

ThrowAcademy

Amentum Sports

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Throw ZONE League



Throw Academy

Why this manual?

This manual has been created for children and young people to have an adequate training plan that they can carry out at home, or in a small space, with basic equipment. The training plan can be carried out by all ages and levels. The manual is a complement to your regular training in your sports and will help to build the necessary body frame in an injuryfree way over time. Injuries kill the momentum of the athlete. So stay healthy! This training plan that we have included are being carried out by many world class junior and junior athletes, obviously with a higher degree of difficulty. This has served to create a general training plan for all ages that can be done at home, in a closed space, in an appropriate way. EXCERCISE BECAUSE IT MAKES YOU HAPPY AND IT FEELS GOOD.

This manual was written to help EDUCATE athletes and coaches that train Special Abilities athletes. All these activities will help to improve arm strength, fitness, correct technique, explosiveness, accuracy, core strength, speed, and elasticity. Overhand throwing if not done properly can cause serious injuries to the joints and muscles. Children especially have a high rate of injury, particularly in baseball. With this manual you will learn the proper techniques and training protocols to maintain a long and successful career as an athlete. Work hard, train intelligently, follow the training protocols described in this manual, and improvement is undeniable. The whole body is used to launch an implement. Elastic and fast arms are needed and correct technique is required to avoid injuries. It is frustrating to see how many pitchers in the baseball or cricket leagues are injured by throwing too often and too hard. Athletes have to prepare the body with time and protect it from injuries. This manual will help you do this. It is ideal for AGES at any level of fitness.

The first part is tailored for all athletes in general, and the second part, advanced training, is tailored for athletes who have a better background and talent and can represent India in international events. All athletes should go through all our sequences,

beginners and advanced, as the first part will help the athlete get ready for more intense training.

Coaches and parents from all levels and sports will be able to learn from this manual how to teach, step by step, how to strengthen the body intelligently, without injuries, and have their athletes consistently progress month to month. Proper training requires patience and discipline. This manual will provide you with both and will help to avoid injuries, and help athletes to progressively improve their ability in general. This manual is not only for youth and open athletes, but also for masters athletes who have a passion for this sport.

- You will learn the TAAT Test assess adjust test, a world-class test system that shows your improvement over time. Keep record of your improvement and progress. We perform at the end of the month basic tests that can be expanded depending on the level of the athlete to more and more tests.
- You will learn to throw technically correct and you will understand how to use all the parts of your body. You will learn to plan your workouts well. Only then can you achieve your goal of improving your performance.
- The correct training will create a good foundation that will achieve your goals in the long term.
- It is fundamental to understand that you must avoid injuries at all costs. Injuries are the illness of athletes, too much time is lost. Training time is lost. It takes a lot of time to just to get back to the level you were at prior to the injury.
- The body consists of several parts and this manual will allow you to understand the functions of the various parts and how to improve overall performance. It must be understood that it takes many years of intense preparation to achieve these objectives. You have to train hard and you have to train intelligently.

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 You will develop a faster body that will help acelerate the implement. Speed is generated by the whole secuence of movements, and not just by the arm.

What we offer is a world class, injury-free system

A system for creating a base for all throwing events. This program will make your body frame ready for the upcoming challenges in your sports. It will help develop power, speed, accuracy and improve your throwing distance for your event. Whether you want to be a javelin thrower, a fast bowler, a cricket fielder, a baseball pitcher or handball player this system will develop right basics from the start. It is a handy tool for all coaches. The influence of grassroots sport is crucial. Sport is an obvious, enjoyable way of getting regular exercise and maintaining a healthy body weight. Our Grass roots system provides a structure that can be applied in schools, at home and in sports clubs. We focus on fitness, learning proper technique, develop an all-round athletic body, the best sports equipment in the world (Turbojav) and a fun, easy to follow system.

You have to stick to the basics and build it brick by brick. Beginners should train 2-3 times a week for months and let the body get use to it. You need time to get the body use to training and add more as you get physically fit. It takes time to do any sport well and javelin is tough if you don't have basics down like clockwork. You must keep the fundamentals of training as your center, focus and build your anchor around it. The Mini Javelin event is a run, jump, and throw event! So you must do lots of running, jumping, and throwing, together in training your mind and body to get in sync.

You must do your drills so many times it becomes auto pilot. You don't have to think, you just let go, and let the throw happen. Repeat, and repeat with quality

The same chain reaction happens in javelin. The block and ground create the whip from ground to hips and the chest and body reacts to the stretch reflex to the shoulder/ arm that is created by the torque. The shoulder is torque converter and most people think it is elbow and that means Tommy John surgery in many cases. There is no elbow use. It will bend a bit naturally to transfer energy. If you think of a bow and arrow, the bow does not move much when you pull back arrow. You do not see energy as it is short big stroke of energy that accelerates arrow. The C position is the bow at plant and you can t see the bump of energy in real time. You can slow it down and see how stretch reflex bump hits and its linear energy that Tom could feel and knew it was a long throw. This is hard to find and it is found in the basic and fundamentals over and over.

THE AUTHOR: TOM PETRANOFF:

Javelin is one of the most demanding and challenging events not only from track and field but in sports in general. The javelin throw requires a lot of skills, drills, flexibility and technical understanding to execute the throw. You need to be fast, explosive, elastic, and have an overall fitness level that is very well-balanced.

Tom had a twenty year successful track and field career that included two world records, Olympic Games, World, African and Pan-American Championships as well as competed in 517 top track meets around the world. Tom found a need to teach the javelin event to

youth that would enable kids from all ages to learn about javelin and throwing in a fun, safe and easy way. Over the past three decades we have sold over a million of TurboJavs all around the world. We have been helping young athletes to develop not only their skills, but to have tons of fun during the process. Turbojavs are a great tool to improve throwing in general; it does not matter if you are a baseball pitcher, a quarterback, or a javelin thrower. Learning the right mechanics will enable you to perform better.



Mini Jav Rules

ATHLETICS RULES

Throwing Events: Women 300g, Men 400g

•In shot put, softball throw, mini-javelin, and tennis ball throw, each athlete shall be allowed three non-consecutive attempts. The longest attempt shall be used for scoring. In the case of ties, the second longest score shall be used.

- •In softball throw and tennis ball throw, competitors may use any type of throw.
- •Mini-Javelin:
- o The mini-javelin must be held by the grip with one hand only.
- o The mini-javelin shall be thrown over the shoulder or upper part of the throwing arm and may not be slung or hurled.
- o At no time may the competitor turn completely around so that his/her back is towards the throwing area.
- o The measurement of each throw shall be made from where the tip first struck the ground to the inside edge of the arc.

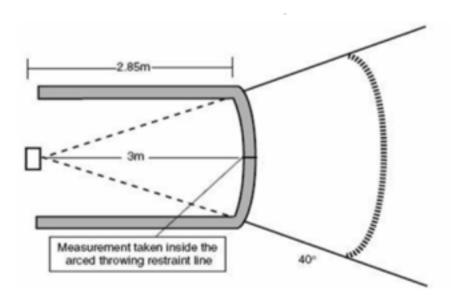
o It is counted as a foul if the competitor:

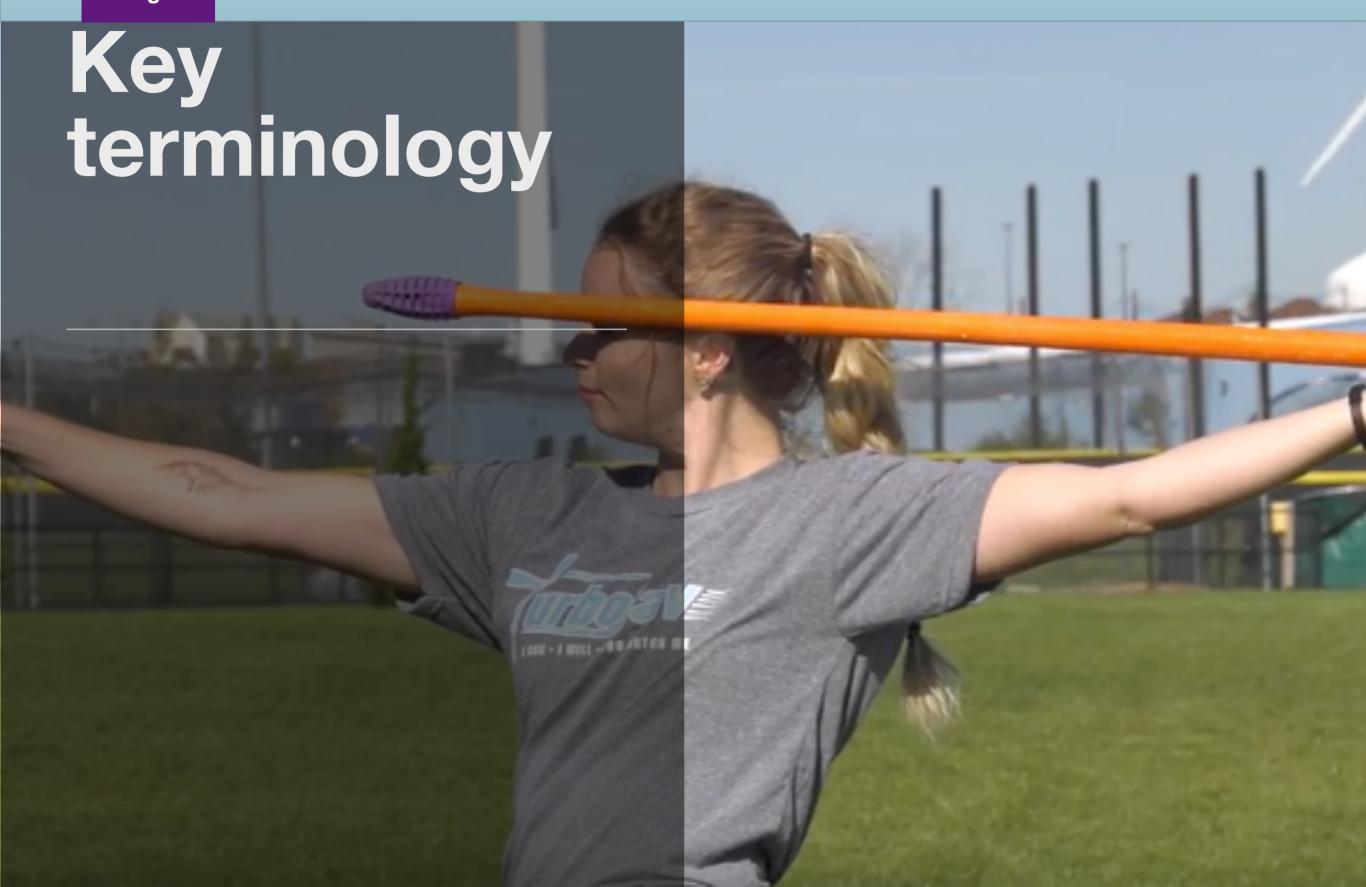
- Does not use the proper throwing technique.
- Does not throw the mini-javelin so that the point (tip) lands before any other part of the implement.
- Does not throw the mini-javelin so that the point (tip) falls completely within the

