

The Trifecta of Fitness:
Creating a powerful experience to
improve the quality of Life

*“Only those who risk going too far can
possibly find out how far they can go.” (T.S. Eliot 120)*

Sometimes the answer is right in front of us and we don't see it or chose to ignore it. Perhaps the truth is too difficult to face or we need some life threatening reason to face it. I'm not sure how this psychology works in the human mind, but it seems to me that many of our physical and psychological ailments can be cured by a powerful combination of three things; exercise, nutrition and hydration, what I like to refer to as the “Trifecta of Fitness”. But, what exactly is the power of the trifeca? And does it really improve your quality of life? Does a combination of three lifestyle changes really have a profound affect on your physical and emotional health? Can it really improve things like anxiety, depression, lack of sleep, obesity, fatigue, heart disease, and other ailments? Perhaps it can make a huge difference in many people's lives. It may even mitigate the need for prescription medication. Or it is just a bunch of opinions thrown together from fitness freaks? It's time to decide.

According to the Mayo Clinic, exercise improves your mood, “Physical activity stimulates various brain chemicals that may leave you feeling happier and more relaxed than you were before you worked out. You'll also look better and feel better when you exercise regularly, which can boost your confidence and improve your self-esteem. Regular physical activity can even help prevent depression.” But how about that painful feeling of exhaustion you get when your heart is pumping so fast that you think you will pass out? Is that good for your mood? I've seen people become so depressed over how out of shape they are that they stop exercising after a few attempts. We really need to analyze this further because there are many people out there who don't believe these claims. Or maybe they know it's true, but it's just too damn hard.

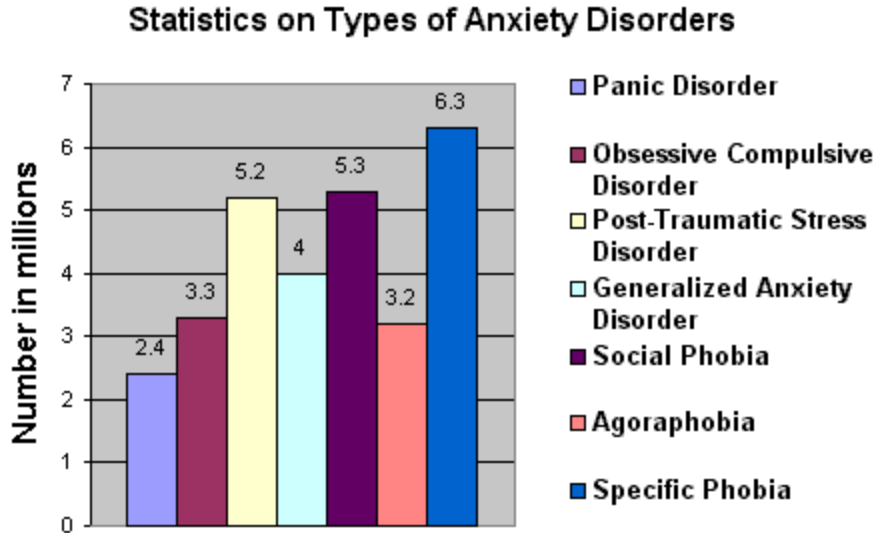
Nothing in life that has any value comes easily. You have to work hard for anything that is worthwhile achieving. With this hard work, comes a sense of achievement and confidence that is extremely powerful. It drives you to do more and conquer more. Success breeds success. The more you can see the results of your hard work, the more you push yourself. Fitness is the perfect example. It's a lot of hard work. It takes time, persistence and consistency, but the results are powerful. The Trifecta of Fitness is even more powerful. It is a three prong attack on negative influences. Everything that you put into your body will have some affect, why not make it positive?

However, according to the article *Can Exercise be Bad for you?* By Roger Dobson of The Independent, “While moderate exercise maybe good for the heart and lungs, it's emerging that too much of the wrong kind is bad news for the

joints and can lead to a painful middle- and old-age.” This article goes on to elaborate that “ A number of research studies are now suggesting that human joints were not meant for too much constant pounding, and that damage even at a young age can lead to osteoporosis in the knees, ankles, hips and neck. Other over-use injuries can also affect the tendons around the ankle, knee, hips, shoulder and wrist.” This argument points out the importance of moderation. Too much of even a good thing can be bad for you. This can be said of every aspect of the Trifecta. Too much exercise can hurt your body, too much water can damage your bladder and yes, even too much nutrition can be impossible for your body to process effectively and efficiently. In fact, if you restrict your diet too much, it can lead to self deprivation and result in “binge eating”. Exercise can be taken to an extreme of obsession which can lead to disorders of the mind, including anxiety about weight management. According to an article in Kids Health, “Compulsive exercise (also called obligatory exercise and anorexia athletica) is best defined by an exercise addict's frame of mind”. People no longer choose to do it, but rather feel compelled to do so and struggle with guilt and anxiety if they don't work out. “In a sense, exercising takes over a compulsive exerciser's life because he or she plans life around it.”

