

Chapter 1 : Four Layers of Strength - PDF Free Download

And opportunity to explore the four layers of your strength, maximize your potential in each layer, become the strongest version of yourself and dedicate your life to helping others become the strongest version of themselves!

May the principles in this book shine forth as a beacon of light to guide you on your journey of Growing Stronger. From my perspective, strength is about much more than how strong you are, or appear to be, physically. It is my belief that true Strength is found not in the muscles, nervous system, or organs, alone, but in all of them, working together as functioning parts in the dynamic system that you are. In this book I present you with a concept about developing strength that has been 35 years in the making, forged through many failures and successes. But like a map, this book guarantees you nothing. At the end of the day, only you can do the walking. With that being said, I hope that this book does prove to be resourceful for you. Why Four Layers of Strength? Because of my upbringing, I was always one of the strongest and fastest boys in my neighborhood. When I got older, Uncle Elroy taught me how to lift barbells, and I immediately became hooked. At about the same time, I started playing football. Lifting barbells and playing football enabled me to harness the excessive amounts of energy I had during my teenage years and do something productive with it, and I stuck with it. In truth, strength training saved my life. I became the captain of my high school football team and eventually earned an athletic scholarship to play collegiately at St. The Strongest Version of Myself? So you can see how I was introduced to strength from very early on in my life. Once I graduated, I decided to study exercise science in graduate school. I had several internships while I was there, where I worked for many of the best sports performance gyms around. An old version of me dies, A few inches up my arm was my entire biceps muscle, balled up near my Vhoulder. I had torn my distal biceps tendon clean off the bone. In that moment, a version of me died. The weakness I experienced came from the feeling that there was much, much more that I should be doing with my life, but I had no clue where to begin. My family needed me, my business was failing, and my body was broken. For the next several days I sat on my living room couch, feeling depressed and wondering what I was going to do with the rest of my life. Everything that I had spent the last 10 years of my life building up seemed to have been a waste. When you signed up to receive this book, you were added to my Grow Stronger email newsletter. With these emails I aim to provide you with useful and entertaining ideas, tips, and techniques that will support you in growing stronger. KHn , sKarH a product, it is because I believe it will help you. Of course, if you invest in a product that I suggest, I will usually earn a commission. Finally, unlike most digital books, this one is made to be given away. Feel free to email or send this PDF to anyone you feel it might help. Like I said before, my main purpose in writing this book is to share some ideas that I hope might support you in becoming The Strongest Versions of Yourselves, while avoiding some of the costly mistakes I made. And when this happens and the imbalances in your lifestyle grow too dysfunctional for the body to handle any longer, your strength and health will collapse. Again, there is a whole lot more to developing strength than just exercising your muscles. Life Mastery Like layers in a building, each layer of strength adds to and supports the others; if one starts crumbling, the whole structure begins to deteriorate. Only through the full expression of each of these four, foundational layers can a temple of true strength be built and accessed. Our bodies become overdeveloped and tight in some areas, and in other areas, we become weak and underdeveloped. Put simply, modern living wreaks havoc on our bodies, and this results in neuromuscular imbalances that inhibit our ability to grow stronger. So, part of growing stronger is identifying and correcting these imbalances. Only when we free ourselves from our muscle viruses will we be able to expand our true limits of strength and ability. This is what the First Layer of Strength is all about. If you notice, with each successive layer we go deeper, accessing fully the matrix that contributes to making you what you are. Energetic Strength deals with your thoughts and feelings, and how these shape who you are and the amount of strength you bring forth. Acknowledging the connection between mind and body, we use various exercises to release those aspects of your mind that may create tension in your body and are thus inhibiting your strength and ability. Bioenergetic breathing and catharsis are two modalities we use to do this and bring the body into a more expressive and grounded state. Once the body has been stimulated and calmed

