



Pediatric Feeding and Dysphagia Newsletter

Dear Fellow Feeders:

Welcome to our last issue of this subscription year! Here we have an excerpt from The Reflux Book focusing on defining reflux, transition from sucking to cup drinking by Debra Beckman, and an article on picky eaters from a nutrition perspective. Included also is current research, a case, editorial, and web link we like.

It's time to reorder—please note the invoice to order is attached to the email. Prices have not gone up—the newsletter continues to be \$12/issue but I am asking that renewals be for 6 issues this time to allow for a change in 2010 that allows the start of the newsletter year to be in January. The academic calendar I've been working off of seems to be confusing.

I wanted to add that it has been so nice meeting many of you through my workshops. I love hearing from everyone so thanks for emailing.

Enjoy, Krisi Brackett (Write me: feedingnews@earthlink.net)

The Pediatric Feeding & Dysphagia Newsletter

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Special Points of Interest:

- ☉ Current information
- ☉ New products
- ☉ Research and publications
- ☉ Education

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An excerpt from The Reflux Book By Beth Pulsifer Anderson, "Defining Reflux"



A full description of reflux is 50% medicine and 50% careful wording. The simplest definition of reflux is backwashing of stomach contents into the esophagus. It is literally that simple.

Gastro	+	Esophageal	+	Reflux
(Stomach)		(Throat)		(Backwash)

But, the word *reflux* is a lot like the word *depression*. It is commonly used to describe something that can range from trivial and annoying to something that is very serious indeed. When somebody says they are depressed, they might be telling you they are upset over a temporary situation or they might be telling you that they have been hospitalized. The word depression covers a very broad spectrum. So does the word reflux.

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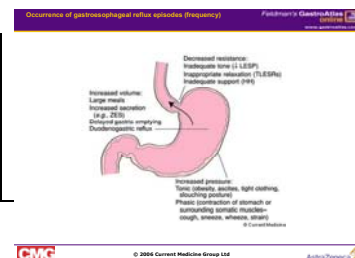
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An excerpt from The Reflux Book By Beth Pulsifer Anderson, “Defining Reflux”

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The real problem in describing reflux is that there are a million levels of reflux ranging from normal to life threatening. Somehow, I had to take those million variations and group them into useful categories. At the same time, I have to explain what reflux ISN'T. PLEASE, don't get too hung up on the way I divided reflux into three categories. They are not set in stone and they are not the only way to divide reflux. When I was asking doctors to help us come up with a definition, they all gave definitions that contradicted each other in subtle ways. And every attempt at revision provoked new discussions.

Some reviewers were 'lumpers' and wanted to divide reflux into two categories (disease and not disease). Others were 'splitters' who like more categories. Some call normal spit up 'Gastroesophageal Reflux' and some said, 'Don't use a medical sounding term for something that is normal.' Some doctors advised using clinical terms throughout the book and others advised using a more conversational tone and only using clinical terms occasionally. Some suggested giving you a list of every term you will see if you read medical journals and magazines. Others found the list too confusing or said to move terms to a different category – this is why you will see some overlap in the terminology table.

The categories I use are the best compromise I could come up with. They aren't perfect, but they are reasonably accurate and fairly easy to understand. Ask your doctors what categories they use.

There are many legitimate ways to describe the various levels of reflux. I chose to use these:

Reflux – The Normal Event

Reflux – The Condition/Illness

Reflux – The Disease

Reflux - The Normal Event

The simplest definition of reflux is the backwashing of stomach contents up into the esophagus and occasionally out of the mouth. In fact, the word reflux is just Latin for reverse flow.

But this isn't a disease - it is a normal process that happens on occasion to almost everybody after meals. Adults call it a "wet burp" and in babies, wet burps often come up all the way out of the mouth and become known as "spit up."

When babies spit up a lot, the parents often get quite worried even though the doctor will view the spitting as more of a laundry problem than a true medical problem. Rest assured that occasional episodes of reflux are very seldom cause for alarm. Even a bit of spitting up after every meal can be perfectly normal and harmless (at least to the baby). Doctors often refer to this as "physiologic" (normal) reflux.

