

# strength training for shin splints

## The Role of Strength Training for Shin Splints: A Comprehensive Guide

**strength training for shin splints** is a crucial, often overlooked, component of recovery and long-term prevention for this common running ailment. While rest and reduced activity are essential initial steps, building a stronger foundation in the lower legs, ankles, and even hips is key to addressing the root causes of medial tibial stress syndrome. This article delves into the science behind why targeted exercises are vital, explores the specific muscle groups to focus on, and outlines effective strength training programs designed to alleviate shin splint pain and enhance resilience. We will discuss the importance of proper form, progression, and integrating strength work into a holistic approach to managing shin splints.

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## Understanding Shin Splints and Their Causes

Shin splints, medically known as medial tibial stress syndrome (MTSS), is characterized by pain along the inner edge of the shinbone (tibia). This condition is most prevalent among athletes, particularly runners, and is often attributed to overuse and repetitive stress on the tibia and the surrounding connective tissues. The pain can range from a dull ache to sharp, stabbing sensations, typically worsening during and after physical activity.

Several factors can contribute to the development of shin splints. These include sudden increases in training intensity or duration, running on hard surfaces, improper footwear that lacks adequate support or cushioning, and biomechanical issues such as flat feet or overpronation. Muscle imbalances and weakness in the lower leg, foot, and hip muscles also play a significant role in predisposing individuals to MTSS.

## The Biomechanical Link: How Weakness Contributes to Shin Splints

The biomechanics of running involve a complex interplay of forces transmitted through the lower limbs. When muscles that support the foot and ankle are weak or fatigued, they are less effective at absorbing impact and stabilizing the leg. This increased stress is then placed directly onto the tibia,

leading to inflammation and pain. Weakness in the tibialis anterior (the muscle at the front of the shin) can result in poor dorsiflexion, forcing the foot to slap down harder on the ground.

Furthermore, weakness in the calf muscles (gastrocnemius and soleus) can lead to overreliance on the tibialis posterior, a muscle that helps support the medial arch. When this muscle is fatigued or not strong enough, the arch may collapse excessively during the gait cycle, further stressing the tibia. Hip abductor and gluteal muscle weakness can also contribute indirectly by affecting pelvic stability and leading to compensatory movements in the lower leg, increasing the risk of shin splints.

## **Key Muscle Groups for Strength Training for Shin Splints**

To effectively address shin splints through strength training, it is crucial to target specific muscle groups that are integral to lower leg stability and shock absorption. Focusing on these areas will help to correct imbalances and improve the body's ability to withstand the repetitive forces of running and other activities.

### **Tibialis Anterior Strengthening**

The tibialis anterior muscle, located on the front of the shin, is essential for dorsiflexion (lifting the foot upwards). Weakness here can lead to an increased risk of foot slap and can contribute to shin splints. Strengthening this muscle helps to control the rate at which the foot lands.

### **Calf Muscle Strengthening**

The gastrocnemius and soleus muscles in the calf are primary plantarflexors, responsible for pushing off the ground. Strong and resilient calf muscles are vital for absorbing impact and providing power during the gait cycle. Weak or tight calf muscles are a common contributor to shin splints.

### **Foot Intrinsic Muscle Strengthening**

The small muscles within the foot, known as intrinsic foot muscles, play a critical role in arch support and foot stability. Strengthening these muscles can improve the foot's ability to adapt to different surfaces and absorb shock effectively, reducing the burden on the tibia.

### **Hip and Gluteal Muscle Strengthening**

While seemingly distant, the hip and gluteal muscles are crucial for kinetic chain efficiency. Weakness

in the gluteus medius and minimus, for instance, can lead to excessive inward rolling of the knee (valgus collapse) and an unstable pelvis, which can translate to increased stress on the lower legs, including the shins.

## Essential Strength Training Exercises for Shin Splints

Incorporating a variety of exercises targeting the key muscle groups is vital for a comprehensive strength training program for shin splints. These exercises can be performed with minimal equipment and can be adapted as your strength progresses.