“Why then, can one desire too much of a good thing?”
(Shakespeare's *As You Like It*, 1600)

Anxiety seems to be the popular buzz word these days. Everything seems to give people anxiety. According to the “Merriam-Webster Dictionary” Anxiety is defined as “A painful or apprehensive uneasiness of mind usually over an impending or anticipated ill, by doubt concerning the reality and nature of the threat, and by self-doubt about one's capacity to cope with it.” Some examples that come with anxiety are feelings of anger and fear. I spoke with five random teenagers in my sister's High School. They were 3 female and 2 male, all 17 years old. They were from different nationalities and economic backgrounds. Two had divorced parents and one was adopted. All five teenagers said they had experienced periods of “high anxiety”. Three were taking medication; one was on “Lexapro”. I found this random research sampling astounding. According to one female, her Mother took her to the Doctor for stomach cramps and periods of vomiting. The Doctor asked a series of questions, one of them asking if she had any anxiety. When she answered yes, the Doctor immediately recommended Lexapro, and followed by saying “many of my teenage patients are on it”. Well, congratulations Doctor, you are adding to the modern decay of society. What happened to good old fashioned exercise? I seem to recall a time when Doctors used to say, “Eat right and exercise”. Fact is that these medications are not always needed and they come with a host of side effects that people may not be aware of or pay attention to. They waste money and cause problems in their body by taking a pill to fix their stress or anxiety.



When it comes to issues of the brain, like anxiety or depression, most people don't think about the exercise and nutrition. People develop certain anxieties and stress disorders that can be overwhelming and they normally turn to prescription drugs. Many don't realize that by eating right and getting the proper physical exercise, they can reduce their symptoms and even cure their illnesses. According to "The relationship between exercise and anxiety, obsessive-compulsiveness, and narcissism." By Linda Spano, "Researchers have found that regular physical exercise provides positive contributions to mental health and promotes psychological and physical health in normal adults." (2, 34) This is a critical example of how exercise can have a positive impact on an individual's life. Yet so many turn to medication without this knowledge that can change their lives in a positive and healthy way. The truth is out there waiting to be discovered.

"To say that we should drop the idea of truth as out there waiting to be discovered is not to say that we have discovered that, out there, there is no truth" (Richard Rorty 190)

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Can Yoga Improve your State of Mind and Body?

Certain forms of exercise combine meditation with the use of muscles and stretching to create a sense of well being and calm. These exercise programs such as Yoga and Tia Chi, are recommended for a variety of anxiety and stress disorders. The University Counseling Center offers a "Yoga for Stress Management Program" as a Complementary Alternative Counseling Resource. According to the center, "This innovative practice program focuses on Yoga as a Stress Management Program". The program has been used as a complementary alternative therapy designed to help students cope with stress." (1,12) Yoga

helps with stress reduction because of its quiet and precise movements. Yoga draws an individual's focus away from the chaotic day they may have had and towards a calmer mind state. To hold certain positions and breathe properly requires balance and concentration. To obtain this balance and concentration, one must focus in a quiet environment and breathe. This lends itself to relaxation and peace of mind.

Yoga is a workout that can help people relax and relieve tension. Many people think that yoga is just stretching. However, while stretching is part of it, yoga is really about creating balance in the body through developing both strength and flexibility. This is done through the different poses and postures. Each of these poses has a specific physical benefit. Depending on the speed and intensity of these different poses and stretches, yoga can be a good cardio workout. According to WebMD, some benefits of Yoga include:

- Improved flexibility and agility
- Improved muscle tone and strength
- Improved posture and body awareness
- Meditation and peace of mind
- Breathing techniques for stress relief
- Heart health, lower blood pressure, slower heart rate
- Better concentration and focus
- Less mood swings

According to the article Benefits of Yoga for African American Heart Failure Patients by Paula R. Pullen, "Yoga combines structured physical exercises with breathing techniques and meditation to stimulate a sense of well-being. The breathing, relation, and meditation components may lead to an improvement in baroreflex sensitivity and a reduction in HR variability as a result of reduced chemoreflex response to hypoxia and hypercapnia" (6,7). The improvement in baroreflex sensitivity can affect the reduction in hypertension which is a huge impact on heart failure and other cardiovascular diseases." This article also discusses a research study where forty patients were recruited from the outpatient cardiology clinic at Grady Memorial Hospital in Atlanta, GA. All of these patients had systolic or heart disease. These patients were randomized to a yoga group or a control group.

The patients were then put in a yoga session which was conducted twice a week. The breathing exercises consisted of slow, deep inhalation and exhalation through the nasal passageways. This helps with the mediation and relaxation. After 16 yoga sessions which took about 8-10 weeks, there was a positive increase in the yoga group versus the control group. In conclusion of the study, yoga may provide a beneficial adjunctive therapy and may be added to standard medical care under similar circumstances. This study showed that yoga, an exercise that is offered everywhere and has become very popular throughout the years, may help many health problems. We can expect that since

yoga helped this group of individuals, it can also have positive affects on other heart patients, as well as healthy individuals.



