

# Five ways to develop... upper-body strength

*Julie Mountain* provides some tips for helping children develop the muscles in their upper body

The ability to write begins with a baby's very first movements and develops as they learn to push themselves up from their tummy, mix mud with a stick, turn a tap on and off.

Co-ordination and resilience in the hand relies on strength and flexibility in the wrist and lower and upper arm. These rely on the ability to control the large muscle groups in the shoulder, upper back and trunk. Upper body strength is vital for confident (pain-free) writing – and outdoors is the perfect place to build it.

## 1. BOTTLE BABIES

Bottles filled with water are brilliant, open-ended resources for outdoors. A litre of water weighs a kilo, so providing bottle of various sizes is an excellent way to vary the effort children need to make to transport bottle babies around the setting.

Add glitter or food colouring to the water if you like, and glue the caps shut. Encourage children to lift, roll, carry and push the bottles – and collaborate to move the heavier ones.

## 2. RIBBONS AND ROPES

Stretching, pulling and dragging are crucial upper-body movements.



Stretching develops flexibility and pulling and dragging build strength. Provide a collection of sticks with long lengths of ribbon attached, French skipping elastics, ropes for tug o' war and exercise bands. Children can use their own bodies for resistance, or pull against a fence or a friend.

## 3. HOLD ON TIGHT

Using their own body as the counterweight, children will gain confidence and develop stamina through climbing and hanging. If you don't have a climbing structure, improvise with

**Clockwise from left: hand- and footholds on a wall; using a sign as a horizontal bar; swinging from a tree and lifting bottles filled with water**

ropes attached to tree branches, swinging around horizontal bars, or even buy a doorway pull-up bar and fix it at the appropriate height for your children.

## 4. TRAVERSING

Installing climbing hand- and footholds to a sound brick wall is a quick, cost-effective and safe way to introduce whole body exercise.

Handholds need only be placed at children's 'stretch' height, with footholds no higher than 30cm from the ground. Varying the distance between the higher and lower holds will encourage stretching, bending and reaching as children travel along the wall. Handholds of different sizes will provide opportunities for fine motor movements including finger pinches and whole hand grabs.

## 5. BOX, BANG AND BASH

Opportunities to 'connect' with an object are a great lesson in Newton's Third Law – every action has an equal and opposite reaction. When a child strikes a gong, bashes pans on a musical washing line or whacks a punch bag, they feel their action reverberate through their whole body – an instant 'reward' for the effort.

Provide a range of percussion instruments outdoors, including cymbals and drums, along with beaters of various lengths, weights and diameters; each requires different muscle effort to create a sound. Suspending objects above children's head height demands additional stretching and balancing; a beater in each hand ensures the effort isn't just about building strength on the child's dominant side. A child-sized punch bag is an interesting addition to a few settings I've visited and also provides useful lessons in turn-taking! ■



## RISKS... AND BENEFITS

Repetition of physical actions builds muscle memory, but it's the quality of the movements that matters, as much as the quantity. Repetition of poor movements will only perfect those poor movements. A useful example is learning to lift heavy objects properly – from the knees, not the back. Changing a habit that's likely to lead to back pain is much more difficult than learning to

lift correctly in the first place.

It's important to ensure children make strong, safe and co-ordinated movements, so that the crucial tensing and flexing of muscle groups across the body enables, rather than prevents, exuberant and risky play.

New movements should be introduced in manageable chunks so that children can 'feel' success in their bodies

before moving onto more challenging movements.

Upper-body movements help test children's endurance and core stability, but plan rest and recuperation to avoid overtraining growing muscles and joints.