NAVY Fitness

LETTER OF INTRODUCTION
Hello Softball Player,

Welcome to another season of Navy Softball. As you know the sport of softball at times is a very explosive and fast paced sport. Every year players are becoming bigger, stronger, and faster. With faster and stronger athletes as your competition you as an athlete must be prepared. The importance of coming into the season in the best shape possible is at the utmost priority. By coming into a season out of shape you are already behind your competition that has been training for the whole off-season. This is what separates the good players from the mediocre ones. Championship teams and players come into the season in shape and only improve from then on. Mediocre players come into the season out of shape and are always trying to catch up with the winning teams the whole season. Remember you cannot play yourself into shape. You must prepare before you win a championship not prepare as you are trying to win a championship.

The importance of employing a pre season conditioning program for softball is critical for the prevention of injuries. Scientifically based programs will get you into the best shape possible for the upcoming season. The following program will help get into shape for the season and with a little luck will keep you injury free. Remember you do not help the team if you are on the sidelines nursing an injury that could have been prevented. Enjoy the program and enjoy your upcoming softball season.

Good Luck and Have Fun,

Marc J. Meeker
Programs Manager Navy Fitness
WARM UP
WARM UP

The key to beginning any training program is to get the body ready for activity. This is done by doing a combination of static and dynamic movements to bring blood to the muscles that will be worked during the training period. Static Stretching is stretching, using slow, controlled stretches, held in position for a period of time. Dynamic Stretching is repeated, fluid, gentle dynamic-range movements.

You should stretch at the following times:

- Before exercise, practice, and competition
- During exercise, practice, and competition
- Following Exercise, practice, and competition

This is done to increase the following to prepare you for exercise:

- Heart Rate
- Blood Flow
- Deep Muscle Temperature
- Respiration Rate
- Viscosity of Joint Fluids
- Perspiration
- Flexibility

Additionally for those who lack sufficient flexibility, extra stretching sessions during free time may be both relaxing and beneficial. Stretching can be done at night before going to bed, sitting watching TV or after a hot shower when you feel more relaxed.

*Consistency and time in a stretching program will show improvements in flexibility*

Softball requires a large amount of flexibility from the legs, core muscles, and upper body especially the shoulders. If any one of these areas is inflexible it could hurt your game tremendously. This is why it is very important to make sure you stretch every time before and after playing, train, and feel tight. On the next few pages we will go through a basic stretching program that will include both static and dynamic movements to improve your flexibility while on the field.
SOFTBALL WORKOUT WARM UP

1. Begin a general warm-up period, which may consist of 2-5 minutes of slow jogging or riding a stationary Bike.

2. At the completion of the general warm-up period, mark off approximately a 15-yard area with cones. Perform the following dynamic stretches.

**Dynamic Stretches**
*(Done in the following order) Exercises are done using 50% effort. Stay relaxed and emphasize on technique rather than speed.*

1. Skipping – Down and Back
2. Walking Lunges – Down and Back
3. Side Shuffle – Down and back facing the same direction the whole time.
4. Backwards – Down and Back
5. High Knees- Down and Back

At the completion of the dynamic movements immediately perform the following static stretches to complete the warm-up.

**Static Stretches**
*(Progress from upper body stretch to lower body stretch. Stretches are to be held for approximately 30 seconds)*

**Upper Body:**
1. Neck Stretch
2. Chest Stretch
3. Triceps Stretch
4. Shoulder Stretch & Upper Back Stretch

**Lower Body:**
1. Groin Stretch (Butterfly)
2. V-Sit w/ Calf Stretch
3. Knees Side to Side
4. Quad Stretch
5. Back Extensions

After performing the static stretch portion of the warm-up you will roll over onto your back and perform the following abdominal exercises.

- Crunches x15
- X Crunches x15
- Y Crunches x15
- R Leg Up x15
- L Leg Up x15

This will complete your warm up. You are now ready to begin your workout. Depending on what day it is will determine what activity you will perform first either speed or plyometrics.
DYNAMIC MOVEMENTS EXPLANATION

Skipping - Starting from a standing position place one foot slightly ahead of the other. Push off with your back leg, drive the lead knee up to the chest, and try to gain as much height and distance as possible. Continue by immediately driving with the other leg on landing. Repeat for desired distance (2x15 yds)

Walking Lunges - Starting from a standing position take a step forward and go into a deep lunge position. Once getting into a deep lunge position repeat the movement with the opposite leg moving forward each time. (2x15yds)

Side Shuffle - Starting standing sideways then sit down into a deep squat position. Once in this position, take a lateral step sideways and then replace it with the other foot. Keep your chest up at all times. Do not cross your feet. (2x15)

Backwards Run - Standing with your back facing the direction you are going, place yourself in a low position. Stay low and step backwards using proper arm motion keeping low throughout the entire distance. (2x15)

High Knees - Starting in a standing position take a step forward driving your knee up as high as you can. Staying on the balls of your feet repeat the motion with your other leg. Repeat this motion as many times as possible in the desired distance. (2x15)

UPPER BODY STRETCH EXPLANATION
(Some explanations taken from “Sport Stretch,” Alter, 1990)

Neck Stretch-
1. Stand or sit upright on the floor
2. Lower your chin so it is touching your upper chest
3. Look from side to side while your chin remains tight to your chest
4. This should create a “U” movement. Continue movement for approximately 30 seconds.

Chest Stretch-
1. Stand upright facing a corner or open doorway or use a partner.
2. Raise your arms in a reverse “T” (elbows below your shoulders) to stretch the collarbone section of your pectoral muscles bilaterally.
3. Exhale, and lean your entire body forward.
4. Hold the stretch for approximately 30 seconds.

Triceps Stretch-
1. Sit or stand upright with one arm flexed and raised overhead next to your ear, and your hand resting on your shoulder blade.
2. Grasp your elbow with the opposite hand.
3. Exhale, and pull your elbow behind your head.
4. Hold the stretch for approximately 30 seconds.

**Shoulders and Upper Back Stretch**
1. Sit or stand upright while bringing your arm across your body while keeping it straight.
2. Grasp your elbow with the opposite hand.
3. Exhale and press on the elbow
4. Hold stretch for approximately 30 seconds.

**LOWER BODY STRETCH EXPLANATION**

**Groin Stretch**
1. Sit upright on the floor.
2. Flex your knees and bring the heels and soles of your feet together as you pull them towards your butt.
3. Place your elbows on the inside portion of both upper legs.
4. Exhale, and slowly push your legs to the floor.
   Hold the stretch for approximately 30 seconds then repeat with other leg.

