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## **CHAPTER 3**



### **Strength & Conditioning**

*“Failing to Plan is Planning to Fail”.* We have all heard this saying, but it really is true and We believe that a successful football program needs a comprehensive, year round Speed, Strength, & Conditioning program. Our overall mission for our program is:

***WORK OUT WITH HIGH INTENSITY, USING EXPLOSIVE MOVEMENTS  
AS A TEAM, INCORPORATING LOTS OF VARIETY.***

Every Program is different in terms of equipment, time, facilities, and knowledge of the coaches. As YOU design our program, you need to keep in mind some basic tenets of training:

#### **REMEMBER YOUR OBJECTIVES**

Defensive and offensive linemen need to be big, strong and powerful. For them to develop these physical attributes, off-season workouts are absolutely essential. This is the only time of the year when they can make noticeable improvements in their strength and power. To have your linemen on a entirely separate workout plan will not work in high school because your team is probably in one weight training class. Furthermore, I strongly believe that a team needs to lift as a team and whenever possible I tried to have my linemen lift with backs to build camaraderie.

It is very challenging for the high school coach to design a coordinated, year-round training program that makes kids stronger, bigger, more explosive, and quicker. One size doesn't fit all when it comes to football training. The conundrum is that we want our linemen to be stronger than our backs and receivers. Conversely, we want our receivers to gain more speed and quickness than our linemen. Yet we still want some quickness in our linemen and some strength in our receivers. Complicating matters are multiple sport athletes as well as severe nutritional challenges in a high school setting.



Now let's focus on the linemen. Listed below are the traits that all great linemen must possess:

- An animal on the field. We need to breed **toughness**.
- Super **strong** (and be able to use this strength on the field, called “functional strength”)
- **Explosive** and **quick**
- **Fast** for five yards and be well-**conditioned**
- A great **technician**

Sure, genetics plays a role in this. A 6'4", 300 pound guy will have an advantage over a guy who is five feet, eight inches and 185 lbs. So while genetics does play a part, even the smallest high school linemen can still destroy the competition. So while this entire book is dedicated to teaching great technique, this chapter will list the things that the O-Line coach can do to make his linemen strong, explosive, quick, and in great shape.

### BUILD REAL TOUGHNESS

This is a difficult point to express. Toughness is an absolute necessity for linemen. The game is simply a three-hour fight between you and your opponents. But how do you build toughness? Do you withhold water like the idiotic coaches of the 70s did? Do you simply scream at the guys until they become so bored they tune you out? Of course not. Both of those methods have nothing to do with toughness.

Toughness is built in the weight room and on the field. It's built every time you do that last set even when you feel like quitting. It's built every time you finish your sprints all the way through the line even when no one is looking. It's built when you go after a PR and fail but come back next time and smoke it. Simply put, it's a long, slow evolution.

Many coaches feel that if a player isn't naturally tough, he won't be a good lineman. But this is simply untrue. Some people are born with that 'never quit' attitude but most need to be taught. And let's not confuse toughness with having a mean streak. Walter Payton, Jerry Rice, J.J. Watt and Art Shell are genuinely nice human beings but on the field they were the toughest to play the game. Players don't have to be A-Holes to be tough.

Always finish what you start—your reps, your sets, your sprints, and your homework. Learn to fail and come back with a vengeance. We all mess up. We all miss tackles and blocks, even NFL Hall of Famers. But they also know how to come back and make the next play. They don't sit on the sidelines and pout or throw their helmet and curse. They figure out what they did wrong and come back and do it right. That's the kind of tough linemen I want on my side.

### LINEMEN SIZE & STAMINA

For an offensive lineman to build mass and gain strength, he needs to lift heavy and eat properly. While receivers and backs need long-distance running skills and leaping ability, linemen use more strength and explosive power in their play. Therefore, do not ignore agility & quickness, but also don't spend so much time lifting that you fail to get them in shape.

Linemen are big and most high school linemen are out of shape. They don't play other sports so the off-season can see a buildup of fat and a decrease in cardiovascular. 100yd sprints are a waste of time for this position. They need a series of short bursts and sprints with a recovery time that simulates the time between plays (30 seconds). Nutrition is also a big factor because they need a huge caloric intake to gain mass but if it is high in fat they will gain the wrong type of weight. There is a fine line of getting big and getting fat. We always prided ourselves in the fact that our linemen did not have big bellies (we called them coaches bellies).



