Quiz Policies

Eligibility
The NCSF online quizzes are open to any currently certified fitness professional, 18 years or older.

Deadlines
Course completion deadlines correspond with the NCSF Certified Professionals certification expiration date. Students can obtain their expiration dates by reviewing either their certification diploma or certification ID card.

Cancellation/Refund
All NCSF continued education course studies are non-refundable.

General Quiz Rules

- You may not have your quiz back after sending it in.
- Individuals can only take a specific quiz once for continued education units.
- Impersonation of another candidate will result in disqualification from the program without refund.

Disqualification
If disqualified for any of the above-mentioned reasons you may appeal the decision in writing within two weeks of the disqualification date.

Reporting Policy
You will receive your scores within 4 weeks following the quiz. If you do not receive the results after 4 weeks please contact the NCSF Certifying Agency.

Re-testing Procedure
Students who do not successfully pass an online quiz have the option of re-taking. The fees associated with this procedure total $15 (U.S) per request. There are no limits as to the number of times a student may re-test.

Special Needs
If special needs are required to take the quiz please contact the NCSF so that appropriate measures can be taken for your consideration.

Quiz Rules

What Do I Mail Back to the NCSF?
Students are required to submit the quiz answer form.

What do I Need to Score on the Quiz?
In order to gain the .5 NCSF continued education units students need to score 80% (8 out of 10) or greater on the CEU quiz.

Where Do I Mail My Quiz Answer Form?
You will mail your completed answer form to:

NCSF
Attn: Dept. of Continuing Education
5915 Ponce de Leon Blvd., Suite 60
Coral Gables, FL 33146

How Many CEUs Will I Gain?
Professionals who successfully complete the any continuing education quiz will gain .5 NCSF CEUs per quiz.

How Much does each quiz cost?
Each quiz costs the student $15.00.

What Will I Receive When The Course Is Completed?
Students who successfully pass any of the NCSF online quizzes will receive their exam scores, and a confirmation letter.

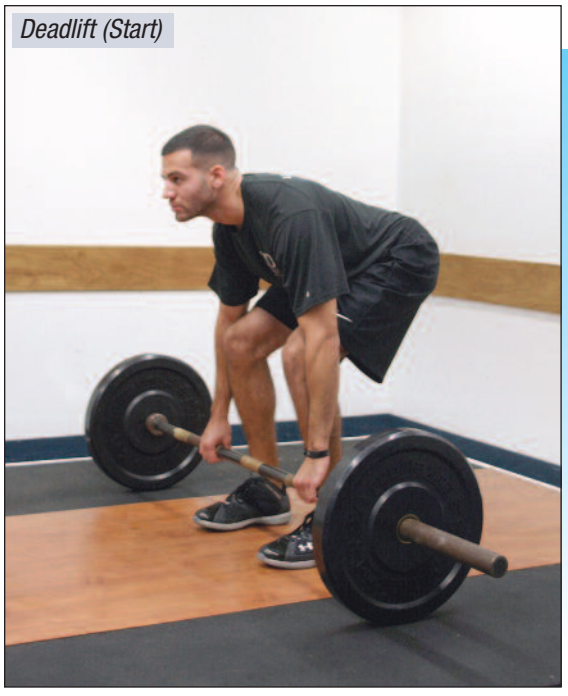
How Many Times Can I Take The Quizzes For CEUs?
Individuals can take each NCSF quiz once for continuing education credits.

