What is Attention-Deficit Hyperactivity Disorder (ADHD)?
A persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with daily functioning or development, as characterized by at least six symptoms of inattention or hyperactivity/impulsivity, as listed in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5).

Subtypes:
- ADHD, Predominantly Inattentive Presentation
- ADHD, Predominantly Hyperactive/Impulsive Presentation
- ADHD, Combined Presentation

What are the causes of ADHD?
- There is usually a genetic component.
- Prenatal environment, very low birth weight, and environmental toxins also may be causative.

ADHD is typically caused by a combination of biological characteristics and environmental factors. In other words, the interaction of a genetic predisposition for ADHD and environmental influences can influence the severity of ADHD symptoms. Environmental risk factors can include trauma, prolonged stress, and poor interpersonal relationships, while protective factors may include early detection and treatment, and strong relationships with parents and teachers.

Prevalence:
- Approximately 4-8% of school-age children
- 8-10 % of all pro athletes have ADHD, as compared to 4-5 % of the general population of adults
- Hyperactivity symptoms are most prominent during elementary school; by early adolescence, hyperactivity is typically reduced to fidgeting or an inner feeling of restlessness. Inattention generally persists through adolescence and may contribute to significant organization, time management, and planning problems.

Diagnostic Features:
- At least some symptoms are apparent prior to 12 years old
- Symptoms are present in two or more settings (e.g., school, home, sports)
- Tends to be more prevalent in Caucasians
- More common in males than females, with a ratio of 2:1 in children
- Females are more likely than males to show symptoms of inattention

The biggest challenges were the huddles, and remembering the plays the coach wanted us to do...I’d be looking somewhere else, and my coach would yell, “Kaman, what did I just say?!”
--Chris Kaman, current NBA player
Examples of INATTENTION:
- Easily distracted by stimuli unrelated to the task at-hand
- Individuals often appear as if they are daydreaming and not listening
- Difficulty organizing tasks and managing instructions in a sequential order
- Tasks requiring sustained mental effort are experienced as unpleasant and
- often result in the individual avoiding such activities that demand organization and close concentration

Potential Consequences:
- Problems with self-regulation
  - Children with ADHD frequently have difficulty controlling their behavior and managing their emotions
- Can result in failure to complete tasks; leading to the emotional response of feeling like a failure; feeling inadequate; low self-esteem
  - Can subsequently result in being bullied and/or isolated from teammates
- Children with behavioral disorders such as ADHD are almost 10 times more likely as others to have been regular targets of bullies. (Journal of Developmental Medicine and Child Neurology)
- Problems with social skills can obstruct the development of relationships with coaches & teammates, evoking negative evaluations.
- Athletes with ADHD often drop out of sports because the pressure and structural demands become too overwhelming

Why Are Children with ADHD Often Encouraged to Participate in Sports?
- Can enhance self-esteem
- Can improve social relationships
- Structure and concrete goals can enhance overall functioning
- Elements of cooperation, communication, self-evaluation, & self-regulation allow the athlete with ADHD to feel part of a team
- Research shows that participation in sports may be associated with lower levels of anxiety and decreased symptoms of depression in children with ADHD
- To promote self-regulation and self-discipline

Challenges Within Athletic Settings:
- Potentially poor planning and strategic thinking skills, which may be particularly problematic when interacting with peers
- Motor skills generally are less well-developed, although there are many youth with ADHD who have advanced motor development
- Difficulty adhering to structure and demands of the sport
  - Are subsequently characterized by coaches as being disruptive & problematic
- Parents are often hesitant to confide in coaches that their child has ADHD
  - Coaches are encouraged to promote open communication, especially regarding issues related to exceptionalities
    - Address in preseason parent meeting and in letter sent home
      …Remember to embrace parents as partners!
  - A good coach will consider it a gift when informed of a child’s special needs, and will collaborate with parents to develop strategies to work with the child. Coaches have the opportunity to make a huge impact on athletes’ lives and can help each player feel like an important member of the team.
Suggestions for Coaching Athletes with ADHD:

Establish Goals
• Goals are motivational!
• Realistic, challenging, specific goals are more effective than “do your best” goals
• Establish mastery criteria to better enable the learning of specific skills
  • Identify a quantity, level, or standard of performance, such as:
    • Golf: make two 4-foot putts in a row
    • Tennis: hit 3 backhands down the line in a row
    • Basketball: make 3 foul shots in a row
    • Baseball: hit 2 curveballs in a row out of the infield

Issue One Task at a Time
• Only give the athlete instructions about himself or herself, not regarding other players
• Provide visual aids and nonverbal demonstrations
  • E.g., visible schedules, drawings on white boards and clipboards, videos
• Establish eye contact before speaking. Use simple, one-step instructions and check for understanding.

