Archives

All About Feet

By Mary Ellen Langdon, PT

A baby typically starts to notice his/her feet around 5 months of age. At this time the feet can become a frequent source of entertainment with pulling off socks, putting the feet in the mouth, or just grabbing at the toes. This is a wonderful way for the baby to stretch toe flexor muscles and hamstring muscles. It is also an excellent source of sensory integration and sensory awareness ("Hey, these things are attached?"). It is always fun to introduce this activity, even at and older age if for some reason it was not learned.

Between the ages of 9 to 11 months our feet begin to learn about standing (and falling). Physical therapists like to refer to this as the weight bearing stage and this is when both the small and larger muscles of the feet begin to "wake up" and work together. Weight bearing through the feet can be introduced by many activities. They can include: assisted standing in an adult's lap, standing at furniture, pulling to stand, walking around furniture (cruising), standing in exer saucer, and bench sitting.

As a child is learning to stand and doing more assisted walking, parents often have questions about the child's ankles rolling in or the feet turning inward/outward. Sometimes these "atypical postures or movements" occur due to muscle weakness at the trunk or hips. Activities to strengthen the hips or tummy muscles can change the foot or leg posture. Also as a child improves their independent walking, foot posture can correct itself. So often at this learning to walk stage it's common to wait and see what occurs at the feet. Strengthening activities to consider while your child is developing his/her walking skills are: assisted stair climbing, seated push toys, assisted walking backwards, walking on curbs or balance beams, and walking on different surfaces (grass, sand, mulch, or ramps).

Light weight shoes with good arch support may also help give your child's feet added support and stability in the learning to walk stage.

Toe Walking: Reasons & Treatments

By Carolyn Priem, PT

Your child's first smile. Your child's first word. Your child's first crawl. These milestones are an exciting time for baby and family and are eagerly awaited. However, as a Physical Therapist, the one milestone that parents most seem to anticipate most is that skill of walking. Many times I am asked ***"when will my child walk?"*** While there is a range of "normal" for when each individual child will take those first independent steps, once they do, the next question I typically get is "why is my child walking on his/her toes?"

Toe walking in children under the age of 3 is quite common. We typically see this happening when a child first learns to cruise along the furniture. They may stand still with their feet flat against the floor, but as they move down the couch, they come up onto their toes. Some children, when they are able to be independent walkers and leave the support of the furniture will come in and out of toe walking. Many times this is do to a child accidentally experimenting with a newfound position, i.e. "this feels different when I do this to

my body" and they continue with this "habit" for a period of time.

As mentioned previously, toe walking can be common in children under 3 but sometimes, especially in children over 5, toe walking can be the result of something more. The following are some of the more common causes of toe walking in children:

1.) Idiopathic Toe Walking: This is when the toe walking is happening for no specific or explainable reason. This can often be very frustrating to the parents if their child is doing this just "because". **Treatment:** Generally what can be helpful is to give gentle reminders for the child to "walk with flat feet" or "heel first" (depending on child's cognitive level) and give praise when they do it. Like other "quirky" habits kids do just because, this one will also work it way out if there is not an underlying cause for the toe walking.

2.) A shortened Achilles' tendon: The Achilles' tendon is what attaches the calf muscle to the heel bone. If this muscle is too tight or short, it is difficult for the child to be able to lift his or her toes up in order for the heel to come into contact with the ground when the child is walking. In order to compensate for this shortened muscle, the child will walk on their toes as this is how they can achieve contact with the floor. **Treatment**: Physical therapy to show stretches that can effectively stretch out the calf muscle and the Achilles' tendon. If the muscle shortening is significant enough, sometimes serial casting is used. This requires wearing a cast in order to stretch out the muscle and as new range of motion is gained a new cast if fitted to the child's leg. The cast is typically applied every 2 weeks and the treatment may last as long as 6 to 8 weeks.

3.) Muscle Spasticity: Neurological disorders like Cerebral Palsy or Muscular Dystrophy can cause muscles to be "over active" or spastic. If the calf muscles are in this over active state, they can cause the toes of the foot to remain in a downward position (contracture) thereby making it difficult to place the heel of the foot on the ground. **Treatment:** Stretching, casting and sometimes surgical intervention is necessary depending on the severity of the contracture.

