

Sports Health

Sports Medicine

NEWSLETTER

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The Pitfalls of Early Sports Specialization

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With average temperatures in the 80's, South Florida is a prime location for year round sports participation. The majority of our youth participate in their primary sport for both school and club leagues bringing average practice times upwards of 14 hours per week year round. This repeated exposure to the same sport is thought to enhance the athletic abilities of the young athlete for the particular sport that they are involved in. The theory; "the more your play the better you will be" or "practice makes perfect" are commonly used amongst parents and coaches. The problem with this theory is that research on sports specialization tells us the exact opposite.

Early sports specialization, choosing to participate in one sport prior to late puberty, is associated with negative consequences such as earlier sports dropout rates, increased risk of overuse injuries, decreased athleticism, and social isolation. On the contrary, athletes who choose to specialize after puberty tend to be more consistent performers, have fewer injuries and play sports longer than those who specialize early. Recent research has shown us similar findings that professional athletes report participation in a wide range of youth sports and trended towards not specializing until after age 16. Given the evidence against early sports specialization the following age based guidelines are suggested:



Pre-school/Elementary Age

- Focus on fundamental movement skills, foundational strength and multisport participation
- Keep training fun

Middle School Age

 Continue multisport participation and begin to narrow down to a primary sport

High School Age (Late puberty)

- Begin to focus on primary sport with cross training in other sports during off season.
- Discourage year round playing of same sport

References:

- Brenner J S, Overuse Injuries, Overtraining, and Burnout in Child and Adolescent Athletes. Pediatrics 2007;119;1242.
- Baker J. Early Specialization in Youth Sport: a requirement for adult expertise? High Ability Studies, Vol. 14, No. 1, June 2003
- WARD, P., HODGES, N.J., STARKES, J.L., &WILLIAMS, A.M. (2002).
 The road to excellence in soccer: A quasi-longitudinal approach to deliberate practice. Manuscript submitted for publication.
- Bompa T. From Childhood to Champion Athlete. Toronto, Canada: Veritas Publishing, Inc; 1995

Meet the Sports Medicine Physicians





Stephen M. Swirsky, DO *Director, Sports Medicine*

Specialties:

Pediatric and adolescent sports medicine, arthroscopic surgery, rehabilitation and injury prevention.



Craig Spurdle, MD

Specialties:

Pediatric and adolescent sports medicine, arthroscopic surgery, rehabilitation and injury prevention.



Specialties:Sports Medicine

Shoulder RTC Simple Stretching and Strengthening

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It is important to keep your shoulder healthy and strong throughout the entire sports season. The best way to keep healthy and help avoid shoulder injury is to stretch before and after a game. Strengthening your shoulder daily will help avoid weakness and fatigue that you may feel as the sports season rolls along.

Before playing, it is important to warm-up your rotator cuff and other shoulder and upper back muscles to help reduce the risk of injury and perform better.

Remember to always stretch and exercise both shoulders equally.

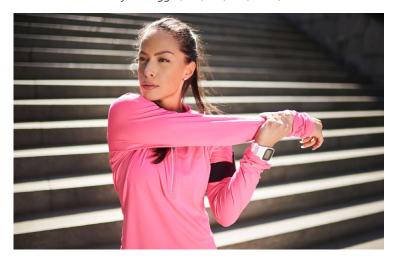
Here are some tips to keep your shoulder muscles warm and loose with dynamic stretching before a game or practice and some static stretching after play.

Common shoulder dynamic warm-up stretches include:

Forward and backward arm swings, both small and large circles (three sets for 30 seconds)

Scissor stretch: swing arms back and forth horizontally in front of your chest, crossing left and right arms after each repetition (three sets for 30 seconds)

Triceps stretch: lift arm overhead, bend elbow to bring your hand behind your neck and with the opposite hand pull gently on the back of the elbow. Hold for two seconds and then extend the arm back overhead. Repeat the stretch for 30 seconds and switch to the other arm.



There are many different tools that you can use to help with shoulder and arm stretching and strengthening exercises, including a body blade or weighted dumbbells and cuffs. Using resistive bands attached to a wall or fence, or tied together in a loop, is a very useful tool for dynamic warm-up and shoulder maintenance exercises, especially for throwers. Some examples of warm-ups and exercises that you can use with resistive bands include:

Internal and external rotation exercises: stand tall keeping your back flat, keep your elbow close to your side and elbow bent, slowly pull out and back in.

Band pull aparts: stand tall keeping your back flat, hold resistive band with arms and elbows straight at shoulder width apart, and pull away from each other slowly out and back in.

Serratus press/Forearm wall slides: place looped band around your wrists, stand tall against a wall with elbows bent as in a plank position and palms facing you, pull wrists apart and slowly slide arms up the wall at the same time, then slowly back down.

Standing rows: with bands attached to a wall or fence, hold the bands with a straight elbow just below shoulder height, with knees slightly bent and back flat. Bend the elbows keeping them close to the body until hands are at your side slowly, then return slowly to the starting position.

Static Stretches are done after playing, once your muscles are warmed up. The more often you static stretch after practices and games, the more flexible you may become and lessen the risk of injury. It is important to hold static stretches for at least

30 seconds. Examples of static stretching for the upper body include:

Cross body stretch: reach across the chest with one arm. The other arm/hand pushes at the elbow to provide the force for the stretch

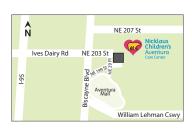
Sleeper stretch: lie on your side. The arm on top of the body applies the force to internally rotate the shoulder. Slowly apply the stretching force.

Doorway stretch: place forearms on each side of a door frame. The chest and the front part of your shoulder should stretch when you step forward and lean through the door frame.

Citations:

- Bonvechio, T. The Ultimate
 Pitcher's Warmup: 4 Shoulder
 Exercises with Bands [Internet].
 STACK: Bigger, Stronger, Better,
 Faster. 2014 Feb 14. Available
 From: http://www.stack.com/a/
 the-ultimate-pitchers-warm-up-4 shoulder-exercises-with-bands.
- Schirm, M. Dynamic Arm Stretches [Internet]. Livestrong: Sports and Fitness, Stretching; 2015 Oct. 19. Available From: http://www. livestrong.com/article/354369dynamic-arm-stretches/.
- 3. Brumitt, J. Stretching Exercises to Maintain Shoulder Region Flexibility [Internet]. NSCA: National Strength and Conditioning Association; 2017 Jan 24. Available From: https://www.nsca.com/education/articles/stretching-exercises-to-maintain-shoulder-region-flexibility/.

Locations:



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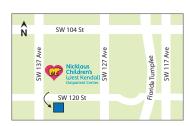
Nicklaus Children's Hospital Main Campus

3100 SW 62 Avenue Miami, FL 33155



Nicklaus Children's Miramar Outpatient Center

12246 Miramar Parkway at Miramar Square Miramar, FL 33025



Nicklaus Children's West Kendall Outpatient Center 13400 SW 120 Street

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