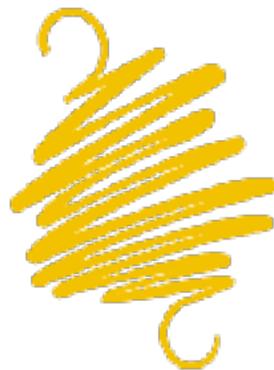


Building Strength

Fiber-By-Fiber



Freestyle Trampoline

A s s o c i a t i o n

**“Conditioning Is Not A Race,
It Is A Defence Mechanism For The Trial And Error Process Of
Learning”**

Strength And Conditioning

There is a lot of research available online about how to properly strengthen and condition the body. In this document we will outline how you can do that specifically for Freestyle Flippers. Many athletes under-value conditioning because they believe they can 'out-smart' the dangers of training. Many simply assume that acrobatic training by its self will be enough to gain results. Acrobatic training is tough and will build muscles but by adding a simple conditioning program you can speed up adaptation, learn skills faster as well as be safer when you have rough landings.

Let's start by saying you can't out-smart training! In reality, training is the idea of breaking down the body systematically to rebuild it stronger than before; either mentally, physically or bio-energetically by creating thicker and faster muscles and networks of neurons in the body and brain.

As the body finds itself in a new environment it will survey the landscape physically and mentally to try to determine what behaviours will keep that person in one piece. Naturally the person will undergo a trial and error process determining what works and what doesn't. This trial and error process will have some bumps on the road because the body can't anticipate every single possible circumstance that could happen. Instead, the body averages out each of these bumps and makes simple decisions that will help keep the body intact as it moves through the different environments, both physically and mentally.

Strength and conditioning happens naturally without people having to even think about it. If you live in a part of the world that does not have paved roads and you walk barefoot more often than most, the muscles, tendons and skin on your feet will 'toughen up' and naturally learn to build more muscle fibres and create tougher skin which will help take the stress off the bones and the body as a whole.

In sports, athletes have large demands put on their bodies and therefore specific training programs are built to help athletes develop extra strength and toughness, even though their natural environment does not demand it. No human living in the 21st century will ever 'naturally' grow muscles as big as a body builder. They build only as much as is necessary within their environment.

Athletes, who live within environments that do not require extreme strength or speed, will train many hours a week to artificially build their muscles for moments of peak athletic performance at competitions. This training will help in those few instances where they actually need the extra unnecessary strength during competition.

Along with a great conditioning program you will need to start thinking about your diet as well. In “Building Nutrition” we discuss the ways you can incorporate your strength and conditioning program with a natural nutritional program as well as with the help of a supplement brand such as Arbonne. The FTA has partnered with Arbonne to help provide a nutritional base for athletes.

If you plan on doing amazing feats of athleticism in the acrobatic world you need to look at conditioning as a defence mechanism and not just a way to jump higher or do more flips. You will jump higher and do more flips of course, but remember what goes up, must come down and you can’t always control how you go down. With a conditioning program you will build muscles that will allow you to build bigger skills, along your rotational pathway. However, even more importantly, with an extra conditioning program, you will build muscles that will protect you along that pathway through the bumps and scrapes.

Think of training as boxing with a world class boxer, like Muhammad Ali. The trial and error process on the trampoline will constantly throw ‘punches’ at you, so you need to be able to withstand those punches to keep going down your rotational pathway. If you believe you will simply ‘dodge’ all the punches you’re sadly mistaken. You need to *build* your body to withstand the trial and error process that comes with learning new skills even if you are being systematic with the Spatial Awareness Quotient (SAQ). Then you can build even more strength to allow for larger skills along the pathway.

Many athletes are taught to try and dodge the punches and at first that may seem like a logical perspective. After many years of flipping you will realize that you can’t dodge them all. It is better to build a tough body that can simply keep moving forward as the sport keeps throwing punches at you. It is a valuable approach to life as well...

Building your body is the same as building your behaviours. You need to do it Degree-By-Degree. The following monthly conditioning programs will

provide a template for all athletes who wish to begin preparations for this trial and error process. Some research indicates that every two weeks a new program should be provided to keep the body adapting; but in the realistic world you will most likely only do three times a week. That means you only fit in twelve trainings a month which is not enough for major adaptations. High performance athletes will change up their training every 2-3 weeks depending on the sport and phase of the program. That is because they are training a few times a day on a regular basis.

