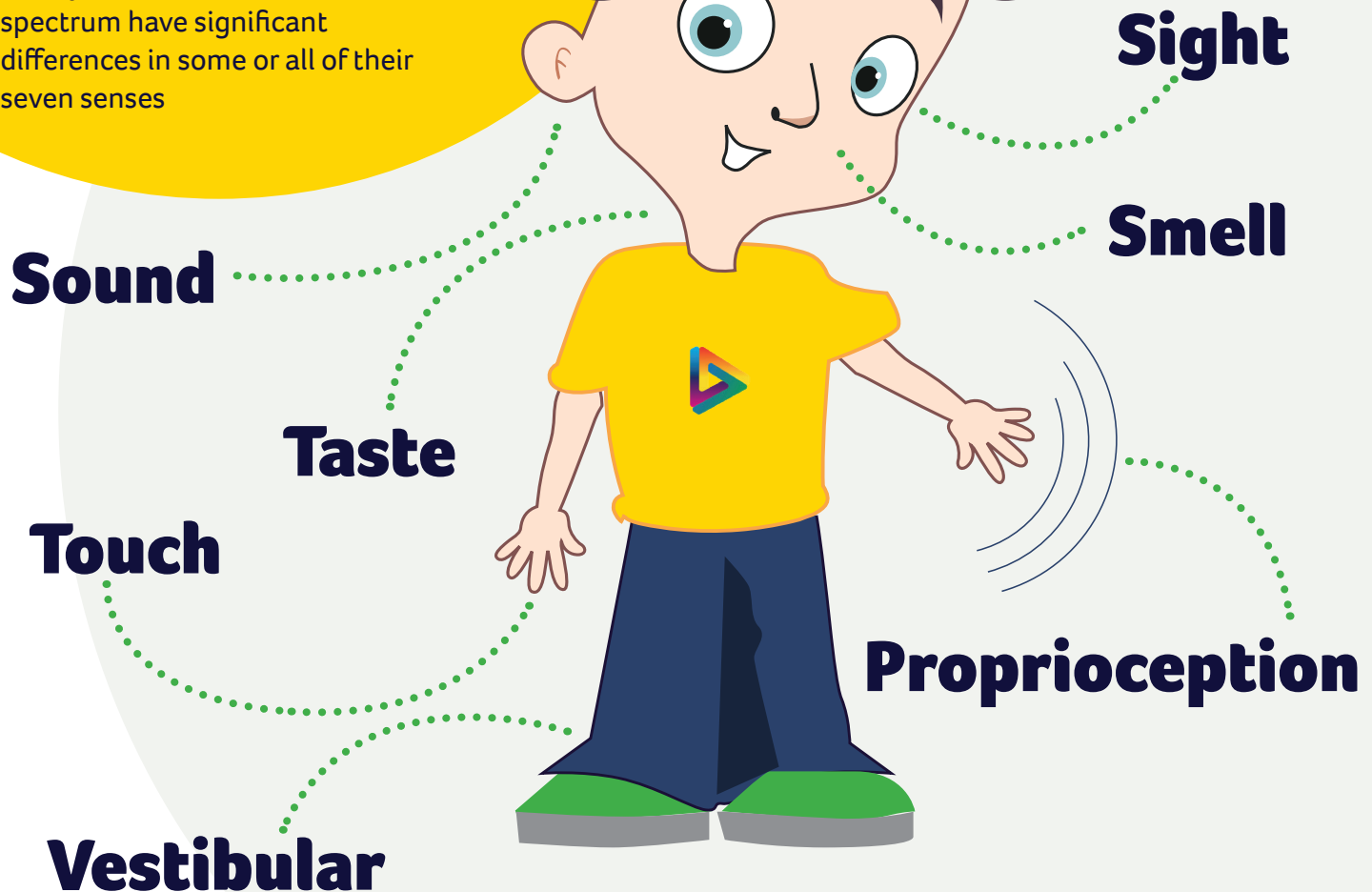


# Autism & the senses

Around one in every hundred people in the UK is on the autism spectrum. Nearly 80% of people on the autism spectrum have significant differences in some or all of their seven senses



# Sight

People on the autism spectrum experience some form of sensory difference with their vision and, in some cases, this can cause them physical pain.

## Under responsive

They may seek experiences to boost the visual input they are receiving. A person may be captivated by small details, unnoticed by others, or found staring into light sources. Pattern or colour may be fascinating.