through these body-based techniques, we can use frequency meditation to balance the mind even further. The only way to truly become The Strongest Version of Yourself is to share your strength with others. This brings us to the Fourth Layer of Strength: And maybe even learn how to earn a living, like I do, by doing just that. Our capacities in this life are far greater than most of us have ever considered. Join me in becoming the Strongest Version of Yourself! Strength is actually a neurological function. If your nervous system can supply your muscles with a strong enough signal to overcome the resistance, you become stronger, regardless of muscle size. This is neuromuscular strength. Your Nervous System Your nervous system consists of two components: The CNS consists of the brain and spinal cord, and the PNS contains all the nerves that branch out from the spinal cord to the rest of the body. Think of your CNS as a rheostat. You know, that dial on the wall that lets you dim or brighten the lights: But what it does mean is that you can teach your nervous system to produce more force without growing much larger. Fibrous versus Fluid-Filled Muscle All this being said, your musculature is still a key component of your strength. In the same way that you need light bulbs to harness electricity in order to give you light, you need muscles to harness the energy of your nervous system and generate force. And this is the type of muscle growth we want to train when our aim is to increase strength. They can also be the result of compensatory efforts brought on by injury. This is how muscle tears happen. Take a great enough force, and whichever side is weaker will tear. I refer to ideal alignment within the joint as its instantaneous axis of rotation. This impairs mobility and causes wear and tear on the soft tissues of the joint, ultimately leading to pain and injury. Through proper assessment, corrective stretching, corrective exercising, and myofascial release, or foam rolling, The First Layer of Strength aims to correct these imbalances and restore full mobility, integrity, and balance to the joints. Upper crossed syndrome involves a kyphosis, or rounding of the upper back. This is a common result of all the driving and working at our computers that we do. Due to this overemphasis placed upon them, both in daily living and in our training, the muscles on the front side of the body become hypertonic, or tight. Because the shoulder joint is pulled out of its instantaneous axis of rotation, strength gains and development are limited, and your chances for a shoulder or rotator cuff injury are increased. The C-1 vertebrae, also known as the atlas, is located in the area of the body where your spine meets your skull. And if one of those joints gets out of its optimal alignment, it affects not only the soft tissue surrounding the joint, but the nerves going in and out of the spinal column as well. Just like the Greek god, Atlas, who holds up the world, the atlas in your spine literally holds up the world of your neurological function. Here is a video that further explains how this works. Several years ago I broke my ankle. It was a stupid accident. As a result of this injury, and dealing with the healing process around it, I developed compensatory movement patterns, ways of getting around that were aimed at minimizing my pain and discomfort while I healed. Over time, this habituated defective movement caused me to develop a muscle virus that affected predominantly my hip, which became tight. Then I met chiropractor and upper cervical specialist Dr. Essentially, what he said was that my stretching was only serving as a temporary Band-Aid for a deeper, neurological issue. He challenged me to try his Advanced Orthogonal Cervical Adjustment. By re-aligning the bones of my uppermost spine, he claimed, he could restore communication between my nervous system and my muscles. This way, he could make my muscle virus go away. During my studies with Paul Chek, we had discussed this very subject. Paul was a very strong proponent of cervical alignment, and this seemed to be a great opportunity. So I took him up on it. The results surprised even me. Think of your core as the structure that supports and stabilizes your spine. As such, your body has evolved in many ways to offer maximum protection to this area, and at the same time preserve your capacity for movement. The muscles of your core play important roles, both in the protection of key, vulnerable organs and in mobility. They also help support circulatory, digestive and lymphatic functions. Your grandmother was right; posture is important, but for more than just looking good. When your spine is properly aligned, the pathways for the nerves of your PNS are unimpeded, and the signals leaving and going into your CNS can travel freely. In other words, good posture leads to increased strength and performance. But for now, know this: To sum it all up, a strong core is a stable core.

Chapter 2 : Plywood Strengths | Home Guides | SF Gate

The Four Layers of Strength has 82 ratings and 3 reviews. Charles said: I'm a big Elliott Hulse fan and have heard Elliott mention the Four Layers on h.