Yoga Pose: Asana

One exercise and depression study showed that an improvement in mood begins just ten minutes after an exercise is started. The mood then continues to get better for up to twenty minutes. Another exercise and depression study found depression had improved after an individual had walked on a treadmill for thirty minutes a day for only ten days. It is found that antidepressant medication usually takes at least two to three weeks to begin improving a person's mood. For a more lasting change in improving the mood of an individual was found to occur after two to three weeks of exercising. But how about people who don't last two to three weeks? I go back to my example of heart pumping nausea that deters beginners from consistency. This is a real problem. As a personal trainer, I've seen people give up prematurely. My observation is that they do not consult a professional on a customized plan that gradually takes them to where they want to be. According to the training records of Gold's Gym in East Northport, 70% of new members do not take advantage of their free introductory training session with a personal trainer. They simply start working out and from I have seen, many don't use the equipment properly.

The first step is to have a full physical and get the green light from your Doctor to begin an exercise program. Next, is to consult with a fitness professional who will gauge your current state and discuss your body transformation goals. They will develop a plan that includes exercise and nutrition. They will take you through a series of workouts that gradually build your resistance and stamina to be able to progress at a rate that is right for you. Many people don't take this necessary step and think they can do it on their own. They may become discouraged or even depressed at their lack of progress and give up exercise forever. Equally important to their effort is nutrition, especially when beginning a fitness program. Your body needs the right fuel to perform and recover. A professional can give diet advice that will supplement your workouts and improve performance.

It has been medically proven that regular exercise can help boost an individual's mood and lower their rate of depression. When a person exercises their body releases chemicals called "endorphins" and these chemicals help the brain cope with pain in a better manner. It also helps trigger a positive feeling similar to what happens when a person takes morphine. That is why a person can feel elated after a healthy dose of exercise. Although depression may happen due to various negative experiences an individual suffers in a day to day life, it has also got a lot to do with an individuals general health. Healthy people who live an active life are rarely depressed. Regular exercise can provide many helpful health benefits. Such as, it can increase energy levels and keep blood pressure in check.

"Those who think they have not time for bodily exercise will sooner or later have to find time for illness." ~Edward Stanley

Even basic activities can give an exercise that can have positive effects on an individual's overall mental state. Going for a bike ride, gardening, a nice walk or joining a dance class are all examples of exercise. Choose something that is right for you, where you won't get bored so you can be consistent. Consistency is the key to any exercise program. Simple activities can boost individuals self esteem and help them feel better about themselves which helps reduce stress. In the Book, "The Healing Power of Exercise: Your Guide to Prevention and Treating Diabetes, Depression, Heart Disease, High Blood Pressure, Arthritis, and More states, "A universal finding in exercise studies is that people experience a greater sense of well-being." (3, 14) Exercise can in fact help a person have a better mood and a happier state of mind. This is important for everyday life duties. Such as student and a working professional, it helps these individuals have a better day at work and working and to perform with less stress.

Can fitness help children?

From obesity to academics, children have many ways to benefit from fitness. It's truly amazing to see the many studies done on the relationship between exercise and physical, psychological and emotional issues. But there is also a relationship between fitness and the performance of the brain, particularly as children develop.

Children also suffer from obesity, which can affect their study habits. There has been more focus lately on obesity in America, particularly in our children. As part of my research, I interviewed children who performed well academically as well as those who struggled. I spoke with 10 children between the ages of 11 – 15. Those who performed well seemed to have better study habits, good focus and discipline. Those who struggled complained about fatigue and lack of focus and concentration. While there are obvious physical benefits

from healthy habits formed at a young age, there are rarely discussions about academic achievement and the relationship between physical fitness and performance of the brain. The article “The Relationship between Physical Fitness and Academic Achievement” discusses a research study that was done among public school children. They wanted to see if there is a relationship between physical fitness and academic achievement. This study found was that students who were more physically fit outperformed their less fit peers on standardized math and English test. The author states that “fitness may reflect overall healthy which could contribute to academic achievement” (7, 12).

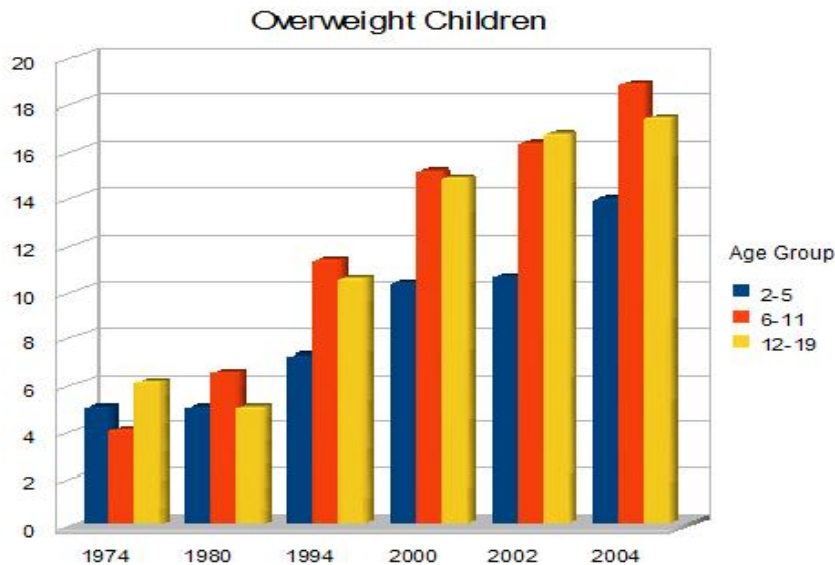
The results of this study showed the positive effects of physical activity and fitness on academics in the sample used in this research. But I was surprised to see the study by The National Bureau of Economic Research that found that “in general, children who are overweight or obese have achievement test scores that are about the same as children with average weight” (Kaestner & Grossman). This study would argue if fitness and nutrition can really play a role in a child’s academic performance. Although this was the opposite of everything I was reading, it was only one study and did not sway my personal belief and life experiences. Besides, the statistics on the other side of this argument were too overwhelming to ignore.