For a beginner it is better to take slower steps with a month long program before switching it up. As you condition more over the years, you will naturally shorten these phases. This program is meant for new Flippers and aims to simply get you started on the pathway to building your conditioning similar to how you should not be on the pathway to building your acrobatic skills.

The program will begin with absolute beginners that have never even seen a training program and will build up to an Olympic/Influencer level athlete. There are many variations with this program but it is a general guide for athletes who choose to condition on their own, without a coach who can administer a specific program. Feel free to make any alterations you wish but please understand that this is a building process so please build your program systematic as outlined in the next few pages, even if you choose to alter the exercises.

People tend to over-estimate their abilities and this may cause the muscles to try and react to an extreme situation, that it has not been built to do, which can result in a pulled or strained muscle. You can build your muscle strength for acrobatics systematically Degree-By-Degree. This will prevent over-use injuries and reduce training accidents because the body is ready to 'fall down' without breaking.

You might start a conditioning program with a set of exercises that are too difficult and do not allow the body to become use to the new stimuli. This causes the body to reject the exercise program as it is perceived as an 'enemy.' The "*Fight or Flight*" response will activate and the athlete will subconsciously look at training as an enemy that needs to be avoided.

For this reason you will see that the building process on the next pages is simple, gradual and has high intensity peaks and low intensity phases that allow the muscles to cycle through different functions. This includes, max

strength, speed, agility, stability and sport specific cross training. Conditioning is not a race to the finish. It is a gradual building of muscles over the entire body in a cyclical sort of way to help prevent 'burn out.'

In much the same way we build our skills along the rotational pathway Degree-By-Degree we will build muscles Fiber-By-Fiber and not simply just compare ourselves to the body builder who can lift 500kg with one leg. Keep that imaginary ideal in the back of your mind, but as you go along the pathway for many years along with your acrobatic training, you will take small steps and cycle through different training phases regularly.

Even though it is not discussed in this program, you will need to stretch your muscles before and after every training. Simply go through all the muscle groups you trained and stretch them out for at least one minute per muscle and repeat each stretch two times at the beginning and end of training. It is that simple.

These exercises are a mix between ones that can be done at home, in the gym, alone or with a partner. If you do not have access to a gym, pick the exercises that are more suitable for your environment. Get creative!

It always helps to have a friend workout with you and help you with exercises so go find a few that are dedicated to their training as much as you are and form a regular workout schedule with them. Do not feel you absolutely need a partner however because to some conditioning is a time to think and focus on themselves.

You will naturally decide what exercises work for you and which cycles work for you based on your specific goals and regular life schedule. I do suggest that you create a few target goals every three months and record your progress. These goals can be generic such as "40 Push Ups By March 1st." Your monthly training program will not focus around each of these goals all the time, but having over arching goals helps give you something to strive for.

Month #1:

Focusing On Holding Positions, Not Major Movements Yet!

Exercise	Reps	Sets	Reps By End Of Month
Chair Sit Against Wall	30 Seconds	X 2	1:30 Seconds
Ankle Raise Holds	30 Seconds Each Leg	X 2	1:30 Seconds
Lunge Holds (Back Knee 1 Inch Above Floor)	30 Seconds Each Leg	X 2	1:30 Seconds
Headstand Hold Against Wall	20 Seconds	X 2	45 Seconds
Chin Up Holds (90° Elbow Bend)	10 Seconds	X 2	30 Seconds
Stomach Crunch Holds With Feet Off Ground	30 Seconds Each	X 2	1 Minute +
Side Arch Holds	30 Seconds Each	X 2	1 Minute +
Back Arch Holds	30 Seconds Each	X 2	1 Minute +
Invent A Holding Exercise	30 Seconds Minimum	X 2	1:00 - 1:30 Seconds

This month is all about holding the positions. To even maintain a static position takes lots of energy and has very low chance for injury due to the lack of movement. This means you can start activating the muscles without having to risk an injury. Each week you should increase the duration of the exercise by 10-20 seconds. If you can increase more because it seems easy, then add more time. Only reduce time or load when you are a week away from competition to focus on technique with fully rested muscles and get back to conditioning when the competition is over. When you create your own exercise, make it a static exercise revolving around your sport. As the months progress you will find new exercises that can incorporate your Freestyle discipline more often as your muscles get stronger. This will 'unlock' new creative exercises that will add more excitement to conditioning.

