Muscles play a vital role in supporting overall health and wellness, especially into old age. They aren't just about looking good , although that would be a big plus, and they aren't just about the occasional need to help your friends move; they're a critical factor in metabolic health, body weight control, bone strength, and resilience to stress and disease.

Did you know you have more than 600 muscles in your body? These muscles help you move, lift things, pump blood through your body, and even help you breathe, basically muscle keeps you body alive!

When you think about your muscles, you probably think most about the ones you can control. These are your voluntary muscles, which means you can control their movements. They are also called skeletal muscles, because they attach to your bones and work together with your bones to help you walk, run, pick up things, play an instrument, throw a baseball, kick a soccer ball, push a lawnmower, or ride a bicycle. The muscles of your mouth and throat even help you talk!

Healthy muscles let you move freely and keep your body strong. They help you to enjoy playing sports, dancing, walking the dog, swimming, and other fun activities. And they help you do those other (not so fun) things that you have to do, like making the bed, vacuuming the carpet, or mowing the lawn.

Strong muscles also help to keep your joints in good shape. If the muscles around your knee, for example, get weak, you may be more likely to injure that knee. Strong muscles also help you keep your balance, so you are less likely to slip or fall.

And remember—the activities and exercise that make your skeletal muscles strong will also help to keep your heart muscle strong!

Keeping your muscles healthy will help you to be able to walk, run, jump, lift things, play sports, and do all the other things you love to do. Exercising, getting enough rest, and eating a balanced diet will help to keep your muscles healthy for life.

Exercise not only shapes our bodies, it also shapes our minds. With the ability to calm, elevate mood and counter anxiety and depression, exercise is a valuable tool for combating stress. ***But how does it work?***

One of the most well-known ways that exercise provides mental benefit is through chemical reactions brought about in the brain. During exercise, the body's stress hormones, such as cortisol and adrenaline, are reduced, while endorphins, the body's natural painkillers, are stimulated. Endorphins have also been associated with providing a sense of euphoria, but according to the review article, "The Anti-depressive Effects of Exercise," published in Sports Medicine, it is unclear if the endorphins are directly responsible for these feelings or if they simply block pain while allowing the pleasure chemicals, dopamine and serotonin, to be more apparent.

The American Psychological Association describes the benefits of exercise as total body communication, "Biologically, exercise seems to give the body a chance to practice dealing with stress. It forces the

body's physiological systems -- all of which are involved in the stress response -- to communicate much more closely than usual...And all of these are controlled by the central and sympathetic nervous systems, which also must communicate with each other. This workout of the body's communication system may be the true value of exercise..." By regularly activating these communication pathways, the better the body becomes at handling stress. The less often this happens, the less efficient the body is with coping.

Improved Overall Well Being

By performing regular physical activity, the body typically becomes healthier and stronger which can reduce stress associated with other health issues that may be worsened, or brought on, by inactivity. Lost work and lost wages, doctor's visits, and expensive medications can lead to worry, insomnia, and irritability. According to Harvard University Health Publications, during the stress response, mind and body can amplify each other's distress signals, creating a vicious cycle.

Although they can work against each other, the mind and body are also capable of working together to provide tremendous benefits. Regular exercise provides ***improved health, better sleep, and more energy.*** This can lead to improved self-confidence and a sense of command over body and life, which can help an individual feel more equipped and confident when faced with stress.

Whether it's a needed escape, meditation or playtime, exercise can provide a way to get away from it all, either in solitude or with friends or family. Harvard University Health Publications state, ***"...when your body is busy, your mind will be distracted from the worries of daily life and will be free to think creatively."***

One of the best approaches for people dealing with health issues like depression, anxiety, or stress is to use exercise as an adjunct to any other forms of treatment that might be necessary. And in order for exercise to work in alleviating symptoms of depression, anxiety, and stress, it has been suggested that the workout environment include fun, consistency, an avoidance of competitive situations, and activities that are personally satisfying and enjoyable.

Muscle and Healthy Aging

Muscle has a stronger connection with our health than many people realize. There is growing evidence that skeletal muscle is a key biological marker of health, aging, and disease. The best medicine available to maintain muscle mass and strength is less complicated and costly-namely, **exercise and a healthy diet**. Yet about **60%** of people over 65 are insufficiently active or overtly inactive, and many have poor nutrition. Most people will lose approximately **30%** of muscle mass over their lifetime, and as much as **50%** by the time they reach their 80s or 90s. The loss of skeletal muscle mass, quality and strength that is associated with aging is known as sarcopenia.

If you've suffered a noticeable loss of muscle mass, strength and function as you've gotten older, chances are that it isn't a random occurrence. It very well could be a condition known as sarcopenia, or adult onset muscle loss, a progressive and generalized loss of muscle mass that is directly associated with the aging process.