### Tibialis Anterior Exercises

- **Toe Raises (Seated or Standing):** Sit with your feet flat on the floor. Keeping your heels down, lift your toes and the front of your feet as high as possible. Hold for a few seconds, then lower slowly. For a more challenging version, perform this exercise standing.
- **Resistance Band Dorsiflexion:** Sit on the floor with your legs extended. Loop a resistance band around the ball of one foot, holding the ends of the band. Keeping your heel on the floor, pull your toes towards your shin against the resistance of the band.
- **Heel Walks:** Walk on your heels, keeping the balls of your feet and toes off the ground. This is a great way to engage the tibialis anterior dynamically.

### Calf Muscle Exercises

- **Calf Raises (Standing):** Stand with your feet hip-width apart. Rise up onto the balls of your feet, squeezing your calf muscles at the top. Hold briefly, then slowly lower your heels back down. For increased difficulty, perform on one leg at a time.
- **Seated Calf Raises:** Sit on a chair with your feet flat on the floor. Place a weight (like a dumbbell or plate) on your thighs just above your knees. Lift your heels off the floor, engaging your calf muscles.
- **Eccentric Calf Drops:** Stand with the balls of your feet on the edge of a step or block, with your heels hanging off. Lift yourself up onto your toes, then slowly lower your heels below the level of the step, emphasizing the lowering (eccentric) phase.

## Foot Intrinsic Muscle Exercises

- **Towel Curls:** Sit with your feet flat on the floor, with a small towel underneath one foot. Using only your toes, try to scrunch the towel towards you.
- **Marble Pickups:** Place a small pile of marbles on the floor. Sit with your feet flat and use your toes to pick up the marbles one by one and place them into a bowl.
- **Arch Lifts:** Stand with your feet flat. While keeping your toes on the ground, try to lift the arch of your foot, creating a dome shape.

## Hip and Gluteal Muscle Exercises

- **Glute Bridges:** Lie on your back with your knees bent and feet flat on the floor. Squeeze your glutes and lift your hips off the ground, creating a straight line from your shoulders to your knees.
- **Clamshells:** Lie on your side with your knees bent and stacked. Keeping your feet together, lift your top knee upwards, engaging your gluteus medius.
- **Lateral Band Walks:** Place a resistance band around your ankles or just above your knees. Stand with your feet hip-width apart, with a slight bend in your knees. Step sideways, maintaining tension on the band.

## Implementing a Strength Training Program for Shin Splints

A structured approach to strength training is essential for effective recovery and prevention of shin splints. It's not simply about performing exercises, but about doing them consistently and progressively.

Begin with a frequency of 2-3 times per week, ensuring at least one rest day between sessions to allow for muscle recovery. Start with lighter resistance or bodyweight exercises and focus meticulously on proper form. As you gain strength and confidence, you can gradually increase the repetitions, sets, or resistance. Listen to your body; if an exercise exacerbates your shin pain, modify it or consult with a healthcare professional.

## Progression Strategies

Progression is key to continued improvement. Once you can comfortably complete the prescribed repetitions and sets with good form, it's time to make the exercises more challenging. This can be achieved through several methods:

- **Increase Repetitions:** If you are doing 15 reps, aim for 20.
- **Increase Sets:** If you are doing 2 sets, aim for 3.
- **Increase Resistance:** Use heavier weights, stronger resistance bands, or add ankle weights.
- **Decrease Rest Times:** Shorten the rest period between sets.
- **Increase Time Under Tension:** Slow down the movement, especially the eccentric (lowering) phase.
- **Unilateral Exercises:** Progress from bilateral (two-leg) exercises to unilateral (single-leg) variations where appropriate.

## Important Considerations for Strength Training and Shin Splints

When incorporating strength training into your shin splint recovery, several factors require careful consideration to ensure safety and maximize effectiveness. Ignoring these can lead to setbacks or even further injury.

Always prioritize proper form over the amount of weight lifted or the number of repetitions. Poor technique can place undue stress on already vulnerable tissues. If you are unsure about the correct execution of an exercise, seek guidance from a qualified physical therapist or certified personal trainer. They can assess your biomechanics and demonstrate proper form.

Pain is your body's signal. While some muscle soreness is normal after strength training, sharp or increasing pain in the shin area during or after exercises is a red flag. If you experience this, stop the exercise immediately and reassess. It may indicate that the exercise is too intense, the form is incorrect, or you are pushing too hard too soon. Rest and modification might be necessary.

