

HEALTHY BABY MOTOR DEVELOPMENT 7-12 MONTHS



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OBJECTIVES



1. Define gross motor, fine motor, and sensory skills and how they contribute to development
2. Identify motor and sensory milestones for 7-12 months
3. Gain tips for play ideas and healthy motor development

DEFINITIONS

GROSS MOTOR

Involves large muscle groups for large movements

FINE MOTOR

Involves smaller muscle groups of the hands and mouth for refined and specific movements

SENSORY SKILLS

Refers to the brain's ability to receive, interpret, and effectively use information provided by all 8 senses: **vision, hearing, taste, smell, touch, the detection of movement (vestibular), body/joint position (proprioception), and inner body sense (interoception)**

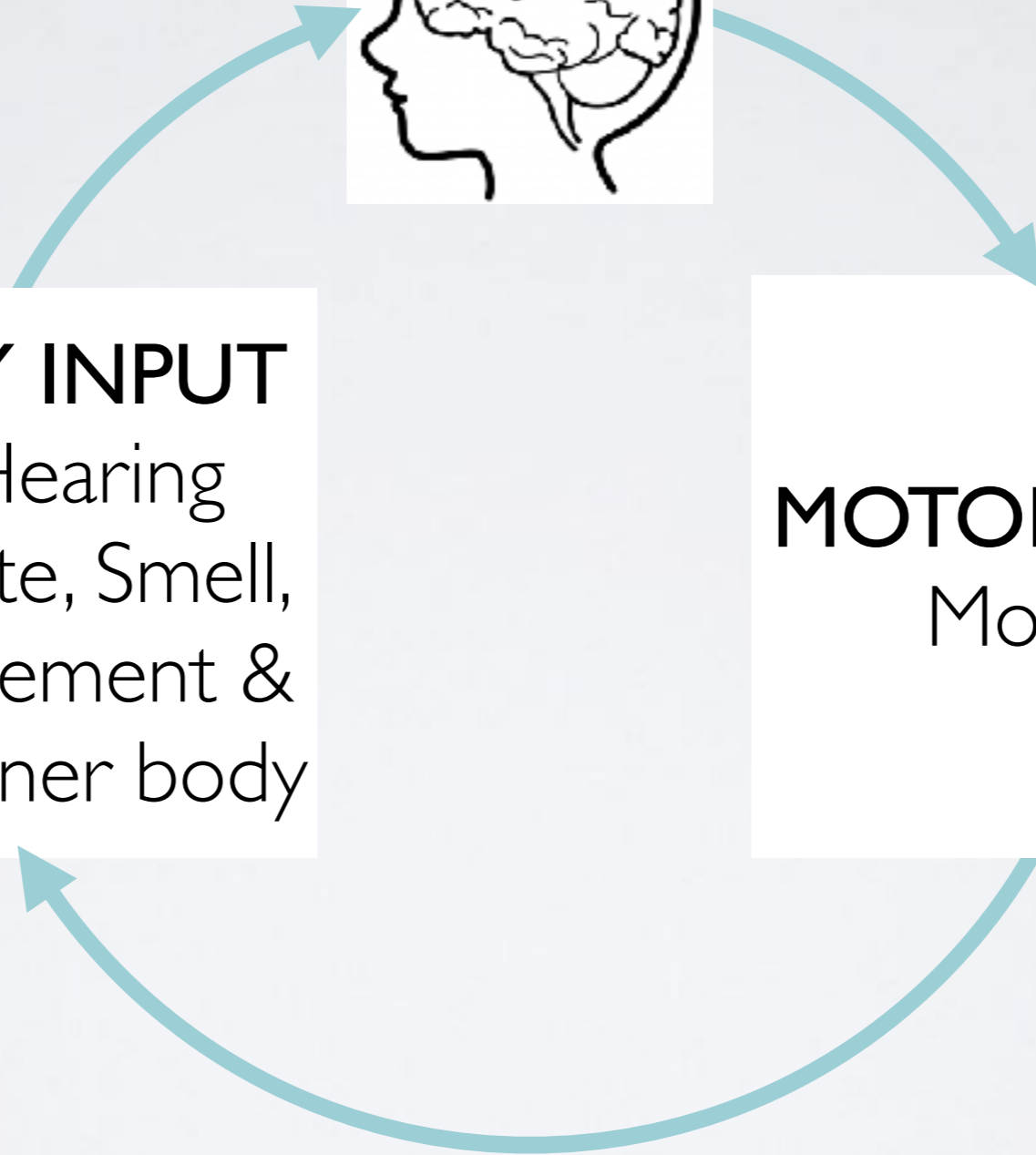


SENSORY AND MOTOR SYSTEMS



SENSORY INPUT
Vision, Hearing
Touch, Taste, Smell,
Body Movement &
Position, Inner body

