



## INFORMATION SHEET

Age Group: **Children / Adolescents and Young Adults**

Sheet Title: **Motor Clumsiness**

It is recommended that each individual with Asperger's Syndrome be assessed to determine the degree and nature of any problems with movement. However, studies show that the main areas affected are:

### LOCOMOTION

When the person walks or runs, the movements appear ungainly or "puppet" like, and some children walk without the associated arm swing. This is because the upper and lower limbs lack co-ordination. This can be conspicuous and other children may tease the child, leading to reluctance to participate in physical education at school. A physiotherapist or occupational therapist can devise a program to ensure the movements are co-ordinated. It appears that the ability to swim is the least affected, and this activity should be encouraged.

### BALL SKILLS

Catching and throwing accuracy seem to be particularly affected in those with Asperger's Syndrome. When catching a ball with two hands, the arm movements are often poorly co-ordinated and affected by problems with timing, that is, the hands close in the correct position, but a fraction of a second too late.

It also seems that children with AS may have poor co-ordination in their ability to kick a ball. This can lead to the child being excluded from some of the most popular social games in the playground. Thus the child is less likely to improve their skills through practice.

From an early age, parents need to provide tuition and practice in ball skills, to ensure that the child has basic competence to be included in the games. It is also important to check the child's eyesight to establish whether wearing glasses improves hand/eye co-ordination.



## BALANCE

A problem with balance can be detected by examining the ability of the individual with Asperger's Syndrome to stand on one leg with eyes closed. Walking in a straight line can also cause problems (it seems like walking on a tight-rope). The child may need practice and encouragement with activities that require balancing.

## MANUAL DEXTERITY

This area of movement skills involves the ability to use both hands, for example: learning to dress, to tie shoe laces or to eat with cutlery. This can also extend to the co-ordination of feet and legs (as in learning to ride a bicycle).

A useful strategy for this area of difficulty is "hands on hands" teaching. A carer physically patterns the child's hands or limbs through the required movements, gradually fading out physical support.

## HANDWRITING

The handwriting of an individual with Asperger's Syndrome can be very difficult to interpret. Those with AS may avoid activities which involve extensive writing, and may become embarrassed or angry at their inability to write neatly and consistently.

It is a good idea to have the child assessed by an occupational therapist, who can suggest some exercises to help with the problem. However modern technology is a great help with this issue, as those with AS are often very skilled at using computers and keyboards, and they could have special dispensation to type rather than write homework and examinations.

## RAPID MOVEMENTS

Studies have shown that while engaged in activities that require motor co-ordination, such as cutting out shapes with scissors, children with AS tend to rush through the task. They appear to be impulsive and unable to take a slow and considered approach. With such haste, mistakes occur. This can be infuriating for the child, teacher and parent.



With supervision and encouragement, the child can be taught to slow down by having to count between actions and by using a metronome to indicate an appropriate pace.

### LAX JOINTS

One of the features found in those with Asperger's Syndrome is lax joints. This could be due to low muscle tone or possibly due to double-jointedness, but can lead to problems holding pencils, etc. An occupational therapist or physiotherapist can help with exercises. This should be a priority for a young child, as so much school work involves the use of pens and pencils.

### RHYTHM

Children with Asperger's Syndrome can often have significant problems copying various rhythms. This explains a feature that is quite conspicuous when walking next to a person with AS. As two people walk side by side, they tend to synchronise their movements, much as occurs when soldiers are on parade. Their movements have the same rhythm. The person with AS appears to walk to the beat of a different drum. This can also affect their ability to play a musical instrument – they may excel with a solo performance, but have considerable difficulty when playing with other musicians.

### IMITATION OF MOVEMENTS

There is a natural tendency for people to imitate the posture, gestures and mannerisms of another person when in conversation. This occurs without conscious thought.

However, a person with Asperger's Syndrome may have difficulty synchronising or mirroring their movements with those of another person. They may try to overcome the problem by looking at body movements and immediately echoing them. This may become such meticulous duplication that it is conspicuously artificial.

The individual with AS may be unsure what are the appropriate body postures for the situation, and imitation is one way of attempting cohesion in movement. It is



extremely difficult to identify strategies to learn this ability without appearing contrived or false.

### OTHER RECOGNISED DISORDERS OF MOVEMENT

Tourette Syndrome, Catatonia, Parkinsonian Features and Cerebellar Dysfunction can also be seen in those with Asperger's Syndrome. It is important that an individual with AS is examined for these disorders and treated for them if necessary.

For further information please download the 'Related Conditions' document from our web site.