

Autistic sensory experiences



What is sensory processing?

Sensory processing is how your brain interprets information received from your senses (known as 'sensory input'). This process is how you feel and react to things in your environment and sensations in your body.

The five main senses are: sight, hearing, touch, smell and taste.

Three other key senses are: balance and movement, spatial awareness and awareness of internal states.

Many autistic people have sensory processing differences.

This means they experience input from their senses differently to other people. Autistic people can be much more sensitive (**hyper-sensitive**) or much less sensitive (**hypo-sensitive**) than other people to the same sensory input.

Some autistic people have a **mixed and/or varying experience**, experiencing both hyper-sensitivity and hypo-sensitivity. They may have different sensitivity across different senses or within the same sense.

An autistic person's sensory experience can change over time, in different environments or due to other factors, such as their mental and physical health.

For more information, visit our web page [**Autism and sensory processing**](#)

Understanding common reactions

People who experience **hyper-sensitivity** may:

- **avoid** (or become irritated/distressed by) uncomfortable or painful sensory input
- **enjoy** being sensitive to pleasurable or soothing sensory input
- face **challenges** due to hyper-sensitivity.

People who experience **hypo-sensitivity** may:

- **not notice** sensory input
- **seek out** (or become frustrated/distressed by a lack of) sensory input
- face **challenges** due to hypo-sensitivity.

How to use this resource

Use the table below to explore each sense from the perspective of sensory hyper-sensitivity and hypo-sensitivity.

This may help you to think about your own sensory profile, how you react to sensory inputs, any challenges you face and to explore self-management and support strategies.

Fill out the companion resource [**My sensory experience**](#) to create a profile document that is unique to you.

Sight

Light, colour, pattern

Hyper-sensitive Much more sensitive		Hypo-sensitive Much less sensitive	
Common triggers, example reactions and challenges	Self-management and support	Example reactions and challenges	Self-management and support
<p>Triggers:</p> <ul style="list-style-type: none"> • bright or fluorescent lighting • bright sunlight • visually crowded or cluttered places • patterned wallpaper or carpets • eye contact <p>Reactions:</p> <ul style="list-style-type: none"> • covering eyes • wearing sunglasses indoors • avoiding common triggers • enjoying sensitivity to pleasurable or soothing visual input <p>Challenges:</p> <ul style="list-style-type: none"> • getting to sleep with light disturbance • people misinterpreting less or no eye contact as rudeness or not paying attention • being in or concentrating in environments with triggers 	<p>To manage sensory input:</p> <ul style="list-style-type: none"> • wear sunglasses or other tinted glasses • wear hats that shade the eyes • find sensory tools you enjoy (eg soothing sensory lights) • spend time in environments without triggers, especially to recover from sensory overload <p>Other people can help by:</p> <ul style="list-style-type: none"> • allowing sunglasses and hats to be worn, including inside • using natural light, but avoiding sun glare through windows • avoiding fluorescent, bright or flickering lights • reducing visual distractions (eg clutter or patterned decorations) • providing coloured overlays for reading • never forcing a person to make eye contact 	<p>Reactions:</p> <ul style="list-style-type: none"> • not noticing visual information like signs • seeking more visual input by watching spinning objects, lights or glitter <p>Challenges:</p> <ul style="list-style-type: none"> • being in low-lit environments • missing important information 	<p>To get more sensory input:</p> <ul style="list-style-type: none"> • use sensory tools or toys that spin, light up or glitter <p>Other people can help by:</p> <ul style="list-style-type: none"> • using larger text fonts with good contrast • providing good lighting