Design[edit] The aluminium alloy and temper used for the outer strands in the United States and Canada is normally H19 and elsewhere is H19, each with To extend the service life of the steel strands used for the conductor core they are normally galvanized, or coated with another material to prevent corrosion. The diameters of the strands used for both the aluminum and steel strands vary for different ACSR conductors. ACSR cable still depends on the tensile strength of the aluminium; it is only reinforced by the steel. Higher strength steel may also be used. In the United States the most commonly used steel is designated GA2 for galvanized steel G with class A zinc coating thickness A and regular strength 2. Class C zinc coatings are thicker than class A and provide increased corrosion protection at the expense of reduced tensile strength. A regular strength galvanized steel core with Class C coating thickness would be designated GC2. Higher strength grades of steel are designated high-strength 3 , extra-high-strength 4 , and ultra-high-strength 5. An ultra-high-strength galvanized steel core with class A coating thickness would be designated GA5. The use of higher strength steel cores increases the tensile strength of the conductor allowing for higher tensions which results in lower sag. These coatings provide increased corrosion protection and heat resistance compared to zinc alone. Regular strength Class "A" mischmetal thickness weight coated regular strength steel would be designated MA2. Aluminium-clad steel is designated as "AW". Aluminium-clad steel offers increased corrosion protection and conductivity at the expense of reduced tensile strength. Aluminium-clad steel is commonly specified for coastal applications. The most commonly used steel is S1A for S1 regular strength steel with a class A coating. S1 steel has slightly lower tensile strength than the regular strength steel used in the United States. Canadian utilities are using conductors built with the higher strength steels with the "M" zinc alloy coating. Lay[edit] Lay of a conductor is determined by four extended fingers; "right" or "left" direction of the lay is determined depending if it matches finger direction from right hand or left hand respectively. Going toward the center each layer has alternating lays. Some conductor types e. Sizing[edit] ACSR conductors are available in numerous specific sizes, with single or multiple center steel wires and generally larger quantities of aluminium strands. Although rarely used, there are some conductors that have more steel strands than aluminum strands. Naming convention[edit] To help avoid confusion due to the numerous combinations of stranding of the steel and aluminium strands, code words are used to specify a specific conductor version. In North America bird names are used for the code words while animal names are used elsewhere. Although the number of aluminium strands is different between Grosbeak and Egret, differing sizes of the aluminium strands are used to offset the change in the number of strands such that the total amount of aluminium remains the same. Differences in the number of steel strands result in varying weights of the steel portion and also result in different overall conductor diameters. Most utilities standardize on a specific conductor version when various versions of the same amount of aluminum to avoid issues related to different size hardware such as splices. Due to the numerous different sizes available, utilities often skip over some of the sizes to reduce their inventory. The various stranding versions result in different electrical and mechanical characteristics. Ampacity ratings[edit] Manufacturers of ACSR typically provide ampacity tables for a defined set of assumptions. Individual utilities normally apply different ratings due to using varying assumptions which may be a result in higher or lower amperage ratings than those the manufacturers provide. Significant variables include wind speed and direction relative to the conductor, sun intensity, emissivity, ambient temperature, and maximum conductor temperature. Conducting properties[edit] In three phase electrical power distribution , conductors must be designed to have low electrical impedance in order to assure that the power lost in the distribution of power is minimal. Impedance is a combination of two quantities: The resistances of ACSR conductors are tabulated for different conductor designs by the manufacturer at DC and AC frequency assuming specific operating temperatures. The reasons that resistance changes with frequency are largely due to the skin effect , the proximity effect , and hysteresis loss. Depending on the geometry of the

conductor as differentiated by the conductor name, these phenomena have varying degrees of affecting the overall resistance in the conductor at AC vs DC frequency. Often not tabulated with ACSR conductors is the electrical reactance of the conductor, which is due largely to the spacing between the other current carrying conductors and the conductor radius. The reactance of the conductor contributes significantly to the overall current that needs to travel through the line, and thus contributes to resistive losses in the line. For more information on transmission line inductance and capacitance, see electric power transmission and overhead power line.

Skin effect[edit] The skin effect decreases the cross sectional area in which the current travels through the conductor as AC frequency increases. This decreased area causes the resistance to rise due to the inverse relationship between resistance and conductor cross sectional area. The skin effect benefits the design, as it causes the current to be concentrated towards the low-resistivity aluminum on the outside of the conductor.

Proximity effect[edit] In a conductor ACSR and other types carrying AC current, if currents are flowing through one or more other nearby conductors the distribution of current within each conductor will be constrained to smaller regions. The resulting current crowding is termed as the proximity effect. This crowding gives an increase in the effective AC resistance of the circuit, with the effect at 60 Hertz being greater than at 50 Hertz. Geometry, conductivity, and frequency are factors in determining the amount of proximity effect. The proximity effect is result of a changing magnetic field which influences the distribution of an electric current flowing within an electrical conductor due to electromagnetic induction. When an alternating current AC flows through an isolated conductor, it creates an associated alternating magnetic field around it. The alternating magnetic field induces eddy currents in adjacent conductors, altering the overall distribution of current flowing through them. The result is that the current is concentrated in the areas of the conductor furthest away from nearby conductors carrying current in the same direction.