inner edges of the sector lines.

• Where the competitor touches with any part of the body the arc as marked, or any ground beyond the arc or throwing box.

FIELD SETUP





Key Terminology

https://www.youtube.com/watch?v=3cu0EOQSo A

1. The Grip:

There are three ways to hold the javelin. It is important that you feel comfortable and have a good grip as this will allow you to transmit force into the javelin.

Grip No.1: Index Finger Grip. In this grip, the index finger grips right around the edge of the cord. The thumb and index finger are on the edge of the cord, and must be opposite to the index finger The other fingers simply wrap softly onto the cord. This is the most popular grip to begin with comfortable and simple. This is a great grip for both beginner and elite throwers. It is often called the "American Grip".

Grip No. 2: The Middle Finger Grip is also a popular grip in javelin throwing. If you place the javelin in your hand, you will notice that the javelin comfortably sits in the groove of your palm and that middle finger naturally lands on the cord edge. Many throwers enjoy the feel of the middle finger grip including myself, the world record holder Tom Petranoff, so you can't go wrong with this grip. It is also called the "Finnish Grip".

Grip No. 3: The Fork Grip. We do not recommend this grip because it is very hard to master. Not many throwers use it because it's hard to control the javelin with this grip. The thrower places the javelin between their index finger and middle finger, very deep into knuckles. It is not a very balanced grip. This grip is sometimes used by beginner and intermediate throwers and typically phases out of use as throwers begin to throw further. I used the middle finger grip with the old rules javelin. Then when new the rules came out in 1986, I switched to fork

grip as I threw further with this grip. Try them all. Pick the one that feels best and gets you good flights.





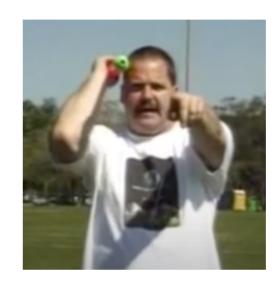


Key Terminology

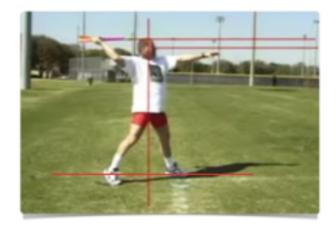
2. Standing Throw:

With your feet flat on the ground, face in the direction of the throw. The Turbojav should be held at eye level, parallel to the ground, with the point facing forward. Your non throwing arm should also be pointing out in the direction of the throw. Draw the Turbojav back being careful not to bend the throwing arm and also not allowing the nose of the Turbojav to rise up or fall down. Keep the Turbojav trajectory always over the throwing shoulder, as it will help you to throw clean and through the point. Practice first throwing light and clean and as you master the throw, add more strength and speed. Throwing correctly will help you to improve the mechanics, not only for the Turbojav, but for all throwing sports, such as baseball and football.

https://www.youtube.com/watch? v=3CnEy5gb_UA













Key Terminology

3. One, Three, Five Step Throw:

A right handed throwers will start with the right foot forward and the right arm back. The Turbojav should be drawn back and the non throwing arm or left arm should point in the direction of the throw. Both arms should be held high just above the shoulders. Your first step will be with the left foot planting hard and blocking. The left arm at the plant or block should pull into the ribcage quickly, while leaving the throwing arm back and relaxed. This will allow the right shoulder and hip to accelerate without resistance over the plant leg as you throw. Your body then continues forward to the followthrough position. Once you have mastered the one step throw, you can start practicing with a three step throw, This is done by adding a crossover from left to right before you reach the right position. Once you have this mastered, then you can add two more steps to make the five-step throw.



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5. Basic concepts

Center of Gravity:

The center of gravity is the location directly under the body core where your balance, power, leverage and speed can be optimized if you use its levers and chain reaction of stretch reflex from the ground up.

Foot Placement:

Placement of the feet for the Turbojav, as well as the javelin should be shoulder width apart. Usie a long stride to develop the pull. After placing the feet in this position, hold the implement directly over your center of gravity. The javelin is then aimed at a target. This will allow all the levers used in throwing to be properly aligned and the javelin can then be thrown over the center of gravity with accuracy, utilizing a pulling action. The blocking action and pull is created by left side action. At no time does the right side come into play.

Drawback:

The process by which a thrower moves a Turbojav or javelin from a "carrying" position to a position

whereby the implement is "drawn back" in preparation for the throw. The javelin must be kept very still, level to the ground, and the point must be facing forward towards your intended target. The drawback must be both smooth and relaxed. Practice this traansition over and over thousands of times to master it.

Leverage blocking action:

It is important to have a thrower balanced so they can "apply force" and "leverage" over their center of gravity. The center of gravity of a thrower should not change change when the thrower runs, draws back and throws. The most important thing is to gain momentum, building speed, slowly drawing back, and using the non-throwing side to block and create the whip like stretch reflex reaction of the shoulder.

Over Shoulder Throwing Motion:

Over the shoulder throwing is the process of bringing the Turbojav or Javelin over the shoulder in order to throw. By bringing the implement over the shoulder instead of around the body, the center of gravity never leaves the center of the athletes body. By keeping the center of gravity underneath the thrower instead of out to the side, the thrower will

experience more accurate and powerful throws. Additionally, by remaining centered the athelete will experience far less stress on the elbow and shoulder joints. By throwing out away from the body, off to the side, the arm becomes susceptible to injuries. The athelete is not using the body's leverage system and the large powerful muscles of the chest and shoulder.

Throwing through the Point:

A common fault of many throwers in any sport is to think that throwing is a pushing motion, or in some way there is a rotational component to the throw; there is not. With the Turbojav and the javelin, this is maybe clearer than any other implement. Javelins are elongated, long and slender implements. They are easily affected in a negative way by the application of any rotation aspect. The level carry and drawback are also imperative to long, accurate, and safe throws. When someone "throws through the point" they are "pulling", not pushing the tail of the implement through where the point was only fractions of a second earlier. By throwing the tail through the point, or a baseball, or a cricket ball, one is optimizing the flight path of the implement.









1. Games: Distance and Accuracy Games:

The object of this game is to throw for accuracy and distance. Draw a straight line for throwers guidance. Throws are measured from the toe-board to where the Turbojav lands. Then measure the distance to the right or left of the line where the Turbojav landed. Then you subtract that distance from the distance thrown. 1st Place 5 points, 2nd Place 3 points, and 3rd Place 1 point.

- **Distance**: Throws are measured from the toe-board to where the Turbojav lands nose first. 1st Place 5 points, 2nd Place 3 points, and 3rd Place 1 point. Organize athletes into groups relative to how many Turbojav's are available. For example, a group of 24 athletes with 6 Turbojav's should be organized into 6 groups of 4 athletes. Place a group into a safe throwing formation. This means each group will be lined up behind a group marker, all facing the same direction, with adequate space between each group. For further safety, a coach may wish to have the athletes waiting for a turn behind a 2nd marker.
- Target: Garbage Can, Basketball Hoop, Hula Hula: The aim of these drills is for athletes to throw the Turbojav and hit the allocated target. For the first couple of lessons begin by positioning the throwers 5-10 meters away from the targets. As your athletes master the skills they can be moved further back. Points should be awarded only if the rubber tip of the Turbojav hits the target. Correct flight of the Turbojav is what we are after while performing these drills. Eventually athletes or groups could compete against each other and points should be awarded not only for accuracy but also for who has the best flight and technique. Points are awarded for nose hitting the can and Turbojav going into the can. Five points-going into can, and 3 points-hitting the can.
- Over the Shoulder System Target: Points are awarded for the nose only hitting the target. Five points-for inner circle; 3 points-for middle circle, and 1 point-for outside ring
- Test your speed! Use a radar gun to check your throwing speed. You will be surprised how much

Training tools

1. Medicine Ball training

Medicine balls come in various weights. Youth athletes use 2kg, and junior athletes 3kg. Use 1 and 2 kg medicine balls for one arm throws starting at age 15. We don't ecourage one arm medicine ball throws at younger age as this can result in elbow and shoulder overload.