## DESIGNING YOUR PROGRAM

As you design your strength and condition program for both your team and your linemen there are some things you should keep in mind. First and foremost is understanding **ENERGY SYSTEMS** because that will determine How Much, How Fast, and How Long you will do everything else. Any explosive movement such as jumping, sprinting, or cleaning will use up the ATP that is stored in that muscle in the first 20 seconds of training. After that the muscle has to break down stored glucose and that will run out after 2 minutes. Once your athlete goes for more than 2 minutes without a break, then the muscle is forced to **BREAK DOWN MUSCLE** in order to continue. That is counterproductive to what you are trying to accomplish, which is to build muscle up. It takes approximately 1-2 minutes to buildup more ATP.

With that in mind, athletes should always do their explosive exercises first. So plyos, cones, ladders, cleans, and snatch should be the first thing that they do. And they will need to rest that muscle for 1-2 minutes after 30 seconds of work. That doesn't mean the entire body has to rest. After Squatting, the athlete can immediately do a shoulder workout, which allows his thighs to rest. He then moves to situps for 20 seconds, giving both shoulder & thigh a rest. His legs are now ready for a leg auxillary. He then becomes the spotter which gives full body rest before doing the circuit again for his second rep.

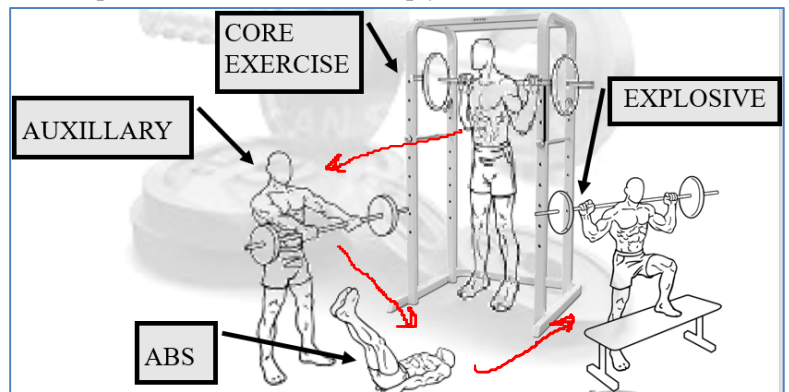


Fig 18: A Rotation System to Allow ATP Recovery

The next area to address is how many **SETS, REPS, AND WEIGHT**. As a general rule of thumb: The higher the reps, the more muscle endurance will increase & fat you will burn. Linemen want to get strong and should stay in the 3-8 rep range on most lifts. According to National Strength & Conditioning Association, never do more than 6 reps on snatch & clean. Auxillary lifts such as abs, arms, shoulders, pushups, and pullups will have more reps than the core lifts (bench, squat, clean). However, the core lifts will have more sets than the auxillaries.



**Volume = sets + reps.** For example, 4 sets of 10 equals a volume of 40. With linemen we want to stay in the less than 10 reps area most of the time, but not all the time. So an example workout day would look like this:

**Power Clean (4x6); Bench (4x8); Pushups (3x15); Pullups (3x10); Abs (3x 20)**



Figure 19 shows the annual strength and conditioning plan that I use at the high school level. For the most part our O-Linemen did not play winter or spring sports so they could follow this plan. If they wrestled or threw shot put, then I had to make tweaks for them on a case-by-case basis.

Many studies have shown that muscles will adapt to specific training. For example, a study by *Medicine & Science in Sports & Exercise* (Sale, 1988), showed that squatting for 8 straight weeks produced great gains on the squat, but only showed 50% gains on leg press, and no gains on leg extension...even though all 3 exercises used the same muscle.

So here is what I do to attack the muscles at all different angles. We SQUAT, CLEAN, SNATCH, and BENCH twice per week and that never changes. We will change our auxiliaries every week and alternate between barbell and dumbbell every week. For example we have 8 different shoulder exercises. We do 4 one week and the other 4 the following week, so our kids don't see the same shoulder exercise until week 3.

Variety keeps players motivated, breaks up the monotony, and challenges your athletes..

WEEK	PHASE	WEEK	PHASE
Jan W2	Max & Teaching	July W3	End of Summer - OFF
Jan W3	Strength 1	July W4	
Jan W4		Aug W1	Pre Season Conditioning
Feb W1		Aug W2	
Feb W2		Aug W3	
Feb W3	Aug W4		
Feb W4	Strength 2	Aug W5	In Season Maintenance
Mar W1		Sept W1	
Mar W2		Sept W2	
Mar W3	Spring Break - OFF	Sept W3	
Mar W4	Power 1	Sept W4	
Mar W5		Oct W1	
Apr W1		Oct W2	
Apr W2		Oct W3	
Apr W3	Power 2	Oct W4	
Apr W4		Nov W1	
May W1		Nov W2	
May W2	Spring Football	Nov W3	
May W3		Nov W4	
May W4		Nov W5	
June W1	Graduation Week - OFF	Dec W1	OFF
June W2	Summer Conditioning *5 days off for July 4 <sup>th</sup>	December	
June W3			
June W4			
June W5			
July W1			
July W2			

Fig 19: Annual Workout Schedule

## STRENGTH TRAINING

We can't all be 6'-6", 300 pounds, but we can all be as strong as humanly possible. Maximum strength is the base for all other aspects of athleticism. It controls quickness, explosiveness, speed, and power.

