

# Essay on pulmonary rehabilitation

[Health & Medicine](#), [Body](#)



## **Nutrition and the COPD patient**

Pulmonary rehabilitation utilizes multidisciplinary teams to improve the social and physical functioning of patients with COPD. The program provides rehabilitation to the inpatient, outpatient with COPD. (Hill, 2006). Pulmonary rehabilitation for patients with COPD includes activities like exercise training, behavioral intervention, nutritional therapy outcome assessment, psychosocial and behavioral intervention and education. It can be seen that nutritional therapy is one of the key areas of intervention in a successful pulmonary rehabilitation programme.

Patients with COPD are either overweight or underweight. A body mass index that is low has been shown to have a positive correlation to a worse prognosis for the patient. (Celli et al, 2004). In patients with stable COPD, weight loss and depletion of fat-free mass (FFM) may be observed irrespective of the level of airflow limitation that the patient may be suffering from.

There is a huge contribution from loss of weight and more importantly muscle wasting and these factors contribute a significant deal to the morbidity handicap and disability of patients with COPD.

The negative balance between dietary intake and energy expenditure leads to loss of weight and loss of fat mass. Moreover, muscle wasting results from a negative balance between protein synthesis and the breakdown of protein by the body.

Nutritional supplementation should be offered to the patient. This should initially consist of modifications to the patient's diet habit. This can be extended to the administration of supplements that are dense in energy;

which will be well divided during the day to avoid loss of appetite and the adverse ventilatory effort and metabolic effects of a high load of calorie in the body.

It is also important to note that some patients do not respond to nutrition therapy despite supplementation with energy-dense supplements. This has been explained by the widespread systemic inflammation that occurs in patients with COPD. In view of this, it has been advocated that nutritional supplementation be combined with an anabolic stimulus like exercise to optimize function. This has been shown to result in weight gain which would no doubt lead to reduction in mortality and morbidity from COPD (ATS, 2013).

Key points which the patients should be educated upon include the fact that patients with COPD generally expend more energy in a bid to ventilate the body effectively. This leads to the individual utilizing more energy, as opposed to the normal individual to respire. This trend can lead to rapid loss of weight by the individual. Therefore, the patient with COPD needs to understand that weight loss is a major complication that they need to look out for.

The patient with COPD also needs to know that intake of food can be largely impaired by the general fatigue that they feel because of the breathing difficulty that they have. This would lead to a general lack of appetite because they would see the act of eating as a tedious activity that would make them more tired. In view of this, the patient needs to be counseled and motivated to eat good food even when they do not feel like doing so because of the general lack of appetite.

It is also important that the patient with COPD be motivated with the fact that an optimal weight would positively correlate to a better prognosis, with less frequent exacerbations as opposed to malnutrition, which has been positively correlated with a worse prognosis for patients with COPD.

## REFERENCES

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