



The Arizona Quarterly Spine

What is the Arizona Quarterly Spine?

The Arizona Quarterly Spine is a quarterly publication designed to provide you information about SpineScottsdale Physical Therapy and other spine and physical therapy related news and information. You are receiving this because you are a valued patient and we care about your health.

If you would like to be removed from our Arizona Quarterly Spine email list, no problem, simply click on the unsubscribe link.

Patient Edition

A Note From Shane



As a physical therapist who specializes in spine disorders, its important for me to review the evidence based spine research to provide your patients with the most recent spine assessment and rehabilitation strategies. The American College of Sports Medicine (ACSM), the largest sports medicine and exercise science organization in the world, has just released new recommendations on the quantity and quality of exercise for adults, definitively answering the age-old question of how much exercise is actually enough. I have included this information in this edition of the Arizona Quarterly Spine!

Fall 2012

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SpineScottsdale Physical Therapy Newsletter



SpineScottsdale shares the American College of Sports Medicine's position on their recommendations on the quantity and quality of exercise for adults. These recommendations are included on this document.

ACSM Issues New Recommendations on Quantity and Quality of Exercise

by Craig Odar | Aug 01, 2011

Position stand addresses aerobic, resistance, flexibility and neuromotor exercise

INDIANAPOLIS – The American College of Sports Medicine (ACSM) has just released new recommendations on the quantity and quality of exercise for adults, definitively answering the age-old question of how much exercise is actually enough.

The position stand, titled "[Quantity and Quality of Exercise for Developing and Maintaining Cardiorespiratory, Musculoskeletal, and Neuromotor Fitness in Apparently Healthy Adults: Guidance for Prescribing Exercise](#)," reflects current scientific evidence on physical activity and includes recommendations on aerobic exercise, strength training and flexibility. Consistent with the 2008 Physical Activity Guidelines for Americans, ACSM's overall recommendation is for most adults to engage in at least 150 minutes of moderate-intensity exercise each week.

"The scientific evidence we reviewed is indisputable," said Carol Ewing Garber, Ph.D., FAHA, FACSM, chair of the writing committee. "When it comes to exercise, the benefits far outweigh the risks. A program of regular exercise – beyond activities of daily living – is essential for most adults."

The basic recommendations – categorized by cardiorespiratory exercise, resistance exercise, flexibility exercise and neuromotor exercise – are as follows:

Cardiorespiratory Exercise

- Adults should get at least 150 minutes of moderate-intensity exercise per week.
- Exercise recommendations can be met through 30-60 minutes of moderate-intensity exercise (five days per week) or 20-60 minutes of vigorous-intensity exercise (three days per week).
- One continuous session and multiple shorter sessions (of at least 10 minutes) are both acceptable to accumulate desired amount of daily exercise.
- Gradual progression of exercise time, frequency and intensity is recommended for best adherence and least injury risk.
- People unable to meet these minimums can still benefit from some activity.

Resistance Exercise

- Adults should train each major muscle group two or three days each week using a variety of exercises and equipment.
- Very light or light intensity is best for older persons or previously sedentary adults starting exercise.
- Two to four sets of each exercise will help adults improve strength and power.
- For each exercise, 8-12 repetitions improve strength and power, 10-15 repetitions improve strength in middle-age and older persons starting exercise, and 15-20 repetitions improve muscular endurance.
- Adults should wait at least 48 hours between resistance training sessions.

Flexibility Exercise

- Adults should do flexibility exercises at least two or three days each week to improve range of motion.
- Each stretch should be held for 10-30 seconds to the point of tightness or slight discomfort.
- Repeat each stretch two to four times, accumulating 60 seconds per stretch.
- Static, dynamic, ballistic and PNF stretches are all effective.
- Flexibility exercise is most effective when the muscle is warm. Try light aerobic activity or a hot bath to warm the muscles before stretching.

Neuromotor Exercise

- Neuromotor exercise (sometimes called “functional fitness training”) is recommended for two or three days per week.
- Exercises should involve motor skills (balance, agility, coordination and gait), proprioceptive exercise training and multifaceted activities (tai ji and yoga) to improve physical function and prevent falls in older adults.
- 20-30 minutes per day is appropriate for neuromotor exercise.