### Tips to reduce anxiety

- A seeker may need night lights to help them sleep.
- A rain stick sensory toy, various apps like Magic Fluids Lite or Magma are great for those seeking more visual input
- Outline or highlight words to help focus



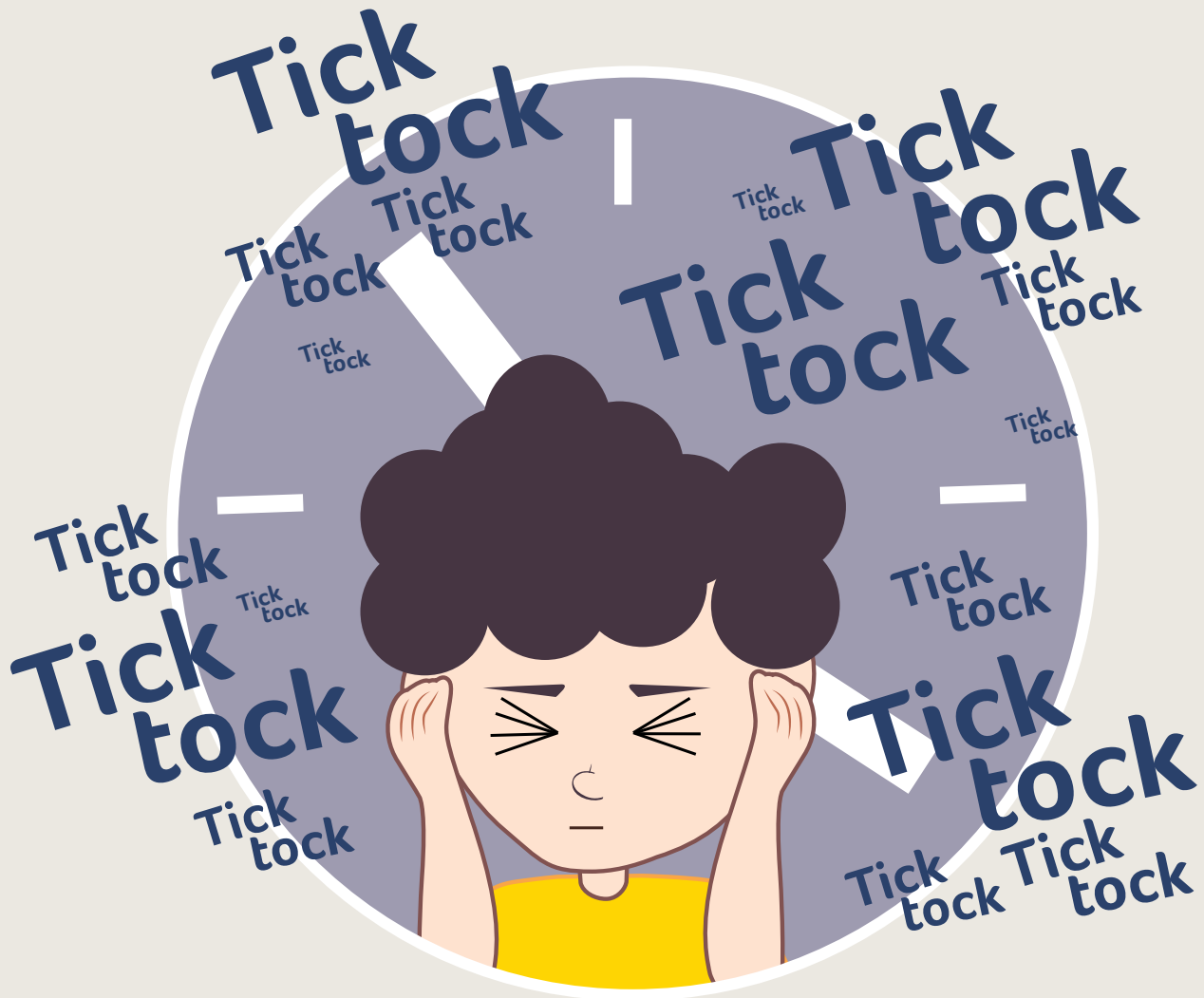
## Over sensitive

A person may find it particularly difficult to use or maintain eye contact. What can appear rudeness, may actually be a reluctance to participate in an action which can causes them physical pain and anxiety.

