

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.

Training Clients with Fibromyalgia

Fibromyalgia is characterized by musculoskeletal pain throughout the entire body usually accompanied by a number of other chronic issues. It has traditionally been categorized as a rheumatic-like disorder that creates widespread pain and accompanying psychological issues, but current research points toward fibromyalgia being caused by neurochemical imbalances in the central nervous system (CNS) that increase the perception of pain. According to the National Institutes of Health (NIH), fibromyalgia affects 5 million Americans 18 or older with between 80-90 percent of those diagnosed being women. However, men and children also can also develop the disorder, with the majority of diagnosis occurring during middle age.

Fibromyalgia is a CNS processing disorder where ascending and descending neurological pathways function abnormally. Symptoms often commence following a specific episode of physical trauma, surgery, infection or significant psychological stress. In other cases, symptoms steadily accumulate over a given period of time with no solitary “triggering” event. Many sufferers also experience tension headaches, cognitive difficulties, temporomandibular joint (TMJ) disorders, endometriosis, restless legs syndrome, tingling and numbness in the extremities, balance issues, irritable bowel syndrome (IBS), sleep disturbances and apnea, anxiety and depression. Obviously, this is a difficult disorder to deal with; warranting explicit modifications to standard exercise prescription based on symptoms.

The primary symptom associated with this chronic disorder is described as a constant dull muscular ache felt throughout the body. Additional pain is often experienced when firm

pressure is applied to specific areas of the sufferer’s body known as “tender points”. Clients with fibromyalgia also experience chronic fatigue, even though they report sleeping for long periods of time, as sleep is frequently disrupted by pain. This must be recognized and considered when deciding on the intensity to use during training segments for these individuals.

Associated risk factors for fibromyalgia include hereditary influences, sex (women are at a greater risk) severe infection such as hepatitis C, extreme physical/emotional trauma, and presence of rheumatic disease (e.g., lupus or rheumatoid arthritis). Initial management of fibromyalgia usually includes referral to a physical therapist, medications, acupuncture, lifestyle changes, dietary modification such as eliminating caffeine, and enrollment in cognitive-behavioral therapy or support groups. Lifestyle changes generally includes stress reduction, ensuring adequate sleep or improved sleeping patterns, regular exercise (to be addressed in detail shortly), and changes to the diet. Sufferers are usually recommended to try to limit their emotional stress, plan a specific period each day to relax, try meditation techniques, create a sleep schedule, engage in

Primary tender point locations include:

- Back of the head and neck
- Between the shoulder blades
- The superior aspects of the shoulder joints
- The anterior-lateral neck regions
- The upper chest
- The lateral aspects of the elbow joints
- The superior-posterior regions of the hips
- The lateral-inferior aspects of the hips
- The medial aspects of the knee joints

daily, moderate-intensity physical activity, and eat healthier foods while limiting alcohol, tobacco and stimulants.

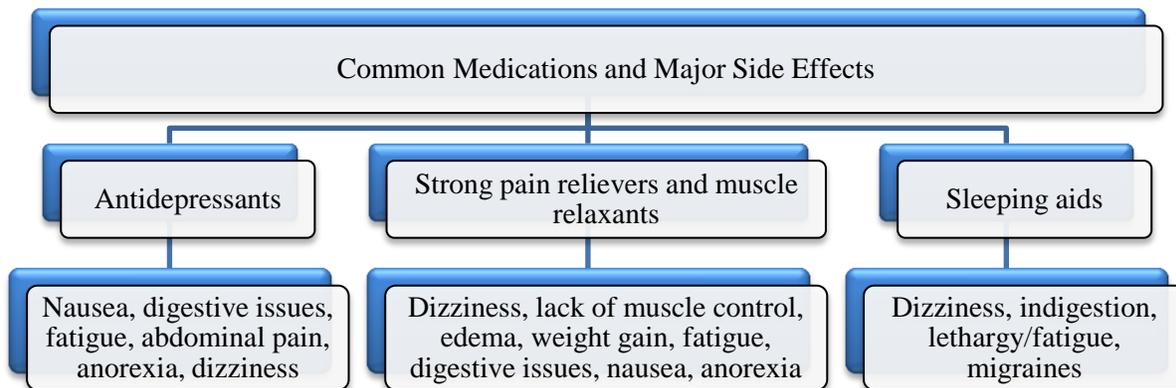
As it relates to commonly used medications and their side effects, it is evident that the creation of a suitable program for clients with fibromyalgia can be relatively difficult. Trainers must inquire about the meds and attain a medical referral with recommendations, as necessary.

Current research has shown appropriate exercise to be a very effective means by which to reduce tangible measures of pain among individuals with fibromyalgia. Aerobic exercise, strength training, aquatic exercise, flexibility activities (e.g., yoga and tai chi), Pilates, lifestyle physical activity changes, and whole body vibration training have all been examined via clinical investigation.

Aerobic and strength training both appear effective for reducing symptoms, but the long-term efficacy has not been determined. Aerobic exercise has been shown to have beneficial effects on overall pain and the various psychological issues associated with fibromyalgia, but some studies failed to show any positive influence on tender points. The primary concern for the personal trainer as it relates to prescribing aerobic training is the selection of proper duration and intensity.