In fact, sarcopenia affects 14 percent of 65-69 year olds and 53 percent of the population 80 and older. And with the number of people around the world aged 60 and older expected to reach 2 billion in 30 years, even conservative estimates show sarcopenia affecting more than 200 million people by 2045.

An even bigger concern for all of us today is that deteriorating muscle mass affects more than just strength; it also negatively impacts our balance and gait as well as our overall ability to perform what were once routine tasks of daily living, from hauling groceries to walking the

dog. All too often this leads directly to frailty, morbidity, disability, poor quality of life, increased dependence on long-term care and eventually mortality. As of the early 21st century, the estimated direct health care costs related to sarcopenia already **exceeded $20 billion**.

As a general rule, the body seeks stasis (equilibrium), which means a balance between protein production (synthesis) and usage (metabolism). However, while we never really lose our ability to metabolize protein, we do lose the ability to synthesize our own as we get older. So, at a time when we actually require more protein to stay healthy and strong (given that our muscles account for 60% of the body's protein stores),we're actually getting less.

As such, any interventions for sarcopenia should also focus on meeting all nutritional requirements. Unfortunately, most of us tend to adhere to the same diet throughout our lives, and consequently many seniors find themselves protein-deficient. (It's important to point out that a recent study showed that due to the anabolic resistance of aging, dietary protein is not as effective in older adults, which means no matter how much protein you eat, you will never achieve a balance between how much muscle protein is produced and how much is lost.)

When it comes to disability, the loss of muscle mass and strength is a significant risk factor in the aging population.

And when coupled with other diseases associated with aging, sarcopenia's effects can be even more pronounced. For example, when patients suffer from both sarcopenia and osteoporosis, the risk of falling and fractures—and the accompanying loss of autonomy—rises precipitously.

But perhaps the most powerful indication that the loss of skeletal muscle (and the accompanying loss of strength) is vitally important stems from its propensity to act as a precursor and predictor of future mortality in middle-aged and older adults.

Many scientists still believe sarcopenia is an inevitable fact of life for those who live long enough, but the process is significantly more complicated than that. Although primarily a condition of older individuals, sarcopenia's development may be associated with conditions that impact younger generations as well, such as the correlation between inactivity and the corresponding loss of muscle mass and strength.

However, the medical community has identified three primary factors that cause muscle loss:

1. Hormone decline
2. Protein deficiency
3. Motor unit restructuring

Motor units are muscle fibers (slow twitch and fast twitch) and the motor neurons that command them. Fast twitch muscle fibers tend to die off first, and when this occurs, muscle fibers like these that are no longer commanded by a motor neuron are in danger of atrophying (muscle death). The body combats this by instructing the closest slow twitch motor neuron to take over (motor unit restructuring), but when a slow twitch fiber replaces a fast twitch fiber, it results in a loss of coordination, balance and general slower reflexes and muscle reactions, all of which are common symptoms among older adults. Individuals who have maintained an active lifestyle typically have more lean body mass and muscle mass even at an advanced age, and resistance weight training exercise has been shown to be particularly effective for slowing and even reversing the age-related loss of skeletal muscle by helping the body to synthesize protein better. This in turn suggests that physical activity should be utilized as a protective factor for both the prevention and the management of sarcopenia.

In fact, one USDA study showed that elderly participants who did resistance training for 45 minutes three times/week over a three-month span showed an average increase of 32 percent muscle fiber and a corresponding 30 percent increase in strength.

While some things, like death and taxes, are inevitable, research indicates that two important physiological factors associated with ageing can be easily controlled or reversed. **These two factors are muscle mass and strength.**

Strength training is key to a healthy and rewarding old age because it can improve health and well being on so many levels. An exercise prescription that includes two doses of resistance training per week, can improve muscle mass, strength, bone density, functional ability, blood pressure, metabolic rate, glucose metabolism and cardiovascular health.

Muscle strength is one of the keys to healthy aging, yet after we achieve peak mass in our early 40s, it's pretty much downhill from there. Most people begin to lose modest amounts of muscle at that point and experience progressive deterioration as the years go by, especially if they are sedentary.

Strengthening your muscles and increasing your muscle size are obviously important. But muscles play a much bigger role than most people realize. In fact, the benefits of your muscles might amaze **YOU!**

The Surprising Benefits Of Stronger Muscles

Muscle Keeps Your Metabolically Balanced

Muscle has always been recognized for its importance in strength, mobility and physical activity, bud did you know that muscle plays a big part in maintaining the metabolism of protein in your body?
Your body is composed of proteins that are in a constant state of breakdown and synthesis. their goal is to stay balanced between anabolism (gaining protein) and catabolism (losing protein).