### Tips to reduce anxiety and stress

- Lower lighting
- Reduce glare
- Ease up on eye contact
- Remove person from crowded areas or disperse the crowd
- Consider other sensory differences which may also be impacting or masking other conditions





# Hearing

There are several ways in which people with autism may experience sensory challenges to do with hearing. When people can't tell us how they feel we use an assessment tool called a sensory profile. Sometimes the noisiest people are noise sensitive. It helps them to block out other sounds. Some of the challenges faced by an individual on the autistic spectrum dealing with sound include...

## Auditory cluttering

Anxiety involving difficulties in filtering and processing sounds, which can be a very painful experience for individuals.

## Over-sensitivity to sound (hyper-responsive)

A very painful reaction to noises like alarms, bursting balloons, sirens, drills, banging doors, dogs barking and babies crying – even a buzzing insect may cause distress. People may use ear-defenders to block out some of the noises.

## Under-sensitivity to sound (hypo-responsive)

Someone may be under-sensitive to sound – or to a particular sound – and may seek to experience extreme volumes of that sound to gain the stimulation they require.

## Environmental meaning deafness (auditory agnosia)

Difficulties in processing and understanding sounds even if heard before. Reminders such as “That’s the dinner bell – time for dinner,” can really help.



## Meaning deafness (auditory verbal agnosia)

Understanding what language means can be difficult. Use short, direct sentences so that the child/adult will have a better chance of understanding the meaning.

## Tonal Deafness (tonal agnosia)

An inability to pick up tone, inflection or emphasis from a person’s voice. 38% of our communication is conveyed in this way, so say what you really mean and always try to be clear and concise.

# Smell

## Over sensitive

A hypersensitive sense of smell creates strong and intense smells out of ordinary, everyday ones. Everyday smells, such as spicy foods, scented shampoos or petrol, may overwhelm a person with autism and they may refuse to eat certain foods or go to certain places. Smells can be so overwhelming that they may display unusual behaviours to avoid that smell.



### Tips to reduce anxiety

- Use fragrance-free cleaning products
- Use unperfumed toiletries
- Keep rooms well ventilated
- Cover nose with tissue

## Under responsive

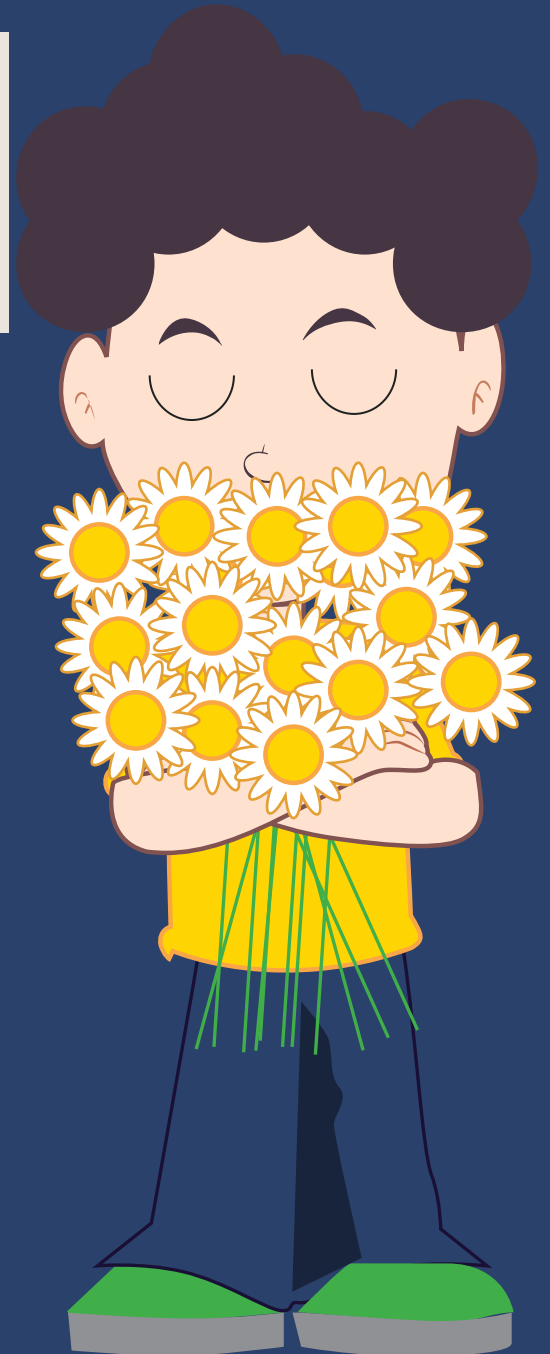
Some people with autism may seek out strong smells - we refer to them as hypo-sensitive to smell. They may be drawn to curry powder, herbs, flowers, essential oils and perfumes. They may even go out of their way to smell things or people, attempting to sniff your hair or skin.