**V-Sit with Calf Stretch**
1. Sit on floor with legs spread wide.
2. Keep the legs straight and bend at the hips looking toward and reaching for the right leg.
3. Grab your toes and pull them towards you to stretch both the calf and hamstrings.
4. Maintain an upright chest position at all times.
5. Repeat to the other leg.

**Knees Side to Side**
1. Lay on your back with your knees bent and feet on the floor.
2. Roll your knees side to side without your feet coming off the floor.
3. Repeat back and forth for approximately 30 seconds.

**Quad Stretch**
1. Lie face down with your body extended.
2. Flex one leg and bring your heel towards your butt.
3. Exhale, swing your arm back to grasp your ankle, and pull your heel toward your butt without over compressing the knee.
4. Hold the stretch for approximately 30 seconds then repeat with other leg.

**Back Extension Stretch**
1. Lay on your stomach in a push-up position
2. Arch up keeping your hips on the ground.
3. Complete 5 repetitions lasting for 5 seconds each
PLYOMETRICS

Plyometrics is defined as exercises that enable a muscle to reach maximum strength in as short a time as possible. In softball you will be performing many quick and explosive movements. Plyometrics will aid in softball by training the muscles used to be faster and stronger thus creating more force resulting in quicker movements from point a to b. Below is the plyometric workout that will be done before your strength training on days two and four. Any throwing or passing movements will be done with a 5lb – 10lb Medicine ball.

**Plyometric Workout #1**

Two Foot Ankle Hops 2x 5-10  
Lateral Step Ups 2x 5-10  
Standing Long Jumps w/Sprint 2x 5-10  
Side Throws 2x 5-10  
Overhead Throws 2x 5-10

**Plyometric Workout #2**

Cone Hops 2x 5-10  
Hexagon Drill 2x 5  
Explosive Backpedals 2x 5-10  
90 Degree Single Arm Ball Throw 2x 5-10  
Slow to Fast Bat Swings 2x 5-10

**PLYOMETRIC EXPLANATION**

**Two Foot Ankle Hops**

1. Start with both feet approximately shoulder width apart.
2. Using only the ankles for momentum, hop continuously in one place.
3. Extend the ankles to their maximum range on each jump.
4. Repeat continuously for given number of repetitions.

**Lateral Step Ups**

1. Stand to the side of a box or bench and place your foot closest to the side of the box on the bench or box.
2. Explode up onto the bench using the leg that is positioned on top of the box as the main mover.
3. Once both feet are on top of the box take the same leg that was on top of the box and lower it down to the ground on the opposite side of the box. Leaving the leg that was originally on the ground when the motion started on top of the bench or box.
4. Repeat same movement with opposite leg to return to the starting position.
5. Repeat for given number or repetitions per side.
Standing Long Jumps w/Sprint
1. Start with the feet shoulder width apart and in a semi squat position.
2. Using your arms for momentum forcefully swing them forward while jumping as far out as you can with two feet.
3. Immediately on your landing sprint forward for approximately 20 feet.
4. This should be a continuous movement without a pause from the jump to the sprint.
5. Complete for desired amount of repetitions.

Side Throws
1. Either have a partner or stand next to a wall to start.
2. Hold a medicine ball on your right side and standing with your left shoulder towards a wall.
3. Rotate your hips to the right as far as they can go like you would be ready for a swing.
4. At maximum rotation forcefully turn your body the other way as if you were swinging a bat.
5. At this point you will either toss the ball to your partner or against the wall.
6. Complete for desired amount of repetitions.

Overhead Throw
1. Stand with your feet shoulder width apart while holding a medicine ball overhead.
2. Step forwards and throw the ball with both arms to a partner or into a wall.
3. Repeat for given number of repetitions.

Lateral Cone Hops
1. Place a single cone on the ground and position yourself directly beside it.
2. Starting from a slight knee bent position jump laterally over the cone to the other side.
3. Immediately upon landing on the other side jump back over the cone to the other side to complete the repetition.
4. Repeat for given number of repetitions.

Hexagon Drill
1. Place a hexagon of tape on the floor with sides about 24 inches long.
2. Stand in the center of the hexagon with feet shoulder width apart.
3. Jump across on side of the hexagon and back to the center.
4. Proceed to jump each side of the hexagon and back to complete one rotation.
5. Repeat for given number or repetitions.

Explosive Backpedals
1. Standing backwards towards an open area with feet shoulder width apart.
2. Thrust backwards with either leg as if you were going to sprint backwards.
3. Once your rear foot has landed bring your front foot back in alignment with the other.
4. Repeat the same movement but on the opposite leg to complete one repetition.
90 Degree Single Arm Ball Throws
1. Grab a rubber ball the size of a baseball or a very light medicine ball (no more than two pounds)
2. Stand facing a wall and bend your arm so that there is a 90-degree bend in alignment with your shoulder.
3. Take the rubber ball or med ball in your hand and throw it against the wall rotating at the elbow not the shoulder.
4. Ball should rebound to your hand once thrown.
5. Repeat for given number of repetitions them switch arms.

Slow to Fast Bat Swings
1. Grab a regular softball or weighted bat and take your standard stance you use.
2. Starting with the bat in front of you slowly swing the bat to the top of your regular stance.
3. At the farthest rotation immediately swing the bat forward as fast as possible.
4. Repeat the same motion again slow back fast forward for desired amount of repetitions.
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SPEED
SPEED

Speed is usually what separates the average teams from the great teams. Teams that are faster do not always have the best athletes but what they lack in athleticism they make up with speed. Speed for the most part is a genetically given gift. However, we can be more efficient in our movements to move faster. By moving more then we have to could cause a loss in speed. By streamlining our movements and training our bodies to react faster we can get our full potential out of our given speed. One key to getting faster is to lose body fat. Excess weight will just slow you down. Below are a few drills that can help you increase your present speed levels. This workout will be done in conjunction with your agility drills. All speed work should be completed before lifting.

Quick Starts x5

10’s x one complete cycle

Get Up and Go’s x5

30Yard Stride-Outs (85% Effort) x3

30 Yard Sprints (100% Effort) x3

SPEED EXPLANATION

Quick Starts-
1. Mark off a 10 yard area with cones
2. Start at one end of the 10 yard area
3. On a set go command pump your arms and move your feet as fast as possible for the complete 10 yards.
4. The movement should be over exaggerated emphasizing on the arm swing and quick foot stride.
5. Complete for desired number of repetitions.

