

The How and Why Behind Proper Fitness Assessments for Young Athletes

By Eric Reed, CSCS*^D from Foothills Sports Medicine & Rehabilitation in Phoenix, Arizona.

Fitness assessments are important on their own but the order in which they are performed is just as important. When receiving a battery of tests on the same day, the following format should be followed: height/weight measurements, agility tests, max strength tests, sprint tests, muscular endurance, anaerobic capacity and aerobic capacity. A proper warm-up is highly recommended to ensure athletes do not develop any sprains or strains.

With younger athletes competing at such a high level so early, they have been known to develop muscular imbalances. If these muscular imbalances are not detected early they can grow into a variety of injuries including overuse injuries. Through proper testing and screening, athletes are more aware of their imbalances. Once the athlete has been tested, they can be placed into a training program to help correct those imperfections and help make them become a more functional athlete.



Fitness testing should also be completed at certain times. Testing should be done before, during and after a sport season. It should also be done before, during and after different training programs. The pretests are done to give the athlete a starting point. With this starting point in place the athlete can set goals and design their training for the upcoming season. The testing done during the sport season or training program is performed for two reasons. One is to check for overtraining... Overtraining can lead to burnout if not identified early enough. The second reason is to check to see if your program is sound and the athlete is seeing positive benefits. The posttest is done to see if the athlete gained or lost any attributes from their training program throughout the season.

These fitness assessments should always be administered by certified personnel. Those holding the CSCS or CPT conditionals have been properly trained and possess the educational background to ensure fitness testing is valid.

In today's ever changing world of athletics, young athletes are playing and specializing in sports at younger ages. Because of this, proper fitness assessments have become more important than ever. Testing these young athletes to identify overtraining, correct posture, proper body mechanics, muscle imbalances, strength, endurance and speed is crucial to a good training program and proper progression through that program.

For more information on receiving a free fitness assessment at Foothills Sports Medicine & Rehabilitation, contact Eric Reed at 602.424.0529 or email ereed@foothillsrehab.com, or contact PSPN at 1-877-360-PSPN (7776) for a participating PSPN provider in your area.

Are Analgesic Balms Safe for Young Athletes?

By Jeff Pottenger, Physical Therapist and Owner of South San Physical Therapy, San Antonio, TX

Analgesic balms (sports creams) are commonly used by athletes of all ages to provide relief from joint inflammation, strained muscles, and general aches and soreness. The manufacturers report their products are reasonably safe when used according to their instructions. What happens, however, when the instructions are not followed? Is there potential danger? The answer is yes. These balms contain one or more substances that cause the analgesic effect, meaning they reduce pain. While these substances may not be considered medicines, they can nevertheless have medicine-like effects. For example, some balms contain salicylates, an important ingredient of aspirin. Salicylates penetrate and produce pain relieving effects below the skin. Capsaicin, another common ingredient, on the other hand, works by causing irritation, activating certain types of nerves, and stimulating specific types of muscle fibers.

The vast majority of the problems experienced using analgesic balms are apparently very minor. However, in 2007, the Associated Press reported that a female high school track star in New York City overdosed and died after using analgesic balm on her legs. (Sports cream warnings urged after teen's death: "Track star's overdose points to risks of popular muscle salves" - <http://www.medscape.com/viewarticle/471677> Accessed 10-18-10). Her body reportedly had absorbed a high level of methyl salicylate, which is found in various sports creams. She reportedly had used analgesic pads and had also slathered a combination of analgesic balms over both of her legs. Her cause of death was the first of its kind in New York City. The good news is that there is no epidemic of analgesic balm-related deaths. This athlete's case was extreme and rare. At the time of her death there were no other documented instances of analgesic balm being associated with a death. An recent on-line search of the medical journals revealed no reports of other significant sports cream-related problems. However, such a tragedy could be repeated if adequate caution is not provided particularly to the younger athletes. The take-home lesson is that sports creams are relatively safe for young athletes if their directions are followed and the use is not excessive.



Baseball Training 101 - What NOT To Do

Written by Nathan J. Shaw, ATC, CSCS - Arizona Diamondbacks, Major League Strength and Conditioning Coordinator; Co-Owner, Foothills Sports Medicine & Rehabilitation - Gilbert, Arizona

Designing training programs for baseball players can be very simple. There are a few concepts to focus on before you get started. A successful program is one that a player can complete without a large risk of injury. A successful program also helps the athlete achieve some specific goals. A successful program also takes into consideration that all baseball players are throwing athletes. If you adopt these concepts there is a good chance that you will be on the right track to getting the best program together for your athletes.

There is a line in a country song and it says to be sure you "don't outsmart your common sense". That thought process is also a general weight room guideline. It's better to not go in any direction rather than go in the wrong direction. Injuries from a training program are unacceptable. Here are some exercises that I **avoid** with my players at all costs.

- **Away behind the neck pull down, behind the neck press or overhead shoulder press**
This group of exercises requires less than optimal shoulder positioning.
- **Any type of single bar (barbell) bench press**
Chest exercises can add to bad posture and therefore throw off ideal shoulder mechanics. Supine bench press de-trains the muscles around your rib cage because of the immobilization of the shoulder blade on the bench
- **Crunches**
This exercise group can help create faulty posture patterns that augment shoulder and low back pain.
- **Leg Press**
The exercise movement is very slow and not very specific to many baseball movements. Leg strength is very important but when the ball is in play the play makers are typically on one foot and have to be able to be moving very fast.
- **Leg Extensions**
This exercise can often cause the knee cap to track incorrectly. It also leads to a shortening/tightening of the quad(thigh) muscles. Ideally your program doesn't cause any muscles to become short or tight.