### LATERAL STRENGTH

About 90 percent of the average football speed training programs concentrate on straight ahead linear speed. However, football players have to be able to move laterally. Reach blocks, escaping to backer, pulling, and kick sliding all have you moving sideways in a violently fast motion. I challenge you to do your linear exercises in a sideways motion.

### LATERAL SQUATS

### BACKWARD LUNGES

All of these movements also have the added benefit of strengthening the knees laterally, which is especially useful when some big dummy gets thrown down onto the side of your leg.

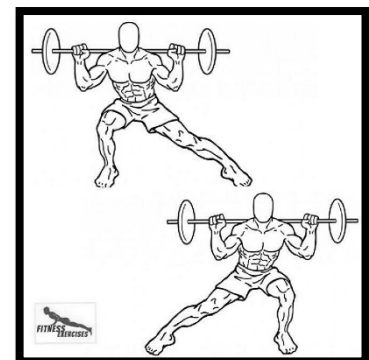


Fig 20: Lateral Squats



## RAW STRENGTH

The only way to really build strength is to improve your raw strength. Linemen need raw, brute strength. In its most basic form, line play is a three-hour fight. Being stronger and more physical than your opponent is the easiest way to beat him. You need to focus your main exercises on heavy, low rep sets. The more fatigued you become, the more likely you are to break form and get hurt. On rep 11 of a 12 rep set, form becomes atrocious.

This is our workout from Jan until Easter break. Goal is to gain mass and get stronger.

**Table 3: Lift During Strength Phase**

	MON	TUE	THUR	FRI
Main Lift	Front Squat Overhead Squat	Barbell Snatch Hang Clean	Back Squat Explosive Dead Lift	Bench Power Clean
Auxillary	Explosive Legs	Pushups / Dips	Squat Variation	Pushups / Dips
Auxillary	Shoulders	Row Variations	Shoulders	Pullups
Auxillary	Straight Leg DL	Neck	Glute Ham	Neck
Abs	Ground Based	Upright	Ground w/weight	Planks & Back

	Strength	Explosive	%	Aux
Week 1	3 x 10	3 x 8	60%-75%	3 x 10
Week 2	4 x 8	4 x 5	70%-85%	4 x 10
Week 3	5 x 5	5 x 3	80%-90%	4 x 10
Week 4	10-8-6-4-2	5-4-3-2-1	80%-max	3 x 10

**Figure 21: Set, Reps, Volume for Strength Phase**

Strength lifts are Squat and Bench. Explosive lifts are Snatch, Clean, & Dead Lift. The first week back from winter we max, then lift hard for 4 weeks, do “plateau busters” week 5, then repeat this workout for 4 more weeks. That usually takes us to Easter break. We eliminate plateau buster week if Easter comes soon, or we max again if Easter is late.

## EXPLOSION & QUICKNESS

We discussed in Chapter 2 the importance of ACCELERATED GET-OFFS. During the Strength Phase we mixed in some plyometric explosion, however when we return from Easter break we really focus on explosion.

**Table 4: Lifts During Explosive Phase**

	MON	TUE	WED	THUR	FRI
Main Lift	Front Squat Snatch	Vertical Plyos	Power Clean Bench	Horizontal Plyos	Back Squat Exp Dead Lift
Auxillary	Rows		Pullups		Rows
Auxillary	Shoulders	Cone Agilities	Pushups	Ladders	Pushups
Auxillary	Straight Leg DL		Overhead Squat		Glute Ham
Abs	Ground Based		Planks & Back		Upright

	Strength	Explosive	%	Aux
Week 1	10-8-6-4-2	6-4-4-2-2	60%-75%	4 x 10
Week 2	5-4-3-2-1	5-4-3-2-1	80%-max	4 x 10
Week 3	5 x 5	5 x 5	80%-90%	5 x 10
Week 4	3 x 3	3 x 3	85%-95%	3 x 10

**Fig: 22: Sets-Reps-Volume for Explosive Phase**

By combining our upper & lower body lifts on the same day, we gain two days to really focus on Explosion, Quickness, and Agility. But it also prevents muscle plateau and muscles adapting to the workout. Vertical Plyos is a bunch of jumping up & down in one place, on both legs and one. This also includes jump rope. Horizontal plyos starts off as lots of variations to Standing Long Jumps but eventually we start jumping on and off boxes. Don't forget to jump forward, sideways, and laterally.

