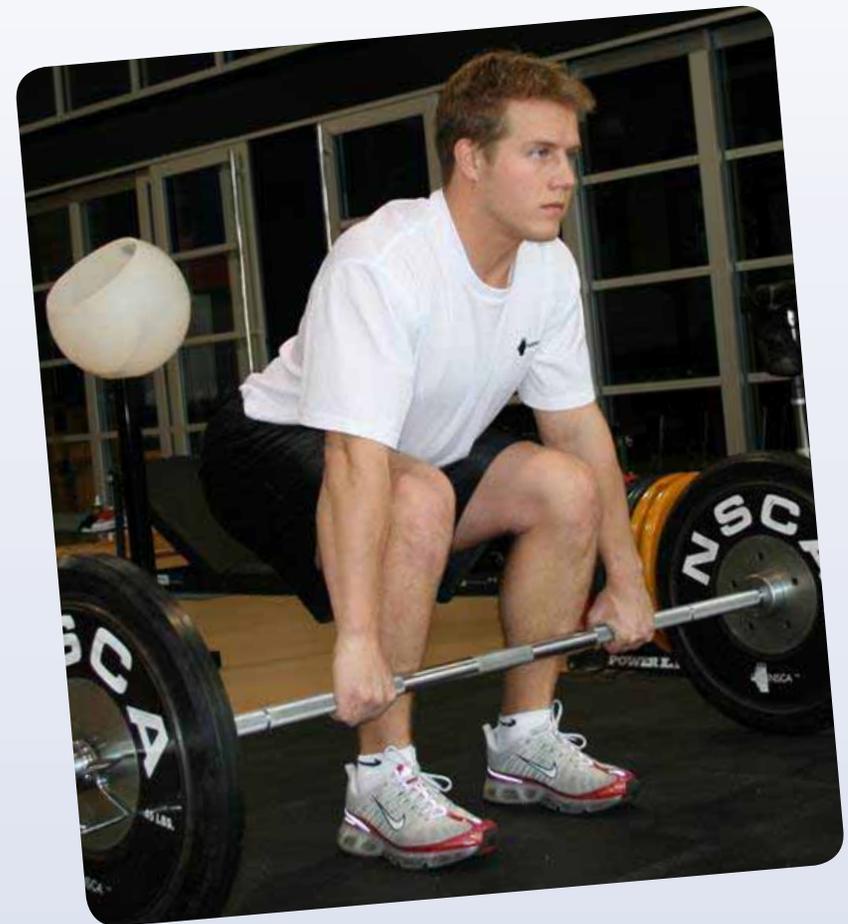


- Needs Analysis
- Active Rest
- Lifting Program
- Hruska Activators  
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- Explosive Day Exercises
- Strength Day Exercises



# Needs Analysis

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Athlete's Name: \_\_\_\_\_ Sport: \_\_\_\_\_ Date: \_\_\_\_\_

Sport Analysis: \_\_\_\_\_

Description Of Sport: \_\_\_\_\_

Most Common Injuries: \_\_\_\_\_

Movements That Must Be Trained: \_\_\_\_\_

Position Played: \_\_\_\_\_

Physiological Description Of The Athlete: \_\_\_\_\_

<b>EVALUATOR</b>	<b>Previous Year</b>	<b>Present Year</b>
Height		
Weight		
Vertical Jump		
Pro Agility Run		
10 Yard Dash		
Hang Clean		
<b>Other Tests</b>		
40 Yard Dash		
Bench Press		
Incline		
Squat		
Broad Jump		

## How can this benefit your athletes?

---

**N**eeds analysis and custom program design considerations require the coach to look at a variety of factors including the characteristics of the sport.

If you are designing a program for volleyball, you are wanting to select exercises that develop power because the sport requires powerful movements.

First we need to consider any previous injuries as we test athletes. The test data is evaluated to determine the individual needs of the athlete so the program can be tailored to the individual.

# Areas that need improvement

---

A movement analysis of the sport of volleyball indicates the large muscle groups need to be trained, particularly the legs. A physiological analysis indicates the target energy source to be the anaerobic system which involves short explosive bursts.

The muscle actions need to be concentric not isometric. We will select exercises that are multi-joint recruiting large muscles or multiple muscles that are explosive and have positive transfer to sport actions because they mimic specific movements in the sport.

The assistance exercises will be selected to give proper balance of strength across joints and opposing muscle groups primarily single joint exercises and smaller muscle groups.

We will have to consider equipment availability and time restrictions so our recommendations may have to be tailored to the facility that is available and the amount of time the athlete has available for training.

# Program Selection

---

In looking at the primary sites of injury for volleyball we must consider women and the high injury rate for ACL's. Also the common rotator cuff injuries from repeated shoulder rotation.

We consider the maturation level and coachability as we work with the athletes to set goals.

We will need to train within the NSCA Principles for proper training frequency, exercise order for proper exercises sequencing, we will want power and core technique exercises first then assistance exercises to follow.

The training loads and repetitions, volume, rest periods and Split Routines to fall within the NSCA Principles and match the needs for the sport season. in-season, preseason, off-season, or post-season.

We will look at conditioning needs and consider which agility, speed, and polymeric drills to include.

# Program Selection (cont.)

---

We will want to include nutritional considerations, lifestyles and emotional state to maximize the training effect and reach the desired goals.

A progressive and methodical application of overload in an athlete's program over time provides the stimulus and the needed recovery to produce the best results.

This means drills and exercises must be combined systematically to improve the strength, conditioning, speed and agility necessary to play at a championship level.

Exercises and drills must be organized into a plan on a yearly basis to peak athletes as they go into the season. Develop a Big Picture annual plan by looking at a calendar and determine what months athletes should train.

Depending on the sport, divide the year into four seasons in a building block procedure. Each season lays the foundation for the next more intense season.

# Active Rest

---

Immediately after the competitive season is over athletes need rest. They need to recuperate physically and psychologically after a stressful season.

If the athletes don't get some rest following the competitive season they will, get stale and lose their enthusiasm to reach the intensity necessary to bring about a conditioning response.

The most important time to take rest is right after the season. Encourage athletes to use the active rest concept; it is crucial to their physical development to higher levels.

Active Rest is a time to have fun but be active enough to get a conditioning effect. Control eating habits during the active rest and work on developing great lifting technique.

Sometimes the athletes will want to show what a hard worker they are and train right through the active rest period. This will diminish their long range gains. Teach them to train smarter not harder.

# Lifting with No Running

---

Zach Duval, a former strength coach for the University of Nebraska provided some post-test data that clearly shows athletes can improve speed, power and agility without running a step.

Zach trained high school age athletes in Colorado where he had no indoor fieldhouse to run. He followed the NSCA Fly Solo Principles for six weeks in his lifting program but did no running.

His pre and post-test data shows how his athletes were able to improve in all performance tests from lifting.

Hopefully this will give coaches confidence to conduct lifting only off-season programs where running is not possible.

In fact, there should be a period in the off-season where the focus is getting strong without any running to interfere with recovery. Once the strength is gained, it is easier to maintain.

Programs that run too much and too often will not be as strong.

## Data from Zach Duval on High School Athletes

<b>36 Males: 6 Weeks Pre/Post Averages</b>	<b>10</b>	<b>40</b>	<b>Pro Agility</b>	<b>VJ</b>
Date: 11/13/2002	2.08	5.9	5.22	16.18
Date: 12/20/2002	1.86	5.7	5.06	20.9
Improvement	0.22	0.2	0.16	4.72

<b>25 Females: 6 Weeks Pre/Post Averages</b>	<b>10</b>	<b>40</b>	<b>Pro Agility</b>	<b>VJ</b>
Date: 1/11/2003	2.11	6.17	5.34	15.7
Date: 2/23/2003	1.89	5.82	4.97	20.33
Improvement	0.22	0.35	0.37	4.63

# Lifting Program

---

**T**raining should occur at least 3 days a week, with a minimum of 24 hours rest between training sessions.

Programs should be designed so that all of the major muscle groups are targeted during training sessions.

Program design should take into account appropriate muscle balance across joints, as well as both the upper- and lower-body muscle groups.

Training should be periodized so that variation of volume and intensity occurs.

Plan recovery periods to help avoid any overtraining symptoms.

Generally, no more than two exercises should be performed per body part; however, different exercises per body part may be used throughout the week.

Specific large-muscle group exercises should be limited to twice a week (e.g., neutral squat performed on Tuesdays and Fridays).

Adequate recovery should be allowed for muscle groups during a training week (e.g., split programs or split-body part programs can be used depending upon the program goals).

## Lifting Program (cont.)

---

Large-muscle group exercises should be performed first in a workout.

Rest between sets depends upon the goals of the training program. If maximal strength is the goal, then a longer rest period is desirable (e.g., 2 – 3 minutes). If skeletal muscle hypertrophy is the primary goal, then short rest periods may be desirable (1 minute).

The light lifting day 1RM should be 10 – 15 pounds lighter than the heavy day 1RM.

Using a four-day-per-week training protocol, one can divide the selected lifts into two groups: (a) explosive lifts, back and biceps (b) strength lifts, legs, chest, shoulders and triceps. This arrangement is most often used by experienced lifters and is the basis for many collegiate programs.

A well-balanced program will make use of multi-joint explosive lifts with free weights as well as ground based isolated movements also with free weights to promote targeted muscle hypertrophy.

Care must be taken when developing programs for younger and older athletes because the volume of exercise and the intensity may have to be altered to meet the recovery demands of each individual.

# Hruska Activators

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The Hruska Activators were developed by Ron Hruska, MPA, PT, at his Postural Restoration Institute™ in Lincoln Nebraska through the study of Myokinematics. Myokinematics is the study of motion, or lack of motion, produced by specific muscles forces. It is the study of muscle as it relates to movement.

The Hruska Activators are designed to create symmetrical muscle flexibility, strength, and length by facilitating, turn on, specific muscle groups and inhibit, turn off, others. The goals of these exercises are to warm the internal temperature of the muscles and establish proper muscle recruitment patterns aligning the body to be in a mechanical advantage to express power and strength.

These recruitment patterns help to restore postural restoration through generating a

neutral pelvis. A neutral pelvis, or level pelvis, is described as the angle and rotation the pelvis creates in relation to the entire body. Muscles must be taught what position they need to be in for restoration to occur.

Postural restoration gives the knees, femur, back, shoulders, and neck capability of full range of motion (ROM) without impingement, decreasing the chance of injury and increasing performance. ROM is described as the entire movement through which a body part rotates around a joint. Muscles must be taught to work through full ranges of motion.

Postural restoration also influences breathing patterns and ability to expand the chest wall upon deep inhalation. The more air, i.e. oxygen, we can bring into our body, the more muscle activity we can generate.

## What does this have to do with my athletes?

---

Most of the population experiences symptoms created by an anterior pelvic position. Symptoms at the knee, hip, groin, sacral-iliac joint, back, top of the shoulder, between the shoulder blades, neck, or face and will demonstrate inability to fully adduct, extend or flex their legs, on one or both sides of their body. They also have difficulty; rotating their trunk, horizontal abduction, and internal rotation limitations, on one or both sides. Postural asymmetry will be very noticeable, with one shoulder lower than the other, and continual shift of their body directed to one side through their hips.

## Hruska Activators

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- 1. Paraspinal Release**
  - 1 set of 10 on the left leg
  - 1 set of 10 on the right leg
- 2. Single Leg RDL**
  - 10 standing on the left leg
  - 5 standing on the right leg
- 3. Side Lying Knee to Knee's**
  - 1 set of 10 on the left side
  - 1 set of 10 on the right side
- 4. Side Lying Internal Rotation**
  - 1 set of 10 on the left side
  - 1 set of 10 on the right side

# 1. Paraspinal Release

Developed to facilitate the hamstrings, abdominals, and upper-back while inhibiting the low-back and hip flexors.

## Starting Position

1. Sit with feet straight out in front, hands behind the butt, toes pointed up, and shoulder blades pulled back and down.
2. Bend both knees to about 35 degrees and pull the toes toward the shins.

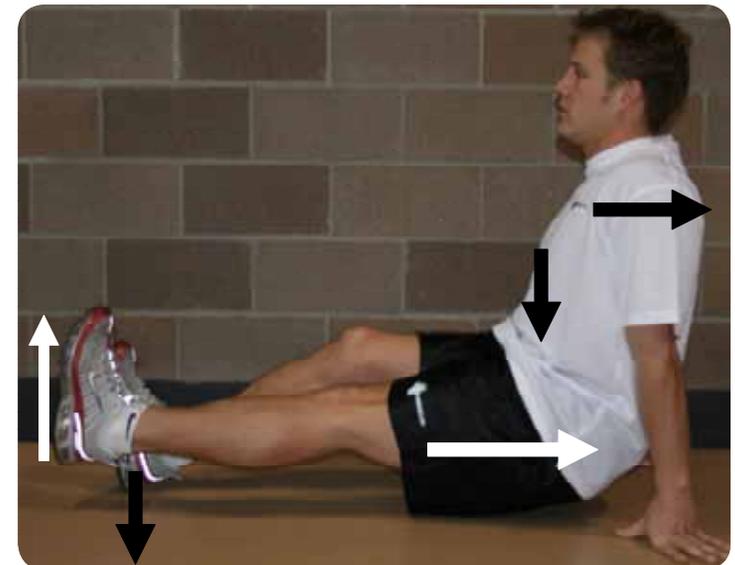
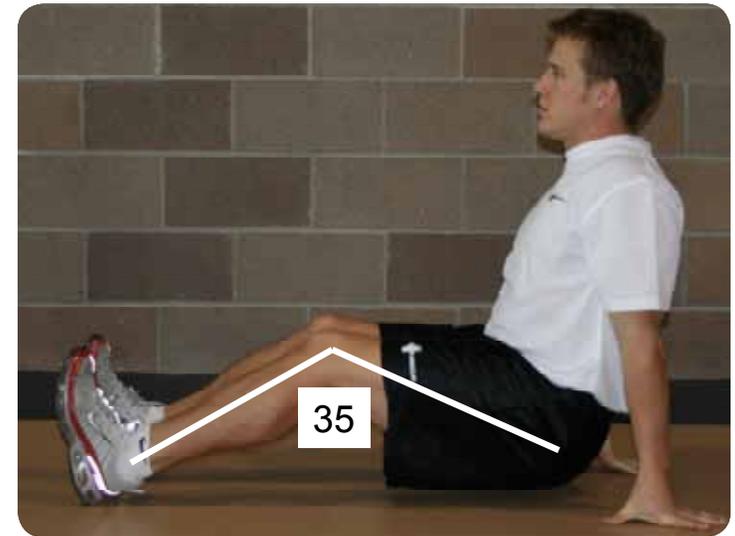
## Procedure

1. Using the hands and heels, lift the butt off the ground.
2. Lift the left foot off the ground, straighten the left leg by locking out the knee, and keep both toes pulled back.
3. Shift the hips back until they are under the shoulders and there is approximately a 15 degree bend in the right knee.
4. Pull down hard with the right heel, contract the abdominals, and keep the shoulder blades pulled back and down.
5. Hold for 10 seconds, go down, and repeat for the other leg.

## Coaching Points

- Keep the shoulders pulled back and down with the chest pulled down by bringing the belly to the spine.
- Hold the head in a relaxed, neutral position, making sure to breathe normally throughout the entire exercise.
- Avoid letting the shoulders roll forward or the toes to point during any part of the exercise.
- Control the 10 second count for both legs.

1 x Left [10 sec]  
1 x Right [10 sec]



## 2. Single Leg RDL

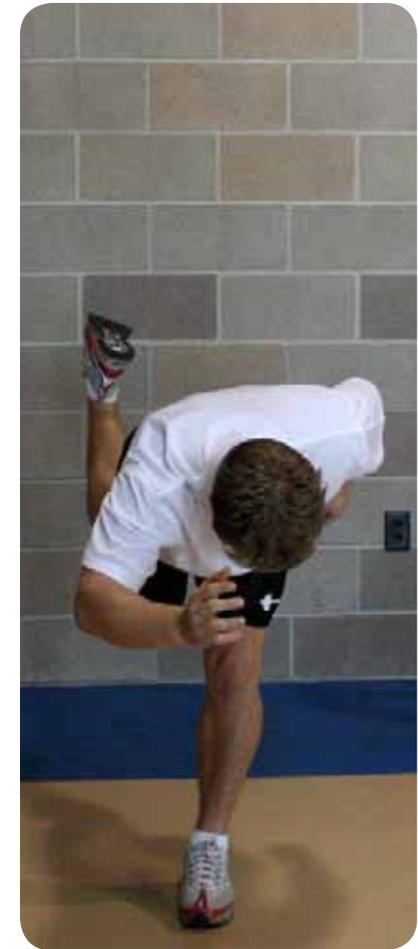
Developed to facilitate the hamstrings, glutes, and abdominals while inhibiting the low-back and hip flexors. Also strengthens the ankle by forcing it to stabilize the weight of the body.

### Starting Position

1. Stand with the feet hip-width apart, knees slightly flexed, and toes slightly turned in.
2. Isometrically contract the abdominals and low-back by bringing the belly to the spine.
3. Shift body weight to the left leg and slightly into the hip; lift the right foot off the ground and raise the right hand in the air.

