YOUTH SPORT TRUST

DSActive
Activities for people with Down's syndrome

Top Tips

Supporting people with Down's syndrome in to PE, School Sport and Physical Activity

These Top Tips were developed by the Youth Sport Trust and the Down's Syndrome Association's DSActive programme. These Top Tips are to support schools (and their wider community) to ensure their offer for PE, School Sport and Physical Activity is inspiring, accessible and meaningful for people with Down's Syndrome.

What is Down's syndrome?

- Down's syndrome is a genetic condition which is present from the moment of conception. People with Down's syndrome have an extra copy of chromosome 21 in their cells.
- For every 1,000 babies born, 1 will have Down's syndrome. There are approximately 40,000 people with Down's syndrome living in the UK.

Health conditions associated with Down's syndrome

- The extra chromosome can cause common physical features, such as hypotonia (relaxed muscle tone) and hypermobility.
- There are possible health conditions associated with Down's syndrome, such as congenital heart defect, hypothyroidism, respiratory and gastrointestinal problems, vision and hearing impairments.
- All people with Down's syndrome will have poorer visual acuity, which means they struggle to see the world clearly and may have issues with depth perception.
- All people with Down's syndrome will have a learning disability of some form. This does not mean they cannot learn, it just means they need additional support to learn. People with Down's syndrome are often strong visual learners and very good at modelling behaviour.
- People with Down's syndrome will follow the same developmental pathway as a person without Down's syndrome; achievements of milestones will differ for individuals due to highly varied developmental delays and individual needs. A supportive and an inclusive society are crucial indicators of success.
- Craniovertebral Instability – People with Down's syndrome are more susceptible to craniovertebral instability due to a tendency for lax ligaments and lower muscle tone. This can lead to excessive movement between the atlas and axis vertebrae at the top of the neck, which in severe cases can lead to a range of neurological problems from mild aches and pains to paralysis. It is very clear that very few sporting injuries have ever been recorded in people with Down's syndrome which could have been caused by craniovertebral instability. There are sports (e.g. trampolining, gymnastics, boxing, diving, rugby and horse riding) that may carry with them more of a risk because of increased likelihood of impact. Prior to taking part in such activities, it is strongly advisable to ask a GP, paediatrician or chartered physiotherapist about the increased chance of neck instability occurring following participation in these sports.

Coaching Considerations

- Communication – Start with singular commands or points to allow athletes to fully grasp and subsequently retain information.
- Progressions – Make progressions slight and gradual to support people to learn new skills and adapt to changes.
- Demonstrate – Demonstrate the skills in the sessions, as learning through modelling is a strength for many people with Down's syndrome.
- Adaptability – Ensure that the session is always adaptable and achievable for each athlete as there might be a wide range of physical, technical and cognitive ability.
- Routine – People with Down's syndrome often like to follow a routine as it helps reduce anxiety and increases confidence.
- Self-confidence – People with Down's syndrome may have negative previous experiences with physical activity so it is important to improve their confidence by making the session fun, engaging and achievable.
- Promote positive behaviour – It is important to acknowledge and praise good behaviour as this will make attending the session a positive experience which will increase the chance of the person wanting to return to the session.
- Assess - Some sports, such as gymnastics, require participants to complete a screening test before they can participate in the sport. Screening may detect evidence of neck instability at a given moment in time. It does not allow health professionals to predict whether the person will have the condition in the future. You can find out more about this from the relevant sport national governing bodies.

DSActive provides opportunities for people with Down's syndrome to live healthy and active lives. For more information have a look at our website www.dsactive.org.uk or email dsactive@downs-syndrome.org.uk