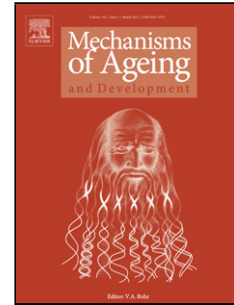


## Accepted Manuscript

Title: Improving the comprehension of sarcopenic state determinants: An multivariate approach involving hormonal, nutritional, lifestyle and genetic variables

Authors: Jonas R. Dias da Silva, Ivna Vidal Freire, Ícaro J.S. Ribeiro, Caroline Silva dos Santos, Cezar Augusto Casotti, Djanilson Barbosa dos Santos, Ana Angélica Leal Barbosa, Rafael Pereira



PII: S0047-6374(18)30040-X  
DOI: <https://doi.org/10.1016/j.mad.2018.05.008>  
Reference: MAD 11060

To appear in: *Mechanisms of Ageing and Development*

Received date: 17-3-2018  
Revised date: 4-5-2018  
Accepted date: 24-5-2018

Please cite this article as: da Silva JRD, Freire IV, Ribeiro ÍJS, dos Santos CS, Casotti CA, dos Santos DB, Leal Barbosa AA, Pereira R, Improving the comprehension of sarcopenic state determinants: An multivariate approach involving hormonal, nutritional, lifestyle and genetic variables, *Mechanisms of Ageing and Development* (2018), <https://doi.org/10.1016/j.mad.2018.05.008>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

## IMPROVING THE COMPREHENSION OF SARCOPENIC STATE DETERMINANTS: AN MULTIVARIATE APPROACH INVOLVING HORMONAL, NUTRITIONAL, LIFESTYLE AND GENETIC VARIABLES

### Running title: Determinants of Sarcopenia in old adults

Jonas R. Dias da Silva<sup>a</sup> BSc, Ivna Vidal Freire<sup>a,b,c</sup> MSc, Ícaro J. S. Ribeiro<sup>a,b</sup> MSc, Caroline Silva dos Santos<sup>a</sup>, Cezar Augusto Casotti<sup>b</sup> PhD, Djanilson Barbosa dos Santos<sup>d</sup> PhD, Ana Angélica Leal Barbosa<sup>c</sup> PhD, Rafael Pereira<sup>a,b,c</sup> PhD\*

<sup>a</sup>Integrative Physiology Research Center, Department of Biological Sciences, State University of Southwest Bahia (UESB), Jequié 45210-506, Bahia, Brazil.

<sup>b</sup>Postgraduate Program in Nursing & Health, State University of Southwest Bahia (UESB), Jequié 45210-506, Bahia, Brazil.

<sup>c</sup>Human Genetics Laboratory, Department of Biological Sciences, State University of Southwest Bahia (UESB), Jequié 45210-506, Bahia, Brazil.

<sup>d</sup>Centro de Ciências da Saúde, Universidade Federal do Recôncavo Baiano, Av. Carlos Amaral, 1015 - Cajueiro, Santo Antônio de Jesus 44.570-000, BA, Brazil.

### HIGHLIGHTS

- The aging is associated with a continuous decline of muscle mass and strength
- Sarcopenia is determined by genetic, nutritional, hormonal and living habits aspects
- The comprehension regarding the determinants of sarcopenia may lead the prevention
- Age, low serum Vitamin D and II-genotype were the major determinants of sarcopenia

### Abstract

It is known that sarcopenia is a multifaceted phenomenon, which involves genetic, nutritional, hormonal and living habits aspects. Then, an integrated analysis, as a multivariate approach, could improve the comprehension about the determinants of sarcopenic state in old adults. The present study aimed to investigate the interaction among serum vitamin D, daily caloric and protein intake, lifestyle habits, ACE I/D gene polymorphism and sarcopenic state in community-dwelling old adults. One hundred one community-dwelling old adults were clinically stratified as sarcopenic or non-sarcopenic. Serum vitamin D, daily caloric and protein intake, lifestyle habits (smoking, physical activity level and sedentary behavior) and ACE I/D gene polymorphism were recorded. A multivariate logistic regression technique

Download English Version:

<https://daneshyari.com/en/article/8284668>

Download Persian Version:

<https://daneshyari.com/article/8284668>

[Daneshyari.com](https://daneshyari.com)