Good vibrations—in space?

Astronauts endure a variety of bodily changes during micro-gravity. “When they return to Earth, most of these conditions disappear, some immediately, some gradually. One condition, the loss of bone mass, can take several years to repair itself, and for some astronauts, the damage may be permanent.” For earth-bound women, the bone loss rate “increases to 1 to 2 percent a year somewhere between three and eight years after menopause...astronauts lose mass at the same rate, per month. A round-trip to Mars could take three years.”

Clinton Rubin, a principal investigator at the State University of New York, “believes that the body’s lack of vigorous physical activity in space may not be the sole cause of the bone loss and muscle atrophy common during spaceflight.” Rubin conducted experiments having “ theorized that low-magnitude, high-frequency strain, such as ... while a person is sitting or standing, may also have a great impact on bone morphology.”

His vibration platform studies with rats had similar results to a study with sheep. “We found the platform group showed, ‘that this noninvasive, low-level stimulus was strongly anabolic [bone-building].’”

From: 2002 NASA Space Research report

Picture: JSC NASA

MARCH MEETING
Our speaker on Saturday, March 12th, 2011, is Joe Gallucci, R.Ph, owner of Healing Hands Compounding Pharmacy, in Murphy. He will outline how compounding pharmacies differ from other pharmacies, and take your questions.

“Walking ... has the highest compliance rate of any exercise around—probably because it requires little more than a sturdy pair of walking shoes and the great outdoors”. From: www.realage.com Link sent in by Rita Clarke

Suzanne visits Pratt & Whitney, aircraft manufacturers

Group member, Suzanne O’Malley, recently gave a presentation on bone health to employees at Pratt and Whitney, aircraft parts manufacturers, in Dallas. It went well, and she will be happy to make other presentations upon request.

Suzanne has degrees in Chemical Engineering and Biology. Now retired, she worked for 17 years in the petroleum industry in Houston, Dallas, Denver, and Midland. She has taught Biology and Anatomy & Physiology at Community College. “I love biology, health topics, and teaching.”

Thank you for your community outreach, Suzanne!

AUGUST MEETING
Andjelka Pavlovic, an exercise physiology doctoral student in the Department of Kinesiology at Texas Women’s University will talk to us about brand new TWU research data on vibration exercises and bone density.

Group leader: Elizabeth Kimbrough, 972-238-8413 and Jennie Image, 972-965-1467

Shout-out for Vitamin B12
New dietary guidelines for Americans were posted by the government on January 31, 2011. The guidelines included a recommendation that older adults aged 50 years and older should consume foods that are fortified with vitamin B12, such as cereals and dietary supplements.