Hysteresis loss[edit] Hysteresis in an ACSR conductor is due to the atomic dipoles in the steel core changing direction due to induction from the 60 or 50 Hertz AC current in the conductor. Hysteresis losses in ACSR are undesirable and can be minimized by using an even number of aluminium layers in the conductor. Due to the cancelling effect of the magnetic field from the opposing lay right-hand and left-hand conductors for two aluminium layers there is significantly less hysteresis loss in the steel core than there would be for one or three aluminium layers where the magnetic field does not cancel out. The hysteresis effect is negligible on ACSR conductors with even numbers of aluminium layers and so it is not considered in these cases. For ACSR conductors with an odd number of aluminium layers however, a magnetization factor is used to accurately calculate the AC resistance. The correction method for single-layer ACSR is different than that used for three-layer conductors. Due to applying the magnetization factor, a conductor with an odd number of layers has an AC resistance slightly higher than an equivalent conductor with an even number of layers.

Non-standard designs[edit] ACSR is widely used due to its efficient and economical design. Variations of standard sometimes called traditional or conventional ACSR are used in some cases due to the special properties they offer which provide sufficient advantage to justify their added expense. Special conductors may be more economic, offer increased reliability, or provide a unique solution to an otherwise difficult, or impossible, design problem. The main types of special conductors include "trapezoidal wire conductor" TW - a conductor having aluminium strands with a trapezoidal shape rather than round and "self-damping" SD , sometimes called "self-damping conductor" SDC. A similar, higher temperature conductor made from annealed aluminium is called "aluminium conductor steel supported" ACSS is also available. They do not use designs which have odd number of layers three layers due to that design incurring higher hysteresis losses in the steel core. It is a concentric-lay stranded, self-damping conductor designed to control Aeolian-type vibration in overhead transmission lines by internal damping. Self-damping conductors consists of a central core of one or more round steel wires surrounded by two layers of trapezoidal shaped aluminium wires. One or more layers of round aluminium wires may be added as required. SD conductor differs from conventional ACSR in that the aluminium wires in the first two layers are trapezoidal shaped and sized so that each aluminium layer forms a stranded tube which does not collapse onto the layer beneath when under tension, but maintains a small annular gap between layers. The trapezoidal wire layers are separated from each other and from the steel core by the two smaller annular gaps that permit movement between the layers. The round aluminium wire layers

are in tight contact with each other and the underlying trapezoidal wire layer. Under vibration, the steel core and the aluminium layers vibrate with different frequencies and impact damping results. This impact damping is sufficient to keep any Aeolian vibration to a low level. The use of trapezoidal strands also results in reduced conductor diameter for a given AC resistance per mile. Reduced diameter for a given AC resistance yielding reduced structure transverse wind and ice loading. There most likely will be increased installation and clipping costs due to special hardware requirements and specialized stringing methods. The conductor design always requires the use of a steel core even in light loading areas. Aluminium-conductor steel supported[edit] Aluminium-conductor steel supported ACSS conductor visually appears to be similar to standard ACSR but the aluminium strands are fully annealed. Annealing the aluminium strands reduces the composite conductor strength, but after installation, permanent elongation of the aluminium strands results in a much larger percentage of the conductor tension being carried in the steel core than is true for standard ACSR. This in turn yields reduced composite thermal elongation and increased self-damping. The major advantages of ACSS are: Since the aluminium strands are "dead-soft" to begin with, the conductor may be operated at temperatures in excess of Degrees C Celsius without loss of strength. The major disadvantages of ACSS are: In areas experiencing heavy ice load, the reduced strength of this conductor relative to standard ACSR may make it less desirable. The softness of the annealed aluminium strands and the possible need for pre-stressing prior to clipping and sagging may raise installation costs. Twisted pair[edit] Twisted pair TP conductor sometimes called by the trade-names T-2 or VR has the two sub-conductors twisted usually with a left-hand lay about one another generally with a lay length of approximately three meters nine feet. The sub-conductors can be any type of standard ACSR conductor but the conductors need to match one another to provide mechanical balance. The major advantages of TP conductor are: In an ice storm when ice deposits start to accumulate along the conductor the twisted conductor profile prevents a uniform airfoil shape from forming. With a standard round conductor the airfoil shape results in uplift of the conductor and initiation of the galloping motion. The TP conductor profile and this absence of the uniform airfoil shape inhibits the initiation of the galloping motion. The reduction in motion during icing events helps prevent the phase conductors from contacting each other causing a fault and an associated outage of the electrical circuit. With the reduction in large amplitude motions, closer phase spacing or longer span lengths can be used. This in turn can result in a lower cost of construction. TP conductor is generally only installed in areas that normally are exposed to wind speed and freezing temperature conditions associated with ice buildup. The non-round shape of this conductor reduces the amplitude of Aeolian vibration and the accompanying fatigue inducing strains near splices and conductor attachment clamps. TP conductors can gently rotate to dissipate energy. As a result, TP conductor can be installed to higher tension levels and reduced sags.