Stretch Reflex with Medicine ball: Begin this drill standing up on your toes with your feet shoulder width apart. You should be about one or two feet away from the wall with your core pressing against it for support. The Medicine ball should be positioned above your head ready to be pulled into the wall. When performing this drill keep your arms at the elbow as straight as possible. Throw the Medicine ball into the wall so it bounces off with enough force so it pulls your arms back behind your head. Then in one continuous motion repeat the process again throwing the Medicine ball into the wall. We are trying to create a stretch in the shoulders, so the harder you throw the Medicine ball against the wall the harder it will rebound forcing your arms behind your head.

Single Arm Stretch Reflex with Medicine Ball: This drill is very similar to the two handed stretch reflex but you concentrate on a single arm. Begin by standing up on your toes with your feet shoulder width apart. You should be about one or two feet away from the wall with your core pressing against it for support. The med ball should be placed in your right hand and positioned over your center of gravity ready to be pulled into the wall. When performing this drill keep your arm as straight as possible. Throw the med ball into the wall so it bounces off with enough force to pull your arm back behind your head staying over your CG. Then

in one continuous motion repeat the process again throwing the med ball into the wall. Repeat with the left arm. Age 14+

Standing Throw with Medicine Ball: This test measures upper body strength and explosive power. The subject stands at a line with the feet side by side and slightly apart, and facing the direction to which the ball is to be thrown. The ball is held with the hands on the side and slightly behind the center. The throwing action is similar to that used for a soccer/ football sideline throw-in. The ball is brought back behind the head, then thrown vigorously forward as far as possible. The subject is permitted to step forward over the line after the ball is released, and is in fact encouraged to do so in maximizing the distance of the throw.

One Step Throw with Medicine Ball: This drill is very similar to the one-step with the Turbo Jav. A right handed thrower will start with the right foot forward and the left foot back with the med ball positioned directly above your head over your CG. Your first step will be with the left foot stepping ahead of your right leg then planting down hard and blocking. Always remember not to initiate the throw with the upper body and always wait for the body to create the block before you throw. Once the block happens now the athlete can initiate the throw by pulling with the core creating hip drive or the "C". The med ball will be released high above your head over your CG creating the stretch reflex. As the med ball leaves your hands continue with an explosive follow through allowing your right side to come through in order to absorb your power. Note: An explosive block is always followed by an explosive follow through.

Training tools

Three-Step Throw with Medicine Ball: This drill is the same as the one-step but you just add to two more steps at the beginning. A right handed thrower will start with the right foot forward and the left foot back with the med ball positioned directly above your head over your CG. Initiate the throw with your left foot stepping ahead of your right leg. Once your left foot comes down immediately drive off it onto your right again then forcefully bring your left foot through and plant down hard and block. Always remember not to initiate the throw with the upper body and always wait for the body to create the block before you throw. Once the block happens now the athlete can begin the throw by pulling with the core creating hip drive or the "C". The med ball will be released high above your head over your CG creating the stretch reflex.

2. Hammer drills

Use a hammer drills to strengthen the core shoulder, torso and arm muscles. For this you can use different weights and do with it a series of exercises that allowed me to develop flexibility and strength in the shoulders, arm and back. Do hundreds of repetitions with both arms, hitting a tire, sideways, strong side and weak side. Follow the sequence that I have included in this manual,

start with few series, few repetitions, increase the weight, the exercises and repetitions and you will see how the musculature and power develop.

3. Rubber Band Drills

The rubber band is an important component of any training because it allows in a controlled way, to improve the elasticity and flexibility of the arms and shoulders. Many pitchers attach little importance to flexibility work, but without flexibility, it can not be released. They can hold the end of the rubber band to a high point, and start with slow stretching exercises, both sides, weak and strong, stretching the arms more and more and thus improving the elasticity of the joints.

4. Gymnastics

Gymnastics is great way to train young athletes outside of the weight room. Developing dynamic strength in multiple dimensions is key to successful and injury free javelin throwing. Wall feet walks, wall hand walks, Push up circles, V-Walk, V-Walk bounce, Crab Walk, Handstand against wall, handstand push-ups, handstand walk. Wrestlers bridge, wrestler bridge push, wrestler bridge to stand

Gymnastics is a very important part of the training for young throwers as well as of the more

advanced throwers, because several muscles are worked at the same time. It's excellent for strengthening the muscles in general and give elasticity to the joints. At the beginning it is difficult to do it, because it takes time to achieve balance, but once you manage to do it, you will feel how the muscles balance and strengthen.

5. Plyometrics

Multi jump training will develop explosive athleticism that is essential for long throws. The intensity of Plyometrics is measured by the amount o upon impact and can be affected by many factors including the height of the jump, the athlete's strength and the athletes posture upon landing. The intensity of a plyometric workout should be adjusted for the training and skill level of each athlete to prevent injury

Burpees, rocket jump, Standing broad jump,
Standing 2-foot triple jump, Skips, Bounds, Box
jumps All athletes of throwing events must develop
strong legs and a way to do this is through jumps.
There are many different types of jumps that can be
included during training. We start training with sand
drills to strengthen the foot. Power is initiated
through the contact of the foot with the ground,
and many athletes forget to develop reactive,
strong foot. Start by walking on toes or ancles, and

The aining tools ZONE League

sideways, 10 x 10 meters, Then you can do easy sand jumps, with two legs, one leg, lateral jumps. This will gradually develop strong and reactive foot. As you progress, you can incorporate other types of jumps, such as standing jumps, tripple jumps, lateral jumps, hurdle jumps and for more advanced athletes, dead jumps. As the athlete improves, he can do hurdle jumps and dead jumps but in a progressive way. You can set up 5 or 10 hurdles at low height and do 3-5 series of two leg jumps and as your athlete improves, raise the height and number of series.

6. Turbojav: Turbothrowing is an essential part of any season javelin training. It is a great way to intoduce new concepts to throwers because the implement is much more forgiving the shoulder and elbow joints when mistakes are made.

Standing, forward throws: Low effort forward throws to teach the athlete to throw over their center of gravity and propel the implement using body whip rather than arm strength. Do afterwards 3 step (one left), 5 step (one left), 7 step (one left). Dont forget to train weak and strong side. Training both weak and strong side is an important part of developing a balanced athlete who remains injury free. Weakside improvements will always transfer to the strong side

Target throwing: Helps develop the low trajectory of a good throw (29-32 degrees). Throw that land left or right of the target gives good feedback regarding misdirected rotational energy

Standing warm up only, 3 step (one left), 5 step (one left), 7 step (one left)

Two hand overhead, One hand overhead, rainbow Two hand underhand. Over the back

Throw academy



Training plans

TRAINING IN GENERAL

Training consist of blocks that are designed to prepare the athlete for the training and to teach the proper elements and work on fitness.

- Warm up: 5-10 minutes. We can do different activities that will help warm up the body, stretch the muscles and motivate to do sports. It can be a warm up lap, small running and jumping games, be always creative in finding new ways to jump start training. We do some flexibility drills, stretching drills, running drills, jumping drills.
- Teach proper techinique: 5-10 minutes. We show the athletes how to hold the Mini Javelin, how to do the drawback, how to stand correctly, how to throw over the shoulder, and basic throwing concepts,
- Target Games: 5-10 minutes to warm up: Target games are the best way to develop accuracy and throwing mechanics. We can do different target games, change the distance of the target, use different balls, such as tennis balls, cricket balls, basketballs, do one and two arm throws, strong and weak side.
- Throwing session: The body is warm and now we can go into the throwing session that

consists of 5 standing two arm throws, 5 walking two arm throws 5 standing throws, 5 three step walking throws, 5 three step jogging throws, then we do 5 5-7 step throws. Always focus on proper throwing mechanics and on holding the implement correctly.

• Fitness: At least 10 minutes: We have a series of fitness exercices that target the whole body, mix them up by training zones or parts. Do some jumps, some sprints, some abs, push ups, and strength exerices in general.

ADVANCED TRAINING: FOR ATHLETES THAT CAN THROW OVER 20 METERS

We will be able to identify talents that can become really good throwers. A more specific training will help these talents develop more power, accuracy, speed, and technique, that will propell them into elite throwers.

We use the same training blocks, but add more exercices and drills that will help them become even better. Training consist of blocks that are designed to prepare the athlete for the training and to teach the proper elements and work on fitness.

 Warm up: 5-10 minutes. We can do different activities that will help warm up the body, stretch the muscles and motivate to do sports. It can be a warm up lap, small running and jumping games, be always creative in finding new ways to jump start training. We do some flexibility drills, stretching drills, running drills, jumping drills.

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- Target Games: 5-10 minutes to warm up: Target games are the best way to develop accuracy and throwing mechanics. We can do different target games, change the distance of the target, use different balls, such as tennis balls, cricket balls, basketballs, do one and two arm throws, strong and weak side.
- Throwing session: 10-15 minutes. The body is warm and now we can go into the throwing session that consists of 5 standing two arm throws, 5 walking two arm throws 5 standing throws, 5 three step walking throws, 5 three step jogging throws, then we do 5 5-7 step throws. Always focus on proper throwing mechanics and on holding the implement correctly.

Throw ZONE League

Training plans

- Fitness: At least 10 minutes: We have a series of fitness exercices that target the whole body, mix them up by training zones or parts. Do some jumps, some sprints, some abs, push ups, and strength exerices in general.
- Specific Fitness: At least 10 minutes. We include rubberband drills, hammer drills, and medicine ball drills.

GENERAL FUN TRAINING

All age groups:

Develops accuracy and throwing mechanics, speed and power.