In addition to outlining basic recommendations and their scientific reasoning, the position stand also clarifies these new points:

- Pedometers, step-counting devices used to measure physical activity, are not an accurate measure of exercise quality and should not be used as the sole measure of physical activity.
- Though exercise protects against heart disease, it is still possible for active adults to develop heart problems. All adults must be able to recognize the warning signs of heart disease, and all health care providers should ask patients about these symptoms.
- Sedentary behavior – sitting for long periods of time – is distinct from physical activity and has been shown to be a health risk in itself. Meeting the guidelines for physical activity does not make up for a sedentary lifestyle.

“It is no longer enough to consider whether an individual engages in adequate amounts of weekly exercise,” said Garber, who is an associate professor of movement sciences at the Teachers College of Columbia University. “We also need to determine how much time a person spends in sedentary pursuits, like watching television or working on a computer. Health-and-fitness professionals must be concerned with these activities as well.”

The position stand’s purpose is to offer health-and-fitness professionals scientific, evidence-based recommendations that help them customize exercise prescriptions for healthy adults. The position stand is published in the July 2011 issue of *Medicine & Science in Sports & Exercise*®, the official journal of ACSM.

The American College of Sports Medicine is the largest sports medicine and exercise science organization in the world. More than 45,000 international, national and regional members and certified professionals are dedicated to advancing and integrating scientific research to provide educational and practical applications of exercise science and sports medicine.

Medicine & Science in Sports & Exercise® is the official journal of the American College of Sports Medicine and is available from Lippincott Williams & Wilkins at 1-800-638-6423. To speak with a leading sports medicine expert on the topic, contact the department of communications and public information at 317-637-9200, ext. 133 or 127. Visit ACSM online at www.acsm.org.

Have you been to our website?

www.spinescottsdale.com

This is an opportunity for new patients to learn about us and previous patients to stay in contact with us. We update our website often, so please check back!

- [Learn about the staff at SpineScottsdale Physical Therapy](#)
- [Learn about all the services we provide](#)
- [Get directions to our facility](#)
- [Read testimonials from previous patients](#)

Your 2012 Medicare Benefits Will Be Expiring Very Soon!

I just want to remind you that your 2012 physical therapy benefits will be expiring very soon. Before the New Year brings in a new deductible and new limitations, consider taking care of any painful spine or extremity injuries and conditions with the physical therapy benefits you are entitled to by year's end.

All physical therapy must be medically necessary for Medicare to cover your services, so ask for physician for a prescription to SpineScottsdale Physical Therapy.

Please contact us should you have any questions and to schedule an appointment!

Healthcare Providers of the Quarter

SpineScottsdale Physical Therapy would like to recognize a local healthcare provider in every journal that has made significant contributions to the treatment of both spine and extremity conditions. This journal we would like to recognize: Scottsdale Sports Medicine Institute Providers: **David Carfagno, DO and Luke Knowlton, PA-C**



David Carfagno, DO

David Carfagno, D.O., C.A.Q.S.M. is Board Certified in Internal Medicine, Sports Medicine (CAQ) and Ringside Medicine (ABRM). His internship, residency and fellowship were completed at the world-renowned **Cleveland Clinic Foundation**.

Dr. Carfagno currently serves as a medical director for **Ironman Arizona**, as well as team physician for **USA Boxing** and ATP/WTA professional tennis. He also does medical consulting for **US Inline Skating** on a local level, is a team physician for a junior college. He has also served as a medical consultant for the **Chinese National Baseball** team, **MLB Milwaukee Brewers** and the **Arizona Fall League**.

Dr. Carfagno is a notable published author and featured speaker on a variety of sports medicine topics including concussions, athletes with arthritis, steroids and supplements and metabolic testing.



After graduating from Greenville High School in Greenville, Maine, Luke attended Springfield College in Springfield, Massachusetts. At Springfield, he earned a Bachelor of Science in Applied Exercise Science with a Health Studies minor and Magna Cum laude honors. He was involved with three exercise physiology internships/practicum experiences at Springfield College, including one that brought him across the world to Wollongong, Australia and a final fieldwork experience at Scottsdale Sports Medicine Institute.

Following his final fieldwork experience in 2005, he was hired full-time as an Exercise Physiologist here at SSMI. From 2005-2009, he was employed and mentored by Dr David Carfagno. His specialization during these years at SSMI included the research

Luke Knowlton, PA-C

and testing of metabolic substrate utilization (VO2 Max), Cardiac Stress testing, Pulmonary Function testing, Body fat and Bone density testing via DEXA scan, as well as the development of individualized performance enhancement programs in individuals of every fitness level from Olympic athletes to sedentary clients.