Chapter 3 : The Four Layers of Strength by Elliott Hulse

Why four layers of strength? If you're reading this report you are probably familiar with me though the over 1, videos I've posted on YouTube on all topics related "Strength".

Two things you can manage to reduce the destructive effects of stress, or catabolic overload, are diet and sleep. Digestion and Nutrition Not all humans look alike. All you have to do is take a look around you to realize this is true. There are black people, brown people, red people, yellow people, white people, and many in between. They also grew accustomed to thriving on a certain ratio of macronutrients proteins, carbohydrates, and fats. Over the millennia, they passed down these tolerances, intolerances, and this predisposition to thriving on a certain macronutrient ratio to their offspring, ultimately coming to you. This genetic predisposition, in addition to many other factors, such as the seasons, your activity level and at what you live in influences your metabolic type, your unique way of breaking down the food you eat into the building blocks of your cells nutrients. There are 3 metabolic types, according to Wolcott: Protein types typically have ancestry going back to parts of the world where early humans had lots of access to proteins and fats and limited access to sweet fruits and year-round vegetables. Think northern Europe, Canada, and other places that experience cold, snowy winters. Protein types do well when they eat relatively high amounts of proteins and healthy fats, and a smaller portion of low-glycemic carbs. They may feel sluggish or jittery on diets that are too high on carbohydrates. In terms of an ideal macronutrient ratio, protein types function best on diets that include 40 percent protein, 30 percent fats, and 30 percent carbs. These are places where fresh fruits, vegetables, and grains are widely available, and where the climate is warm enough to not require inhabitants to eat lots of fats to keep them warm in the colder seasons. The ideal macronutrient ratio for a carbo type is: In between the protein types and the carbo types on the metabolic spectrum are the mixed types. These are often people whose ancestry is not so cut and dry, or whose ancestors lived in parts of the world that experience moderate climates. As you might expect, mixed types thrive on a well-rounded diet of 50 percent carbs, 30 percent protein, and 20 percent fats. Of course, one might fall onto any part of the metabolic typing spectrum, so these numbers could look like carbs, proteins, and fats for some mixed types and carbs, proteins, and fats for others, to name a few examples. The MyFitnessPal app is a great tool for managing your daily macronutrient and caloric intake. I hope the above description can give you some idea of what metabolic type you identify with. By focusing on consuming the foods that are ideally suited for your genetics and lifestyle “but most of all just make you feel great” and eating them in the right macronutrient ratio for your metabolic type, you will eliminate a large source of potential stress that your body would otherwise have to handle. Non-organic, Water, and Supplements out of foods would food will serve you best. These foods are alien to our bodies and, for many, cause gastrointestinal distress and other more systemic symptoms. Grain-fed meats and dairy “even if organic” may not be the best choices for your health. Animals are meant to roam free outside and eat a pasture-centered diet. I understand that buying organic foods is more expensive, and not everyone can afford it. Just do the best that you can. If you can afford to buy high quality food, here are some ways to minimize your expenses. Buy in bulk and sign up for your local co-op or go straight to your local farmer for good deals on organic produce and pasture-raised meats. That means that, just like you are what you Drink half your weight lbs in ounces of water per day. I like to drink out of glass Mason Jars; you can get them for a couple of dollars a bottle. Finally, a word on supplements. I currently only take a handful of supplements, all of which come highly-recommended. Living Fuel produces an excellent line of products that my family and I have been enjoying for over a decade. I also take Masszymes Enzymes to help with protein absorption and P3-OM probiotics to promote gut health. Nothing particularly fancy, but they get the job done. Studies have shown that the optimal window of sleeptime for maximizing hormonal health is the period of time from 10 pm to 6 am. From my experience, I can tell you this is true. Without getting neurotic about it, if you can strive to sleep during as many of these hours in this 8-hour window as possible, your body will thank you. This will help your body release hormones like melatonin which helps you fall asleep, which in turn elevates levels of growth hormone as you sleep.