### Procedure

1. Keep the left knee slightly flexed and bend forward at the hip with the torso and right knee moving together.
2. Proper range of motion has been achieved when the back becomes parallel with the ground.
3. Use the hamstring and glute to pull the body back up to the starting position.
4. Repeat for 10 repetitions standing on the left leg and 5 repetitions standing on the right leg.



1 x 10 Left

1 x 5 Right

## 2. Single Leg RDL (cont.)

### Coaching Points

- Keep the abdominals and low-back isometrically contracted throughout the entire exercise to prevent any arching or use of the back.
- Avoid touching the raised foot to the ground for balance between repetitions. To help with balance, pick a spot on the ground about a foot in front and focus on it.
- Do not allow the body to twist open when bending forward. Keep the hips square to the ground.
- Encourage the athletes to move in a slow and controlled manner through every repetition.



INCORRECT — Back Extension



CORRECT — Hip Extension

### 3. Side Lying Knee to Knees

Developed to facilitate the adductors, glutes, and internal obliques.

#### Starting Position

1. Lay down on the left side with the bottom arm pointed straight up and the top arm reaching out front pushing into the ground.
2. Tuck the knees up to create a 90 degree angle at the hips and knees and pull the toes toward the shins.

#### Procedure

1. Keep the feet together and slowly raise the top knee up about six inches to hip height. The top knee should never leave this position throughout the entire exercise.
2. Raise the bottom knee up, squeezing it to the top knee as hard as you can; hold for 2 seconds, and release.
3. Continue until 10 repetitions are complete, roll over to the right side, and repeat.

#### Coaching Points

- Maintain the raised position of the top knee throughout the entire exercise.
- Start the 2 second count when the bottom knee and top knee are squeezed together.
- Avoid letting the body rotate backward when squeezing. Stay forward and keep pushing into the ground with the top arm.
- Control the pace of the exercise. Tell the athletes when to squeeze and when to release. Counting on your fingers helps keep track of repetitions while still allowing you to help the athletes make corrections.



#### STARTING POSITION

1x10 Left (2sec)

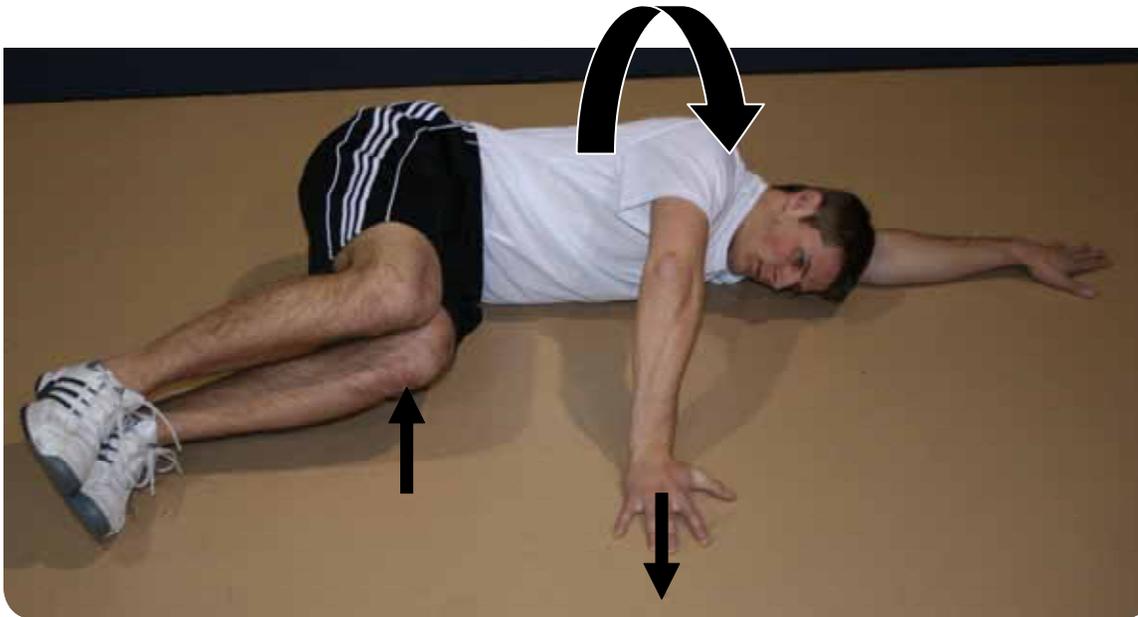
1x10 Right (2sec)

### 3. Side Lying Knee to Knees (cont.)

---



RELEASE POSITION



SQUEEZED POSITION

## 4. Side Lying Internal Rotation

Developed to facilitate the internal rotators, adductors, abductors, glutes, and internal obliques.

### Starting Position

1. Lay down on the left side with the bottom arm pointed up and your top arm reaching out front and pushing into the ground.
2. Tuck the knees up to create a 90 degree angle at the hips and knees and pull the toes toward the shins.
3. Straighten out the top leg reaching through the heel, locking out the knee, and pulling the toe toward the shin. This will create a straight line from the hand to the ankle.
4. Slightly raise the bottom knee off the ground keeping the foot flat on the floor.

### Procedure

1. Rotate the entire leg inside the hip socket as far as possible without bending the knee or pointing the toe.
2. Lower the leg down until the toe touches the ground.
3. Maintain the rotation in the leg and raise it back up to the starting position.
4. Then un-rotate the leg from inside the hip.
5. Continue until 10 repetitions are done, roll over to the right side and repeat.

### Coaching Points

- Avoid any rotation coming from the back throughout the entire exercise. Stay forward and keep the top arm pushing into the ground.
- Avoid bending at the knee and pointing the toe when rotating. All the rotation should come from inside the hip.
- Control the pace of the exercise. Tell the athletes when to rotate, touch, up, and unrotate. Counting on your fingers helps keep track of repetitions while still allowing you to help the athletes make corrections.

### STARTING POSITION

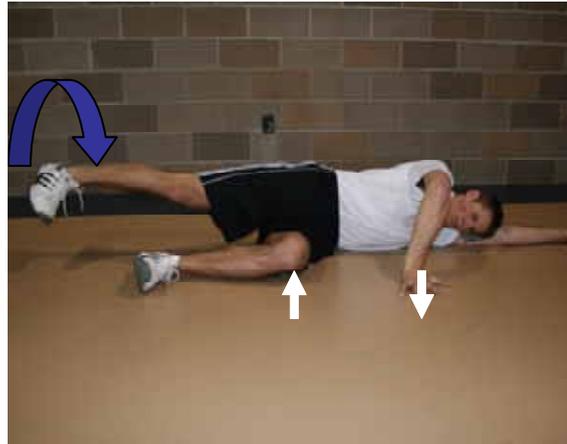
1x10 Left 1x10  
Right



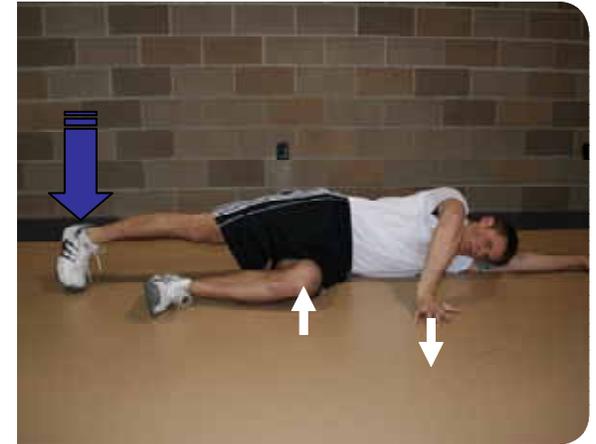
## 4. Side Lying Internal Rotation (cont.)



Starting Position



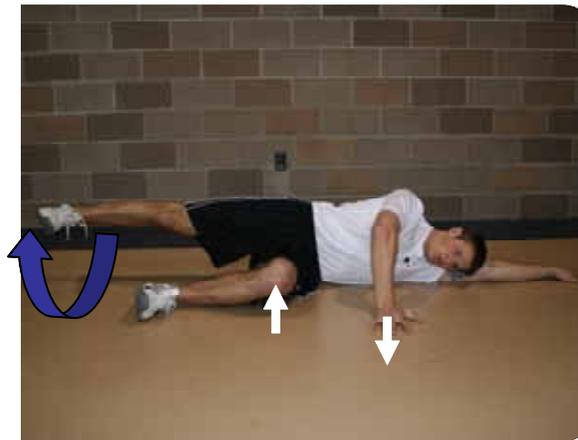
Rotate →



Touch →



Up →



Un-rotate

# Explosive Day Exercises

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## Practice Drills

- Position Practice
- Catch Practice

## Exercise #1

- 1a. Rack Clean
- 1b. Hang Clean
- 1c. Power Clean

## Exercise #2

- 2a. Standing Press
- 2b. Power Press
- 2c. Push Jerk

## Exercise #3

- 3a. Jammer Extension
- 3b. Power Jumps with  
or without Dumbbells

## Exercise #4: Pulling Choice

- 4a. Pull-ups
- 4b. Standing Low Row
- 4c. Lat Pulldown
- 4d. Bent-over Row

## Exercise #5: Bicep Choice

## Exercise #6: Ab Choice

# Explosive Day Base Phase Workout Card

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Sport/Class: \_\_\_\_\_ Phase: Base 3x5

Monday (heavy)	Week 1 - 65%				Week 2 - 70%				Week 3 - 60%				Week 4 - 75%			
Hruska Activators	Load				Load				Unload				Strength Level Test Day			
1. Para-Spinal Release	1x10sec each leg				1x10sec each leg				1x10sec each leg				1x10sec each leg			
2. Single Leg RDL's	10 on Left - 5 on Right				10 on Left - 5 on Right				10 on Left - 5 on Right				10 on Left - 5 on Right			
3. Knee to Knee's	1x10 each side				1x10 each side				1x10 each side				1x10 each side			
4. Internal Rotations	1x10 each side				1x10 each side				1x10 each side				1x10 each side			
1a. Warm-up-Rack Shrug	1x5				1x5				1x5							
	1RM	Sets	Lbs.	Reps.	1RM	Sets	Lbs.	Reps.	1RM	Sets	Lbs.	Reps.	Warm-up and Test			
* 1a. Rack Clean		3x5				3x5				3x5			Rack Clean 5 - 6 reps			
* 2a. Standing Press		3x5				3x5				3x5			Weight	Reps		
3b. Power Jumps with or without Dumbbells	3x5				3x5				3x5							
^ 4. Pulling Choice	3x10				3x10				3x10				Standing Press 5 - 6 reps			
5. Bicep Choice	3x10				3x10				3x10				Weight	Reps		
6. AB Choice																
Thursday (light)	Week 1				Week 2				Week 3				Week 4 - 70%			
Hruska Activators																
1. Para-Spinal Release	1x10sec each leg				1x10sec each leg				1x10sec each leg				1x10sec each leg			
2. Single Leg RDL's	10 on Left - 5 on Right				10 on Left - 5 on Right				10 on Left - 5 on Right				10 on Left - 5 on Right			
3. Knee to Knee's	1x10 each side				1x10 each side				1x10 each side				1x10 each side			
4. Internal Rotations	1x10 each side				1x10 each side				1x10 each side				1x10 each side			
1a. Warm-up-Rack Shrug	1x5				1x5				1x5				1x5			
	1RM	Sets	Lbs.	Reps.	1RM	Sets	Lbs.	Reps.	1RM	Sets	Lbs.	Reps.	1RM	Sets	Lbs.	Reps.
* 1a. Rack Clean		3x5				3x5				3x5				3x5		
* 2a. Standing Press		3x5				3x5				3x5				3x5		
3b. Power Jumps with or without Dumbbells	3x5				3x5				3x5				3x5			
^ 4. Pulling Choice	3x10				3x10				3x10				3x10			
5. Bicep Choice	3x10				3x10				3x10				3x10			
6. AB Choice																
Date	Comments													Supervisor		
	* Represents major lifts that need to be done everyday and checked off by a coach															
	^ 4. Pulling Choice - a. Pull-ups, b. Standing Low Row, c. Lat Pulldown, d. Bent-over Row															

# Example

## NSCA Pounding Chart

Strength Level	3			3			3			5			5			5											
1RM	10	10	10	10	8	6	4	3	2	10	8	6	4	3	2	10	8	6	4	3	2	10	8	6	4	3	2
120	80	85	90	60	70	85	95	100	110	90	95	100	110	110	110	105	110	115	120	125	100	110	115	120	125		
125	80	85	95	60	75	85	100	105	110	95	100	105	110	110	110	115	120	125	130	135	100	110	115	120	125		
130	85	90	95	65	80	90	105	110	115	95	105	110	115	115	120	125	130	135	140	145	110	120	125	130	135		
135	85	95	100	65	80	95	110	115	120	100	110	115	120	120	125	130	135	140	145	150	120	130	135	140	145		
140	90	100	105	70	85	100	110	120	125	105	110	120	125	125	130	135	140	145	150	155	130	140	145	150	155		

**1.** On Monday the first exercise is the Rack Clean and calls for three sets of five reps. Find three columns under the fives column. Look down the columns until you find the poundages you think you can accomplish. (example 95, 105, & 110)

**2.** This would give you a predicted 1RM of 130 pounds. Record the 1RM in the space to the right of the Rack Clean and under Week 1.

**3.** If the poundages are easy, increase your 1RM the next workout. If the poundages were difficult and did not allow good technique, reduce the 1RM the next workout.

**4.** The coach should watch the third set, initial the card, and determine whether the 1RM needs to increase, decrease, or stay the same, then determine the 1RM for the next week's heavy day workout on the card. Use the chart for all major lifts.

## Workout Card

Monday (heavy)	Week 1 - 65%				Week 2 - 70%			
Hruska Activators	Load				Load			
1. Para-Spinal Release	1x10sec each leg				1x10sec each leg			
2. Single Leg RDL's	10 on Left - 5 on Right				10 on Left - 5 on Right			
3. Knee to Knees	1x10 each side				1x10 each side			
4. Internal Rotations	1x10 each side				1x10 each side			
1a. Warm-up-Rack Shrug	1x5				1x5			
	1RM	Sets	Lbs.	Reps.	1RM	Sets	Lbs.	Reps.
* 1a. Rack Clean	130	3x5	95 105 115	LOW	140	3x5		
* 2a. Standing Press		3x5				3x5		
3b. Power Jumps with or without Dumbbells		3x5				3x5		
* 4. Pulling Choice		3x10				3x10		
5. Bicep Choice		3x10				3x10		
6. AB Choice								

# Explosive Day Development Phase Workout Card

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Sport/Class: \_\_\_\_\_ Phase: Development 3x3

Monday (heavy)	Week 5 - 75%				Week 6 - 80%				Week 7 - 70%				Week 8 - 85%			
Hruska Activators	<b>Load</b>				<b>Load</b>				<b>Unload</b>				<b>Strength Level Test Day</b>			
1. Para-Spinal Release	1x10sec each leg				1x10sec each leg				1x10sec each leg				1x10sec each leg			
2. Single Leg RDL's	10 on Left - 5 on Right				10 on Left - 5 on Right				10 on Left - 5 on Right				10 on Left - 5 on Right			
3. Knee to Knee's	1x10 each side				1x10 each side				1x10 each side				1x10 each side			
4. Internal Rotations	1x10 each side				1x10 each side				1x10 each side				1x10 each side			
1b. Warm-up-Hang Shrug	1x5				1x5				1x5							
	<b>1RM</b>	<b>Sets</b>	<b>Lbs.</b>	<b>Reps.</b>	<b>1RM</b>	<b>Sets</b>	<b>Lbs.</b>	<b>Reps.</b>	<b>1RM</b>	<b>Sets</b>	<b>Lbs.</b>	<b>Reps.</b>	<b>Warm-up and Test</b>			
* 1b. Hang Clean		3x3				3x3				3x3			<b>Hang Clean 3 - 4 reps</b>			
* 2b. Power Press		3x3				3x3				3x3			Weight	Reps		
3b. Power Jumps with or without Dumbbells	3x3				3x3				3x3							
^ 4. Pulling Choice	3x5				3x5				3x5				<b>Power Press 3 - 4 reps</b>			
5. Bicep Choice	3x5				3x5				3x5				Weight	Reps		
6. AB Choice																
Thursday (light)	Week 5				Week 6				Week 7				Week 8 - 80%			
Hruska Activators																
1. Para-Spinal Release	1x10sec each leg				1x10sec each leg				1x10sec each leg				1x10sec each leg			
2. Single Leg RDL's	10 on Left - 5 on Right				10 on Left - 5 on Right				10 on Left - 5 on Right				10 on Left - 5 on Right			
3. Knee to Knee's	1x10 each side				1x10 each side				1x10 each side				1x10 each side			
4. Internal Rotations	1x10 each side				1x10 each side				1x10 each side				1x10 each side			
1b. Warm-up-Hang Shrug	1x5				1x5				1x5				1x5			
	<b>1RM</b>	<b>Sets</b>	<b>Lbs.</b>	<b>Reps.</b>	<b>1RM</b>	<b>Sets</b>	<b>Lbs.</b>	<b>Reps.</b>	<b>1RM</b>	<b>Sets</b>	<b>Lbs.</b>	<b>Reps.</b>	<b>1RM</b>	<b>Sets</b>	<b>Lbs.</b>	<b>Reps.</b>
* 1b. Hang Clean		3x3				3x3				3x3				3x3		
* 2b. Power Press		3x3				3x3				3x3				3x3		
3b. Power Jumps with or without Dumbbells	3x3				3x3				3x3				3x3			
^ 4. Pulling Choice	3x5				3x5				3x5				3x5			
5. Bicep Choice	3x5				3x5				3x5				3x5			
6. AB Choice																
Date	Comments														Supervisor	
	* Represents major lifts that need to be done everyday and checked off by a coach															
	^ 4. Pulling Choice - a. Pull-ups, b. Standing Low Row, c. Lat Pulldown, d. Bent-over Row															