Hyper-sensitive Much more sensitive		Hypo-sensitive Much less sensitive	
Common triggers, example reactions and challenges	Self-management and support	Example reactions and challenges	Self-management and support
<p>Triggers:</p> <ul style="list-style-type: none"> noisy environments people speaking loudly loud or background music electrical technology 'humming' the sound of people chewing food unexpected noises (eg alarms, sirens) background noise (eg in schools, workplaces, shops restaurants and event venues) <p>Reactions:</p> <ul style="list-style-type: none"> covering ears struggling with background noise avoiding common triggers may still enjoy listening to music or making noise <p>Challenges:</p> <ul style="list-style-type: none"> background noise affecting concentration or causing irritation getting to sleep with noise disturbance being upset by sudden, unexpected noises 	<p>To manage sensory input:</p> <ul style="list-style-type: none"> wear ear defenders, ear plugs or noise-cancelling headphones (be aware that using these a lot can increase sensitivity over time as your hearing adjusts) listen to music to block out other noise listen to relaxing sounds (eg waves or birdsong) <p>Other people can help by:</p> <ul style="list-style-type: none"> turning music down or off (eg in workplaces, restaurants, shops) giving warning of fire alarm tests offering quiet times (eg in shops) providing ear defenders or ear plugs, or noise-cancelling headphones to listen to music at school, seat students away from louder classmates shutting windows and doors to block sound speaking more quietly using a visual rating scale for the person to indicate if they are becoming distressed by the level of noise 	<p>Reactions:</p> <ul style="list-style-type: none"> not noticing your/their name being called not noticing public announcements (eg at train stations) having difficulty following quiet or fast-moving conversations, or taking in instructions seeking out more sound input by listening to loud music or making noise (eg by banging on a table) <p>Challenges:</p> <ul style="list-style-type: none"> not feeling part of conversations or able to follow them being misunderstood or getting in trouble if people think you/they are choosing to ignore information or to not respond unhelpful reactions from others to the person making noise 	<p>To get more sensory input:</p> <ul style="list-style-type: none"> listen to loud music safely (loud volumes can damage hearing and may further decrease sensitivity to noise) <p>Other people can help by:</p> <ul style="list-style-type: none"> checking the person has taken in information and is included in conversations providing information in writing providing alternatives to audio announcements, such as digital screens (at train stations, GP surgeries) and text alerts/updates offering relaxed performances (at theatres, cinemas) for people who may make noise

Touch

Texture, pressure, heat / cold
 (Feeling hot / cold is also linked to awareness of internal states, see page 9)

Hyper-sensitive Much more sensitive		Hypo-sensitive Much less sensitive	
Common triggers, example reactions and challenges	Self-management and support	Example reactions and challenges	Self-management and support
<p>Triggers:</p> <ul style="list-style-type: none"> crowded places and being bumped into being touched, particularly if this is unexpected fabric textures (eg clothing, furniture covers, bedding) food textures (eg soft or slimy) wind or rain on skin <p>Reactions:</p> <ul style="list-style-type: none"> struggling to wear certain clothes (eg a tie, school uniform, scratchy fabrics) or sleep in certain bedding not liking being touched or physical affection (eg shaking hands, hugging, kissing) avoiding washing or being washed due to dislike of being wet, the feeling of scrubbing or products on skin or hair avoiding common triggers enjoying sensitivity to pleasurable or soothing input (eg pleasing fabrics or textures) <p>Challenges:</p> <ul style="list-style-type: none"> following uniform or dress codes when these feel too restrictive, uncomfortable or hot/cold getting enough sleep if bedding feels too restrictive, uncomfortable or too hot/cold being physically affectionate eating disliked food textures 	<p>To manage sensory input:</p> <ul style="list-style-type: none"> remove labels from clothing and bedding, wear seamless clothing or underwear carry clothing layers or options with you to respond to the weather and temperature identify fabrics and textures you like for clothes or bedding and stick to these tell people what your preferences are for touch and physical affection (eg if you do not want to be hugged, or only want to be hugged firmly) <p>Other people can help by:</p> <ul style="list-style-type: none"> asking permission before hugging or touching giving the person extra space around them allowing the person to choose their own clothing, or being flexible around school uniforms and dress codes queuing for them or letting them go to the front of the queue to reduce accidental touch 	<p>Reactions:</p> <ul style="list-style-type: none"> having limited or no reaction to being touched, injury and temperature seeking more input by: <ul style="list-style-type: none"> stroking or holding certain fabrics and textured items chewing things picking skin, pinching or biting themselves to feel the sensation touching very hot or very cold things <p>Challenges:</p> <ul style="list-style-type: none"> not noticing injury causing self-injury by skin-picking, pinching or biting due to seeking touch sensations 	<p>To get more sensory input:</p> <ul style="list-style-type: none"> use sensory tools or toys with interesting textures use compression clothing or weighted blankets if you enjoy the feeling of pressure activities such as messy play may increase awareness of touch and introduce new textures <p>Other people can help by:</p> <ul style="list-style-type: none"> providing alternatives like sensory toys, stickers or Velcro if the person frequently touches other people encouraging dressing in front of a mirror if the person can't feel that clothes are twisted on their body providing compression clothing or a weighted blanket

Smell

Odour / scent

(Smell is linked to taste, see next page)

