

Bone Health Special Interest Group Research Update

January, 2010-Issue 2

In This Issue

Committee Members Needed!

Article Headline

Quick Links

[Section on Geriatric](#)

[Bone Health SIG](#)

[National Osteoporosis Foundation](#)

Greetings!

Thank you for your membership in the Bone Health SIG! Welcome to our newest feature- the Research Update. Each issue will provide an abstract of a recently published research article pertaining to bone health. We hope this information will give you new ideas for optimal management of our current or potential clients.



Bone Health Committee Members Needed!

Moving into 2010, the Bone Health SIG is looking for volunteers to help with projects to promote consumer and professional awareness of bone health. We are also looking to develop some exciting programming for CSM 2011.

Join us at CSM in San Diego at our member Business Meeting Thursday, February 18th from 12:30-2:15 pm to hear about our current projects for the coming year. Our Education and Practice Committees are charged with promoting bone health education and standards of practice. The following research update is an example of the ways in which the Education Committee will be working to keep you, our BHSIG members informed throughout the year.

We will be reporting on our completed and current projects and needs at CSM. Connect with fellow boneheads at the CSM member meeting or contact us if you have project ideas or want to participate in one of our current activities.

Melissa Peterson, PT, PhD, GCS,
BHSIG Secretary, at mpetersn@bradley.edu

Nancy Abodeely, PT, MA, OCS, CLT-LANA
BHSIG Interim Chair, at Nancy.Abodeely@kp.org

Muscle Forces or Gravity: What Predominates Mechanical Loading on Bone?

KOVRT, WENDY M.; BARRY, DANIEL W.; SCHWARTZ, ROBERT S.

Medicine & Science in Sports & Exercise. 41(11):2050-2055, November 2009.

doi: 10.1249/MSS.0b013e3181a8c717

Abstract:

Most mechanical forces acting on the skeleton are generated either through impact with the ground (i.e., gravitational loading) or through muscle contractions (i.e., muscle loading). If one of these conduits for activating mechanotransduction in bone is more effective than the other with respect to developing or maintaining bone strength, this would have important clinical implications for prescribing physical activity for the prevention or treatment of osteoporosis. This section of the symposium considered whether there is evidence from studies of humans that the effectiveness of physical activity to preserve bone health is dependent on whether the activities stimulate the skeleton primarily through gravitational or muscle loading. Conclusive evidence is lacking, but several lines of research suggest that physical activities that involve impact forces, and therefore generate both gravitation and muscle loading, are most likely to have beneficial effects on bone metabolism and reduce fracture risk.

(C)2009The American College of Sports Medicine

Available at: http://journals.lww.com/acsm-msse/Abstract/2009/11000/Muscle_Forces_or_Gravity_What_Predominates.12.aspx

You received this e-mail because your APTA e-mail preferences indicate that you would like to receive e-mails from your Chapter and Sections(s). If you would like to update your e-mail preferences or contact information, please visit www.apta.org and click "My APTA." We respect your e-mail preferences.

Bone Health Special Interest Group
Section on Geriatrics APTA

✉ **SafeUnsubscribe®**

This email was sent to andreasaevoon@apta.org by geriatrics@apta.org.
[Update Profile/Email Address](#) | Instant removal with [SafeUnsubscribe™](#) | [Privacy Policy](#).

Email Marketing by



Section on Geriatrics APTA | 1111 N Fairfax Street | Alexandria | VA | 22314