Go One-on-One
• Children with ADHD can get lost in group instructions. However, they often do well in one-on-one coaching situations. Without drawing too much attention to the exceptional child, a coach could talk with him or her individually to explain/review directions.

Positive Reinforcement
• Provide consistent praise and encouragement
  • Praise specific behaviors instead of making a general, vague statement
    • Example: “I like how you ran hard all the way to first base,” instead of “good job.”
  • Praise and reward appropriate behavior immediately after it occurs
  • Provide positive attention and praise at least 4 times more often than corrective feedback
  • Encourage positive self-talk; after praising the athlete, ask, “How do you feel you did with that drill?”

Maintain Boundaries
• Implement team rules – be consistent
• Corrective feedback can be helpful if provided appropriately. Correction is a form of “punishment” in that it points out what the child should do…not what not to do. For example, it is better to say, “Keep your eyes on the batter,” as opposed to, “You are not paying attention.” It is effective when administered much less often than positive attention and praise.
• Establish consequences for misbehavior; enforce immediately
  • If safety becomes an issue (e.g., child is pushing), consider implementing a “time-out.” This can be followed by corrective feedback.
• Stay calm – exercise patience – individuals with ADHD may have difficulty maintaining control
• Avoid ridicule, criticism, or any tactics that may humiliate

Never Humiliate a Child
• Some coaches feel that embarrassment, humiliation, and punishment (running suicides if a drill is not executed properly) will “coerce” a child to pay attention. This approach will not work with a child with ADHD, and is disapproved of by Play Like a Champion in general.
  • A coach should take the time to find out what a child does not understand and help him/her work through it. Perhaps designate a team buddy who guides the athlete through the plays.

“In class, I had trouble concentrating, but racing helped me focus.”
-Justin Gatlin, Olympic Gold Medalist, 100 M Dash
Use Modeling & Shaping
- Modeling: Demonstrating the desired behavior or skill
  - Most effective when paired with verbal rules/instructions
  - Exemplify good sportsmanship at all times. Athletes with ADHD can be easily frustrated due to the pressure to succeed and avoid mistakes; this stress can result in them losing of self-control or misbehaving.
  - A team buddy can also serve as a peer model – people are more likely to imitate someone who is similar to them, and this is especially true for children.
- Shaping: Providing reinforcement (e.g. praise) in small increments for each step of a desired skill or behavior until it is fully achieved
  - Establish an appropriate starting point for the individual

Example: A tennis coach wants to enforce that all team members arrive to practice on time and immediately serve a bucket of balls with full concentration. This could be challenging for an athlete with ADHD, who could easily become distracted by extraneous stimuli. The coach may start shaping the ritual by praising athletes for arriving on time and filling their buckets with balls. The coach would do this consistently for as many days as it takes to become habit. The coach might then praise athletes for finding a court and serving the first ball, again, until it happens regularly, with little to no distraction. The coach may then begin offering praise after 10 balls are served with minimal distraction. When the athletes are able to successfully arrive on time and stay focused through the process of serving a full basket, they should be praised consistently and a reward could be considered.

Administer Rewards: Token Economy
- For sportsmanship
- For compliance with rules/instructions; attentiveness

EXAMPLE: Create a chart to document instances of desired behavior. Designate someone to maintain the log (e.g., assistant coach, team mom, student manager). Consider publicly posting the chart. A “slash” is recorded for each instance a baseball player displays attentive, compliant, sportsmanlike behavior. These can be pre-determined, reviewed with all of the athletes, and established as team goals. Following the practice/competition, slashes are added and tokens (i.e., poker chips) are distributed (e.g., 5 slashes = 1 red token; 10 slashes = 1 blue token). At the end of the week, tokens can be exchanged for small prizes (e.g., stickers, rubber balls, matchbox cars). (based on a study by Reitman, Hupp, O’Callaghan, Gulley, & Northup)

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<th>Tom</th>
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<td>Knew Number of Outs When Asked</td>
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Be cautious about using rewards for actual skill development – if an athlete remains physically unable to perform a given task, he or she may experience feelings of helplessness or failure which could be reinforced by not earning a reward.
Manage Excitement
• Children with ADHD can get caught up in the action of the game and forget about strategy and teamwork. A coach’s awareness of this will better enable the coach to help a child focus.

