

What is Sensory Modulation Disorder?

Sensory Modulation Disorder is one specific type of Sensory Processing Disorder (SPD). Sensory modulation refers specifically to the brain's ability to respond appropriately to the sensory environment and to remain at the appropriate level of arousal or alertness. There are actually three primary types of Sensory Modulation Disorder:



Over-Responsivity:

An exaggerated response of the nervous system to sensory input. For example, people who get motion sick easily are over-responding to vestibular input (the sensation of movement). The nervous system goes into fight-or-flight mode even when no real danger exists. Over-Responders need calming forms of sensory input. Slow, rhythmic movements, deep pressure to the muscles and joints, "heavy work" activities, peaceful music, dim or natural lighting, and quiet preferred activities will all be helpful.

(Passive) Under-Responsivity:

A lack of response, or insufficient response to the sensory environment. Sometimes these people appear to be daydreaming or unfocused on what is happening around them. They may also be uncoordinated and have difficulty with motor skills development. Passive Under-Responders need alerting forms of sensory input. Jumping, bouncing, racing the clock, fast or multi-directional movement, spinning, blow toys, cold items, light "tickly" touch, and dance music are examples of alerting sensory input.

Sensory-seeking:

The nervous system of the sensory-seeker needs intense input in order for the sensation to be registered properly in the brain. Therefore the sensory-seeker craves intense sensations constantly. This is actually also due to under-responsivity but children who are sensory seekers are attempting to get the higher level of input they need whereas the Passive Under-Responders are not. Sensory Seekers also need the intense alerting forms of sensory input. This seems confusing at first but it makes sense when we realize that what they really need is help getting that higher level of input they are seeking. When that level is reached, helpful neurochemicals will be released and the student will seem "calmer" or more focused. Many of the same activities that are helpful for Passive Under-Responders will also be helpful for Seekers. The more thrill and excitement involved the better! Try to incorporate multiple sensory systems simultaneously such as listening to fast music while going through an obstacle course that involves crawling, rolling, and jumping.



What is a Sensory Diet?

A sensory diet is what all of us use to keep our brains alert and focused throughout our days. Most of us have created our own sensory diets without consciously thinking about it. You may drink coffee to stay alert during long meetings or twirl you hair while concentrating. Some people do their best problem-solving while pacing back and forth in their offices. Many people exercise to "decompress" – to help them modulate the sensations that have been taxing on their nervous systems throughout their day. Some people need intense sensations in order to feel good – really hot showers, extra spicy food, and extreme sports like bungee-jumping. Music is an important part of most people's sensory diets – certain types of music help you calm down while other types perk you up. For people with a sensory modulation disorder, figuring out what their brains need to be alert and focused, or calm enough to go to sleep at night, requires some assistance. Often, a "Sensory Diet" is recommended to them by an occupational therapist or other professional trained in sensory integration treatment. The sensory diet is usually a written or picture schedule of selected activities designed to be used throughout the person's day to keep their nervous system at the appropriate level of arousal. BrainWorks is a sensory diet tool used by many occupational therapists to provide children and teens with pictures of activities chosen specifically for them that will enhance their sensory modulation.

How can I use BrainWorks to support my child in choosing appropriate activities?

BrainWorks is a sensory diet tool that helps children learn to identify their current sensory state and then to choose appropriate sensory activities that will help them get to that "just right" level – able to focus, pay attention, follow instructions, and interact with others well. When using BrainWorks, here is a helpful guide:



- Typically start on green. Their brains are spinning/going too fast. Their bodies may or may not be going fast.
- Typically need red arrow and yellow arrow activities to help them "slow down/ calm down/relax."



- Typically start on red. Their bodies are usually moving slowly, they tend to be sluggish and lethargic. Not "tuning in" well.
- Usually need green arrow and yellow arrow activities to help them "perk up/ wake up/ be alert."



- Typically start on green. Their bodies are usually literally going too fast running/jumping/spinning/crashing.
- Usually need more green to help them reach their high threshold for input. "Your gasoline tank has too
 much gasoline in it and the quickest way to burn off the extra gasoline is with green arrow activities."

YELLOW ARROW activities are always okay. Yellow arrow activities help all of us get to that "just right" level of sensory modulation.

FOR MORE INFORMATION ON SENSORY DIETS AND THE BRAINWORKS APPROACH, PLEASE VISIT WWW.SENSATIONALBRAIN.COM.