### Tips to reduce anxiety

- Carry a scented hanky with preferred scent
- Perfumed hand cream
- Cooking with strong smells

### Risks potential

Our sense of smell can help us identify danger in our life, such as smoke, escaped gas or food that is off. Individuals on the autistic spectrum may not be able to identify things based on smell - or they may have a lack of smell or be unable to identify strong smells.



# Vestibular (Balance)

The vestibular system is located in our inner ears. It helps us feel balanced. When it isn't working, typically, people with autism can be seriously affected. It can impede their understanding of what is happening to themselves and to the world around them.

## Over sensitive

A debilitating response to motion, typically in the form of travel sickness. This can be particularly difficult for someone with autism to bear if they don't know what is causing the nausea and can't express their feelings. It can vary from person to person, so it may be even more difficult to determine the cause of the anxiety.



### Tips to reduce anxiety

- Repetitive actions like mild rocking or swinging can help calm an over-stimulated vestibular system by gently controlling the movement. This can also build tolerance.
- Yoga poses may help
- Sitting still on the floor can also help



## Under responsive

A need to seek out experiences to boost body movement. Without this additional movement, the balance a person feels comfortable with may not be achievable. This may appear as hyperactivity, a desire to be on the move all the time, to eagerly accept experiences like fairground rides, swings, rough and tumble or gymnastics. All of these activities will stimulate the senses.

### Tips to reduce anxiety

All types of movement can help, eg...

- Dancing
- Climbing
- Riding a bike
- Swimming
- Using a ball chair or wobble cushion for seated activities



# Proprioception (body awareness)

Proprioception unconsciously tells us where our bodies are in relation to other objects and space and how our different body parts are moving. We get messages (feedback) from our muscles and joints telling our brain where we are. They regulate movement and posture and also the appropriate pressure for tasks, such as cracking open an egg without crushing it. Some people on the autism spectrum may experience varying differences associated with this sense.

## Over sensitive

A difficulty understanding where one's body is in relation to other objects, thus appearing clumsy, knocking things over, dropping items or misjudging personal space and thus standing too close to others. People may also have difficulty in regulating pressure so may break items or struggle with writing (their pressure on the pen can be too light or so heavy that they may even rip the paper). Some people say it affects their sense of self of who they are as a person





## Under responsive

Seeking out more sensory input by banging objects, jumping about, stomping when walking, bumping into people or biting or sucking on fingers.

Deep pressure such as tight bear hugs, tight clothing or weighted items such as heavy blankets or bags may be enjoyed.

### Tips to reduce anxiety

Perhaps trial a weighted backpack if someone needs extra sensory feedback when out walking. Occupational therapists can advise on a wide range of suitable sensory equipment.

# Touch

Our tactile sense helps us to interpret information about pressure, texture, movement, vibration, temperature and pain. It also provides us with information that we need for visual perception, body awareness and motor planning. Some people can experience difficulty with processing this tactile information. It can impede people's understanding of what is happening to them and to the world around them.