# Explosive Day Peak Phase Workout Card

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Sport/Class: \_\_\_\_\_ Phase: Peak 4,3,2

Monday (heavy)	Week 9 - 80%				Week 10 - 85%				Week 11 - 90%				Week 12 - 80%			
Hruska Activators	Load				Load				Load				Unload			
1. Para-Spinal Release	1x10sec each leg				1x10sec each leg				1x10sec each leg				1x10sec each leg			
2. Single Leg RDL's	10 on Left - 5 on Right				10 on Left - 5 on Right				10 on Left - 5 on Right				10 on Left - 5 on Right			
3. Knee to Knee's	1x10 each side				1x10 each side				1x10 each side				1x10 each side			
4. Internal Rotations	1x10 each side				1x10 each side				1x10 each side				1x10 each side			
1c.Warm-up-Power Shrug	1x5				1x5				1x5				1x5			
	1RM	Sets	Lbs.	Reps.	1RM	Sets	Lbs.	Reps.	1RM	Sets	Lbs.	Reps.	1RM	Sets	Lbs.	Reps.
* 1c. Power Clean		4,3,2				4,3,2				4,3,2				4,3,2		
* 2c. Push Jerk		4,3,2				4,3,2				4,3,2				4,3,2		
3b. Power Jumps with or without Dumbbells	4,3,2				4,3,2				4,3,2				4,3,2			
^ 4. Pulling Choice	3x5				3x5				3x5				3x5			
5. Bicep Choice	3x5				3x5				3x5				3x5			
6. AB Choice																
Thursday (light)	Week 9				Week 10				Week 11				Week 12			
Hruska Activators																
1. Para-Spinal Release	1x10sec each leg				1x10sec each leg				1x10sec each leg				1x10sec each leg			
2. Single Leg RDL's	10 on Left - 5 on Right				10 on Left - 5 on Right				10 on Left - 5 on Right				10 on Left - 5 on Right			
3. Knee to Knee's	1x10 each side				1x10 each side				1x10 each side				1x10 each side			
4. Internal Rotations	1x10 each side				1x10 each side				1x10 each side				1x10 each side			
1c.Warm-up-Power Shrug	1x5				1x5				1x5				1x5			
	1RM	Sets	Lbs.	Reps.	1RM	Sets	Lbs.	Reps.	1RM	Sets	Lbs.	Reps.	1RM	Sets	Lbs.	Reps.
* 1c. Power Clean		4,3,2				4,3,2				4,3,2				4,3,2		
* 2c. Push Jerk		4,3,2				4,3,2				4,3,2				4,3,2		
3b. Power Jumps with or without Dumbbells	4,3,2				4,3,2				4,3,2				4,3,2			
^ 4. Pulling Choice	3x5				3x5				3x5				3x5			
5. Bicep Choice	3x5				3x5				3x5				3x5			
6. AB Choice																
Date	Comments														Supervisor	
	* Represents major lifts that need to be done everyday and checked off by a coach															
	^ 4. Pulling Choice - a. Pull-ups, b. Standing Low Row, c. Lat Pulldown, d. Bent-over Row															

# Position Practice

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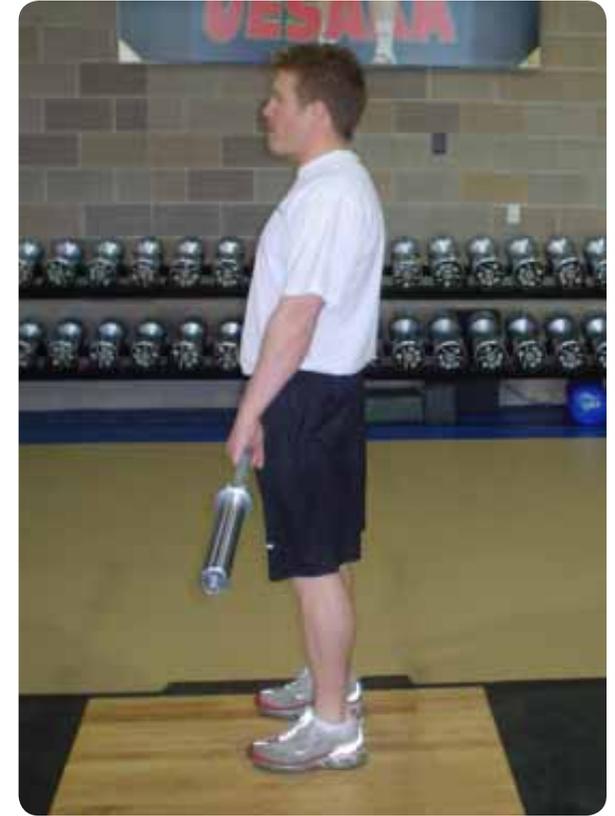
To teach the correct body positioning and movement patterns needed to perform the Rack Clean, Hang Clean, and Power Clean.

The three positions taught in this drill are:

1. Cover Position or the top of the knees  
(the power position of the Hang Clean)
2. Mid-thigh Position (starting position of the Rack Clean)
3. Mid-shin Position (the starting position of the Power Clean)

## Starting Position

1. Use a stick or bar with no weight.
2. Grasp the bar with an overhand grip slightly wider than shoulder width, pull the shoulder blades back and down, and keep the arms straight with the elbows pointed out.
3. Place the feet hip-width apart and toes pointed straight ahead.
4. Stand erect with the shoulders, hips, knees, and ankles in alignment and the bar held at arm's length touching the top part of the thighs.  
(Position 1)



Position 1

## PROCEDURE:

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### Cover Position

1. Slowly push the hips back, letting the bar slide down the thighs, and transfer the weight from the balls of the feet to the heels until the bar reaches the top of the knees. This is the cover position. (Position 2)

In this position, the shoulders should be in front of the bar, the back is flat with the shoulder blades pulled back and down, the arms are straight with the elbows pointed out, hips are flexed, and the knees are slightly flexed.

2. Rise back to the starting position. Pull-through by extending the hips and squeezing the glutes and abs until the body is fully erect.

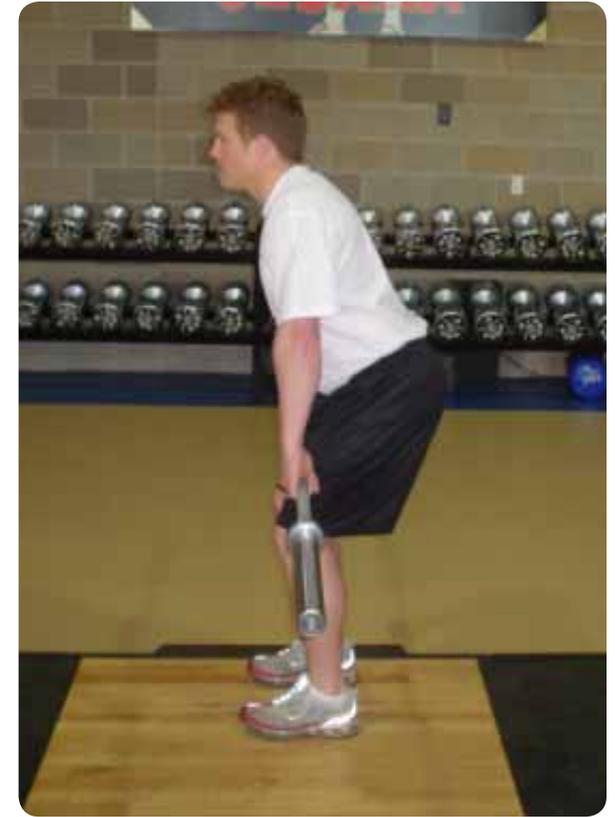
3. Continue the cover—pull-through, multiple times until the movement pattern and body positioning are engrained in the muscle memory.



Position 2

## Mid-thigh Position

4. Next begin adding the mid-thigh position.
5. From the cover position, the bar rides up the thighs by slightly extending the hips and flexing the knees until the shoulders are directly above the bar and in line with the knees and ankles. (Position 3)
6. Practice multiple reps going from the cover position, to mid-thigh, back to cover, back to mid-thigh, and pulling through.



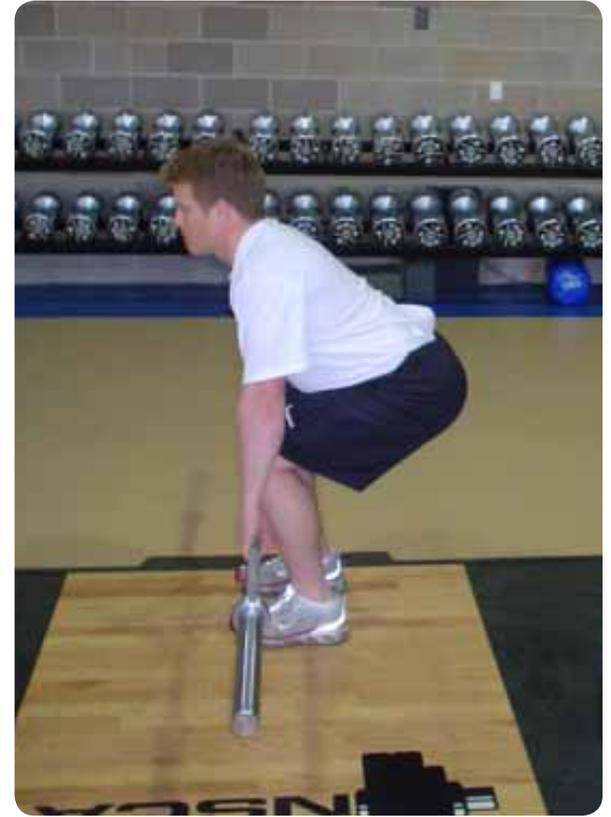
Position 3

## Mid-shin Position

7. To get down to the mid-shin position; get into the cover position, squat down by pushing the hips down and flexing the knees, and keep the back flat with the arms straight.
8. The chest should be filled with air (without lifting the ribcage) with the abs and back isometrically contracted.

Make sure the shoulders are positioned just in front of the bar and the head is held in a neutral position. The weight should be on the heels and the hips should be slightly higher than the knees. (Position 4)

9. Rise back up to the cover position by slowly extending the hips and knees with the shoulders, hips, knees, and bar all moving simultaneously. Keep the bar in contact with the legs at all times and pull through.



Position 4

10. Begin mixing it up and start going from the starting position to the cover position to the mid-shin position, back to cover, to mid-thigh, to cover to mid-shin, to cover and pull-through. Use various combinations of all positions.

11. Once the movement patterns are learned, begin adding an explosive jump phase into the drill from either the mid-thigh or cover position.

## Coaching Points

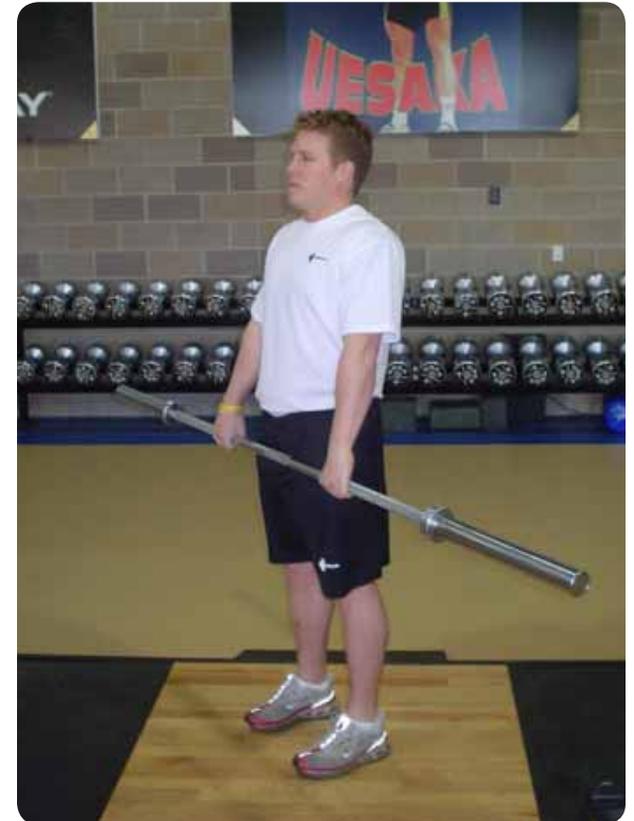
- Maintain a flat back with the arm straight and elbows pointed out. Keep the shoulder blades pulled back and down with the head held in a neutral position.
- During the initial stages of each position, the coach should make sure that every athlete has the correct body positioning by having the athletes hold each position and make any necessary corrections before moving on.
- If the athletes are able to master these three positions, they will have little trouble performing most of the lifts and drills.

# Catch Practice

To teach the correct body positioning and movement patterns of the extension, shrug, pull, and catch phases of the Clean Progression.

## Starting Position

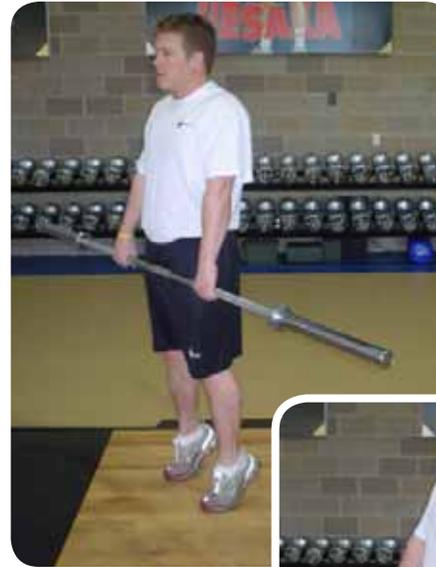
1. Use a bar or stick with no weight.
2. Grasp the bar with an overhand grip slightly wider than shoulder width, pull the shoulder blades back and down, and the arms straight with the elbows pointed out.
3. Place the feet hip-width apart and toes pointed straight ahead.
4. Stand erect with the shoulders, hips, knees, and ankles in alignment and the bar held at arm's length touching the top part of the thighs. (Position 1)



Position 1

## Procedure

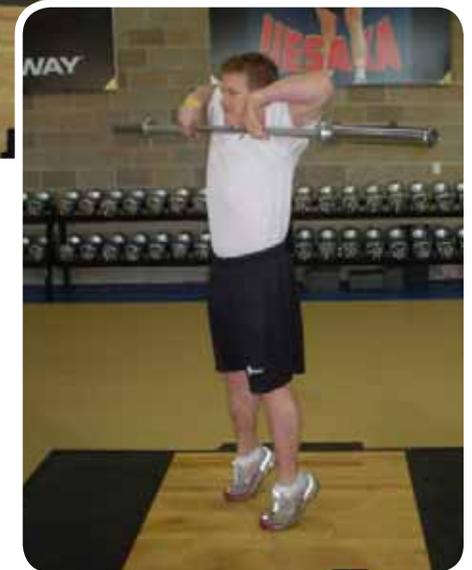
1. Rise up onto the toes. (Position 2)
2. Shrug the shoulders up to the ears keeping the shoulder blades pulled back with the arms straight and the elbows pointed out. (Position 3)
3. Pull the bar up keeping the elbows high with the bar tight to the body. (Position 4)
4. Quickly jump the feet into a squatting stance, keeping them in a 30" x 36" box, and quickly pull yourself under the bar.
5. Flex the hips back and keep the knees behind the toes to sit into a quarter squat position.



Position 2

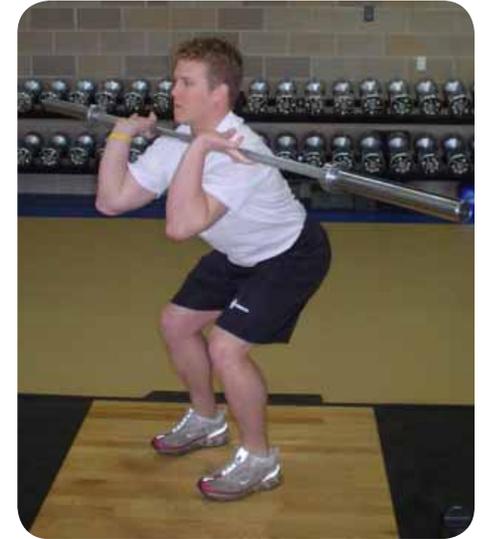


Position 3



Position 4

6. Rotate the elbows down and then up ahead of the bar catching it on the front portion of the shoulders, keeping the elbows high so that the bar is securely racked. (Position 5)
7. Stand erect with the feet flat on the ground until the shoulders, hips, knees, and ankles in alignment.
8. Lower the bar under control and prepare for the next repetition.



Position 5

## Coaching Points

- The shrug position teaches athlete to keep their arms straight through the triple extension of the body.
- Keeping the elbows high in the pull phase teaches the athlete how to keep the bar close to the body.
- Avoid moving so quickly through the phases of the drill that the movement is performed out of control; make it one fluid movement.
- Perform this drill as a warm-up prior to beginning the explosive day workout.
- Good cues to use are; Toes, Shrug, Pull, Catch, respectively for each phase of the drill.