MOTOR OUTPUT
Movement



SENSORY AND MOTOR DEVELOPMENT

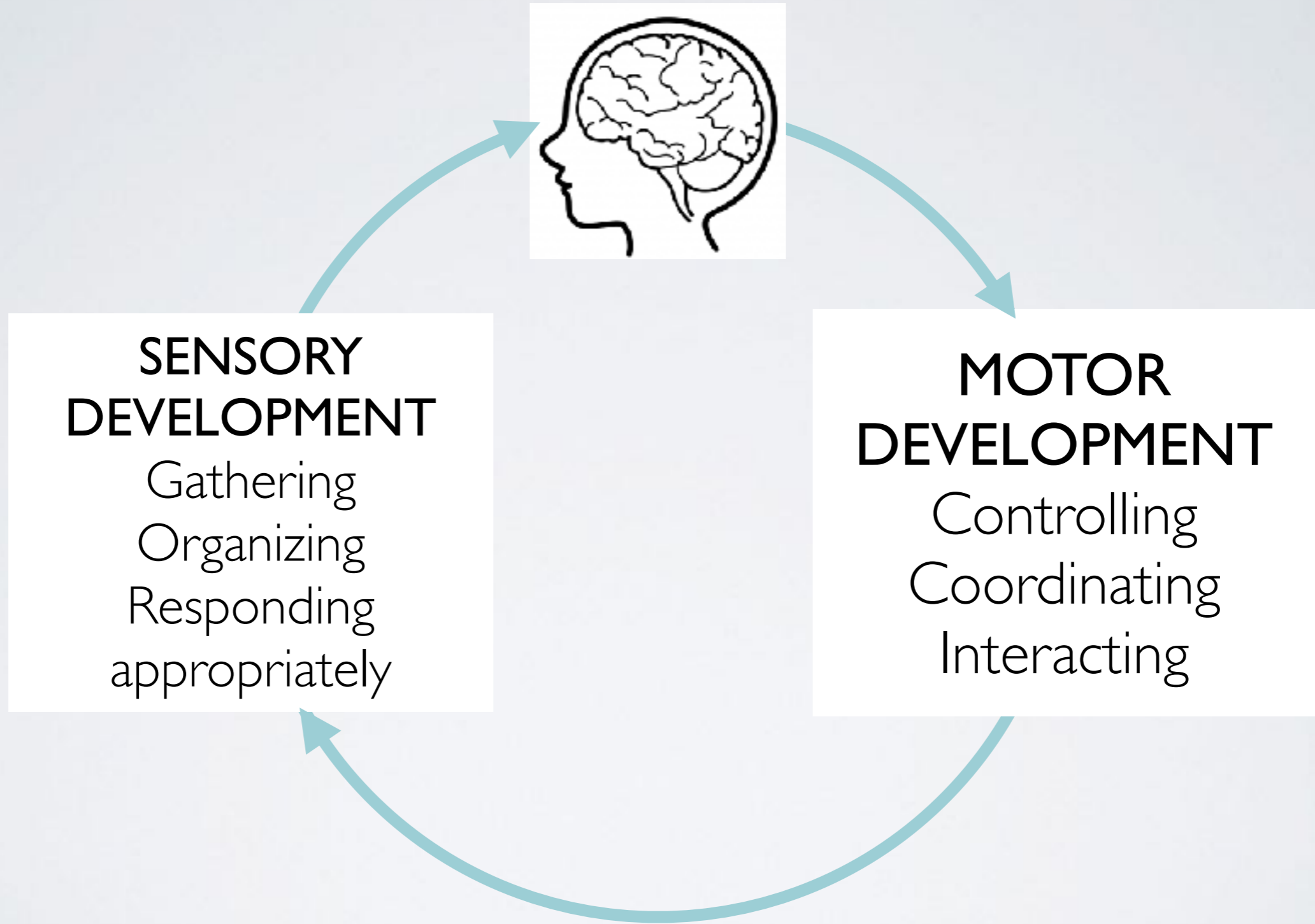