Training should be done at least two times per week, ideally is up to 3 times, for a total of 30 minutes. This type of training plan can be done all year round and will be beneficial for all throwing events. It's a great way to improve athletics and the core body strength, flexibility, coordination, speed, accuracy, and so on. It is very important that you bring the enthusiasm and fun component of sports into the children's training, and make them realize the importance of sports. This age group is very important as healthy habits, discipline, perseverance and team spirit develops during this phase of life. The need is to promote sports, and slowly build up a core frame that will help build the base. During this age, the focus should be

teaching proper technique, core fitness and form. Always encourage and assist them during practice.

Training sequence is as follows: Warm up, flexibility, Throws and Turbojav, hammer-medicine-rubberband, fitness

- Turbojav Games. Set up a target that is initially 5 meters away and do different types of throwing games, it can be from standing position, or one step throw, or three step throws. It should be done focusing always on correct form and start with low intensity. Kids love these games and it's a great way to introduce them into throwing. As we want to teach the technique, let's follow this sequence, standing, one step throw, three step throw, five step throws.
- Medicine Ball throws: Use 1 or 2 kilo medicine balls. A teacher should assist the athlete, and throw or roll him or her the ball, so he does not get hurt catching the ball. Focus on repetitions and not on intensity. We do only two arm throws at this age. We do forward, overhead, under head, 2 hand throws from standing, one and three steps. You can also use a basketball or soccer ball if you don't have a medicine ball.
- Specificity drills: We start using rubber band, plate twists (you can use the medicine ball as well) and add volume of the core exercises.
 Gymnastics is essential in sports, and we love to do handstand, Finish the training with some pushups and crunches to strengthen the core muscles.

•

- Overall fitness: We have a mix of upper body and leg drills.. Mix them, choose new exercices and let your athletes sweat a bit. We have different types of jumps, standing jumps, standing hops, single leg jumps, 2 leg bouncing, small jumps. After jumps, lets do some upper body training and finish with midsection exercices. If you can, do some 10-30 meter-yard sprints
- Turbojav throw: Start with Turbojav Games. Set up a target that is initially 10-15 meters away and do different types of throwing games, it can be from standing position, or one step throw, or three step throws. It should be done focusing always on correct form and start with low intensity. We always follow the throwing sequence, standing, one step throw, three step throw, five step throws, teach first from walking, and then slowly add speed.
- Medicine Ball throws: Use 2 kilo medicine balls. Focus on repetitions and not on intensity. We do only two arm throws at this age. forward, overhead, sideways, under head, 2 hand throws with one and three steps. We start with two arm throws, then we do one arm medicine ball throws that weights 1 kilogram. Focus again on form and not on intensity and power, as one hand throws can be very challenging to execute correctly. Do them in slow motion first and gradually at speed and power.
- Specificity drills: We start using rubber band, plate twists (you can use the medicine ball as well) and add volume of the core exercises.
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Training plans

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 Overall fitness: We have a mix of upper body and leg drills.. Mix them, choose new exercices and let your athletes sweat a bit. We have different types of jumps, standing jumps, standing hops, single leg jumps, 2 leg bouncing, small jumps. After jumps, lets do some upper body training and finish with midsection exercices. If you can, do some 10-30 meter-yard sprints

ADVANCED TRAINING

Helps to develop more accuracy and throwing mechanics, speed and power. We add advanced training drills that will help develop more power and throwing skills. Training should be done at least 3 to 4 times per week. for a total of 60 minutes. This type of training plan can be done all year round and will be beneficial for all throwing events. It's a great way to improve athletics and the core body strength, flexibility, coordination, speed, accuracy, and so on. The need is to promote sports, and slowly build up a core frame that will help the thrower into an elite athlete.

Training sequence is as follows: Warm up, flexibility, Throws and Turbojav, hammer-medicine-rubberband, fitness

• Learn to throw: Start with basic technique that will familiarize the athlete with basic concepts such as how to hold the mini javelin, how to drawback, how to properly place the feed and how to create the c position. As different athletes will bring different abilities, identify the level of learning of each athlete and focus on teaching them in groups.

- Target Games: Set up a target that is initially 5 meters away and do different types of throwing games, it can be from standing position, or one step throw, or three step throws. It should be done focusing always on correct form and start with low intensity. Kids love these games and it's a great way to introduce them into throwing. As we want to teach the technique, let's follow this sequence, standing, one step throw, three step throw, five step throws.
- Medicine Ball throws: Use 1 or 2 kilo medicine balls. A teacher should assist the athlete, and throw or roll him or her the ball, so he does not get hurt catching the ball. Focus on repetitions and not on intensity. We do only two arm throws at this age. We do forward, overhead, under head, 2 hand throws from standing, one and three steps. You can also use a basketball or soccer ball if you don't have a medicine ball.
- Overall fitness: We have a mix of upper body and leg drills. Mix them, choose new exercices and let your athletes sweat a bit. We have different types of jumps, standing jumps, standing hops, single leg jumps, 2 leg bouncing, small jumps. After jumps, lets do some upper body training and finish with midsection exercices. If you can, do some 10-30 meter-yard sprints

 Advanced fitness: We add throwing drills with medicine balls, hammer drills, rubberbands, and more specific throwing excersises that will help develop more power and speed.

INJURIES:

Injuries are part of the athlete's life, but what one as a coach or as a parent can do is observe the athlete and constantly evaluate what type of pain the young person may be having when making the training plan. In the more than five formative years that I have practiced sports with my 12 year old son, he has never had a serious injury. You have had falls, a small tear when kicking a ball, or making a break, or knee or foot pain, but nothing serious. What we do during training is to talk if you feel any kind of pain and take caution and understand if it is due to some overload, or growth, or lack of specific training in some parts.

For example, my son suffers from knee and foot pain, and when this happens, we usually lower the training load, or simply eliminate leg work for a few days, and when we return home, we use an ice bucket or bags with ice that is put on the joints. We do this three times, 10 minutes each time, we pause for 10-15 minutes and repeat it for another 10 minutes. Normally the joint pain goes down, and after a few days we can do the workouts, but always starting with low intensity.

It is important to understand that what we seek to do is build a long-term athletic body, and we do not seek the optimal result in a week, or a month. It is equally impossible to achieve this and it

Throw ZONE League

Training plans

is totally harmful to overload the developing body of the young man. We have had very good experience planning in the long term, not only with my son's work, which I have planned with the help of sports specialists worldwide, but also evaluating what works and what does not, what we can do better, in less time, so as not to tire you quickly. Children from 8 to 10 years old are very deconcentrated, although we have made this plan from 10 years old, the plan can be made by younger children.

Regarding repetitions and series, we usually use 1 set per exercise, from 6 to 10 repetitions, and we mix 4-5 exercises from the set that we have included, in this way the children do not get bored, and always find something new to do. There are many exercises that we have for the different parts of the body, we also include basic exercises, such as the planks, the abdominals, exercises with bars, free bar, etc., but we give much more depth to the training with other things that help to strengthen other muscles.

Listen to your children, don't force them to do more than they can do. Injuries start unexpectedly, and can quickly become chronic. If pain persists, it would also be good to visit a foot specialist to make special insoles for children. Always be careful not to do leg exercises with an angle of less than 90 degrees, ideally they are 110-120 degrees, as they put a lot of pressure on the knees and bones of young people.

What we do is raise the load over time, but this only after having made the training plan for a long period, but always meeting the limits that have been established.

How to use the manual:

We have included over 100+ exercises that should be followed by you. It includes different exercises that should be followed with the table FUN AND PRIDE.

FUN GROUP

They should a shorter warm up (5 minutes), flexibility (5 minutes), medicine ball (choose 5 different sets, and do 10 reps. Use can CFEST EXERCISES that are easy to do) and only two arm drills. Hammer and rubberband drills should not be done. We will do Turbojav throws or throws with different equipments, and 1f accurract throws, using other implements such as are bals, baseballs, volleyballs, and finish with fitness. You can select from various exercises at least 10 different sets, and finish with pushups, jumps and situps.

- Advanced throwers should a longer warm up (10 minutes), flexibility (10 minutes), medicine ball (choose 10 different sets, and do 10 reps. They can start doing easy one arm medicine ball drills, 5 sets x 5 reps. Make a light hammer (max 1 kg) and do two arm sets x 10 sets x 10 reps, and do also 5 sets x 5 reps with one arm. The same applies to rubberband drills.

Mix GREEN- AND RED EXERCISES We will do 50 Turbojav throws or throws with different equipments, such as cricket balls, baseballs, volleyballs, and finish with fitness. You can select from various exercises at least 10 different sets, and finish with pushups, jumps and situps. For

fitness, you can choose 15 different fitness exercises, and then finish with pushups, jumps and situps.

Training plans

TAAT Tests: Test-Assess-Adjust-Train

During our Fastest Arms event and every four weeks we run the TAAT test, where we run tests to check power (medicine ball), fitness (pushups, abs), accuracy tests, and distance throws. Keep record on these results. Some athletes are naturally strong and perform better in certain areas, what we do is monitor which areas have weakness and try to add few more exercises or repetitions to improve the weakness. Same with strength, we want to maximize the strength areas of the athlete.