Assign Tasks
• Athletes should have a job to do to keep them busy and involved while waiting on the bench or during down time. Examples include assisting scorekeepers, keeping equipment in order, etc.

Take a Breather
• Devise a rest plan and consider structuring practices into “intervals.” These respites help children who are overwhelmed to regroup.

The Three R’s: Routine, Ritual, Relaxation
• Routine: Provide a structured environment and somewhat predictable practice format
  • Decreases anxiety and increases a sense of comfort
• Ritual: collective acts the team shares
  • Provides public acceptance of the ADHD athlete as a full member of the team
  • E.g., pregame huddle
• Relaxation: By helping an athlete enhance his or her ability and feel confident in attempting various aspects of a sport, he or she will be more likely to feel relaxed…AND perform in the zone.

Drill with Energy
• Children with ADHD can easily become bored and distracted standing around waiting their turn. Try to implement drills that require change and continuous movement.

Move Players Around
• The coach may consider rotating positions so that everyone on the team has an opportunity to be in active positions. This can help an athlete with ADHD - and teammates - to use excess energy well and possibly learn a new skill.

Consider Age Placement
• Children with ADHD are often socially and emotionally younger than their age. If it is feasible with the structure of the league and they can play with children a year or two younger, they may have more fun.

Build upon Strengths
• Assess child’s strengths and capitalize on them. For example, if an athlete’s soccer coach sees that she is determined to block the ball, he might make her the goalie.

Win - and Lose - as a Team
• Many athletes have a hard time with losing, especially when they link the outcome of a game to their self-worth. Children with ADHD, who already struggle with emotional regulation, may experience losing as an emotional trigger for which they lack adequate coping skills. The coach should make sure that the players know that winning or losing is a team responsibility, and that every member of the team can be a CHAMPION. No player should be held at fault, even if he missed the last shot or made the last strikeout. It is the coach’s job to instill and demonstrate sportsmanship values for all players, beginning with the first practice. Support, encouragement, and respect for all players should be a top priority.

Follow Through
• Encourage exceptional children to finish the season. Youth with ADHD tend to move on if things become too difficult.
The Lowdown on MEDICATION:
• Approximately 3 out of 4 children with ADHD take medication at some point to treat their symptoms
• According to previous research, the combination of ADHD medication and a behavioral modification program that rewarded attentive behavior (i.e., token economy) showed significant improvements in attentive behavior and a reduction of disruptive behavior during sports participation.
• Children with ADHD typically have a slower thinking process than their peers. Stimulant medication raises the brain activity levels of children with ADHD to within the normal range. Stimulants increase an individual’s ability to ignore distraction, focus more successfully on the task at-hand, and better manage impulsive behavior.
• Due to the proven effectiveness of medication in treating symptoms of ADHD, parents may wish to explore this option with their child’s physician

Additional Notes to Parents:
• Arrive prepared and on time!
• Helping to enable organization & responsibility can decrease chaotic feelings that can be overwhelming to an exceptional athlete, who may already experience his or her world as chaotic much of the time.
• If your child has difficulty remembering to bring entire uniform and equipment - designate one place at home for sports gear; gear should always be in that place (if not in the wash or with your child at the game or practice).

Some Professional Athletes with ADHD:

Shane Victorino (baseball)
Scott Eyre (baseball)
Justin Gatlin (sprinter)
Andres Torres (baseball)
Michael Phelps (swimming)
Terry Bradshaw (football)
Pete Rose (baseball)
Derek Lowe (baseball)
Cammi Granato (hockey)
Adam LaRoche (baseball)
Tom Gorzelanny (baseball)
Jim Ahern (golf)
Payne Stewart (golf) (deceased)