SENSORY DEVELOPMENT

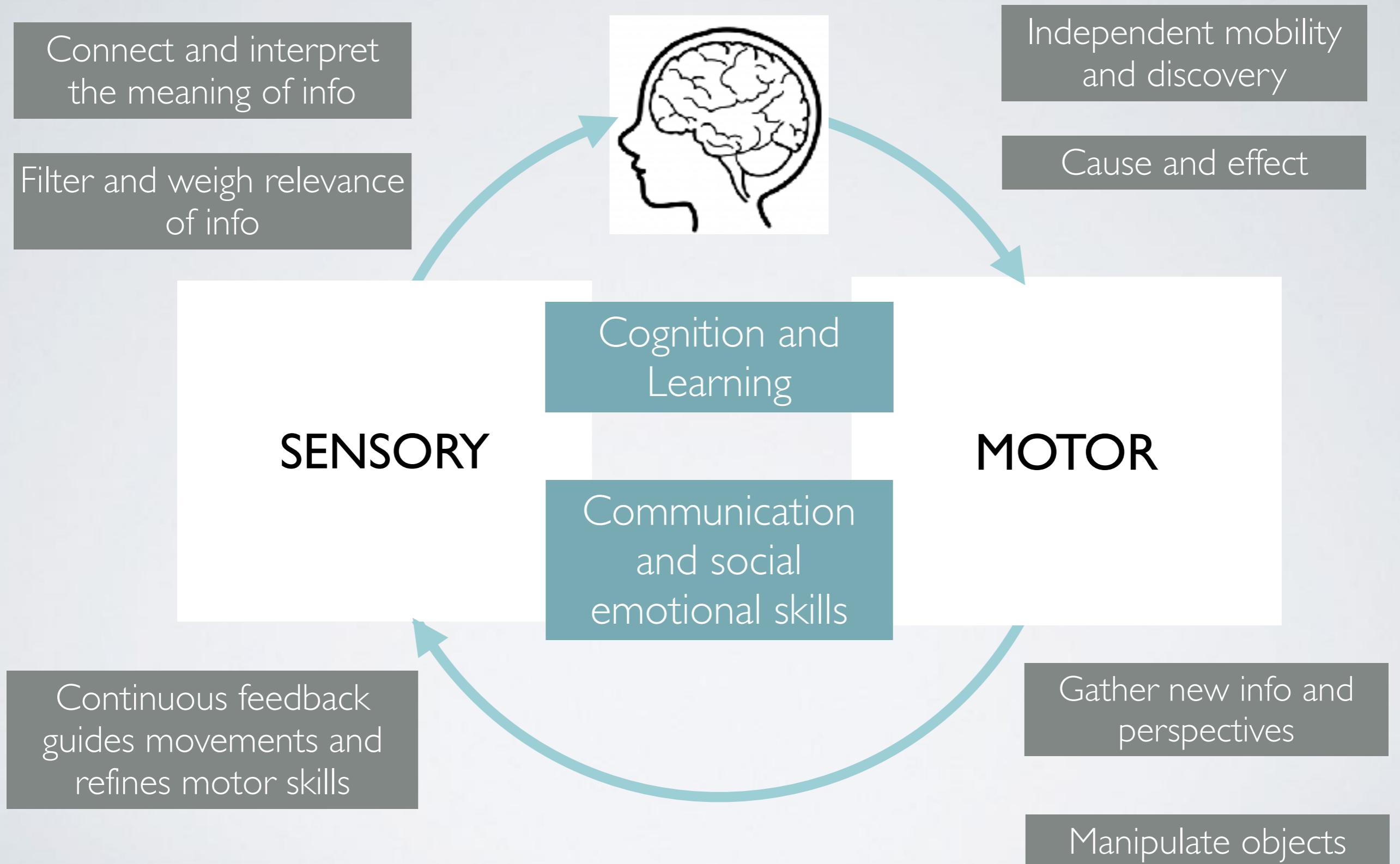
Gathering
Organizing
Responding
appropriately