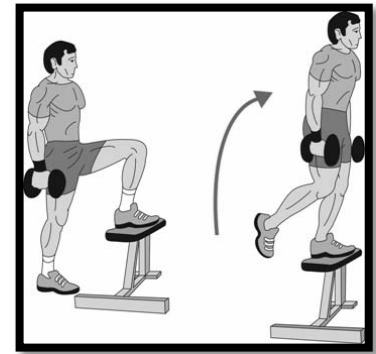


Linemen on both sides of the ball need explosive upper bodies and fast hands. Slow hands prevent Defensive linemen from getting off blocks. Explosive, quick hands allow offensive linemen to deliver breath-taking, rib-cracking blows

Having quick hands and an explosive upper body also allows you to control your opponent. Again, these traits are controlled by max strength, so work on the bench and incline are a must. But we must also train to specifically get your arms blasting through the motion used on the field. Concentrate your efforts on three exercises.

**PLYOMETRIC PUSH-UPS:**

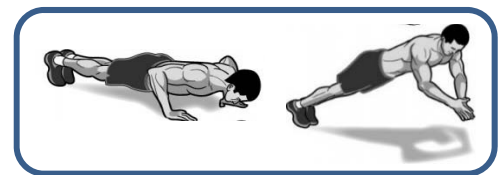
Attempt to push yourself off the ground with so much force that your body actually comes up far enough where you can clap your hands between reps. If a large lineman struggles at first, put him on his knees and just ask that he “claps” as he pushes up while knees stay on the ground. Progress to being off his knees, but allow his feet to stay on the ground while clapping. Eventually the entire body leaves the ground.



**Fig 23: Step Ups**

**RAPID STANDING BAND PRESS**

Do these as a warmup on upper body days. Wrap a large band around your back or a pole and grip with both hands. The bands can be the assisted pullup bands or the ones that come with the p90x workouts. Get into an athletic position, and literally do a two-armed punch. These reps are rapid—punch, recoil, punch, recoil, punch. Do these for 3–4 sets of 3–6 reps pre-workout/practice/game



**Fig 24: Pivo Pushups 1**

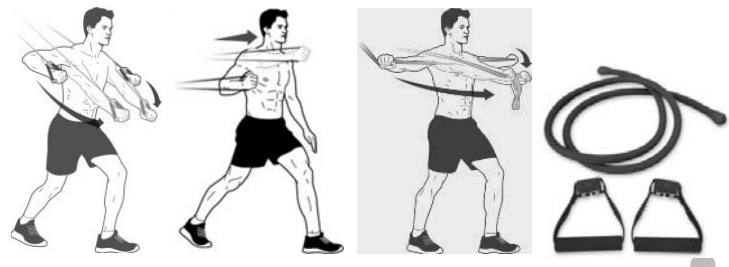
**SANDBAG CLEAN AND PUSH:**

If you’re serious about being able to coordinate the hips and hands so that you can make opponents crumble, you need the sandbag clean and push. This is very similar to the traditional clean and jerk but with several advantages:

- Because the bag changes shape and moves around, it builds the type of upper and lower body strength that easily carries over to the football field.
- You can literally push the sandbag up and out using the same arm motion you would when blocking. This isn't advisable with a barbell.
- Because you start in a low position, triple extend, and end with releasing the sandbag, you teach the body to transfer power from the ground all the way through your arms and into your opposition.

Use this as a finisher at the end of your regular training session. You can go with a medium bag for high reps as a conditioning exercise or you can go with a heavier bag for a more traditional 3–4 X 3–5.

You can fill a small duffle bag with sand or fill up old basketballs with sand. You can also use medicine balls.



**Fig 25: Rapid Standing Band Press 1**



**Fig 26: Clean & Push 1**



TRADIONATAL PLYOMETRICS

These are incorporated into our normal weight training schedule, are done after school during the spring and our OL coach will sneak a few in during our summer OL workouts.