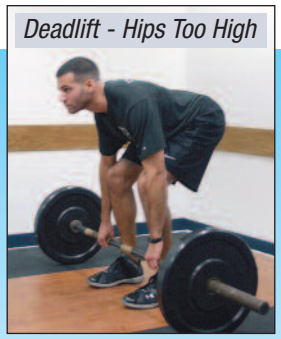
DEADLIFT

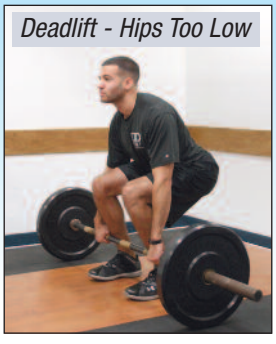
The word deadlift references one of man's oldest movements; picking up a static object from the ground. Even today man cannot get away from the functional task on an almost daily basis. Much like the squat, the deadlift exercise has several variations but differs in the fact that the load does not change its location. During the squat exercise the resistance is moved around the body to change the muscle activation emphasis, whereas in the dead - lift the body makes the adjustments around the load. The three most common exercise variations include the traditional deadlift, modified deadlift, and Romanian deadlift; all of which use a straight bar as the requisite loading medium. Of interest, each of these exercises can be further manipulated to produce a more specialized, desired stress by changing the loading conditions (i.e., dumbbells), hand positions, and symmetry of the lift.

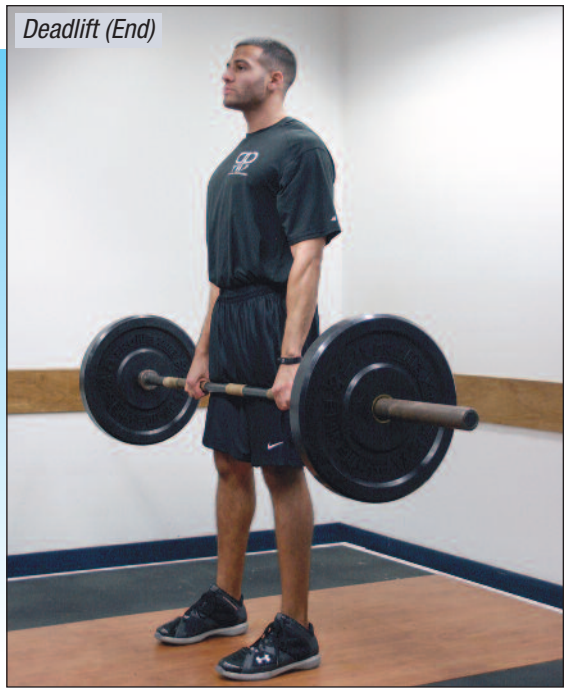
The traditional deadlift comes from the Olympics, representing the first pull of the clean and jerk. This explains why the foot location is similar to the front squat and the hand position is the same as a push press or split jerk. The exercise is often thought of as a hamstring or back exercise due to the discomfort often experienced in these areas, but the truth is the deadlift should not be referenced as to a prime mover. The traditional deadlift is a connector; optimizing the kinetic chain that links knee and hip extension across a stable trunk in an effort to raise the load uniformly. Unfortunately, many individuals lack flexibility in the hip extensors, which promotes a round back from a posterior pelvic tilt; further perpetuated by central weakness. During the initial pull, strong quads and weak internal stabilizers cause leg extension without equal hip extension as the spine bends rather than remaining rigid, resulting in the round back position. A common adjustment to trunk weakness is to sit down in an attempt to squat lift rather than pull the load up. The low hips provide mechanical advantage to the spine by placing more load on the hips. This often causes a lifter to drag the weight against the shins; a painfully incorrect technique. In fact, and to the contrary, if the deadlift is performed correctly the weight cannot touch the shins because there is no posterior horizontal movement.

The deadlift is a vertical displacement movement suggesting the resistance rises up linearly. Therefore activities that promote vertical movement will optimize the efficiency of the lift. The vertical jump is one such action. Concurrent hip and knee extension are primary drivers consistent of all vertical power movements. That being said,


Deadlift (Start)


Deadlift - Hips Too High


Deadlift - Hips Too Low


Deadlift (End)

an easy way to determine the correct starting position for the deadlift is to practice the counter movement vertical jump. The eccentric or bottom phase of the counter movement action is the actual starting position of the lift for many individuals; variations exist as limb lengths are not consistent among humans but the effort will certainly encourage posterior hip displacement with appropriate (shoulders over bar) trunk position. The resistance should be held above the distal portion of the shoe laces. When establishing the proper hand position, the arms should hang under the shoulder with a pronated hand grip for Olympic style deadlifts; many people use an alternate grip to make it easier to hold the bar. From a lateral view the shoulder to hip to knee position should look like the open mouth of an alligator, with the start energy in the hip. The back will be straight and roughly angled at 45-50 degrees. A common error is a back position parallel to the ground or extended vertically like a squat. Once the start position is properly established, the deadlift is accelerated with all muscle movements concentrically synergistic, meaning no one part should move faster than the other. In strength and conditioning environments the weight is often only moved concentrically and then ridden to the floor under rapid flexion. In fitness, weights are not generally dropped so the eccentric movement should be similar in speed and position to the concentric phase.