MOTOR DEVELOPMENT

Controlling
Coordinating
Interacting

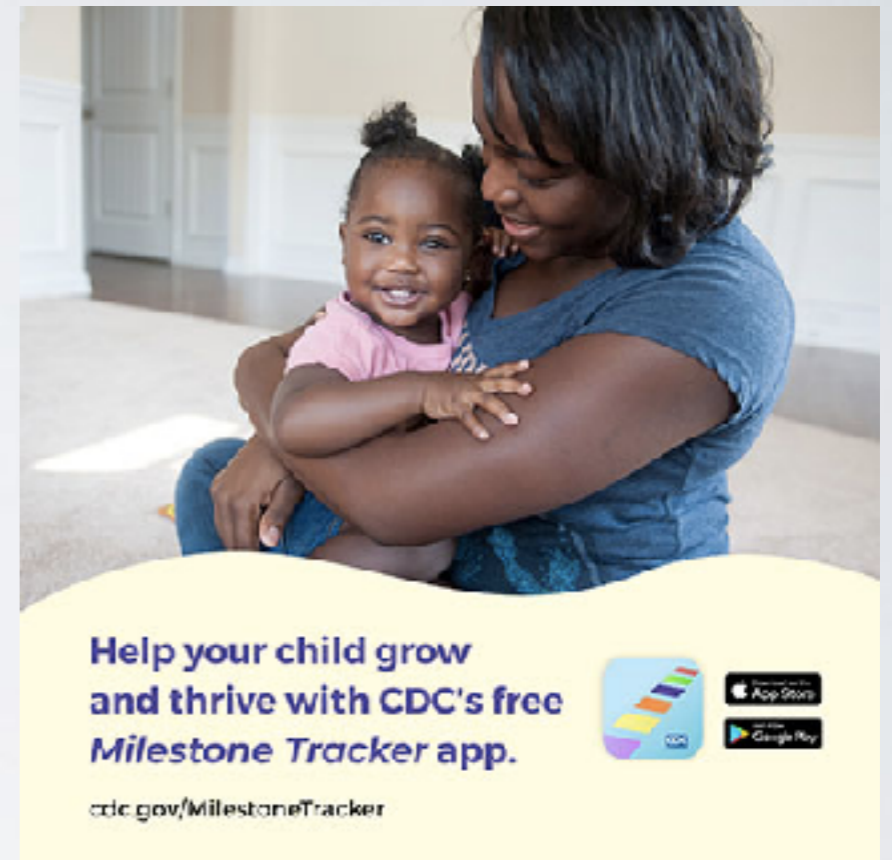


EFFECTS OF SENSORY AND MOTOR DEVELOPMENT



MOTOR MILESTONES

- The AAP and CDC published new milestone checklists in 2022
 - Social/Emotional
 - Language/Communication
 - Cognitive
 - Movement/Physical Development Milestones
- New milestones are set at an age where at least 75% of children are expected to exhibit these skills
- Aim is to gain clarity on delays and reduce “wait and see”



MOTOR SKILLS

Motor Skills/Abilities



- At an age when they are usually achieved, but there is individual variability and a wide range of normal
- Look at the big picture of development
- Gaps can help us to be intentional about purposeful play

The goal of healthy physical development is full and independent participation in the activities that are meaningful to your child and your family

7-9 MONTHS



GROSS MOTOR

Reaches out for toys in sitting without falling

Moves from tummy or back to sitting

Moves with alternate leg and arm movements in creep or crawl

Pulls to standing at furniture



7-9 MONTHS



FINE MOTOR

Holds and drinks from a bottle in supported sitting

Turns pages of a board book

Claps hands, bangs toys together, and moves things from one hand to another

Uses fingers to “rake” food towards herself

7-9 MONTHS



SENSORY

Looks when you call his/
her name

Eating thicker pureed, soft,
and mashed foods

Looks at familiar objects
and people when named

Smiles at self in a mirror

10-12 MONTHS

GROSS MOTOR

Cruises along furniture



Stands alone



Transitions independently between sit and stand



Takes a few steps independently

10-12 MONTHS

FINE MOTOR

Finger feeding, begins transition from bottle to open cup

Releases object into a container with large opening

Uses pincer grasp (thumb and 1st finger) to pick up tiny object



10-12 MONTHS

SENSORY

Enjoys listening to songs

Crawls to or away from objects seen in the distance

Enjoys wider variety of smells and tastes



BABY PLAY!



