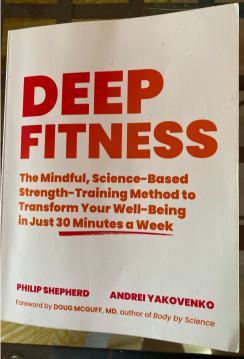


Newsletter December 2022 Amenia Yoga – a Place for Wellness *The cozy little studio with a big heart*

Lately, I keep a book called Deep Fitness by Philip Shepard and Andrei Yakovenko by my side.

The book is based on a few decades of research that throws our current, collective understanding of health to the wind! It refutes the belief that aerobic fitness, cardiovascular output, and endurance are the signs of good health. Instead, the authors' thorough compilation of research clearly shows that MUSCLES reign. They do far more than move our body from place to place; our muscles, not aerobic fitness, will enhance our healthspan and reverse conditions like Alzheimer's and dementia, some cancers, high cholesterol, coronary heart disease, hypertension and stroke,



fibromyalgia, insulin resistance and Type 2 Diabetes, obesity, and Osteoporosis, to name only a few.

Although nothing is wrong with aerobics, nothing is wrong if you jog three times a week, and nothing is wrong with 10K steps daily. Our body is made to move, and any way you do it benefits your health. However, these forms of exercise don't strengthen muscles, so it's important to incorporate one day per week of high-intensity resistance training.

Muscle mass and its importance to overall health is a hot research topic. For example, a study showed that muscle contractions produce myokines. Myokines, a new word from 2003, are hormone-like substances involved in the beneficial effects of all cell types and organs, including the brain, liver, pancreas, fat tissue, bone, etc.



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When we contract muscles, these myokines are released and travel to their receptors in these organs to support them! The muscle is actually an endocrine organ that releases myokines. So here is the thing: the more potent the muscle, the more it contracts and the more myokines it produces. Myokines can counteract Sarcopenia! A recent study in 2015 showed that inactivity (lack of muscle contraction) could contribute to pathological consequences.

So now that we know that muscle contraction is essential, we'll go a bit deeper into how they work and why your 10K steps a day isn't enough to prevent muscle loss.

Intensity is required to gain muscle strength. Muscles are made up of motor units, which are fibers leading to a single nerve. When something stimulates the nerve, all the fibers contract together. Motor units come in three basic categories: small, endurance ones, also known as slow twitch. Mid-size are intermediate twitch, and then we have the muscles used for explosive, high-peak movements; these are fast twitch fibers. The fibers come into action in order. First, the small, endurance ones start working, and when they tire, the intermediate ones kick in. Then, if needed, the big powerful ones are activated. The small, endurance ones are the most used, and they're also the most resistant to fatigue and the quickest to recover; they are also less powerful. These small ones aren't stimulated to grow because they get help as soon as they fatigue. For most of our day-to-day activities, we use the slow, endurance, and intermediate ones. The high-peak powerhouse, explosive, fast-twitch muscles aren't readily used because we don't need them!



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Think about the fast twitch muscles of our hunter-gatherer ancestors. They used their explosive muscles when hunting game or running from becoming prey. Their muscles were ready when necessary! In our modern lifestyle, we rarely use our fast twitch muscles; therefore, purposely we create opportunities to activate and overload them – intensity is the key; if we don't overload our muscles to failure, they won't grow. Since we rarely use the fast-twitch muscles, they are the first to be weakened by Sarcopenia. We need all three types to come into play, in order, and overload them to failure, which happens with resistance training.

When we work our muscles to failure, this happens: When the muscle can't physically work anymore, there are little micro tears in it, and the recovery process begins. Think of two teams. The first team arrives as a response to the inflammation to clean up and recycle the damaged tissue. After that team finishes, the second team comes in to remodel and make the muscle stronger than before. This entire process can take a few days, making this intense exercise necessary only once per week!



Amenia Yoga's new class offering on Fridays at 9:30 am, starting January 13, is specifically designed to use body weight and resistance bands to overload muscles and make them stronger! The class is hybrid (in-studio and Zoom) Anyone can participate, and we can all get stronger! For more info, contact: info@ameniayoga.com

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1.Pedersen, BK, Muscles and their myokines, Journal of Exp. Biology. 2011 2.Pedersen, Severinsen. Muscle–Organ Crosstalk: The Emerging Roles of Myokines, Endocrine Reviews, 2020.

3.Han Lee and Hee-Sook Jun Role of Myokines in Regulating Skeletal Muscle Mass and Function. Frontiers in Physiology, 2019.

4.Shepherd, Yakovenko, Deep Fitness North Atlantic Books 2021

5.Wescott. WI, Resistance training is medicine: effects of strength training on health. Current Sports Med Rep 2012.



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Schedule December until January 8, 2023. Normal classes resume on Monday January 9, 2023

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
4	KAPPY KWANZAAI			1	2	3
4	5 7:00am - Hybrid Rise & Shine 9:15 - 10:30 Wisdom Yoga 5:30 Yoga Fusion	6 5:30 Yin	7 7:00am -Hybrid Rise & Shine 9:30 -10:45 Wisdom Yoga 5:30 Early Evening Flow	8 5:30 Gentle Unwind	 9 7:00am -Hybrid Rise & Shine 5:30 Early Evening Flow 	10 10:00 Stability Ball
11 9:00 Regular Sunday	12 7:00am - Hybrid Rise & Shine 9:15 - 10:30 Wisdom Yoga	13 5:30 Yin	14 7:00am - Hybrid Rise & Shine 9:30 -10:45 Wisdom Yoga 5:30 Early Evening Flow	15 5:30 Gentle Unwind	16	17
18 9:00 Regular Sunday	19 7:00am - Zoom Rise & Shine 9:15 - 10:30 Wisdom Yoga	20 5:30 Yin	21 Rise & Shine 9:15 -10:30 Wisdom Yoga 5:30 Early Evening Flow	22 5:30 Gentle Unwind	23	24
25	26	27	28	29	30	31
	2 7:00am - Zoom Rise & Shine 9:15 - 10:30 Wisdom Yoga	9 5:30 Yin	4 7:00am - Zoom Rise & Shine 9:15- 10:30 Wisdom Yoga 5:30 Early Evening Flow	5 5:30 Gentle Unwind	6	7
8 9:00 Regular Sunday						