Hyper-sensitive Much more sensitive		Hypo-sensitive Much less sensitive	
Common triggers, example reactions and challenges	Self-management and support	Example reactions and challenges	Self-management and support
<p>Triggers:</p> <ul style="list-style-type: none"> • perfumes or deodorants • body odours and toilet smells • washing and cleaning product smells • food and cooking smells • environments with particular smells (eg shared or public toilets, petrol stations) <p>Reactions:</p> <ul style="list-style-type: none"> • covering or holding nose • breathing through the mouth instead of the nose • avoiding common triggers • may react differently to different scents (eg finding some overwhelming and others not) <p>Challenges:</p> <ul style="list-style-type: none"> • using toilets, particularly shared or public toilets • being near people wearing strong perfume • cooking or eating certain foods (smell and taste are connected senses) • washing and cleaning due to body odours and product smells 	<p>To manage sensory input:</p> <ul style="list-style-type: none"> • use unscented washing and cleaning products, or find scents you prefer • cook using an extractor fan or open windows • keep a preferred smell on a wristband or handkerchief to cover unpleasant smells <p>Other people can help by:</p> <ul style="list-style-type: none"> • avoiding wearing perfumes or strong-smelling deodorants • avoiding using strong air fresheners in toilets, or allowing the person access to their own toilet • keeping rooms well ventilated 	<p>Reactions:</p> <ul style="list-style-type: none"> • not noticing body odour, fragrance or cooking smells • smelling strong scents to get more sensory input • sniffing things or people <p>Challenges:</p> <ul style="list-style-type: none"> • unhelpful reactions or judgement from other people to body odour or sniffing behaviours • missing warning signs (eg the smell of 'gone off' food) 	<p>To get more sensory input:</p> <ul style="list-style-type: none"> • try activities with strong smells (eg playing with scented playdough or using aromatherapy scents) <p>Other people can help by:</p> <ul style="list-style-type: none"> • teaching the person to read danger labels and expiry dates if they are not sensitive to strong smells, which may leave them vulnerable to eating and drinking toxic substances • find alternative scents to replace inappropriate sniffing (eg sniffing people) or sniffing of toxic substances

Taste

Flavour

(Taste is linked to smell, see previous page)

Hyper-sensitive Much more sensitive		Hypo-sensitive Much less sensitive	
Common triggers, example reactions and challenges	Self-management and support	Example reactions and challenges	Self-management and support
<p>Triggers:</p> <ul style="list-style-type: none"> • certain flavours (and food textures – this is related to sense of touch, see above) • unfamiliar foods <p>Reactions:</p> <ul style="list-style-type: none"> • having a restricted diet (eg only eating bland or 'beige' foods) • struggling to eat unfamiliar foods • being able to taste flavours others can't (eg subtle flavours or detergent residues on glasses and cutlery) <p>Challenges:</p> <ul style="list-style-type: none"> • not having a varied or healthy diet • not eating enough or eating too much • feeling or being sick • having difficulty eating unfamiliar foods (eg in restaurants, school, other people's homes or on holiday) 	<p>SEEK PROFESSIONAL SUPPORT:</p> <ul style="list-style-type: none"> • if a restricted diet is affecting your/their health or you/they are becoming underweight, seek immediate advice from your GP (be aware that sensory-avoidance of food can be mistaken for body image issues and wanting to lose weight; treatment approaches can differ) <p>To manage sensory input:</p> <ul style="list-style-type: none"> • carry preferred foods or snacks with you if you are concerned about finding acceptable food options <p>Other people can help by:</p> <ul style="list-style-type: none"> • creating a calm environment at mealtimes • avoiding forcing the person to eat disliked foods • introducing new foods with a similar flavour or heat profile (eg bland or spicy) to preferred foods 	<p>Reactions:</p> <ul style="list-style-type: none"> • not noticing subtle or strong flavours, or differences in flavour (eg too much salt, ingredients that have 'gone-off' or perished) • seeking out strong flavours • licking and tasting toys • eating items or substances that shouldn't be eaten or swallowed (this is known as 'pica') <p>Challenges:</p> <ul style="list-style-type: none"> • illness from eating or drinking perished foods and fluids (eg 'gone-off' eggs and milk) • health dangers from swallowing non-edible or toxic objects or substances 	<p>SEEK PROFESSIONAL SUPPORT:</p> <ul style="list-style-type: none"> • if the person is eating/ swallowing inedible objects (known as 'pica') or dangerous substances, seek immediate advice from your GP <p>To get more sensory input:</p> <ul style="list-style-type: none"> • try stronger flavours or spicier foods • use condiments to enhance flavour (eg salt, mustard, pickles, chilli flakes, sauces) • try foods that need more chewing or crunching (to get more touch/texture input if you/ they are not getting so much taste input) <p>Other people can help by:</p> <ul style="list-style-type: none"> • teaching the person to use expiry dates to ensure food and fluids are safe to consume • if the person is eating or trying to eat inedible objects, seek professional support and: <ul style="list-style-type: none"> - provide edible alternatives - teach the person to know the difference between edible and inedible objects, and about safety around dangerous substances