If your child has this harmless level of reflux, you will not need to read the more technical parts of this book, but you may find that the feeding, diet and positioning ideas can help quite a bit.

The term 'normal reflux' or 'reflux events' will be used in this book when it is necessary to distinguish it from other levels of reflux.

Reflux - The Condition or Illness

Most people, including doctors, use the words *condition*, *illness* and *disease* to mean the same thing, but they aren't quite the same.

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An excerpt from The Reflux Book By Beth Pulsifer Anderson, “Defining Reflux”

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The medical definition of a *condition* is an excessive amount of what healthy bodies normally do. In this case, we are talking about an unusually large number of reflux episodes. A child who experiences an excessive number of reflux episodes may require a lot of extra work, but this is really a condition, not a disease. (Disease is covered in the next section.)

In medical lingo, an *illness* is when the patient or their family quite rightly believes there is a problem but it isn't serious enough for the doctors to call it a *disease*. A child who fusses a lot during feeding may be experiencing reflux that makes her parent know that something is wrong, but the doctor may not think the problem is severe enough to treat with medication.

It is quite natural to be worried when your child is doing something all day long that other children only do occasionally. Excessive reflux events or crying can be quite stressful on parents and the whole family.

The home care and coping strategies in this book may be quite useful for this level of reflux. If your child has this level of reflux, it is also important for you to really understand the condition well enough that you can help monitor your child carefully. Her symptoms will probably get better with time, but if the symptoms get worse, she may get a diagnosis of reflux disease, which is described next. Recognizing problems early can help reduce her suffering.

The term 'reflux the condition' will be used in this book when it is necessary to distinguish this level of reflux.

Reflux - The Disease

Doctors define gastroesophageal reflux *disease* (GERD), as *reflux episodes that cause some sort of measurable problem or consequence*. We are back to careful wording again because now we have to define the words *problem* and *consequence*. Defining *measurable* can also make it tricky.

It is hard for parents to believe that such a common medical problem doesn't have a more precise definition. In June 2001, The North American Society for Pediatric Gastroenterology and Nutrition released official “Guidelines for Evaluation and Treatment of Gastroesophageal Reflux in Infants and Children.” This groundbreaking document is the best attempt so far to gather all the knowledge into a single place and give doctors suggested courses of action to follow with their patients. The committee of doctors who wrote the Guidelines defined gastroesophageal reflux disease this way: *Gastroesophageal reflux disease (GERD) occurs when gastric contents reflux into the esophagus or oropharynx [mouth /throat/nose] and produce symptoms.*

The term 'reflux disease' will be used in this book when it is necessary to distinguish this level of reflux.

Squishy Terminology

A very simplistic definition of GERD is easy to understand. But, like the age-old problem of writing a definition for pornography, it can be very tricky to draw the line with words.



(Continued on page 4)

**An excerpt from The Reflux Book
By Beth Pulsifer Anderson, “Defining Reflux”**

Terms you MAY see used to describe Reflux The Normal Event	Terms you MAY see used to describe Reflux The Condition or Illness	Terms you MAY see used to describe Reflux The Disease
<ul style="list-style-type: none"> ✦ Physiologic reflux ✦ Garden variety reflux ✦ Spitting-up ✦ Brits call spitting-up possetting or spilling ✦ Wet burp ✦ Regurgitation ✦ Harmless reflux episodes ✦ Volume reflux of infancy ✦ Non-acid reflux events ✦ Happy spitter ✦ Gastroesophageal Reflux (GER without the word disease added) ✦ Emesis (this is actually a word for the stomach contents) 	<ul style="list-style-type: none"> ✦ A touch of reflux ✦ Wait and Watch reflux ✦ Mild reflux ✦ Excessive reflux events ✦ Gastroesophageal Reflux (GER) ✦ Excessive spitting-up <p>Dr. Sears says, “the Hurting Child”</p>	<ul style="list-style-type: none"> ✦ Gastroesophageal Reflux Disease ✦ GERD (often pronounced to rhyme with bird) ✦ Heartburn (Often used to mean the same as GERD, but it really just describes one particular symptom) ✦ Acid Reflux Disease (this term is often used but is only 99% accurate) ✦ Non-Erosive Reflux Disease (NERD) ✦ Laryngo- Pharyngeal Reflux (LPR)

