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Get Healthy 2011



This year we have been working to expand our focus to not just helping our patients achieve freedom from back or spine related pain, but to help you achieve better overall health. To help introduce our community to all we have we have a New and Returning patient First Visit offer.

Starting July 1 and running to July 30 anyone in our community that makes an appointment and mentions this offer will get their first visit services for 40 dollars. The first visit includes an office tour, consultation, examination, and any necessary x-rays. There are no strings attached to this offer and no obligation to start care in our office.

If you are reading this newsletter as a current patient, feel free to pass along this offer to your friends and family to get them started on a road to better health. If you are reading this newsletter as a former patient and curious about the changes we have made in the office, give us a call to set up an office tour or take full advantage of this offer. We would love to show you all the new things we have to offer.

Thank you for choosing us and we look forward to seeing you soon.

Due to Medicare Law patients with Medicare Insurance are unable to receive free care.



Quarterly Journal of

Staker Family Chiropractic

Practice Updates

Bstrong4Life Updates

BStrong4Life™ continues to positively improve the life of our patients. We have patients that have been on the program since January that had up to 130% improvement in strength. We have patients that have made a huge turn around in their care since starting Bstrong4Life, and in a shorter time frame than what we see with traditional chiropractic care alone. Patients are already telling us that the Bstrong4Life program is having a positive influence on their daily lives.



Dr. Staker has been on the program since January and he has noted a significant improvement in his lower back. Not only has he been less stiff, but he notices he can do more with little to no back pain. Before Bstrong4Life he would have noticeable pain after sitting for a long period of time like after mowing the lawn or a long drive. Now he has none of that, after an 11 hour drive to Penn

sylvania in April he had no lower back pain. He also notes no pain after riding the lawn mower or working in his yard. Dr. Staker's story is just one of many that we are starting to hear after just a few months of being on the Bstrong4Life program.

Dr. Staker sees the BStrong4Life program as the key component to breaking the cycle of progressively worsening chronic back pains.

To see more personal experiences of the people who have been on the Bstrong4Life program go to geneva.bstrong4Life.com and look for the testimonials link.



Are you on facebook? Well we are, and if you have a facebook account to keep in touch with family and friends look us up and give our page a "like". This is just another way for you to keep in touch with what is going on in our office.

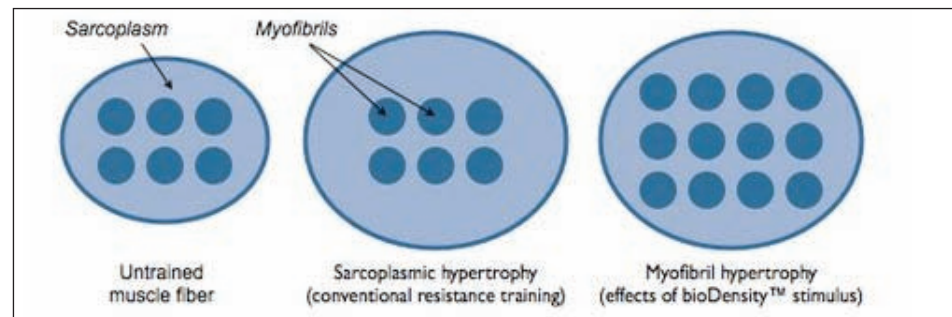
SPINAL COLUMN

July/Aug
2011

Physiology of the Bstrong4Life Program

A single muscle cell is made up of myofibrils, which are the contractile units of the cell, and other typical cellular proteins, enzymes, and structures. These contractile units have two positions, contracted and relaxed. With conventional resistance training, the stimulation takes place where the muscle is in the stretched position, thereby guaranteeing an inferior stimulation due to the obvious lack of myofibril involvement. For the best adaptive growth response there would need to be a 100% stimulation of myofibrils (all engaged), and by definition this is only possible when the entire muscle is in the fully contracted position. This is what occurs with the bioDensity™ load delivery and the resulting data has shown unparalleled strength gain results.

There are two different types of muscular growth; sarcoplasmic hypertrophy and myofibril hypertrophy. As detailed in the 2006 book, Science and Practice of Strength Training by Kraemer and Zatsiorsky, "sarcoplasmic hypertrophy of muscle fibers is characterized by the growth of sarcoplasm and non-contractile proteins that do not directly contribute to the production of muscle force." This results in a larger muscle cell, with little or no change in force production, which is typically what is generated from conventional resistance training. Conversely myofibril hypertrophy as also stated in Science and Practice of Strength Training, "is an enlargement of the muscle fiber as it gains more myofibrils and, correspondingly, more actin and myosin filaments. This type of fiber hypertrophy leads to increased muscle force production." This type of growth requires the heaviest resistances and has a training risk associated that most individuals will not go through. Bstrong4Life™ both lowers risk and creates the most powerful stimulation of myofibril hypertrophy because the less efficient positions in a given range of motion are eliminated. This enables the stimulus to happen with complete myofibril involvement and central nervous system participation.



The muscular system has the unique ability to improve its strength in response to outside stresses or exercise. Our central nervous system is constantly responding to outside stimuli and adapting to any changes, this is called an adaptive response. The muscles in our body will build more tissue as an adaptation to a specific stimuli and the more intense the stimuli the bigger the adaption response. Another example of adaptive response would be the body responding to sunlight by creating melanin in the skin, which is commonly called a suntan.