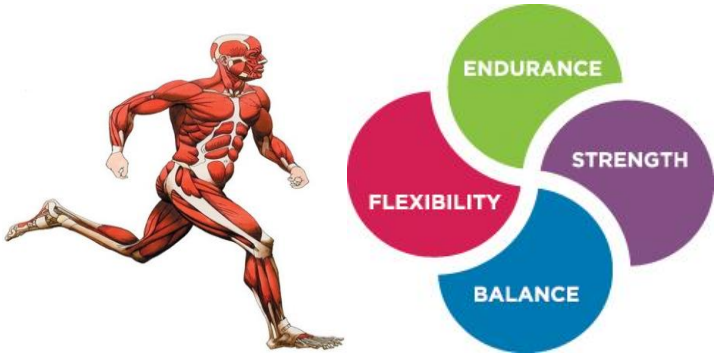
Throughout the day your body routinely goes through periods of both anabolism and catabolism, depending on whether you have just eaten a meal or whether it has been several hours since you have eaten and you are no longer absorbing amino acids.

Thankfully, your organs and tissues maintain the balance between synthesis and breakdown throughout the day as well.. even if you are not consuming dietary protein.

This is a good thing! Just think of the problems we would have if we missed a couple of meals and the skin protein became catabolic and caused us to lose a significant amount of skin. Or what if we lost protein form the liver, heart or kidneys?

The essential tissues and organs maintain a balance between protein synthesis and breakdown in the absence of dietary protein consumption because they can draw from the amino acids circulating in the blood. Even in the absence of food intake and continuous uptake of amino acids from blood for protein synthesis in tissues other than muscle, the blood amino acids concentrations remained constant. How does your body stay balanced? **You can thank your muscles for that!**

Muscles Keep You ALIVE!



Muscle plays a key role in maintaining the plasma amino acids levels in the absence of absorption of dietary amino acids from digested protein. You can consider muscle to be the reservoir of amino acids for the rest of the body.

It is the only tissue in the body that can afford to lose some of its mass without impairment of health. In the absence of dietary amino acids, there is a net breakdown of muscle protein to supply amino acids to the blood to balance the amount take up by the tissues, in order to maintain health in other tissues and organs. The result is ant loss of skeletal muscle in the absence of dietary protein intake.

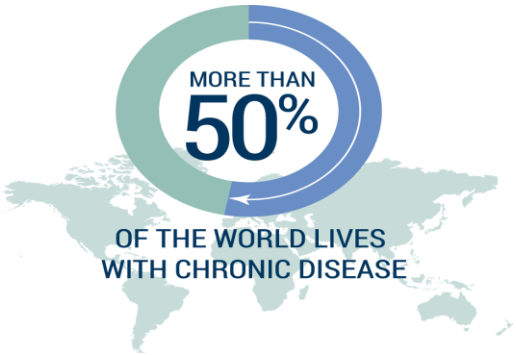
In short: Your muscles sacrifice themselves to that you can live!

That is precisely what muscle atrophy is. Your body is sacrificing its muscles in an effort to get the essential amino acids to your vital organs. If you are not eating a balance of essential amino acids, and the average person is **NOT**... then protein synthesis is not happening at the rate you want or need.

Thankfully, the situation can be reversed if caught in time. Muscle loss can be replaced and the muscle growth and strengthening create can be accelerated by getting a balanced formula of essential amino acids in foods.

Eating dietary amino acids usually results in the production of muscle, and these essential amino acids are ideally in the proper amounts and combinations to get the best results.

Muscle Health and Chronic Diseases



Muscle Helps Fight Diabetes

Muscle plays a key role in regulating the blood concentration of glucose (blood sugar) as well as the amino acids.

Under normal conditions, the brain relies entirely on glucose from the blood for energy. A drop in blood glucose concentration can cause loss of consciousness and even death. In contrast, an increase in glucose concentration in the blood is responsible for many of the adverse effects of diabetes.

It is important to understand..

All carbohydrates are ultimately converted to glucose in order to be metabolized in the body.

After you eat carbs, your blood glucose level increases. the hormone insulin works to moderated this increase by stimulating the uptake of glucose, mostly by the muscle. Once in the muscle cell, the glucose is converted to a chemical form of energy or stored as glycogen for later use.

Muscle is not only important in blunting the magnitude of increases in blood glucose after meals, it also helps prevent decreases in the blood glucose level between meals that could impair brain function. This is because the liver can produce new glucose from amino acids when your are not absorbing dietary carbohydrates.

What that means to you is this:

Maintaining healthy muscles is crucial for keep your blood glucose levels in the normal range. Keeping your muscles healthy is vital for prevention of diabetes as well as other healthy problems caused by hypoglycemia (low blood glucose level).

