

# Accepted Manuscript

Zinc supplementation reduces *RANKL/OPG* ratio and prevents bone architecture alterations in ovariectomized and type 1 diabetic rats

Elaine C.S. Ferreira, Raul H. Bortolin, Francisco P. Freire-Neto, Karla S.C. Souza, João F. Bezerra, Marcela A.G. Ururahy, Ana M.O. Ramos, Silvia T. Himelfarb, Bento J. Abreu, Thiago V.N. Didone, Lucia F.C. Pedrosa, Aldo C. Medeiros, Sonia Q. Doi, José Brandão-Neto, Rosário D.C. Hirata, Luciana A. Rezende, Maria G. Almeida, Mario H. Hirata, Adriana A. Rezende



PII: S0271-5317(16)30374-8

DOI: doi: [10.1016/j.nutres.2017.03.004](https://doi.org/10.1016/j.nutres.2017.03.004)

Reference: NTR 7734

To appear in: *Nutrition Research*

Received date: 31 August 2016

Revised date: 16 February 2017

Accepted date: 9 March 2017

Please cite this article as: Ferreira Elaine C.S., Bortolin Raul H., Freire-Neto Francisco P., Souza Karla S.C., Bezerra João F., Ururahy Marcela A.G., Ramos Ana M.O., Himelfarb Silvia T., Abreu Bento J., Didone Thiago V.N., Pedrosa Lucia F.C., Medeiros Aldo C., Doi Sonia Q., Brandão-Neto José, Hirata Rosário D.C., Rezende Luciana A., Almeida Maria G., Hirata Mario H., Rezende Adriana A., Zinc supplementation reduces *RANKL/OPG* ratio and prevents bone architecture alterations in ovariectomized and type 1 diabetic rats, *Nutrition Research* (2017), doi: [10.1016/j.nutres.2017.03.004](https://doi.org/10.1016/j.nutres.2017.03.004)

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.

**Zinc supplementation reduces *RANKL/OPG* ratio and prevents bone architecture****alterations in ovariectomized and type 1 diabetic rats**

Elaine C. S. Ferreira<sup>a</sup>, Raul H. Bortolin<sup>a</sup>, Francisco P. Freire-Neto<sup>b</sup>, Karla S. C. Souza<sup>a</sup>, João F. Bezerra<sup>a</sup>, Marcela A. G. Ururahy<sup>a</sup>, Ana M. O. Ramos<sup>c</sup>, Silvia T. Himelfarb<sup>d</sup>, Bento J. Abreu<sup>e</sup>, Thiago V. N. Didone<sup>d</sup>, Lucia F. C. Pedrosa<sup>f</sup>, Aldo C. Medeiros<sup>g</sup>, Sonia Q. Doi<sup>h</sup>, José Brandão-Neto<sup>g</sup>, Rosário D. C. Hirata<sup>d</sup>, Luciana A. Rezende<sup>i</sup>, Maria G. Almeida<sup>a</sup>, Mario H. Hirata<sup>d</sup>, Adriana A. Rezende<sup>a\*</sup>.

<sup>a</sup>Department of Clinical and Toxicological Analyses, Federal University of Rio Grande do Norte, Natal, Rio Grande do Norte, Brazil

<sup>b</sup>Department of Biochemistry, Federal University of Rio Grande do Norte, Natal, Rio Grande do Norte, Brazil

<sup>c</sup>Department of Clinical Pathology, Federal University of Rio Grande do Norte, Natal, Rio Grande do Norte, Brazil

<sup>d</sup>School of Pharmaceutical Science, University of São Paulo, São Paulo, Brazil.

<sup>e</sup>Department of Morphology, Federal University of Rio Grande do Norte, Natal, Rio Grande do Norte, Brazil

<sup>f</sup>Department of Nutrition, Federal University of Rio Grande do Norte, Natal, Rio Grande do Norte, Brazil

<sup>g</sup>Department of Clinical Medicine, Federal University of Rio Grande do Norte, Natal, Rio Grande do Norte, Brazil

<sup>h</sup>Department of Medicine, Uniformed Services University of the Health Sciences, Bethesda, MD, USA

<sup>i</sup>Department of Chemistry, University of Ribeirão Preto, Ribeirão Preto, São Paulo, Brazil

Download English Version:

<https://daneshyari.com/en/article/5588626>

Download Persian Version:

<https://daneshyari.com/article/5588626>

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