Month #2:

Start Incorporating Large Range Of Motion Exercises

Exercise	Reps	Sets	Reps By End Of Month
Squats (90° Knee Bend)	X 20	X 2	X 40 + Full Range Of Motion (Slow)
Ankle Raises (One Foot)	X 40 (20 Each Leg)	X 2	X 60 (30 Each Leg)
Lunge Walks (Slow Tempo)	X 20 (10 Each Leg)	X 2	X 30 (20 Each Leg)
Handstand Hold Against Wall	20 Seconds	X 2	X 40
Chin Up Negatives (Jump Up And Slowly Lower To A Straight Arm Hang)	X 5	X 2	Hold Half Way Down For 10 Seconds Before Full Hang
Stomach Crunch Rocks	X 25	X 2	X 35
Side Arch Rocks	X 25	X 2	X 35
Back Arch Rocks	X 25	X 2	X 35
Invent An Exercise	X 20	X 2	X 30

You can see that we have taken the previous exercises and built on them to start basic slow movements. It is important that your conditioning program follows a steady path for the first few months to ensure that your muscles get use to the new program before you start getting too adventurous. Too many times athletes who have never truly done a workout program will start with the most fancy high-paced exercises for fun (*or to show off*) and forget all the small muscles that they have not developed. All of these exercises cover the whole body from the ankles, legs, core and the upper arms. After your first month of the basic static holds you can start picking your own exercises. Keep them simple with large slow movements but get creative. The Gymnastics gym or trampoline park will have many options.

Month #3: Add Some Speed

Exercise	Reps	Sets	Reps By End Of Month
Jump Down From A Block And Stick The Landing (90° Knee Bend)	X 10	X 2	Increase Size Of Block From Waist height To Chest Height
Bounding Up Onto Block (Quick Off Toes)	X 20	X 2	X 30
Side Ways Walking Squats	X 20 (10 Each Side)	X 2	X 30 (10 Each Side)
Wheelbarrow Walks	30 Steps	X 2	40 Steps (50% Faster)
Rope Climbs With legs	X 1	X 3	X 5
Dips (90° Elbow Bend)	X 10	X 2	X 15
L-Sit (Sit And Hold Body Up With Just Hands)	X 20 Seconds	X 2	X 35 Seconds
Jog With Full Backpack	X 20 Second Sprint/ 30 Second Walk (Rest) X 5	X 2	X 25 Second Sprint/ 25 Second Walk (Rest) X 5
Invent An Exercise	X 20	X 2	X 30 (Make It A Harder Exercise)

You can see now we are starting to get into more acrobatic exercises since we have built up a base for the last few months. Certain exercises will only be possible in a Gymnastics or training facility. If you do not have access to one, utilize furniture at home like tables or desks for Dips. If Rope Climbs are impossible, do Chin Ups instead.

You will see that we are starting to build up more intense exercises with speed such as Bounding up onto blocks which requires quick muscle contraction. Start with a small block and build up over the month. Do not just go for max height. Even if the exercise feels somewhat easy, just stick to it for a week before increasing the height or weight of the exercise. You may end up waking up more sore than you thought!

Month #4: Get Creative

Exercise	Reps	Sets	Reps By End Of Month
Roof Tops	X 10	X 2	Increase Size Of Block From Knee height To Waist Height
Wheel Barrow "Battles" With Friends	X 20	X 2	X 40
Single Leg Candle Stick Roll	X 20 (10 Each Leg)	X 2	X 10 (20 Each Leg)
Handstand Battles Against Friends	Best Of 3 "Battles"	X 2	Best Of 3 "Battles"
Swing On Bar With Heavy Backpack	X 30 Seconds	X 3	X 50 Seconds
L- Sit Walks	X 10 Steps (5 Each Hand)	X 2	X 20 Steps (10 Each Hand)
Log Rolls (Roll From Back To Stomach Repeatedly Without Touching Feet Or Hands)	X 10 Rolls (5 Each Way)	X 2	X 20 Rolls (10 Each Way)
Run Up Stairs	1 Flight Up/ 1 Flight Walk Down X 5	X 2	2 Flights Up/ 1 Flight Walk Down X 5
Invent An Exercise	X 20	X 2	X 30 (Make It A Harder Exercise)

This month we can see a clear shift towards more creative exercises such as Log Rolls and Handstand Battles. Creative exercises are great but also hard to measure in terms of increased difficulty. When battling your friend in a Handstand Battle, it is hard to know how much muscle you are building even though it is exhausting. For this reason you will add in creative exercises as you get more fit, but try to make sure most of them are able to be tracked to ensure you stick to your plan.