10’s-
1. Use the same 10-yard course that was used in the quick starts.
2. You will be completing 5 different drills in this exercise.
3. All drills will start at one end of the 10-yard course.
4. First drill sprint 10 yards as fast as you can. Turn around and complete the sprint again to your starting point.
5. Second drill sprint 10 yards as fast as you can but at the end plant your foot and immediately backpedal 10 yards. Complete this drill twice.
6. Third drill position yourself into a four-point stance like a sprinter would at the beginning of a race. Feet should be slightly staggered with the dominant leg towards the front. Balance yourself completely on your front foot while lifting your rear foot
off the ground. Forcefully explode off your front foot and sprint for 10 yards. Turn around and complete this drill again to return to the starting point.

7. Fourth drill position yourself into a four-point stance like a sprinter would be at the beginning of a race. Feet should be slightly staggered with the dominant leg towards the front. Balance yourself completely on your back leg while lifting up your front leg. Forcefully explode with your rear foot and sprint for 10 yards. Turn around and complete this drill again to return to the starting point.

GET UP AND GO’s
1. Again use the 10 yard course you have used in the previous drills.
2. Start on your stomach, head behind the starting line
3. On command or on your own
4. Explode off the ground and sprint the full 10 yards.
8. Turn around and complete the same action and return to your starting point.

30 YARD STRIDE-OUTS (85% EFFORT)
1. Starting out of a side stance as if you were stealing a base.
2. Explode out of your stance for a 100% start.
3. Stay low for 3 yards then stand tall.
4. Throttle back to 85% effort.
5. Finish with high knee action and long stride length.
6. Jog back to starting line and complete for required number of repetitions

30 YARD SPRINTS (100% Effort)
1. Starting out of a side stance as if you were stealing a base.
2. Explode out of your stance for a 100% start.
3. Sprint 30 yards with 100% effort.
4. Stand tall, relax, high knees, and long strides
5. Jog back to starting line and complete for required number of repetitions.
AGILITY

Having good agility on the field of play will just magnify your athletic ability. You will have the potential to make impossible moves look easy because your body will already know how to respond in certain situations safely. Agility drills places your body in movement situations that are not normally encountered in every day life. By preparing your body to be placed in these awkward situations you will be less prone to an injury during the season. This is why a good general agility program should be included in any year-round training program. Below are three drills that will prepare you for most of the movements you will encounter during your upcoming season.

Four Corner Drill x3

Pro Agility Drill x5

Triangle Drill x5

Explanation of Agility Drills

FOUR CORNER DRILL

The four-corner drill is a combination of

a.) Sprint
b.) Shuffle
c.) Carioca,
d.) Backpedal

1. Start with a 5 yard sprint then
2. 5 Yard Shuffle
3. 5 Yard carioca then
4. 5 Yard backpedal

Key: Reverse direction with each repetition
- Face towards the inside of square during the carioca and shuffle

Sprint
Backpedal
Shuffle
Carioca
**PRO AGILITY**

1. Straddle the middle line in a three-point stance with your hand on the middle line.
2. Sprint to the right line touch it with your right hand.
3. Sprint to the far-left line and touch it with your left hand.
4. Finish by sprinting back to the right, through the middle line.

Key: Face forward (towards the start) throughout the drill do not turn 180 degrees at the outside touch lines.

**TRIANGLE DRILL**

1. Start at the first base side of the triangle and sprint towards the middle cone.
2. As you get near the middle cone start to take choppy steps and slow down once you touch the middle cone with your foot immediately go into a shuffle towards the third base cone.
3. Once you touch the third base cone immediately backpedal back towards the middle cone once again.
4. Upon reaching the middle cone sprint back to the first base side to complete the drill.
5. Complete for 5 repetitions.
STRENGTH
Strength training has not always been a focus of most participants in softball. In the past it was thought that being stronger or more muscular could reduce bat speed and power. This was a huge falsity. Being stronger and more explosive will make you more of an asset to your team at all times. If you can develop yourself to be a more explosive softball player it will show huge dividends on the field of play. This, however, requires proper training and preparation way before the season even begins. Just going into the weight room and lifting does not always result in improvements on the field of play. You must emphasize on those muscle groups and movements that will benefit you the most while you are playing. Proper preparation through strength training for an upcoming season will prevent injuries and will improve your output for your team making you a valuable asset.

Below is a four-day workout. Every week you will be training the entire body twice. This means that every two days you will be working every major muscle group in the body. There is one day of rest before you work the entire body again mid week and a two-day rest period is then taken on the weekends.

**Day One**
Back Squats 3x8-10
Jump Squats 2x6
Calf Raise W/Bar 2x12
DB Shoulder Press 3x8-10
45 Degree Rear Delt Raise 2x8-10
DB Shrugs 2x10-12
EZ Curls 2x10-12
Bar Hangs 2xALAP (as long as possible)

**Day Two**
Incline Bench Press 3x8-10
DB Bench Press 2x10
Push Ups 2x25
Lat Pulldowns 2x10
One Arm DB Rows 2x10
Hyperextensions 2x10
Tricep Pushdowns 2x10
Lying DB Extensions (Skull Crushers) 2x10

**Day Three**
Lunges 2x8-10
Wide Laterals 2x10 (each side)
RDL’s 2x10
Tibia Raises 2x10
Push Press 2x10
5 Way Shoulder 2x8
Reverse Shrugs 2x10
DB Curls 2x10
Plate Drops 2x20
**Day Four**
Bench Press 3x8-10
Incline DB Bench 2x10
Push-Ups Wide 2x25
Bent Over Rows 2x10
Mid Rows 2x10
Revers Hypers Off of Ball 2x10
Overhead Extension 2x10
Close Grip DB Press 2x10

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**CORE WORK**

At the base of every good softball player is a solid foundation in the mid-section. Without a strong midsection the transition of power from your hips to your legs and arms may not be as effective when trying to run after a ball or swing for the fences. Core work can be done at any time during the workout. Preferably it should be done after the warm up and before plyometrics. Core work can be done every day of the week but a minimum of three days is optimal for core strengthening. Below is a simple core strengthening workout that will aid in developing your mid-section.

**Core Workout:**

1. Crunches x50
2. Leg Lifts x30
3. Superman’s x20
4. Planks x 1 min
5. Bridges x 1 min
6. V-Sit Twists x30

**Core Work Explanation**

**Crunches** – Lying flat on your back on a padded surface. Bend your knees keeping your feet flat on the floor and bring them close to your butt. Place your hands either across your chest or behind your head. At that point contract your abdominal muscle so you are bringing your chest towards your knees. Make sure you rise up enough that your shoulder blades come up off the ground. Once you feel them come up off the ground return to your starting position and repeat for the desired number of repetitions. Exhale on the contraction portion of the exercise and inhale when you return to the starting position.