“It is no use trying to sum up people” – (Virginia Wolf 172)

Despite the growing knowledge and emphasis placed on fitness in the past 20 years, there has still been a dramatic increase in obesity in the United States. According to the Center for Disease Control and Prevention, Thirty-three states had prevalence equal to or greater than 25%; nine of these states (Alabama, Arkansas, Kentucky, Louisiana, Mississippi, Missouri, Oklahoma, Tennessee, and West Virginia) had a prevalence of obesity equal to or greater than 30%. This has been a growing problem, especially with the fast food craze and sedentary lifestyle so many Americans practice. This problem has been spreading among our children in alarming rates. According to the New York City Department of Health, 43% of public elementary school students are overweight and 76% of New York City children are not getting the recommended five daily servings of fruit and vegetables.

Obesity is basically determined by body mass index which is considered BMI of 30 or greater. BMI is calculated from a person’s weight and height and provides a reasonable indicator of body fatness and weight categories that may lead to healthy problems. A high BMI is caused by lack of exercise and good nutrition. Obesity has become a major risk for cardiovascular disease, different types of cancer and diabetes.

Here is a chart of children obesity over the past few years, provided by the “Centers for Disease Control and Prevention”:



As you can see, obesity has become greater throughout the years. This can cause many health problems for children as they become older. According to the “Arch Intern Med : is Primary Care Practice Equipped to Deal with Obesity?” by Debra Haire-joshu, “Obesity is associated with a long list of serious medical complications that impair health, reduce quality of life, and shorten lifespan. These complications can be improved or completely resolved by weight loss. Therefore, obesity is a legitimate medical concern that should involve the implementation of therapeutic weight loss by primary practice physicians.

These statistics are alarming, especially when you consider that physical fitness affects academic performance. Are these obese children having trouble in school? Perhaps academically, but also emotionally. We can all recall how difficult it is to fit in at school with peer pressure and bullying. Many obese children become victims of teasing and bullying and tend to withdraw. These feelings can cause anxiety and depression. According to the LiveScience article [Obese Kids More Likely to Get Bullied](#), “[redacted] Obese children have it tough. Not only are they set up for all kinds of health risks, including type-2 diabetes, high cholesterol and high blood pressure, they are more likely to be bullied than their svelte counterparts, a new study suggests.”



Obese child in school

Childhood obesity has been linked to diabetes, high blood pressure, depression, anxiety, and poor academic performance. A healthy lifestyle begins at home and many children are not getting the proper guidance from their parents. Unfortunately, many kids pick up their eating habits from their parents and obese parents tend to have obese children. According to an article in the Daily News, Study: Children are likely to become overweight by mimicking behaviors of obese parents, “Obese moms are 10 times more likely to have obese daughters, according to new research and obese dads are six times more likely to have obese sons, according to a British study of 226 families at Plymouth’s Peninsula Medical School and reported by the BBC.”

This is why it is becoming increasingly important to implement better health and nutritional education programs in our schools. Teachers have a unique opportunity to instill lifelong health and fitness habits in students through nutritional education, gym activities, yoga, and even purposeful play at recess. Starting at an early age has its definitely has advantages because children develop healthy habits that stay with them for the rest of their lives. As early as Kindergarten, we need to educate kids on the importance of exercise and eating the right foods. But this education must be continued and consistent at home. Unfortunately we cannot control what people do in their homes, so we must try to take charge of what kids are exposed to in school. This can be a strong influence in a child’s life. The more we educate and present information in a fun and effective manner, the greater the chance of kids absorbing that information and taking it away with them.

Teachers and counselors have many resources to turn to when they are looking for nutrition and fitness advice for children. Organizations such as “Donors Choose”, “A Healthier Generation” and “The Children’s Aid Society” provide programs to help teachers educate their students. Balls, books, juggling

kits, and even heart rate monitors are some of the things they offer teachers to help their students learn about staying fit and healthy. Healthy students are better able to concentrate on their work, attend school on a regular basis and perform better in class.

The fact is that parents and teachers are key decision-makers when it comes to the nutrition, physical activity and health needs of children. Each day, we can take advantage of the healthy choices around them and do little things that can affect children's health in a big way. More emphasis on exercise programs is a must. Simple calisthenics and sports are not enough anymore. Schools must incorporate cardio programs and educate kids on the importance of heart pumping exercise for 30 – 40 minute intervals, at least 4 times per week.