In June 2009, he left SSMI to pursue a Master's of Medical Science in Physician Assistant studies at Midwestern University in Glendale, AZ. Almost 3 years later, we are excited to offer his clinical services here at SSMI as a certified Physician Assistant (PA-C). In his spare time, he enjoys spending time with his wife, Jaime, eating her delicious southern cooking, playing competitive soccer in Scottsdale United Amateur Soccer League, weight training, marathon running, hiking, surfing, water-sports and world travel.

To learn more about Scottsdale Sports Medicine Institute visit: www.scottsdlesportsmedicine.com or to set up an initial consultation call 480-664-4615.



Using the Internet

SpineScottsdale is now using the internet to connect with the community. We are on Facebook, Twitter, Posterous, and Yelp! You can learn more about these internet sites below...



Facebook: Are you a fan?

Perhaps you have heard of this social networking site that is gaining popularity...FACEBOOK. Well, SpineScottsdale has decided to be a part of the trend. You can find a link at our website, www.spinescottsdale.com, to become a fan. You can post comments, view pictures, read articles, and tell your friends.



Twitter: Providing your patients tips on how to keep your spine healthy

Every day, millions of people use Twitter to create, discover and share ideas with others. Now, SpineScottsdale is turning to Twitter as an effective way to provide you and members of the community tips on how to keep your spine healthy. You can find a link to our Twitter page at: www.spinescottsdale.com



Posterous: Evidence-based blog designed for health care professionals

Are you interested in medical spine research? If so, I've created a blog page. I will be posting a weekly blog discussing the most recent evidence-based material on spine related issues. You can view this blog by going to: spinescottsdale.posterous.com and read my blogs that talk about the most recent evidence-based material on spine related issues.



Yelp: The purpose of YELP is to connect people with great local businesses.

1. Yelp was founded in 2004 to help people find great local businesses.
2. As of May 2010, more than 32 million people visited Yelp in the past 30 days.
3. Yelpers have written over 11 million local reviews.
4. You can find out what other patient's are saying about their experience at SpineScottsdale Physical Therapy at www.yelp.com



What are our patients saying?

"I want to express how satisfied I am with Shane's care and treatment protocols. He has demonstrated an innate ability to provide the most effective rehabilitation program while having a genuine concern for my well being. I am feeling almost 100% in less than a month from seeing Shane."

-George

"This was my first experience with physical therapy. Shane communicated very clearly which led to a relaxed and positive experience."

-Marcia

"Shane is fantastic. Not only did he correct my immediate problem of lower back pain, he has taught me how to be proactive in maintaining back health. I highly recommend him."

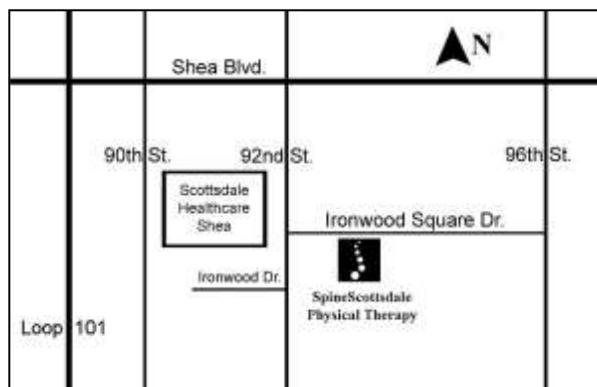
-Denise

"This has been a great experience and the results have been outstanding. Thank you for giving me my mobility back and relieving my pain. I would recommend Shane without exception!"

-Stephanie

"I have been coming here for a few months. I could hardly stand when my therapy started and had major pain in both legs and lower back. Within a short time the pain in my legs is gone and the back feels great. Everyone on staff is friendly and makes it a fun time. I have been to other doctors for physical therapy and Shane and the staff has helped more than anywhere else."

-Jason



10133 N. 92nd St., Suite 101
 Scottsdale, Arizona 85258
 Phone: 480-584-3334
 Fax: 480-272-9369
 Email: shane@spinescottsdale.com

Shane Sullivan
 PT, DPT, CERT. MDT, OCS, ATC, CSCS



Licensed Physical Therapist
 Doctor of Physical Therapy
 Certified in Mechanical Diagnosis and Therapy
 Board Certified Orthopedic Clinical Specialist
 Certified Athletic Trainer
 Certified Strength and Conditioning Specialist