In real life, reflux does not have neat little boxes with neat little labels that make it clear exactly which box your child fits into. There is a lot of room for argument over where to draw the line between reflux the event, reflux the condition/illness and reflux the disease. It may be hard to tell which box your baby belongs in.

If your baby has many reflux events and is gaining weight very slowly, do we call this reflux the condition/illness or reflux the disease? If your baby has many reflux events and has become uninterested in eating, do we call this GER or GERD? And do you call it disease when the number and frequency of episodes is clearly excessive but there is no measurable damage?

Here is a quote from Susan Orenstein, MD in “Pediatric Gastrointestinal Motility Disorders” (1994) about when to call it “reflux disease”:

Since reflux is present in normal individuals, a continuum from normal to diseased exists with respect to gastroesophageal reflux. We should not define reflux disease simply by the deviation from normal values of frequency of duration: we should demand that symptoms, harm, or disability must be produced to meet our definition of disease. This may be difficult to determine, however. Does the patient who has pain induced by acidification, but who does not have histologic esophagitis [damage to the esophagus] or esophageal dysmotility [another type of measurable damage], have reflux disease? If so, it may often be missed. Does the pa-

An excerpt from The Reflux Book By Beth Pulsifer Anderson, “Defining Reflux”

tient who has normal reflux frequency, but who occasionally aspirates refluxate [stomach contents enter the lungs], have reflux disease? Certainly, but this course of events is often extremely difficult to document.

Some people say that you call it disease (GERD) when the baby has *significant* problems and call it a condition when the baby only has *insignificant* problems from the reflux episodes. This is a great idea, but then we are back to defining more squishy words.

In reality, reflux *disease* should probably be called reflux *syndrome*. A syndrome is a medical problem with a whole bunch of different symptoms and each patient has different symptoms.

To order [The Reflux Book](http://www.refluxbook.com) go to www.refluxbook.com or send payment (\$20.00 plus \$5.00 shipping and handling) to Intensive Care Parenting, 5257 Buckeystown Pike, suite 308, Frederick, MD, 21704

Editorial: The Benefits of a Dry Spoon– A Starting Place by Krisi Brackett MS SLP/CCC

Many of the children we treat with “feeding problems” have varying degrees of food refusal. Refusing food looks different with each child but can include refusing all foods, accepting only a limited number of foods, accepting foods that are not age appropriate or even preferring only certain brands of foods.



Once the medical issues have been addressed and treated, how do we teach the child to accept foods? Nutritious foods? Including volume and variety of these foods?

A good place to start is a dry spoon. Using a dry spoon means a spoon without food. An infant size spoon (i.e., the maroon or hard plastic or rubber coated spoons) often works best. By taking away the component of food, which is often scary for the child, will allow you as the therapist to teach the child the basic oral motor requirements for taking the spoon.

More specifically: 1. The therapist presents the dry spoon saying “open”.

2. The child opens his mouth, accepts the entire spoon in with pressure to the tongue, lips close on the spoon, and then the spoon is pulled out.

3. Follow this with 20-30 seconds of a motivating reward.

Most children will realize quickly that there is nothing on the spoon, this is pretty easy, and they get to play after the task. Practice is essential and I have my families practice 2 –4 times per day with the dry spoon protocol until it is an automatic response from the child and they no longer fear the spoon. It is important to use a reward that the child is willing to work for! Once they have mastered taking the dry spoon, we can move our way through dips, bites, volume, pre-chewing skills and cup drinking utilizing the same structured protocol.

