

# 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.

# Contraindicated Exercises

The fitness industry has made significant advancements in using research to improve the biomechanics of lifting and to prevent imbalances by connecting motion segments to optimize coordinated efforts in sports and in life. For knowledgeable exercise professionals the traditional approach of body part isolation using “3 sets of 10” has faded in light of programming for purpose using stress specific exercise techniques. Of interesting however is that with all this new knowledge common biomechanical errors still exist and are performed in fitness centers everyday throughout America.

Likely, some of the most common errors that exist include actions at the shoulders and low back during pulls and presses, knee translation and pelvic instability during hip and knee flexion and excessive recruitment of the hip flexors during abdominal exercises. The usual reasons behind poor lifting technique is exercisers receive incorrect instruction or copy what they see in the gym, or movement compensation occurs due to weakness along the kinetic chain. When force couples fail to exceed the resistive stress along the movement plane other biomechanical actions are used to create momentum to accommodate the movement range of motion.

In many cases these problems can be corrected by a few simple adjustments or adjuncts to the current training program. The first step is to evaluate the problem and identify what is incorrect and why. If it is a simple technique error and muscle strength/balance and flexibility are not contributing factors the correction is easy. Switching the lat pull-down from behind the head to in front is an easy

adjustment that improves recruitment while reducing risk of injury. If though, the biomechanics are altered due to musculoskeletal issues, additional strategies must be utilized. Loss of pelvic stability during squatting and leg pressing is a common example of this issue.

Regardless of the problem, there exists a solution and for the most part the first step is focus on the movement efficiency. This means reducing the stress applied during the movement. In most cases this lowering or removing of the weight allows for a better neuromuscular learning environment. Although ego seems to be a very influential factor when it comes to resistance training it is an anchor to the adaptation progress. Exercisers need to understand that it is the quality of the movement that is most influential not the total load moved. For instance, recruiting your back extensors to perform a heavy lat pull-down does not increase recruitment in the intended muscle. Actually, it often reduces it below perceived overload due to changes in localized tension and time under stress, which is counterintuitive. Many people spend many hours in the gym with little return. Exercise without overload is simple a process of heat generation.

The following exercises have been deemed contraindicated as they present more risk than reward. For each exercise a modification exists that reduces the risk for injury while maintaining or increasing the effectiveness of the movement for the desired results. Each includes a problem and a solution. For those movements that cannot be corrected to proper performance remove the exercise from the program and replace it with another more effective activity.

### Lat Pull-down behind the Head

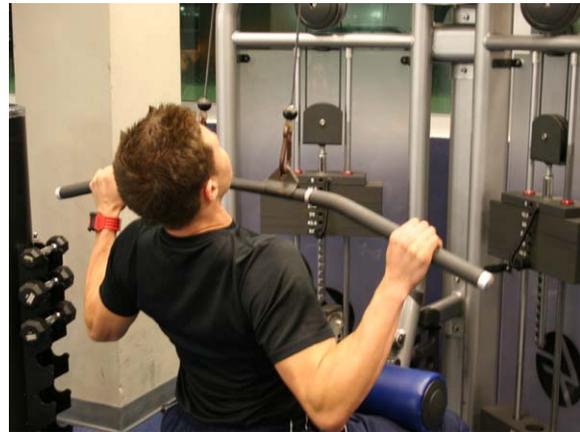
**Problem:** Heightened risk of cervical injury; reduced latissimus dorsi activation.

**Correction:** Neutral spinal position, depress and adduct scapula pulling the bar to the top of the sternum. Avoid premature arm flexion and changes in hip angle to prevent momentum.

Several research studies have indicated that the pull-up to the front and lat pull-down to the front exceed the latissimus dorsi muscle activation of the behind the head lat pull-down. Additionally, the glenohumeral position is maintained in a more desirable position throughout the exercise.



**Incorrect**



**Correct**

### Shoulder Press behind the Head

**Problem:** Increased risk of glenohumeral injury; potential risk of cervical spine injury

**Correction:** Standing military press

Research indicates standing pressing activities increase trunk activity and kinetic chain enhancements during pressing exercises more than dumbbell presses seated on the ball.



**Incorrect**



**Correct**

### Leg Lifts/Throws

**Problem:** Abdominals do not insert on the femur, so the upper leg shouldn't be moving during the abdominal exercise. Recruitment of the hip flexors pull on the iliac and lumbar spine leading to potential posterior disc compression. Throw downs can also cause abdominal strains and fascial tears.

**Correction:** Reverse curl-up

A posterior pelvic tilt is requisite to correct exercise performance when the femur presents as the resistance arm. Hip flexion with an anterior pelvic tilt is undesirable as it places limited load on the abdominals and potentially compresses the intervertebral discs.



**Incorrect**



**Correct**

### Anchored Sit-ups

**Problem:** Increases hip flexor activity; may cause disc compression; increases risk for low back pain aggravation.

Sit-ups in general are inappropriate for most of the general population due to trunk imbalances and the risk for low back pain. Sit-ups in general heavily recruit the hip flexors. Anchoring one's feet further increases the hip flexor pull on the hip and spine, further stressing the connective structures. For newer exercisers, curl ups can be used to start but research demonstrates rollout and prone knee flexion on the ball promote more abdominal activation.

