscle fatigue. For this reason it's unnecessary to train anything other than the inspiratory muscles. Respiratory muscle training has been most widely used in patients with COPD; Inspiratory Muscle Training is clinically proven and beneficial for patients with COPD for Stand Alone Therapy and for Pulmonary Rehab. The aim of my presentation is to present some of researches on medical use of IMT techniques, which show that: POWERbreathe training is 10 times more effective than oxitropium bromide for improving exercise tolerance and quality of life in patients with COPD; patients experience a reduction in DYSPNOEA after as little as 3 weeks' such training; laboratory studies found ASTHMA symptoms improved with IMT by up to 75% in 3 weeks; IMT provides benefits to young CF patients; Respiratory muscle training can improve respiratory muscle strength and endurance in children and young adults with Duchenne Muscular Dystrophy; IMT improves exercise tolerance by 19% and quality of life by 16% at CHF PATIENTS; IMT may be a useful technique for positively influencing exercise capacity and physical activity in ELDERLY INDIVIDUALS. Furthermore, IMT is a widely used drug free method to increase respiratory ability and results in ENDURANCE SPORTS.

Key words: Inspiratory Muscle Training, efficiency of breathing, pulmonary rehabilitation, respiratory muscle fatigue, drug free, sport results.