# 1a. Rack Clean

Develops the explosive phase of the pull and teaches the lifter how to get under the bar quickly.

## Starting Position

1. With the bar resting on boxes or in a power rack, the athlete address the bar.
2. Place the feet hip-width apart and toes pointed straight ahead.
3. The knees should be flexed with the weight evenly distributed through the feet.
4. Thighs should be in contact with the bar approximately mid-thigh height.
5. The head should be held in a neutral position with the eyes looking forward.
6. The shoulders, elbows, knees, and ankles should all be in alignment.
7. Take a deep breath to fill the chest with air (without lifting the ribcage) and isometrically contract the abs and low back.



## Procedure

1. Explosively extend the hips, knees, and ankles to achieve triple extension and accelerate the bar upward.
2. Simultaneously extend onto the balls of the feet while shrugging the shoulders straight up.
  - Keep the bar close to the body with the arms straight and elbows pointed out.
3. Jump the feet into a squatting stance, keeping them in a 30" x 36" box, and quickly pull yourself under the bar.
4. Flex the hips backward keeping the knees behind the toes and sit into a quarter squat position absorbing the weight of the bar.

5. Quickly rotate the elbows down and then up ahead of the bar catching it on the front portion of the shoulders so that it is securely racked.
6. Stand erect with the feet flat on the ground and shoulders directly over the balls of the feet.



## Coaching Points

- Lower the bar in a slow controlled manner between reps by keeping the elbows slightly flexed, sitting into a quarter squat position, and allowing it to land on the thighs aiding in its deceleration.
- Avoid pulling with the arms (bending the elbows) before the hips are completely extended.
- Catch the bar with the knees behind the toes, hips back, elbows high, and eyes looking forward.
- Keep the elbows high in front so that the bar is securely racked on the front portion of the shoulders.

# 1b. Hang Clean

Develops the ability to express explosive power in the hips and legs. The mechanics used to execute the Hang Clean are specific to many athletic movements.

## Equipment and materials needed:

- A platform or rubber floor with a 30" x 36" box on it.
- An Olympic bar, rubber plates, and clips.

## Starting Position

1. To begin, approach the bar resting on the floor or platform so the shins make contact with it.
2. Place the feet hip-width apart and the toes pointed straight ahead.
3. Keeping the back flat and shoulder blades pulled together, squat down until the hands grasp the bar.
4. Grasp the bar with an overhand grip slightly wider than shoulder-width with arms straight and the elbows pointed out.
5. The head is held in a neutral position with the eyes looking forward throughout the entire lift. (Position 1)

6. Slowly extend the hips and knees, elevating the bar to just above the knees. Keep the bar in close to the body.
7. As the bar passes the knees, extend the hips.
8. Stand erect with the shoulders, hips, and knees in alignment and the bar held at arm's length touching the top part of the thigh. (Position 2)



Position 1



Position 2

## Procedure:

1. Take a deep breath to fill the chest with air and isometrically the abs and low back.
2. Keeping the back flat, shoulder blades pulled together, and trapezius relaxed; lower the bar to the top of the knees by flexing at the hips.
3. In this position the shoulders should be in front of the bar, the back is flat, the arms are straight with the elbows pointed out, hips are flexed, the knees are slightly bent (not locked out), and the weight is on the heels. This will put the athlete in the power (cover) position. (Position 3)
4. When the bar reaches the top of the knees there should be no hesitation as to take full advantage of the stretch-shortening cycle.
5. Immediately extend the hips, knees, and ankles explosively to achieve triple extension and accelerate the bar upward.
6. Simultaneously extend onto the balls of the feet while shrugging the shoulders straight up. (Position 4)
7. Keep the bar close to the body with the arms straight and elbows pointed out.
8. Jump the feet into a squatting stance, keeping them in a 30" x 36" box, and quickly pull yourself under the bar.
9. Flex the hips backward keeping the knees behind the toes and sit into a quarter squat position absorbing the weight of the bar. Jump the feet into a squatting stance, keeping them in a 30" x 36" box, and quickly pull yourself under the bar.
10. Quickly rotate the elbows up ahead of the bar catching it on the front portion of the shoulders so that it is securely racked. (Position 5)
11. Stand erect with the feet flat on the ground and shoulders directly over the balls of the feet. (Position 6)



Position 3



Position 4



Position 5



Position 6

- **Once the bar is lifted off the platform the lift begins.**
- **Each athlete is allowed 1 set of 5 repetitions.**
- **Lower the bar in a slow controlled manner between reps by keeping the elbows slightly flexed, sitting into a quarter squat position, and allowing it to land on the thighs aiding in its deceleration.**
- **Stand erect before each repetition.**
- **If the bar is dropped to the platform the lift is over.**
- **The coach will determine the number of repetitions that were successful.**



Position 1



Position 2



Position 3



Position 4

## Coaching Points:

- Avoid pulling with the arms (bending the elbows) before the hips are completely extended.
- Catch the bar with your knees behind the toes, hips back, elbows high, and eyes up.
- The scooping action or re-bend of the legs can be compromised by bending the elbows before the hips can be fully extended to the triple extension (Position 4) OR by swinging the bar away from the body.
- With the younger and or less experienced athletes, have them pause and hold the bar at the top of the knees so the coach can make sure they are in the correct power position before making the explosive movement.



Position 5



Position 6

## 1c. Power Clean

Develops the ability to express explosive power in the hips and legs. The bar is pulled in one continuous motion and is caught on the shoulders.

### Starting Position

1. Approach the bar resting on the floor or platform so the shins make contact with it.
2. Place the feet hip-width apart and the toes pointed straight ahead.
3. Keeping the back flat and shoulder blades pulled together, squat down until the hands grasp the bar.
4. Grasp the bar with an overhand grip slightly wider than shoulder-width with arms straight and the elbows pointed out.
5. The head is held in a neutral position with the eyes looking forward throughout the entire lift.
6. The weight should be on the heels and the hips should be slightly higher than the knees.
7. Take a deep breath to fill the chest with air (without lifting the ribcage) and isometrically contract the abs and low back.



## Procedure

1. Lift the bar smoothly off the floor to just above the knees by slowly extending the hips and knees keeping the bar in contact with the shins.  
The bar, knees, hips, and shoulders rise at the same rate keeping the back angle constant.
2. As the bar passes over the knees, the shoulders remain in front of the bar, the arms are straight with elbows pointed out, hips are flexed, and the knees slightly bent.
3. Explosively extend the hips, knees, and ankles to achieve triple extension and accelerate the bar upward.
4. Simultaneously extend onto the balls of the feet while shrugging the shoulders straight up.

The bar is accelerated upward and kept close to the body by keeping the shoulder blades pulled back with the arms straight and elbows pointed out.

5. Jump the feet into a squatting stance, keeping them in a 30" x 36" box, and quickly pull yourself under the bar.
6. Flex the hips backward keeping the knees behind the toes and sit into a quarter squat position absorbing the weight of the bar.
7. Quickly rotate the elbows up ahead of the bar catching it on the front portion of the shoulders so that it is securely racked.
8. Stand erect with the feet flat on the ground and shoulders directly over the balls of the feet.



## Coaching Points

- Lower the bar in a slow controlled manner between reps by keeping the elbows slightly flexed, sitting into a quarter squat position, and allowing it to land on the thighs aiding in its deceleration.
- To lower the bar back to the platform, get into the cover position, squat down by pushing the hips back and down and flexing at the knees with the back and arm positions remaining constant.
- Do not jerk the bar off the floor; pull it smoothly and under control to the top of the knees.
- Avoid bending the elbows before the hips are completely extended.
- Catch the bar with your knees behind the toes, hips back, elbows high, and eyes straight ahead.



## 2a. Standing Press

To develop strength in the muscles of the shoulder girdle and teach the lifter to use the whole body in the stabilizing of weight overhead.

### Starting Position

1. The bar should be set a height where the athlete has no trouble lifting it off the rack.
2. Place the hands evenly on the bar, slightly wider than shoulder-width, and grasping it tightly with a pronated grip.
3. The bar should be positioned behind the neck comfortably across the shoulders with the shoulder blades pulled back and down and the elbows pointed down with the hands directly above them.
4. Stand erect and take one or two steps back, positioning yourself in the center of the rack with the feet hip-width apart, toes pointed straight ahead, and slightly flexing at the hips and knees with the weight centered on the feet.
5. The head and eyes should be focused straight ahead in a neutral position.  
This keeps the cervical spine in line with the body and helps maintain balance.
6. Isometrically contract the glutes and abs to stabilize the body and prevent the back from arching.



## Procedure

1. Maintain the position of the ankles, knees, and hips, and press the bar straight overhead by extending the arms.
2. The bar should end behind the ears with the elbows completely extended and inline with the shoulders, hips, and heels.
3. Lower the bar to its starting position in a controlled manner.



## Coaching Points

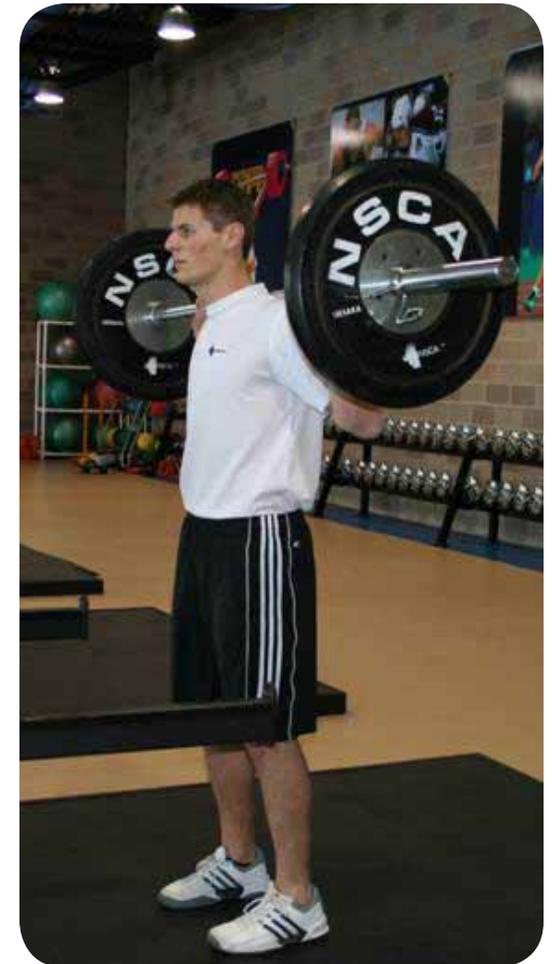
- When lowering the bar, the athlete should simultaneously flex the hips and knees as the bar hits the shoulders to help absorb the weight, not allowing the knees to come forward over the toes.
- Avoid using your lower body to complete the lift.
- Keep the shoulders over the hips during the entire range-of-motion.
- Keep the elbows directly under the hands throughout the entire lift.
- Keep the glutes and abs isometrically contracted to avoid arching the back to complete the lift.
- This lift can also be done from the front of the shoulders.

## 2b. Power Press

To develop explosive power in the hips and legs, as well as strengthen the shoulder muscles while stabilizing the weight overhead.

### Starting Position

1. The bar should be set a height where the athlete has no trouble lifting it off the rack.
2. Place the hands evenly on the bar, slightly wider than shoulder-width, and grasping it tightly with a pronated grip.
3. The bar should be positioned behind the neck comfortably across the shoulders with the shoulder blades pulled back and down and the elbows pointed down with the hands directly above them.
4. Stand erect and take one or two steps back, positioning yourself in the center of the rack with the feet hip-width apart, toes pointed straight ahead, and slightly flexing at the hips and knees with the weight centered on the feet.
5. The head and eyes should be focused straight ahead in a neutral position. This keeps the cervical spine in line with the body and helps maintain balance.
6. Isometrically contract the abs and low back to stabilize the body and prevent the back from arching.



## Procedure

1. Keeping the back flat and shoulder blades pulled together; dip into a quarter squat position by pushing the hips back, flexing the knees, letting the torso come forward, and transfer the weight onto the heels.
2. Explosively extend the hips and knees going onto the balls of the feet to accelerate the bar upward.
3. Drive the bar upward by extending the arms completely, pressing it overhead. The bar should end up behind your ears with the elbows completely extended and inline with the shoulders and hips.
4. As the bar is caught overhead, flex the hips backward keeping the knees behind the toes and sit into a quarter squat position.
5. Extend the hips and knees to stand erect and complete the lift.
6. Lower the bar to its starting position in a controlled manner.

## Coaching Points

- When lowering the bar, simultaneously flex the hips and knees as the bar hits the shoulders to help absorb the weight, not allowing the knees to come forward over the toes.
- The dip should be controlled with NO pause at the bottom.
- Keep the elbows directly under the hands throughout the entire lift.
- Keep the abs isometrically contracted to avoid arching the back to complete the lift.
- This lift can also be done from the front of the shoulders.



## 2c. Push Jerk

To develop explosive power in the hips and legs, as well as strengthen the shoulder muscles while stabilizing the weight overhead.

### Starting Position

1. The bar should be set a height where the athlete has no trouble lifting it off the rack.
2. Place the hands evenly on the bar, slightly wider than shoulder-width, and grasping it tightly with a pronated grip.
3. The bar should be positioned behind the neck comfortably across the shoulders with the shoulder blades pulled back and down and the elbows pointed down with the hands directly above them.
4. Stand erect and take one or two steps back, positioning yourself in the center of the rack with the feet hip-width apart, toes pointed straight ahead, and slightly flexing at the hips and knees with the weight centered on the feet.
5. The head and eyes should be focused straight ahead in a neutral position. This keeps the cervical spine in line with the body and helps maintain balance.
6. Isometrically contract the abs and low back to stabilize the body and prevent the back from arching.



## Procedure

1. Keeping the back flat and shoulder blades pulled together; dip into a quarter squat position by pushing the hips back, flexing the knees, letting the torso come forward, and transfer the weight onto the heels.
2. Explosively extend the hips and knees going onto the balls of the feet to accelerate the bar upward.
3. Split the legs apart as the feet leave the ground moving one straight forward and one straight back.
4. Drive the bar upward with the shoulders, extending the arms, and pushing the body under the bar.
5. Flex the front leg to about 90 degrees with the knee directly over the ankle and the front foot slightly turned in.
6. Slightly flex the back knee with the foot up on the toes and the heel pointed up.
7. The bar should end up behind the ears with the elbows completely extended and inline with the shoulders and hips.
8. Once the catch is made and stabilized stand erect, walking the feet back to parallel with the shoulders, hips, knees, and ankles in alignment.
9. Lower the bar to its starting position in a controlled manner.

## Coaching Points

- When lowering the bar, simultaneously flex the hips and knees as the bar hits the shoulders to help absorb the weight, not allowing the knees to come forward over the toes.
- The dip should be controlled with NO pause at the bottom.
- Keep the torso vertical when making the catch overhead. Any forward lean will make it difficult to complete the lift.
- Drive the bar up with the shoulders to take advantage of the power from the hips and legs.
- When splitting the feet apart they should land on the ground hip-width apart. On every other repetition, switch which foot goes forward and which foot goes back.
- Keep the elbows directly under the hands throughout the entire lift.
- Keep the abs isometrically contracted to avoid arching the back to complete the lift.
- This lift can also be done from the front of the shoulders.

## 3a. Jammer Extension

To develop total body power by utilizing a ground-based, multiple-joint movement. This exercise also develops the ability of the body to stabilize at the ankles, knees, hips, torso, shoulders, elbows and wrists.

### Start Position

1. Grasp the handles with hands as close as possible.
2. Position the shoulders directly behind the hands as close as possible.
3. Elbows should be positioned at the side of the torso.
4. Position the feet hip-width apart, toes pointed straight ahead, and the body weight evenly distributed on the feet.
5. Flex the hips backward keeping the knees behind the toes and sit into a quarter squat position.



## Procedure

1. Take a deep breath to fill the chest with air (without lifting the ribcage) and isometrically contract the abs and low back.
2. Rock back allowing the weight to shift to the heels and then move forward to the starting position to gain momentum.
3. Explode into the handles by extending at the hips, knees, and ankles onto the balls of the feet.
4. Follow through by extending the shoulders and elbows simultaneously. There should be a straight line from the wrists to the ankles.

## Coaching Points

- Do not allow the shoulders to be positioned higher than the hands. If the shoulders are too high, the hips won't be flexed at the correct angle.
- When rocking back keep the shoulders below the hands. This helps maintain the proper hip and knee flexion.
- Before you extend the hips, make sure the shoulders are close to the hands and the elbows are tucked tight to the side of the torso.
- The body must be positioned in a straight alignment from the feet to the hands at the finish of the exercise.



## 3b. Power Jump

Develops the ability to express explosive power in the hips and legs.

