Accepted Manuscript

Soy protein improves tibial whole-bone and tissue-level biomechanical properties in ovariectomized and ovary-intact, low-fit female rats



Pamela S. Hinton, Laura C. Ortinau, Rebecca K. Dirkes, Emily L. Shaw, Matthew W. Richard, Terese Z. Zidon, Steven L. Britton, Lauren G. Koch, Victoria J. Vieira-Potter

PII:	S2352-1872(18)30030-5
DOI:	doi:10.1016/j.bonr.2018.05.002
Reference:	BONR 159
To appear in:	Bone Reports
Received date:	10 February 2017
Revised date:	15 May 2018
Accepted date:	17 May 2018

Please cite this article as: Pamela S. Hinton, Laura C. Ortinau, Rebecca K. Dirkes, Emily L. Shaw, Matthew W. Richard, Terese Z. Zidon, Steven L. Britton, Lauren G. Koch, Victoria J. Vieira-Potter, Soy protein improves tibial whole-bone and tissue-level biomechanical properties in ovariectomized and ovary-intact, low-fit female rats. The address for the corresponding author was captured as affiliation for all authors. Please check if appropriate. Bonr(2017), doi:10.1016/j.bonr.2018.05.002

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.

ACCEPTED MANUSCRIPT

Soy Protein Improves Tibial Whole-Bone and Tissue-Level Biomechanical Properties in

Ovariectomized and Ovary-Intact, Low-Fit Female Rats

Pamela S. Hinton, Ph.D.¹, Laura C. Ortinau, Ph.D.,¹ Rebecca K. Dirkes¹, Emily L. Shaw¹, Matthew W. Richard, M.S.¹Terese Z. Zidon, M.S.¹, Steven L. Britton, Ph.D.², Lauren G. Koch, Ph.D.², Victoria J. Vieira-Potter, Ph.D.¹

¹Department of Nutrition and Exercise Physiology, University of Missouri, Columbia, MO, USA.

²Department of Anesthesiology, University of Michigan Medical School, Ann Arbor, MI, USA.

Pamela S. Hinton, PhD

University of Missouri-Columbia- Department of Nutrition and Exercise Physiology

204 Gwynn Hall

Columbia, MO 65211

(573)-882-4137

Abbreviations used- Low-capacity runners (LCR), ovariectomy (OVX), Sham (SHM), Soy-protein-based diet (SOY), control diet (CON), trabecular separation (Tb.Sp), trabecular thickness (Tb.Th), trabecular number (Tb.N), connectivity density (Conn.D), maximal torque (Tmax), torsional stiffness (Ks), shear modulus of elasticity (G), ultimate tensile strength (Su), osteocalcin (OC), N-terminal propeptide of type I procollagen (P1NP), tartrate-resistant acid phosphatase (TRAP5b), and C-terminal telopeptide of type I collagen (CTx).

This study was funded by Grant Number P50AT006273 from the National Center for Complementary and Integrated Health (NCCIH), the Office of Dietary Supplements (ODS), and the National Cancer Institute (NCI). Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the NCCIH, ODS, NCI, or the National Institutes of Health. Download English Version:

https://daneshyari.com/en/article/8627661

Download Persian Version:

https://daneshyari.com/article/8627661

Daneshyari.com