

What is deep pressure?

For people who are agitated, who have trouble calming down during sensory overload, and who prefer not to be in crowded situations, deep pressure can be a great way to feel better in and after those situations. But what exactly is deep pressure?

Deep pressure is when an amount of pressure is exerted on your body that reaches the deeper layers in the skin and the layers below (connective tissue, muscles and tendons). The pressure can come from another person (getting a hug), through someone's hands, a blanket, a pressure vest, or otherwise.

When calming is the goal, apply the pressure firmly and in a controlled manner. Holding tightly, rubbing, wrapping tightly in a blanket, wearing a pressure vest, or lying under a heavy blanket are all ways to experience deep pressure. Heavy work with your muscles, by carrying, pushing or pulling something or by playing sports, also creates deep pressure.

With deep pressure you not only reach the deeper layers of the skin, but also connective tissue, tendons and muscles. With light pressure or light touch you only touch the superficial skin layers. For example by tickling, very light friction or just touching the hairs.

With deep pressure in the joints you also activate the sense of movement (proprioception), the sense that transmits information about the position of your joints and the speed of movements. One of the consequences of this is the release of serotonin and dopamine, substances that are important for regulating processes in the brain. Dopamine is also released with firm contact. Dopamine and serotonin provide, amongst other things, a feeling of pleasure and relaxation.

Much research has been done on the effects that deep pressure can have on the body. By searching the internet for 'deep pressure' and 'research' you will come across many articles. For example, at <http://ajot.aota.org/> you use the search term 'deep pressure' and at <http://www.grandin.com/inc/squeeze.html> you will find a study by Temple Grandin. The various studies indicate that relaxation is a result of deep pressure.

With sustained deep pressure, where the pressure does not vary, the calming effect usually diminishes within half an hour. The body gets used to the constant input and no longer responds to it.

When the pressure is varied, by moving under a weighted blanket, by deflating a pressure vest and then inflating it again a little later, or by varying the pressure during a firm hug, the calming effect lasts much longer. The body does not get used to input that varies.

People who are able to relinquish control are more likely to relax under deep pressure given to them by someone else. For example, because someone wraps them tightly in a blanket or holds them tightly.

Someone who likes to stay in control should use a strategy that they can control themselves, for example by using a heavy blanket or a pressure vest, or by playing sports.



Deep pressure provides a pleasant experience for many people. In particular for people who are on the autism spectrum, it appears to be an important tool. Much sensory input is perceived very strongly by people with autism, which can be (extremely) bothersome. Often so much that it becomes difficult to function in an environment with too much sensory input. Deep pressure is a useful tool that can, for example, ensure that someone can still go to a store or meeting, fall asleep more easily or relax better after a busy day.

On the website <https://www.squeasewear.com/> you can read experiences of people who use a deep pressure vest in their daily lives. They, or people around them, share what it means to them to use this tool.

In the download 'Sleep, heavy blankets and alternatives' you can read more about materials that can help you fall asleep and stay asleep.

If you have any questions, tips or ideas about deep pressure, you can email us at monique@dutchsensorysolutions.nl.

Kind Regards,
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