

In Good Hands

A Free Monthly Newsletter For The Friends and Patients of: Gordon R. Gensel, DC, CNC
www.genselwellnesscenter.com

“Most men pursue pleasure with such breathless haste that they hurry past it.” ~ Soren Kierkegaard

What we know about...

Easing Back Pain?

**More Exercise Or Less? Weights Or Aerobics?
New Studies Shed Light On These Questions And More...
How top athletes trigger anti-aging effects at the cellular level, and
can the Wii Fit® video game help your family get fit?**



Monterey – Let’s start this newsletter with an amazing display of some incredible psychic powers. How, you ask?

I’ll tell you something about yourself, even if we have never met. Are you ready?

Ok, here it goes: *You have suffered from back pain.* And, not only have you suffered from back pain, your back pain has been a problem for quite a while and you are afraid it will stick with you for the rest of your life.

Pretty accurate statement... isn’t it?

While that may be accurate – it has nothing to do with psychic powers. Although “psychics” use this very technique to...

Fool People Every Day!

What you have just read is a truism. A truism is something that is *true* for a majority of people. In this case, statistics show 80% of people in North America will suffer from back pain at some point in their lives.

Not only that, for 85% of these back pain sufferers, the pain will be chronic.

That being said, there are things you can do to ease and possibly relieve back pain so you are not just another statistic.

One thing, of course, is Chiropractic care. Studies have shown Chiropractic care to be effective (and cost effective) in the treatment of many cases of

back pain and it is clearly a great option for many back pain sufferers.

It is wise for back pain sufferers to consult a Chiropractor to find out if Chiropractic care can help and to see what their options are.

Besides Chiropractic, recent research reveals some important things about easing back pain you probably do not know – should you use...

Weights Or Aerobics To Ease Back Pain?

“People who use weight training to ease their low back pain are better off than those who choose other forms of exercise such as jogging, according to a University of Alberta study”, as reported in a December 16, 2009 article in Science Daily.

“The study, done in conjunction with the University of Regina, showed a 60 percent improvement in pain and function levels for people with chronic backaches who took part in a 16-week exercise program of resistance training using dumbbells, barbells and other load-bearing exercise equipment.

“In contrast, people who chose aerobic training such as jogging, walking on a treadmill, or using an elliptical machine to ease their back pain only experienced a 12 percent improvement, said Robert Kell, an Assistant Professor of Exercise Physiology at the University of Alberta, Augustana Campus.”

Researchers believe they achieve better pain management results with resistance training because they are using a whole body approach. On the contrary, aerobics training generally works just the lower body.

More Exercise Or Less?

According to a University of Alberta study, if you suffer with low back pain, you should exercise MORE, not less.

In the study, 240 men and women with chronic back pain who exercised four days a week had 28% less pain and 36% less disability, while those who exercised two or three days a week did not see this change.

Amazing what a day or two in the gym can do, isn't it?

The study showed working with WEIGHTS four days a week provided the greatest amount of pain relief and quality of life improvement.

An important note: "Working with weights" is a very relative term. Before you start any exercise program, you should see a qualified doctor for a pre-workout examination. And, all workouts should be designed to suite your individual case and needs. (We are trained to assist you in this.)

Now for some great benefits of exercise, besides your aching back...

How Athletes Stimulate An Anti-Aging Effect on The Cellular Level!

According to the *Journal of the American Heart Association*, new research shows exercise by professional athletes triggers anti-aging in heart muscle cells – which has a protective effect against aging of the cardiovascular system.

In technical terms: Telomeres are DNA that protect the two ends of chromosomes from damage. Imagine the ends of a shoelace. The telomere is like the end of the shoelace that protects the lace from fraying; the end caps. Telomeres have a shortening mechanism that limit the number of divisions a cell can undergo. This basically defines the life of the cell.

Telomeres gradually shorten from cell division and this shortening leads to aging on the cellular level.

The study found physical exercise by professional athletes leads to the activation of the enzyme telomerase.

Telomerase is important because it stabilizes the telomere.

Author of the study, Ulrich Laufs, says, "This is direct evidence of an anti-aging effect of physical exercise. Physical exercise could prevent the aging of the cardiovascular system, reflecting this molecular principle."