Muscle Helps Fight Obesity

Muscle plays a major role in energy balance and prevention of obesity. The process of continuous synthesis and breakdown of muscle can be calculated .. Here is the equation

10kg of lean muscle = 100kcal/d

That means a person who has 30kg more muscle mass than another person will burn approximately 300 kcal more energy every single day at rest... and even more during exercise.

The results:

The person with more muscle mass can burn off as much as 30lbs of fat in a year, all without TRYING!

Muscle burns fat because muscle is always burning, even while you are sleeping. this is another powerful reason for working to increase your muscle mass!

The dangerous consequences of muscle loss and fat gain most obvious among the elderly, making muscle health especially important after middle age. Aging presents a perfect storm that greatly accelerates the rate of sarcopenia. As people get older, they generally stop exercising (if they ever did), and spend more time sitting still. But muscle, unfortunately, is a use-it-or-lose-it kind of tissue. For one thing, it takes a lot of energy to maintain, so if you want to keep it around, you have to use it regularly to show your body that it's still worth the effort. Since an elderly person's body already has enough to do without maintaining muscles for no reason, it breaks down the muscle proteins to spare energy and keep the heart and other organs functioning.

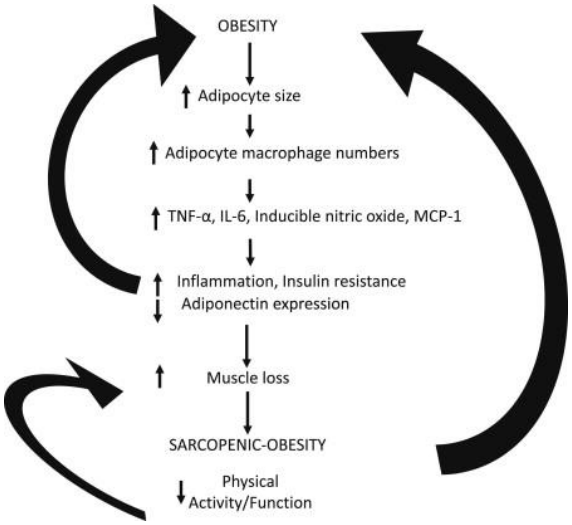
The result is a steady decrease in muscle size that really takes off around age 50 and accelerates with time. And it's not only the amount of muscle tissue that's affected; muscle quality also declines. Scans of elderly people's muscles reveal much more intramuscular fat, or fat tissue that has penetrated into the muscle. Basically, the elderly are at a much greater risk of being "skinny-fat:" they aren't noticeably underweight or under-muscled to the naked eye, but look a little closer and that "muscle mass" isn't all muscle.

All of these factors make old age an enormous risk factor for losing fat and gaining muscle, and as you might expect, the vast majority of sarcopenic obese patients are over 60. The consequences are severe. Sarcopenic elderly patients are more vulnerable to falls, and less able to recover from illness or hospitalization. Add obesity, and the story gets even worse; in one study, sarcopenic obese elderly patients fared

dramatically worse than sarcopenic non-obese or obese non-sarcopenic patients in a test of their ability to carry out everyday activities (for example, bathing, dressing themselves, and cleaning the house). The extreme consequences of sarcopenic obesity in the elderly really highlight the crucial importance of muscle mass for maintaining a healthy spectrum of human activity

So as you work to strengthen your body and increase your muscle size, knowing that you are simultaneously fighting, diabetes, bone loss, cancer, heart issues and obesity is very encouraging.

This diagram (taken from this study) perfectly illustrates the vicious cycle of sarcopenic obesity:



To explain the relationship very simply, obesity is inflammatory, and inflammation causes muscle breakdown throughout the whole body. Muscle loss makes it harder to move around, contributing to a sedentary lifestyle. Sitting all day accelerates weight gain and muscle loss, and the cycle continues.

Strong muscles are perhaps the greatest defense against weight gain, sickness and aging.

Building the muscle mass and strength you want is also incredibly healthy!!

Muscle Helps Strengthen Your Heart!

Heart Attacks and Strokes are ore common and usually more disastrous in individuals with depleted muscle mass. To say it another way:

Those with healthier muscles live longer!

Survival from other serious diseases, such as chronic obstructive lung disease and heart failure, is also better in individuals with greater muscles mass..

Muscles Helps Fight Cancer

Cancer is the most documented clinical state in which survival is directly linked to the maintenance of muscle mass. Cancer is associated with a rapid loss of muscle mass and strength at a rate faster than would normally occur because of decreased protein intake alone.

Survival from a variety of cancers is directly related to how well the muscle mass is maintained. This is because the ability to withstand the rigors of chemotherapy and radiation therapy is directly related to muscle mass and strength.

How Can I keep My Brain Healthy

People are becoming aware of the importance of "exercising" the brain and feeding it the proper nutrients or supplements to keep it sharp.