BASIC	INTERMEDIATE	ADVANCED
<i>Weeks 1-4</i>	<i>Weeks 5-7</i>	<i>Weeks 8-10</i>
<i>Vertical Jumps</i> <i>Calf Jumps</i> <i>Diagonal Jumps</i>	<i>Power Skips</i> <i>Lateral &amp; Forward Hops</i> <i>Box Jumps</i>	<i>Power Shuffle</i> <i>Power Carioca</i> <i>Lateral &amp; Running Bounds</i>

1. Jumping and landing on two feet is a JUMP.
2. Jumping and landing on one foot repetitively is a HOP.
3. Jumping and landing on one foot then the other is a BOUND.
4. Jumping and landing off boxes are SHOCKS.

Doing plyometrics on 1 foot increases balance and strengthens joint ligaments.



Fig 27: Explosive Dead Lift

FLEXIBILITY & BALANCE

BALANCE

Proper use of the flexibility exercises described on the previous page will also improve your range of motion in both the ankle and hip areas. There are a couple ways that we improve our athletes balance:

- 1 LEG EXERCISES: lunges → assisted 1-leg squats → unassisted 1-leg squats  
*Some athletes may need to hold the squat rack or bench to perform the 1-Legged squat on the left.*

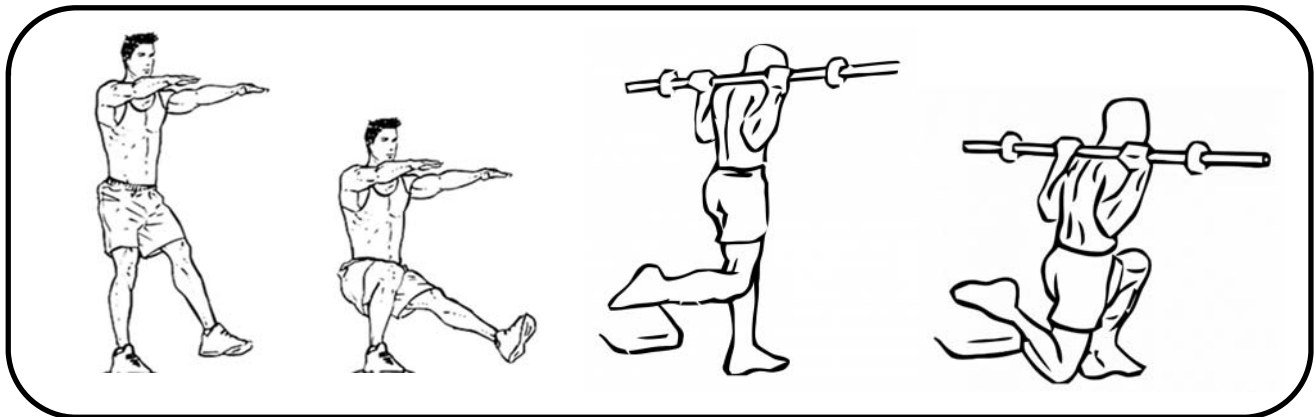


Fig 28: One Legged Exercises

- 1 ARM EXERCISES: Snatch & clean with a dumbbell in 1 arm.  
 Alternate every week between barbell and dumbbells for all presses (bench, military, incline)

**DIFFERENTIATED LOADS:** Put a 10lb weight on one end of barbell and 25lb weight on other end.

Place on shoulders when doing lunges, lateral squats, or box step ups. Also develops core



## SHORT-RANGE SPEED

There are many arguments that the 40 time is useless in football and I do believe that it is totally useless to train specifically for increasing a 40-time. I do time my players twice a year but make them do it out of their football stances (WR standing up for example). While this is a good barometer to see improvement in training, offensive linemen should train in much shorter distances. How fast a lineman is for 1–5 yards is crucial. Even chasing down a backside linebacker does not require more than a 10 yard sprint. Explosion, quick feet, and proper angles are way more important.

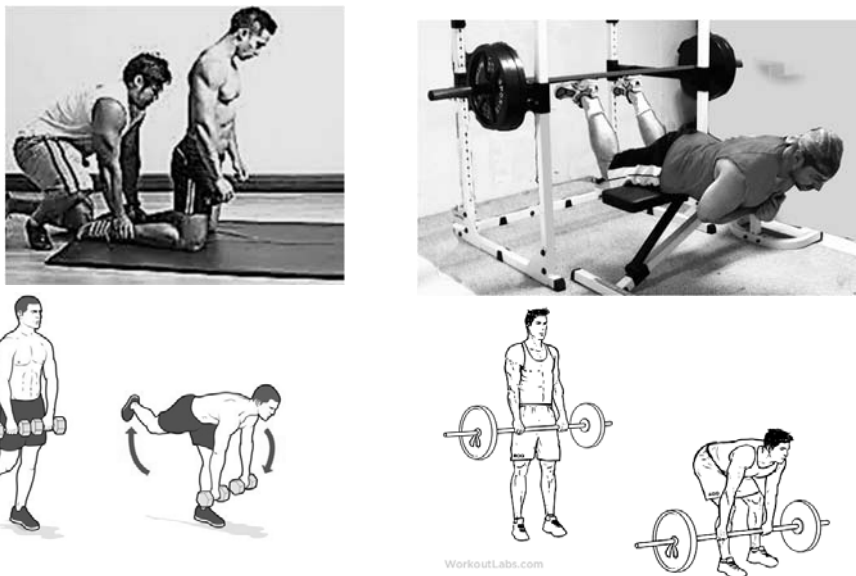
Speed is built with strength, stride length, and muscle elongation. I always tell my athletes this simple rule:

**THIGHS FOR STRENGTH**

**HAMSTRINGS FOR SPEED**

**CALVES FOR QUICKNESS**

To get faster your linemen must improve the explosive force and power of the legs against the ground, which in turn increases their stride length. This is done by SQUATING and plyometrics. They must also elongate the muscle which is done with the exercises shown below. Flexibility decreases injuries and improves their ability to maintain low positions, but it will not increase stride length.



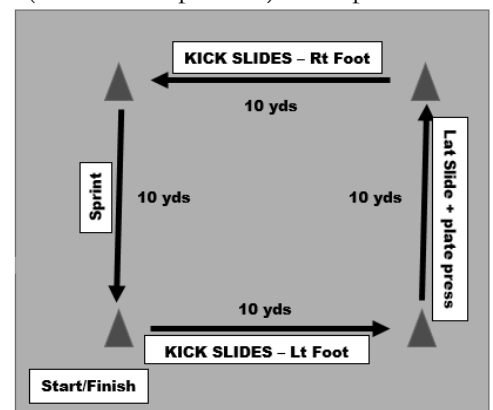
**Fig 29: Glute Ham Exercises**

We do “poor man” glute hams (top two pictures) and straight leg dead lifts (bottom two pictures) twice per week. However another old fashioned way to get faster is to simply go out and sprint.

## AGILITIES

The internet is full of cone, star, dots, and ladder drills that you can do with your team. Let me give you some ideas of how you can make your LINEMEN agility time very position specific:

- Star, Line, Dot Drill as auxiliary with Squat
- Weighted Jump Rope
- Cone Drills (Fig 31)
- Get-Offs and Chutes (Chapter 4)
- jkjklKick Slides & Mirror Drills (Chapter 7)



**Fig 31: Linemen Cone Drill**





## WARMUP UP

The dynamic warmup not only gets the body ready to workout, but it can also serve a dual purpose of teaching proper running mechanics. We incorporate A-skips, B-skips, high knees, and short accelerations into our warmup. The following proper running mechanics are stressed while performing these exercises:

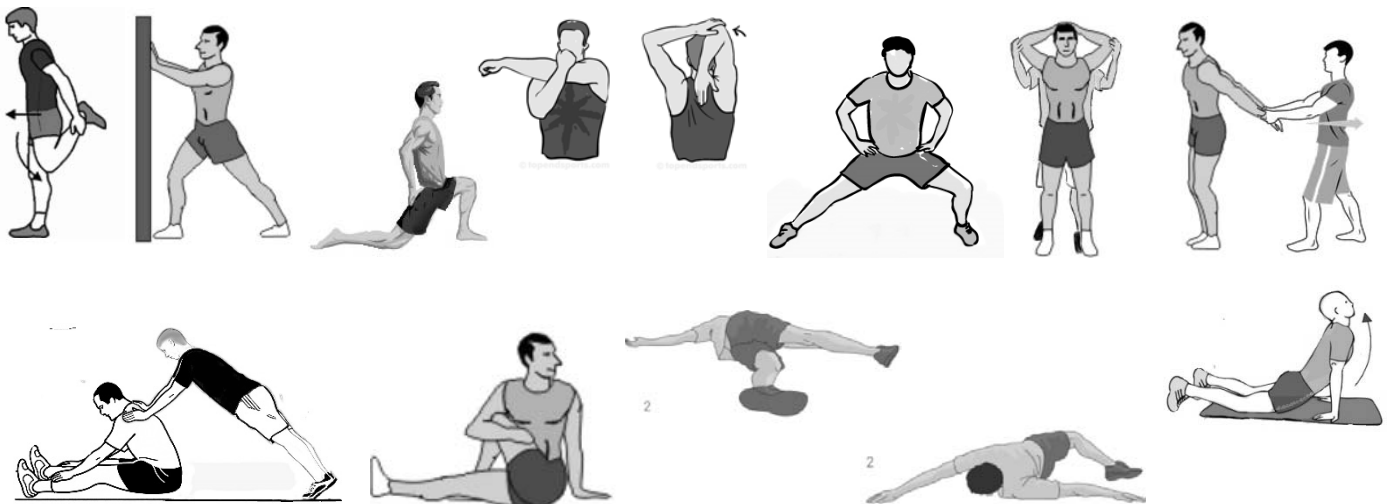
- Arm Swing: Form an “L” shape. Thumbs to ears on way up and hammer the nail on the way down.
- Leg Movement: Parallel thighs, keeping knee below the knee.
- Foot Placement: Land below the hips on the balls of your fee. Push up and off.