The weight should be placed on the ground and should not be bounced into the next repetition. A common error is to bounce the weight at the bottom of the movement to use momentum to add repetitions. But the body's stability may be compromised as the intra-abdominal pressure may be released on impact. It is actually better to use a slight pause and assure proper start position for each lift. For this reason the exercise tends to be programmed at lower rep schemes as stability fatigue can lead to back injury. Since the weak link in the kinetic chain is always the back due to the joint dynamics the determination of volitional failure should center on back position.

When exercisers cannot manage the traditional deadlift due to tightness, weakness and/or poor muscular balance the exercise can be adjusted or "modified" to promote a mechanical advantage. The modified deadlift uses a back squat stance width which changes the stress on the trunk rather considerably. The modified position makes it easier because 1) the wider base makes it more stable and shortens the ROM, 2) it allows the hips to access the glutes and adductors (global movers) rather than trunk muscles (local and global stabilizers) for added mechanical advantage, and 3) reduces hamstring stretch placing the pelvis in a more mechanically advantaged position. The power lifters exaggerate the stance even more, called a sumo deadlift position, to increase all of these advantages. Due to the heel under shoulder position the arms will be located inside the knees rather than outside as seen in the traditional lift. It is important to recognize the modified deadlift is not a squat but resembles the position a bit more due to the stance; the same jumping technique can be used for alignment of the body toward the start position. From a lateral view the alligator reference still applies, there is a greater temptation to squat the bar up from this position so instruction is key to create proper three section synergy. At first many lifters are

Modified Deadlift (Start)

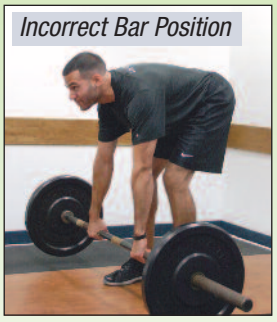
Modified Deadlift (End)

stronger using a squat tactic but the advantage is also the limitation. Like all weight training it is far better biomechanically and otherwise to employ and enforce proper technique from the start of the movement as faulty movement patterns promote mechanical inefficiency.

The Romanian deadlift is the most unique of the three because it requires more isolated rather than coordinated action at the hip. Additionally, the exercise starts eccentrically rather than concentrically. The Romanian deadlift, like the traditional deadlift movement is limited by ROM in the hips, primarily the hamstrings. Because the knees are only slightly flexed the hamstrings are lengthened. Therefore one must have adequate hamstring range of motion to perform the exercise correctly. The movement starts from an upright, heels under hip stance. It is initiated by hip flexion with concurrent knee flexion. Once the knees reach approximately ten degrees of flexion they should be located over the heels; the knee joint angle should then be maintained during the full descent. If the knees continue to flex it is often a sign of poor hamstring ROM. A recurring common error is the round back position which may be from poor hip ROM, lack of trunk strength or poor technique. The back should never be rounded under loaded conditions. The key to the Romanian deadlift is the location of the load in reference to the base of support. Many people erroneously reach forward rather than pushing their hips backward. The difference between the two is where the load is placed. As mentioned earlier in the deadlift the bar always moves up and down in the same linear plane. When the bar moves forward and crosses the toes the stress radiates to the low back. When the bar stays over the shoe laces the stress is in the hips. Secondly, the depth is much more relevant to loading than people realize. The shoulder joint should never be lower than the hip joint. Such range will disconnect the functional force couples and make the exercise a low back activity rather than a hamstring exercise. Trying to use the exercise to attain a stretch is not appropriate when it goes beyond safe/effective ROM. Only if the individual performing the exercise is short in stature will they need to stand on a platform to get the requisite ROM. For most people the back is already overtrained and out of balance with the abdominals; incorrect Romanian deadlifts will perpetuate rather than improve this condition. Romanian deadlifts performed incorrectly place undue stress in the low back and perpetuate low back problems.

