

What's the difference between *tossing and turning* and *settling in for a good night's sleep*?

Compare the terms *pacing* and *strolling along*.

How about *rock and roll* versus *rock-a-bye*?

For almost all of us, tossing and turning implies that we are not able to quiet ourselves. Unable to get our brains and bodies to quit worrying about the external world or the discomforts of the physical self, in order to get into a sleep state where healing, integration, and recovery can occur. Whereas, settling in, indicates our movement pattern is enabling us to get our systems to tune out and turn off in such a way as to allow the interior systems to take over and initiate repair, reinforcement, re-wiring, and restoration efforts.

Pacing is an indication of heightened distress. It typically stems from a lapping (going around a perimeter over and over) or moving point-to-point in pursuit of stimulation or to avoid over-stimulation. Pacing indicates an inability to find comfort and control. Strolling, on the other hand, tends to foster a sense of engagement in a subtle, yet sensory-rich way. The ability to notice something of interest or of sensory enjoyment causes the total body motion to pause or alter without causing a full halt or capture of attention. Some people find that strolling is more pleasurable while talking and listening to a trusted partner, while others may prefer music (instrumental or vocal), and others find the sounds that are encountered a core part of the soothing nature of the walk. Selecting environments that are just the right match for each person can provide the magic that calms and prepares a person for episodes of greater activity and engagement, OR fosters the onset of rest and sleep.

While rock-and-roll challenges our dynamic balance and coordination systems, our sense of rhythm, and bilateral, segmented action, it also stimulates our physiological systems and energizes us. Like any good opportunity there is a great time and place for its use, however, if applied at the wrong time, it can make calming and resting become an impossible target. Rock-a-bye baby is an age-old technique of using a rocking motion, either back and forth or side-to-side, or in combination (a figure eight) to calm an infant or child who simply cannot self-calm.

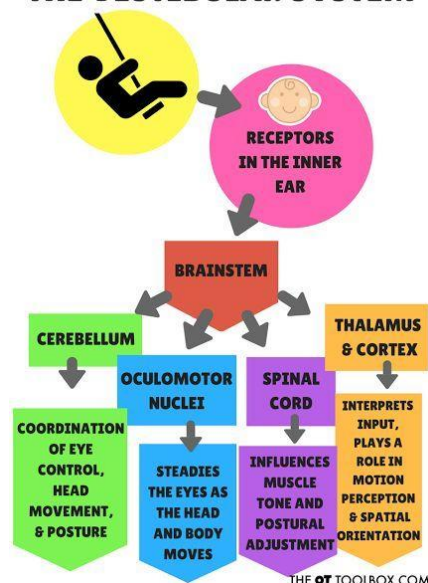


The interesting thing is that all of these actions and emotional, alerting, or calming states that are connected to them, is that they are mediated by our vestibular systems. Little tiny stones (otoliths) and hair cells under membranes are found in three fluid-filled canals in our inner ears. Otoliths settle when we are at rest and have paths that they travel when we are in motion. Our vestibular system is designed to allow us to move effectively through the world and to orient ourselves relative to gravity at all times. Otoliths are tightly connected to our visual systems, our hearing systems, and our sensory-motor systems while they are also tightly integrated into our primitive brain structures and survival mechanisms.

It turns out that motion can be stimulating or calming, and it can be modulated through the use of the vestibular system combined with visual, auditory, and proprioceptive systems. Here is an image that helps us notice all the systems that are tied in together.

Rocking, swinging, swaying, riding in a car, or resting against a comfortable surface with our body supported can be calming for most of us. However, some people find it hard to get the right mix of sensations to get what they need to calm themselves. That's where we come in. We have the ability to modify **environments**. We can help select the sensations, spaces, surfaces, and social situations that seem to help the person get what they need both in an energizing way and a calming way. We can also investigate the best **timing** for delivery of the various stimulations. What helps in terms of timing during the 24 hour cycle, duration of the stimulation or activity, frequency of the activity, intensity of the activity, and variability of the activity. Finally, we will want to look at **our skills and abilities** and decide if we need support and greater awareness, knowledge, and skill or if we have the just right magic, for now.

THE VESTIBULAR SYSTEM



Here's the catch: It's not just about THEM! We will want to look carefully at our own needs and preferences when it comes to calming and stimulating ourselves. If my preferences and needs are not a good match for my partner's needs, I will want to figure out how we can both get what we need when we need it. Failure to recognize the mismatch can lead to challenging situations and dangerous confrontations simply because we are trying to do the impossible with inadequate preparation. Finding a good pattern and right mix of movement at the right time for both of us will make life better for all of us!

[Here](#) are a few [links](#) you might want to take a look at for ideas. If you have the resources and the ability, consider contacting an OT in your area and see if there is anyone who works with adults as well as children. Ask if they have any experience with dementia. Please notice, each of these lists are geared to children, so use caution when asking an older person to try something out. Try it yourself, if you are considering it, and have a partner on hand for spotting and observation.

One final prompt. Take a look at Melanie helping me in my Ruby state to settle in for a rest. I have been walking long and hard and I am exhausted, but, I just can't turn myself off. In the first clip, we have an UH OH moment and I am back up and out. On the second try, however, she successfully gets me to snuggle in and get my rest cycle started.