4.) Vestibular System Dysfunction: A child's vestibular system is what is responsible for giving their brain information or "feedback" regarding their body's motion and position in space. In children with this dysfunction, it would be important to provide the child's vestibular system with appropriate stimulation. This can be a common problem in children with autism. **Treatment:** Therapy to provide the child with therapeutic vestibular stimulation such as swinging or being pushed or pulled on a scooter board.

As always, it is important to remember that each child reaches milestones and develops at his or her own pace with varying degrees of uniqueness to their style of walking. Remember, up until the age of 3 toe walking is common, but if it persists after 3, you may consider talking to your child's pediatrician regarding possible causes.

Why is it Important to Move?

By Andi Larsen MS, OTR/L, CEIS

We read it in the magazines and hear it on TV; moving reduces stress, it keeps your brain sharp and saves your heart. These benefits are good for us and our children. But there is more: our vestibular system with receptors in the inner ear helps us

detect movement to let us know where we are in space, if we are moving and how fast we are going. The receptors also respond to head position and gravity. When we move we stimulate the vestibular system which helps our eyes and head to co-ordinate as we scan pictures in a book; develops and maintains normal muscle tone which helps us hold different positions and keeps us upright; helps us balance as we walk, kick a ball or climb stairs; and helps us co-ordinate the two sides of our body as in pedaling a tricycle. Movement and the vestibular system are important to our ability to do so many things in life.

Here are some ideas to get us and our children moving:

Outside

1. Go to a playground and swing, slide, hang and climb.

2. Swing on your belly

3. Go sledding. Encourage your child to walk back up the hill

4. Make snow angels in the snow

Inside

1. Play together on the floor, pull back and forth and sing “Row The Boat”

2. Gently bounce your child on your lap or knee. Sing a song or say a rhyme.

3. Swing your child in a blanket.

4. Slide back and forth in a laundry basket.

5. Encourage your child to lie on the floor while holding their head up to color, do puzzles or throw bean bags at a target.

6. Encourage bilateral activities such as jumping, swimming, wheelbarrow walking, creeping through a tunnel, hand over hand pulling on a rope.

Feeding Your Young Child: The Introduction of Solid Foods

By Beth Magnuson, OTR

Many parents are inundated with information about feeding their infants and toddlers. Cultural influences, conflicting advice from grandparents, pediatricians and the other mothers in the neighborhood, as well as differences in individual children's developmental skills, may all lead parents in different directions. Add the information available via the internet, and advertising from the baby food companies, and it's no wonder that many are confused.

When to introduce solid foods is a question that stresses many parents. Breast milk or formula does provide the bulk of needed nutrition for an infant up to one year of age. However, the oral motor skills for handling the transition to table foods are developing in most infants well before that time. Some children are ready to start on cereals, fruit and vegetables at four months. Others won't be ready until later. Issues of illness, developmental delays, sensory sensitivities, family history of food allergies all compound the decision. Every child's individual medical issues and growth and development are unique, and specific questions should be routed to your pediatrician. Many early intervention programs in Massachusetts have nutritionists available to assist those families with children with complicated issues. However, there are some readiness cues that typically help parents decide the right time to introduce solid foods. Physical cues include sitting without much support, and putting hands and toys into the mouth frequently. The child that is able to hold their head up with a straight back when supported on an adult's lap is not going to have to expend energy and concentration on controlling the head and trunk when sitting in a well-fitting high chair. (If your child has a physical disability that prevents this control, talk with your child's physical or occupational therapist about supported seating that provides the needed support.) Likewise, the child that puts hands and toys into their mouth is developing an acceptance of the sensory input entailed in eating. You can help a child with physical disabilities get their hands or toys to their mouth, and look for

the response to the sensory input.

For the sake of space, this article won't go into what foods to first offer - see your pediatrician for that. You do want to introduce one food at a time, so that issues of intolerance or allergic reactions can be more easily determined. However, don't think that tastes of new foods have to be given by a spoon, it can also come from small tastes from your finger, or the baby's pacifier. This may be especially helpful for babies who are more sensitive or have difficulty learning new movements. If your baby doesn't enjoy the new eating experience or more food seems to come out than goes in, it's okay to put the food away and try again in a week. There is a wide variation of readiness for first foods, and your respect of your baby's cues will help start you off on a positive note!