Romanian Deadlift (Start)

Round Back



Incorrect Bar Position

Excessive Range of Motion

Romanian Deadlift (End)

CEU Quiz

Deadlift

1. With regard to load, which of the following is one of the primary differences between the deadlift and the squat?
   a. The location of the load does not change during the deadlift
   b. The location of the load during the squat is always the same
   c. Heavy loads cannot be used during the squat
   d. Light loads must be used during the deadlift

2. According to the article, the three most common deadlift variations are:
   a. Single leg deadlift, physioball deadlift, Romanian deadlift
   b. Modified deadlift, single leg deadlift, hack deadlift
   c. Traditional deadlift, modified deadlift, Romanian deadlift
   d. Deadlift swing, physioball deadlift, traditional deadlift

3. The deadlift exercise is commonly mislabeled as a/an _____.
   a. connector exercise
   b. upper back exercise
   c. low back exercise
   d. stabilizer exercise

4. A rounded back position during the performance of the deadlift exercise often results from _____.
   a. a lack of flexibility in the hip extensors
   b. an excellent range of motion in the hips
   c. excess muscle mass in the upper back
   d. a resistance that is too light

5. True or False? When the deadlift is performed correctly, the exerciser should lift the weight so that the barbell scrapes against the shins.
   a. True b. False

6. Strong quads and weak internal stabilizers will often cause an individual performing the deadlift to _____.
   a. squat to lift the load rather than pull it up
   b. be able to lift heavier loads
   c. maintain a flat, rigid back position
   d. lift the load without any posterior horizontal movement

7. When establishing the proper hand/arm position for the traditional deadlift, the exerciser's arms _____.
   a. should be kept at 90 degrees of elbow flexion throughout the movement
   b. should move anterior/posterior as the weight is lifted
   c. should flex on the way up and extend on the way down
   d. should hang under the shoulder with a pronated grip

8. During the proper performance of the deadlift exercise, the angle of the back in the starting position should be roughly _____.
   a. 30-40 degrees
   b. 45-50 degrees
   c. 60-70 degrees
   d. 90 degrees

9. Which of the following are ways in which the "modified" deadlift can help an exerciser who cannot properly perform the traditional deadlift?
   a. The wider base makes it more stable because it shortens ROM
   b. It allows hips to access the glutes and adductors rather than trunk muscles
   c. It reduces the stretch in the hamstrings, placing the pelvis in a more mechanically advantaged position
   d. All of the above are correct

10. In order to perform the Romanian deadlift correctly, one must have adequate _____ .
    a. range of motion in the hamstrings
    b. range of motion in the quads
    c. pectoralis strength
    d. gastrocnemius strength

Quiz Answer Form

FIRST NAME_____ **LAST NAME**_____ **M.I.**_____

TITLE_____

ADDRESS_____ **APT.**_____

ADDRESS _____

CITY_____ **STATE**_____ **ZIP**_____

COUNTRY_____ **POSTAL CODE**_____

CERTIFICATION NO. _____ **CERTIFICATION EXP.** ____/____/____

MEMBERSHIP NO. _____ **MEMBERSHIP EXP.** ____/____/____

Quiz Name	Member Price	Total
	$15	

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_____ _____ _____
Account No. Exp. Date Security Code

_____ _____
Signature Date

Quiz Answers

1. _____ 6. _____
2. _____ 7. _____
3. _____ 8. _____
4. _____ 9. _____
5. _____ 10. _____

Fill in each blank with the correct choice on the answer sheet. To receive 0.5 CEUs, you must answer 8 of the 10 questions correctly.

Please mail this Quiz answer form along with the proper enclosed payment to:

NCSF
5915 Ponce de Leon Blvd., Suite 60
Coral Gables, FL 33146

Questions? 800-772-NCSF