

What is Body Perception?

We all have a perception (idea) of how we look to others and to ourselves which is made up from the information we receive from all our senses (sight, hearing, touch, smell and taste). The information from our senses is channelled through our nerves and processed in our brains. Many things influence these processes eg when you have a local anaesthetic at the dentist and your lip or tongue feels very large but looks almost normal. Humans are very adaptable and can usually find a way to make sense of the sensations from their eyes, ears, nose, skin and taste buds. Having body perception allows us to do this and helps us achieve many things. For example successfully pick up objects judging the correct distance and direction to reach or when we take a step on stairs we can judge the right height to lift our foot and where to place it.

What is body perception disorder?

Sometimes there is a mismatch between the information our brain receives from our senses and what the brain expects to receive. This confuses the brain and results in a misjudgement: e.g. missing a step or going to lift a heavy object and suddenly finding it is lighter than we expected. This is perfectly normal and is usually very temporary.

For a number of people after they have had an injury this mismatch can lead to a more prolonged problem and result in un-pleasant sensations such as pain and/ or ongoing difficulty with activities which would normally seem automatic. This can be quite distressing because it doesn't "make sense," (people suffering from this may find it hard to talk about what is happening). This is known as a body perception disorder. It is actually quite common after an injury and usually settles on its own but sometimes help is needed.

How do you know if I have a body perception disorder?

There is no scan or one test for this problem. There are clues that health care professionals can pick up on by observing how you move or listening to what you say. Some people say that a body part doesn't feel like their own, or they may be angry that a limb won't do what they want it to

Are you saying it is all in my head?

Perception is a function of the brain but relies on all the information that your senses can provide. The connections between your brain, your body, your senses and your experiences cannot be easily separated. The whole body and brain plays its part in this problem and in its solution. Health care professionals recognise this as a genuine problem and are committed to help you recover.

What I can I do to help?

There are a number of things that can help to improve body perception. Different things help different people so you may need to try a combination of things before you find a winning solution for you.

Body perception re-education

Bombarding your affected body part with normal sensations has been shown to improve your symptoms. Even if your problem is in your leg doing the following activities with your hands can sometimes help.

- A small selection of everyday objects are needed for sensory re-education.
- Choose a quiet, distraction free time and place to work through your programme.
- If you are unable to recognise the actual object, try to recognise and think about properties of it e.g. hot, cold, hard, soft, and smooth. (wood is warmer than metal etc)
- Use as many senses as possible i.e. touch, smell, taste, vision and hearing (e.g. peeling an orange, crinkly brightly coloured sweet wrappers, bubble wrap).
- Perform the exercises in both hands or feet and compare what it feels like in your unaffected hand or foot to help to retrain your sensation.

Try the following:

1. Fill a drawstring bag with commonplace objects, first larger objects, progressing to smaller ones. Try to recognise objects by feel (but no peeping!).

Examples:

- Larger objects: cotton reel, key, sponge, wood medicine spoon etc
- Smaller objects :paper clips, buttons, screws, erasers.
- Different weighted objects

Identify the objects; if incorrect spend time looking at and feeling the objects in both hands, thinking about its shape, texture, weight, edges, thickness, size etc.

2. Make a "Money Grab Bag" - Place an assortment of coins in a bag, and try to identify each one.
3. If the problem is in your foot you can try putting your bare feet on different textures and temperatures such as carpet, tiles, laminate floor, metal, water, grass or concrete and try to recognise and think about properties of it e.g. hot, cold, hard, soft, and smooth. (wood warmer than metal etc)
4. Bombard affected area by gently rubbing various textures with various amounts of pressure (do not rub so hard as to cause redness). Compare the feeling to the unaffected area.
5. Ask a friend or family to outline shapes, numbers, letters, on affected areas: Try to identify where exactly you are being touched and what is being outlined

- Mirror visual feedback therapy may be useful and will be explained separately by your Therapist if appropriate.
- A full length mirror may be used to re-establish more normal body image by focusing on size, length, appearance, movement and completeness of the limb and comparing the mirror appearance of one side to the other. Positive reinforcement using the correct names for body parts e.g. “my hand” helps to improve your feelings towards the limb.
- Consciously thinking about this as you are moving is important (you’re therapist will explain this in more detail)



- Try to change your feelings towards the limb – consider the positive aspects of limb function. Discuss these feelings with your therapist.
- When showering or putting on body lotion, think about the shape, size, length and the feeling of the whole body part.
- Watch other people using their limbs. Think back to a time that you used yours without pain and remember how it felt.
- Look at a magazine or scrap book with images of right and left hands (or relevant limb) – ensure pictures are not too interesting and don’t have any specific functional relevance to your own hobbies/work.
- It is important to set specific, meaningful functional goals that you are able to progress towards and recognise. Small steps and progress are important.
- Mirror visual feedback therapy may be useful and will be explained separately by your Therapist if appropriate.
- You may find that exercising to your favourite music or with your favourite perfume may improve the outcome.

- If you have a favourite colour or you associate a specific colour or object with positive feelings this can also help. For example if you love football using this in your programme can be helpful.