Hydration and nutrition also play supporting roles. Adequate water intake is crucial for muscle function and recovery. A balanced diet that provides sufficient protein supports muscle repair and growth, which is essential for building the strength needed to combat shin splints.

# Progressing Your Strength Training for Long-Term Shin Splint Prevention

The ultimate goal of strength training for shin splints is not just immediate pain relief but also long-term resilience and prevention. As your shins heal and you return to your desired activities, consistently incorporating these strengthening exercises into your routine will help build a robust defense against future occurrences.

Think of strength training as an ongoing maintenance program. Even when you are pain-free, continue to dedicate time to your lower leg and hip strengthening exercises. This proactive approach helps maintain muscle balance, improves shock absorption, and enhances overall biomechanical efficiency, reducing the likelihood of shin splints returning. Gradually reintroduce running or other high-impact activities, always mindful of increasing volume and intensity incrementally and ensuring your strength work remains a priority.

## The Importance of Gradual Return to Activity

Rushing back into full training after experiencing shin splints is a common mistake that can lead to re-injury. Strength training provides the foundation for a safer return. As your strength improves, you can begin a gradual return-to-running program. This typically involves alternating walking and running intervals, slowly increasing the duration of running and decreasing the walking segments over several weeks.

Cross-training can also be a valuable component of your rehabilitation and prevention strategy. Activities like swimming, cycling, or using an elliptical machine provide cardiovascular benefits without the repetitive impact on the shins, allowing your body to recover while maintaining fitness. These activities can often be performed while continuing your strength training regimen.

## FAQ

### **Q: How quickly can I expect to see results from strength training for shin splints?**

A: The timeline for seeing results can vary greatly depending on the severity of the shin splints, individual consistency with the exercise program, and adherence to other recovery protocols like rest and proper footwear. Generally, you might start to notice some reduction in pain and improved muscle endurance within 4-6 weeks of consistent strength training. Significant improvements and a strong preventative effect may take several months of dedicated work.

## **Q: Should I do strength training if I am currently experiencing shin splint pain?**

A: This depends on the intensity of the pain. If the pain is mild and does not worsen during the exercises, gentle strengthening exercises targeting the tibialis anterior and calf muscles with low resistance might be beneficial. However, if you experience sharp or increasing pain, it's crucial to scale back or avoid exercises that aggravate the condition. Consulting with a physical therapist is highly recommended to determine the appropriate exercises and intensity level during an active flare-up.

## **Q: What is the best frequency for strength training for shin splints?**

A: For active recovery and rehabilitation, a frequency of 2-3 times per week is generally recommended. This allows for adequate muscle recovery between sessions. Once shin splints have resolved and you are focusing on prevention, you can maintain this frequency or incorporate some of the exercises into your regular fitness routine 1-2 times per week as maintenance.

## **Q: Can I use weights for my shin splint strength training exercises?**

A: Yes, weights can be incorporated to progressively overload the muscles once you have established a solid foundation with bodyweight exercises and have good form. Start with light dumbbells or resistance bands and gradually increase the weight as you get stronger. Overdoing it with weights too early can increase the risk of re-injury.

## **Q: How important are hip and glute exercises for shin splints?**

A: Hip and gluteal muscles are extremely important for shin splint prevention and recovery. Weakness in these areas can lead to poor biomechanics in the lower leg and foot, causing excessive pronation or instability. Strengthening these muscles helps to improve overall kinetic chain efficiency and reduce compensatory stress on the shins.

## **Q: What kind of footwear should I wear during strength training for shin splints?**

A: Wear supportive athletic shoes that fit well and provide adequate cushioning. Avoid training in worn-out shoes or going barefoot, especially if you have biomechanical issues like flat feet. If you have custom orthotics, wear them during your training sessions.

## **Q: How do I know when I'm strong enough to return to running?**

A: You should feel ready to return to running when you can perform your prescribed strength training exercises without pain, have regained normal range of motion in your ankles, and can walk

comfortably for extended periods. A gradual return-to-running program, starting with walk-run intervals, is essential. Listen to your body, and don't hesitate to regress if pain returns.