### Starting Position

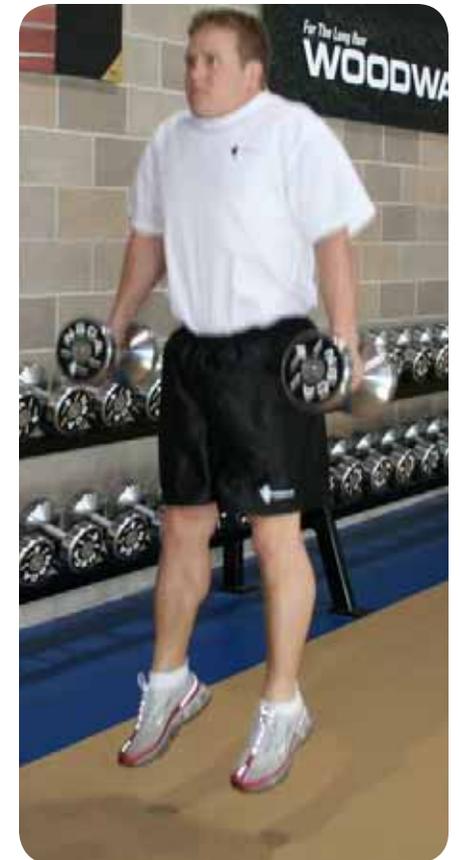
1. Stand in an erect position holding dumbbells at the sides with the shoulder blades pulled back and down, arms straight, and palms facing in.
2. Position the feet hip-width apart and toes pointed straight ahead.
3. Take a deep breath to fill the chest with air (without lifting the ribcage) and isometrically contract the abs and low back.

### Procedure

1. Keeping the back flat and shoulder blades pulled together; dip into a quarter squat position by pushing the hips back, flexing the knees, letting the torso come forward, and transfer the weight onto the heels.
2. Without any hesitation, explosively extend the hips, knees, and ankles to achieve triple extension.

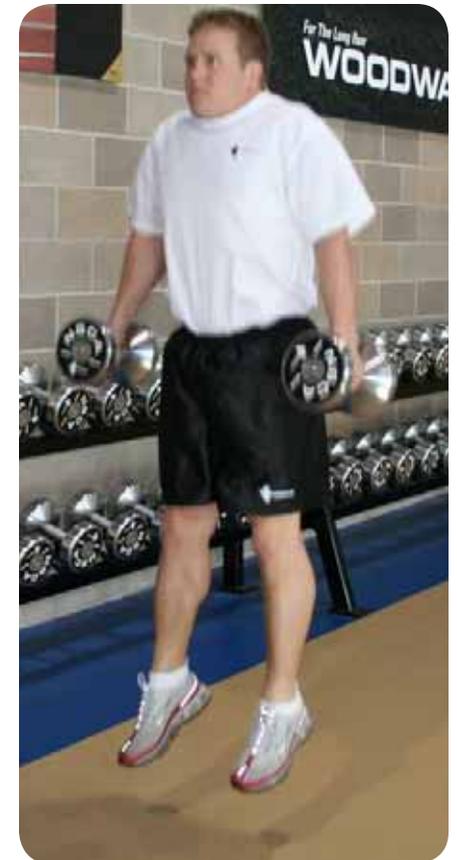
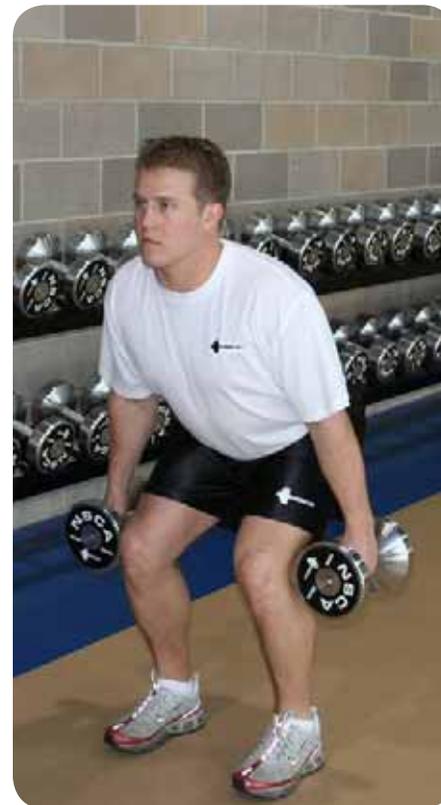
As the feet leave the ground the shoulders, hips, knees, and ankles should all be in alignment.

3. At the peak of the jump, shrug the shoulders upward toward the ears, and keep the dumbbells close to the body.
4. Land as soft as possible, flexing at the hips and knees to absorb the weight.



## Coaching Points

- When landing, keep the shoulder blades retracted back, and simultaneously flex at the knees and hips, not allowing the knees to come forward over the toes, to help absorb the weight.
- Maintain the isometric contraction of the abs and low back throughout the entire lift and landing.
- Avoid shuffling the feet or taking any steps before jumping.
- Avoid letting the dumbbells swing around; keep them tight to the sides.



## 4a. Pull-Ups

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To develop strength in the muscles of the upper back, arms, abdominals, and stretch the upper extremities.

### Starting Position

1. Place the hands evenly on the bar slightly wider than shoulder-width with a pronated grip.
2. Let the body hang completely from the bar making sure the elbows and hips are fully extended with the knees slightly flexed and ankles crossed.
3. Isometrically contract the abs and low back to stabilize the body and prevent arching of the back.

### Procedure

1. From the fully extended position pull the body up, squeezing the shoulder blades down and together as the elbows are flexed.
2. Continue to pull the body upward until the chin is over the bar.
3. Lower yourself in a controlled manor back to the starting position.

### Coaching Points

- Avoid swinging the body or legs to complete the lift.
- Concentrate on squeezing the shoulder blades back and down and achieving a full range of motion.
- Maintain the isometric contraction of the abs and low back throughout the entire range of motion.
- Lower yourself slowly until a full stretch is experienced at the bottom of the motion.

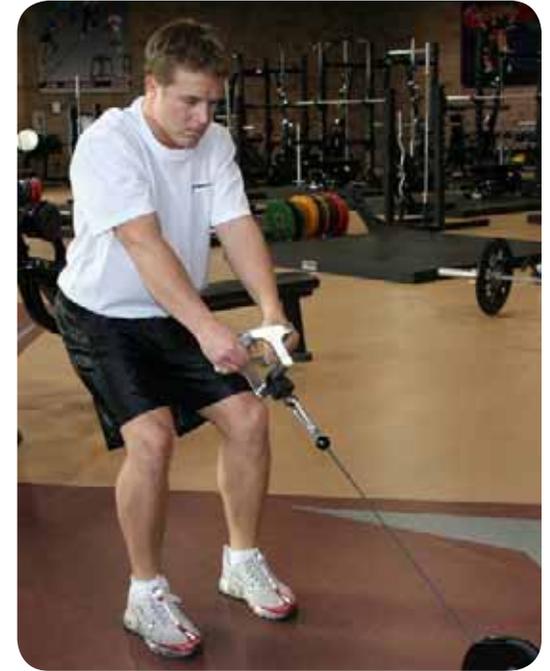


## 4b. Standing Low Row

To develop the muscles of the upper back as well as the stabilizers of the legs and trunk.

### Starting Position

1. Squat down to grasp the bar, placing the hands evenly on it.
2. With the chest up, back flat, and abs contracted, take a few steps back and center yourself in the machine.
3. Stand with the feet hip-width apart, toes pointed straight ahead, hips and knees slightly flexed, and the weight centered on the feet.
4. The knees should be directly over the ankles with a slight forward lean of the torso so the shoulders are directly over the knees.
5. The elbows should be fully extended.
6. Isometrically contract the glutes and abs to stabilize the body and prevent the back from arching.



## Procedure

1. Maintaining the starting body position, squeeze the shoulder blades back and down while flexing the elbows.
2. Continue to pull the bar until it touches the upper abdomen.
3. Return the bar to its starting position in a slow, controlled manner.



## Coaching Points

- Maintain a flat back throughout the entire exercise.
- Concentrate on maintaining a constant body position throughout the entire lift.
- Avoid using momentum to complete the lift.
- Focus on achieving a full range-of-motion.



## 4c. Lat Pulldown

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To develop strength in the muscles of the upper back.

### Starting Position

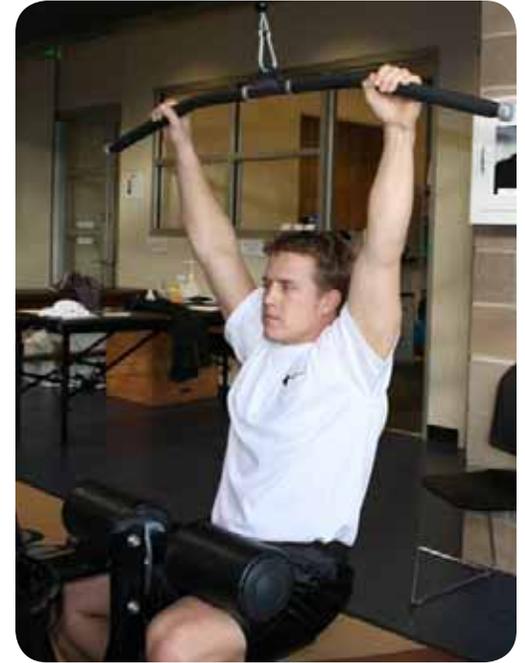
1. Adjust the thigh pad to a height where it anchors you to the seat.
2. Place the hands evenly on the bar slightly wider than shoulder-width using an overhand grip.
3. With the arms fully extended, sit with the chest up, back flat, and abs contracted.

### Procedure

1. Maintaining a flat back, pull the shoulder blades down and together while flexing the elbows.
2. Pull the bar down until it touches the top of the chest.
3. Return the bar to its starting position in a slow, controlled manner.

### Coaching Points

- Maintain a flat back position throughout the entire lift.
- Avoid initiating the movement of the bar downward by leaning backward with the torso.
- Concentrate on pulling the elbows straight down and squeezing the shoulder blades together.
- Focus on achieving a full range-of-motion.



## 4d. Bent-over Row

To develop strength in the muscles of the upper back.

### Starting Position

1. Walk up to the bar resting on the floor or platform and place the feet hip-width apart and toes pointed straight ahead.
2. Keeping the back flat and shoulder blades pulled together, sit down until the hands grasp the bar.
3. Grasp the bar with an overhand grip slightly wider than shoulder-width with the arms straight and elbows pointed out.
4. Slowly extend the legs elevating the bar to just above the knees. As the bar passes the knees extend the hips to stand erect.
5. Isometrically contract the abs and lower back.
6. Keeping the back flat and knees slightly flexed push the hips back and lower the upper body until it is parallel with the floor.



## Procedure

1. Maintaining an upper body position parallel to the floor, squeeze the shoulder blades together while flexing the elbows, pulling them up and slightly outward.
2. Continue to pull the bar upward until it touches the upper abdomen.
3. Return the bar to its starting position in a slow, controlled manner.

## Coaching Points

- The body weight should be on the heels of the feet with the knees slightly flexed.
- Maintain a straight back position throughout the entire lift.
- Concentrate on squeezing the shoulder blades back and down and achieving a full range of motion.
- Avoid using momentum to complete the lift.



# 5. Bicep Choice: W-bar Curl

To develop strength in the muscles of the biceps.

## Starting Position

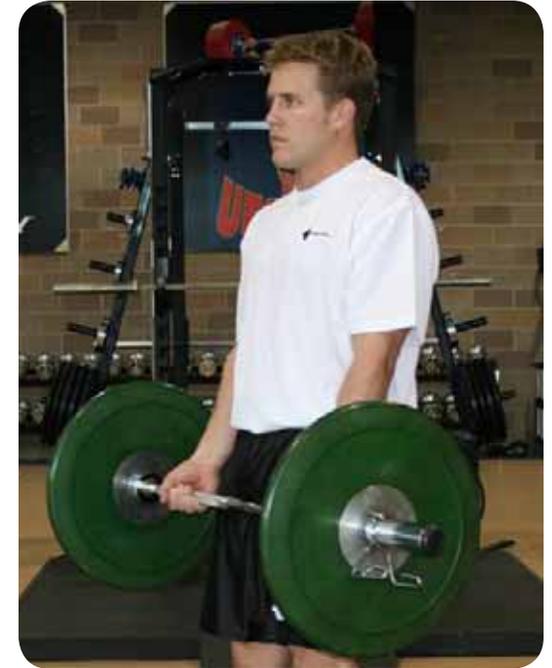
1. Grasp the bar with an underhand grip at approximately shoulder-width.
2. Stand erect with the feet hip-width apart and toes pointed straight ahead.
3. Hold the bar at arms length with the elbows completely extended and shoulder blades pulled back and down.
4. Isometrically contract the glutes and abs to stabilize the body and prevent rocking back and forth to complete the lift.

## Procedure

1. Maintaining an erect body position, slowly pull the bar upward by flexing the elbows.
2. Continue to pull the bar up to the shoulders until the elbows are completely flexed.
3. Return the bar to its starting position in a slow, controlled manner.

## Coaching Points

- Keep the elbows positioned at the sides throughout the entire lift.
- Avoid letting the shoulders roll forward during any part of the lift.
- Avoid using momentum to complete the lift.
- There are many different bicep exercises to choose from. Change the exercise every so often to add variety to the workout and prevent staleness.



## 6. Ab Choice: Planks

To develop strength, stability, and balance in the muscles of the pelvic, abdominal, back, and shoulder areas.

### Hand Planks

#### STARTING POSITION

1. Start by getting on the hands and knees on a non-slip surface.
2. The hands should be directly under the shoulders and the knees should be directly under the hips.
3. The head should be held in a neutral position. This keeps the cervical spine in line with the body and helps maintain balance.

#### PROCEDURE

1. Walk the feet straight back until your legs are fully extended and stay on the toes.
2. Create a neutral pelvic and spine position by rolling the pelvis forward, contracting the glutes, and pulling the belly button to the spine by contracting the inner abdominal muscles.



3. A straight line should be created from the ankles to the ears.
4. Maintain this position for the designated time or until a breakdown in technique occurs.

#### COACHING POINTS

- Avoid letting the hips sag and arching the lower back.
- Concentrate on breathing normally without releasing the abdominal contraction throughout the entire exercise.
- Try holding for 1 minute to start. As strength is gained and technique improves, increase the time.

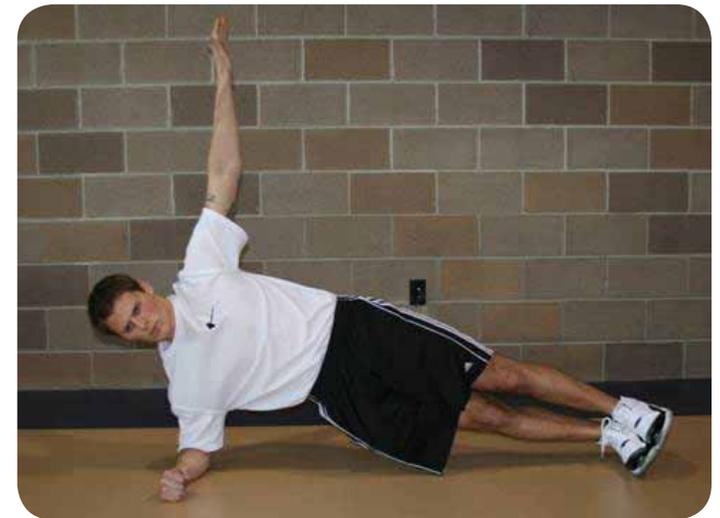
# Elbow Planks

## STARTING POSITION

1. Start by getting onto the elbows and knees on a non-slip surface.
2. The elbows should be directly under the shoulders and the knees should be directly under the hips.
3. The head should be held in a neutral position. This keeps the cervical spine in line with the body and helps maintain balance.

## PROCEDURE

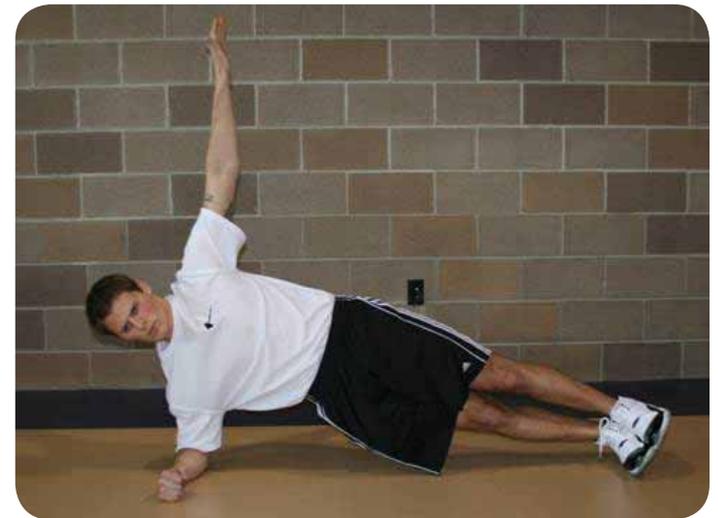
1. Walk the feet straight back until the legs are fully extended and stay on the toes.
2. Create a neutral pelvic and spine position by rolling the pelvis forward, contracting the glutes, and pulling the belly button to the spine by contracting the inner abdominal muscles.
3. Hold this position for 30 seconds. Then, without letting the knees or hips touch the ground, roll to one side positioning the elbow directly under the shoulder and turning the arm to face forward.
4. Maintaining the neutral pelvic and spine position, stack the feet, lift the hips high, and raise the top arm straight up.
5. Hold for 30 seconds then roll to the other side and hold for 30 seconds.



## Elbow Planks

### COACHING POINTS

- Maintain body position for the designated time or until a breakdown in technique occurs.
- Avoid letting the hips sag and arching the lower back.
- Concentrate on breathing normally without releasing the abdominal contraction throughout the entire exercise.
- As strength is gained and your technique improves, increase the time.
- Keep the elbows directly under the shoulders throughout the entire exercise.
- When rolled to one side keep the top hip in front of the bottom hip and avoid letting the body fall and rotate backward.



