

Proprioceptive Input

“Muscle Stimulation”

One more way to help my baby grow

Proprioception is a clinical term used to describe how the muscles and joints in our body are able to give our brain information about where our body parts (arms, legs, etc.) are in space in relation to the rest of our body. This gives us the ability to do things like touch our own nose while having our eyes closed, or reach for an object without having to look at it. This type of stimulation to the muscles and joints is called *proprioceptive input*.

Before a baby is born, he or she receives this stimulation constantly while inside the womb, from both the walls of the uterus and from amniotic fluid. This stimulation helps the baby’s brain to develop. As the baby grows older, the baby will begin to put weight through his or her arms and legs, which gives this same type of stimulation and helps him or her learn to do things like crawl and walk.

Babies who are born early and some babies who are sick can benefit from giving them this type of stimulation in the hospital and at home by parents and healthcare professionals using their hands to imitate this type of stimulation to the muscles and joints. This handout will tell you how you can help your baby to grow using muscle stimulation in the hospital and at home.



This picture demonstrates how each joint in the leg (the hip, knee, and ankle) is lined up to 90 degrees, with gentle pressure provided through all of the joints at once.

Muscle Stimulation Home Exercises

Baby Name: _____

Age: _____

- Start with one of your baby’s legs and bend the knee so it is lined up at a 90° angle between the hip and ankle, just like the picture above.
- Provide gentle pressure to the hip, knee, and ankle joints at the same time by pushing down through the hip and across through the knee and ankle. Continue for 2-3 minutes.
- Repeat this on the other leg, and both arms by pushing through the wrist, elbow, and shoulder in the same way. Be sure that all joints are lined up at a 90° angle.
- If your baby is fussy it is okay to give them a break. You can do the legs and arms all at once or at different times. Watch for your baby’s stress cues and do only as much as he or she can tolerate. Be to sure to use your baby’s coping strategies to help him or her stay calm and relaxed!