## **Q: Are there any exercises that could worsen shin splints?**

A: High-impact exercises like jumping, plyometrics, and very fast-paced running can aggravate shin splints, especially during the recovery phase. Certain movements that involve excessive foot slapping or forceful landing can also be problematic. It's important to modify or avoid any exercise that causes or increases shin pain.

## **Strength Training For Shin Splints**

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**strength training for shin splints:** 10-Minute Strength Training Exercises for Seniors Ed Deboo PT, 2024-03-12 Get the ultimate guide to strength training for seniors with these easy, 10-minute exercises that Booklist calls ...an ideal starter for exercise newbies. Staying strong and flexible becomes even more important as we age. This guide to exercise for seniors makes it easy to stay in motion with short and simple exercises you can do anytime and anywhere. With clear illustrations alongside step-by-step instructions from licensed physical therapist Ed Deboo, you'll learn how to build muscle mass, improve bone density, and feel great in only 10 minutes per day. A 3-part plan—Start with the principles of strength training before diving into 40 individual exercises, then put it all together with 25 combined routines that help you target every muscle group. No equipment required—Get strong at home with bodyweight exercises such as squats, lunges, and push-ups, along with moves that can be done with items you have on hand like soup cans and gallon jugs. Boost overall well-being—Discover how getting active gives you the confidence and independence to stick with your favorite activities, and build endurance for new adventures.



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**strength training for shin splints:** The New Harvard Guide to Women's Health Karen J. Carlson, Stephanie A. Eisenstat, Terra Diane Ziporyn, 2004-04-30 With complete information on women's health concerns, physical and behavioral, this A-Z reference brings the topics up-to-date for a new generation of readers.

**strength training for shin splints:** *Strength Training for Runners* John Shepherd, 2015-02-12 Due to cost and time pressures, people are abandoning the gym and organised sport in favour of more flexible and informal pursuits such as running. But it's not just as simple as getting the miles under your belt. Injuries can impact on your ability to train, and all runners can benefit from a simple strength training and conditioning programme to boost performance and avoid unnecessary injuries. Strength and Conditioning is now regarded as integral to any training programme from marathon runners to triathletes. *Strength Training for Runners* is designed to keep you, as a runner, on track, whatever your level. Packed with photos illustrating the different techniques, this coaching manual is ideal for any motivated runner. Chapters will guide you through constructing a programme of exercises to keep you running fit, show you how to improve and strengthen your running and other muscles in specific warm ups and provide you with some great conditioning advice that will make you a stronger and faster runner. With the right strength training approach behind you, one that is balanced and reflects your training and racing needs, your injury risk can be significantly reduced and your performance significantly increased.

**strength training for shin splints:** **Strength Training for Fat Loss** Nick Tumminello, 2023-08-14 Lose fat. Add muscle. Look great. No fads or diets are required—just hard work, sensible strategies, and science-based programming to achieve the results you desire. In *Strength Training for Fat Loss*, Second Edition, internationally renowned trainer Nick Tumminello provides the formula for transforming your body. He explains how to use the three Cs of metabolic strength training—circuits, combinations, and complexes—to accelerate your metabolism and maximize fat loss while maintaining and even adding muscle. In this updated second edition, you'll find more than 150 exercises using barbells, dumbbells, kettlebells, machines, or just your body weight, basic guidelines for eating sensibly to accelerate your metabolism, over 50 ready-to-use metabolic strength workouts, color photos demonstrating the exercises, at-home workouts that require minimal equipment, and beginner workouts for those new to strength training as well as advanced exercisers. Practical and accessible, *Strength Training for Fat Loss* is your guide to creating and maintaining the physique you seek. Earn continuing education credits/units! A continuing education exam that uses this book is also available. It may be purchased separately or as part of a package that includes both the book and exam.

**strength training for shin splints:** **Strength Training Past 50** Wayne Westcott, Thomas R. Baechle, 2015-05-04 Increase your strength to improve your health, your appearance, and your performance with *Strength Training Past 50*. Strength training offers many benefits for active adults, including enhanced athletic performance, reduced risk of disease, and decreased symptoms of arthritis, diabetes, and osteoporosis. Whether you are just getting started or have been training your entire life, *Strength Training Past 50* has you covered. In the third edition of this best-selling guide, you'll find these topics: - 83 exercises for free weights, machines, bands, and balls - 30 workouts for increasing size, endurance, and strength - Sport-specific programs for tennis, golf, cycling, running, and more - Eating plans and nutrition advice for adding lean muscle and losing fat *Strength Training Past 50* will keep you active, healthy, and looking great with workouts and programs designed just for you.

