

## MOL2NET, International Conference Series on Multidisciplinary Sciences <a href="http://sciforum.net/conference/mol2net-03">http://sciforum.net/conference/mol2net-03</a>

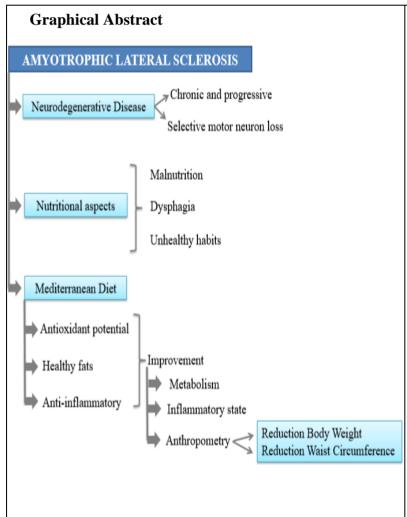
## Effect of the Mediterranean diet on body weight and waist circumference in patients with Amyotrophic Lateral Sclerosis (ALS)

S. Carrera (sandra.carrera@ucv.es)<sup>a</sup>, C. Barrios (carlos.barrios@ucv.es)<sup>b</sup>, JE. de la Rubia (joseenrique.delarubi@ucv.es)<sup>c</sup>, ML. Moreno (ml.moreno@ucv.es)<sup>d</sup>, E. Drehmer (eraci.drehmer@ucv.es)<sup>d</sup>

<sup>a</sup>Doctoral Degree's School, Catholic University of Valencia "San Vicente Mártir", Valencia, Spain <sup>b</sup>Institute for Research on Musculoskeletal Disorders, Catholic University of Valencia "San Vicente Mártir", Valencia, Spain

<sup>c</sup>Department of Basic Medical Sciences, Catholic University of Valencia "San Vicente Mártir", Valencia, Spain

<sup>d</sup> Department of Basic Sciences, Catholic University of Valencia "San Vicente Mártir", Torrente, Valencia, Spain



## Abstract.

Amyotrophic Lateral Sclerosis (ALS) is a progressive and devastating neurodegenerative disease. It produces a disabling weakness secondary to the selective loss of upper motor neurons and lower motor neurons in the brainstem and spinal cord.

The Mediterranean Diet has been widely studied in the field of neurodegenerative diseases due to its great antioxidant potential and its content in healthy fats. It can produce improvements in anthropometric, metabolic and inflammatory parameters.

The aim of this study is to analyze the effect of the Mediterranean Diet on the anthropometric parameters such as body weight (BW) and waist circumference (WC) in 10 patients with ALS.

The results in the male population showed an average reduction in body weight of 2.42% after 2 months and 4.19% after 4 months. The average reduction in waist circumference was 4.47% and 6.32% after 2 and 4 months, respectively.

In the female population, an average reduction in body weight of 2.34% after 2 months and 4% after 4 months was obtained. The average reduction in waist circumference was 3.54% and 5.51% after 2 and 4 months, respectively.

Patients with ALS may benefit from a dietary pattern based on the Mediterranean Diet.

## References

Dinu, M., Pagliai, G, G., Casini, A., and Sofi, F. (2017). Mediterranean diet and multiple health outcomes: an umbrella review of meta-analyses of observational studies and randomized trials. *Eur. J. Clin. Nutr.* 72(1): 30-43. Doi: 10.1038/ejcn.2017.58.

Franco, S., Vila, M., and Perier, C. (2018). Mitochondrial Quality Control in Neurodegenerative Diseases: Focus on Parkinson's Disease and Huntington's Disease. *Frontiers in Neuroscience*. 12(342): 1-25. Doi: 10.3389/fnins.2018.00342

Robberecht, W., and Philips. (2013). The changing scene of amyotrophic lateral sclerosis. *Nature Reviews. Neuroscience.* 14(4):248-64. doi: 10.1038/nrn3430. Doi: 10.1038/nrm3430