# CREATING A SENSORY REGULATION PLAN PROPRIOCEPTIVE INPUT



Proprioception is one of our 8 senses and refers to our body awareness.

Our proprioceptive receptors are located in our muscles, joints, and tendons and are used to help us coordinate movements and understand where our body is positioned.

# Why do I want sensory input?

# Have you ever wondered why people like weighted blankets? Or why stress balls are called stress balls?

Activities that provide proprioceptive input can be a used to help with emotional regulation, focus, and body awareness. Research shows "15 minutes of proprioception activities can have a 1-2 hour positive effect". By being proactive about getting this input, you can decrease overall anxiety, feel more grounded, and prevent sensory overload.

We get proprioceptive input from activities that put pressure on our muscles, tendons, and joints. This can be done by working with heavy objects or resistance, like weights or a stress ball.

Regulating sensory input can be gained through **deep pressure activities**, where your body is getting pressure, and **heavy work activities** where you're engaging your muscles.

<u>Deep pressure activities:</u> Massages, using a weighted blanket etc. <u>Heavy work activities:</u> Weight lifting, running, push ups etc.

The proprioceptive system is unique because it is the only sensory system that can't be overloaded and lead to more dysregulation. Because of this, proprioceptive input can be used to regulate all forms of sensory overload and they are safe "go-to" activities when you're feeling overwhelmed.

\*Important note: Most activities that provide proprioceptive input will also provide input to other sensory systems that can be overloaded. Be mindful of what feels comfortable to you and adjust accordingly.

# What does my body want?

Like most things in life, each person's sensory needs are unique. Some people prefer heavy and/or frequent proprioceptive input, while others prefer less intense input. We also all have different reactions to movement and balance (vestibular input). If you are more sensitive to movement and balance activities (e.g. get dizzy easily, prefer having your feet on the ground, avoid inversions), start with exercises that involve less intense movement and/or balance. The tactile (touch) system is also very involved in deep pressure activities so pay attention to how the touch feels, if you don't like it try something else. That could mean more or less pressure or using another material/texture.

#### Activities that provide proprioceptive input can be alerting or calming.

#### Alerting activities

are energizing and wake your body up.

\*Use alerting activities when you are feeling depressed, tired, "lazy", numb, or disconnected.

#### **Calming activities**

make you feel more calm and relaxed. \*Use calming activities when you are feeling anxiety, fear, panic, anger, or aggression.

Each person will find different activities more alerting or calming. Try each activity that interests you and see what effect it has on your body. In general, more intense movement activities (e.g. jumping) tend to be more alerting while passive activities that provide deep pressure (e.g. using a weighted blanket) tend to be more calming.

# EXERCISES FOR PROPRIOCEPTIVE INPUT (HEAVY WORK)

Swimming Team sports (e.g. soccer,

Weight lifting basketball, baseball)

Running Climbing

Yoga Boxing

Gymnastics Wrestling

Biking Dancing

### SPECIFIC EXERCISES

Push ups Leg lifts

Sit ups Burpees

Pull ups Handstands

Jumping jacks Arm reaches

Jump squats Superman

High steps Wall exercises

Chair dips Exercises with

equipment listed below

#### Equipment (optional):

Resistance band Medicine ball

Yoga ball

Kettlebell

Weights

Jump rope

Punching bag

Foam roller

## WALL EXERCISES (HEAVY WORK)

#### Wall pushes



- 1. Put both hands on the wall with your feet a little farther than arm's length back from the wall. Keep your heels on the ground and your arms straight.
- 2. Step forward with one foot.
- 3. Push forward into the wall as if you were trying to move it.

#### Wall lunges

- 1. Put both hands on the wall with the feet a little farther than arm's length back from the wall. Keep your heels on the ground.
- 2.Lean your weight into the wall as if you were trying to push it forward.
- 3.Bend your knee in, bringing it up towards your chest and try to touch your knee with your head.
- 4.Go back to the starting position.
- 5. Repeat on the other side.

#### Leg lifts

- 1. Put both hands on the wall with your feet a little farther than arm's length back from the wall. Keep your heels on the ground.
- 2.Lift one leg up and bring it up in front of you to make a 90 degree angle.
- 3. Stretch that leg back until it's straight.
- 4.Go back to the starting position.
- 5. Repeat on the other side.

#### Wall push-ups

1. Put both hands on the wall with your feet a little farther than arm's length back from the wall. Keep your heels on the ground. 2.Bend your arms in as if you were doing a push up and push back to straight arms.