SIBLING PLAY IDEAS



- “Show and tell”: Sibling is the expert and shows baby household items, toys, colors, numbers, demonstrates how to play or use items
- Body parts: Sibling gently touches and points out body parts “this is my nose, this is your nose!”
- Peek-a-boo with a blanket
- Sing songs together
- Silly dances, silly faces, tickles to make baby smile and laugh

SIBLING PLAY IDEAS

- Face to face tummy time on the floor or parallel play side by side on the floor
- Tummy to tummy (if sibling is old enough to safely hold baby)
- Singing together
- Imitation play (hand motions during songs, using a spoon, fork, or cup, playing with a ball, gross motor skills like rolling, sitting up, walking, climbing, jumping)
- Reading books or showing pictures to baby



MORE SENSORY MOTOR PLAY IDEAS

PROPRIOCEPTION

- Massage
- Gentle bouncing up and down



VESTIBULAR

- Dancing
- Swinging and spinning
- Baby wearing

INTEROCEPTION

- Honor baby's communication and support his needs



ROCKING AND ROLLING

MINI MILESTONES

- From tummy to side
 - Bends one hip and knee
 - Shifts weight side to side over arms
- From back to side
 - Lifts and grab knees or feet
 - Tips over to side



TIPS AND TRICKS

- Help bring elbows under shoulders
- Guide the weight shift side to side at the shoulders or at the hips
- Use a towel or blanket underneath and gently lift side to side to help with the feeling of weight shift

ALMOST UPRIGHT

MINI MILESTONES

- Good head and trunk control on tummy and when carried upright
- Pushing up on straight arms on tummy

TIPS AND TRICKS

- Sit behind baby
- Put baby in a (couch) corner
- Make a soft landing zone to all sides
- Let baby wobble!



READY FOR SOLIDS

- Baby needs enough head and trunk control to sit upright for safe swallowing
- Looking at food with interest
- Reaching and grabbing for food
- No more tongue thrust and gagging



- Baby is not yet ready to sit up in a chair:
- Head and trunk tilting to one side
 - Slouched, leaning back



- Good choices in a chair:
- Flat seat bottom
 - Feet supported
 - Arms supported on tray or table surface

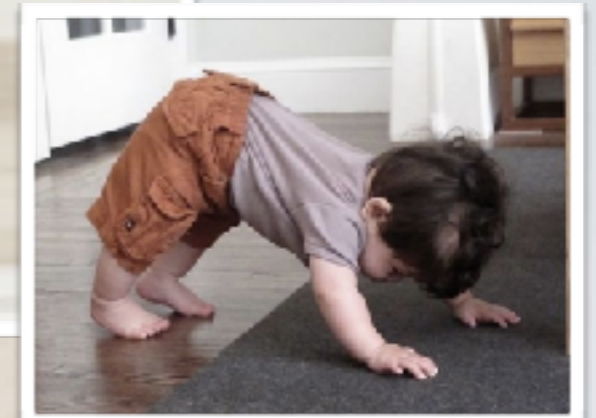
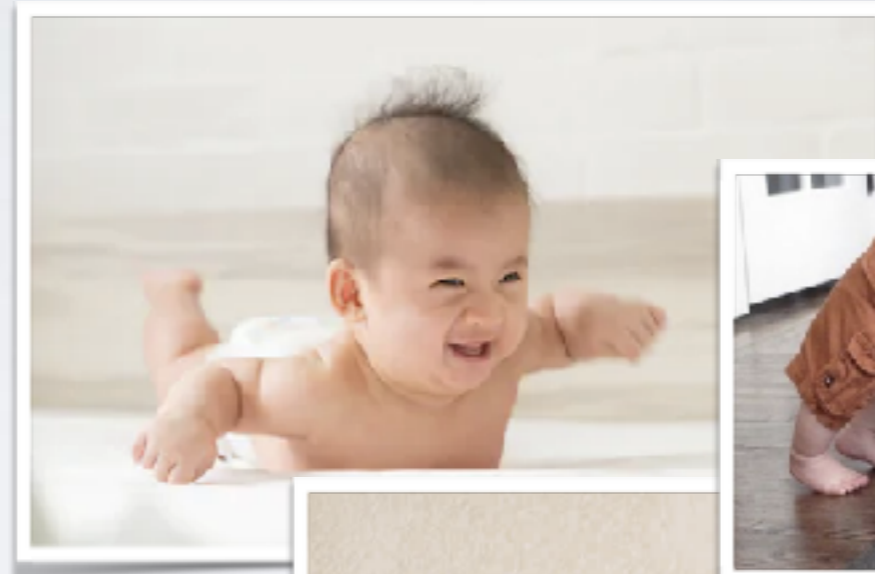
CRAWLING PREP