Without questions, the brain is the most important organ in the body, it is so central to our being and life that it is hared to think of it as just another tissue that requires oxygen and nutrients to keep functioning optimally.

Because the brain is so vital to life, it is well protected by a specialized structure that only lets certain molecules pass though into the brain. This protective shield is call the blood brain barrier.

Across this protective shield flow the essential amino acids, which become important chemical messengers that can affect mood,

appetite, energy levels, sex drive and many other behaviors and feelings that affect our lives.

With sufficient amounts of the right essential amino acids, the brain is able to function at its optimal level..

HEALTHY MUSCLES = HEALTHY HEART, BRAIN & HEALTHY BODY!

Keeping Your Liver Healthy

The liver detoxifies and purifies blood, but when the liver gets fatty, your body pays the price.

Specifically, your liver plays an important role in amino acid metabolism. Amino acids from protein digestion get started and transformed into different (non-essential) amino acids in the liver, depending on the need. The liver helps to maintain a proper balance of amino acid concentration in the blood by producing non-essentials amino acids that might be in low supply.

Drinking too much alcohol or being over-weight will cause fatty liver, and even the normal process of aging is associated with increase liver fat.

As the liver cleans your blood, normally only a small amount of fatty acids from the blood are stored in the liver. A healthy liver repackages these fatty acids and secretes them back into the blood to be delivered elsewhere in the body for storage.

But if the liver itself begins to store fat, it is a sign of metabolic dysfunction. A fatty liver leads to diabetes, hepatitis, scarring of the liver tissue and serious liver diseases, including cirrhosis.

Traditional medicine, however, is not very effective at treating a fatty liver. Commonly prescribed medicines often have adverse side effects. I have found that regular consumption of the EAAS formula is effective in treating fatty liver... and with no adverse side effects!
Not only does your muscle play a part in maintaining relatively constant levels of amino acids in the blood, so too does your liver. It is for this reason that all "healthy" dietary recommendations should include a balanced approach to essential amino acids and protein nutrition.

Muscles And Bone Density

Each year, more than 60,000 women die from the effects of osteoporosis, a disease of the bones that causes low bone density and weak bones that are more likely to break. That’s 20,000 more deaths than are caused by breast cancer and cervical cancer combined.

Despite these numbers, many Americans don’t take precautions against this potentially life-altering disease. In an April 2016 Harris Poll survey on osteoporosis, three-quarters of Americans said they were aware of the effects that osteoporosis can have on their health, yet only about half reported taking steps to prevent it.

Osteoporosis often goes unnoticed until it’s too late and a man or woman suffers a painful, life-changing fracture.

And each year, these bone breaks from osteoporosis result in:

Half a million hospitalizations

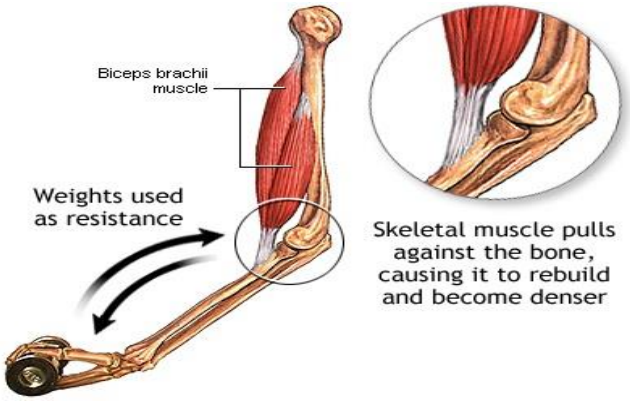
800,000 emergency room visits

2.6 million trips to the doctor

180,000 people being placed into nursing homes

Nearly 54 million Americans are living with osteoporosis or at risk for developing it. A variety of factors can put someone at risk for osteoporosis, including age, genetics, low body weight, lifestyle choices, and perhaps most importantly, a prior history of an osteoporotic bone break or a low-trauma fracture. Men and women over age 50, including postmenopausal women, are at risk for osteoporosis.

Strong muscles also help preserve and maintain healthy bone density. Especially for women and the elderly, bone density is important for preventing osteoporosis – and it's not just about eating your calcium chews. Just like building muscle to prevent sarcopenic obesity later in life, improving bone density through strength training is another benefit that it's best to start working on while you're young. If nothing else, it's much easier to maintain a habit you already have than to take up deadlifting at 65. This review even found that exercise increased bone density in preadolescent children: as long as the exercise is done at an age-appropriate intensity, there really is no age limit on the benefits.



Your overall health depends on it!

Chronic Illness…Summary

Muscle loss is a key player in the cycle of obesity and diabetes. Gain muscle, and you improve your metabolic function and reduce your risk of fat gain. (Although it's not a magic bullet, it's also worth mentioning that muscle in the resting state burns more calories than fat, so it does raise your metabolism slightly).

