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## NUTRITIONAL INTERVENTION MAKES STRONG COPD REHABILITATION PATIENTS

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**Rationale:** The benefit of pulmonary rehabilitation (PR) in COPD has been associated with fulfilment of energy and protein balance. *The aim* of this study was to investigate the effect of a nutritional intervention in PR.

**Methods:** An intervention study including three sessions of individual dietary counselling to the ten weeks COPD PR. Data were collected at baseline, post intervention (PI) and at three-month follow up (FU3)(N=39). Energy and protein intake was recorded for four days. Body composition was measured by BIA, and functional status by 30-seconds chair stand (30s-CST), and 6-minutes walking test (6MWT).

**Results:** Of the 111 included, ninety-nine patients, mean age at 71.36±0.85 completed the program. Twelve participants excluded themselves due to fear of COVID-19 or hospitalization. Energy intake increased from baseline 1676(±505 kcal) to PI 1941(±553 kcal) (p=0.00) and protein intake from 64(±22 g) to 88(±25 g) (p=0.00). The increased protein intake almost maintained from PI to FU3 (84±26g) (p=0.02). An improvement in functional parameters was seen for 30-s CST from 10.8±2.8 repetitions at baseline to 14.1±4.3 repetitions at PI (p=0.00). 6MWT increased from 377(±131) meters at baseline to 404(±128) meters at PI (p=0.02). For body composition, FFM increased from baseline 52.7 kg (±10.2) to 55.1(±11.4) kg at FU3 (p=0.02). A positive association was seen between energy intake at FU3 and 30s-CTS (p=0.04).

**Conclusion:** Individual nutritional guidance sessions are beneficial among COPD patients in PR and helps the patients to increase physical function and muscle mass.

**Disclosure of Interest:** None declared