The study examined 32 professional runners from the German National Track and Field Team. Their average age was 20 and their average running distance was 45 miles per week. The study also examined 51 year olds who had a history of continuous endurance exercise since youth, with an average running distance of 50 miles per week.

Will The Wii Fit® Video Game make your family "fit?"

Wii Fit® may be a lot of fun... but according to a new study – just having "fit" in the title doesn't mean it has anything to do with actual fitness... at least for the entire family. A University of Mississippi study shows the game has little effect on family fitness. The study analyzed 8 families who had a Wii Fit for 3 months. The data showed the children had a significant increase in aerobic fitness, but none of the other fitness factors were increased and fitness was not increased for the family as a whole.

And don't forget, if you ever have any questions or concerns about your health talk to us. Contact us with your questions. We're here to help and don't enjoy anything more than participating in your lifelong good health.

The 100 Year Lifestyle "The New Healthcare Model"

Dr. Gensel and Dr. Brunke will be presenting a series of four lectures on how you can have the best years of your life for the rest of your life!

Date: Tuesday, March 16

Time: 6:30pm to 8pm

Location: Monterey Hilton Garden Inn

1000 Aguajito Rd. (right next to MPC)

Any questions please call (831) 333-1513

Body Composition

The term “body composition” is used to describe the different components that make up a person's total body weight. Total body weight is composed of lean mass (muscle, bone, and organs), fat mass, and water.

Weight scales determine only the total body mass. They do not tell you whether that mass is fat, lean mass or water. Body composition is more important than your weight in determining fitness and health.

BMI or Body Mass Index, is a method of estimating body fat percentage based upon weight and height measurements. BMI is a calculation and not a direct measurement. This calculation will only tell you if you are overweight, normal or underweight for your height. BMI makes no distinction between body weight from muscle and body weight from fat. For example, Sarcopenic obese people have a standard weight, a low BMI, but a disproportional body fat percentage. It occurs frequently in young women. Despite looking thin, they have a low level of muscle and a high percentage of body fat. It is hard to detect this kind of obesity just by BMI or through general observations, so body composition analysis is a helpful tool to detect this state of obesity (and health).

When choosing a method of body composition measurement, you want to ask yourself, “Is this a calculation or direct measurement?”.

One method for measuring body composition, the Hydrostatic Method (underwater weighing method), has been considered the gold standard for body composition assessment. However, because of expense and convenience, newer technology may make underwater methods obsolete.

DEXA stands for dual energy x-ray absorptiometry. DEXA is most often used to measure bone density and lean mass, but it can also deliver fat mass readings. DEXA takes bone mineral content into consideration when determining body fat and muscle, therefore it is considered to be more accurate than underwater weighing. There is some x-ray exposure during the procedure and is costly. It can cost up to \$300 for a screening.

Because of the expense and inconvenience of underwater weighing and DEXA scans, many facilities use a simple skin fold measurements to determine body fat percent. The American College of Sports Medicine says that when performed by a trained, skilled, tester, they are up to 98% accurate. Because the degree of error is potentially high, this method of fat measurement is useless if not in the hands of an expert—someone with a lot of practice and validation. In addition, keep in mind; skin fold measurement is only testing subcutaneous fat (the fat just under your skin). This tissue is usually composed of fat cells as well as the structures that run through it like, blood vessels and nerve. Subcutaneous fat is less of a threat when it comes to diseases. Skin fold measurements are not an ideal measurement method for those who are obese and/or very lean. You need to search out for methods that directly measure your visceral fat (the fat around your internal organs) and total body water.

BIA (Bioelectrical Impedance Analysis) is another method used to measure body fat. It's a technique that measures the body impedance (resistance or opposition) to a low, safe electrical current through the body. However, although easy to use, conventional BIA has not been the preferred method for testing body composition in the past because technology used only single frequency methods and relied on empirical data (application of variables such as gender, age, exercise frequency, etc) to estimate results.