**Leg Lifts** – Lying flat on your back on a padded surface. Place your hands under your butt, elbows out so the small of your back is pressed against the floor, head up shoulder blades off the floor. Then extend your legs straight out, heels resting on the floor. Use the muscles of your lower AB’s to raise your legs until they are perpendicular to the body.
Then lower the legs in a controlled motion and repeat for the desired number of repetitions.

**Superman’s** – Lie facedown flat on the floor, leaving your arms at your side. Slowly raise your chest and feet off the floor as high as you comfortably can. Hold for two seconds and come back to the floor slowly and repeat for the desired number of repetitions.

**Bridges Core Stabilization** – Lie on the floor (on your back) hands at your sides. Push with your feet and shoulder blades to lift your butt off the ground and make a shoulder bridge. Your back should not be overly arched but in a flat neutral position. Hold this position for the desired amount of time.

**Planks**- Lie face down on the floor. Position your elbows at your sides with arms bent. Rise up on your forearms so that the only thing touching the floor is your toes and your forearms. Keep your body in a fairly rigid position keeping the butt down. You should look like a flat board from the side not an A frame. Hold for the desired amount of time. A towel or cushion under the arms will aid in the pressure from a hard floor.

**V-Sit Twists** – Lie flat on your back, legs extended straight (knees unlocked), heels resting on floor, arms extended overhead. Use AB’s to simultaneously raise your torso and legs together so you are in a V position balancing on your butt. Rotate your torso to the right and touch the floor beside you while still balancing with your torso and feet in the air. Once you touch one side immediately repeat to the other side. Once you complete both sides that is two repetitions.

**STRENGTH EXPLANATION**

**Lateral Pulldown** – Adjust seat to just reach handles and secure thighs under roller pads. Pull handles downward below chin level. Return slowly to starting position and repeat. Maintain erect posture.

**Mid Rows** – Sit so that hands can just reach top of handles. Pull handles backward as far as possible. Return slowly to starting position and repeat. Maintain erect posture. Keep chest against support pad throughout exercise.

**Calf Raise W/Bar** - While standing on a flat surface and holding the bar on your back as if you were in the starting position of the squat slowly rise up onto your toes in a controlled fashion. Once you reach the full extension on your toes slowly lower yourself to the starting position. Maintain neutral head position and a straight back with your chest up

**45 Degree Rear Delt Raise**- Position a 0-90 degree bench in the 45 degree position. Grab two DB’s before you position yourself on the bench. Sit backward on the seat so that your chest is facing towards the back support and your chest is supported. Let your
arms hang in front of you in a relaxed position. Slowly raise the DB’s out towards your sides while squeezing your shoulder blades together. Raise your arms until you are parallel with your back and chest. Repeat for desired number of repetitions.

**Lunges** – Starting on a flat surface holding two dumbbells in your hands. Step forward with one leg and bend at the knee. Upon reaching a 90-degree angle at the knee, forcefully push back with the stepping leg. Once returning to the beginning position repeat with the other leg. At no time should the stepping leg knee be past the toes. Keep an erect posture with your chest up and head in a neutral position.

**Incline DB Bench Press** – Set up a free bench so it is at 45 degrees. Pick up two dumbbells that you will be able to press for the desired amount of repetitions. Lift the dumbbells to your shoulders before you sit down on the bench. After sitting down on the bench press the dumbbells over your head in a slow and controlled manner keeping the dumbbells in alignment with your eyes until you are almost completely extended at the elbow. Lower the weight to the starting position and repeat. This exercise is done to develop the chest and deltoids.

**Triceps Pushdowns** - Stand with feet shoulder-width apart in front of a press-down cable. Grasp a V or straight bar with an overhand grip, elbows against sides, and hold at chest level. Push the bar downward until elbows are fully extended. Return slowly to starting position and repeat. Maintain neutral head position. Return the bar no higher than chest level between repetitions.

**Push-Ups**- Starting in an up position of the push-up with hands wider than your shoulders lower yourself to the floor and touch your chest. Upon touching your chest push yourself up to the starting position. Perform in control and not in a rapid-fire mode.

**Dumbbell Bench Press**- Pick up a set of DB’s that match your strength level. Carry them over to a flat bench. Sit down with the DB’s and place them upright on your knees and slowly pull them to your stomach and lay down at the same time. Take the DB’s out to your sides and position them like you would on a regular bench press. Press the DB’s up until the elbows are almost in a locked position. Lower slowly and repeat for desired number of repetitions.

**RDL’s**- Stand with feet fairly close together while holding a barbell with a shoulder width grip. Slowly stand erect keeping the bar close to the body. When erect, stick the butt and chest out and keep a slight bend in the knees. From there, all motion should be at the waist while maintaining the slight bend in the knees. From there, all motion should be at the waist while maintaining the slight bend in the knees. Slowly lower the weight as low as you can, focus on a straight back and stretching the hamstring. Begin the upward motion in a slow and controlled manner. Once the bar passes the knees, explode the hips through and shrug the bar straight up. Enough force should be produced to lift the feet off the floor to produce a small jump.
5 Way Shoulder- #1 Grab a 5-10 lb. Weight plate and stand in front of a mirror. While holding a plate in each hand bend your arms to a 90 degrees keeping your elbows tight to your sides. Cross your hands in front of you like you would be hugging yourself than take and uncross your arms and go past the starting position as far as you can without letting your elbows come away from your sides. #2 Position your arms like you are making a human goal post. Both arms should be bent at 90 degrees with your knuckles up still holding on to the plates. Rotating only at the elbow lower the weight so that you have an upside down field goal and the plates are at your sides with your arms still bent at a 90 degree angle. #3 Place your hands on the front of your thighs and rotate your thumb so you are poking the top of your thigh with it. Still holding on to the weight plate perform a front raise with the weight going no higher than eye level. #4 Take both plates back to the original starting position with 90 degrees elbows at your sides. Lift the elbows straight out to the sides like you would be pouring a pitcher of water performing a lateral raise. #5 Bend over at a 45-degree angle and place your palms facing you while your arms are extended. Lift the weights directly out to your sides while squeezing the upper portion of your back together. Repeat all exercises for 8 repetitions before moving on.

Back Squats- Rack the bar comfortably on your back. The feet should be slightly wider than shoulder width apart with the toes slightly pointed out. Your back must remain flat throughout the entire lift. Descend, maintaining control, to a depth where the top of the thigh is parallel. On the upward motion, the head should be straight with the eyes looking up as you accelerate the weight up. Focus on control during the lift.