On the other hand, if you lose muscle, your body has a harder time maintaining a healthy weight and a normal degree of insulin sensitivity. And worse still, the cumulative effect of sarcopenia, diabetes, and obesity is far greater than the sum of their individual problems. All three of these conditions magnify each other and keep you trapped in a vicious cycle of poor health.

This all goes double if you're over 60. The elderly, as the population most at risk for muscle loss and fat gain, are especially prone to sarcopenic obesity, and have the most to gain from taking care of their muscles. But it doesn't just affect the retiree crowd: in people who don't regularly exercise, muscle loss starts around age 20. Preventing insulin resistance and weight gain in middle age, and heading off sarcopenic obesity in old age, start in the gym when you're young.

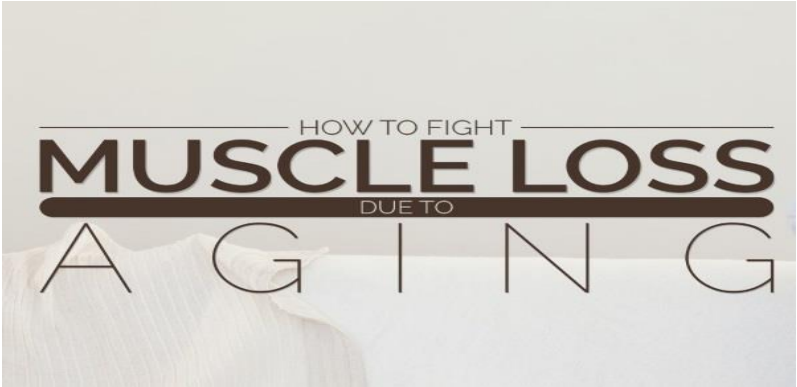
If You Don't Use It.. You Lose It!

Scientist argue about many things, but one point not debated is the fact we lose muscle mass and strength as we age.

This fact applies to everyone regardless of age. Your muscles are going to shrink and you will lose strength if you are not working those muscles.

That is a cold, hard fact.

Thankfully, the opposite also holds true: If you use it, **build it bigger and stronger!**



Are You Losing Muscle Already

Losing muscle and strength from disuse has much broader health implications than most people realize. Recent research has made it clear that significant loss of muscle and/or strength will:

* increase your risk of cardiovascular events
* decrease survival from various diseases, including cancer, and chronic obstructive lung disease
* Impair recovery from major surgery
* cause bone health to suffer

These health issues are all related to muscle mass. The reason that muscle is at the core of all these health conditions is due to muscle's role as the reservoir for amino acids.

Amino acids from your muscles are mobilized when other tissues and organs need an increased supply of amino acids, such as to battle infection, for an increased exercise regimen, metabolic balance, for wound repair and more.

Most people see muscle loss as something "that old people deal with," but disuse brings muscle and strength loss no matter how old, or young, you might be. This applies to everyone.

The loss of muscle can start in some people as early as age 30, but by age 50, almost everyone is starting to lose a significant amount of muscle.

It is typically hard to notice muscle loss for two reasons:

#1 Your body weight does not change or you might actually be gaining weight

#2 You can still comfortably do everything you demand from your body

Usually, muscle loss sneaks up on you. It does not happen overnight. It is a slow process, but it is always happening.. unless we are taking active measures to counter balance it.

Thankfully, it is possible to reverse muscle loss and to prevent muscle loss. That is the beauty of the right balance and ration of essential amino acids.

With a steady intake of the essential amino acid solution (EAAS) formula, along with an exercise program, your body can maintain mass and even repair itself from muscle loss.

Aging might not even be a concern for you at this point, but remember it is much easier to maintain muscle mass than to regain it once lost. That holds true for two primary reasons:

#1 After you have lost a significant amount of function, you are limited in the amount of exercise you are able to perform.

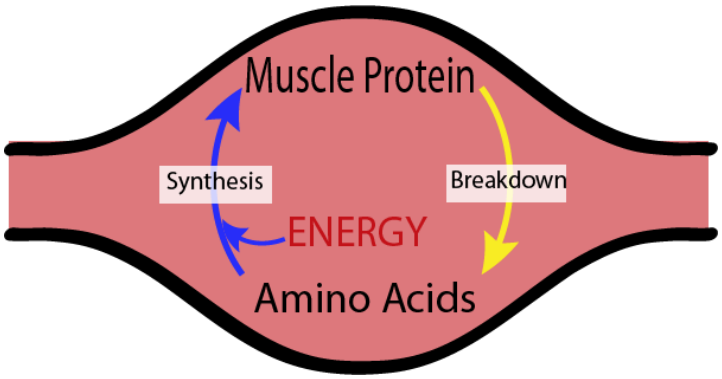
#2 Once muscle is depleted, there are metabolic changes that make it less receptive to the beneficial effects of essential amino acids.