Whereas the majority of BIA equipment is single frequency, the emerging technology for BIA applies Direct Segmental Multi-Frequency BIA (DSMF-BIA). DSMF-BIA obtains an impedance measurement for each arm, leg, and the highly sensitive trunk (chest and abdomen). The ability to measure an accurate value of the trunk's impedance is vital to providing accurate body composition. This technology enables one to directly measure ICW (intracellular water) and ECW (extracellular water). DSMF-BIA applies an 8-point tactile electrode method which allows for direct segmental analysis. Conventional methods use only 4 electrodes and divide the body into 2 segments (upper and lower body). Thus, for example, with DSMF-BIA you can determine the difference in the amount of water and fat free mass (muscle) in right and left leg. This method helps patients and athletes that need pinpoint accuracy on their muscle measurements and is also extremely helpful in rehabilitative medicine and movement cure. DSMF-BIA examines segmental development of the subject and gives exact measurements regardless of gender, age, disease and ethnicity.

Did You Know?... The health benefits of broccoli and related vegetables may come in part from a chemical known as sulforaphane, which appears to activate a specific heart-protecting protein. In addition to broccoli, cruciferous vegetables include cabbage, cauliflower, radish, turnip, mustard greens and watercress. Sulforaphane was found to increase the activity of the protein Nrf2, which is known to be inactive in areas of the cardiovascular system that are predisposed to plaque build up. In these areas, which include bends and branches in blood vessels, blood flow is slowed or even disrupted entirely. Sulforaphane has shown it can protect those regions by activating Nrf2. These fascinating findings provide a possible mechanism by which eating vegetables protects against heart disease.

Tip Of The Month – The Importance Of Being Shot With Cupid’s Arrow... Have you ever been shot by



Cupid’s arrow? In other words... have you ever been in love? Well, here’s something about Cupid’s arrow that that you may find interesting. For example, did you know that research has shown being in love has consequences for your health and well-being? REAL consequences – not just superficial feelings. In fact, a study published in the *Neuroendocrinol Lett* 2005; 26(3):264–267: states *“Love and pleasure carry the ability to heal or facilitate beneficial motivation and behavior, in addition to ensuring survival of individuals and their species. After all, love is a joyful, yet useful, activity that encompasses wellness and feelings of well-being – a rather holistic and integrative medical procedure! Positive emotions, compassion and happiness, help us to feel better, particularly in stress, and further improve bodily functions: Love, compassion and joy make our immune system function better and help to battle diseases. Furthermore, current research on these topics made the wellness concept evolve from a sometimes esoteric or non-scientific background and become a major focus of progressive medical science.”* **How Does All This**

Happen? There is a hormone in your body called oxytocin. It is produced in your brain and some is released into your bloodstream, but it is believed most stays in the brain. Scientists say oxytocin works through the dopamine reward system and makes us feel good when we are around people we care deeply about or even our pets. Dopamine is a brain chemical important in how we perceive pleasure. If the dopamine system is not functioning correctly, it can lead to depression and even mental illness. Oxytocin is not just about feeling good. It lowers levels of stress hormones in the body, reduces blood pressure, increases tolerance for pain and might even speed up the time it takes wounds to heal. And, get this: It has actually been linked to how much we trust others... playing an important role in all of our relationships. A study at the University of North Carolina at Chapel Hill found couples who have a more positive relationship have higher levels of oxytocin, and couples with more frequent physical contact (like handholding and hugging) have the highest levels of oxytocin. What does all this mean? It seems obvious a shot from Cupid’s bow cannot only lead to one of the most wonderful feelings in the entire world – it might also lead to a healthier, longer life. **What Is Love?** *“Love is a temporary madness. It erupts like an earthquake and then subsides. And when it subsides you have to make a decision. You have to work out whether your roots have become so entwined together that it is inconceivable that you should ever part. Because this is what love is. Love is not breathlessness, it is not excitement, it is not the promulgation of promises of eternal passion. That is just being “in love,” which any of us can convince ourselves we are. Love itself is what is left over when being in love has burned away, and this is both an art and a fortunate accident. Your mother and I had it, we had roots that grew towards each other underground, and when all the pretty blossoms had fallen from our branches we found that we were one tree and not two.”* ~ St. Augustine

**Remember, we’re always here, using the miracle of Chiropractic and Nutrition
to help your body heal and maintain the health you deserve.**

This information is solely advisory, and should not be substituted for medical or chiropractic advice. Any and all health care concerns, decisions, and actions must be done through the advice and counsel of a healthcare professional who is familiar with your updated medical history. We cannot be held responsible for actions you may take without a thorough exam or appropriate referral. If you have any further concerns or questions, please call our office at 831-333-1513.