# Strength Day Exercises

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These traditional lifts have provided great results for thousands of programs all over the country for many years. Athletes tend to make better gains when they first begin lifting.

## **Exercise #7: Neutral Squat**

## **Exercise #8**

8a. RDL

8b. Clean Deadlift

8c. (1)Walking Lunge  
or (2)Split Squat

## **Exercise #9**

9a. Bench Press

9b. Incline Press

## **Exercise #10**

10a. Shoulder Raises

10b. Shoulder Press

## **Exercise #11: Triceps Choice**

## **Exercise #12: Ab Choice**

# Strength Day Base Phase Workout Card

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Sport/Class: \_\_\_\_\_ Phase: Base 3x10

Tuesday (light)	Week 1 - 65%				Week 2 - 70%				Week 3 - 60%				Week 4 - 75%			
Hruska Activators	<b>Load</b>				<b>Load</b>				<b>Unload</b>				<b>Strength Level Test Day</b>			
1. Para-Spinal Release	1x10sec each leg				1x10sec each leg				1x10sec each leg				1x10sec each leg			
2. Single Leg RDL's	10 on Left - 5 on Right				10 on Left - 5 on Right				10 on Left - 5 on Right				10 on Left - 5 on Right			
3. Knee to Knee's	1x10 each side				1x10 each side				1x10 each side				1x10 each side			
4. Internal Rotations	1x10 each side				1x10 each side				1x10 each side				1x10 each side			
7. Warm-up-Neutral Squat	1x10				1x10				1x10							
	<b>1RM</b>	<b>Sets</b>	<b>Lbs.</b>	<b>Reps.</b>	<b>1RM</b>	<b>Sets</b>	<b>Lbs.</b>	<b>Reps.</b>	<b>1RM</b>	<b>Sets</b>	<b>Lbs.</b>	<b>Reps.</b>	<b>Warm-up and Test</b>			
* 7. Neutral Squat		2x10				3x10				3x10			<b>Squat 8 - 10 reps</b>			
8a. RDL		2x10				3x10				3x10			Weight	Reps		
* 9b. Incline Press		2x10				3x10				3x10			<b>Bench 8 - 10 reps</b>			
10a. Shoulder Raises	2x10 frt/lat/b-o				2x10 frt/lat/b-o				2x10 frt/lat/b-o				Weight	Reps		
11. Triceps Choice	2x10				3x10				3x10							
12. AB Choice																
Friday (heavy)	Week 1				Week 2				Week 3				Week 4 - 70%			
Hruska Activators																
1. Para-Spinal Release	1x10sec each leg				1x10sec each leg				1x10sec each leg				1x10sec each leg			
2. Single Leg RDL's	10 on Left - 5 on Right				10 on Left - 5 on Right				10 on Left - 5 on Right				10 on Left - 5 on Right			
3. Knee to Knee's	1x10 each side				1x10 each side				1x10 each side				1x10 each side			
4. Internal Rotations	1x10 each side				1x10 each side				1x10 each side				1x10 each side			
7. Warm-up-Neutral Squat	1x10				1x10				1x10				1x10			
	<b>1RM</b>	<b>Sets</b>	<b>Lbs.</b>	<b>Reps.</b>	<b>1RM</b>	<b>Sets</b>	<b>Lbs.</b>	<b>Reps.</b>	<b>1RM</b>	<b>Sets</b>	<b>Lbs.</b>	<b>Reps.</b>	<b>1RM</b>	<b>Sets</b>	<b>Lbs.</b>	<b>Reps.</b>
* 7. Neutral Squat		2x10				3x10				3x10				3x10		
8a. RDL		2x10				3x10				3x10				3x10		
* 9a. Bench Press		2x10				3x10				3x10				3x10		
10a. Shoulder Raises	2x10 frt/lat/b-o				2x10 frt/lat/b-o				2x10 frt/lat/b-o				2x10 frt/lat/b-o			
11. Triceps Choice	2x10				3x10				3x10				3x10			
12. AB Choice																
Date	Comments												Supervisor			
	* Represents major lifts that need to be done everyday and checked off by a coach															

# Strength Day Development Phase Workout Card

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Sport/Class: \_\_\_\_\_ Phase: Development 3x5

Tuesday (light)	Week 5 - 75%				Week 6 - 80%				Week 7 - 70%				Week 8 - 85%			
Hruska Activators	Load				Load				Unload				Strength Level Test Day			
1. Para-Spinal Release	1x10sec each leg				1x10sec each leg				1x10sec each leg				1x10sec each leg			
2. Single Leg RDL's	10 on Left - 5 on Right				10 on Left - 5 on Right				10 on Left - 5 on Right				10 on Left - 5 on Right			
3. Knee to Knee's	1x10 each side				1x10 each side				1x10 each side				1x10 each side			
4. Internal Rotations	1x10 each side				1x10 each side				1x10 each side				1x10 each side			
7. Warm-up-Neutral Squat	1x5				1x5				1x5							
	1RM	Sets	Lbs.	Reps.	1RM	Sets	Lbs.	Reps.	1RM	Sets	Lbs.	Reps.	Warm-up and Test			
* 7. Neutral Squat		3x5				3x5				3x5			Squat 3 - 5 reps			
* 8b. Clean Deadlift		3x5				3x5				3x5			Weight	Reps		
* 9b. Incline Press		3x5				3x5				3x5			Bench 3 - 5 reps			
10b. Shoulder Press		3x5				3x5				3x5			Weight	Reps		
11. Triceps Choice	3x5				3x5				3x5							
12. AB Choice																
Friday (heavy)	Week 5				Week 6				Week 7				Week 8 - 80%			
Hruska Activators																
1. Para-Spinal Release	1x10sec each leg				1x10sec each leg				1x10sec each leg				1x10sec each leg			
2. Single Leg RDL's	10 on Left - 5 on Right				10 on Left - 5 on Right				10 on Left - 5 on Right				10 on Left - 5 on Right			
3. Knee to Knee's	1x10 each side				1x10 each side				1x10 each side				1x10 each side			
4. Internal Rotations	1x10 each side				1x10 each side				1x10 each side				1x10 each side			
7. Warm-up-Neutral Squat	1x5				1x5				1x5				1x5			
	1RM	Sets	Lbs.	Reps.	1RM	Sets	Lbs.	Reps.	1RM	Sets	Lbs.	Reps.	1RM	Sets	Lbs.	Reps.
* 7. Neutral Squat		3x5				3x5				3x5				3x5		
* 8b. Clean Deadlift		3x5				3x5				3x5				3x5		
* 9a. Bench Press		3x5				3x5				3x5				3x5		
10b. Shoulder Press		3x5				3x5				3x5				3x5		
11. Triceps Choice	3x5				3x5				3x5				3x5			
12. AB Choice																
Date	Comments												Supervisor			
	* Represents major lifts that need to be done everyday and checked off by a coach															

# Strength Day Peak Phase Workout Card

Name: \_\_\_\_\_ Date: \_\_\_\_\_ Sport/Class: \_\_\_\_\_ Phase: Peak 10,8,6,4,3,2

Tuesday (light)	Week 9 - 80%			Week 10 - 85%			Week 11 - 90%			Week 12 - 80%		
Hruska Activators	Load			Load			Load			Unload		
1. Para-Spinal Release	1x10sec each leg			1x10sec each leg			1x10sec each leg			1x10sec each leg		
2. Single Leg RDL's	10 on Left - 5 on Right			10 on Left - 5 on Right			10 on Left - 5 on Right			10 on Left - 5 on Right		
3. Knee to Knee's	1x10 each side			1x10 each side			1x10 each side			1x10 each side		
4. Internal Rotations	1x10 each side			1x10 each side			1x10 each side			1x10 each side		
7.Warm-up-Neutral Squat	1x10			1x10			1x10			1x10		
	1RM	Sets	Lbs.	1RM	Sets	Lbs.	1RM	Sets	Lbs.	1RM	Sets	Lbs.
* 7. Neutral Squat		10,2			10,2			10,2			10,2	
8c. (1) Walking Lunge	3x5			3x5			3x5			3x5		
* 9b. Incline Press		10,2			10,2			10,2			10,2	
10b. Shoulder Press	3x5			3x5			3x5			3x5		
11. Triceps Choice	3x5			3x5			3x5			3x5		
12. AB Choice												
Friday (heavy)	Week 9			Week 10			Week 11			Week 12		
Hruska Activators												
1. Para-Spinal Release	1x10sec each leg			1x10sec each leg			1x10sec each leg			1x10sec each leg		
2. Single Leg RDL's	10 on Left - 5 on Right			10 on Left - 5 on Right			10 on Left - 5 on Right			10 on Left - 5 on Right		
3. Knee to Knee's	1x10 each side			1x10 each side			1x10 each side			1x10 each side		
4. Internal Rotations	1x10 each side			1x10 each side			1x10 each side			1x10 each side		
7.Warm-up-Neutral Squat	1x10			1x10			1x10			1x10		
	1RM	Sets	Lbs.	1RM	Sets	Lbs.	1RM	Sets	Lbs.	1RM	Sets	Lbs.
* 7. Neutral Squat		10,2			10,2			10,2			10,2	
8c. (2) Split Squat	3x5			3x5			3x5			3x5		
* 9a. Bench Press		10,2			10,2			10,2			10,2	
10b. Shoulder Press	3x5			3x5			3x5			3x5		
11. Triceps Choice	3x5			3x5			3x5			3x5		
12. AB Choice												
Date	Comments											Supervisor
	* Represents major lifts that need to be done everyday and checked off by a coach											

# 7. Neutral Squat

To develop the quadriceps, thigh adductors, gluteus maximus, and hamstrings. When done correctly, full squats strengthen the muscles, ligaments, and tendons surrounding the knee. The core muscles are developed to a large degree by keeping the torso erect. The squat is the best exercise to develop lean body mass.

## 1. Approach, Back-Out, and Set-Up

- Bar should be placed across the center of the shoulders.
- Make sure the entire body is under the bar.
- Both feet must be under the bar and parallel.
- Prior to lifting the bar out of the racks, inhale—expanding the lungs—and hold until you have set up.
- Stand erect with the chest filled with air.
- Take one or two steps backward to set up.

### Common Mistakes

- Not placing the body in center of the bar
- Not placing the entire body under the bar
- Not filling the body with air and holding
- Taking more than two steps to set up.



## 2. Gripping the Bar (Hand Placement): Based on the Size or Height of the Athlete

- All athletes should use a pronated grip and grip the bar tightly.
- A closer grip helps bunch the muscles in the back
- Taller athletes' grip will vary from medium to wide
- Shorter athletes' grip will vary from close to medium



### Common Mistakes

- Athletes gripping the plates and not the bar
- Athletes taking their hands off the bar during the ascending phase
- Athletes not gripping the bar with a firm grip

### 3. Bar Placement:

No Significant Difference in Muscle Development Between High-Bar and Low-Bar Squatting:

- A. High Bar Squat: The bar sits on top of the trapezius muscle near the base of the neck. Increases force at the knees.
- B. Low Bar Squat: The bar sits 1 to 2 inches below the deltoids. Increases force at the hips.

#### Common Mistakes

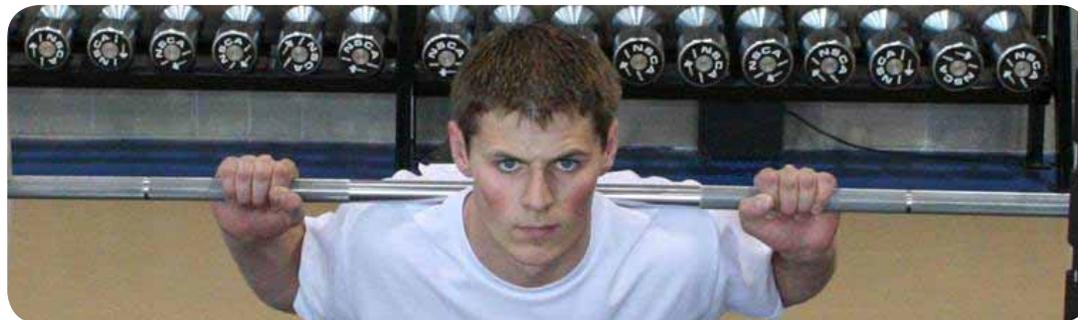
- High-Bar: Leaning forward or rounding the back
- Low-Bar: Bar rolling down

### 4. Head and Eye Position

Head and eyes should be focused straight ahead. This is a natural position; keeping the cervical spine in line with the body helps maintain body weight distribution throughout the squat. Balance is one of the key elements of squatting. When the neck is placed in an improper or unnatural position, the back is rounded, placing unwanted stress or strain on the neck.

#### Common Mistakes

- Titling the head forward (looking down), the weight can shift to the balls of the feet, placing excess stress on the body and causing the athlete to round his/her back.
- Tilting the head backward (looking upward), can cause the weight to shift to the heel of the foot, which can cause an improper curvature of the spine and place unwanted stress on the neck and back.



## 5. Breathing

Inhale Deeply to Maintain Intra-thoracic Pressure and Prevent Bending Forward, Arching the Back, and Passing Out

- A. Helps maintain tightness throughout the squat
- B. Inhale and hold prior to descending in the squat
- C. Exhale once you are near or at the top of the squat
- D. Inhale and exhale at the top of the squat between repetitions

### Common Mistakes

- Holding your breath during repetitions
- Exhaling at the bottom of the squat

## 6. Torso-Trunk

- A. Stabilize your torso-trunk by isometrically contracting the abdominals and back.
- B. The torso-trunk should be held between 35 and 45 degree angles.
  - Less than 35 degrees, you are too straight upward
  - More than 45 degrees, you are too far forward
- C. The torso should be kept flat and straight (the axis of flexion runs through the hip thigh joint.)

### Common Mistakes

- Allowing the torso-trunk to lean forward too much
- Keeping the torso-trunk too upright
- Not squatting with a rigid torso.



## 7. Descending

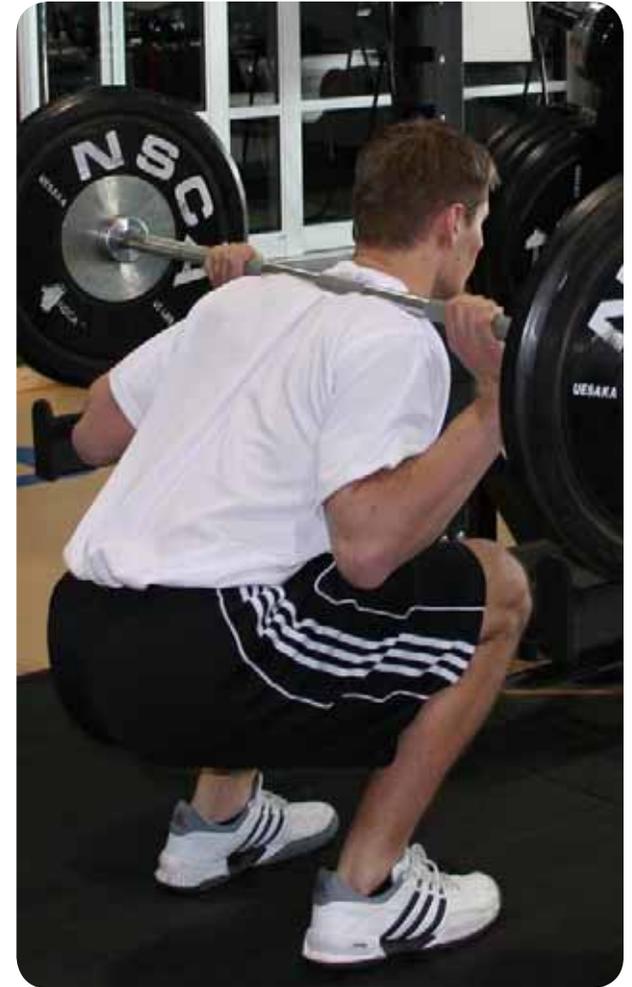
- A. Push hips back
- B. Simultaneously flex at the knee and push the hips back and down.
- C. Maintain torso position.
- D. Distribute body weight from balls of the feet to the heels
- E. Maintain a slow and controlled manner during descent, not letting the knees extend past the balls of the feet.
- F. Keep the shins as vertical as possible.
- G. At the bottom, do not bounce, jerk, or stop the squat

### Common Mistakes

- Going straight down in the squats.
- Allowing the knees to go past the balls of the feet.
- Shins not vertical
- Dropping down too quickly into the squat

**NOTE:** To obtain optimal results in core flexibility, muscular development, and strength of the lower body, observe the following:

- When performing the back squat, the proper depth has been achieved when the mid-thigh is parallel to the floor, while still maintaining the proper back squat form.
- Squatting to additional depth—while still maintaining the proper back squat form—will result in greater core flexibility, muscular development, and strength of the lower body than the mid-thigh position.



## 8. Ascending

- A. Drive the feet through the floor
- B. Simultaneously raise the hips and shoulders
- C. Push your shoulders slightly back into the bar so that your chest remains facing outward
- D. Rotate the hips under the bar
- E. Maintain proper head and eye position
- F. Stand erect and tall, back into the starting position.