For further information, look for:

- Child of Mine - Feeding with Love and Good Sense, or
- How to Get Your Child to Eat… but Not Too Much, both by Ellen Satter, RD

Or on the Internet:

- Ask the Dietician www.dietician.com (click on infants or toddler issues)
- Medline Plus from the National Library of Medicine www.nlm.gov/medlineplus
- For children with disabilities or specialty issues: New Vision has a nice site:
- www.new-vis.com (click on Feed Your Mind for some great articles - "Guidelines for Success - Enhancing Infant Readiness for Supplemental Foods" is a favorite of mine)

Nurture a Love for Books in Young Children

By Melanie Shipon, MEd - Two by Two Coordinator

There are so many conflicting opinions among parenting experts that libraries and book stores are filled with shelf after shelf of books. One opinion is not disputed, however, and that is the importance of reading aloud to very young children. In fact, both reading and early childhood specialists agree that reading aloud is the single most important thing that a parent can do to assure future success in reading. It provides a model for language development, teaches new vocabulary, and expands a child's

knowledge of the world. Most importantly, however, is the understanding that reading is fun and worthwhile, especially when shared in the lap of a special person. Here are some ways to nurture a love for books in young children.

- Begin with nursery rhymes, folklore-such as "This Little Piggy Went to Market".
- Choose books with large, clear and realistic pictures and short, simple text. Heavy board books are ideal for toddlers to "read" alone.
- Establish a regular reading time, and be persistent-without forcing the issue. If the child is squirming, just talk about the pictures without actually reading the text. Be brief and listen to the child's cues.
- Toddlers particularly love repetition, often choosing the same book over and over. Children are comforted by and learn best through repetition.
- Set a good example. Children of readers are more likely to be readers also.
- Make regular visits to the local library; many have toddler story times and other age appropriate programs.
- Put "life" into reading with your voice. Young children love different voices for different characters.

The earlier you start reading to a child, the easier it is to acclimate the child to the sound of the reading voice and the idea that reading books is pleasurable. So… PICK OUT A GOOD BOOK AND START READING WITH YOUR FAMILY!

Tips for Promoting Backpack Safety

By: Courtney Porter, OTR/L

- A child's backpack should not weigh more than 15% of his/her body weight

- The best type of backpack to avoid injury is one on wheels. However, some schools do not allow these.
  (PCCD does permit wheels on backpacks)

- Make sure your child packs only necessities for the school day. Eliminate unnecessary items, i.e. toys from home, favorite books

- When loading items into the bag, place the heaviest items on the side that is closest to the child's back

- Choose backpacks that have 2 well padded shoulder straps. Make sure your child wears both straps. Adjust the straps so that the bag is snug and not hanging loosely. The bottom of the backpack should lie against the curve of the lower back. Backpack with waist and chest straps are also great to evenly distribute the bag's weight

- Keep in mind the size of the backpack in relation to the size of your child. Backpacks come in many sizes

~ Adopted from The American Occupational Therapy Association, Inc. "Lighten Up! Pack it Light, Wear it Right" campaign

Guidelines for Choosing Shoes for your Young Walker

By Mary Ellen Langdon, PT

As we all know it's easier and more pleasant to walk in comfortable shoes. We just don't seem to walk with the same ease when the shoes are too big, too heavy, or just uncomfortable. Occasionally we find a pair of shoes that we simply love because they make the feet go "aaah."

It's hard to figure this out with your infant or toddler, whose walking is new or still evolving. Here are some tips to guide you when choosing shoes for your young walker.

- Look for shoes/sneakers with arch support. Not all shoes have this. It does create more support and comfort to the whole foot.

- When choosing a child's shoe/sneaker, place it in your hand to feel its weight. Is it heavy or light? Many of the new styles are heavier and

it's hard to judge this by sight. Heavier shoes are harder to walk in. Lighter shoes are more comfortable.

- Choose shoes/sneakers that fit correctly. Even though children grow out of shoes so quickly, it's best to buy the correct size, and not a size or two bigger. An incorrect size changes the way a person walks (adult or child).