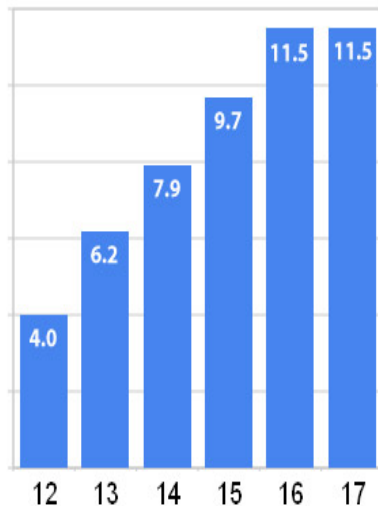
The heart is a muscle and it needs exercise like the other muscles in your body. Muscles that don't get exercise will shrink and become weaker, and that is very dangerous for the heart. If we explain this in simple terms to children, it can have a powerful impact on their actions and the way they think about their bodies. This is critical to preventing health problems as they get older. We must start young to have better control over our population's obesity and overall health crisis. Education and prevention is the key to improved health and reduced need for medication.

While trying to find the benefits that physical activities had on children, I came across another study written by Richard Wittberg called "Aerobic Fitness Thresholds Associated with Fifth Grade Academic Achievement". The purpose of the study was to assess student aerobic fitness measured by FITNESSGRAM Mile times and pacer circuits. This is to find the nature of the association between aerobic fitness and standardized academic performance is dose-response or threshold related. The study consisted of standardized academic test scores and aerobic capacity scores collected from two cohorts of 5th grade students over two years. The end result of this study was that the students, who completed the 9 minute mile run or less, peaked in academic performance. This study identifies aerobic fitness points which if they were achieved, offer a great probability of increased academic success in fifth graders. According to the article, "School-based physical activity and fitness opportunities may positively impact health risk factors associated with childhood obesity." (3, 284)

In my previous research with teenagers, I began to realize that part of the anxiety and depression they may be feeling has to do with hormones. As a teenager starts to produce hormones, they can experience "mood swings". Often, they begin to think they are "bipolar" or that they need therapy or medicine. Many teenagers suffer from anxiety due to pressures of High School as well as the hormones. They start to feel like a "victim" and think there is something wrong with them. This can lead to more serious problems like depression and can even be linked to teenage suicide. This is why I believe teenagers can benefit even

greater than younger children. Proper nutrients and a fitness regime can help teenagers balance their moods, hormones and perform better academically.

Percentages of Teens (12 to 17)
Having a Major Depressive Episode



Medication is not always the answer, yet Doctors seem very eager to prescribe them, as in the case with the teenager suffering from stomach cramps whose Doctor wanted to prescribe Lexapro. Or like the case of a woman who had pesticide poisoning and was in therapy taking anti depressants. This was a program on the Fitness channel about a woman who seemed to develop symptoms of anxiety and depression overnight. She began to withdraw into her work and was very moody. She also showed symptoms of OCD and her friends became worried. She was going to therapy and taking anxiety medication along with anti depressants, but was not improving. She went through this for nine months before she tried a new therapist who was very astute. As the woman explained that her symptoms seemed to develop suddenly, the Doctor began to suspect that this was not a psychological problem, but perhaps physical. She was sent for blood tests and the results were that she was exposed to a high degree of pesticides that attacked her central nervous system. Apparently, she used a high dose of flea fogger in her small apartment that wound up poisoning her.

I found this extremely interesting because the Doctors were readily prescribing medication to mask her emotional symptoms without getting to the root of the problem. Although this woman's problem was not a result of nutrition and exercise, it was developed by a lower immune system due to damage to her central nervous system. Everything in the body is connected. Good nutrition, hydration and exercise may have improved her overall state. It also confirmed for

me, that doctors overprescribe and misuse medications. There are probably thousands, if not millions of people who take anxiety and depression medication who don't need them.

“Seldom, very seldom, does complete truth belong to any human disclosure; seldom can it happen that something is not little disguised or a little mistaken” – Jane Austen, Emma25

Why exercise? One Client's perspective

There are some people who seek the natural method instead of turning to medication. As a personal trainer, I have clients with medical issues who are looking for a natural cure. I'm able to see and hear firsthand how fitness affects these individuals. My clients range from athletes to stay at home moms. Sometimes their focus slowly ends and their motivation seems to decrease. They go through the peaks and valleys of bursts of energy. Then they seem to put on the weight again or stop working out. I try to preach that this is a lifestyle that should stay consistent. Eating habits and exercise should stay with you 10 years from now. As we move forward we can analyze personal experience from my clients and interviews.

I interviewed one of my clients who agreed to answer a few questions. This client is in his early 40's and was a college athlete. After having kids and working all the time, he lost touch with fitness and gained a lot of weight. He was also suffering from a bad back and lack of sleep. Here is an interview of what he had to say about his new fitness approach:

Client interview with Erik Drewes.