Most linemen did not grow up running and these mechanics are very important. It is important for our OL coach to emphasize mechanics during summer OL workouts, during practice, and after practice conditioning. We do traditional dyanamic warmups like I just decribed before weight training sessions and during spring/summer speed workouts. However to maximize efficiency and repetitions we do not warmup as a team before practice. Every position group has a 5 minute station and does position specific warmups. The following are what our linemen do before practice:

- Get-Offs      Footwork drill as described in Chapter 4.
- Chutes or Funhouse      Proper footwork and keeping pad level low.

## COOL DOWN & FLEXIBILITY

While most coaches do dynamic movements as a warmup, but most do not do any sort of cool down, static stretching after their workouts. This is a mistake. We do the following static stretches after every workout. Static stretching before lifting actually hinders the muscles ability to develop force. I count to 10 on each stretch so the entire routine takes less than 4 minutes. This cool down period results in less soreness, quicker recovery between workouts, and increased flexibility.



**Fig 32: Cool Down & Flexibility**



# CONDITIONING

Conditioning is one of the main factors in a lineman's ability to become a great player. The best players are always in great condition. Linemen need to work on their cardiovascular year-round to maintain their weight. Once a large person gets heavy, it is very difficult to get the weight off. Also in your training don't ignore the abs and lower back.

## EXTREME TWO-WAY CONDITIONING

All linemen should be able to play both sides of the ball, even if they don't have to. Smaller schools have no choice. This cannot happen over the course of 20 practices in August. It has to be built up during the off-season. Linemen have no business jogging because it is a lazy movement and you would never jog during a game. Besides, you weigh more than half the cross-country team combined, so why try to do what they do?

There are several ways to condition so that you're able to go both ways all year long:

- Short sprints (keep them short—5–20 yards)
- Position sprints (get into a stance, take the steps they would in a game, and then sprint in the direction a play would go.) Group these short bursts into groups of ten. When you do all ten, rest for 60–90 seconds and go again. When you can do six sets with minimal hard breathing, you'll be able to play both ways in your sleep.)
- Prowler sprints. I know that she doesn't play O-Line, but don't you wish she did?

## ENDURANCE TRAINING

I know that I have been preaching that linemen should be focused on short sprints, however, they need to spend the summer building up their aerobic cardiovascular so that they enter August camp in shape. We will do the following endurance running for 6 weeks during the summer and then focus on short sprints in August camp.

**FIVE FIFTHS:** Set cones where the 5-yard line meets the sideline in all four places. Place four more cones 5 yards in from the sideline on the goal line. This creates an oval if the player runs along the sideline and cuts around the cones and around the goal posts. Goal Post to goal post and around all 8 cones equals  $1/5^{\text{th}}$  of a mile, or 1056 feet, or 352 yards. After each fifth, they get a 45-second break. If the times it takes to run each of the five fifths are added up, it should be under 100 seconds. We have had many linemen do all five in 70-seconds. Obviously the 45-second breaks do not count.

**110's:** Run each 110-yard sprint in under 20 seconds with a 45-second break between each run. Our goal is to run 15 separate sprints, each one under 20 seconds. I have had some teams who did 30 sets of 110s.

**CROSS FIT:** These are extreme metabolic workouts that also makes players very mentally tough. I had our all-league tackle tell me that whenever we went for 2-points he would think of our summer cross-fit workouts and tell himself: "If I could get through that, then I can drive my man 3-yards into the endzone." Examples are on following page:



30 pushups, rows, air squats followed by lap around the track. Then do 25 pushups, rows, air squats, followed by another lap. Continue at 20, 15, 10, and then 5 pushups, rows, air squats.

Do 30 updowns at goal line, sprint 100 yards. Do 29 situps at other goal line, sprint 100 yards. 28 updown, sprint, 27 situps, sprint, 26 updowns, continue until reach zero.