I have demonstrated this technique in my workshops on our demo patients and have been able to teach children with total spoon refusal to take a dry spoon in about 5 minutes in front a large group of people. We are basically breaking down spoon feeding into simple components where the child can have success!

Transition from Breast or Bottle Feeding to New Utensils: An Oral Motor Perspective

By: Debra A. Beckman, MS, CCC-SLP, SLP, Oral Motor Specialist

For many children with motor delays due to low muscle tone or cerebral palsy, the journey from breast or bottle to new utensils such as a cup or straw can be challenging. As your child begins attending preschool and then kindergarten, he or she will be expected to drink independently, as most day care and school staff will have limited time to assist children during snacks and lunch. Drinking enough during the day is very important for the health of all children. By working together with your therapist, you can help to make this journey toward independence easier for your child.

Why would using new drinking utensils be difficult? For most children, it is no problem. But children with oral motor impairment need to develop the muscle control needed to open the jaw, close the lips around the cup or straw, and control the lips, cheeks and tongue to draw the fluid into the mouth while breathing and swallowing.

Often, a child with mild oral motor impairment has steady but slow weight gain. Real problems do not emerge until time to transition to new food types and utensils. It is important to find the utensil that is easiest for your child to use for drinking as you and your therapist work to change the child's muscle control, so that your child will be able to drink from any utensil, or no utensil - for example - at the water fountain.

The easiest drinking utensil is a flexible straw in a closed container, a straw bottle (see illustration). While the care giver controls the amount of liquid coming into the mouth, your child needs to be able to do the following:



1. Lift the tongue to the roof of the mouth
2. Control the liquid as it comes into the mouth
3. Coordinate sucking, swallowing, breathing

To drink from a regular straw in an open container, like a cup, your child needs to have a bit more control:

1. Lip strength to maintain lip seal around the straw
2. Lip rounding
3. Negative pressure to pull the liquid into the mouth
4. Lift the tongue to the roof of the mouth
5. Control the liquid as it comes into the mouth
6. Coordinate sucking, swallowing, breathing

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Transition from Breast or Bottle Feeding to New Utensils: An Oral Motor Perspective

By: Debra A. Beckman, MS, CCC-SLP, SLP, Oral Motor Specialist

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To drink from a regular cup, your child needs even more control:

1. Head/neck control for extension/flexion
2. Internal jaw stability (strength)
3. Lip strength to maintain lip seal on the rim
4. Lip rounding
5. Negative pressure to pull the liquid into the mouth
6. Lift the tongue to the roof of the mouth
7. Control the liquid as it comes into the mouth
8. Coordinate sucking, swallowing, breathing

To improve your child's oral control, you and your therapist work together in therapy and outside of meal time using Beckman Oral Motor Interventions. As you and your child work together with your therapy team, day by day, your child can develop the muscle control needed to drink easily from anything, even from a water fountain.



When your child is ready to begin drinking from an open cup (not a sippy cup), it may be helpful to start out with a cut-out cup (see illustration). It is easy to make one out of a paper cup. Cut one side of the paper cup $\frac{1}{2}$ " lower than the other side so that as you tip the cup up, the cup does not hit the nose. This way, your child's head can stay level, as you present the liquid. If you sit behind your child, you can better support the child's head. Place the cup gently to his/her upper lip while waiting for the lower lip to seal around the cup. Tilt the cup so that the liquid touches the upper lip. This will usually cause the lower lip to lift up to the cup with the tongue staying inside the mouth, not sticking out under the cup. Never push or force the head back. This is dangerous and can cause choking. Practice this technique a little every day until your child is drinking several ounces. Next, encourage your little one to place his or her hands around the cup with yours and practice until there is enough of a comfort zone to permit complete independence. And there you have it, a successful developmental milestone accomplished!

More information about oral motor patterns and Beckman Oral Motor Assessment and Intervention is available on the web site www.beckmanoralmotor.com.