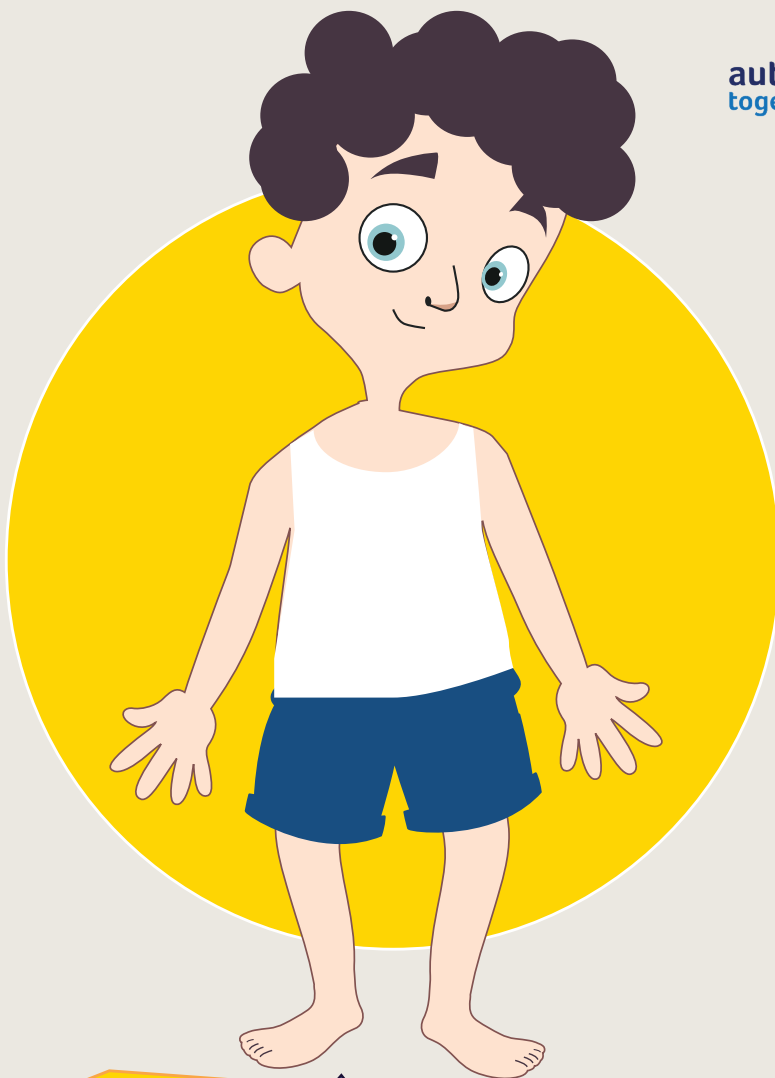
## Touch seeker

Seeking out tactile stimuli, this person may appear to have a high pain threshold. They may self-injure or chew on inedible items or clothing. They may seek out physical touch and different textures to experience.



## Touch avoider

Withdrawing from or avoiding certain tactile experiences, this person may find another's touch feels unpleasant or even painful. They may also avoid getting 'messy' and not like eating certain foods, brushing their teeth, bathing or having a haircut. Wearing certain textures of clothing may be unpleasant.



### Tips to reduce anxiety

Seamless clothes can be more comfortable if they are closest to the skin, and also remove labels and other items that could be scratchy.



### Additional support

Your GP may refer you to see an Occupational Therapist, who can advise on a wide range of sensory equipment and programmes to support these sensory differences.



# Taste

Sweet, sour, bitter or salty are the four main taste areas on the tongue. Some people may prefer foods from one of these groups, or foods of a certain texture or temperature. Others may only eat foods of a certain colour.

## Under sensitive Over responsive

This person may prefer foods that are very spicy. They may even pick up, taste, or even eat, non-edible items such as grass and stones

## Over sensitive Under responsive

Tastes and flavours are too strong for this person. Their diet may be limited to what they can tolerate. It may be that odours from certain foods are too strong for them to cope with, so they limit their food to certain textures, appearances and tastes.



### Tips to reduce anxiety

- New foods can be introduced by making them similar in texture and colour to the person's preferred food tastes.
- Write a short information sheet that puts the food into a very positive light that will encourage the person to want to try it.
- Put a small piece of 'new food' near the person's plate until it can be placed on the plate. This could take days or even weeks.

## About us...

Autism Together is a Merseyside-based charity and service provider supporting over 400 people on the autism spectrum. Founded in 1968 by a group of pioneering parents, the organisation now employs over 1,000 staff and has operations in Merseyside, Cheshire, and North Wales.

- We offer specialist services for families and children, residential care and supported living.
- We have our own garden centre, park, farm, canal boat, a rock-rap band, a choir and individuals we support are able to get involved in all of these.
- The people we support have the option to learn diverse skills and enjoy activities such as swimming, cycling, trampolining, music, dance, painting, photography, gardening and much more.
- We act as a voice for people on the autism spectrum in the North West and have led campaigns for Liverpool to be the UK's first autism-friendly city and for 'mate crime' (the bullying and manipulation of vulnerable people) to be recognised in law.
- In the last five years we've won more than a dozen awards for our range of services, supporting people on the autism spectrum.



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