### Common Mistakes

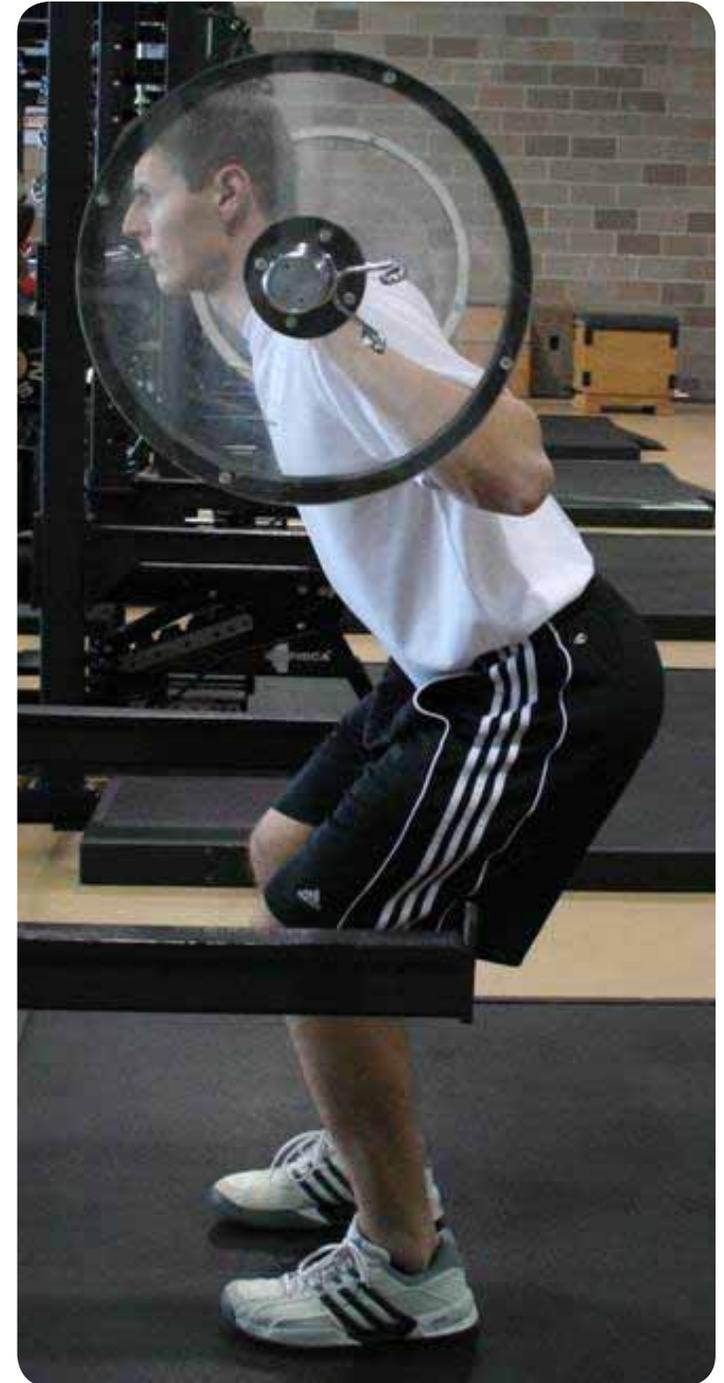
- Attempting to bounce out of the bottom of the squat
- Allowing the hips to raise too quickly out of the bottom of the squat
- Allowing the weight to shift to the toes

## 9. Foot Position

- A. Narrow stance—works the quadriceps, some gluteus
- B. Medium Stance—works the quadriceps, some adductor work
- C. Wide Stance—works the adductor, gluteus, and outer quadriceps
- D. Keep heels on the floor
- E. Toes should be pointed out slightly from neutral to 30 degrees.
- F. The angle of the foot position makes no difference as long as you are comfortable with the stance

### Common Mistakes

- Not finding what stance works for you
- Turning or pointing the toes inward



## 10. Abdominals

- A. Strong abdominal muscles help maintain torso stability and intra-thoracic pressure throughout the squat
- B. The obliques are an important muscle group when performing the squat as they help to maintain torso stability.

### Common Mistakes

- Not including abdominal work as part of the regular strength training routine
- Working only one section of the abdominal area (either upper or lower, or just the obliques)
- Not using a variety of abdominal/oblique exercises
- Too much hip flexion during abdominal exercises

## Summary

Without question, the squat is the single most effective leg exercise. This strength training exercise involves a large part of the muscular system. As strength coaches, we must remember that athletes' squats will vary based on differences in their body types, length of the legs, and flexibility of the ankles. Technique will vary based on differences in foot stance widths, the use of heel pieces, and the positioning of the bar—high or low—on the back.

To utilize higher weight or to help an athlete achieve proper depth in the squat, lower the bar and widen the stance. Coach and teach your athletes to stabilize their torso by isometrically contracting the abdominals and back. Never flex the spine during a squat.

Overall, the key to performing the squat is to do it correctly and carefully. Never let the weight control you. You control the weight. Squats are not “bad for your knees.” The fact is that if you have healthy knees, they are quite capable of handling even the heaviest weight that your body can tolerate.

# 8a. RDL

To develop strength in the muscles of the hamstrings, glutes, and erector stabilizers.

## Starting Position

1. Grasp the bar with a pronated grip slightly wider than shoulder-width.
2. Stand in an erect position with the feet shoulder-width apart, toes pointed straight ahead, and knees slightly flexed.
3. The arms should be fully extended with elbows pointed out and the bar resting against the thighs.
4. Pull the shoulder blades back and down and isometrically contract the abs and low back to maintain a flat back.

## Procedure

1. Slowly push the hips backward letting the bar slide down the thighs and transfer the weight onto the heels.
2. Maintain a flat back and continue the decent until the bar reaches the top of the knees.
3. Ascend back to the starting position; extending the hips forward by pulling with the hamstrings, squeezing the glutes, and transfer the weight back to the center of the feet.

## Coaching Points

- Maintain the starting back, chest, and knee positions throughout the entire range of motion.
- Keep the shoulder blades pulled back and down throughout the entire lift.
- The bar should remain in contact with the legs throughout the entire lift.

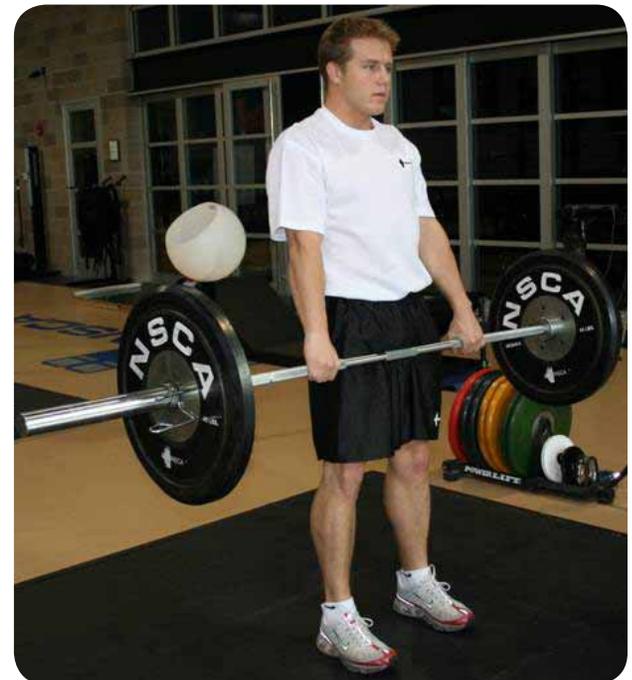
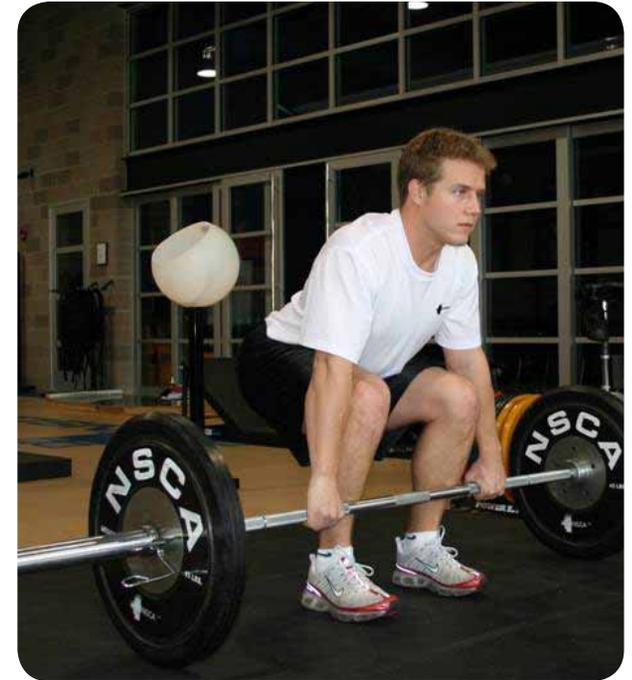


## 8b. Clean Deadlift

To learn how to lift the bar off the ground properly and to develop strength in the muscles of the legs, hips, back, and torso stabilizers.

### Starting Position

1. Approach the bar resting on the floor or platform so the shins make contact with it.
2. Place the feet hip-width apart and the toes pointed straight ahead.
3. Keeping the back flat and shoulder blades pulled together, squat down until the hands grasp the bar.
4. Grasp the bar with an overhand grip slightly wider than shoulder-width with arms straight and the elbows pointed out.
5. The head is held in a neutral position with the eyes looking forward throughout the entire lift.
6. The body weight should be on the heels and the hips should be slightly higher than the knees.
7. Take a deep breath to fill the chest with air (without lifting the ribcage) and isometrically contract the abs and low back.



## Procedure

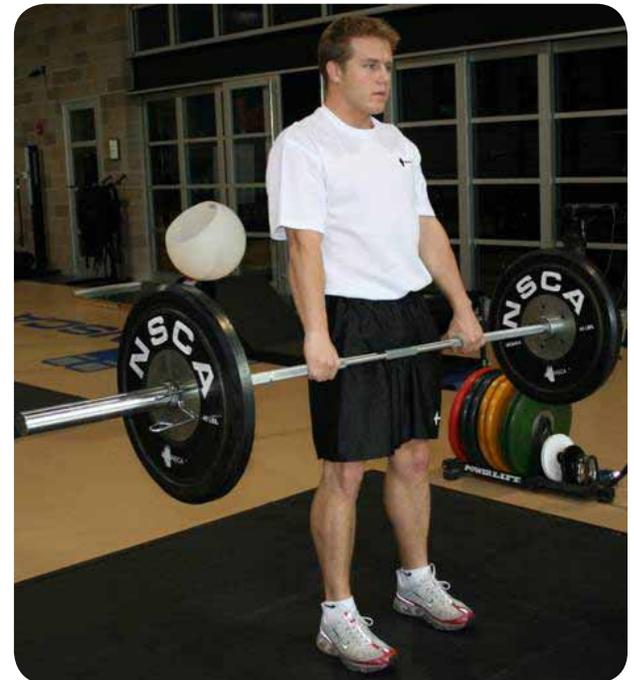
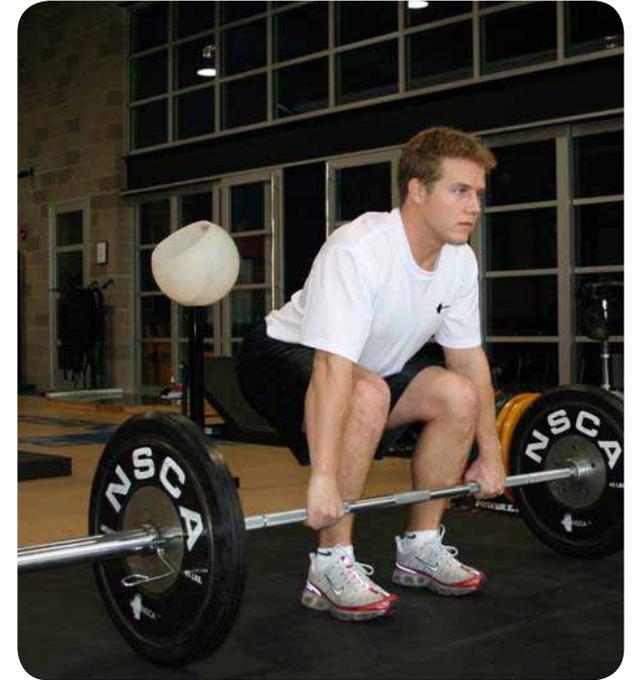
1. Lift the bar smoothly off the floor to just above the knees by slowly extending the hips and knees keeping the bar in contact with the shins.

The bar, knees, hips, and shoulders rise at the same rate keeping the back angle constant.

2. As the bar passes over the knees, the shoulders remain in front of the bar, the arms are straight with elbows pointed out, hips are flexed, and the knees slightly bent.
3. Extend the hips forward squeezing the glutes and abs.
4. As a fully erect body position is established, the shoulders, hips, knees, and ankles should be in alignment.
5. Return the bar to the platform in a slow, controlled manner maintaining an isometric contraction in the abs and back.
6. The bar should ride down the thighs as you flex primarily at the hips until it passes over the knees; then squat down by simultaneously pushing the hips back and flexing the knees with the body weight on the heels.

## Coaching Points

- Maintain a constant back angle during the initial lift off. The shoulders, hips, knees, and bar should all move together as one unit.
- Do not jerk the bar off the floor; pull it smoothly and under control.
- The bar should remain in contact with the legs throughout the entire lift.



# 8c.(1) Walking Lunge

To develop strength in the muscles of the hips, legs, and trunk.

## Starting Position

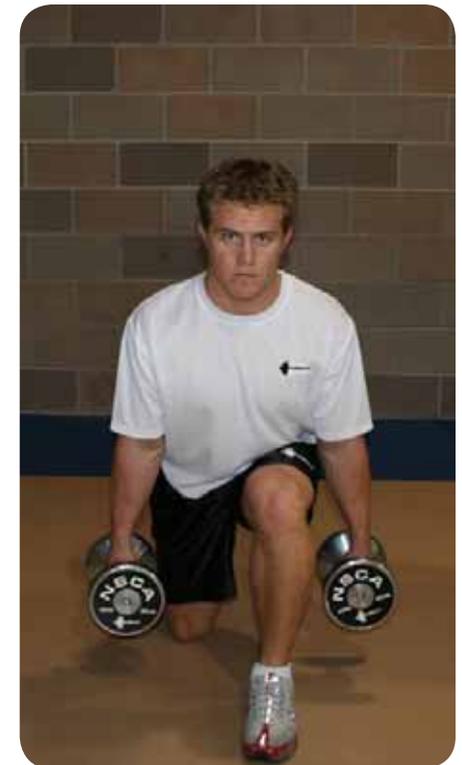
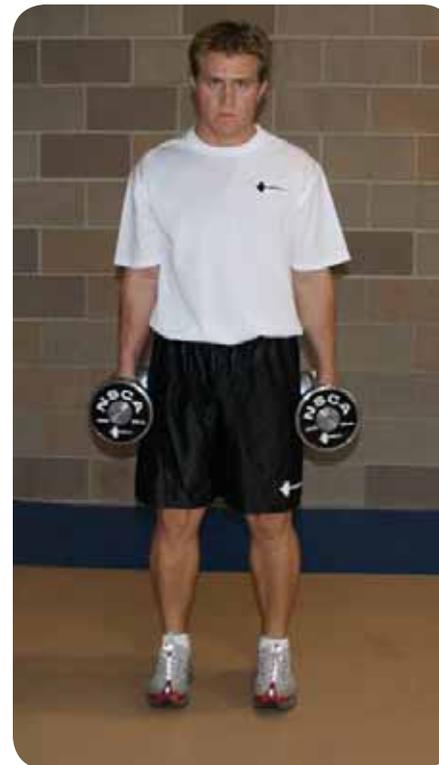
1. Stand in an erect position holding dumbbells at the sides with the shoulder blades pulled back and down, arms straight, and palms facing in.
2. Position the feet hip-width apart and toes pointed straight ahead.

## Procedure

1. Take an exaggerated step forward with one leg keeping the toes pointed straight ahead.
2. Sit the hips and back knee down until the front thigh is parallel with the floor.
3. The torso should come forward to a 35 – 45 degree angle with the back kept flat and straight.
4. Maintain balance as you push off with the back leg and step all the way through to the next lunge.

## Coaching Points

- Make sure that the hips and shoulders remain square to the direction going throughout the entire lift.
- Keep the weight on the front heel and keep the back heel pointed to the sky to prevent it from rolling to the side.
- Do not allow the front knee to go forward past the ball of the foot.
- Avoid taking a middle step for balance as you step through to the next rep.



## 8c.(2) Split Squat

To isolate a single leg and develop strength in the muscles of the hips, legs, and trunk.