- Shoes/sneakers that add ankle support (high tops) aren't necessary for all beginner walkers. It's best to talk with your pediatrician and/or motor therapist about whether your child may benefit from high top shoes.

- Lastly, there always seems to be some debate about bare feet versus shoes (for beginner walkers). Infants can benefit from both. Shoes add extra stability and support; bare feet allow strengthening of all the muscles in the toes and foot.

Create Teaching Tools Out of Household Items

By Julia Strumpfler OTR/L

I once attended a class titled "Occupational Therapy and Physical Therapy on a Shoe String Budget." The class was about making equipment and tools to use at the home visit as well as adaptive switches.

The speaker was a master at using everyday items for unexpected uses such as; decorating a new flyswatter and hitting balloons and bubbles with it. The common sheet can be used as a parachute, by drawing hands on it the child will have a visual for where to put his hands for wheel barrel walking, and as the child crawls on the sheet the home visitor gently pulls the sheet to work on balance and strength. And of course using it for bear hugs.

The course had several ideas for clothing use such as; making a boppy pillow out of sweatpants. Sew up the waist and stuff the legs and then sew up the ankles, the size of the pillow will depend on the size of the pants. Another idea for clothing use is a t-shirt rice bag. To begin sew the bottom of a tee-shirt, fill with rice and

then sew the neck, when the child plays with the rice he will place his arms through the sleeves, NO MESS and LOTS OF FUN.

There were several ideas for fine motor skills. One idea was playing with cloth pins, place them on a yardstick to take on and off, or put them around the home to find like a scavenger hunt. Sewing cards were another idea to make from sheets of Foamies. Punch holes around the edge of a sheet of Foamie. To make "buttons" cut the pieces into smaller sizes and punch only one hole in the center, you can also use a yogurt lid. Another fine motor idea was "feed the tennis ball" start by collecting milk container lids then cut a tennis ball "mouth" to the right size.

With all of these ideas my head starts to swim. I think as I am going through the stores "um, this would be good for…" Of course with everything there are guidelines to consider when using everyday items. You must be DILIGENT about the SAFTY of the items, watch out for wear and tear and ask your self "is this item less expensive than buying it commercially?"

I love looking around my home and stores thinking about how I can use unexpected objects when I am at my home visits. I must admit that a majority of the ideas suite the children closer to 3 years old. I enjoyed the lecture this fall and I think that helped me think more creatively when I am at a home visit.

Here are some websites that the course had listed:

1. www.freecycle.org
2. www.crayola.com
3. www.theideabox.com
4. www.funschool.com

Infant/Toddler Sleep – A Family Perspective

By Betsy Hazen, LCSW, CEIS

Who among us knew that when we brought our infants home as newborns that they might have to actually be taught to sleep in ways that are healthful for both baby and family alike? Don't all babies just sleep the way they are "supposed to", and as they grow into toddlers, don't they automatically adjust their sleep habits to meet their needs (and those of their caregivers)?

Apparently not! According to research on what is referred to as "sleep hygiene", up to 30% of toddlers have sleep issues … which means that at least 30% of families with children under 3 years old have sleep issues as well. (Remember that if your family does not perceive or experience your young child's sleeping difficulties as a problem, then there is no problem!). The following article gives an overview of what is generally considered to be "typical" sleep for infants/toddlers, then delves into some common themes associated with sleep problems, along with general strategies to address them. A few good resources for more information on these topics are listed at the end. This brief article does not address the many medical issues experienced by young children (such as apnea, asthma,

medications, certain diagnoses, etc.) which can definitely affect sleep; always check with the doctor if you have any medical concerns for your child.

"Typical" sleep for infants (under 1 year old) averages 9 – 12 hours nightly, with 1 – 4 naps daily which last from 30 minutes to 2 hours each … (note the broad definition of "typical" here!). Developmental issues which can affect infant sleep range from motor and sensory processing skills, to attachment and separation abilities. The self-soothing and sleep association skills that an infant develops early on can positively or negatively affect her sleep hygiene. The best strategy for helping your infant learn to sleep is to put her to bed drowsy, but awake. "Typical" sleep amounts for toddlers (between the ages of 1 and 3) total 12 – 13 hours within a 24 hour period, including 1 – 2 naps. Again, the range of "typical" is broad. Routines and use of transitional objects are of developmental importance for your toddler's sleep hygiene.