Endurance is the ability to use your muscles over long periods, such as a three-hour football game. A **CIRCUIT-TRAINING WORKOUT** is a fun, effective way to build and maintain muscular endurance. Exercise at a pace that doesn't require your long breaks. To work on cardiorespiratory endurance (heart and lungs), use less resistance and exercise at a higher heart rate. If you're working on muscles in their arms, legs, chest, back and core, use enough resistance that their muscles start fatiguing by the end of the circuit. You can use dumbbells, resistance bands or bodyweight exercises to help accomplish this.



Fig 33: Prowler Sled

## Conditioning Is Not Just Running Sprints

### RECOVERY

Any lineman knows that you don't get tired during a play – it's after each play that you're struggling to catch your breath and recover in time for the next play. To get in the best shape possible, football linemen need to use interval training to improve their ability to recover after each play. This will train their bodies to recover in the amount of time that they have between plays. You can simulate recovery time that happens between plays in a number of ways:

Give them 20-30 second rest between wind sprints;

During plyometrics, ladders, cones....only allow 20 second rest between exercises.

In the weight room, only allow 20-30 second break between sets;

### NUTRITION

To get big, you need to eat big. This not only means eating more food in general, but also getting your calories from healthy, nutrient-dense sources to fuel performance. Leslie Bonci, sports dietitian for the Pittsburgh Steelers, recommends eating every four hours and splitting your plate into thirds -- one third protein, one third carbs and one third fruits and vegetables. Don't skip breakfast and drink plenty of water to avoid dehydration. Higher calorie, healthy foods such as meat, eggs, potatoes, nuts and seeds and dairy products, along with fruits and vegetables, should make up the bulk of your diet.



$$\text{Weight (pounds)} \times 23 + 500 = \text{weight gain}$$

**60% Carbs    15% protein    25% fat**

I spend the first 2-3 Wednesdays in January explaining to our team what all of this means. It is a classroom setting with powerpoints and examples. During this time each athlete will form a weight gain or loss goal. We used the free app called **“My Fitness Pal”** and many of my players would track their daily intake.

My players would also bring a bottled water to school every day and re-fill it between every class. When I passed them in the hallways they had to show me “tally marks” on the bottle to show how many times they had filled it up. Almost every high school team in America lifts and yet their players do not get big. How many times has a player come back to visit you a year after graduation and has already gained 20-30 pounds? It is because they are off the bell schedules and shopping for themselves. They have the freedom to eat every 4 hours and are not at the mercy of what their mother puts in the fridge

We addressed the problem areas as follows:

- BREAKFAST:** Make a protein shake with fruit to drink on way to pre-first workout.  
**RECOVERY:** Chocolate Milk. I made a deal with cafeteria to get my players 2 cartons every morning.  
**SNACK:** Pack hard boiled eggs, tuna sandwich, PBJ in backpacks to eat around 10am.  
**LUNCH:** Eat whatever cafeteria served and supplement with items listed in snack.  
**AFTERSCHOOL:** Drink a protein shake  
**DINNER:** Eat double of whatever mom makes.  
**LATE NIGHT:** Peanuts, Trail Mix.

<b>DO NOT EAT BEFORE / AFTER EXERCISE</b>			
Chips	French Fries	Pizza	Burgers
Ice Cream	Doughnuts	Chocolate	Nuts
Fried Meats	Bologna	Salami	Pepperoni

<b>EVENING AFTER DINNER SNACKS</b>				
pretzels	cereal	crackers	bagels	cereal bar
yogurt	popcorn	Pudding	Sports bar	trail mix

<b>PRE - WORKOUT MEALS</b>		
<b>3 HOURS BEFORE</b>	<b>2 HOURS BEFORE</b>	<b>1 HOUR BEFORE</b>
Pasta	Bagels	Cereal/granola bar
Stir Fry or Fajitas	Crackers	Pretzels
Sandwiches	Pretzels	Fruit Drink
Eggs & Toast	Protein Shake	Fruit
Chicken or potato	Cereal & milk	Instant Breakfast
Brown Rice	Waffles/pancakes	Nutrition Shake

## HEALTH CONCERNS

You need to balance your food intake correctly, as overeating can be extremely detrimental to performance and health. According to a study at Ohio State University, offensive linemen are the most likely players to be obese. A 2011 New York Times article also found that retired linemen have a much higher mortality rate than the general public. Although you do need a higher calorie intake to gain muscle, you shouldn't get fat either. Adjust your calorie intake accordingly -- if you're not getting bigger and stronger, eat a little more, and if you're getting fat, cut your calorie intake slightly. If you're injured, you'll also need fewer calories, as you won't be burning them off.