Balance and movement

You moving and things moving in relation to you

Hyper-sensitive Much more sensitive		Hypo-sensitive Much less sensitive	
Common triggers, example reactions and challenges	Self-management and support	Example reactions and challenges	Self-management and support
<p>Triggers:</p> <ul style="list-style-type: none"> body movements, especially fast or spinning motions objects and people moving around you/them causes of motion sickness (eg travelling by car, bus or train) <p>Reactions:</p> <ul style="list-style-type: none"> turning your/their whole body to look at something, to avoid dizziness from moving just the head avoiding making fast or turning/spinning movements (eg in some sports, fairground rides) feeling unbalanced by things moving around you/them feeling distressed or unwell when travelling by car, bus or train <p>Challenges:</p> <ul style="list-style-type: none"> getting motion sickness when travelling by car, bus or train taking part in sport or play activities that include fast or spinning movements, which may cause dizziness or nausea 	<p>To manage sensory input:</p> <ul style="list-style-type: none"> learn strategies to avoid or manage motion sickness (eg focusing on a fixed point) take breaks from movement that triggers motion sickness, where possible use a chair that allows your/their feet and back to rest on a surface <p>Other people can help by:</p> <ul style="list-style-type: none"> providing alternative sports or PE activities that do not require fast, turning or spinning movements providing a stable and adjustable chair teaching strategies to avoid or manage motion sickness (eg looking at a fixed point) providing ways for the person to request a break in movement (eg holding up a 'calm card') 	<p>Reactions:</p> <ul style="list-style-type: none"> not noticing (or misjudging) body movements not noticing objects or people moving nearby seeking more input: <ul style="list-style-type: none"> by stimming (using repeated movements and behaviour, eg rocking, spinning, swinging) from extremes (eg heights, climbing, jumping off things) <p>Challenges:</p> <ul style="list-style-type: none"> bumping into objects and people, tripping over or knocking things over difficulty sitting still if sensory input from movement is needed people not being understanding of these challenges 	<p>To get more sensory input:</p> <ul style="list-style-type: none"> try rocking, spinning and swinging activities try cycling or climbing if you/they struggle to sit still: <ul style="list-style-type: none"> use ball chairs, dynamic seating or wobble cushions learn movements to do safely while sitting down get up and move around between tasks <p>Other people can help by:</p> <ul style="list-style-type: none"> accepting and allowing body movements (eg stimming) providing safe opportunities for jumping, climbing, rocking, spinning and swinging limiting the length of time the person has to stay still, and allowing time to move around between tasks providing a chair that allows for safe movement while sitting

Spatial awareness
Your position in relation to other objects and people

Hyper-sensitive Much more sensitive		Hypo-sensitive Much less sensitive	
Common triggers, example reactions and challenges	Self-management and support	Example reactions and challenges	Self-management and support
<p>Triggers:</p> <ul style="list-style-type: none"> • objects and people around you/them <p>Reactions:</p> <ul style="list-style-type: none"> • being very conscious of objects and people around you/them • feeling that objects or people are too close and wanting more personal space • flinching when things come too close for comfort <p>Challenges:</p> <ul style="list-style-type: none"> • struggling to feel calm in crowded or cluttered places 	<p>To manage sensory input:</p> <ul style="list-style-type: none"> • avoid crowds by visiting places at quieter times where possible • choose workspaces that allow more space around you/them • remove or reduce clutter <p>Other people can help by:</p> <ul style="list-style-type: none"> • allowing the person extra personal space • helping guide the person through crowded places • reducing or removing clutter 	<p>Reactions:</p> <ul style="list-style-type: none"> • not noticing (or misjudging) how close you/they are to objects and people • not noticing that travelling objects (eg a thrown ball) are about to hit you/them • seeking more sensory input through deep pressure (eg from tight or compression clothes or weighted blankets) <p>Challenges:</p> <ul style="list-style-type: none"> • bumping into people and objects • difficulty taking part in activities or sports that require spatial awareness • people not being understanding of these challenges 	<p>To get more sensory input:</p> <ul style="list-style-type: none"> • try bouncing and jumping activities (eg pogo-sticking or trampolining) • try deep tissue massage • do heavy work (eg lifting, pushing or pulling heavy items) • try using an exercise ball, doing stretching exercises or yoga • try wearing tight or compression clothes or using weighted blankets <p>Other people can help by:</p> <ul style="list-style-type: none"> • making the environment safer by providing plenty of space around furniture to reduce the likelihood of bumping into things • teaching the person to stay an arm's length away from other people, to allow for their personal space

