

## ADDED BENEFITS OF RESPIRATORY MUSCLE TRAINING (RMT) USING THE BREATHER TO IMPROVE MENTAL FOCUS

Breathing exercises and control of breathing patterns directly influence the brain and mind, as well as mental and physiological health. This also becomes evident in the way mental health disorders affect the breathing pattern, underlining this bidirectional relationship.

Implications of these findings point to the impact of breathing exercises and voluntary breath control on mental and cognitive function and mental status [1,2,3].

While breathing exercises normally do not require equipment, combining these with a tangible device and breathing guidance may enhance the effect. The Breather (PN Medical, Inc.) is a respiratory muscle trainer based on the principle of resistance training to increase respiratory muscle strength. Inhalation and exhalation through an aperture of adjustable diameter strengthens both inspiratory and expiratory muscles. Even on the lowest setting, the Breather encourages deep abdominal breathing and promotes a rhythmic pattern of breathing.

The diaphragm is the major breathing muscle, particularly during inhalation. Furthermore, it contributes to core strength and balance at the center of the body. A recent hypothesis suggests the diaphragm function and dysfunction may be directly linked to non-respiratory symptoms such as depression, anxiety and chronic pain via phrenic nerve function. Increasing diaphragm function by RMT, therefore, represents a potential rationale for the observed benefits of RMT on psychosocial parameters [4].

Incorporating RMT into breathing and meditation exercises, ideally using guidance such as the Breather Coach app, may, therefore, enhance the experience and outcome of breathing exercises and priming, shortening the time to mental readiness. In addition, it provides a strengthening effect to the diaphragm and the entire respiratory muscle system, increasing exercise tolerance and well-being.

## REFERENCES:

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