Contact Information: Beckman & Associates, Inc, 1211 Palmetto Avenue, Winter Park, FL 32789, 407-647-4740, info@beckmanoralmotor.com

The Picky Eater

by Kelly Dorfman, M.S., co-founder of DDR reprinted with permission from the DDR (developmental delay resource) website, www.devdelay.org, 800-497-0944

Developmental delays and picky eating frequently occur together. Generally, neither clever recipes nor attempts to hide healthy foods in "accepted" ones will correct poor intake. Better to determine the cause and correct the problem from the inside out.

Problem 1: Sensory Misreading in the Mouth or Poor Oral-Motor Skills

A child with tactile defensiveness often exhibits hypersensitivity in the mouth and/or craves oral stimulation, such as chewing on his clothes. Low muscle tone in the mouth and face often coexists with deeper oral-motor issues. Poor sucking, chewing and swallowing skills can cause gagging or terror merely being near food. Passing a medical swallow study does not guarantee that a child can chew and swallow consistently and has the stamina to consume an entire meal.

Possible Solutions for Problems in the Mouth

A speech or occupational therapist with oral-motor training can help. Teaching the child to use an electric toothbrush to massage (desensitize) the mouth or to drink from a straw can strengthen oral-motor skills and greatly reduce eating anxiety. Helpful books are Progress with Puppets and Out of the Mouths of Babes.

Problem 2: Nutritional Deficiency

Poor eating creates nutritional imbalances, which further reduce appetite or increase carbohydrate cravings. Deficiencies in zinc and Vitamin B-1 contribute to anorexia, but a specific nutrient deficiency need not be present. General malnutrition can contribute to disinterest in food, leading to further malnutrition, reducing appetite increasingly over time.

Possible Solutions for Nutritional Deficiencies

Children cannot be forced to eat the necessary diet to correct malnutrition. Once they become malnourished, diet alone may not correct the deficiencies, particularly if children have poor absorption or delivery of nutrients. Best to use nutrient supplements with moderate levels of a broad range of vitamins (C, E, and B-6) and minerals (magnesium, molybdenum, chromium and selenium) that are most deficient in a overly processed diet. Liquid nutrients are available for children who refuse chewables. Pills ground up in a mortar and pestle can be mixed with frozen grape juice concentrate, applesauce, strained pears, or, in desperate cases, chocolate syrup.

Problem 3: Weak Digestive Function

Children with a history of reflux, colic, frequent antibiotic use, allergies, diarrhea, constipation, and low tone, often have a digestive system that is immature, inflamed or inefficient. Most cases are subtle, with a heavy or sinking feeling accompanying eating. These youngsters are uncomfortable and tend to avoid eating, becoming high risk for malnutrition. They do not know how a happy tummy feels, from lack of comparison.

Possible Solutions for Weak Digestive Function

The Comprehensive Digestive Stool Analysis by Great Smokies Labs is one of several tests that evaluate subtle digestive issues. A physician must order these tests.

Another solution may be digestive tonics. A traditional remedy for weak digestion and internal inflammation is ginger "tea;" made by boiling peeled root slices, then cooled and served a few teaspoons at a time (possibly with honey for children older than one), several times per day.

Digestive enzymes in small amounts may increase appetite, but, if used in excess, can loosen stools or cause intestinal cramping. Digestive capacity diminishes as the day progresses, so, if trying enzymes, always start at dinner, the most problematic meal for poor digesters.

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Problem 4: Drug Side Effects

Stimulants such as Ritalin and Dexedrine decrease appetite. Antibiotics can also reduce appetite by increasing yeast overgrowth and damaging the intestine's lining. Yeast overgrowth can turn the intestines into a fermentation machine. When yeast digest sugars, the intestines bloat, sending either a "full" signal or a call for more carbohydrates.

Possible Solutions for Drug Side Effects

If stimulants severely affect the appetite, re-evaluate the side-effect/benefit ratio. Stimulants are controlled substances, and their use in a young child should yield huge benefits to justify the long-term costs (both known and unknown). If stimulants are deemed absolutely necessary, feed the child dinner foods for breakfast, because he will eat little while the drug is in the system. After school, when the medicine is breaking down, feed a second dinner, rather than snacks. Then at 7:00 pm, bring out the low-sugar cereal, toast and snacks.