Split Squats – Rack the bar comfortably on your back. Position your feet so you are in a wide split position with one foot to the front of you and one foot to the back. Your back must remain flat throughout the entire lift. Descend; maintain control, to a depth where the front thigh is almost parallel to the floor without your rear legs knee touching the floor. On the upward motion, the head should be straight with the eyes looking up as you accelerate the weight up. Once desired number of repetitions is completed on one leg switch to the other side to complete one set.

Bench Press- Done on a flat bench, use an overhand grip and keep palms facing away from you throughout the entire lift. The grip should be somewhere between the smooth inner part of the bar and the small ring towards the outside of the bar. Start from a locked out position with the bar directly over the chest. Lower the barbell with control and touch the mid-line of the chest. Explosively press the bar back to the starting position.

Hyperextensions- Position yourself in a hyperextension/ glute-ham machine so that you fit comfortably and are supported at the hips and you can bend to a complete 90-degree angle. Starting from a bent 90-degree position raise your torso to a 180-degree position. Do not go any higher than this position because of potential injury to the spine at higher degrees. Once at the 90-degree position lower yourself to the starting position again in a controlled manner. Complete for desired number of repetitions to complete one set.

Close Grip Dumbbell Press - Grab a pair of dumbbells from the rack and lay down on a flat bench. While lying down position the dumbbells so they are at your sides with a both
palms facing each other. Keeping elbows tight to your sides press the dumbbells upward until arms are straight. Lower back to starting position in a controlled manner. Complete desired number of repetitions to complete one set.

**Wide Laterals** - Better known as hockey lunges. Stand with the bar positioned high on your back comparable to where you put the squat bar. Take a very wide base so that your feet are at least three feet apart. At this point lunge to one side without moving your feet. Return to the starting position and repeat maneuver on the other leg. One complete motion side to side is one repetition. Complete for desired number of repetitions.

**Dumbbell Shrugs** - Pick up a pair of dumbbells and hold them at your sides. Shrug your shoulders upward towards your ears. Once your reach your top position lower back to your starting position and relax your shoulders. Complete for desired amount of repetitions to complete one set.

**Push Press to the Front** - Use a close handgrip that has the hands one thumb length away from the smooth inner part of the bar. Place the bar on the front part of your shoulders. At this point bend your knees quickly and accelerate the bar back up with your legs to complete a shoulder press. Lower the bar back to the starting position and again drive the bar overhead with help from your legs. This exercise should be slightly heavier than your normal shoulder press because of the help from the legs. Never arch your back to complete a repetition keep your knees slightly bent at all times.

**Incline Bench Press** – Set up an incline bench so it is at 45 degrees. Set up a bar with your desired weight. Remove the weight from the rack and lower the bar to the upper portions of your chest but no higher than the clavicle. Raise the weight to the starting position and repeat. Complete for desired number of repetitions.

**Reverse Hypers off of Physio Ball** - Position yourself chest down on a physio ball. Slowly roll yourself forwards overtop of the ball so your hips are on top of the ball and brace yourself with your arms in front of you. The ball should support your hips. Raise your legs off the ground in an upright manner to a 180-degree position. Lower legs back to the ground to complete the repetition. Complete for desired number of repetitions.

**Wide Push-Ups** – Lying flat on the floor with your elbows and hands wide perform a push up to a top position. Lower yourself so your chest touches the floor while keeping your elbows close to your sides. Keep your back and torso flat at all times. Complete for desired number of repetitions to complete one set.

**Jump Squats** – Rack the bar comfortably on your back. The feet should be slightly wider than shoulder width apart with the toes slightly pointed out. Your back must remain flat throughout the entire lift. Descend to a ¼ squat position in a slow and controlled manner. Once you have positioned yourself in the ¼ squat position forcefully explode upward so that you come slightly off of the ground. Because of the jumping action with the bar you should do this exercise with lighter weight. Recommend no more than 25 lbs. per side on the bar. Complete for desired amount of repetitions.
**DB Shoulder Press**- Position a 0-90 degree bench in the full 90-degree upright position. Select a pair of dumbbells that match your strength level and can be performed for desired amount of repetitions. After being seated position the dumbbells at shoulder level. Press the dumbbells overhead until your elbows are almost fully extended. Slowly lower to beginning position and perform for desired amount of repetitions. At no time should the dumbbell be any lower than your shoulders to prevent injury.

**EZ Curls**- Using an E-Z curl bar place a weight on the bar that meet your strength level for the given amount of repetitions stated on the workout. In a standing position, with an underhand grip, curl the bar upward avoiding excessive body lean. Then lower the bar to full extension in a controlled manner. Complete for desired amount of repetitions.

**Bar Hangs**- Find a pull-up bar and position yourself under it. Grab the bar with an overhand grip and pick your feet up off the ground so that your hands are the only thing holding your up. Hold on to the bar as long as your can (30 sec Minimum). Repeat for desired amount of repetitions.

**One Arm DB Rows**- Grab a dumbbell and position yourself on a bench so that your knee and arm opposite of the arm being worked are on the bench. The other leg will be in contact with the floor to provide support. The starting position of the weight should be from an extended arm position. Pull the DB up while bending your elbow. Keep your elbow close to you at all times and make sure to keep your head up. Lower the DB back to the starting position and repeat the movement. Do both the left and right arm for desired amount of repetitions.

**Overhead Extensions**- Grab a DB and place your hands inside the plate with your hands forming a diamond like position. Sit down on a bench and place the DB overhead with arms extended. Bend the elbows to 90 degrees and then extend the arms up to the starting position. Keeping the elbow in at all times concentrating on the triceps doing the work.

**Tibia Raises**- Stand on the edge of a squat rack platform, with the heels raised. Then pick up your toes and hold for a second, and then lower them back to the floor. Repeat for desired number of repetitions.

**Bent Over Rows**- Using a straight bar. Take an overhand grip that is about shoulder width apart. Stand up and bend over but make sure to keep the back straight, chest out, shoulders back, and a slight bend in the knee. From there slowly pull the bar up to the chest, by pulling the elbows straight back. Then slowly lower the bar back to the starting point.

**DB Curls**- Using a pair of DB’s position yourself in a standing position, with an underhand grip, curl the bar upward avoiding excessive body lean. Then lower the DB’s to full extension in a controlled manner. Complete for desired amount of repetitions.
**Reverse Shrugs**- Position yourself on a dip rack with your arms fully extended and your body weight being supported by your shoulders. Without bending at the elbow let your shoulders come up as you sink then raise yourself up again with your trapezius muscle. Complete for desired amount of repetitions.