What was your routine before you started training?

A: I ate whatever I wanted, I rode a bike once in awhile when the weather was nice.

How did you feel before you started training?

A: At the time I felt out of shape and would feel fatigued a lot. I did not realize how bad I was until I started training.

Did you have any health problems prior to working out?

A: I had a bad back and my sleep schedule was horrible, I never was able to fall asleep and I felt myself stressed out a lot easier.

What is the difference now that you have been training for the past 3 months?

A: My sleep schedule is completely different, I am a lot more patient with things and my back does not bother me as much now that I lost a lot of weight. I feel better about myself and this shows in my attitude and my behavior at work.

As you can see his overall lifestyle has changed for the better. When I first met Erik he had problems with sleeping. This was a big issue for him which he stressed from the beginning. I told him that with the proper workout and eating regime he will have a better night's rest. Sure enough, within 2 weeks he was able to get 6-8 hours of sleep versus the 2-4 hours of sleep he was getting. This is an example how the proper workout and eating regime can help relieve stress on the body. It can actually translate to a better state of mind and help an individual sleep better or develop more normal patterns of sleep.

The following chart highlights the risks of poor fitness. These are serious concerns of people who stop working out or eating right as they get older.



These are some of the risks that Erik and my other clients are trying to avoid by working out and eating right. They want to change their way of life, not just for themselves, but for their families. They want to live a full rich life and enjoy their health without worrying about the risks of a poor diet and fitness level. According to IHRSA Fitness Facts, people stay in shape to strengthen their heart muscle, improve their metabolism and reduce the risk of high blood pressure and heart disease. "Physically fit people generally live longer, perform better, and get more out of life," Arnold Schwarzenegger, Chairman, President's Council on Physical fitness and Sports, 1991.

It's nice to see these clients turning to fitness and nutrition for relief instead of medication. But is all medication so terrible? Not really. Some are truly necessary and let's face it; the Trifecta of Fitness is not the cure for everything. There are some serious and very real medical conditions that diet and exercise

will not help. What about the occasional Aleve or Advil for pains and aches? Take it from someone who often wakes up soar from a workout, these pain relievers are necessary. But the key is moderation.

Staying in shape is typically harder as you get older, but critically more important. According to Joseph Saling of Kroger Health Update, the top reasons people stay fit as they age is to increase bone density, remain independent, gain flexibility and prevent falls. More seniors are looking to stay physically active to keep their bodies and minds strong as they age. They typically turn to less strenuous forms of exercise such as walking or Yoga.

Can Fitness Leads to Drug Use?

My experiences with my clientele have been transforming lifestyles, as well as bodies. I have seen them improve their attitudes and self confidence, particularly those who stay consistent. Many of my clients, including Erik, are concerned with their appearance, especially as they get older. It is becoming increasingly important to look good and feel good. Our society places a lot of emphasis on how people look. From magazines to television, we are confronted with perfect bodies and pushed to plastic surgery and cosmetics, in search of beauty and confidence. This is why many people exercise. It is obvious when you walk into any gym in America. You can see the tan body builders showing off their muscles in tank tops and shorts. But body building can become an obsession and sometimes even lead to drug use.

I recently read an interesting article from the NSCA, called "Positions Stand on Androgen and Human Growth Hormone Use". The article discussed the confusion and negative decisions surrounding the use of Anabolic drugs. The pressure placed on athletes for performance and body image has fueled the use of these drugs, despite the negative consequences. The article went on to explain the position of the NSCA is to help athletes and coaches to train naturally through the use of strength training techniques and nutrition programs.

As a former athlete in wrestling, I have always been aware of the use and discussions of Anabolic drugs. My observations have been that athletes, particularly in high school and college, come into contact with these drugs quite easily and give little thought to the negative consequences of using them. It's actually quite interesting and alarming how little thought is placed on the side effects, while a great deal of attention and focus is placed on performance enhancement. The wide spread use fuels the disregard for safety or the confusion over how dangerous these drugs can actually be.

According to the NCSA, "resistance exercise is the most effective anabolic form of exercise, and over the past 20 years, the research base for resistance exercise has just started to develop to a significant volume of work to help in the

decision-making process in program design. The interface with nutritional strategies has been less studied, yet may yield even greater benefits to the individual athlete in their attempt to train naturally.”

It is truly refreshing to read that professionals are publically preaching a natural method of training over the use of Anabolic drugs. Although the natural training system will never produce the quick and concentrated results of performance that the unnatural can produce, safety should be the main concern and education is critical. There has been some success in educating high school athletes on the risks of androgens, but it has not been far-reaching. At times, the people that are using are the people who have the greatest influence on adolescents, coaches and teachers. They should be the primary focus of educational programs.

According to the Encyclopedia of Sports Medicine and Science, the risks of Anabolic steroids include liver damage, cardiovascular diseases and problems with male and female reproductive systems. They also produce psychological effects due to the “Increased testosterone levels in the blood are associated with masculine behavior, aggressiveness and increased sexual desire. Increased aggressiveness may be beneficial for athletic training, but may also lead to overt violence outside the gym or the track. There are reports of violent, criminal behavior in individuals taking Anabolic Steroids. Other side effects of AS are euphoria, confusion, sleeping disorders, pathological anxiety, paranoia, and hallucinations.”