**strength training for shin splints:** **Strength Training** Cris Caivano, 2018-01-16 Expert guide, suitable for those at every level of fitness, presents more than 80 exercises for increased flexibility and resilience. Exercises are based on yoga, Pilates, tai chi, other disciplines. 350 black & white photographs.

**strength training for shin splints: Endurance Training Basics** Ava Thompson, AI, 2025-03-14 *Endurance Training Basics* explores the core principles of endurance training, from exercise physiology to practical application for athletes of all levels. It emphasizes the importance of structured, evidence-based training to maximize performance and minimize injury risk. Did you know understanding how your body uses energy during prolonged activity (energy systems) and carefully planning training to stimulate beneficial adaptations are key to improving and reducing injury? This book avoids a one-size-fits-all approach, focusing instead on tailoring training plans to individual goals and capabilities. The book progresses systematically, beginning with core concepts like VO2 max and lactate threshold, and then moves through long slow distance training, interval training, strength and conditioning, nutrition, and recovery strategies. Guidance on creating personalized training plans, addressing challenges, and optimizing performance is provided. The book will give you actionable advice to optimize fueling strategies and promote tissue repair, ultimately empowering you to take control of your training and enhance your cardiovascular health.

**strength training for shin splints: Marathon Training Basics** Liam Brown, AI, 2025-03-14 *Marathon Training Basics* offers a comprehensive guide for runners aiming to conquer the 26.2-mile challenge. It emphasizes a holistic, science-backed approach that goes beyond simply increasing mileage, focusing on the three key pillars of successful marathon training: endurance building, nutrition, and recovery. The book bridges the gap between traditional training methods and contemporary sports science, presenting evidence-based strategies in an accessible manner. For example, understanding concepts like VO2 max and lactate threshold is crucial for optimizing training intensity and preventing overtraining. The book progresses logically, starting with the fundamentals of endurance training and delving into practical aspects like structured training plans, interval workouts, and tempo runs. It then dissects the role of nutrition, covering macronutrient needs, hydration, and nutrient timing. Finally, it explores recovery strategies, including sleep optimization and injury prevention. By integrating these elements, runners can minimize injury risk and maximize performance. The book emphasizes how deficiencies in one area, such as neglecting proper hydration, can undermine progress in other areas, such as endurance. What sets *Marathon Training Basics* apart is its balanced and evidence-based perspective. Rather than promoting a one-size-fits-all approach, it empowers readers to tailor training plans to their individual needs. It incorporates real-world examples and analyzes training data to illustrate the impact of different strategies. This makes it particularly valuable for runners seeking a deeper understanding of the science behind training and those who want to optimize their performance through evidence-based strategies in sports, health & fitness.

**strength training for shin splints: Fundamentals of Athletic Training** Lorin A. Cartwright, William A. Pitney, 2011-01-18 *Fundamentals of Athletic Training*, Third Edition, explains foundational concepts in athletic training and presents injuries and illnesses commonly encountered by certified athletic trainers. Written specifically for high school students, this text develops the knowledge and skills of students assisting athletic trainers on the field and in the training room as well as those considering future careers as sports medicine professionals. In an engaging full-color layout, the updated third edition presents the latest developments in athletic training with regard to treatment, care, administration, and certification. These new and updated topics are covered: •How to deal with more than one injury simultaneously •How to work with athletes with differing cultural backgrounds •Treatment and care of athletes with specific conditions or disabilities •Facility design and modality safety •Equipment ordering and maintenance •The role of the athletic trainer in school emergencies *Fundamentals of Athletic Training*, Third Edition, covers all of the introductory concepts that future athletic trainers need to know—at a level that high school students can understand. The text begins with an overview of the athletic training profession and presents human anatomy and the physiology of injury and tissue healing. A quick reference list highlights where to find related anatomical drawings. It then presents comprehensive head-to-toe coverage of common injuries and includes an explanation of each injury with appropriate treatment protocols. The text also discusses various conditions, illnesses, and communicable diseases along with information on