TAAT: Keeping track of your progress	Score	Date
Power test:		
Overhead throws medicine ball, 3 throws	Best throw	
Underheat throws, 3 throws	Best throw	
Standing long jump, 3 times	Best jump	
Pushups: Max	Max	
Abs: Max	Max	
Accuracy test:		
Standing throw, 5-10-15 meters distance	% Hits	
Do 10 throws, and count Number of hits at the target		
You can use a turbojav, tennis ball, cricket or baseball		
Distance throw:		
Do 3-4 max throws, measure the longest, do standing throw, 3 step throw	Max meters	
You can use a turbojav, tennis ball, cricket or baseball		

Grassroots All level training

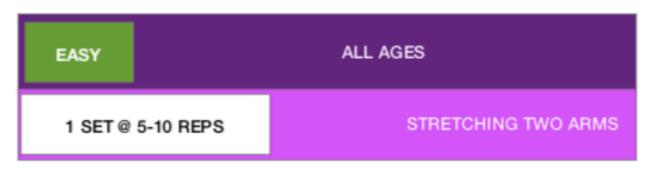




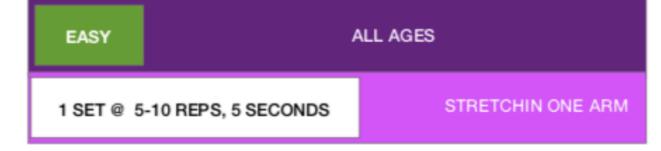


Flexibility

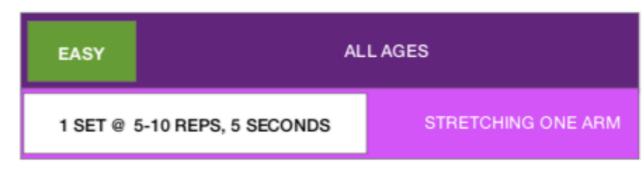
Flexibility drills

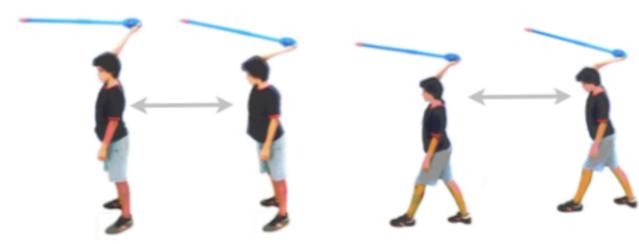












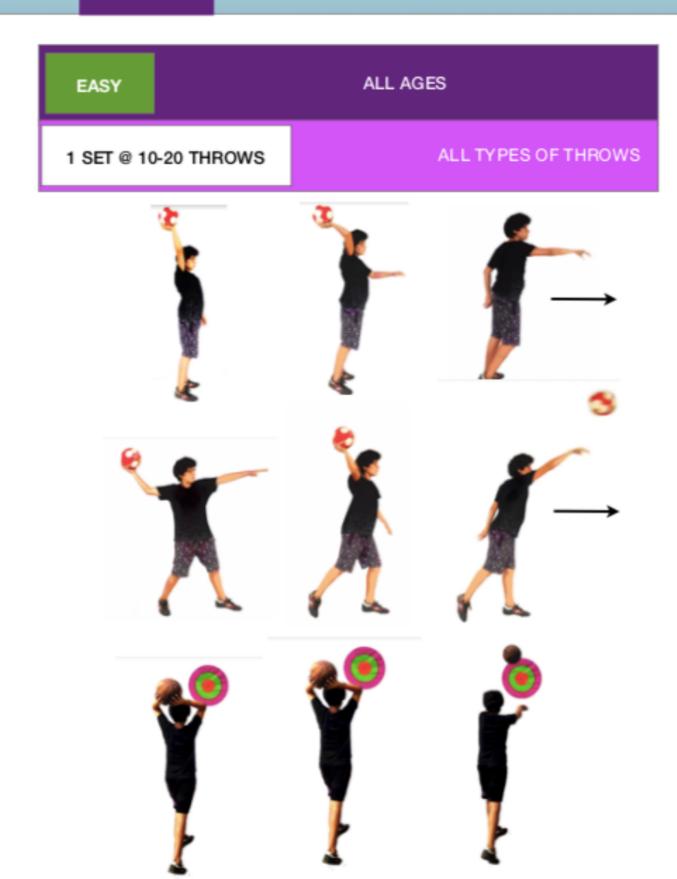
EASY	ALL AGES	
1 SET @ 5-10 REPS, 5 S	SECONDS STRETCHING ONE ARM	





Throwing Drills

Flexibility drills





Note: ACCURACY Throwing drills are extremely important because they will help an athlete improve the throwing mechanics, strength, flexibility and power.

Start doing clean, easy throws, and add gradually more speed and power. We never throw full intensity, as you will end up hurting yourself. Most of the throws have to be in 50% intensity (50-60%), and add another 30% of all throws at 70%,, and finish the 20% with throws of around 80-85%.

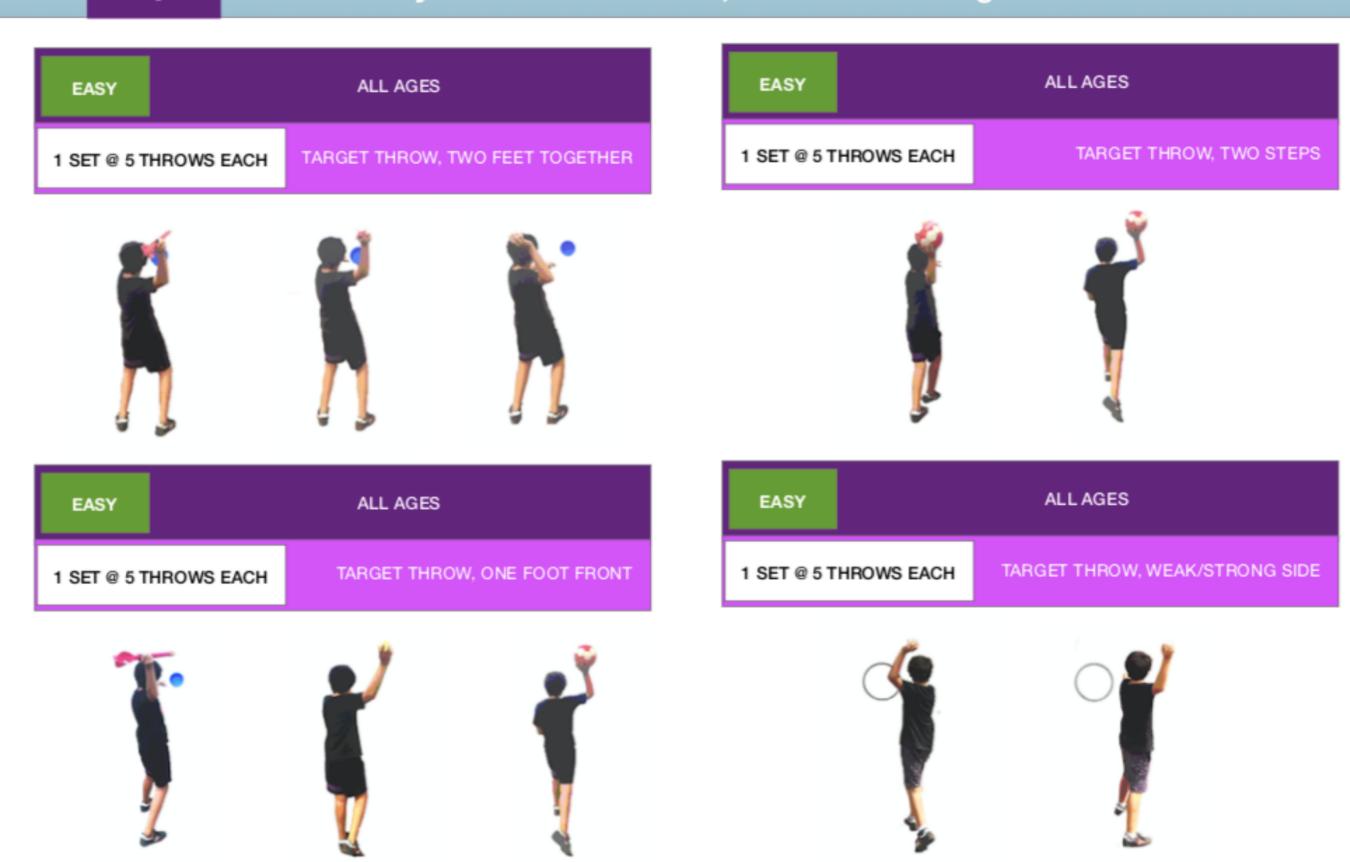
MIX 3-5 STEP THROWS, ALWAYS DO STRONG AND WEAK SIDE. FOCUS ON PROPER TECHNIQUE. THROW EASY AND CLEAN, AND GRADUALLY INCREASE POWER AND SPEED.