As with any type of drug abuse, there are patterns of behavior and usage that continue over a period of time. These patterns often make it hard to stop using and contribute to greater health risks. The National Institute on Drug Abuse discusses “Cycling refers to a pattern of use in which steroids are taken for periods of weeks or months, after which use is stopped for a period of time and then restarted. In addition, users often combine several different types of steroids in an attempt to maximize their effectiveness, a practice referred to as stacking.” According to the NIDA, the effects of Anabolic Steroids on the brain are significant, but not the same as other drugs of abuse. Steroids are not Euphorigenic and do not trigger dopamine which drives the “high” that motivates substance abuse behaviors. But eventually, over long periods of use, it can have the same negative impact on the chemical pathways of the brain which can affect the mood in significant ways.

For men, some risks include shrinking of the testicles, reduced sperm count, infertility, baldness, development of breasts, and increased risk for prostate cancer. For women, risks include growth of facial hair, male-pattern baldness, changes in or cessation of the menstrual cycle, enlargement of the clitoris, deepened voice. For adolescents, risks include stunted growth due to premature skeletal maturation and accelerated puberty changes. This is the

type of information that should be widely shared and discussed among athletes and coaches alike. These are critical topics for education and concern.

“None of these diverging mistakes can co-exist with a real knowledge of the people” – George Elliott 51

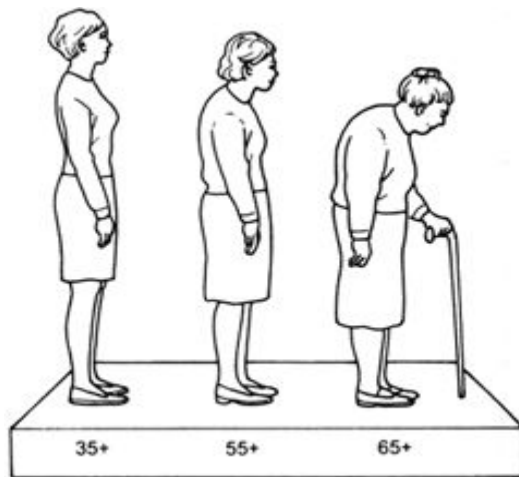
The NSCA is reaching out to fitness professionals to educate them about natural methods of training to combat the wide spread use of performance enhancing drugs. I think this will be a significant step in the right direction. I plan to research their training methods further and incorporate them into my personal fitness programs. I need to be prepared and educated to discuss this topic with my clients and other professionals as provide a natural method of fitness that will provide the results they are looking to achieve, versus the Anabolic route.

Can Fitness Help the Elderly?

As a personal trainer, I have also seen health problems that prevent or deter people from starting or continuing an exercise program. From back knees to sore backs to bad hips and joints, there are many aches and pains that make it difficult for people to exercise. Especially with older people, they have a harder time starting a fitness program. The elderly tend to think it's too late to exercise or they may be afraid of getting hurt, but the fact is that there are at a higher risk of injury and illness without exercise. According to Dani Veracity of Natural News Magazine, “Numerous studies demonstrate strength training's ability to increase bone mass, especially spinal bone mass. According to Keeton, a research study by Ontario's McMaster University found that a year-long strength training program increased the spinal bone mass of postmenopausal women by nine percent. Furthermore, women who do not participate in strength training actually experience a decrease in bone density.” Women are at higher risks for Osteoporosis and should really begin to exercise early in life. The earlier you begin to condition your body, the better off you will be. Stronger muscles and bones will protect you as you age and result in fewer illnesses and injuries. Again, the “Trifecta” plays an important part. Exercise combined with good nutrition and plenty of water will help overall health, including bone density.

Osteoporosis is a major cause of concern for women as they age. Studies have shown that weight bearing exercise can actually improve bone density in women. According to the article “Exercising with Osteoporosis” by the Mayo Clinic Staff, exercise can “reduce your risk of the spinal problems and broken bones that can result in loss of mobility and independence.” They suggest that it's never too late to start exercising. If you have been exercising your whole life, great! You have probably increased your bone density and built strong muscle around the bone to protect it. But even as women enter menopause, it becomes more important to begin and exercise program of weight training. According to

the article, “Starting an exercise program can increase your muscle strength, improve your balance and help you avoid falls — and it may keep your bones from getting weaker.” Strength training helps promote muscle growth around the bones that protect against fractures. Exercise can also keep your bones strong, especially when combined with the right nutrition. You’ve always heard about how milk keeps your bones strong and it’s true, but the fact is that many adults don’t drink enough milk. The right amount of dairy, combined with vitamin supplements that contain calcium and vitamin D will also help maintain bone density, especially as women age.