nutrition and the effects of therapeutic, recreational, and performance-enhancing drug use. Students will learn the fundamentals of rehabilitation and injury prevention techniques through the use of taping, wrapping, and protective equipment. The third edition includes new and updated learning features that add interest, depth, and opportunities for critical thinking. Special chapter vignettes titled What would you do if . . . ? encourage students to consider how they might handle day-to-day challenges faced by athletic trainers. "The Real World" segments provide examples of experiences that athletic trainers currently working in the field encounter. Other highlighted elements offer additional information about challenging topics, suggestions for additional research and special projects, or direction for hands-on application of theories presented within the chapter. Fundamentals of Athletic Training, Third Edition, also includes fully updated and expanded instructor materials. Online access to the instructor guide, the test package, and a new image bank now provide convenient, one-source assistance for lecture and test preparation. As a bonus, instructors may request the Essentials of Interactive Functional Anatomy CD-ROM for use in their classrooms. This unique learning tool provides an engaging way to teach the basics of human anatomy. Fundamentals of Athletic Training, Third Edition, provides student athletic training assistants with a clear understanding of the functions, skills, and activities they might encounter while assisting certified athletic trainers. By offering a solid introduction to the profession, this text will also pique the interest of students considering their career possibilities and act as a springboard to a future in athletic training and sports medicine.

**strength training for shin splints: Graphic Sports** Felix Abayateye, 2010-04-06

**strength training for shin splints: The Triathlon Training Book** DK, 2016-02-16 The Triathlon Training Book is your one-stop reference for training and competing in a triathlon. Find all the essentials you need to start training and improve your performance: + Clear, customizable training plans for all triathlon distances. + Step-by-step exercises to build your strength. + Incredible illustrations that explain efficiency and speed. + Expert advice on race-day strategy, nutrition, and equipment. + Trustworthy advice on treating common triathlon injuries and maintaining a healthy body. Whether you are a first-timer or a seasoned Ironman veteran, you'll find what you need in The Triathlon Training Book. There's even a special performance chapter with detailed anatomical artwork that explains the physiology and body mechanics for swimming, cycling, and running, so you can see what's happening inside your body as you train.

**strength training for shin splints: Essentials of Strength Training and Conditioning** NSCA -National Strength & Conditioning Association, 2021-06 Developed by the National Strength and Conditioning Association (NSCA) and now in its fourth edition, Essentials of Strength Training and Conditioning is the essential text for strength and conditioning professionals and students. This comprehensive resource, created by 30 expert contributors in the field, explains the key theories, concepts, and scientific principles of strength training and conditioning as well as their direct application to athletic competition and performance. The scope and content of Essentials of Strength Training and Conditioning, Fourth Edition With HKPropel Access, have been updated to convey the knowledge, skills, and abilities required of a strength and conditioning professional and to address the latest information found on the Certified Strength and Conditioning Specialist (CSCS) exam. The evidence-based approach and unbeatable accuracy of the text make it the primary resource to rely on for CSCS exam preparation. The text is organized to lead readers from theory to program design and practical strategies for administration and management of strength and conditioning facilities. The fourth edition contains the most current research and applications and several new features: Online videos featuring 21 resistance training exercises demonstrate proper exercise form for classroom and practical use. Updated research—specifically in the areas of high-intensity interval training, overtraining, agility and change of direction, nutrition for health and performance, and periodization—helps readers better understand these popular trends in the industry. A new chapter with instructions and photos presents techniques for exercises using alternative modes and nontraditional implements. Ten additional tests, including those for maximum strength, power, and aerobic capacity, along with new flexibility exercises, resistance training exercises, plyometric

exercises, and speed and agility drills help professionals design programs that reflect current guidelines. Key points, chapter objectives, and learning aids including key terms and self-study questions provide a structure to help students and professionals conceptualize the information and reinforce fundamental facts. Application sidebars provide practical application of scientific concepts that can be used by strength and conditioning specialists in real-world settings, making the information immediately relatable and usable. Online learning tools delivered through HKPropel provide students with 11 downloadable lab activities for practice and retention of information. Further, both students and professionals will benefit from the online videos of 21 foundational exercises that provide visual instruction and reinforce proper technique. Essentials of Strength Training and Conditioning, Fourth Edition, provides the most comprehensive information on organization and administration of facilities, testing and evaluation, exercise techniques, training adaptations, program design, and structure and function of body systems. Its scope, precision, and dependability make it the essential preparation text for the CSCS exam as well as a definitive reference for strength and conditioning professionals to consult in their everyday practice. Note: A code for accessing HKPropel is not included with this ebook but may be purchased separately.