MIX DIFFERENT BALLS, BASKETBALL, CRICKETBALL, BASEBALL, TURBOJAV

Throw ZONE League

Throwing Drills

Accuracy with different balls, weak and strong side



Throwing Drills

Turbojav drills



Throwing Drills

Turbojav drills



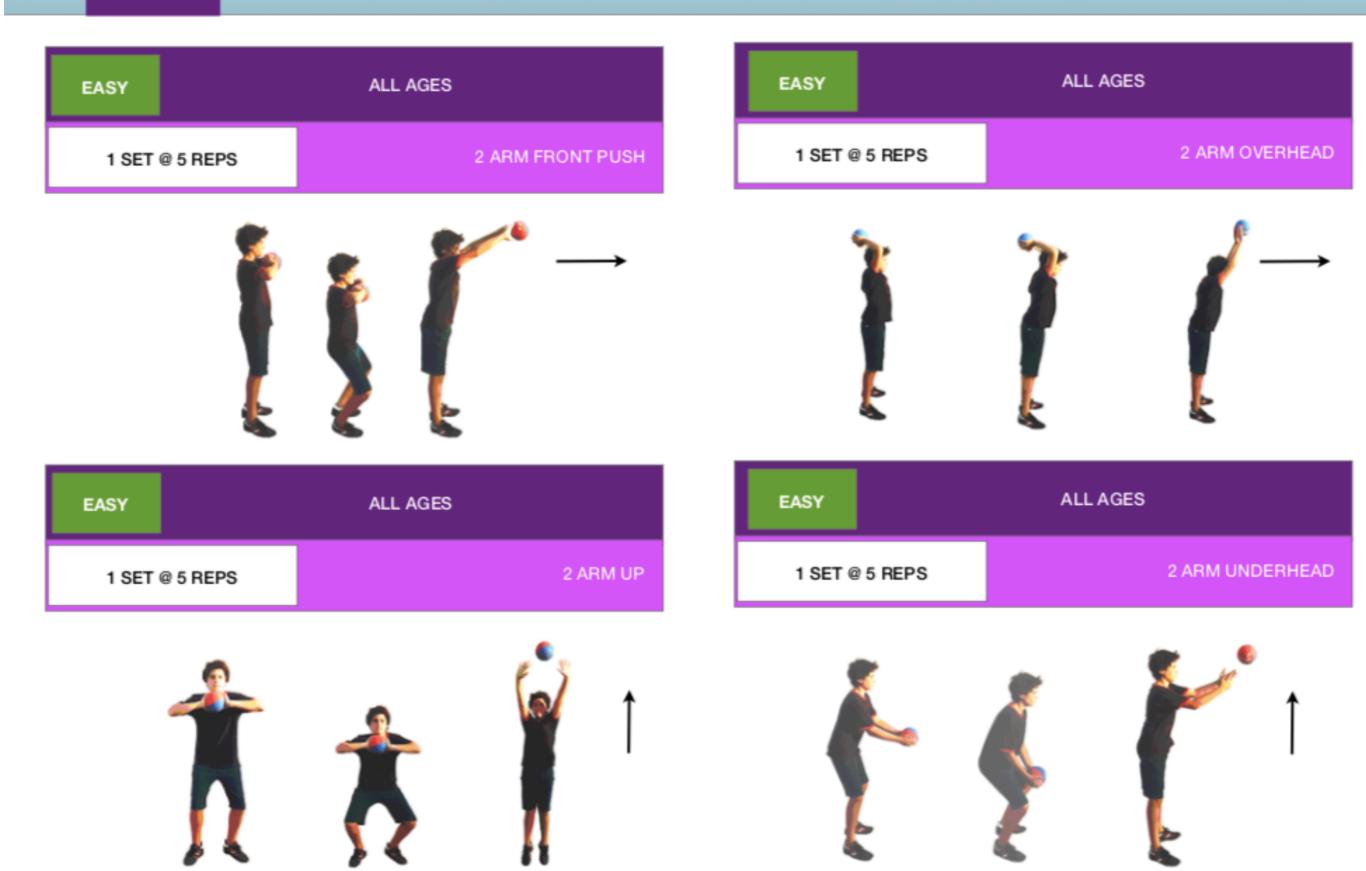


EASY	ALL AGES		
1 SET @ 5 THROWS	KNEE THROW		



Advanced Training Drills







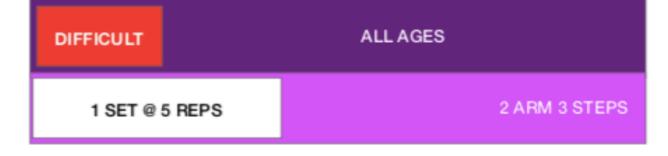








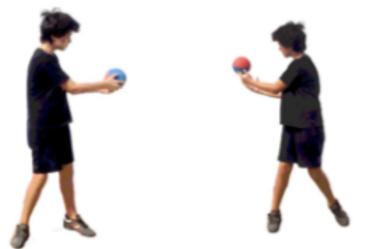












DIFFICULT	ALL AGES
1 SET @ 5 REPS	2 ARM , SIT PUSH











DIFFICULT	ALL AGES
1 SET @ 5 REPS	2 ARM , SIT PUSH

















DIFFICULT	ALL AGES
1 SET @ 5 REPS	2 ARM BEND KNEE LIFT HIP THROW



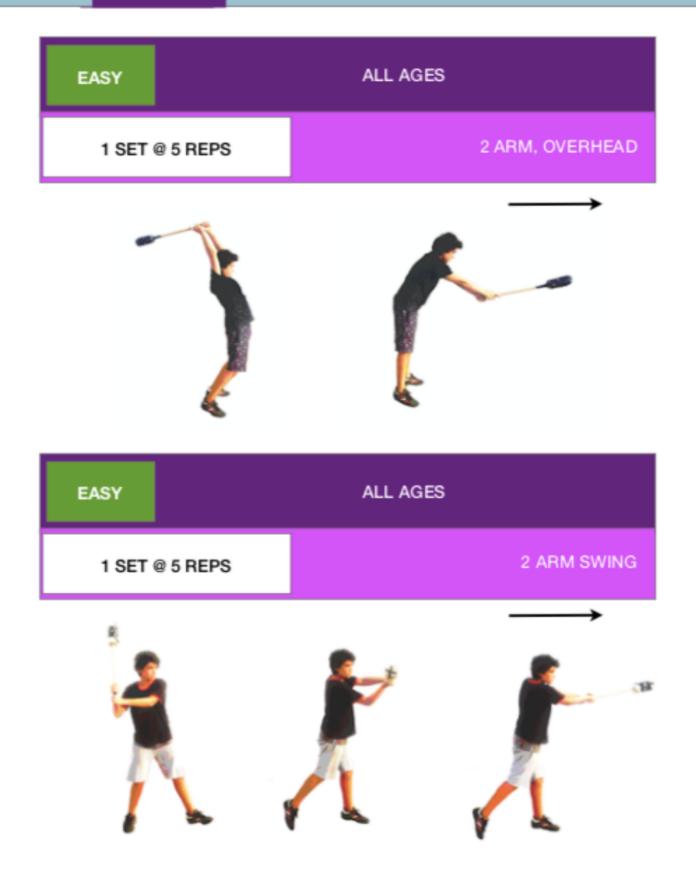


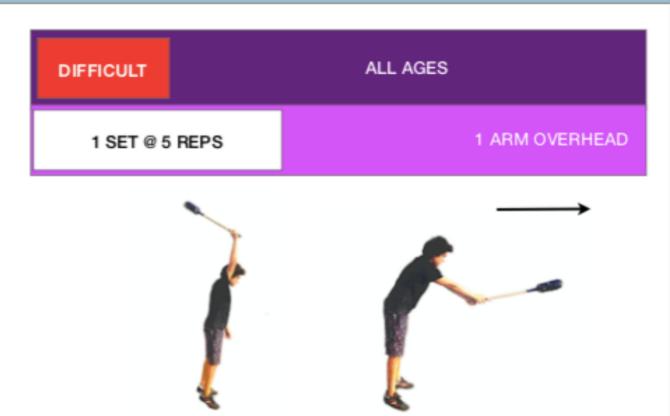


Throw ZONE League

Advanced Training

Hammer Drills





Note:

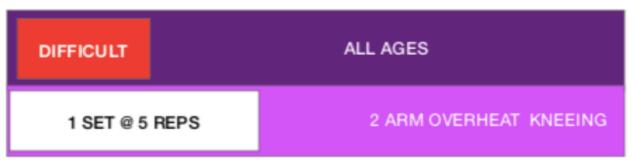
Hammer drills are extremely important drill exercise that will help an athlete improve strength, flexibility and power. Start doing slow circles and get a feel for the hammer. It should weight aprox. 500-1000g for kids up to 10, and 1000g for kids up to 12, and 1500 for youth starting at 14 years of age. Do them with the right and left side.

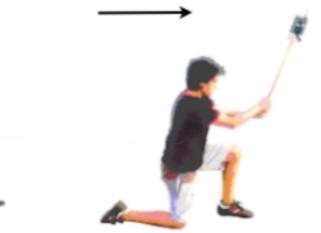
Use 1kg Hammer that you can make at home, using towel, tape and broom cut in 2.

