



**Asperger's syndrome**  
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## **INFORMATION SHEET**

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

#### **Sheet Title: Sensory Issues**

A significant number of people with Asperger's Syndrome have been perceived to display either an over-sensitivity or an under-sensitivity to sensory stimuli. This includes all, or a combination of: touch, taste, smell, sound, sight and movement, as well as possible problems with motor co-ordination.

One or several sensory systems are affected such that ordinary sensations are perceived as unbearably intense. The mere anticipation of the experience can lead to intense anxiety or panic.

Fortunately, the hyper-sensitivity can diminish during later childhood, but for some individuals it may continue throughout their lives.

#### AUDIO SENSITIVITY

It has been observed that there are three types of noise that are perceived as extremely intense:

- Sudden, unexpected noises (a dog barking, a telephone ringing, someone coughing or the clicking of a pen top)
- High-pitched, continuous noise (small electric motors used in kitchen, bathroom or garden equipment)
- Confusing, complex or multiple sounds (in shopping centres or noisy social gatherings)



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It can be hard to understand that these auditory stimuli can cause such pain, but an example of what it may feel like is the discomfort many people feel when they hear fingernails scraping down a school blackboard. The mere thought of this sound can make some people shiver.

One of the features of the acute sound sensitivity is the degree and variation of sensitivity. On some days the sounds are perceived as unbearably intense, while on others they are annoying but tolerable.

Some people with Asperger's Syndrome learn to "switch off" or tune out certain sounds. Techniques include doodling, humming or focusing intently on a particular object.

Thus, inattention or odd distressed behaviour may be a reaction to sounds that the teacher or parent would consider insignificant.

A person with AS can keep silicone ear-plugs on their person, ready to insert them if noise levels become unbearable.

Music can also be used to camouflage the disturbing noises. Having the opportunity to listen to music several times a day can significantly reduce abnormal responses to sound.

It helps to explain the cause and duration of the unbearable sound by using Carol Gray's Social Stories. To know that the hand-dryer in a public toilet will switch off automatically after a set time can help enormously.

## TACTILE SENSITIVITY

There can be an extreme sensitivity to a particular intensity of touch or touching particular parts of the body.



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For some people with Asperger's Syndrome, the forms of touch used in social greetings or gestures of affection were perceived as too intense or overwhelming.

Particular areas of the body appear to be more sensitive, namely the scalp, upper arms and palms. This may cause panic at a hairdresser or when it is time to have hair washed or combed. Some children hate handling certain textures, such as finger paints or playdough. There can also be a reluctance to wear a variety of clothing.

It may be that the child will insist upon having a limited wardrobe to ensure consistency of tactile experience. Once a particular garment is tolerated, it may be necessary to buy several of increasing size, to cope with washing and the growth of the child.

Fortunately, Occupational Therapists have developed treatment programmes called **Sensory Integration Therapy** and these may help to reduce the tactile sensitivity. These therapies include massage, gentle rubbing of the area and vibration. Sometimes deep pressure and vestibular stimulation (rocking or spinning) can help.

### SENSITIVITY TO THE TASTE AND TEXTURE OF FOOD

Some young children with Asperger's Syndrome are thought to be extremely fussy in their choice of food. Fortunately, most children with Asperger's Syndrome who have this type of sensitivity eventually grow out of it.

It is important to avoid programmes of force feeding or starvation to encourage a more varied diet. This is not a behavioural problem, where the child is being deliberately defiant, but a physiological reaction.



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However, it is important for parents to ensure that the child eats an appropriate range of food, and a dietician may provide guidance on what is nutritious but tolerable to the child in terms of texture and taste.

Gradually, the sensitivity diminishes, but the fear and consequent avoidance may continue. When this occurs, the child can be encouraged to lick and taste rather than chew or swallow new food in order to encourage variety and to test their sensory reaction.

It is also a good idea to give the child the opportunity to try new food when relaxed or distracted.

### VISUAL SENSITIVITY

Another characteristic of Asperger's Syndrome is sensitivity to particular levels of illumination, colours or a distortion of visual perception.

Some people with AS report being "blinded by brightness" and avoid intense levels of illumination. It is therefore a good idea to seat the child with AS away from the sunny window, etc. Another approach is to use sunglasses, photo chromic lenses and sun visors indoors to avoid intense light or glare. It has been noted that some adults with AS find IRLLEN LENSES to be beneficial in reducing visual sensitivity.

The intense perception of colours can be recognised in the paintings of some people with AS.

Another characteristic is perceptual distortion, which can lead to a small space being perceived as even smaller by the person with AS, which can lead to fear or anxiety. It is hard to know how to reduce this visual sensitivity. In time effective strategies may be discovered, but at present we can only identify the problems and try to avoid them.



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## SENSITIVITY TO SMELL

Some people with Asperger's Syndrome report that specific smells can be overpowering. Changes in perfume and household cleaning fluids can be perceived as extremely pungent and may have to be avoided.

## SENSITIVITY TO PAIN AND TEMPERATURE

It may appear that the person with Asperger's Syndrome is very brave, and not showing any response to levels of pain that others would consider unbearable.

It is as if the person with AS has a broken internal pain and temperature thermostat.

Because of this, the person with AS may not learn to avoid certain dangerous actions, causing frequent trips to casualty. Medical staff may be surprised at the frequency of the visits, and consider the parents negligent. Obviously, it is important to explain that the child has sensory issues related to Asperger's Syndrome.

It is also difficult for the person with AS to detect when they need medical help. Ear infections or appendicitis may progress to a dangerous level before being detected.

If a child with AS shows minimal response to pain, it is essential for the parents to be vigilant for any signs of discomfort or unusual behaviour which may lead to the discovery of an illness.

It is important to explain to the child why reporting pain is important.



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## SYNAESTHESIA

This is when a person experiences a sensation in one sensory system and as a result experiences a sensation in another modality. The most common expression is seeing colours every time a person hears a particular sound. This is sometimes called coloured hearing.

It has also been noted that sometimes auditory stimuli interfered with other sensory processes, e.g. it is necessary to turn off kitchen appliances so that something can be tasted.

## **STRATEGIES IN BRIEF**

### AUDITORY SENSITIVITY

- Avoid some sounds
- Listening to music can camouflage the sound
- Auditory integration training may be helpful
- Minimise the background noise, especially several people talking at the same time
- Consider using earplugs

### TACTILE SENSITIVITY

- Buy several duplicates of tolerated garments
- Sensory Integration Therapy may be helpful
- Areas can be de-sensitised using massage and vibration

### SENSITIVITY TO TASTE & TEXTURE OF FOOD

- Avoid force-feeding or starvation programmes
- Only lick and taste new food rather than chew or swallow
- Try new food when distracted or relaxed

### VISUAL SENSITIVITY

- Avoid intense level of light



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- Use a sun visor or sunglasses

### SENSITIVITY TO PAIN

- Look for behavioural indicators of pain
- Encourage the child to report pain
- Minor discomfort may indicate a significant illness
- Explain to the child why reporting pain is important