Points to Remember The world we live in today is very stressfulâ€” from environmental toxins in our food and water to frightening images on the news to the everyday stressors of life we all face. In other words, the force of catabolism destruction is strong in ourselves and in our world. But we also have the power of anabolism rebuilding present in ourselves and in our world. Chances are, like most modern humans, you are excessively catabolic. In the next chapter, we will address further ways of reducing stress and promoting anabolism and strength. Also take a look at Dr. Energetic Strength refers to those parts of us that are much less tangible than our nerves, muscles, hormones and organs. It has more to do with our thoughts, feelings and the power of breath. No, not like bursting a water bottle with your lungsâ€” I am talking about the power of DEEP, diaphragmatic, belly breathing. When you are fully a ssin t o r of our r at ou ill f l our lo r ll and l i oor andin This is important. But the fact is, your mind is your body and your body is your mind. Just look at yourselfâ€” your brain and nervous system are parts of your body! The glaring truth is, mind and body are not separate entities but different aspects of the same entityâ€” YOU! You get the picture? One of the most damaging effects of muscular armoring is how it restricts your breathing. Notice how you feel. So you see, changing your body CAN affect how you feel. When you breathe, you should feel your body expanding, right down to your perineum. The o is on of t most ff ti r is s found for r trainin ro r r at in o as o ulariz d in t s a man nam d Al and r o n o r ra tition rs of i on o a and ot r int rnal martial arts a n usin it sin an i nt tim s r ason it is so ff ti as an r is is aus it tar ts man of t os so all d uln ra l s ots t at used to be soft but are now tense from years of muscular armoring. Begin by standing with your feet about shoulder width apart, and with your knees slightly bent. Hands behind the hips like d s ri d a o ill l o n u our i s mor ands ind our ad ill la mor of a str t on our st and ands in t air ill in r as t o rall int nsit of t r is o s m d monstrat isuall o to do t is at this video. A note on mouth breathing: Breathing with an open mouth, and stretched jaw, reduces common tensions which lead to shallow breathing. In this video I explain how to make one and how to use it to maximize your breathing capacity. Essentially, the Bioenergetic Stool places the body in the same position that the Bow does, only with a greater stretch. Placing different parts of your back on the stool will direct the stretch onto diff r nt r at in m anisms is is an ll nt a to r all o n u on and for all all of the tight areas that restrict your breathing. This draws your attention to the area you are trying to open up with your breathing. Demonstrating advanced bioenergetic exercises in one of my Strength Camp Online Coaching videos at om to l arn in m studi s and practice of bioenergetics is that there are multiple ways of generating and ann lin n r ff ti l throughout the body. Breathing is one of those techniques, and chanting, shaking, stomping, yelling, dancing, i on o a and of ours an dir t d mo m nt in n ral ar additional ways of doing this. Watch this video to learn how. Mind and Frequency Meditation t ird t ni u found to ff ti in l in m ro stron r n r ti all is at all mind m ditation is is t traditional form of m ditation r t rou arious modaliti s you train yourself to focus and direct your attention where you want it to go.

Chapter 4 : Four Layers Of Strength by Elliott Hulse - Elliott Hulse

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The strength is a result of individual grain layers placed perpendicular to each other bonded with glue under high pressure in the manufacturing process. This makes plywood virtually split-proof. Other properties that can add strength to plywood are type of glue, species and thickness. Thickness The strongest of all plywood is used for concrete forms, stair risers and industrial flooring. This 1-inch-thick fir plywood is also available with tongue and groove patterns that lock together for even more strength. Plywood strength drops when thickness diminishes. Species and Glue Two types of plywood that are commonly used in the building industry are manufactured using two distinct species of wood. The conifers, or softwood plywoods, generally lack the strength of hardwood species. But even though hardwood plywood is much stronger than softwood plywood, manufacturers use exterior glue on some varieties of softwood plywood. This makes it much stronger over time than hardwood plywood since it will not absorb moisture that causes plywood layers to separate and weaken. But when testing equal sizes of hardwood against softwood that have both been manufactured using interior glue, hardwood plywood is significantly stronger. Flexibility Flexibility is an overlooked asset of plywood. For exterior uses such as sheathing typically placed over two-by-four studs on the exterior of a home, flexibility is a definite advantage. This flexibility -- also known as shear strength -- adds incredible strength to frame structures. Before a frame structure has plywood nailed to it, it is very fragile and can be knocked down easily by a strong wind. But when fir plywood is added as sheathing, the shear strength of the structure improves dramatically, making the structure strong. The shear strength of fir plywood is unparalleled by any other building material. Layers Plywood is layered. The number of layers in plywood relates directly to strength. Individual layers can be counted by looking at the edge of any piece of plywood. This is often referred to as shop-grade plywood, the most affordable plywood. It will bend or break easier than almost any other type of plywood. If the plywood has between four and seven layers, the plywood has a moderate amount of strength and can be used for cabinets or almost any other project. If the plywood has more than seven layers, it is the strongest and can be used for special projects such as guitar bodies or router patterns. About the Author Specializing in hardwood furniture, trim carpentry, cabinets, home improvement and architectural millwork, Wade Shaddy has worked in homebuilding since Shaddy has also worked as a newspaper reporter and writer, and as a contributing writer for *Bicycling Magazine*.