Throw ZONE League

Advanced Training

Hammer Drills







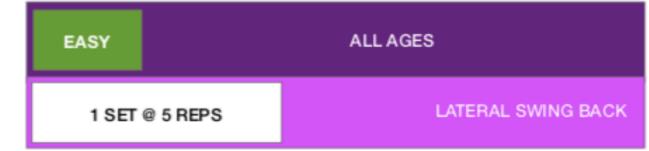


DIFFICULT	ALL AGES
1 SET @ 5 REPS	1 ARM ORVERHEAT KNEEING



Hammer Drills

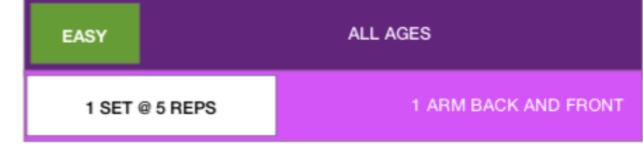
















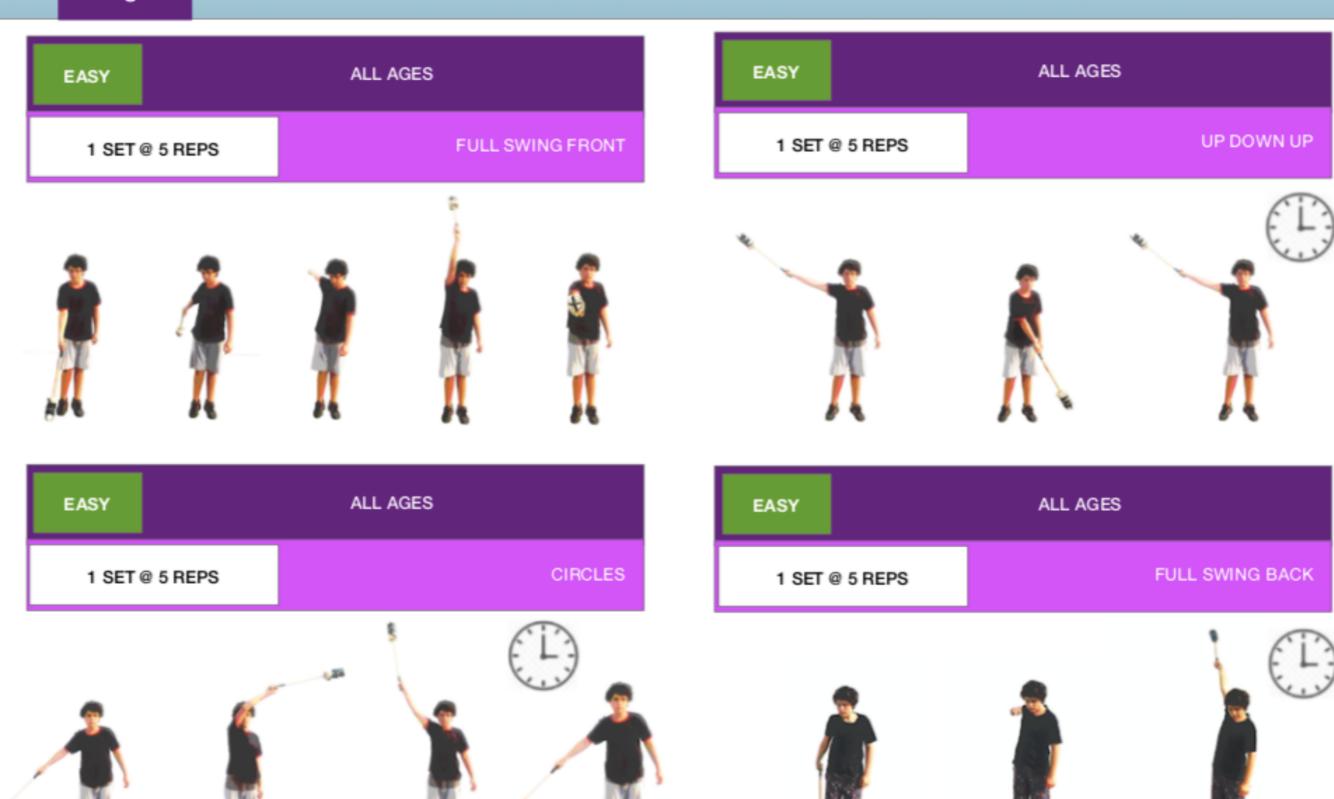








Hammer Drills



Advanced Training

Rubberband Drills









Note:

Do all all rubberband excercises gently, and start slow and increase gradually the resistance and never do them fast. Increase the amount of reps over time, or buy a stronger rubberband,