Osteoporosis in Women



Active elderly

Bone density medications are also being prescribed to aging women in large numbers. This is a huge business for pharmaceutical companies as they produce drugs like Boniva, Actonel and Fozimax. But like most drugs, there are side effects. Osteoporosis medications produce side effects such as dizziness, heartburn, indigestion, or abdominal discomfort; muscle, bone, or joint soreness or aches; other problems such as nausea, vomiting, diarrhea, or constipation. Once again, there is a natural way of dealing with these health issues instead of turning to drugs. These drugs have serious side effects, especially for the elderly. In my own experience, my Grandmother was prescribed Boniva and it made her so sick that she could not eat. She suffered from heartburn and indigestion on a regular basis. Then, the Doctor changed her prescription to Actonel. This led to dizzy spells, and some were so bad that she almost fell and had to lie down. But she was told that she was not allowed to lie down for 30 – 60 minutes after taking Actonel. It really makes you think; there has to be a better way.

Starting an exercise program later in life is challenging and it has to be done carefully and gradually. Starting with simple walking is a light impact exercise that will help bones and muscles stay fit. Weights can be added gradually to arms and legs when walking or simply doing light sets with repetition. Stretching is also important for agility. According to the National Strength and

Conditioning Association, “Resistance training can produce increases in bone mineral density and may help delay or prevent the development of osteoporosis by reducing the age-associated loss of bone mineral density”. But before starting any exercise program, consulting with a physician first is a must, especially for the elderly. But I always advise people to be weary of Doctors who are too quick to prescribe medication. You have the personal choice to seek natural options instead of turning to medication. Pharmaceutical companies are pushing medications to Doctors, who in turn push them on patients. It’s always refreshing to me to find a Doctor who seeks alternative, more natural methods. Some even prescribe diet and exercise before medication; yes believe it or not they still exist!

Water: The Power of Hydration

Now, let’s discuss water. The third prong of the Trifecta of Fitness is hydration. The benefits of drinking water are almost endless. From weight loss to healthy muscles to relieving headaches and constipation, the list goes on and on. According to the “Benefits of Water” by ShapeFit, “The human body, which is made up of between 55 and 75 percent water (lean people have more water in their bodies because muscle holds more water than fat), is in need of constant water replenishment.” Hydration helps your cells rebuild and leads to better skin, hair and teeth. In fact, one study showed that people who drank more water had healthier teeth, simply because they flush out the food that gets stuck between teeth and leads to decay.



Woman drinking water

According to an article on *about.com* “Your body needs water to regulate body temperature and to provide the means for nutrients to travel to all your organs. Water also transports oxygen to your cells, removes waste, and protects your joints and organs.” It’s easier that you might think to increase your intake of water. Simple changes like substituting soda or juice with water throughout the

day and with meals can make a big difference. Typically, you should drink about eight, 8 ounce glasses of water per day. Top ten reasons to drink water include:

1. Healthy skin
2. Flush toxins
3. Reduce heart attack risk
4. Cushion and lube your joints and muscles
5. Get energized and be alert
6. Stay regular
7. Reduce your risk of disease and infection
8. Regulate your body temperature
9. Burn more fat and get more muscle
10. Stay well

The list of benefits go on and on. There are just too many good and healthy reasons to drink water and one potentially negative one, frequent urination. Small price to pay if you ask me.

Conclusion:

“Nothing in life that has any value comes easily. You have to work hard for anything that is worthwhile achieving.” – (Hamid Castro)

The Trifecta of Fitness is a very real and powerful solution. But as a society, we have been trained to take a pill to solve our problems. After all, it's easier than exercise or thinking about what to eat. But we will pay the price in the end. The answer is right in front of us. Before taking prescription medication, you should consider this: a combination of exercise, hydration and nutrition can be the answer to your physical and emotional problems, particularly, if you suffer from the illnesses I have researched in this paper. Often times, these are not illnesses, but symptoms. There are very common problems that I hear so many people complain about; “I can't sleep”, “I feel tired all the time”, “I have anxiety”, “and I'm stressed out!” These are merely symptoms of a lifestyle, a lifestyle that pharmaceutical companies rely on for profits. Their commercials portray these symptoms in a manner we can relate to, yet they fail to mention that simple changes and smarter choices can help.

“My own psychology interests me” – (Virginia Wolf 171)

So I end with a few conclusions I have drawn from this paper, this research and this exercise:

1. Exercise and fitness have significant benefits for a healthy mind and body
2. The “Trifecta of fitness” can be good but too much of even a good thing can be bad, everything in moderation, including fitness.
3. Exercise can improve your mood, reducing anxiety and depression
4. Our society rushes to medication too quickly without seeking healthier alternatives.
5. Pharmaceutical companies are talking over the airwaves with commercial after commercial about prescription medication that is supposed to improve our quality of life.
6. Exercise can be good for all ages, children to the elderly
7. Yoga is one of the best forms of exercise because it delivers the benefits without some of the risks of injury on joints and muscles
8. When exercise leads to drug use, people have gone too far with their desire for muscle. Anabolic drug use has some serious health risk factors that need to be more publicized and discussed, particularly in schools.
9. Drinking plenty of water has incredible benefits that many don't realize, including me. I never knew that it can actually reduce the risk of infection and disease.
10. People exercise for a variety of reasons, but nothing is more important than finding a reason.

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