These exercises are not the best selections available. Given a deeper look, the astute strength coach can prescribe exercises that offer more positive with less risk than those mentioned above.

The final concept to consider is that all baseball players are throwers. The most important joint in the kinetic chain is the throwing shoulder. So playing it smart in regards to protecting the shoulder joint is a very intelligent approach. In the absence of X-ray vision, there is no way to identify what type of bony configurations and growth an individual may have. In some cases bony alignments cause a decrease in the space available for overhead movements. Alignments coupled with poor upperback rotation mixed with a poor exercise selection may provoke injuries that may very well have been avoided otherwise. To be sure the shoulder is as well prepared as possible it is crucial to strengthen the shoulder blade stabilization musculature. There are a ton of exercises available for the shoulder blade. Manual, dumbbell exercises, isometric, tubing, and cable weights all offer different variations of the same exercises. Remember to perform shoulder external rotation and vary the position and the type of resistance of the exercises chosen. Being that you can't make the team if you are not playing because of an injury, you should save your shoulder bullets for throwing activities. Remember that injuries in the weight room are unacceptable and the astute strength coach has a reason for everything he/she does or doesn't do.

-PSPN- Sports Calendar

For more information regarding the Physical Therapy Practices featured in this edition of PSPN Sports and Health Report, please contact PSPN at 1-877-360-PSPN (7776).

ARIZONA

Saturday, November 6th: FREE Running Seminar for all abilities and ages. The seminar is geared toward runners who want to know how to get back on track when derailed from their running by injuries etc. Dr. Myron Hansen will be speaking about foot/ankle injuries, Dr. Matthew Shores will be speaking about knee injuries and Matthew Wichser, a certified running coach, will be helping with getting the running schedule back on track. Lynsey Schmidt, PT and Travis Cummings, Personal Trainer will be showing you how to perform proper dynamic warm-ups and post running stretching as well as strengthening exercises. Saturday, November 6th from 10am to 2pm at Foothills Sports Medicine Physical Therapy, 3200 S. Alma School Rd., Ste. 101, Chandler, AZ 85248. Call 480-782-7831 or email Lynsey@foothillsrehab.com with questions or to RSVP.

Thursday, November 18th: Lecture geared toward runners. Dr. Laurel Robison will be presenting on common running injuries and proper footwear/orthotics. The lecture will be held on Thursday, November 18th from 7:00-8:00 at Foothills Sports Medicine and Rehabilitation, 5110 N. Dysart Rd., Suite 148, Litchfield Park, AZ 85340. Please call 623-547-4739 or email allovd@foothillsrehab.com to RSVP.

CALIFORNIA

Wednesday, November 17th: Golf Workshop: "Manage Your Statistics and Lower Your Score". Please be our guest at our upcoming seminar...Learn how to play better golf with Mark Reid, a former 10 year David Leadbetter Certified instructor and member of the PGA. Located at the Golf Performance Center in Irvine, CA. Receive a detailed Statistical Spreadsheet and a "How to Track your Tendencies." Do what the professionals do and understand your strengths and weaknesses. This will be available free for all attendees as an Excel file or to store on your Android, iPhone or Blackberry Smart Phone. Contact Stephanie Overbaugh at Body Balance and Performance at 949-595-0700 or email overbaugh@fitgolf.com.

GEORGIA

Wednesday, November 10th: Performance Physical Therapy is holding an Open House for their new location and to discuss their golf program and wellness routines. Allen Pace is the physical therapist and clinical director of this new location and he is a Titleist Performance Institute Certified Golf Fitness Instructor. Performance Physical Therapy is located at 1623 Highway 20 West, McDonough, GA 30253, and can be reached at 770-898-9993.

Want to become the best you can be at your chosen sport, and prevent injuries?
Enroll in a Sports Enhancement/Injury Prevention program using one of our PSPN providers!

What is PSPN?

PSPN (Preferred Sports Provider Network) is a network of contracted physical and occupational therapy practices throughout the country who offer Sports Enhancement services at a discount. PSPN was created to bring awareness to the proactive athletic services our practices provide. Not only do they provide injury and illness rehabilitation, they are also experts in strength, flexibility and agility improvement and injury prevention. Our providers have years of training and are truly the most experienced in providing quality preventive and sports fitness services.

Strive for Athletic Excellence

Enroll in a Sports Enhancement Program using one of PSPN's network providers. Whether you want to improve your golf game, RBI, rushing yards, or any other sport, PSPN's network of providers can help enhance your sports performance and prevent injury. Our contracted physical therapy clinics offering sports enhancement programs have gone through rigorous credentialing and meet stringent quality standards. Their programs help athletes and those striving to increase their physical ability to become stronger and perform better, and at a discounted rate.

Why use a PSPN Provider?

- PSPN providers are located within physical therapy clinics, and are highly trained Physical Therapists or Certified Athletic Trainers.
- On average, PSPN providers charge significantly lower than Athletic Training facilities.
- In addition, PSPN providers offer a 30% discount off of their already affordable prices.

*PSPN is a service of PREFERRED Therapy Providers, Inc., the largest rehabilitation network of its kind, representing premier physical, occupational, and speech therapists throughout the country by contracting on their behalf with PPOs, Health Plans, and Third Party Payers.