#### Arm stretch

- 1. Put both hands on the wall with your feet a little farther than arm's length back from the wall. Keep your heels on the ground. 2. Pick one arm off the wall and keep it straight while you turn your body towards that side (i.e. if you're doing this with your right arm, turn towards the right wall).
- 3. Bring that arm back in and touch the opposite shoulder.
- 4. Repeat this motion a few times.
- 5.Go back to the starting position.
- 6. Repeat on the other side.

#### Wall sits



- 1.Stand with your back against a wall and your feet shoulder-width apart.
- 2. Walk your feet about 2 feet forward and slide down the wall until your thighs are parallel to the floor. Adjust your feet so that your knees are over your ankles and bent at a 90-degree angle.
- 3. Rest your upper body and head against the wall.
- 4. Hold.

## YOGA POSES FOR PROPRIOCEPTIVE INPUT

#### Easy:

- © Cat Pose (Marjaryasana)
- Child's pose (Balasana)
   Downward dog (Adho mukha svanasana)
   Bridge (Setu Bandha Sarvangasana)
- Tabletop (Dandayamana Bharmanasana)Plow (Halasana)Cobra (Bhujangasana)

#### Intermediate:

- Plank (Phalakasana):
- Forearm plank (Phalakasana II)
  - Side plank (Vasisthasana)
- Low plank (Chaturanga Dandasana)

**Boat** (Navasana)

Dolphin pose (Ardha Pincha Mayurasana)

#### **Advanced:**

Headstand (Sirsasana)

Handstand (Adho Mukha Vrksasana)

Warrior III (Virabhadrasana III)

Eagle (Garudasana)

Dancer (Natarajasana)

Cow Face Pose (Gomukhasana)

Poses with a vare better for people that are more sensitive to movement and balance activities.

## YOGA POSES FOR PROPRIOCEPTIVE INPUT



Forward fold
Uttanasana



Child's pose Balasana



**Downward dog** Adho mukha svanasana



**Warrior I**Virabhadrasana I



**Warrior II**Virabhadrasana II



**Shoulderstand** Salamba Sarvangasana



Dancer's pose Natarajasana



**Plank** Phalakasana



**Standing side bend** Tadasana side stretch



**Cobra** Bhujangasana



**Tree pose** Vrikshasana



**Side plank** Vasisthasana

# DEEP PRESSURE ACTIVITIES

#### Hand massage

Press your right thumb into your left palm and rub in circles, then squeeze each finger. Switch and repeat on the other hand.

#### **Hand Pulls**

Interlace your fingers with arms stretched out and pull them side to side.

#### Face massage

Gently rub your forehead, cheeks, and jaw in little circles, moving out and up.

#### **Shoulder Push**

Cross your arms Place a hand on each opposite shoulder, and push your shoulders down.

#### Equipment (optional):

Weighted blanket Theragun
Weighted lap or neck pillow Theraputty
Compression clothing Stress ball
Lycra swing Body sock
Compression sheets Bean bag

#### Arm massage

Press your right thumb into your left palm and rub in circles, then squeeze each finger. Switch and repeat on the other hand.

Interlocked-Fingers Arm Stretch Interlock your fingers, straighten your arms, and face your palms outward while holding.

#### **Prayer Push**

Bring your palms together at your chest with elbows out and press.
Then flip your hands so fingers point down and push the backs together, keeping elbows out.

#### Toe raises

Stand on your tiptoes, then drop back onto your heels, using your full weight to create a thump when they hit the ground.

# CREATING A DAILY ROUTINE

- 1.Try the different activities listed to see what feels good.
- 2. Make a list of the activities you find helpful.
- 3. Divide those activities into ones that you find alerting or calming.
- 4. Schedule times to take these breaks during your day while you get to know what works for you.
- 5. Create an exercise routine that's appropriate to your needs and fitness level.
- 6.\*End all routines with a calming activity.\*
- 7. Practice daily and make adjustments as needed.
- \*These activities can also be used individually to address immediate sensory and emotional regulation needs.

## DAILY EXERCISE ROUTINE EXAMPLE

1. Arm stretches: 1-3 minutes

2. Wall sits: 30 seconds sitting x2

4. Jump Squats: 3 sets of 5

5. Exercise with weights: 10 minutes

6. Always finish with a calming activity of your choice (e.g. shavasana, self massage): until you feel grounded and ready to move on with your day.

