



# Help Your Child's Brain Develop at its Best

Our brain is absolutely amazing! It controls every single thing we will ever do. It enables us to think, learn, create and feel emotions, and it controls all of our body's functions -- including every blink, breath and heartbeat! We may not know the details of what's going on inside our head, but here's something important to know: brain scientists have made some important findings about the brain, and they have discovered that there are things we can do to get our brain working at its best -- at any age.

In Dr. John Medina's book, *Brain Rules for Baby*, he connects what scientists know about how a child's brain develops --and what parents can do to make sure it develops at its best. He presents practical advice for raising smart, happy children based on brain science, including the following:

- Ensure your child feels safe; the brain needs to feel safe in order to learn.
- Pay attention to your child's intense emotions; how parents respond to their child's emotions matter in helping the child learn self-control.
- Teach your child the skills needed to make friends (empathy is one of these skills); the greatest predictor of happiness is having friends.

This information is in line with over 30 years of scientific research that has shown that early brain development is directly influenced by children's day-to-day interactions with their parents/primary caregivers. These early interactions, such as talking to a baby, being responsive to her needs, rocking and singing to her, sets the stage for future brain functioning.

In this newsletter, we will discuss Dr. Medina's



parenting advice in greater detail, and highlight some of his practical tips for each age level -- infants, toddlers and preschoolers. We will also present ideas for activities that will build the brain of children, as well as adults.

# This newsletter includes:

- Age-specific information and suggestions about activities to do with your infant, toddler, or preschooler,
- Featured activities for each age group,
- How This Helps: a summary of your child's development by doing these activities together,
- Resources: for more information about this topic, and
- Suggested Books: a list of books to read with your child.



# **Infants**

For an infant, good brain development begins with feeling safe. According to Dr. Medina, our brain seeks safety above all else. When a baby feels safe, loved and nurtured, and has formed a strong attachment with a responsive adult, the neural pathways in her brain are strengthened and a solid foundation for all future learning is built. On the other hand, a baby who feels unsafe or threatened, may experience weakened brain growth which negatively impacts her ability to learn.

Here are some things you can do to help your baby feel safe and lay the foundation for a healthy brain:

- Meet her needs; respond timely, especially to messages of distress
- Bond with your baby and spend close and large amounts of time together
- Use gentle and caring touches; try massaging your baby



- Hold baby close so she can see your face; make frequent eye contact
- Respond to her vocalizations, gestures and facial expressions; when baby coos, babbles or makes other vocalizations, do it back.

# Activity for Infants: Let's Dance!

Adapted from: GymbaROO Active Baby Smart Kids

What You Need:

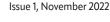
Any type of music/song to dance to

What to Do:

- 1. Hold your baby gently and securely against your body. If your baby does not yet have adequate neck muscles to lift her own head, support the head in all dances.
- 2. How you hold your baby will depend on their level of muscle tone. You can hold your baby in the tummy time position, facing toward you, facing away from you, etc.
- 3. If your baby is facing toward you, look directly in her eyes as you talk, dance and sing.
- 4. Pat your baby to the beat of the song, or walk around keeping beat.
- 5. Try slow and fast movements. Freeze dancing is always fun: dance to the music then stop and freeze when the music stops.
- 6. Be careful not to overstimulate the brain by spinning or dancing too fast or for too long. Be guided by your baby and her reactions.
- 7. Enjoy this special time together! Dancing with your baby helps to calm her, helps her feel secure, is a wonderful bonding activity, and stimulates almost every area of your baby's brain -- encouraging the growth of vital neurotransmitters. For an adult's brain, the benefits of dancing are equally significant, including an increase in cognitive abilities

(See page 5 for information on how doing these kinds of activities with your child helps her development and school readiness.)











# **Toddlers**

Toddlers demonstrate a growing drive for independence, but their brain's capacity to regulate their behavior and emotions continues to develop. Young children may not be aware of the emotions they are experiencing and how to communicate them. They need guidance, and the best way parents and caregivers can provide this guidance is by building a caring relationship with their child and by responding to and acknowledging their emotions (without judging). According to Dr. Medina, how parents and caregivers deal with their toddler's intense emotions is a huge factor in that child's brain development, and ultimately, how happy that child will be as an adult.

Here are some things you can do to help your toddler regulate her emotions and shape her brain's social and emotional future:

 Acknowledge/verbalize her feelings and emotions (e.g., "You seem angry.") By simply verbalizing this, it has a soothing effect on the nervous system.



- Help her make sense of what she may be experiencing by making a guess as to where it came from (e.g., "I think I know why you might be angry. You are angry because you can't get that square block into the round hole.")
- Avoid downplaying her feelings/emotions or explaining why she shouldn't feel that way.

# **Activity for Toddlers: Feeling Dice Game!**

What You Need:

Cube-shaped container (e.g., a facial tissue box or shipping box)
Paper (any type -- to cover the cube-shaped container)
Faces depicting different emotions (Drawings, photographs, or cutouts from magazines)
Tape or glue



#### What to Do:

- 1. Cover the cube-shaped container with paper. Use tape or glue to secure the paper onto the cube.
- 2. Glue a face depicting a different emotion to each side of the cube.
- 3. Now you're ready to play the "feeling dice" game with your child! Start by having your child roll the dice.
- 4. When the dice lands, ask your child to identify the feeling (or label it for her).
- 5. Ask her to describe a time when she felt that way. She may need help from you to recall a time.
- 6. Now it's your turn to roll the dice, identify the feeling, and tell her about a time you felt that way.
- 7. This game is helpful for adults too: games are a great way to build up your brain muscle

(See page 5 for information on how doing these kinds of activities with your child helps her development and school readiness.)