### Starting Position

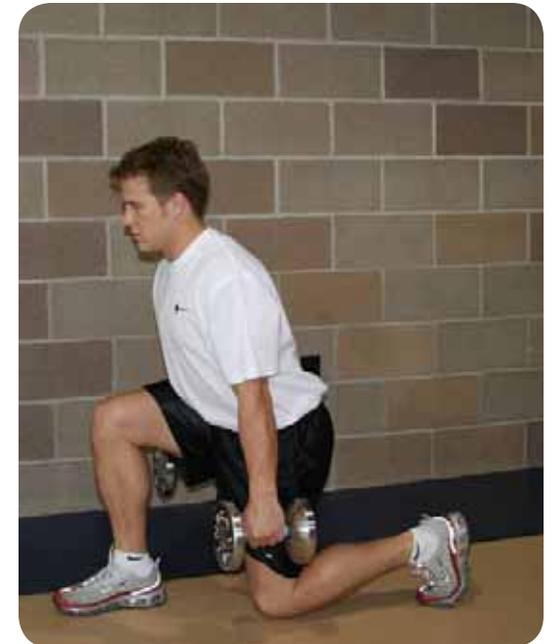
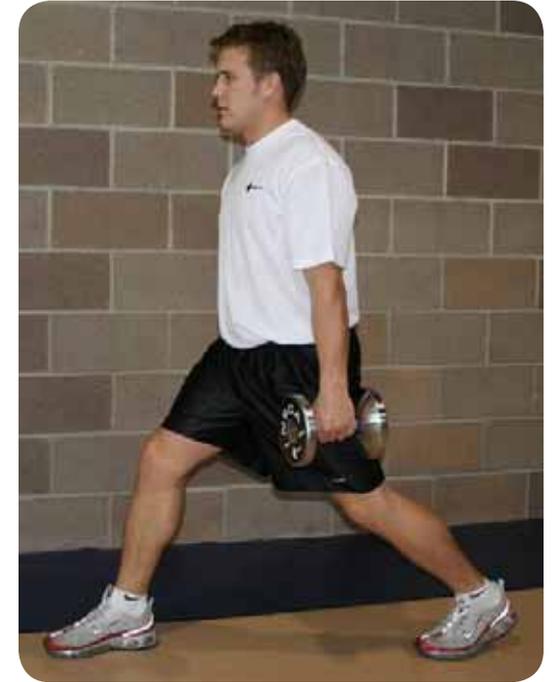
1. Stand in an erect position holding dumbbells at the sides with the shoulder blades pulled back and down, arms straight, and palms facing in.
2. Position the feet hip-width apart and toes pointed straight ahead.

### Procedure

1. Take an exaggerated step forward keeping the feet hip-width apart with the toes pointed straight ahead.
2. Sit the hips down until the front thigh is parallel with the floor.
3. The torso should come forward to a 35 – 45 degree angle with the back kept flat and straight.
4. Maintain balance as you push through the heel of the front foot and toe of the back foot to return to the starting position.
5. Repeat for the desired repetitions then switch legs and complete the same number of repetitions with the other leg.

### Coaching Points

- Make sure that the hips and shoulders remain square to the direction facing throughout the entire lift.
- Keep the weight on the front heel and keep the back heel pointed to the sky to prevent it from rolling to the side.
- Do not allow the front knee to go forward past the ball of the foot.



# 9a. Bench Press

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To develop strength in the muscles of the pectorals, shoulders, and triceps.

## Starting Position

1. Lie flat on the bench in a five-point body contact position with the eyes directly under the bar.
2. Grasp the bar evenly with a pronated, closed grip with the hands slightly wider than shoulder-width.
3. Lift the bar from the hooks and position it directly above the shoulders with the elbows fully extended.

## Procedure

1. Inhale, taking a deep breath to fill the chest with air and isometrically contract the abs to prevent the back from arching to complete the lift.
2. Lower the bar slowly and under control, allowing it to just touch the chest at the nipple line.
3. Keep the wrists rigid and directly above the elbows.
4. Drive the weight explosively off the chest extending the elbows to return the bar to the starting position.
5. Exhale as you near the top of the lift.

## Coaching Points

- The movement of the bar should be down and slightly forward, and up and slightly back. The most common error is to let the bar come off the chest moving toward the legs. This movement takes the bar out of the groove. The bar must come straight up and back off the chest so that maximum force can be applied to the bar.
- The wrists should be in line with the elbows and thumbs must be wrapped around the bar throughout the entire lift.
- The lower back should remain in contact with the bench throughout the entire lift. Do not arch the back or raise the chest to meet the bar.
- Avoid bouncing the bar off the chest.



## 9b. Incline Press

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To develop strength in the muscles of the upper pectorals, shoulders, and triceps.

### Starting Position

1. Lie flat on the inclined bench in a five-point body contact position with the eyes directly under the bar.
2. Grasp the bar evenly with a pronated, closed grip with the hands slightly wider than shoulder-width.
3. Lift the bar from the hooks and position it directly above the shoulders with the elbows fully extended.

### Procedure

1. Inhale, taking a deep breath to fill the chest with air, and isometrically contract the abs to prevent the back from arching to complete the lift.
2. Lower the bar slowly and under control, allowing it to just touch the top of the chest.
3. Keep the wrists rigid and directly above the elbows.
4. Drive the weight explosively off the chest extending the elbows to return the bar to the starting position.
5. Exhale as you near the top of the lift.



## Coaching Points

- The movement of the bar should be down and slightly forward, and up and slightly back. The most common error is to let the bar come off the chest moving toward the legs. This movement takes the bar out of the groove. The bar must come straight up and back off the chest so that maximum force can be applied to the bar.
- The wrists should be in line with the elbows and thumbs must be wrapped around the bar throughout the entire lift.
- The lower back should remain in contact with the bench throughout the entire lift. Do not arch the back or raise the chest to meet the bar.
- Avoid bouncing the bar off the chest.



# 10a. Shoulder Raises

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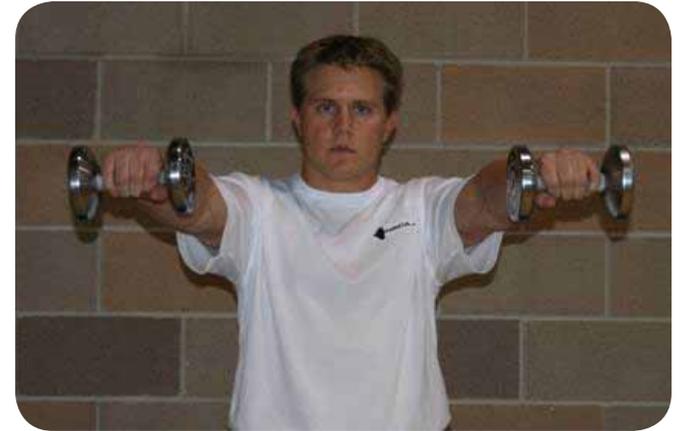
Shoulder raises are a group of three exercises that can be done together in any combination or done separately.

## 1. Front Raises

To isolate and develop strength in the muscles of the anterior deltoids.

### **STARTING POSITION**

1. Stand erect with dumbbells in each hand, arms extended allowing them to hang in front of the thighs, and shoulder blades pulled back and down.
2. Position the feet hip-width apart and toes pointed straight ahead.
3. Slightly flex the knees and isometrically contract the glutes and abs to stabilize the body and prevent the back from arching and rocking back and forth to complete the lift.



### **PROCEDURE**

1. Maintain a constant body position as both dumbbells are raised directly to the front until they are at shoulder level.
2. Lower the dumbbells slowly, keeping the palms facing the ground, back to the starting position and repeat.

### **COACHING POINTS**

- Maintain a constant head, body, and arm position throughout the entire lift.
- Avoid using momentum to complete the lift.

## 2. Lateral Raises

To isolate and develop strength in the muscles of the lateral deltoids.

### STARTING POSITION

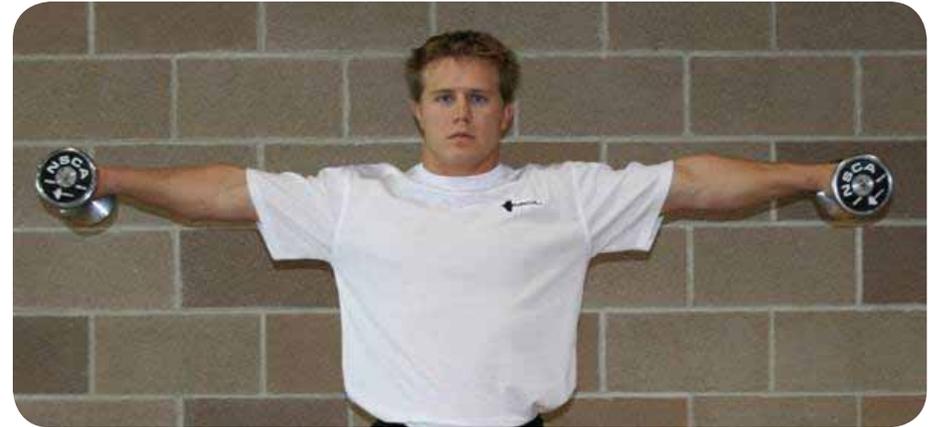
1. Stand erect with dumbbells in each hand, arms extended allowing them to hang at the sides of the thighs, and shoulder blades pulled back and down.
2. Position the feet hip-width apart and toes pointed straight ahead.
3. Slightly flex the knees and isometrically contract the glutes and abs to stabilize the body and prevent the back from arching and rocking back and forth to complete the lift.

### PROCEDURE

1. Maintain a constant body position as both dumbbells are raised laterally until they are at shoulder level.
2. Lower the dumbbells slowly keeping the palms facing the ground back to the starting position and repeat.

### COACHING POINTS

- Maintain a constant head, body, and arm position throughout the entire lift.
- Avoid arching the back to complete the lift.



### 3. Bent-Over Raises

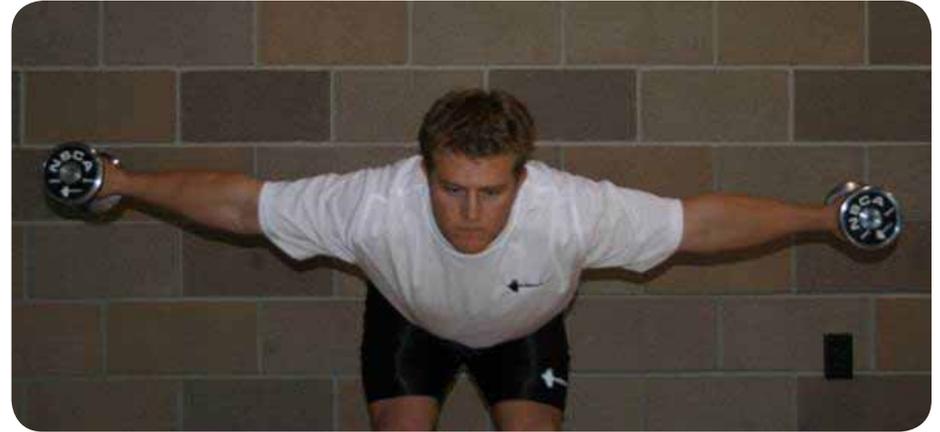
To isolate and develop strength in the muscles of the posterior deltoids.

#### STARTING POSITION

1. Stand erect with dumbbells in each hand and arms extended allowing them to hang at the sides of the thighs.
2. Position the feet hip-width apart and toes pointed straight ahead.
3. Push the hips back transferring the weight to the heels until the back is parallel with the ground.
4. The dumbbells will hang in front of the body with the arms extended, the palms facing each other, and the shoulder blades pulled back and down.

#### PROCEDURE

1. Keeping the body parallel to the ground raise both dumbbells laterally from the shoulders until they are at shoulder level.
2. Lower the dumbbells slowly keeping the palms facing each other back to the starting position and repeat.



#### COACHING POINTS

- Keep the body parallel to the ground and maintain a flat back throughout the lift.
- Avoid using momentum to complete the lift.
- Concentrate on raising the dumbbells laterally from the shoulders.

# 10b. Shoulder Press

To develop strength in the muscles of the shoulder girdle and to teach the lifter to use the whole body in the stabilizing of weight overhead.

## Starting Position

1. The bar should be set a height where the athlete has no trouble lifting it off the rack.
2. Place the hands evenly on the bar, slightly wider than shoulder-width, and grasping it tightly with a pronated grip.
3. The bar should be positioned behind the neck comfortably across the shoulders with the shoulder blades pulled back and down and the elbows pointed down with the hands directly above them.
4. Stand erect and take one or two steps back, positioning yourself in the center of the rack with the feet hip-width apart, toes pointed straight ahead, and slightly flexing the knees with the weight centered on the feet.
5. The head and eyes should be focused straight ahead in a neutral position. This keeps the cervical spine in line with the body and helps maintain balance.
6. Isometrically contract the glutes and abs to stabilize the body and prevent the back from arching to complete the lift.



## Procedure

1. Maintain the position of the ankles, knees, and hips, and press the bar straight overhead by extending the arms.
2. The bar should end up behind the ears with the elbows completely extended and inline with the shoulders, hips, and heels.
3. Lower the bar to its starting position in a controlled manner.

## Coaching Points

- Avoid using your lower body to complete the lift.
- Keep the shoulders over the hips during the entire range-of-motion.
- Keep the elbows directly under the hands throughout the entire lift.
- Keep the glutes and abs isometrically contracted to avoid arching the back to complete the lift.
- When lowering the bar, the athlete should simultaneously flex the hips and knees as the bar hits the shoulders to help absorb the weight.
- This lift can also be done from the front of the shoulders.



# 11. Triceps Choice—Triceps Pushdown

To isolate and develop strength in the muscles of the triceps.

## Starting Position

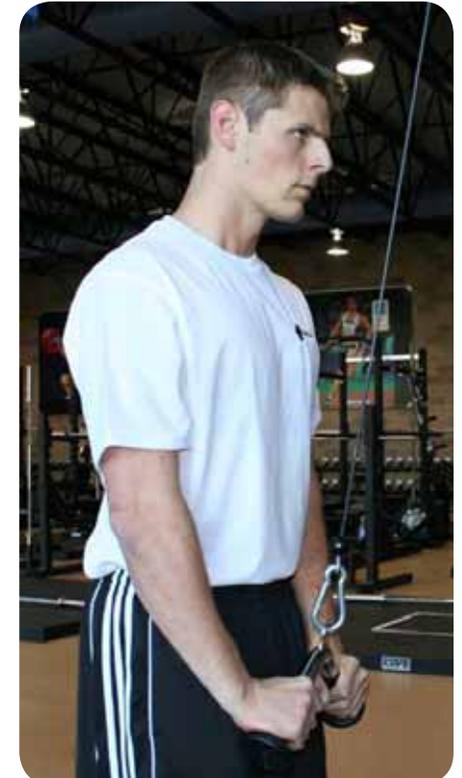
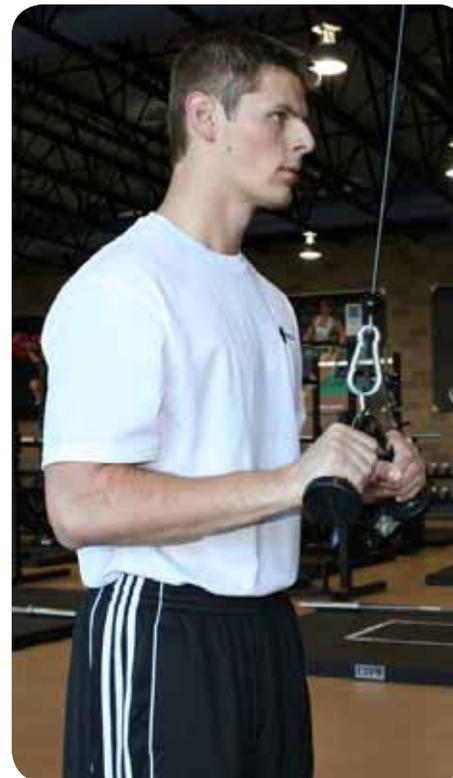
1. Position the hands on the pull-down bar about six inches apart in an overhand grip.
2. Stand with the feet flat on the floor, hip-width apart, and toes pointed straight ahead with the knees slightly flexed.
3. Isometrically contract the glutes and abs to stabilize the body and prevent the back from arching.
4. Pull the bar down to an extend arm position.

## Procedure

1. Keeping the shoulder blades pulled back and down and the elbows positioned at the sides, allow the bar to rise until there is a 90 degree angle at the elbows.
2. Maintain an erect body position and push the bar down until the arms are completely extended.

## Coaching Points

- Avoid letting the shoulders roll forward during any part of the lift.
- Avoid using momentum to complete the lift.
- There are many different triceps exercises that you can choose from. Change the exercise every so often to add variety to your workout and prevent staleness.



# 12. Ab Choice: Heel Touches

To develop strength in the muscles of the abdominals and obliques.

## Starting Position

1. Lie on the floor face up with the arms straight, placed at the sides, and palms flat.
2. Bend the knees keeping the feet flat on the floor, pulling the heels toward the butt, and pressing the lower back into the floor.

## Procedure

1. Bring the chest toward the thighs, lifting the scapula off the ground, and contract the abdominal muscles.
2. The hands should slide along the ground staying close to the body until they make contact with the heels. Hold for 1 second.
3. Slowly return back to the starting position, pause, and repeat for the desired repetitions.
4. For the obliques, bring the right shoulder toward the right heel and slide the hand along the ground until it touches the heel. Hold for 1 second.

5. Slowly return back to the starting position, and then bring the left shoulder toward the left heel and slide the hand along the ground until it touches the heel. Hold for 1 second.
6. Slowly return back to the starting position and repeat for the desired repetitions.

## Coaching Points

- Avoid pulling the head forward throughout the exercise.
- Avoid lifting the lower back off the ground.
- There are many different abdominal exercises that you can choose from. Change the exercise every so often to add variety to your workout and prevent boredom.



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