It is well understood that during the months of intense sunlight it is much easier to get a tan than in the months of low intensity sunlight. So the more intense the stimulus, the greater the adaptive response. Muscle and connective tissue behaves exactly the same way. In a recent study performed in Osaka Japan, bone mass density generation was proven possible with high intensity resistance training, but not effective with low intensity resistance training (Tsuzuku et al., 2001) Going beyond just looking at this study as an example of greater intensity equaling a greater adaptive response, the bioDensity™ load delivery stimulus is a high intensity resistance, thereby increasing bone mass density along with the myofibril growth as described above. The Surgeon General states that increases in bone mineral density, to prevent or reverse the effects of osteoporosis, are stimulated by maximum loading on the musculoskeletal system (Surgeon General 2004). Regular, proper use of the bioDensity™ System enables the user to safely achieve such maximum loading, and therefore helps combat the effects of osteoporosis.

To get a first hand tour of our Bstrong4Life program call us today to schedule a consultation. We will gladly introduce you to our office, what we do, and even let you try out the Bstrong4Life system free of charge. If you would like, you could take advantage of our Get Healthy offer which you can get the same consultation with examination and any necessary radio graphs for 40 dollars.

Healthy for Life

Our Spring Healthy for Life class ended but we will start another in August that will run to late October. Our last class was the biggest one yet and several people who attended that one have already mentioned wanting to take it again. Dr. Staker is involved with the class but Dave Keller is the main instructor and does an excellent job. Dave and his family have been following the Healthy for Life program for the last several years. He is not only very knowledgeable, but also has a lot of personal experience that makes him the perfect instructor for this class.

The Healthy for Life class is based on the work of Ray Stand a medical doctor. The class teaches about how to prepare meals based on choosing foods low on the glycemic index and glycemic load. Each class usually starts with a little social time and food prepared using this method before going through the topic of the night. The class is taught free of charge and we provide a workbook for you to use. We also have resources in the office to purchase including two of Dr. Strand's books, a cookbook based on these principles, and a number of DVD's. Let us know if we can expect to see you for the next class.

Research demonstrates chiropractic care effective for Low Back Pain.

In the last few months I have read so many journals on chiropractic care for low back pain I decided to do a brief summary of them all. If you have been following our facebook page you probably heard this already. In October 2010 a paper was published in the Journal of Manipulative and Physiological Therapeutics that found chiropractic care was just as effective as surgery for sciatica, begging the question if you have sciatica why not try chiropractic first? Early in this year there have been several important studies on chiropractic care for low back pain. The first compared chiropractic care to medical care and guess what?, patients under chiropractic care did better than those under medical care. The second compared chiropractic care to medical care for work related low back injuries. They also studied long term wellness or maintenance care. That study found that not only was chiropractic care better than medical care, but wellness care helped these workers prevent flare-ups after they ended their acute care phase and returned to work.

Chiropractic care is the best place to start if you have low back pain or sciatica and the studies are showing it. It is getting harder and harder to ignore the potential benefits chiropractic care can bring to your health.

Child Car Seat Safety

In March of this year the American Academy of Pediatrics amended their recommendations for child safety seat use. They now support keeping children in rear facing car seats up to age 2 or to the max weight listed on the seat specifications. They also suggest keeping children in belt positioned booster seats to 4 foot 9 inches or to between ages of 8 to 12. It is great to see a group in the US make recommendations like this, keeping our children safe in our cars is important. A few years ago I first learned that a number of European countries have laws that keep children in rear facing seat to 4 or 5 years old. Their reason is based on some solid evidence on child safety.



The biggest concern for children in car seats is protecting the child's spine, particularly their neck and head. The crash that is of greatest concern is the forward or side impact, these crashes are usually of higher speeds than rear impact

crashes. Studies have found that high speed front impact crashes can result in severe injuries including death for children in a properly installed forward facing child seat.

In a high speed front impact crash a child in a forward facing car seat will first be propelled forward resulting in extreme flexion of their head and neck. That flexion can cause severe injuries to their neck and spinal cord. For this reason a number of European countries have made laws keeping children in rear facing seats as long as possible. As you can see in the picture on the right a rear facing seat does more to protect a child's spine than the forward facing seat. The AAP recommendation of two years old is a good start, but it might be prudent to wait longer.

In these countries that keep children in rear facing seats longer, they note lower rates of child injuries and death due to motor vehicle crashes. There is also no real evidence to suggest that keeping children in rear facing car seats past 2 years old results in increased leg or hip injuries. Even if there was a chance that a child would injury their hip or leg those are not life threatening as severe neck and spinal cord injuries are. Ultimately the evidence points to rear facing seats being the best position for our children to ride in.

When choosing a good car seat I suggest to do your homework. Investigate the brand online and make sure it received good marks in crash

tests. Something new I just learned was that it is not required to test car seats in side impact crashes. Now my family checks the brand and model to be sure that the manufacturer went the extra step to ensure the seat tested well in side impact crashes as well as the others. You might even look at buying child car seats made by European manufacturers to their standards.



It is important to stay informed on the best practices to stay safe in all aspects of our lives. We work to try to bring this knowledge to our patients to help you make well informed decisions. If you have any other question or concerns regarding child seat safety or other topics let us know. We would be happy to give you the resources to make the best decisions regarding your family's health.