The bottom line is to try to maintain your muscle mass and function before you lose it.

Your are young, so keep going. The right balance and ration of essential amino acids will help you increase your strength and muscle mass for many years ahead of you..

Healthy Muscles and Amino Acids

Amino acids in the body are fundamental building blocks of life as we know it. These chemical compounds made of nitrogen, carbon, oxygen, hydrogen, and a handful of other elements join together to form ***protein***, the material that forms the muscles, tendons, and organs in our bodies.



In addition, amino acids are the main ingredients of most of the biochemical components in our blood and cells that are necessary for life.

Simply put, everything is build on or built out of amino acids!

The function of amino acids includes the following tasks:

* building muscle and life-supporting tissues
* making the chemicals necessary for the brain and vital organs to function
*Playing an important role in many metabolic pathways

Importantly, essential amino acids (EAAs) are the only macronutrients that are absolutely required in our diet. They not only keep us alive, they improve our metabolic function and physical capacity.

Did you know that there are thousands of different proteins in your body, all with specific functions? Not counting water, those proteins compose about two-thirds of the mass of your body.

Regarding these proteins, it is vital to understand this important fact:

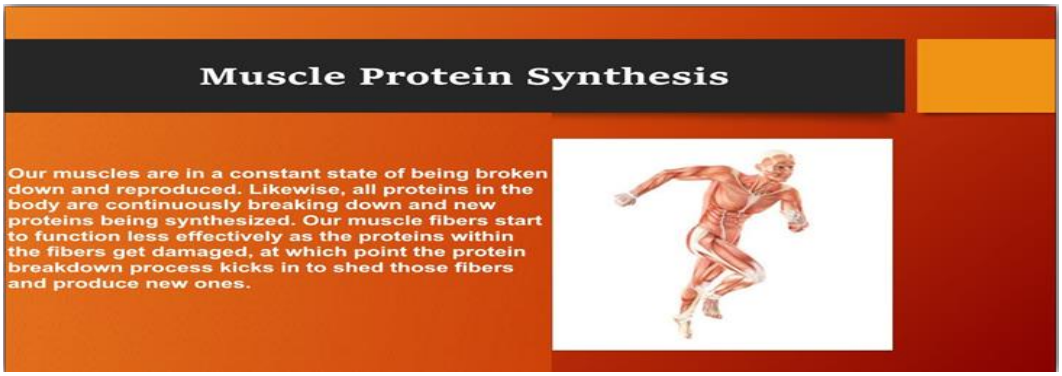
Every protein in your body is in a constant state of breakdown and synthesis..

Because we are losing protein and cannot make what we need (our body cannot produce the 9 essential amino acids) the only answer is to eat essential amino acids.

You drink water daily to meet your body's daily need for water. Similarly, your body needs amino acids on a daily basis to offset what your body uses, discards, or loses.

By eating sufficient essential amino acids, which is best accomplished through a balanced approach the rate of protein synthesis can match or even exceed the rate of protein breakdown.

At that point, you have growth, strength, and restored vitality that tends to a greater quality of life as well as a reduction in risk of disease.



What Amino Acids Do For Your Body

1. Muscle Development
2. Bone Strength
3. Fat Burning
4. Immune Health
5. Cardiovascular Health

As you know, we must obtain the necessary balance of essential amino acids from food sources or supplements since we do not have the ability to make them. Your body, on the other hand, can make or synthesized the non-essential amino acids.

When it comes to eating the non-essential amino acids, most people usually consume more than they need, However, most people usually do ***NOT*** get sufficient amounts of essential amino acids, as it is very challenging to eat a diet in abundance and balance of the essential amino acids. The body can cope, or hobble along if you will, but it is not performing at it's peak by any means.

Inevitably, the deficiency will eventually lead to accelerated muscle loss, which is very common with ***people 50 and above.***

Every amino acid is a structural component of protein. The principal role of dietary proteins is to provide the amino acids that serve as precursors for the production of new protein, to balance the amount that is lost daily through the process of breakdown.

Many amino acids play additional roles. For example, arginine plays a role in regulating blood flow and blood pressure as a precursor for the production of nitric oxide, which is the primary chemical responsible for dilating blood vessels, particularly in muscle.The essential amino acid ***lucine*** can activate the molecular pathways involved in the initiation of ***protein synthesis***.

Every essential amino acid plays a unique and important role! Amino acids do not work independently of each other...they work together in unison.

What this means is..

Taking the essential amino acids in the correct proportions is just as important as taking the essential amino acids in the first place.

