TOPSoccer 301 – Down Syndrome

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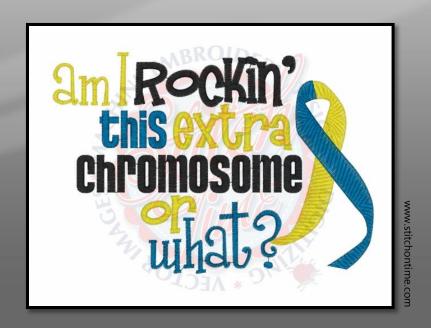
TOPSoccer 301 – Down Syndrome

- Provide an overview of Down syndrome
- Discuss the importance of physical activity in this population
- Identify the benefits of participating in TOPSoccer
- © Discuss strategies and flexible coaching methods to facilitate the success of these athletes



What is Down syndrome?

- Genetic disorder with extra copies of the genes on chromosome 21
 - Changes how the brain and body develop





Facts

- Most frequently occurring chromosomal condition
 - Of every 691 babies born in the U.S., one will have Down syndrome
 - Over 400,000 individuals are living with Down syndrome in the U.S.
- Occurs with no relationship to race or socioeconomic status
- Coupled with an increased risk of congenital heart defects, respiratory and hearing problems, Alzheimer's disease, childhood leukemia, and thyroid conditions
 - Improved quality of life due to better medical treatment
 - Life expectancy has increased dramatically from 25 years in 1983 to
 60 years today







Importance of Physical Activity

- The Surgeon General recommends accumulating 60 minutes of moderate or vigorous physical activity per day
 - Children with DS are not meeting this recommendation
 - Concerning because these children are more likely to be obese than their typically developing peers
- Physical fitness levels have been linked to job performance, community living, and performance on tasks of daily living





Why Soccer?

- Team environment provides an opportunity for social interaction
 - Peers are a powerful facilitator of physical activity
 - Parents have identified encouragement from peers as a crucial component of their child's ongoing participation





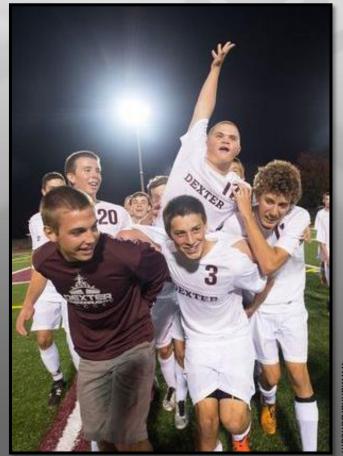
Why Soccer?

- An example of moderate to vigorous physical activity encouraged for children with DS
- An opportunity for siblings to assist with engaging their brother or sister with Down syndrome in physical activity
 - Can help generate the child's interest at TOPSoccer sessions, encourage informal daily practice, and provide a positive role model



More Similarities than Differences

 "He [Zenas] got the trophy, he held it up, his eyes were big, his heart was smiling, and then he ran back to the boys, and they surrounded him."







More Similarities than Differences

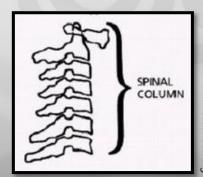
HAVING DOWN SYNDROME IS LIKE BEING BORN NORMAL. I AM JUST LIKE YOU AND YOU ARE JUST LIKE ME. **WE ARE ALL BORN** IN DIFFERENT WAYS, THAT IS THE WAY I CAN DESCRIBE IT. I HAVE A NORMAL LIFE.

CHRIS BURKE



Safety First

- 15% of individuals with Down syndrome have Atlantoaxial Instability (AAI)
 - Increased mobility of the cervical vertebrae in the neck



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- Special Olympics and Indiana Soccer require a cervical spine x-ray for athletes with Down syndrome prior to participation
- Avoid heading activities during sessions
 - Controversy surrounds pre-screening, but there have been **no** reports of spinal cord injury from any Special Olympics activity
 - Either preventative measures are effective or injury is rare

"Big Picture" Coaching Tips

- Demonstrate skills and activities
 - Some children with DS have poor working memory and struggle to understand and interpret instructions
 - However, they often excel with visual-motor integration
- Watch the non-verbal communication of your athletes
 - Kids with deficits in expressive language and speech often have well developed non-verbal communication
- Provide clear, simple directions
 - "Can you please go to the sideline and get a ball so we can start the scrimmage?" versus "Jenny please go grab a ball"
 - Avoid questions if possible (what if the answer is "no"?)