Month #5: Simple But Intense

Exercise	Reps	Sets	Reps By End Of Month
Weighted Squats (With Backpack)	X 10 (50% Body Weight)	X 2	X 20 (60% Body Weight)
Push Ups	X 20	X 2	X 30
Handstand Semi Push Ups (90° Arm bend)	X 5	X 2	X 10
Chin Up Holds (90° Arm bend)	X 30 Seconds	X 3	X 45 Seconds
V-Lifts (Slow And Controlled Stomach Crunch touching Toes At The Top)	X 15 (Do Not Touch Ground)	X 2	X 25 (Do Not Touch Ground)
Back Arch Raises With Backpack (Solo Or With Partner)	X 20 (50% Body Weight)	X 2	X 20 (70% Body Weight)
Single Leg Jumps Up Onto Block	X 20 (10 Each Leg)	X 2	X 30 (15 Each Leg)
Invent An Exercise	X 20 - 30	X 2	X 30 - 40

You have just completed a month of more creative exercises and now it is time to get a bit more serious. This month you will load your muscles preparing for the first peak intensity month at month #7. Do not do this close to a competition. As you get more use to training, you will learn to schedule your creative training programs during competitions times and intense training programs when there are no competitions for a while. It is called “Periodization.” For exercises such as Squats, you can put on a backpack full of heavy things that add up to roughly 50% of your body weight added to your regular weight or actually get to a fitness club that will have access to a lot of great weight lifting equipment. There is a point when body weight, simply won’t cut it.

Month #6: Find A Partner

Exercise	Reps	Sets	Reps By End Of Month
Back To Back Squats With Partner	X 15	X 2	X 25 or Try Single Leg With Partner
Guided Handstand Walking	Go As Far As You Can And Record It	X 2	Beat Your Record Every Week
Wheelbarrow Hops	X 20	X 2	X 30
Chin Up Hold Battles (Hold Longer Than Your Friend)	Beat Your Friend	X 3	Keep Beating Your Friend(s)
Crunch And Throw Medicine Ball (Or Something Heavy)	X 15 (15lbs Weight)	X 2	X 25 (15lbs Weight)
Back Arch With Friend Resistance	X 20 (50% Pressure From Partner)	X 2	X 20 (70% Pressure From Partner)
Jump Squats With Weighted Backpack	X 10 (25% Body Weight)	X 2	X 10 (40% Body Weight)
Invent An Exercise	X 15	X 2	X 20

Now you can see that the exercises are getting harder and even though you are with your friend you are increasing the intensity with weighted backpacks and medicine balls as you prepare for your hardest month to come. If you are inventing your own exercises try to make sure that the reps are medium sized and the intensity is higher. Next month you will have your peak intensity so this month you are building up towards it.

It should be noted that for experienced athletes, normally the intensities of training will be varied in shorter time periods of 4-6 weeks. Since this program is for a new young Flipper we are taking the slow and long approach allowing the developing body to make the proper physiological changes over a prolonged time. After your first year of continuous training, you will be able to go through these intensity cycles quicker.

Month #7: Peak Performance!

Exercise	Reps	Sets	Reps By End Of Month
Weighted Squats	X 10 (70% Body Weight)	X 2	X 15 (80% Body Weight)
V-Snaps (Fast)	X 20 (Do Not Touch Ground)	X 2	X 30
Full Range Handstand Push Ups	X 3	X 2	X 6
Bounding Up Onto Block (Quick Off Toes)	X 20 (Waist Height)	X 2	X 20 (Build Up Height)
Full Range Chin Ups	X 3	X 2	X 6

This program is shorter because it is more intense. The body will get its first taste of intense training here and the next month the body will take a break and bring the level back down. Due to this purposeful intensity peak, give it your all and let those muscles burn. Do not overdo it and end up messing up the training schedule but make sure you finish each training completely exhausted. Do not give yourself big breaks between sets. GO GO GO!

