

A Brief History of Slow Motion Strength Training

The concept of using weights to enhance the strength of the muscles and subsequently the health of the human body is not new. There is historic evidence that strength training has been around since before Christ was born and perhaps as early as the ancient Egyptians. The Romans and the Greeks used various lifting techniques to enhance their swordplay, their games of combat and to better their skills in early Olympic sports. Even then they seemed to understand that practicing their skills was not enough. Some other form of exercise was required to enhance their level of physical prowess beyond what skill practice could provide.

In 1895 John Harvey Kellogg M.D. (the doctor who created Kellogg's Cornflakes) wrote a paper called "The Art of Massage." This paper suggested not only a slow motion style of weight training (counting to eight to lift the weight) but also dictated good exercise form -- no grimacing, no breath holding, no compressing of the exercising muscular structure, etc. Kellogg suggested that there is an inherent difference between exercising for increased health of the muscular system (a.k.a. the Ling or Swedish system of curative gymnastics) "executing various movements and graduating the resistance by hardening the muscle" and exercise for recreational enjoyment "a cure for cardiac afflictions" such as "graduated mountain climbing" Further, Kellogg states the object of recreation is "not to strengthen the muscles, but to regulate the circulation." Dr. Kellogg seemed to believe that exercise (muscle hardening) and activity (graduated mountain climbing) were two different concepts.

Around 1920 a fitness enthusiast named Bob Hoffman wrote and sold strength training courses describing a ten second lifting speed and a ten second lowering speed. He also talked about proper form, specifically how one began the lifting of the weight and how one should reverse and lower the weight back down. He seemed to understand the need for very slow stops and starts to avoid injury.

As the years rolled on, hundreds of fitness gurus and experts created and made their own systems of exercise building upon or refining the systems of Ling, Kellogg and Hoffman as well as others who I have not mentioned like Zander, Jowett, McFadden, Atlas, LaLanne, Weider, on and on.

But perhaps the most influential modern day fitness innovator was man named Arthur Jones. Around the late 1960's, Arthur Jones introduced highly specialized weight lifting machinery and a method of exercising that revolutionized the fitness field. It was called *Nautilus*. Interestingly enough, almost 70 years prior to Jones, a European medical doctor named Gustav Zander created an entire line of strength machines very similar to Jones' with a method of muscular strengthening very similar to Kellogg. (Or was Kellogg similar to Zander?)

Jones' collective ideas became known as the "*Nautilus protocol*" and are still used today in research and fitness training. The Nautilus protocol prescribed slower repetition movements (2 seconds to lift, 4 to lower) compared to what most people were doing at the time, though not as slow as Kellogg's recommendations. Nautilus also advocated very intense and infrequent bouts of exercise using Jones' specialized machines to both enhance muscle stimulation and allow for adequate recovery. Jones believed barbells and dumbbells to be "the tools of the caveman" and promised far greater strength and fitness gains using his machines and theory of exercising.



Recreational exercises including aerobics, according to Jones, became unnecessary if strength training was performed in a "circuit," high intensity fashion. Though scoffed at by the experts of his time, millions of people who followed the Nautilus recommendations reaped the physical rewards of his ideas. The revolutionary genius of Jones almost immediately gave birth to dozens of new exercise experts, machines, companies, theories and techniques. Jones with his slower speed, high intensity training methods along with Kenneth Cooper M.D, the "Father of aerobics" who got everyone (including myself) running and jogging for health, created a huge exercise "movement." The fitness craze was on!

In the 1970's Dr. Ben Bocchicchio, an exercise physiologist and professor who had worked with Jones, suggested to Jones and to others that even slower speeds of lifting weights (10 seconds or slower - similar to Kellogg) might be better than the Nautilus protocol. He had been using this slow motion technique with great success on several of his patients and clients. Jones and everyone else seemed disinterested.