MINI MILESTONES

- Swimming
- Prone pivoting
- Planking/Downward dogging
- Rocking forward and back and side to side on hands and knees

TIPS AND TRICKS

- Play in the hands and knees position over your leg
- Play with toys that roll away, like balls and cars



BABY GEAR?





PLAGIOCEPHALY AND TORTICOLLIS

TIPS TO PREVENT FLAT SPOTS AND TORTICOLLIS



1. BACK TO SLEEP, TUMMY TO PLAY!

- Start tummy time from day 1 and make it fun! Tummy time on caregiver's chest is a cozy place to start
- Strength gained in this position is the foundation for all motor skills
- Place baby on tummy every time she wakes
- Aim for at least 3 times per day. Start with 5 min and gradually increase

2. ENCOURAGE BABY TO TURN BOTH WAYS

- Alternate holding baby on your right and left while breast/bottle feeding and while carrying
- Put interesting toys on both sides while playing
- Alternate baby's direction of position in crib and on changing mat



3. HELP BABY FIND THE MIDLINE

- Play, make eye contact, and sing with baby in your lap facing you
- For babies that are eating solids, position high chair directly facing you while spoon feeding
- Encourage head and body in midline using tightly rolled thin blankets or washcloth towels while in the car seat or stroller if baby needs more support

4. LIMIT TIME IN BABY "HOLDERS"

- Prolonged time (10+ min) in infant swings, reclined seats, and rockers increase pressure on the back of the head and can make flat spots and rotated head position worse
- Take baby out of infant car seat when you're out of the car
- Set up a safe area on the floor as the first choice for playtime for free movement and exploration



SENSORY AND MOTOR RED FLAGS

- Persistent difficulty with feeding, swallowing
- Overly sensitive (or very insensitive) to stimuli like loud noises, textures, pain, temperature, light, smells
- Difficulty lifting head, pushes head back forcefully
- Stiff legs, very little movement
- Keeps hands fisted, stiff arms, very little movement
- Uses only one side of the body to move, strong hand preference
- Turns head or tilts to only one side, neck tightness, lump in neck muscles
- Flat spot on back or one side of the head
- Loss of skills

CHILD DEVELOPMENT PROFESSIONALS

PHYSICAL THERAPISTS

Help kids reach independence and maximize participation by working on strength, flexibility, range of motion, posture, balance, coordination, and movement patterns



OCCUPATIONAL THERAPISTS

Work on daily life skills, such as handwriting, dressing, eating, taking part in social activities, and sensory integration

SPEECH LANGUAGE PATHOLOGISTS

Help improve communication tools (both verbal and non-verbal) and to tolerate sensory stimulation, executive function skills, feeding and swallowing



SUMMARY

- Sensory and motor development support one another and fuel cognition, learning, social emotional and communication skills
- Free movement and tummy time is the building block for all motor skills, and can help prevent and improve plagiocephaly and torticollis

SUMMARY

- Play is essential for development and well-being
- Play ideas to support rolling, sitting, and crawling
- Tips to prevent plagiocephaly and torticollis
- Red flags in development: don't just "wait and see!"
Check in with a pediatrician or specialist.

REFERENCES

Motor Milestones from Standardized Assessments

Hawaii Early Learning Infant Profile

Alberta Infant Motor Scale

Peabody Developmental Motor Scales, Second Edition

Additional online resources

Pathways <https://Pathways.org>

CanChild <https://CanChild.ca>

American Academy of Pediatrics <https://Healthychildren.org>

Zero To Three <https://Zerothreeto.org>

Your Kids Table www.yourkidstable.com

Can Do Kiddo www.CanDoKiddo.com

The Inspired Treehouse <https://theinspiredtreehouse.com/>

CDC's Developmental Milestones <https://www.cdc.gov/>



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therapy

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theworkspaceforchildren
inspiremyplay
my.strong.little.body
busytoddler

QUESTIONS AND DISCUSSION