

Osteoporosis is a systemic skeletal disorder with compromised bone strength that predisposes an individual to increased fracture risk. This is important because people are developing this silent and deadly disease at an alarming rate. Half of all women and ¼ of all men over the age of 50 will suffer an osteoporosis related fracture in their lifetime according to the National Osteoporosis Foundation (2005). That adds up to 10 million Americans living with osteoporosis and an estimated 34 million with low bone mass, putting them at risk for osteoporosis and bone related fractures. The statistics on recovery and quality of life post fracture are alarming and are raising many red flags as to the efficacy of how the current healthcare system can best deal with this disease. On average 24% of hip fracture patients over age 50 die within the year following their fracture. The functional and emotional impacts of living and dying with osteoporosis cause devastating consequences and fear in patients and their families. In my opinion, these numbers are unacceptable and can be greatly reduced through lifestyle modification, specifically exercise, nutrition and how we approach our activities of daily living.

Although many of the risk factors for osteoporosis are non modifiable, there are a wide range of dietary, lifestyle and exercise modifications that enable people to both reverse and prevent bone loss. I teach these exercises at my Pilates studio in Albany, New York and practice them myself. Everyone has improved their posture (some of us have grown taller!), and increased their flexibility, strength and range of motion. It is both remarkable and wonderful and I see proof on a daily basis that movement heals.

It is my dream to teach children worldwide through music and movement the healthy exercises that will strengthen their erector spinae muscles, encourage proper gait, core control and good posture. I believe that if we teach our children alignment awareness now that we will help them to develop healthy habits that will carry them through life standing tall, walking fluidly, and sitting up straight. This will improve bone health, aerobic capacity, attention in school, and increase energy levels and productivity. Their bones will remain strong into old age, chronic back and muscle pain will decrease, people will maintain active, fulfilling lives as they age, and healthcare costs will be greatly reduced. The cost of postural awareness exercises is nominal compared to the cost of post fracture treatment!

I have created this CD in an attempt to raise awareness in all of our communities as to the need for early intervention when it comes to preventing osteoporosis. This was stressed by the National Institute of Health Consensus Development Panel on Osteoporosis Prevention, Diagnosis and Therapy. March 7-29, 2001. JAMA 2001. They concluded that "The bone mass attained early in life may be the most important determinant of skeletal health later in life. Modifiable life-style factors can play a significant role in influencing peak bone mass. Maximizing bone mass early in life offers a critical opportunity to reduce the impact of bone loss related to aging." They went on to stress a list of issues and concerns that need to be addressed as part of directions for future research in osteoporosis management which included: "Strategies to maximize peak bone mass in girls and boys., The most

effective method of educating health care professionals and the public., The cost-effectiveness of programs encouraging bone health., and The long-term effects on health, function, and quality of life.” My music addresses all of the above concerns!

In 2009 I served on the American Institute of Biological Sciences Peer Review Medical Research Program (PRMRP 2009) where I gave critiques of proposals submitted to the U.S. Army Medical Research and Material Command (USAMRMC) based on my experience as a consumer reviewer. During meetings with leading scientists and medical professionals who had convened from across the nation we evaluated and assessed the impact that successful DOD funding of these proposals would have not only on the military but the entire US population. In October I served on a patient panel for Eli-Lilly to help them get a deeper perspective on the effects of living and working with osteoporosis. We discussed the emotional and functional impacts on a patient and their loved ones of living with osteoporosis and brainstormed ideas the drug company could come up with to help on a deeper level than drug development. I spent World Osteoporosis Day, October 20, 2009 in Washington, DC visiting members of Congress as part of the National Osteoporosis Foundation’s “Strong Voices for Strong Bones on Capitol Hill” event that brought together patients and healthcare professionals from across the country to raise awareness of osteoporosis and bone health in Congress. Although we urge the government to get more involved in patient access to testing, education on osteoporosis prevention, management and lifestyle modifications as supported by the NIH, there is so much we can do as individuals to support our own health. We can and must be pro-active. Of all I have accomplished this year, I believe my most effective way of helping so far though has been teaching one person at a time these simple and effective exercises.

My experience in movement education through dance, Pilates, the Meeks Method and over years of working with children and adults of all ages has guided me as I’ve written these songs. As an NOF support group leader and osteoporosis patient myself I have developed insight and awareness into this disease. I hope that my music and the projects that grow out of it will enable me to reach out to a much larger group, specifically the children. By the time kids reach adulthood it’s too late. We have to act now to build strong and healthy bones early. It’s like compounding interest in a savings account. You reap the benefits if you start early!

I am so happy to share these songs with all of you! To all of the children, parents, teachers, health teachers, gym teachers, dance teachers, physical therapists.....I hope they make you smile and have fun singing, dancing, and walking along with them. All of you “skele-toners” out there: Keep moving, keep toning your bones and sending them good vibrations! Let’s eliminate osteoporosis together by setting good examples for our kids. We have to learn the modified exercises ourselves too. So sing along and make the changes in yourselves first. The grown-ups will feel terrific and everyone will feel and see a difference! Although the statistics are alarming with experts predicting that by 2025 the costs of living with osteoporosis related fractures will have surged to approximately \$25.3 billion (NOF 2008), the importance of prevention cannot be overstated. Together we can halt the progress of this disease.

Thank You! Penny Shure.