It is important to know that a supplement containing a high amount of one or several essential amino acids will ***NOT*** benefit the body. It cannot because the body ***dumps*** the excess. Yes, avoiding a deficiency is important, but taking a dietary supplement that creates ***EXCESS*** of several amino acids causes great harm! The intentional overdose of essential amino acids, puts the body out of balance, damages some of the other essential amino acids during the re-balancing efforts.

The best way to approach optimal amino acid nutrition is with a balanced approach, which includes healthy foods plus the essential amino acid solution (EAAS) formula. Together, this brings strength, mobility and a greater quality of life!

In Conclusion:

Whether you're an older adult looking to increase your mobility and enhance your quality of life or a weekend warrior chasing a new personal best, we'd all like to build leaner, stronger muscle mass. Unfortunately, we don't always have the time to eat properly or get the amount of exercise we should.

We can help you build stronger leaner muscles for more Energy, Vitality, Strength and Mobility.

"The most important nutritional supplement to impact human health"- Dr. Robert Wolfe, PhD

To ensure every year is a great year, regardless of your age, TriVita has created an exciting new breakthrough in nutrition science—the MyoHealth™ line. Initially developed to stop, restore and prevent muscle loss in astronauts and bedridden seniors, MyoHealth contains a perfectly blended mix of all nine Essential Amino Acids (EAA), which have been proven in human clinical trials led by Dr. Robert Wolfe to help support muscle strength and function by helping your individual muscle fibers work better.

As the first—and only—EAA complex to contain Dr. Wolfe's patented Essential Amino Acid formula, the EAA blend in **MyoHealth** represents a monumental breakthrough in nutritional science. Amino acids play a key role in the synthesis of new protein, and each of the nine amino acids found in **MyoHealth** is needed to jumpstart the protein molecule process. That's important because EAA can't be produced in the body. You can only get them through diet or supplements. There are 20 primary amino acids in your body's proteins, 9 of which are essential to your diet because your cells cannot manufacture them. These amino acids (histidine, isoleucine, leucine, lysine, methionine, phenylalanine, threonine, valine, and tryptophan) are known as Essential Amino Acids.

Over 30 years in the making, MyoHealth's formula was developed based on findings from the National Aeronautics and Space Administration (NASA), research funded by the National Institutes of Health (NIH) and 24 human clinical trials. The research was led by Dr. Robert Wolfe, a leading authority on amino acids, a renowned expert in the fields of nutrition and muscle metabolism and a record-setting amateur athlete.

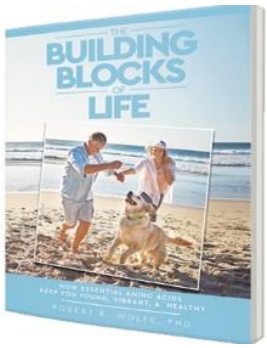
MYOHEALTH ESSENTIAL AMINO ACID COMPLEX

Build muscle the EAAsy way

With hundreds of companies touting thousands of supplements, how can you be sure that MyoHealth is any different than all of the other products that promise to build stronger, leaner muscle? Simple. With MyoHealth Essential Amino Acid (EAA) Complex, it starts with the perfectly blended mix of all 9 EAAs that go into every canister and the years of science that went into developing this formula.

A basic, healthy diet and physical exercise, coupled with the balanced ratio of 9 Essential Amino Acids found in MyoHealth , make for an ***EXPLOSIVE COMBINATION!***

Your body will feel the tremendous benefits of increased vitality and muscle strength, all without negative side effects. Most importantly and fundamentally, as this becomes a way of life, you will be on your way to achieving long-lasting health. With good health, you will have the quality of life that you want and need!



This E-Book Contains Excerpts From Dr. Robert Wolfe Powerful Book... **The Building Blocks Of Life**. It is a powerful book on the importance of Essential Amino Acids and how these EAAs effect our daily lives, especially when it comes to muscle growth, energy, vitality and much more. If you would like a free copy of this book, just give me a call and I will get one right out to you. This is a limited time offer and good while supplies last.

Hello, my name is **Bobby Brown** and I have been taking MyoHealth for over **8 months** now. I personally have seen incredible results, and at the at the age of 64, my strength and vitality has improved immensely. I encourage you to give it a try and take our **30 Day Strength Challenge** and you too can see first hand the incredible power of the 9 Essential Amino Acid Formula, MyoHealth! Plus we have a full **30 day money back Guarantee**... so you have nothing to lose and everything to gain.

As Seen On TV

TAKE OUR 30 DAY STRENGTH CHALLENGE

For A Limited Time we have a **2 for 1 special offer** for **the 30 Day Strength Challenge**. Purchase one canister of our EAAS Formula and get the second canister **FREE**.. Plus we will give you Dr. Wolf's Book... The Building Blocks Of Life and A Shaker Bottle For **FREE!**

READY TO GET STARTED: CLICK HERE

If you have any questions or concerns please feel free to give me a call

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