EASY	ALL AGES
1 SET @ 10 REPS	FRONT PULL













Advanced Training

Rubberband Drills













EASY	ALL AGES
1 SET @ 10 REPS	THROW IMMITATION

EASY	ALL AGES	
1 SET @ 10 REPS	HIGH DOWN LATERAL PULL	







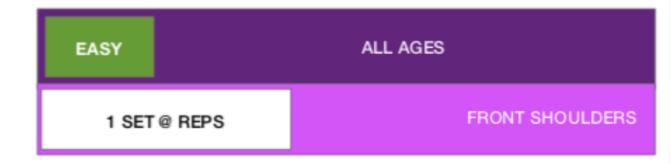




Advanced Training

Rubberband Drills













EASY	ALL AGES	
1 SET @ 10 REPS		BICEPS

EASY		ALL AGES	
1 SET@	REPS		SHOULDER PRESS





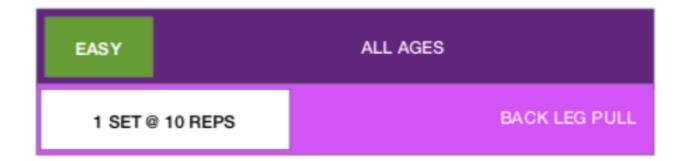




Advanced Training

Rubberband Drills













EASY	ALL AGES	
1 SET @ 10 REPS	GF	ROIN

EASY		ALL AGES	
1 SET@	10 REPS		FRONT LEG PULL





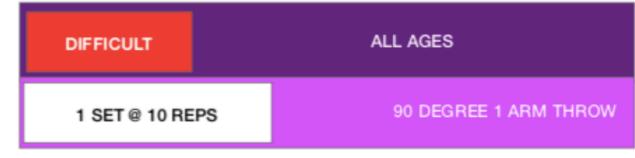




Advanced Training

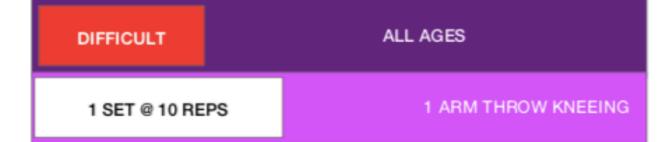
Elite Medicine ball Drills











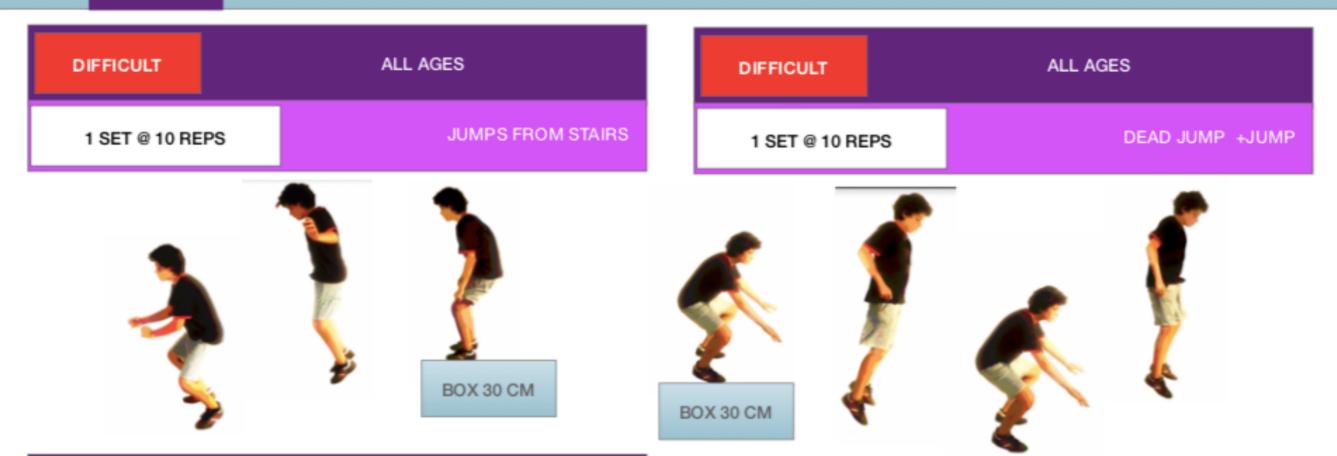
DIFFICULT	ALL AGES	
1 SET @ 10 REPS	1 ARM THROW STANDING	





Advanced Training

Elite Jump Drills



DIFFICULT	ALL AGES	
1 SET @ 10 REPS	JUMPS TO STAIRS	



Advanced Training

Elite Rubberband Running Drills

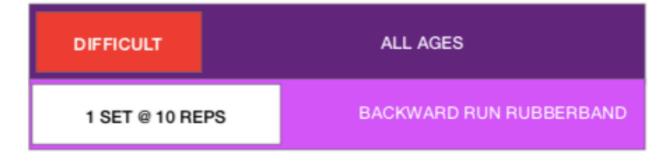








DIFFICULT	ALL AGES	
1 SET @ 10 REPS	LATERAL WALK RUBBERBAND	





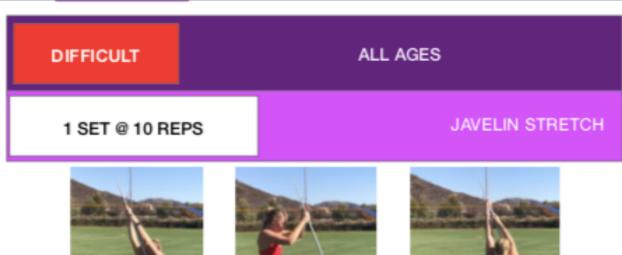




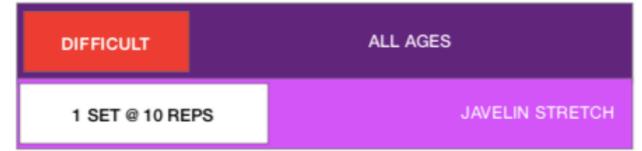


Advanced Training

Elite Javelin Flexibility Drills



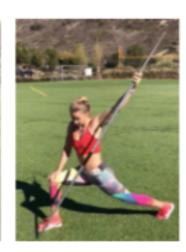


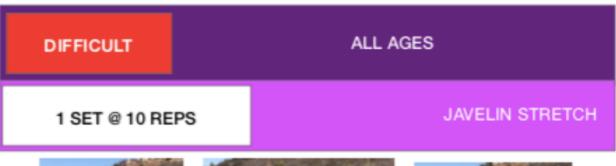


















DIFFICULT ALL AGES

1 SET @ 10 REPS

JAVELIN STRETCH







Advanced Training

Elite Flexibility & Gymnastics Drills







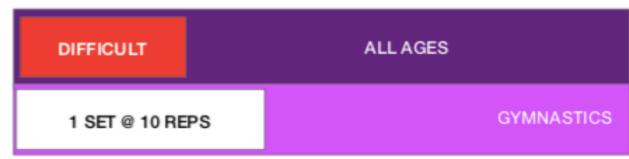














DIFFICULT ALL AGES

1 SET @ 10 REPS GYMNASTICS









Advanced Training

Elite Flexibility & Gymnastics Drills

















Advanced Training

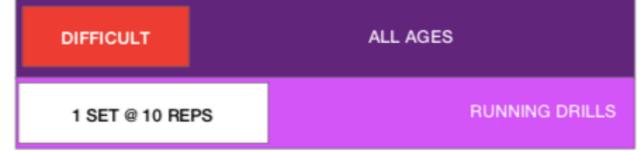
Elite Running & Diverse Drills

DIFFICULT ALL AGES

1 SET @ 10 REPS

RUNNING DRILLS

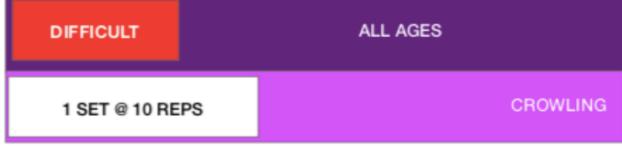


















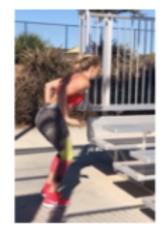
Advanced Training

Elite Jump Drills

DIFFICULT YOUTH JUNIOR SENIOR 2 SET @ 10 REPS

JUMPS

JUNIOR-SENIOR **DIFFICULT DEAD JUMPS** 2 SET @ 10 REPS







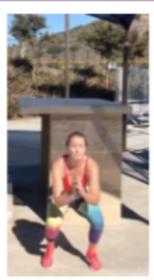










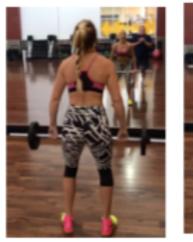


Advanced Training

Elite Weight Lifting

DIFFICULT JUNIOR-SENIOR

CHECK EXCEL WEIGHT LIFTING







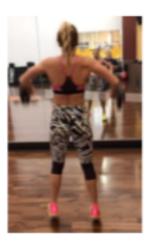














DIFFICULT JUNIOR-SENIOR

CHECK EXCEL WEIGHT LIFTING









Advanced Training

Elite Weight Lifting



















DIFFICULT JUNIOR-SENIOR

CHECK EXCEL WEIGHT LIFTING

















Advanced Training

Elite Plate Drills

DIFFICULT

JUNIOR-SENIOR

2 SET @ 10 REPS

PLATE DRILLS



2 SET @ 10 REPS

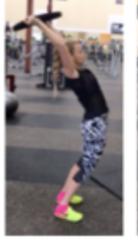
PLATE DRILLS













DIFFICULT

JUNIOR-SENIOR

2 SET @ 10 REPS

PLATE DRILLS

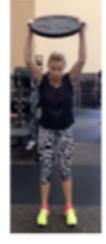
DIFFICULT

JUNIOR-SENIOR

2 SET @ 10 REPS

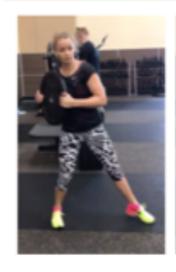
PLATE DRILLS

















Advanced Training

Elite Plate Drills

1 SET @ 10 REPS

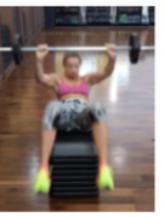
JUNIOR-SENIOR

WEIGHT LIFTING

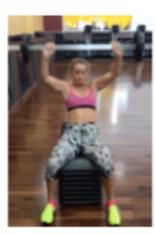
JUNIOR-SENIOR

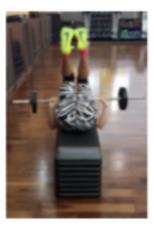
1 SET @ 10 REPS

WEIGHT LIFTING



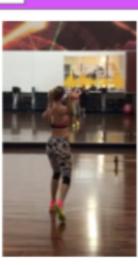


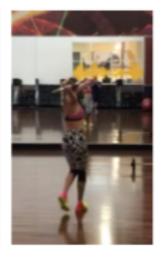












1 SET @ 10 REPS

JUNIOR-SENIOR

WEIGHT LIFTING

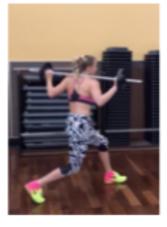
DIFFICULT JUNIOR-SENIOR

CHECK EXCEL WEIGHT LIFTING

















Beginner training day:

TAAT test (Do these tests at least 1 x month

Warm up, 10 minutes jogging, stretching, light running drills, jumping drills

TAAT Tests to be done:

30 m sprint

Standing long jump, standing triple jump

Distance: Standing throw, 3 step throw, strong and weak side

Medicine ball throw: Two arm throw: overhead, under head, backward

Target throw: standing, three step, jogging

Flexibility: two arm back and forward, measure your distance between hands

Beginner training day: Approx.. 50 minutes, 2-3 times per week

10 minutes Warm up jogging, stretching, light running drills, jumping drills

10 minutes Target Games (Strong side, weak side, use our Turbojavs, Baseballs or Softballs. Target should be 10 meters away, once the athlete masters the distance, move target away to 20 meters.

15 minutes Technical Session:

standing two hands, standing overhead, standing drawback, walking throw overhead, walking throw drawback, three steps, 5 steps, 7 steps

10 minutes Fitness: Beginners

5 minutes cool down

Youth Elite-Javelin training day: Approx.. 70 minutes, 2-3 times per week

10 minutes Warm up jogging, stretching, light running drills, jumping drills

10 minutes Target Games

20 minutes Technical Session with Javelin: 5 throws each, standing two hands, standing overhead, standing drawback, walking throw overhead, walking throw drawback, three steps, 5 steps, 7 steps, full run throw

10 minutes basic fitness

15 minutes Advanced Fitness: Advanced throwers

5 minutes cool down

Youth Elite-training day: Approx.. 60 minutes, 2-3 times per week

10 minutes Warm up jogging, stretching, light running drills, jumping drills

45 minutes Weight training

10 minutes specialty drills

5 minutes cool down



Beginner training day: TAAT test

Warm up, 10 minutes jogging, stretching, light running drills, jumping drills

TAAT Tests to be done:

30 m sprint

Standing long jump, standing triple jump

Distance: Standing throw, 3 step throw, strong and weak side

Medicine ball throw: Two arm throw: overhead, under head, backward

Target throw: standing, three step, jogging

Flexibility: two arm back and forward, measure your distance between hands

Beginner training day: Approx.. 50 minutes, 2-3 times per week

10 minutes Warm up jogging, stretching, light running drills, jumping drills

10 minutes Target Games

15 minutes Technical Session: standing two hands, standing overhead, standing drawback, walking throw overhead, walking throw drawback, three steps, 5 steps, 7 steps

10 minutes Fitness: Beginners

5 minutes cool down

For detalied training setup, check excel sheet

Advanced training day: Approx.. 70 minutes, 2-3 times per week

10 minutes Warm up jogging, stretching, light running drills, jumping drills

10 minutes Target Games

20 minutes Technical Session: standing two hands, standing overhead, standing drawback, walking throw overhead, walking throw drawback, three steps, 5 steps, 7 steps

10 minutes basic fitness

15 minutes Advanced Fitness: Advanced throwers

5 minutes cool down

For detalied training setup, check excel sheet

Elite-training day: Approx.. 70 minutes, 2-3 times per week

10 minutes Warm up jogging, stretching, light running drills, jumping drills

10 minutes Target Games

20 minutes Technical Session: 5 throws each, standing two hands, standing overhead, standing drawback, walking throw overhead, walking throw drawback, three steps, 5 steps, 7 steps

10 minutes basic fitness

15 minutes Advanced Fitness: Advanced throwers

5 minutes cool down

For detalied training setup, check excel sheet

Youth Elite-Javelin training day: Approx.. 70 minutes, 2-3 times per week

10 minutes Warm up jogging, stretching, light running drills, jumping drills

10 minutes Target Games

20 minutes Technical Session with Javelin: 5 throws each, standing two hands, standing overhead, standing drawback, walking throw overhead, walking throw drawback, three steps, 5 steps, 7 steps, full run throw

10 minutes basic fitness

15 minutes Advanced Fitness: Advanced throwers

5 minutes cool down

For detalled training setup, check excel sheet

Youth Elite-training day: Approx.. 60 minutes, 2-3 times per week

10 minutes Warm up jogging, stretching, light running drills, jumping drills

45 minutes Weight training

10 minutes specialty drills

5 minutes cool down

For detalled training setup, check excel sheet

India Fastest Arms Day

10 minutes Warm up jogging, stretching, light running drills, jumping drills

10 minutes TAAT testing

Explain the rules: 3 throws each participants,

Lets begin:

Accuracy test: 10 meter (below 12), 15 meters (below 16), 20 meters (below 20). Test from standing, three steps

Longest throw test: Test from standing, three steps