3







# **Preschoolers**

Our brains have a deep need for human relationships. According to Dr. Medina, just as a baby is born eager to connect with her family, our brains are prewired to relate to others. After 75 years of research on what makes people happy, the Harvard Study of Adult Development found that having friends was the number one predictor of happiness. It is important to be aware of two crucial skills that brain science has identified as most likely to predict how socially competent a child will be: 1) the ability to regulate one's emotions (the ability to demonstrate self-control especially when experiencing intense emotions such as anger, and 2) **being empathetic** (the ability to imagine how someone else is feeling in a particular situation and respond with care). The more empathy your child experiences, the more socially competent she'll become, and the happier she'll be. According to Dr. Medina, if 30% of your interactions are empathetic, you'll raise a happy child.

Here are some things you can do to help your child gain skills in empathy:



- Empathize with your child. When she displays those intense emotions, the first thing you should do is describe the emotion you think you see (e.g., "You're clenching your fists, you stomped your feet, you seem angry.") Remember, understanding someone's behavior is not the same thing as agreeing with it.
- Let your child hear and see you being empathetic with others. For example, "I just got off the phone with grandma and she is feeling sad; I think I know why. She misses grandpa. Missing someone hurts. I'm going to visit her now and take her some flowers. I think that might cheer her up. Would you like to come with me?"

# **Activity for Preschoolers:** Foot Rub!

What You Need: Lotion (optional)

## What to Do:

- 1. Ensure your child is sitting or lying comfortably.
- 2. Take one foot and gently rotate it a few times in each direction as you support the foot at the heel. Gently flex the foot backwards and forwards.
- 3. On the sole of the foot, use a thumb over thumb motion to massage from heel to toe. You can also use your thumb to trace circles over the bottom of the foot.
- 4. Apply gentle pressure to the heel and the tendon in the ankle of the foot. Continue to support as you squeeze and knead along the base of the foot.
- 5. Apply gentle pressure to the area under each toe. To finish off, grab each toe between your thumb and forefinger and gently pull until your fingers slip off the end. Do this for all 5 toes.
- 6. Repeat the process on the other foot.
- 7. If your child wants to, let her give you a foot rub, too! Comment on how nice it feels.

(See page 5 for information on how doing these kinds of activities with your child helps her development and school readiness.)





# **How This Helps**

The activities suggested in this newsletter help promote many different aspects of development:

## **Physical Development**

- Learn through her senses (touching, hearing, seeing and smelling)
- Learn to use her body with intention

## **Social and Emotional Development**

- Develop a close bond with you; build trust with you
- Feel important and good about herself

# **Language and Literacy Development**

- Increase her observation, listening and understanding skills and her attention span
- Connect words and sounds she hears with what she experiences



# **Cognitive Development**

- Develop her curiosity about how things work
- Begin to explore distance and space

# Kids in the Kitchen

Cooking teaches valuable lessons such as math (quantities, measurement), science (how matter changes), fine motor (stirring, pouring), and literacy (print awareness). As you make this recipe with your child, talk about kitchen safety. Show her how to handle items safely and allow her to do as much as she is capable of. Praise her efforts, and ask questions throughout the process to encourage her thinking skills. Most of all, have fun!

## **Gratitude Cookies**

Adapted from Focus on the Family Clubhouse Jr https://www.focusonthefamily.com/clubhouse-jr/recipes/crispy-hearts/ Ingredients:

2/3 cup nut butter

1/3 cup honey

1 teaspoon vanilla

3 cups crispy rice cereal

Heart-shaped cookie cutter

#### Directions:

- 1. Stir together nut butter, honey and vanilla in a large mixing bowl.
- 2. Add crispy rice cereal and stir until evenly coated.
- 3. Smoosh mixture into heart-shaped cookie cutter. Place cookie on waxed paper or parchment paper. Repeat until mixture is gone.
- 4. Refrigerate cookies for 1 hour until firm.
- 5. Enjoy and share them with others. It's a sweet way for children to show thanks







# Resources

## Brain Rules for Baby by Dr. John Medina

In this book, Dr. John Medina shares what the latest science says about how to raise smart and happy children from zero to five. Dr Medina has also put together some short video tutorials for parents which can be easily accessed here: https://brainrules.net/brain-rules-for-baby-video/

# Zero to Five by Tracy Cutchlow

In this book, Tracy Cutchlow, the editor of *Brain Rules for Baby*, shares friendly and practical, tried-and-true research and 70 essential parenting tips based on science.



# **Suggested Books**

Discover these books and more at the Hawai'i State Public Library www.librarieshawaii.org.

## **Infants and Toddlers**

## Clap Hands by Helen Oxenbury

Infants and toddlers will love this short simple fun board book that features babies at play --clapping, dancing and spinning, eating and waving.

## Owl Babies by Martin Waddel

Three baby owls awake one night to find their mother gone, wonder where she is, and begin to worry. Joyous flapping, dancing and bouncing greet their mother's return. A tender tale to remind the youngest of children that Mommy comes back.

#### **Preschoolers**

#### **My Magic Breath** by Nick Ortner

This beautiful picture book will help children discover calm through the magic of mindful breathing. It is a great story to help children process the emotions they may have felt throughout the day and help prepare them for bedtime.

## I'll Always Love You by Hans Wilhelm

Elfie is the best dog anyone could ever ask for. Every day she and her owner play together and every night her owner tells her "I'll always love you." Elfie grows older and one day her owner has to say goodbye to her. This tender story is a perfect way to make the topic of loss a little less scary for kids, and also teach empathy.



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