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JULY NEWSLETTER

Unleashed Endurance Coaching

"If you wait for perfect conditions to seize and opportunity, you'll be waiting 'til the day you die."
- Mark Batterson

A Look Ahead...

August 1-2: Washington Yeti 100-Miler - Jess C.

September 27 & 28: OG Yeti 100 - Jess L-J, Caryn

October 17: Baltimore Half - Brigitta

October 1 - November 10: MCM 50k (Virtual) - Kim

Athlete Referral Program

Do you know of anyone looking for the support and guidance of a running coach? Do you have a friend who wants to get into running but doesn't know where to start?

Every athlete who you refer to **Unleashed Endurance Coaching Services** who goes on to complete 3 months of training earns you one month of **FREE** coaching! No limit on referrals. Spread the word!

Announcements:

Welcome to the team, Rachel!

Lift Heavy, Ladies!

- *Jessica Creech* MS ASCP, UESCA CRC, NCSF-SNS

From the moment we're born until we take our final breaths, our bodies are constantly remodeling themselves. Although many of us don't recognize visible growth beyond puberty and young adulthood, our cells - and thereby our tissues, organs, muscles and bones - change throughout our lives. When it comes to skeletal growth and decline women, in particular, are at a distinct disadvantage as estrogen - a hormone that protects bone density and strength - decreases as we age. The precipitous decline in estrogen in pre- and post-menopausal women over age 30 is the key reason that women are at a significantly higher risk for developing osteoporosis than men.

Short of hormone replacement therapy (HRT), it would seem like aging women are doomed to a continuous existence of stress fractures and ever-shrinking frames. Research, however, indicates that the earlier we begin reversing these osteoblastic effects, the more density and subsequent strength our bones will retain. And with

consistent, focused training, we can continue to see less and less decline well into our twilight years. How do we accomplish this? The answer is quite simple: we lift heavy sh*t.

Lifting weights, particularly lifting heavy weights and the ensuing bulk that such endeavors amass has long been associated with men's fitness and female bodybuilders. However, it is possible to lift heavy - and lift consistently - without looking like the WWE Main Event headliner. The keys are 1) knowing how to fuel yourself for optimum fat burning and 2) to do low reps with heavy weights more frequently. And by "heavy" weights, we're not talking about Olympic bodybuilding qualifiers or working to exhaustion - basically, you want to be able to do 10 reps of an exercise with the last 2 reps being *almost* impossible, but still doable. This may sound like a science project, but once you dial in the appropriate weight(s) for various exercises, you'll see the gains rather quickly - like, within the first 2-3 weeks.

So, how does lifting heavy weights affect your skeletal health when weight lifting is primarily about tearing and repairing muscle? I'm glad you asked. As previously mentioned, bone growth and loss occurs constantly throughout your lifetime. At no point is this more visible than in the first year of life, when your skeleton completely replaces itself both structurally and on a cellular level. One of the key drivers of growth and maturation of bone in young children is the hormone estrogen which, like testosterone, is present in both males and females, albeit in differing quantities. During childhood, estrogen is needed for proper closure of epiphyseal growth plates, and deficiencies in the hormone can lead to skeletal weaknesses and deformities as a result of increased osteoclast formation and enhanced bone resorption. For menopausal women, in particular, a decline in estrogen production leads to cancellous as well as cortical bone loss at a rate of about 1% per year after the age of 40. Over time, penetrative resorption results in decreased bone density and strength and in increased incidence of microfractures. Declining estrogen also reduces the number of remodeling units (osteoclasts) available to repair damaged and degrading bone. These hormonal changes, along with inactivity and improper nutrition ultimately lead to a gradual decrease in bone mass.

Fortunately, research has demonstrated that incorporating strength training into our daily activities can not only slow the inevitable loss of bone, but can actually re-activate osteoclasts and build NEW bone. Weight-bearing and resistance activities that put physical stress on bones (through impact, tugging and pushing) have been shown to signal bone-forming cells into action. If performed carefully, consistently and correctly over time, the result is stronger, denser bones. According to researchers at Harvard Medical School, "...strength training, in particular, has bone benefits beyond those offered by aerobic weight-bearing exercise. It targets bones of the hips, spine, and wrists, which are the sites most likely to fracture. What's more, resistance workouts — particularly those that include moves emphasizing power and balance — enhance strength and stability. That can boost confidence, encourage you to stay active, and reduce fractures another way — by cutting down on falls." This last part is of particular importance, because 6 out of 10 adults who experience hip fractures are unable to regain the mobility they had previously - even following hip repair and replacement surgeries. Those are not good odds.

Incorporating just 30 minutes of strength training and in particular, heavy lifting, into a fitness routine 2-3 times per week fights bone loss, builds lean muscle and burns stubborn body fat. Pair that with a healthy, well rounded diet in which you're consuming age- and nutritionally-appropriate amounts of vitamins D and K as well as calcium and magnesium, and you can effectively halt the damaging effects of age-related hormonal decline on your bones. What's more, you'll feel and look better, have more energy and will decrease your chances of osteoporosis, osteopenia, skeletal "shrinkage" and stress fractures. So put down the 3 lb hand weights and grab the heavy stuff. In 20 or 30 years, you'll be glad you did.

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Calling All Photogs!

Do you have running or racing photos to share?

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