Importance of Communication





"Big Picture" Coaching Tips

Facilitate relationships with "buddies" and peers

Practice on even ground

Children with DS have low muscle tone and can be prone to injury

Begin sessions with a dynamic warm-up

- DS results in ligamentous laxity and joint hypermobility, so avoid

static stretching





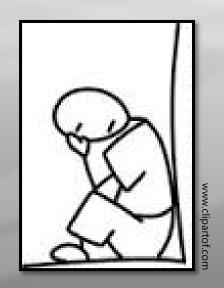
Same Idea, New Approach

- Less emphasis on modifying activities
- Management of individual behaviors is key





Scenario 1

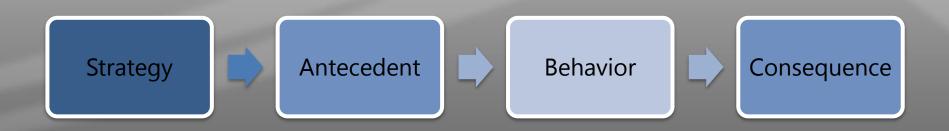


As the group transitions from passing with their buddies to shooting on goal, Chris ignores his coach's instructions, sits on his soccer ball, and covers his face.



Antecedent Based Strategies

 Strategies used before the challenging behavior occurs or before delivering the instruction that will trigger the behavior





Antecedent Based Strategies

Scenario 1

Provide a distractor when transitioning between activities

- Ask Chris to carry the cones from the sideline to the goal
- Inform the athlete what they will receive upon completing the task
 - "Chris, I have a high five waiting for you after you score your first goal."







Antecedent Based Strategies

Scenario 1



Provide a choice before the transition

– "Would you like to shoot first or be goalie first?"



Offer collaboration

- "Let's grab a ball together so we can go shoot on goal."



Scenario 2



After several minutes of not receiving the ball in a group scrimmage, Cindy throws her pinnie on the sideline and sprints 2 fields away.



Skill Building Strategies

- If a child is struggling to communicate, he/she may demonstrate a challenging behavior
- Utilize or help develop alternative responses



Skill Building Strategies

Scenario 2

- Is Cindy running because something isn't working?
 - Can you make the game less stressful for Cindy?
 - Adapt the game to get Cindy more involved
- Is Cindy running for attention?
 - Kids may run for 1:1 attention
 - If they desire this attention from their coach/buddy, send someone else after them to not reinforce the behavior
- Come up with "signs" for common requests



Skill Building Strategies

Scenario 2

- Some children will already be utilizing replacement strategies, so solicit insight from parents
 - Pre-participation information sheet

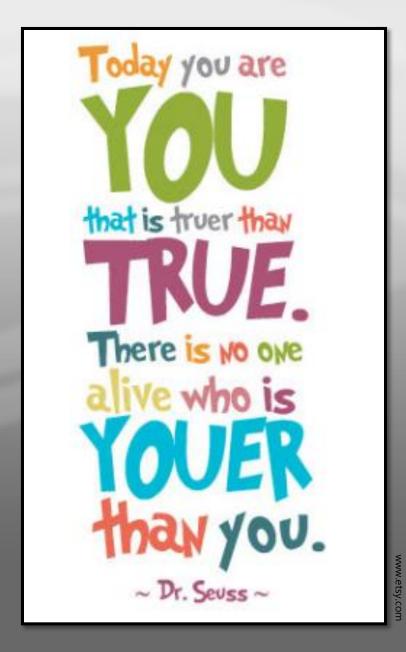
INFORMATION SHEET
(All participants MUST complete this form & return by the first session)
Participant Name: Date:
Is your child looking forward to soccer with:
☐ Enthusiasm ☐ Caution ☐ Anxiety ☐ Acceptance What does your child find soothing?
What methods do you use for positive feedback?
What are your child's social strengths and challenges?
Is your child prone to "meltdowns"?
What types of situations cause your child stress?
Can you share successful management tools? Please list both praise and disciplinary actions?
How does your child indicate that they need to use the restroom?
Does your child have any fears?
Do you have any comments, concerns or helpful hints?



Take Home Points

- Children with Down syndrome need more opportunities for physical activity
 - Soccer is an enjoyable option with unique benefits
- Focus on an athlete's ability rather than disability
- A change in approach and interaction with players can sometimes turn an unsuccessful activity into a successful one
- Take away 1 or 2 strategies and try incorporating them with your athletes
 - Goal is to facilitate greater success for athletes with Down syndrome







Thank you for being involved in TOPSoccer and for investing in these extraordinary athletes!

Questions?



TOPSoccer – The Role of the Buddy

- Be one of the first 25 attendees and take home a Slow Motion/ Sensory Soccer ball
- Taught by coach Auke Wiersma in the Grand Ballroom of the Marriott Hotel on Saturday from 2:15 to 3:15 PM



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