Chapter 5 : Four Layers of Strength by Mir Shithil on Prezi

The Four Layers of Strength How to Become the Strongest Version of Yourself TM By Elliott Hulse w ww. s t ren g t hc a mp. co m This book is dedicated to the Strength that dwells.

Jackie 1 Comment With quickly approaching, everyone is talking about new fitness plans, what they want to do, and setting New Year resolutions. While I love goal setting, the problem with most fitness goals is that they are completely shallow with no real meaning behind them. Some of the biggest feats accomplished throughout all of history were on the heels of an emotional cause. I signed up for the Bodybuilding. It is basically a body transformation challenge where everyone participating tries to change their body in about 12 weeks. As I was writing out my plans, thinking up fitness routines and diet strategies, I was thinking about why strength in general is so important. Life is always there to knock you around, give you new challenges, and generally beat you up. This is what I mean when I talk about the importance of strength. My definition of strength is entirely different. We lack strength in America. Our leaders are weak-minded. School only teaches us to shut up and obey. Everyone is scared for their jobs. No one has time for fun. Breaks consist of substances and couch time with hours of endless Netflix. My own weaknesses in my life brought about the worst times. I saw myself as the victim instead of understanding I was simply a coward. I needed internal strength to leave my last long-term relationship a lot sooner. I needed internal strength to get better grades. I needed internal strength to stick with a fitness program. I needed strength of mind, body, and spirit. Compassion without strength makes you gullible. Empathy without strength makes you weak. Strength comes in many forms. It comes in resiliency. It comes in having the strength to know you deserve better. The world needs the strongest YOU that you can be.

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Maybe there is more than one kind of strength. Imagine! If becoming stronger meant more energy, more money, better sex and proud legacy. The body you live in looks and preforms better than anyone could ever imagine, AND you use this gift to empower the lives of others. Maybe getting stronger, having more vitality and being happier has more to do with your character, physiology and service than your physical power. Imagine! if you had become so strong that you life seemed to elevate from one magnificent success to another. People admired and respected you. Wherever you went everyone would wonder why is THAT guy so damn lucky? Maybe you can become transformed into a far more powerful person. A person who exhibits strength in everything he does. From lifting the heaviest barbells to being the most attractive, to having the strongest intellect. Imagine! how your life might be different, better, than everyone else. You would be focused on only things that make you stronger and matter the most to you. Every waking moment of your life would be clear and concise. Imagine! if you left all of the excuses about why you can not become the strongest version of yourself for other people to worry about, and you did today, the very best that you could with everything that you DO have. Imagine! a version of yourself that was leaner, better looking, smarter, more attractive, more confident, more affluent and had enough to support everyone else around you. Imagine! a YOU that embodied all that you believe to be right and true, a YOU that others look to for strength in their own lives while they are guided by your radiant light. Imagine! if on every rung of that ladder we discover more about ourselves, our true talents and faculties, and how we are only a tiny part of the magnificent story that humankind has been playing in for generations. Maybe a single word, an encouraging glance, or a simple pat on the back allowed YOUR strength to be shared with someone in need. Imagine! if THAT person took the strength that you supported him with and used it to strengthen his family, and imagine if the strength that he shared with his child, which he got from you allowed that child to strengthen the lives of 10 million more. Maybe the limits to our abilities are hidden from plain sight but in your awareness you can sense that you are not currently everything that you could be. Imagine! if you understood how these systems worked and used all of your available resources to maximize the potential of each system, and each system worked to strengthen every other systems which allowed YOU to be the most full functioning organism in the world you live in. Maybe if you worked daily on maximizing your potential in each of the 4 layers of strength that one day they would all work together perfectly leaving you to become the strongest, most vibrant, vital, sexually charged version of yourself. Imagine! how other men and women would respond to you, imagine all of the good things you could do. You Have! four layers of strength to develop, they are psycho somatic strength, physiological strength, physical strength and presentable. You Can! maximize your strength in each and every one of these layers. You Have! a nervous system that is guided by your conscious and subconscious activities, which ALSO governs the way your posture and muscles work. You Can! discover the deep character psychology that locks your body into physical patterns which support an outdated paradigm AND train systems of your body to support an newer, stronger version of yourself. You Can! discover the psychological mechanisms that you have chosen to use that is creating your body and your future as we speak! and you can choose to free your muscular system from the tension that is holding you back. You Have! had experiences which mostly well-meaning authority figures have forced on you that has caused you to protect yourself with what famous psycho analyst called muscular body armor. You Can! liberate the stronger you from the prison of this self-inflicted body-armorng so that your body will once again be free to feel, express, function to its fullest capacity in its physical, psychological, physiological and sexual performance. You Can! discover the trapped strength inside, release it from its old prison and revive the motility that you creator intended for you to express. You Have! multiple biological systems that work together to give you strength, energy and vitality. You Can! assess, discover and eradicate any imbalances in any of these systems on your journey of strength! and ALL