**strength training for shin splints: The Runner's World Big Book of Marathon and Half-Marathon Training** Amby Burfoot, Bart Yasso, Pamela Nisevich Bede, Jennifer Van Allen, Editors of Runner's World Maga, 2012-06-05 The first dedicated book on marathon and half marathon training from the renowned experts at Runner's World Runner's World Big Book of Marathon and Half-Marathon Training gives readers the core essentials of marathon training, nutrition, injury prevention, and more. The editors of Runner's World know marathon training better than anyone on the planet. They have spent the last few years inviting readers to share the long, sweaty journey to the starting line, putting themselves on call to personally answer readers' questions 24/7. This book includes testimonials from real runners, more than 25 training plans for every level and ability, workouts, a runner's dictionary, and sample meal plans. Runner's World Big Book of Marathon and Half-Marathon Training is a powerful and winning resource—the ultimate tool kit for anyone who wants to get from the starting line to the finish line.

**strength training for shin splints: Triathlon Training For Dummies** Deirdre Pitney, Donna Dourney, 2008-12-10 Shaping up for a triathlon is serious business. Triathlon Training For Dummies is packed with insider tips and proven methods for training for a triathlon and pumping yourself into the best possible shape by race day. It helps you find the motivation you need to stick to your program, eat better to maximize your energy, and prevent injuries both before and during the race. This authoritative guide helps you evaluate your cardiovascular fitness, muscle strength, endurance, and flexibility, and to set manageable realistic training goals. You'll learn how to establish a workout schedule, choose a target finish time get the right, affordable equipment you'll need for each leg of the race, and maximize your fitness and form for swimming, biking, and running. You'll also get plenty of help in putting it all together as you focus your training, add dual workouts, become a quick-change artist, and save time during transitions. Discover how to: Choose an event to train for based on your fitness level Get into your best possible shape Select the right equipment and sportswear Train for an Olympic, Sprint, or Ironman triathlon Fuel your body and prevent injuries Prepare for training sessions Maintain energy and recover quickly Set training schedules for every triathlon event Treat common training and racing injuries Live like an athlete Triathlon Training For Dummies comes complete with resources for finding triathlons near you, lists of items to bring along on race day, and tips on registration formalities and racing etiquette.

**strength training for shin splints: The Science and Practice of Middle and Long Distance Running** Richard Blagrove, Philip Hayes, 2021-03-29 The popularity of distance running as a sport, and a recreational activity, is at an all-time high. Motivated by the desire to achieve a personal best, remain healthy, or simply complete an event, distance runners of all ages and abilities actively seek out advice from experienced coaches and sport scientists. This is also reflected in the growth of programmes of education for young coaches and aspiring sport scientists in recent years. There are a multitude of different approaches to training distance runners; however, the basic principles and

ingredients required for success are applicable to any distance runner. The science that underpins the training and physical preparation of distance runners has developed considerably in recent years. The most experienced and successful coaches in the distance running community rarely have the opportunity to share their tried and tested methods of training. Similarly, the novel work of sport scientists is often only accessible to elite runners, their support teams and academia. The Science and Practice of Middle and Long Distance Running links together the science and coaching artistry associated with preparing distance runners for events ranging from 800 m up to ultra-marathon distances. It combines the latest scientific evidence, published by world-leading sport scientists, with the sound training principles and strategies adopted by experienced coaches. The book translates cutting-edge scientific research from the fields of physiology, biomechanics, psychology and nutrition into practical suggestions for achieving success. Important topical issues and contemporary practices related to health and performance are also addressed. This book is an essential addition to the library of any distance runner, coach or sport scientist.

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