**Plate Drops**- Grab a 5 or 10 lb. Plate. Position the plate in your hand as if you were pinching it with your fingers. Drop the plate out or one hand and immediately grab it with your other by coming over the top of your other hand. This is not a transfer of the plate from hand to hand. The plate will actually be dropping when the other hand grabs it. Perform for desired amount of repetitions.

**Lying DB Extensions**- Grab a pair of dumbbells and lay flat on a bench and position the dumbbells so that your palms are facing each other and your elbows are extended. Slowly bend at the elbows and allow the DB’s to come to the sides of your head. Once you reach a 90-degree position at the elbow extend the DB’s back to the starting position. Complete for desired amount of repetitions.
CARDIOVASCULAR
Cardiovascular Training

As you already know softball is not a cardiovascular demanding sport, but being in top cardiovascular condition will only magnify your skill while playing. Skill will only take you so far then conditioning takes over as the main factor in winning or losing. Playing in all day tournaments or weekend tournaments can take a lot out of an individual who is not in top shape. Being in shape will allow your game to be consistent rather than great the first few games and then suffer because of fatigue in the later games. Conditioning will allow you to be a better player by being consistent in your performance game after game.

Gassers and general cardiovascular activities will be our preseason conditioning choice for softball. Gassers a short duration cardiovascular event that will simulate some of the same types of cardiovascular situations you will be placed in on the field of play. General cardiovascular conditioning will include using cross-trainers, treadmill, or bikes to get the heart rate up into a training zone so you can see cardiovascular improvements. The Gassers and cardiovascular activities are explained below.

Gassers

Gasser runs are great way to train your cardiovascular system for softball. This stop and go training will allow your body to get used to short term higher paced running in a controlled environment. This comes closest to actually simulating the cardiovascular stress that will be placed on your body during high intensity softball plays.

Set Up for Gassers:
Measure out 159 feet on a grass field. Place a cone at the beginning of the measurement and a cone at the end of the measurement. Mark off another 159 feet about 30 yards away from the first cone to create a box on the field. This will be the running lanes for the field runs. You can see a visual example below in the diagram.
Half Gasser

Half gassers runs are performed by running to the end of the field marked off by the cones and running back to the start. Once completing a one-minute rest is allowed. These runs should be performed in the following times:

<table>
<thead>
<tr>
<th>AGE</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-19</td>
<td>19 Seconds</td>
</tr>
<tr>
<td>20-24</td>
<td>20 Seconds</td>
</tr>
<tr>
<td>25-29</td>
<td>21 Seconds</td>
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<tr>
<td>30-34</td>
<td>23 Seconds</td>
</tr>
<tr>
<td>35-39</td>
<td>25 Seconds</td>
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<tr>
<td>40-44</td>
<td>26 Seconds</td>
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<tr>
<td>45-49</td>
<td>27 Seconds</td>
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<tr>
<td>50-54</td>
<td>28 Seconds</td>
</tr>
<tr>
<td>55-59</td>
<td>29 Seconds</td>
</tr>
<tr>
<td>60-64</td>
<td>30 Seconds</td>
</tr>
</tbody>
</table>

Full Gassers

Full gassers are performed by running to the end of the field marked off by the cones and running back to the start then turning around and completing the same run again without rest. At the completion of this run a three-minute rest will be allowed. These runs should be performed in the following times:

<table>
<thead>
<tr>
<th>AGE</th>
<th>TIME</th>
</tr>
</thead>
<tbody>
<tr>
<td>17-20</td>
<td>38 Seconds</td>
</tr>
<tr>
<td>20-25</td>
<td>40 Seconds</td>
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<tr>
<td>25-30</td>
<td>42 Seconds</td>
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<tr>
<td>30-35</td>
<td>46 Seconds</td>
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<td>35-40</td>
<td>50 Seconds</td>
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<td>40-45</td>
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<td>50-55</td>
<td>56 Seconds</td>
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<tr>
<td>55-60</td>
<td>58 Seconds</td>
</tr>
<tr>
<td>60-64</td>
<td>60 Seconds</td>
</tr>
</tbody>
</table>

Now that you know how to set up the runs and what times you need to complete. Below is the six-week training plan you need to follow to optimize your cardiovascular training for softball. A combination of both gassers and general cardiovascular training will be included in this workout.
Week One
Tuesday
30 Minutes of Cardiovascular Training at 70% of your Max Heart Rate
Friday
4 Half Gassers
2 Full Gassers

Week Two
Tuesday
30 Minutes of Cardiovascular Training at 70% of your Max Heart Rate
Friday
5 Half Gassers
2 Full Gassers

Week Three
Tuesday
30 Minutes of Cardiovascular Training at 75% of your Max Heart Rate
Friday
6 Half Gassers
3 Full Gassers

Week Four
Tuesday
35 Minutes of Cardiovascular Training at 75% of your Max Heart Rate
Friday
7 Half Gassers
3 Full Gassers

Week Five
Tuesday
35 Minutes of Cardiovascular Training at 80% of your Max Heart Rate
Friday
8 Half Gassers
4 Full Gassers

Week Six
Tuesday
40 Minutes of Cardiovascular Training at 80% of your Max Heart Rate
Friday
9 Half Gassers
4 Full Gassers
DETERMINING YOUR MAX HEART RATE AND HEART RATE ZONES

To improve your current cardiovascular levels on the 6 week program you will be using times and heart rates to place stress on your body to make improvements on you current levels. Times are listed in your workouts in the cardiovascular workout plan. Heart Rates are not listed these will be calculated below. Here is how you calculate your Maximum Heart Rate and your Training Zones.

\[ 220 - \text{Age} = \text{Maximal Heart Rate} \]

\[
\begin{align*}
220 - \underline{\text{__________}} &= \underline{\text{__________}}
\end{align*}
\]

Maximal Heart Rate – Resting Heart Rate = Heart Rate Reserve

Your resting heart rate should be taken in the morning before you get out of bed. Sit on the edge of your bed and take your pulse for a one-minute time frame. The total number of beats will be your Resting Heart Rate.

\[
\underline{\text{__________}} - \underline{\text{__________}} = \underline{\text{__________}}
\]

(Heart Rate Reserve X 65%) + Resting Heart Rate = Target Heart Rate for 65%

\[
(\underline{\text{__________}} \times .65) + \underline{\text{__________}} = \underline{\text{__________}}
\]

(Heart Rate Reserve X 70%) + Resting Heart Rate = Target Heart Rate for 70%

\[
(\underline{\text{__________}} \times .70) + \underline{\text{__________}} = \underline{\text{__________}}
\]

(Heart Rate Reserve X 75%) + Resting Heart Rate = Target Heart Rate 75%

\[
(\underline{\text{__________}} \times .75) + \underline{\text{__________}} = \underline{\text{__________}}
\]

(Heart Rate Reserve X 80%) + Resting Heart Rate = Target Heart Rate 80%

\[
(\underline{\text{__________}} \times .80) + \underline{\text{__________}} = \underline{\text{__________}}
\]

**Target Heart Rates for Workouts**

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>65%</td>
<td>_____</td>
</tr>
<tr>
<td>70%</td>
<td>_____</td>
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<tr>
<td>75%</td>
<td>_____</td>
</tr>
<tr>
<td>80%</td>
<td>_____</td>
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</table>
Now that you know your heart rates for the given percentages what do you do with them? These numbers will allow you to determine how hard your workout will be. By slowly increasing the intensity of your heart rate you will improve your cardiovascular endurance levels.