Awareness of internal states

Hunger, thirst, being hot/cold, needing the toilet, being ill or in pain

Hyper-sensitive Much more sensitive		Hypo-sensitive Much less sensitive	
Common triggers, example reactions and challenges	Self-management and support	Example reactions and challenges	Self-management and support
<p>Triggers:</p> <ul style="list-style-type: none"> • internal triggers include a full or empty stomach or bladder, processes like digestion, being dehydrated and pain sensations • external triggers include hot and cold temperatures <p>Reactions:</p> <ul style="list-style-type: none"> • having a strong awareness of bodily sensations, which can be distracting and even painful • having unexpectedly strong reactions to bodily sensations (eg distress due to hunger, thirst, being too hot or cold, needing the toilet, illness or injury) • may take extra steps to avoid bodily discomfort (eg carrying extra food, drink and clothing options) • may avoid environments or activities where managing bodily comfort may be difficult <p>Challenges:</p> <ul style="list-style-type: none"> • difficulty maintaining comfort, particularly in situations or places where access to food and drink or the heating levels are out of your/their control • other people not understanding or believing how extremely bodily sensations are felt, and not being considerate of the person's needs 	<p>To manage sensory input:</p> <ul style="list-style-type: none"> • plan for mealtimes or carry food and drink with you to avoid being too hungry or thirsty • carry clothing layers or options with you to help regulate your temperature • plan toilet breaks between activities, so you don't have to hold it • allow enough recovery time from illness and pain <p>Other people can help by:</p> <ul style="list-style-type: none"> • believing the person's account of their experience and not assuming they are exaggerating or overreacting • giving information about timings and availability of food and drink, and toilets or toilet breaks • allowing more time for recovery from illness and pain 	<p>Reactions:</p> <ul style="list-style-type: none"> • not noticing hunger, fullness or thirst • not noticing the temperature • not noticing needing the toilet • not noticing being ill or injured <p>Challenges:</p> <ul style="list-style-type: none"> • eating and drinking too much or too little • overheating or getting too cold, which can cause illness • not making it to the toilet in time • unnoticed illness or injury getting worse because you/they aren't taking steps to recover 	<p>To manage needs:</p> <ul style="list-style-type: none"> • schedule times or set alerts/reminders for eating, drinking and going to the toilet • use weather reports to help you decide what to wear • check your body for signs of illness and injury <p>Adjustments:</p> <ul style="list-style-type: none"> • support the person to make schedules and set up alerts and reminders for eating, drinking and going to the toilet • create a 'body check chart' to build awareness of internal sensations (eg pointing to a body part on the chart and asking the person how that area feels)

Autistic sensory experiences

How was this resource created?

All National Autistic Society advice and guidance content and related resources are created through a rigorous process of reviewing the evidence.

Our Evidence and Research department review and gather information from three types of sources:

- research papers published in academic journals
- lived experience sources (content created by autistic people and their families, such as blog posts and videos)
- professional practice literature created or used by relevant professionals, for example in healthcare and education.

The quality of each source is assessed, and the evidence is summarised in a report. This report is used to create our digital information, including advice pages and related resources.

Were autistic people involved?

Yes. Autistic people's accounts of their experience (in blogs and videos) were reviewed during the evidence gathering process. Autistic team members at the National Autistic Society were involved in writing the evidence report, the advice page and this resource. A steering group of autistic adults provided feedback on this resource before it was published.

What if my experience is missing?

The information in this resource is not exhaustive. It is based on the available evidence, but there may be gaps in the evidence.

Sensory processing is complex and unique to each person. An autistic person may have sensory experiences that do not appear in this resource. Their experience should never be dismissed or disbelieved because of this.

Please note

This resource provides information and examples only. It should not replace seeking specialist advice or support if required.

Share your feedback

What do you think about this resource? Please tell us by clicking the link below or scanning the QR code to the right to complete a **short survey**. Feedback is reviewed periodically and helps us to update our resources.