Three areas of sleep problems in infants/toddlers are of note here. The first area has to do with sleep onset problems (your infant/toddler learns to fall asleep under certain conditions at bed-time, then when the typical nighttime arousals take place several times a night, the child can't soothe herself back to sleep because conditions are different; the result is several nighttime awakenings). Strategies for addressing sleep onset difficulties involve establishing a consistent, appropriate bedtime (especially at night); practice a few minutes, depending on your child's age, of soothing activities like reading with your child; put her to bed drowsy, but awake; use transitional objects such as a favorite stuffed animal or toy that your child can associate with bed; say goodnight. Do check on your child intermittently (be brief and boring), until your child figures out how to go to sleep on her own. Do note here also that the 2nd to 3rd nights of practicing this process are the worst in terms of crying, etc. as your child's behavior is going to change; it is easiest to accomplish these strategies if your child is still sleeping in a crib. CONSISTENCY is the keyword which underscores any family's work in helping their child to sleep.

Another area of infant/toddler sleep problems is related to Wake – Sleep Transitions. In these instances, the young child displays disorders of rhythmic movement, sometimes stereotypically repetitive, which involve large muscle groups and which precede the child's descent into sleep. Examples of these difficulties include body rocking, head rolling, or head banging. Upsetting as these movements are for families to observe, injury is rare; usually the young child's self soothing skills are simply immature. The onset of these Wake – Sleep Transition difficulties can begin as early as age 9 months; nearly 100% of the behaviors disappear by age 4.

Thirdly, many parents are confounded and frightened by their young child's "nightmares", which can often be confused with "night terrors", or "sleep terrors". Night terrors occur specifically in the first third of the child's nighttime sleep, and are characterized by the child sitting up and screaming, sometimes seemingly panicked; the child is disoriented to her location, does not respond to her parents, and may mumble incoherently. Attempts to wake a child from a night terror are futile and will increase her terror; the child has no memory of the event. Night terrors occur more often in males than females. The specific causes of sleep terrors in children are unknown, although neurological immaturity can be of relevance. Happily, most children outgrow these episodes by the time they enter school, and families' best strategies for dealing with these events are to ensure the child's safety at all times, limit frightening or anxiety-producing experiences in your child's life, and be reassured that your child's will eventually reduce the frequency and intensity of her sleep disturbances.

Please take note of the following resources, which can be helpful to all families with infants and toddlers who want to feel rested and enjoy life to the fullest. Pleasant dreams!

Resources:

Take Charge of Your Child's Sleep (by Mindell and Owens)

Solve Your Child's Sleep Problems (Ferber)

www.babycenter.com

Fun Ways to Help Your Child Develop Better Oral Motor Skills

By Andi Larsen, MS OTR/L

Our mouth has many jobs to do. We talk using our mouth with tongue, cheek, lip and breath action. We eat using our mouth incorporating teeth, taste and temperature as well. As babies we explore using the mouth to feel the temperature, texture, shape and size of objects. We use our mouths to make funny faces, give kisses and whistle. All of the movement from our mouth, tongue, lips and cheeks require strength and coordination. For most children, this happens automatically as they grow, develop and learn to eat and talk. For those children who need more practice in developing their oral motor skills, here are some fun activities.

Wake Up

Use a warm wash cloth to massage the cheeks and lips.

Use a cold wash cloth to alert the cheeks and lips.

Encourage the child to help.

Sing a catchy tune.

Blow

On hot food

Through paper towel rolls

Cotton balls with a straw

A pile of bubbles on the table

Pinwheels

Pretend candles on a cake

Whistles

Party horns

Feathers

Suck

Drink a smoothie through a straw

Lollipops

Popsicles

Whistles designed to suck in

Imitate

Use a mirror to make funny faces.

Take picture from a magazine and have child imitate face.

Put goldfish or cereal on tongue and move in all directions.

Do kisses, fishy face, lion growl.

Chew/Crunch (if child can manage these foods)

Bagels

Granola bar pieces

Raisins/craisins

Dried apple blocks

Cheese

Tings

Veggie sticks

Pretzels