**Correction:** Abdominal curl-ups

Abdominal curl-ups place the majority of the resistive stress in the rectus abdominis. Rollouts also are effective for engaging the trunk musculature without hip flexion.



**Incorrect**



**Correct**

### High Angle Upright Row

**Problem:** Elevated humerus above ninety degrees increases risk of acromion impingement and increases trapezius activation.

**Correction:** Dumbbell upright row to 90 degrees of humeral abduction or Side Raises to 90 degrees. The upright row is not a desirable trapezius exercise as humeral abduction is a deltoid movement. Likewise, shoulder elevation and humeral abduction above 90 degrees with inward rotation causes impingement risk.



**Incorrect**



**Correct**

### Straight Leg Deadlift

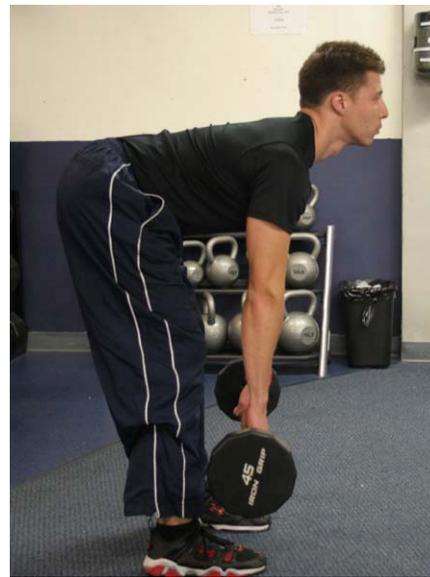
**Problem:** Pelvis migrates posteriorly; back is rounded placing undue stress on the spinal ligaments and the intervertebral discs; excess range of the hamstrings can also present overstretched induced strain.

**Correction:** Slight flexion of the knees along with a flat back position places load in the hip extensors and intentionally reduces back activity.

Tight hamstrings and lumbar fascia can cause both rounding of the back and continued knee flexion to attain a greater range of motion. When the pelvis is instable the spine is at risk for injury.



**Incorrect**



**Correct**

## Contraindicated Exercises CEU Quiz

1. During the performance of exercises requiring hip and knee flexion like the squat, common biomechanical errors include:
  - a. Excessive scapular retraction
  - b. Knee translation and pelvic instability
  - c. Supination and inversion
  - d. All of the above
  
2. Oftentimes, poor lifting technique is a result of \_\_\_\_\_.
  - a. Copying what others in the gym are doing
  - b. Emphasizing a neutral spinal position
  - c. Movement compensation due to weakness in the kinetic chain
  - d. Both A and C are correct
  
3. Correct performance of the lat pull-down will
  - a. Bring the bar in front of the head to the top of the sternum
  - b. Reduce risk of injury to the cervical spine
  - c. Improve latissimus dorsi activation while protecting the glenohumeral joint from injury
  - d. All of the above are correct
  
4. Which of the following is possible if the shoulder press is performed with the bar behind the head?
  - a. Increased risk of wrist injury
  - b. Increased activation of the upper pectoralis major
  - c. Increased risk of glenohumeral injury
  - d. Improvement in rotator cuff health
  
5. To incorporate more trunk activity and kinetic chain enhancements during the performance of the shoulder press, individuals should be instructed to \_\_\_\_\_.
  - a. Complete the movement from a seated position
  - b. Complete the movement from a standing position
  - c. Utilize the selectorized shoulder press machine
  - d. Perform the activity with light resistance

6. Leg lifts/throws are contraindicated because \_\_\_\_\_.
- Only athletic populations should perform them
  - The abdominals are activated during the entire ROM
  - The hip flexors are recruited placing compressive forces on intervertebral discs
  - The obliques muscles are not engaged therefore making this exercise useless for those requiring improvements in rotation
7. Excessive hip flexor engagement occurs during the sit up when \_\_\_\_\_.
- The feet are locked in place
  - Only a 30 degree curl up is performed
  - Added resistance is removed
  - All of the above
8. Correct performance of the upright row \_\_\_\_\_.
- Requires full range of shoulder abduction
  - Initiates the movement using the trapezius
  - Uses 90 degrees of shoulder abduction
  - Is optimized with a straight bar only
9. Which of the following is NOT a common movement error observed during the performance of the straight leg deadlift?
- Pelvis migrating posteriorly
  - A flat back position maintained throughout the movement
  - Excessive ROM of the hamstring due to locked knees
  - A rounded back which places stress on the spinal ligaments
10. If a client is rounding the back during a loaded exercise like the deadlift, a corrective cue to allow for proper movement could be \_\_\_\_\_.
- Increase flexion of the knees to reduce hamstring strain
  - Increase the resistance to improve flexibility
  - Increase the velocity
  - Elevate the chest to improve lumbar support

# 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	



Discover



Visa



Mastercard



Amex



Check/Money Order

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