things you need to know about celiac & bone health!

ASK THE EXPERT

Ask the Doc

Interview with Dr. Michael Reed, of Spine & Sport at the Hospital for Special Surgery

BY **MAUREEN STANLEY**DELIGHT ASSOCIATE EDITOR

DR. MICHAEL REED, DPT, MSC, OCS, MTC HAS PASSIONATELY DEDICATED HIS CAREER TO THE SPECIALTY FIELD OF SPINE REHABILITATION. DR. REED HAS PROVIDED HIGHLY SPECIALIZED PRE-AND POST-SURGICAL SPINE CARE FOR MORE THAN 20 YEARS. SERVING AS DIRECTOR OF SPINE AND SPORT AT THE HOSPITAL FOR SPECIAL SURGERY LOCATED IN JUPITER, FL, DR. REED IS ALSO AN ACTIVE MEMBER OF THE NORTH AMERICAN SPINE SOCIETY.

Here at *Delight Gluten-Free Magazine*, we have received many reader questions on celiac disease and the effect on their bones and muscles.

Dr. Reed recently took time out of his very busy schedule to sit down with us to shed light on this very important topic.



DGF: Early detection appears to be the key. Should bone density scans become a part of a "post diagnosis treatment" for patients with celiac or gluten intolerance? Can these scans be performed on children as well as adults to detect bone loss?

MR: At Hospital for Special Surgery (HSS), we work as a multidisciplinary team to diagnose and treat bone density and muscle disorders so that no stone is left unturned. This collaborative spirit is the underpinning of our success and reputation.

As such, I reached out to my colleague Linda Russell, MD, a rheumatologist at HSS, to answer this question. She said, "Yes, I do feel a baseline bone density is indicated in patients diagnosed with celiac disease. Osteoporosis or a bone density lower than expected for age is more common in these patients than in the general population. It is not unreasonable to get a baseline bone density in a child. The bone density would be compared to an age-matched control."



DGF: Celiac disease/gluten intolerance causes improper absorption of nutrients in our body. After diagnosis, many of us are finding that we not only have celiac disease but bone and muscle loss as well. As a spine specialist, have you seen an increased diagnosis of bone/muscle loss due to celiac disease?

MR: Yes, however, the root cause of a bone density deficiency, a sign of celiac disease or other disorder like hyperparathyroidism, can be very elusive. Unless the pathological origin is identified and treated, any [physical therapy] work that I might do with a patient to address bone and muscle health will be ineffective.

For my specialty, the most important change in the past decade, with respect to osteopenia and osteoporosis, is a much greater awareness of the spectrum of disorders that might cause bone density loss or muscle deficiency.

Treating the signs and symptoms of celiac disease is not a value-based proposition unless the underlying disease process is addressed. From there, the patient can be educated and engaged as an active participant in their treatment which always leads to greater success and gratification.

Yes, you have to exercise! Now, get off the couch!

DGF: Exercising consistently builds muscles as well as bones. What types of exercise are best for maintaining bone and muscle health? How long and how often do you recommend working out?

MR: The data on the positive benefits of exercise with respect to bone and muscle health is now overwhelming and unequivocal. Daily conditioning of the musculoskeletal system, in weight bearing postures such as standing, sitting or walking, will enhance bone deposition and improve muscle profiles on various levels if performed with sufficient intensity, duration and regularity. In fact, for a patient with celiac disease and associated bone/muscle loss, exercise is medicine!

Establishing the correct dosage and ensuring compliance are the biggest challenges. Some people just don't like to take their medication and many just don't like to exercise. So, I am very careful not to prescribe more than my patient is willing to do; but, I try to give them enough to make a difference. The only way to know we are making a difference is to measure progress with serial bone density exams or muscle performance testing.

Weight bearing activities must be utilized as the exercise medium of choice. I do not prescribe swimming for this group of patients; rather, I insist that they exercise under the influence of gravity, such as in a standing or sitting position.

The "king of the hill" with respect to exercise type for this patient population is resistance training. It provides the greatest bone and muscular response. However, this type of exercise is the most difficult to teach for independent use. In addition, patients can just get bored lifting weights. For that reason, I sit with my patients, individually, to establish a realistic set of goals and exercises to ensure the greatest compliance.

Age-related exercise and dosage are important considerations. In my younger patients, I will sit with them and identify attainable goals, like running in a 5K, as a means of inspiring them to participate in an active weight bearing training program. My elderly patients will be encouraged to purchase a pedometer so they can get feedback on their performance. Getting that pull through is critical. Without the carrot, many patients just fall out of compliance.



In reality, increasing physical activities in weight bearing postures over baseline will be a benefit. Even just a little exercise is better than nothing. So, to answer your question in a more practical way, I don't set expectations that my patients can't meet. For some patients, the exercise program consists only of daily walking. For others, I might include three or four resistance training exercises in addition to walking.

Everything is customized to the individual patient and their unique capabilities. The key is to get them doing more than they are now, in weight bearing positions, and to make it appealing enough to become a regular part of their lives. Every effort will bring some level of benefit.





DGF: It's crucial that we stay aware of what our bodies are telling us. Are there any "red flags" we can keep on the lookout for in relation to our bones and muscles?

MR: The most important recommendation I can make with respect to bone density and muscle health is, if a problem is detected; proactively and tenaciously pursue a diagnosis. Patients must recognize that osteoporosis and muscle loss are symptoms of a disease process. A big red flag for me, in examining a patient who has been referred because of bone density loss or muscle deficiency, is the lack of a clear diagnosis. Without an understanding of the root cause, our treatment efforts may be wasted.

To learn more about Dr. Reed's work, visit: www.michaelreedpt.com www.hss.edu/florida.asp