Be active with Spina Bifida

Physical activity
Physical activity is very important for all children, and especially for children living with Spina Bifida.

Physical activity will help to:
- Promote healthy growth and development
- Build strong bones and muscles
- Improve balance and develop coordination skills
- Maintain and develop flexibility
- Improve posture
- Improve cardiovascular fitness
- Provide chances for friendships and independence
- Improve self-esteem
- Improve mood and help relaxation
- Prevent constipation
- Help achieve and maintain a healthy weight.

It is common for many children living with Spina Bifida to use a wheelchair for sport or physical activity, even if they do not use a wheelchair for day-to-day mobility.

Fitness and injury prevention
The fitter your child is, the more they will enjoy being active and will also be less likely to suffer from injury.

To improve physical fitness, it is recommended that your child needs at least one hour (and up to several hours) of moderate to vigorous physical activity every day.

A combination of moderate and vigorous activities – “huff and puff” – is recommended. Children need the opportunity to participate in a variety of activities that are fun and suit their interests, skills and abilities. Encourage your child to visit playgrounds, parks, nature reserves, sporting ovals and beaches with family and friends.

A 5-10 minute warm up will help prepare the body for the activity. The warm up should consist of stretching activities, some continuous movement for 2-3 minutes e.g. arm/upper body movements; and movements/games related to the activity.

A 10 minute cool down should also follow the activity to remove waste products from the muscles so that they don’t become sore and stiff. The cool down should consist of some continuous movement for 2-3 minutes e.g. slower chair pushing/running and stretching the muscles that were used in the activity.

Encouraging children to be active when they are young will help to establish routines that can stay with them throughout their life.

Children should not spend more than two hours a day using electronic media for entertainment (e.g. computer games, TV, internet) particularly during daylight hours.

Building strong upper body and limbs
Physical activity can help to build strong bodies. Children with Spina Bifida need strong arm and trunk muscles to help with balance, to move or transfer from their wheelchair, to walk using equipment and to propel their wheelchair.
Ways to encourage a younger child to use their upper body and build strength include:

- Swimming
- Crawling through tunnels - through the legs of chairs or a low table.
- Crawling over a mat or pillow
- Hitting a large beach ball with two hands
- Batting a suspended ball with a small plastic racquet
- Squeezing sponges in the bath
- Playing with water pistols or water spray bottles
- Push ups lying on their tummy
- Playing wheelbarrow.

Some suggestions for improving an older child's fitness include:

- Pushing in their wheelchair over a distance, using long arm movements. Speak to your therapist about the best way to move the wheels of the wheelchair.
- Sports such as basketball and tennis.
- Walking the dog
- Swimming
- Using a bike with hand pedals – your OT/Physio can assist with adaptations.
- Rowing, canoeing and paddling
- Gym programs such as “Burn Rubber Burn.”

A few things to watch out for:

- Rolling activities and jumping from heights should be avoided if your child has a shunt.
- Most physical and sporting activities are fine for participation but contact sports such as football should be avoided.
- Children living with Spina Bifida do not have normal sensation. Burns and abrasions can occur easily from hot and/or rough surfaces eg. Slippery dip and sand.
- Find the most appropriate activity for your child to participate in.
- If your child has poor walking balance a wheelchair can be used successfully for sport, games and other physical education activities at home, school and in the community.
- Consult with your Spina Bifida Service if you are unsure about what activities your child should avoid.

Sports to try!

- Swimming – Rainbow Club
- Sailing – Sailability
- Bike riding
- Canoeing and paddling
- Bowling
- Wheelchair Junior Sports – try all sorts of sports under the guidance of experienced coaches – basketball, tennis, swimming, athletics, canoeing, winter sports, or sports camps, Call NSW Wheelchair Sports Association Inc. or look up [http://wsnsw.org.au](http://wsnsw.org.au).
- Anything that interests you!

Propelling your wheelchair

- The most energy efficient way to push your wheelchair is using a semi-circular propulsion technique. This is pictured above.
- Use long smooth strokes to decrease the amount of times you need to push.
- Take regular rest breaks and rest following fatigue to let your arms recover.
- Maintain your wheelchair regularly to reduce rolling resistance from clogged castors and stored grime.
- If using pneumatic tyres they should be kept at high pressure to make pushing easier.
- A semi-circular push stroke is where your hand falls below the push rim between push strokes. Reproduced by kind permission of Paraquad NSW.
You can find further information about being active at:

- “Burn Rubber Burn” is a health and fitness program run through Spinal Cord Injuries Australia for people over 12 with physical disabilities [https://scia.org.au](https://scia.org.au)
- “Armed for Life: Prevention Strategies and Management of Upper Limb Overuse Syndrome(s) for Persons with a Spinal Cord Injury (SCI): Wheelchair Set up and Transfers.”

**Remember:**

- Physical activity improves fitness and helps to maintain a healthy weight
- Any activity that sees your child expend energy is good!
- Upper body strength assists in independence.
- Sport provides opportunities for friendship and fun.
- Be active every day to keep healthy.