of us on the journey have unique imbalances. You Canâ€™ learn to respect each of these systems for what they contribute, discover any inconsistencies within them and work to maximize their function to serve the whole. You Haveâ€™ biological systems dependent on vital nutrients and nourishment that if supplied give you vitality and strengthâ€™ but if withheld shuts down your sexuality, creativity and strength abilities. You Canâ€™ make choices about what you eat, drink and breath in order to maximize the functionality of all of your bodies systems. You Haveâ€™ no matter how old you are, the ability to NOW make new choices that will support a super strong, vibrant and vital YOU for years to come. You Haveâ€™ multiple strength qualities to work on and expressâ€™ you were born with some physical gifts and others which are weaknesses. You Canâ€™ choose or design physical exercise programs that maximize your physical gifts and potential while minimizing the effect of your weaknessesâ€™ every person should strive to create the most balanced athletic physique they possibly can. You carry your strength like a badge of honor built through the blood sweat and tears of challenging exercise. You Canâ€™ choose to transcend all perceived and self inflicted weaknesses in your mind and body today! Within you are all of the primal strength qualities that your ancestors used to navigate to rough terrain of this planet, with all of its challenges and predators. You Haveâ€™ strength to survive the most treacherous landscapes. You Canâ€™ train to become stronger, more agile, more mobile, more powerful, more explosive, leaner, muscular and more sexuality alive! You Haveâ€™ muscles that are first an expression of your character, which is directly affected by the health of your digestive and other biological systemsâ€™ that finally gives you the strength to go after everything that you want in life and the sensuality to receive it while experiencing pleasure. You Canâ€™ honor all strength and stability of your body WHILE also experiencing all of the pleasure that the senses of touch, smell and taste as well as the hormones that support them, have to offer. You Haveâ€™ passions, gifts, talents and faculties that bring you joy when expressingâ€™ and bring joy to other you share them with. You Canâ€™ live a resourceful life that is designed to not only build your own strength but support others on their journey of strength as well. You Haveâ€™ many experiences that brought you to this particular place in timeâ€™ some of these experiences were joyful while others painfulâ€™ but ALL of them have added to your strengthâ€™ each experience has added to the YOU that you are today. You Canâ€™ choose to learn from each experience, and in that way use each one as a stepping stone as you move closer to becoming the strongest version of you. You Haveâ€™ people in your life, right now, who look to you for motivation and guidance in the way of strength. Maybeâ€™ you have a deep conviction that your life would be best spent working towards reaching your full potential and supporting others, though your motivation and example, to do the same thing. Imagineâ€™ living a life of integrityâ€™ a life where what you believe and what you do are in alignment. Maybeâ€™ you are not the only oneâ€™ perhaps there are others who feel as strongly as you do about growing stronger. Imagineâ€™ dedicating your life to this process of Strength Building and moving forward TODAY with a blueprint and community working together on the same objective. Maybeâ€™ all of the time that you have been thinking about the things you heard in this video was preparation for your mind to recognize THIS opportunity. Imagineâ€™ if THIS opportunity was brand new, and only being offered to a few serious and committed people. And opportunity to explore the four layers of your strength, maximize your potential in each layer, become the strongest version of yourself and dedicate your life to helping others become the strongest version of themselves! What would you do?

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Like layers in a building, each layer of strength adds to and supports the others; if one starts crumbling, the whole structure begins to deteriorate. Only through the full expression of each of these four, foundational layers can a temple of true strength be built and accessed.

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Elliot Hulse is a strength coach from St. Petersburg, Florida. His YouTube channel "Strengthcamp" has over , subscribers & over 1, videos pertaining to strength, fitness, and life. This eBook was released by Elliot himself in hopes of helping people become the STRONGEST VERSION OF THEMSELVES.