If a workout requires you to be exercising at 65% of your Max Heart Rate for 20 minutes you do not start the exercise time until you are at 65% of your Max Heart Rate. It may take 5 minutes to bring your heart rate up to this level of work. Keep adjusting the workload during your brief warm up time until your heart rate is at this level. Then start the clock for the exercise session. Starting the clock early or below your target heart rate for that workout will only hurt yourself in your cardiovascular improvement. If you can exercise at a higher heart rate then do so but never exceed 80% during a workout. If your heart rate is approaching 80% or higher then reduce the workload of the machine. This will let you stay in the training zone where you will make the most cardiovascular improvements. (You can train at higher levels but you may become mentally fatigued knowing each time that you will be maxing out a workout. Stay within the training zones and you should stay focused with all the workouts)
NUTRITION
NUTRITION

Introduction

As you already know athletes use large amounts of energy to perform at a high levels. What most athletes do not realize is that the food they put in their body to produce energy is a major factor in their performance. This means that an athlete must put high quality nutrients into their body to be able to have high quality performances. Teaching an athlete how to eat a balanced diet is just as important as practicing a skill that is needed for their sport. Applying nutritional education to a training program will enhance an athlete’s performance along with their skills.

First of all, an athlete must understand some basic principals about nutrition and their body. An athlete who is high in body fat is a slower athlete than one lower in body fat. This fat storage in the body comes from persons nutritional habits. Lower body fat increases mobility where higher body fat decreases mobility. Heavier is not always better when the weight comes from excess body fat. Athletes always want to know how to get faster and one simple way is their diet. By using sound nutrition in their diet it will enable them to reduce body fat and become a quicker and leaner athlete.

A normal diet consists of 50-60% Complex Carbohydrates, 15-25% Fat, and 20-25% Protein. You should try to eat a similar combination of carbohydrates, fat, and protein at each meal. By keeping the nutrients and calories the same for every meal eaten during the day an athlete should feel energized all day. There should never be bouts of sluggishness or hyperactivity due to low or high blood sugar levels.

Remember that an athlete uses nutrients and energy every time they workout, practice, or play a game. After a long bout of exercise you should replenish your body with nutrients within one hour of finishing. After a workout your body is looking for nutrients to replace the ones lost or rebuild what you broke down during a workout. By eating your body will absorb nutrients quickly to replenish it losses. This hour is called the “Hour of Power” because this is where nutrition plays a large part in your strength gains after a workout. Getting nutrients to your body after a workout will aid in the recovery process to build stronger, faster, quicker athletes. On the following pages there are guidelines that will give you some insight on how to become a leaner, stronger, and a faster athlete.

NUTRITIONAL GUIDELINES

A. Eating Enough Quality Calories
One of the biggest problems for most athletes is just getting enough quality calories into their diet. An athlete is very active during their season and moderately active in their off-season. This means an athlete will need sufficient calories throughout the day to meet the need of their activity level. Sufficient quality calories do not mean going to Burger King after a workout and eating a Whopper Value Meal. Sufficient quality calories mean calories that your body can use to rebuild and repair itself. These quality calories come from complex carbohydrates (ex. pasta, vegetables) and lean proteins (ex. fish, chicken).

Meals should be broken up into an even percentage of calories compared to total caloric intake. Let’s say you are going to eat 3000 calories in one day. This means that you would be able to eat 1000 calories a meal. If you eat a snack you would just subtract the amount of calories of the snack from your total calories for the day and then divide it by the number of meals you are eating. An example of this is shown below:

**Three Meal Scenario**
3000 cals / 3 meals = 1000 Calories /Meal

**Three Meal Plus One Snack Scenario**
- 500 cal Snack
- 3000 cals - 500 cals = 2500 Cals
- 2500 cals / 3 meals = 833 Calories / Meal

**Three Meal Plus Two Snack Scenario**
- 2x500 cal snack = 1000 Cals
- 3000 cals - 1000 cals = 2000 Cals
- 2000 cals / 3 meals = 667 Calories / Meal

**Four Meal Plus One Snack Scenario**
- 500 cal Snack
- 3000 cals - 500 cals = 2500 Cals
- 2500 cals / 4 meals = 625 Calories / Meal

Also the percentage of carbohydrates, proteins, and fats should be similar for every meal. (Ex. 55% carbohydrates, 20% protein, and 25% fat) This will aid in maintaining muscle tissue, promoting fat loss, and reduces fatigue or sluggishness throughout the day. By keeping food intake consistent your body will stay in a state of energy equilibrium. An example of this is shown below:

**3000 Calorie A Day Diet with Three Meals**

**Carbohydrates**
3000 cals x 0.55 = 1650 Cals From Carbohydrates Per Day
1650 cals / 3 meals = 550 Cals From Carbohydrates Per Meal
550 Cals / 4 cals per gram of carbohydrate = 138 grams of Carbohydrates Per Meal
Protein

3000 cals x 0.20 = 600 Cals From Protein Per Day
600 cals / 3 meals = 200 Cals From Protein Per Meal
200 Cals / 4 cals per gram of protein = 50 grams of Protein Per Meal

Fat

3000 cals x 0.25 = 750 Cals From Fat Per Day
750 cals / 3 meals = 250 Cals From Protein Per Meal
250 Cals / 9 cals per gram of fat = 28 grams of Fat Per Meal

Along with keeping your calories and nutrients the same percentages per meal, an athlete should eat a minimum of three meals a day with about 4-5 hours in-between meals. This will keep the athlete from getting hungry and binging on junk food on the side. Small snacks can be added during the day when needed, but try to make it a snack with similar percentages to your diet plan. These simple tips should allow an athlete to get enough quality calories into their diet and keep them performing at a high level at all times.