Researchers suggest the following for aerobic training: (1) speed walking (or other low-intensity, ground based action) and aquatic exercise are optimal training means; (2) sessions should last for only 20-30 min; (3) the intensity should be kept light to moderate; and (4) training frequency should not surpass 2-3 sessions/week for the at least the first four weeks. Resistance training using free weight and machines has been shown to reduce overall pain, tender point count, mood and overall quality of life among sufferers. Again, research points toward the exercise prescription reflecting moderation with: (1) use of intensities of 40-80% 1RM; (2) training a maximum of 2-3 times per week; and (3) using 1-3 sets of 5-20 repetitions (siding towards lighter and higher-rep schemes).

Aquatic exercise has demonstrated relatively favorable outcomes in the treatment of fibromyalgia. Three sessions of aquatic therapy exercise per week for 16 weeks was effective in decreasing most symptoms in a large group of middle-aged women. Various studies have shown similar results; the positive effects may be attributed to the generally moderate intensity of activities performed coupled with the minimization of joint/soft tissue-related stresses while training in the water. It is recommended that clients engage in no more than three (3), 30-60 min sessions/week, using intensities between



50-80% of the age-predicted maximum heart rate. Tai chi, Pilates and yoga have been shown to promote enhanced motor function, reduced stiffness and localized pain, and improved quality of life among individuals with fibromyalgia. The long-term benefits of Pilates seems to be the least conclusive and Tai chi appears reasonably beneficial; while the Hatha form of yoga appears to be slightly more effective (at least in clinical trials) due to a heavy focus on specific relaxation technique and gentle postures that can be suitably tailored to clients with the disorder. Either way, preliminary research on all three of these “complementary interventions” seems promising. If Pilates is selected, it is recommended to employ three 60 min sessions per week at an intensity determined by the client’s functional level. It is recommended that clients participate in Tai chi and yoga twice per week in 60-90 min sessions, also at intensities dictated by the client’s fitness level. Whole body vibration training combined with traditional weightlifting has also been shown to be effective for reducing measures of pain, fatigue, and balance among women. It may also be useful for reducing measures of muscle soreness, as found in a number of studies investigating therapeutic

measures for athletes; which may be considered especially important among clients who have fibromyalgia due to their heightened sensitivity to pain.

Regardless of the mean(s) used in the exercise prescription, personal trainers must make modifications as necessary to deal with present pain or exacerbated symptoms such as fatigue due to poor sleeping patterns. Pain should be effectively monitored during each session using an easily-understood, subjective scale (such as 0-10 with 0 indicating no pain and 10 indicating unbearable pain) while fatigue can be monitored using the Borg’s Scale of Perceived Exertion (RPE). In addition, exercises should be customized to minimize post-exercise soreness; negating or limiting heavy eccentric loading is one easy to attain this goal. Personal trainers should realize that the life difficulties associated with this disorder promote poor exercise adherence in general. Understanding the client’s overall perception towards physical activity is critical to keep them properly motivated and thinking positively about minimizing the negative effects of fibromyalgia on their quality of life through the performance of appropriate exercise.

Training Clients with Fibromyalgia CEU Quiz

1. It is currently understood that fibromyalgia is caused by _____ that increases the body's perception of pain.
 - a. A blood-borne pathogen
 - b. A neurochemical imbalance
 - c. A mechanoreceptor adaptation
 - d. None of the above is correct
2. Which of the following is not considered a primary "tender point" location among diagnosed with fibromyalgia?
 - a. The back of the neck
 - b. The area superior of the Achilles tendon
 - c. The upper chest
 - d. The superior-posterior regions of the hips
3. Which of the following statements related to aerobic training for clients with fibromyalgia is correct?
 - a. Aerobic training appears to be the best means by which to reduce trigger point tenderness
 - b. Sessions should last for at least 60 minutes to promote an adrenal response
 - c. Training frequency should not surpass 2-3 sessions/week for at least the first 4 weeks
 - d. Moderately-high intensity interval training seems to be optimal for reducing pain
4. Which of the following is considered a primary risk factor for fibromyalgia?
 - a. Family history
 - b. Gender (female)
 - c. Rheumatoid arthritis
 - d. All of the above are correct
5. Which of the following statements concerning exercise-based treatment of fibromyalgia is **not** correct?
 - a. In clinical trials, the Hatha form of yoga was found to be more beneficial than Pilates or Tai chi
 - b. Yoga or Tai chi can be engaged two times a week for 60-90 minutes at intensities dictated by the client's fitness level
 - c. Pilates seems to help minimize trigger point tenderness in the lumbo-pelvic-hip region more effectively than other interventions
 - d. Whole body vibration training combined with weightlifting has been shown to be useful for reducing pain, fatigue and balance among women with fibromyalgia

6. *True or False?* Resistance training has been shown to reduce overall measures of pain as well as tender point count among individuals with fibromyalgia.

- a. True
- b. False

7. Aquatic training using intensities between _____ of an age-predicted maximum heart rate has been shown to produce favorable outcomes in the treatment of fibromyalgia.

- a. 40-55%
- b. 45-75%
- c. 50-80%
- d. 55-95%

8. Exercises in a program for a client with fibromyalgia should be modified to minimize which of the following?

- a. Hypertrophy
- b. Cortisol release
- c. Sweating
- d. Eccentric loading

9. True or false? Symptoms of fibromyalgia often commence following a specific episode of significant physical trauma or psychological stress.

- a. True
- b. False

10. Which of the following statements concerning weightlifting guidelines for a client with fibromyalgia is **not** correct?

- a. Training at 60-90% of the 1RM is recommended based on the goal
- b. Use of 1-3 sets of 5-20 repetitions is recommended (siding with lighter, higher-rep schemes)
- c. A maximum training frequency of 2-3 sessions/week is recommended
- d. The stresses provided should be modified to minimize post-exercise soreness

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



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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