After this intense three-week program, take a week off and maybe even have a few ice baths to heal the muscles. Do not sit around playing video games all day during your week off but take some much deserved rest and let the body destress for a week and just focus on training instead of conditioning. You can of course do some light conditioning but it is understandable if you want to take a small break to clear your head. Do not take a rest more than one week from conditioning or very quickly it will be harder to get back into it.

Month #8: Stability And Balance

Exercise	Reps	Sets	Reps By End Of Month
Squats On Balance Board (Don't Fall)	30 Seconds	X 3	45 Seconds
Balance On Knees Only On Exercise Ball	X 30 Seconds	X 3	Learn To Stand On Exercise Ball X 30 Seconds
Jump Down From Block, One Leg Stick Landing	X 10 Each Leg (Small Block)	X 3	X 10 Each Leg (Higher Block)
Traveling Back Drops On Trampoline	X 10 Lengths Of Trampoline (Back And Forth)	X 3	X 10 Lengths Of Trampoline Faster
Jump Across Balance Beam	X 3 Lengths (Feet Together)	X 3	X 2 Lengths (One Foot Hops)
Handstand Holds (No Wall)	10 Seconds	X 3	20 Seconds
Create A Freestyle Discipline Exercise Including Balance	X 5 Reps	X 3	X 10 Reps
Create A Fitness Exercise Including Balance (Can Use Partner)	X 30 Seconds	X 3	X 60 Seconds

This month you will want to bring down the intensity a bit after the big peak last month. You will want to focus more on sport specific training instead of intensity specific training. Include your friends if you can and work on those small muscles in-between the big ones that sometimes do not get enough attention. They will help your bigger muscle groups to coordinate movement in unique directions.

Month #9: Muscle Speed And Agility

Exercise	Reps	Sets	Reps By End Of Month
Standing Long Jump	X 10 - Mark Your Distance	X 2	X 10 - Keep Beating Your Distance
Sprint	X 20 Seconds 100% Speed (Time It)	X 2	20 Seconds 100% (Beat Your Time)
Handstand Racing	Race A Friend	X 2	Beat Your Friend
Froggy Jumps (Butt To The Ground ANd Full Extension On Hop)	X 20	X 2	X 20 Longer Distance Jumps
Fast Baby Chin Ups (Only extend Half Way And Back Up)	X 10	X 2	X 10 - Faster!
Kick A Soccer Ball Long Distance With Friend	X 10 Minutes Back And Forth Trying To Kick As Far As You Can	X 2	Kick Even Farther!
Standing Back Flips (Use Mat Or Blocks To Help If Needed)	X 10 - Over Block Trying Not To Touch Or With No Assistance	X 2	X 15 Or Use The Blocks Less And Less
Do A Trampoline Combo From Standing	X 1	X 3	X 1 - Make The Combo Harder

Each of these exercises focus on speed and agility and not intensity. Each month we have focused on a slightly different aspect of training and now that the muscles are well on their way to being developed, we can increase the speed of their contraction. Do not start with speed exercises in the early months of your program because if your body is not well conditioned, you will basically fry your nerves and tire out the muscles faster. Speed of contraction is more about the neurons firing and not the muscle itself. If the brain and body has not created a steady training program where the brain and muscles are now use to conditioning, they won't fire effectively and you will not get as much benefit from it and may simply injure yourself with the fast movements that you are not ready for.

Month #10: Building Up Intensity Again

Exercise	Reps	Sets	Reps By End Of Month
Weighted Squats	X 15 (85% Body Weight)	X 2	X 15 (90% Body Weight)
V-Snaps (Medium Speed)	X 30	X 2	X 40
Full Range Handstand Push Ups	X 8	X 2	X 10
Bounding Up Onto Block (Quick Off Toes)	X 10 (75% Max Height)	X 2	X 20 (80% Max Height)
Full Range Chin Ups	X 8	X 2	X 11
Back Arch Lifts With Backpack (Partner Assisted)	X 20 (75% Of Body Weight)	X 2	X 20 (85% Of Body Weight)
Push Ups	X 20	X 2	X 27

As we build up the intensity again you will notice that we are also reducing the length of each workout in terms of number of exercises. Due to the busy schedules many athletes have, they usually will pick a small handful of exercises that they enjoy the most and stick to those. They will change it up every so often but will not have 30 different exercises in a day's program. Many of these exercises repeatedly hit the same target muscles so as long as your exercises are targeting the entire body generally speaking you do not need to make a huge list. Training will compliment your conditioning and a lot of exercising will happen sport specifically on your trampoline or at the Gymnastics gym.