B. Food Choices

Now that you know how to break up your meals and snacks what foods should you be eating to meet these Quality Calorie needs. Making the right food choices does not mean eating as many wings as you can at the local free happy hour buffet. Remember most Americans get 60% of their calories from simple sugars and fat. Fat and simple sugars do not aid in your performance as an athlete. Foods should be nutrient dense with a majority of the calories from complex carbohydrates which include pastas, breads, potatoes, and rice. Avoid foods that are fried, refined, canned, or processed. These foods may be high in calories, but a majority of the calories are from fat. Below are some suggestions for increasing your quality calorie needs as an athlete.

1. Use Complex Carbohydrates as your major source of Carbohydrates

Examples of Complex Carbohydrates are as follows:
1. Bread
2. Cereals  (Watch for sugar content)
3. Oatmeal
4. Pancakes
5. Waffles
6. French Toast
7. Grits
8. Pasta
9. Rice
10. Vegetables (potatoes, sweet potatoes, lima beans, peas, corn, squash)
11. Fruit and Fruit juices (watch for refined sugar in juices)

Eating Complex Carbohydrates promotes better activity in athletes. By having enough stored glycogen in your muscles from carbohydrates will enable you to perform at higher levels for longer periods. Choosing simple carbohydrates (sugars, pop, and candy) only aid in fueling your body for brief periods of time. They are quickly burned and used in the body. The best choices when choosing carbohydrates are complex carbohydrates to power your high performance body for a long period of time.

2. Use lean protein sources to meet your protein requirements

Protein is the building blocks of all body tissues. By eating quality protein sources that are lean will enable your body to build quality muscle. It is recommended that .45 to .73 grams per day of protein are sufficient for every pound of body weight. Remember that a diet very high in protein may promote the accumulation of body fat from extra calories. Also high intakes of protein also promote the increase in urinary water loss to remove excess waste products. This extra loss of water may promote dehydration, which could lead to cramping. Below is a small list of quality protein sources.

**Good Protein Sources**

**Poultry:**
- Chicken Breast
- Turkey Breast

**Fish:**
- Catfish
- Pollock
- Cod
- Salmon
- Flounder
- Scallops
- Haddock
- Shrimp
- Halibut
- Sole
- Lobster
- Snapper
- Orange Roughy
- Tuna Packed in Water

**Dairy:**
- Cottage Cheese, Lowfat
- Skim Milk
- Egg Beaters
- Yogurt, Lowfat
- Egg Whites, Cooked

**Meats:**
- Beef, Lean
- Lamb, Lean
Remember that taking protein supplements instead of eating food to meet your protein needs is not a recommended action. If you follow a normal eating diet as discussed earlier you can meet your protein need without any extra from supplementation. In addition, the body cannot store large amounts of protein so immediate consumption after exercise is needed. An example of this would be drinking a recovery drink after a workout like Boost, Whey protein shake, or milk. This is the only time a supplement would be recommended because a liquid protein drink is digested and taken up by your muscle cells faster than solid foods.

3. Fats

Fat is one nutrient that most people never have any problem of getting enough of. As an athlete you should try to eat nutrient sources that are low in fat. Eating a diet that is high in fat will cause unwanted percent fat increases, chronic exhaustion, irritability, restlessness, and muscle tissue decreases. Remember that a diet high in fat and low in carbohydrate slows the process of energy storage in the muscle. If this continues, there will be less fuel for high intensity activity. This will result in poor performance.

Some ways you can cut down on your fat intake are as follows. Start by limiting the amount of red meats and pork products you eat (steak, hamburger, hot dogs, luncheon meats, bacon, sausage etc.). Red meats and pork products are high in fat most of the time. If you do eat red meats try to pick leaner cuts of meat at the grocery. Also dairy products commonly have higher fat percentages for their total calories. Foods like cheese, butter, mayonnaise, ice cream, and cream sauces (Alfredo) all have high fat content. By choosing lower fat dairy products or sauces that are lower in fat for your food choices you will lower the caloric and fat content of some foods by half. Any foods that are based or cooked with oil are also very high in fat. This includes salad dressings, oils, or anything that is fried in animal or vegetable fat (ex. french fries, chips) By substituting low fat dressings, limiting oil use in cooking, and not frying food will aid in the reduction of fat content from some of your foods. Remember as an athlete you are trying to put on lean mass and fat does not aid in the increase of lean mass. This is why fat must be limited to a certain percentage of your diet and kept that way to prevent fat mass increases.

C. Hydration and Fluids

Along with properly planned meals athletes need plenty of fluids to perform at high levels. Your body is composed of 75% water and uses water in all metabolic functions. Once the body experiences a 3% weight loss in water, there is an affect on performance. This loss could cause muscle cramping, pulls, and heat exhaustion. By taking in water you maintain balance in your body. On the average a human being should drink about 4 to 6 glasses of water a day.

To make sure athletes are getting enough water back into their system after a workout, athletes should weigh themselves before and after strenuous activity to determine the amount of water they have lost and need to replace from their body weight.
For every pound lost 2-3 cups of water will need to be replaced. Another good idea to get water during the day is to fill up and empty milk jug with water and put about 2 tablespoons of either lemon juice, orange juice, apple juice and shake it up. The juice will give the water a mild citrus taste. Every time you open the refrigerator take a drink and at every meal drink out of the jug. By the end of the day you should finish the gallon jug. Believe me there will be many bathroom breaks if you follow this and your urine should be clear. This will mean you are fully hydrated and ready for maximal performance.

Sport drinks and juice are also excellent ways of getting fluids into your body but watch how much you drink. Sport drinks and juices contain calories in the form of simple sugars. By drinking too much juice or sport drink may give you a sugar high which we are trying to avoid with a well-planned diet. Just remember that every time you take a swig of juice from the fridge you are adding calories to your daily total. It is better to drink water if you just want to quench your thirst and save the juices for meals.

D. Conclusion

Probably after reading all this you will see how much nutrition can affect your performance as an athlete. By eating properly your athletic potential can increase greatly but also with athletic success you will want to enjoy life also. It is important to eat well but also enjoy food at the same time. With all the stress of eating healthy and practice you will have some times where you want to go out and eat a pizza, wings or just some good junk food and “that is OK”, but do so in moderation. Here is an example of how to do this. If you eat 21 meals in one week you should try to eat healthy for 18 of those meals. The other three meals enjoy yourself with moderation. I am not allowing you to eat a whole pizza or order 100 wings and eat them all, but eat something you enjoy like a steak, burger, fries, ect. The next meal however you are right back on the diet plan. This will allow you to enjoy some foods that you like and crave. This should prevent you from straying from your diet that will make you a better athlete.