Around the same time during the early to mid 1970's, Dr. Ellington Darden, a one time amateur bodybuilder and an exercise/nutritional specialist, was hired by Jones to beef up the credibility of Nautilus. With Jones' influence, Darden wrote volumes of books and articles preaching the Jonesian/Nautilus Method of exercise. He advocated brief, infrequent bouts of strength training using the Nautilus principles and added his own flair and refinements to the Nautilus system. His books created a huge stir among the body builders in the 1970's and saved thousands of trainees time and needless wear and tear on their bodies. Darden too was scoffed at by the experts of his time.

Around 1980, Ken Hutchins came onto the Nautilus scene lured by Jones' magnetic genius and was hired by Dr. Darden as a copy editor of sorts for his books. Hutchins eventually becoming an aide and trainer on the Nautilus funded Osteoporosis Project. The Nautilus Osteoporosis Project was to be the largest study of the time on how strength training affects bone mineral density in seniors. Unfortunately, the study never was completed. Internal difficulties between the researchers ended the project before completion. (Current research suggests that strength training does, in fact, improve bone mineral density in all human beings.)

Still convinced of the superiority of his slow motion strength training ideas, Dr. Bocchicchio suggested to Ken Hutchins (since Arthur seemed indifferent) that, especially with frail seniors, his slower method (now trademarked as the F.I.R.S.T Exercise System - Focused Intensity Resistance Slow Training) would work better and be safer on the joints of these seniors. At first Hutchins dismissed the idea as Arthur Jones did. But as the project continued, he began to use Dr. Bocchicchio's method and found it indeed to be both superior at improving strength and less forceful on, therefore safer for, the joints than the Nautilus method.

Seeing how beneficial it was, Hutchins worked with and refined Dr. Bocchicchio's technique and a few years later trademarked the term Super Slow™. Hutchins created a guild of enthusiasts and instructors to teach his version of the slow motion exercise method. He wrote and self published various articles and a technical manual for exercise instructors.

Since then, hundreds more fitness enthusiasts have embraced a slow motion, high intensity method of exercising, originally created at least in part by Kellogg, refined by Dr. Bocchicchio, popularized by Jones,



Darden, Hutchins and others. Many fitness authors including Dr. Ralph Carpinelli, Matt Brzycki, Dr. Richard Winett, and myself continue to write about, refine and develop slow motion, high intensity strength training. (And as mentioned earlier, there may have been hundreds of other experts who used a slow method for exercise before Kellogg.) Clearly the concepts were/are logical and universal since they continue to resurge decade after decade into the field of exercise.

In and around the early 1990's Dr. Bocchicchio's method grew gaining support of the medical community from his research on the slow method. Hutchins' following grew as well. He began to appoint master instructors to certify other trainers in his Super Slow method. As one of the original Super Slow masters, one time president of the Super Slow Exercise Guild and advocate of Jones' method, I (as well as other masters) greatly influenced the refinement of the slow motion exercise technique between 1990 to the present. The technique is currently evolving and transforming into many different forms of slow motion exercise (very similar to the dozens of different forms of Yoga, Pilates, and aerobic methods that have evolved over the years).

In the mid to late 1990s Dr. Wayne Westcott, a highly respected exercise physiologist, researcher and author of numerous health and fitness books, conducted several studies comparing traditional weight training methods to the slow method. His research proved overwhelmingly that slow speed strength training produced, statistically significantly, superior results to conventional training methods. His two most recent studies were peer reviewed and published. At the same time the American Heart Association (February 2000) issued a scientific advisory declaring that weight lifting does in fact improve cardiovascular health without supplemental aerobic activity.

Currently there are hundreds of gyms, trainers, books and articles providing information and training in the slow motion method of strength training. To my mind there is no safer, more efficient and effective method of exercising than training in a slow motion, high intensity fashion. Our [Slow Burn™](#) exercise program and programs similar to it (Super Slow, F.I.R.S.T, I.A.R.T, Power of Ten, etc.) are safe and extremely potent health enhancing methods of exercise. Our website offers a multitude of choices and resources for putting slow, safe and efficient exercise training into your life. The choice is yours.

Yours in strength and health,

Fredrick Hahn

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