Month #11: Peak Intensity Again

Exercise	Reps	Sets	Reps By End Of Month
Squats	X 10 (95% Body Weight)	X 2	X 10 (100% Body Weight)
V-Snaps (Fast) With Hand weights and Ankle Weights	X 15 (5lbs Weights)	X 2	X 15 (10lbs Weights)
Full Range Handstand Push Ups With Ankle Weights	X 5 (5lbs Weights)	X 2	X 5 (10lbs Weights)
Bounding Up Onto Block Wight Weighted Backpack (Quick Off Toes)	X 10 (Max Height)	X 2	X 10 (More Height)
Weighted Chin Ups	X 5 (5lbs Weights)	X 2	X 5 (10lbs Weights)
Back Arch Lifts (Partner Assisted)	X 10 - 100% Pressure From Partner	X 2	X 10 (100% Pressure From Partner)

Again we are at peak intensity. We have decreased the number of reps in all exercises because the weight is going up with extra ankle weights. You can use other weights like backpacks as well. As you do this program for a few years you will bring that rep number down to as low as four or five and squat double your body weight. Not yet though!

Notice the slow increase in intensity? Just like building Trampoline skills and building partnerships, we need to take the long steady road to ensure muscles develop properly over time. There is no point in picking exercise that are too complex or creative for the peak intensity segments of your training. They should be simple movements that only focus on stimulating one or two muscle groups and not all the smaller muscles that focus more on balance. Like last peak month, you can take a week off after three weeks of intense building and then the cycle will begin again.

Month #12: Sport Specific Training

Exercise	Reps	Sets	Reps By End Of Month
Freestyle Trampoline Combos	Pick A Freestyle Combo Of 5-10 skills And Practice It. It does Not Count Unless You Complete It!	X 5	Pick Longer And harder Routines
Cross Training	Find Another Freestyle Community To Train With	X 2 Per Week	X 3 Per Week
Go To A Gym And Follow Their Conditioning Program	Whatever They Say	X 2 Per Week	X 3 Per Week

You should be seeing a pattern by now. We start with a generic wide base of movements with static holds and low impact. As we increase the intensity we reduce the repetitions and create cycles of high and low intensity trainings. It has been a year and you have now gone through this cycle two times in your first year. As mentioned, this is because the body is still adapting to the new conditioning program, firing up the neurons and activating the muscles. Make sure you stretch before and after each training to prevent the muscles from simply seizing up and limiting your range of motion. A Freestyle athlete needs to have mobility in order to create unique positions and skills.

After this first year you will get into a rhythm and you will start creating your own program around your training schedule and competitive schedule. Plan your intense weeks between competitions that are a few months apart. If you simply do it right after an intense peak your muscles will be fried and if you do it right after a low intensity period you may be too relaxed. Being a Freestyle athlete you will decide what works for you but make sure you do plan for cycles of peaks and valleys in your training moving forward. You can't just increase linearly or you will just plateau. If you would like more information in regards to training programs contact the FTA for more info.

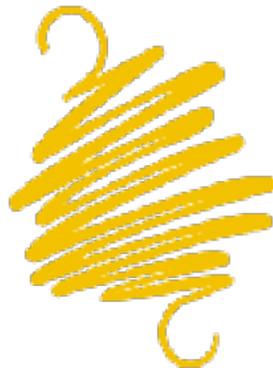
Conclusion:

Strength and Conditioning is a huge aspect of training and you will learn to substitute these exercises for exercises you like. Remember to follow this basic script when scheduling your workouts. If you simply try to go 100% every rep, every day, you will burn out and potentially hurt yourself.

The FTA's focus is on creating an educational platform for athletes who want to train on their own. There is nothing wrong with that if you follow some very simple guidelines that are described in this training package.

Along with the your conditioning program, regular training and a nutritional program you will have a great platform to develop an athletic lifestyle that will help your Flipping career.

Think of developing your conditioning similar to how you build your brand partnerships and your skills Degree-By-Degree. It does not take a genius with fancy techniques to be a high level athlete. It takes perseverance and a systematic approach.



Freestyle Trampoline
A s s o c i a t i o n