Although picky eating can be interpreted as a behavioral issue and treated with behavioral modification, it frequently has nutritional causes. By playing detective, parents can determine "-which solution is right for an individual child.

The Picky Eater, Part 2

The first article on picky eating addressed biomedical and sensory reason for eating problems. Ruling out or treating these oral motor and digestive issues is always the top priority when trying to improve the diet. The next step is devising a workable plan that encourages better eating and downplays resistance.

Accidental Negative Reinforcement

Parenting a child who refuses to eat is distressing. Hours can be wasted on creative dishes that are spit out. Frustration with the child's rigidity leads to fruitless negotiations and bribes. When inducements fail, yelling is next. Yet this inordinate amount of focused attention "accidentally" reinforces the very conduct that needs changing. Children need attention and they will accept it whether it is positive or negative.

Eating behavior is tricky to address because even a child with severe developmental delays can refuse food. People like to have power over their environment. Children with sensory issues have a stronger need to control their surroundings in order to lessen their anxiety. In the hopes of avoiding angry scenes, sympathetic parents give up. Giving in also reinforces the stuck behavior by enabling poor eating.

Don't Force, Don't Give in

To encourage children to eat better, stick to your goals without forcing. Positive change happens when parents take charge of their own behavior. Because the child is closely linked to the parent, he must shift in response. Psychotherapists insist that you cannot change another person but you can affect the dynamics of the relationship by changing yourself.

Encouraging the Picky Eater

Step 1- Work on one food at a time. A new food everyday is overwhelming. Pick one item that would improve the diet. If a child already eats ice cream and milk, pudding is not qualitatively better. Consider fruits, vegetables or protein foods (like small pieces of chicken). These foods are often missing in the diets of fussy eaters.

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Choose a version of the food close in texture to other foods the child eats. Kids preferring soft creamy foods might handle applesauce or pureed chicken soup. For those drawn to crunch try peeled cucumbers or thinly sliced apple. Also consider foods the child liked in the past but no longer eats.

Step 2- Give your child a small “job”. Learning to eat well is a job. The child should be told ahead of time that their job is to learn to eat healthy foods like Elmo, Thomas the Tank Engine or some other figure they like. Their “job” is a doable task, such as taking one bite or in extreme cases, picking up the food. Encourage them to help you select the food by giving them several choices.

Step 3- Acknowledged only positive behavior. Most fussy eaters will say, “no”, when asked whether they want pears or baby carrots. If this happens say, “I see you need help choosing, so I will pick this time. You can choose next time.” The child can then see that lack of cooperation changes nothing.

Food appearing at dinner (a better time than the morning) is another opportunity for the child to see if resistance works. Keep discussion about the “job” to a minimum. If the task is accomplished, stay warm and connected. Act like you knew he could do it all along. If the child refuses or throws a fit, briefly make sure he is safe and walk away. Say you will return when he calms down.

If the job is unfinished, become unavailable for anything else the child wants until it is. Sadly, the TV and computer cannot be turned on. You would love to go to the park, as soon as the job is done. Do not threaten, “If only you would eat.....”. Instead utilize when; then. When you are finished eating, then we can read a story. If the child wanders around all evening without eating the food, simply comment that tomorrow you will be working on the job again.

Step 4- If you are losing your temper; take a time out. We want to teach children that cooperating works. This means staying calm, when they are frustrated and misbehaving. After a long day, this can be challenging. When you reach your limit, give yourself a time out. Forcing the child into time-out rewards bad conduct with increased interaction. Your child needs you to stay calm, so he can get calm.

By focusing on positive attempts at eating, youngsters learn to get attention by cooperating. With consistent application of this principle, even the most finicky eater can expand his palate.

Email Kelly at Kelly@kellydorfman.com

Web Links:

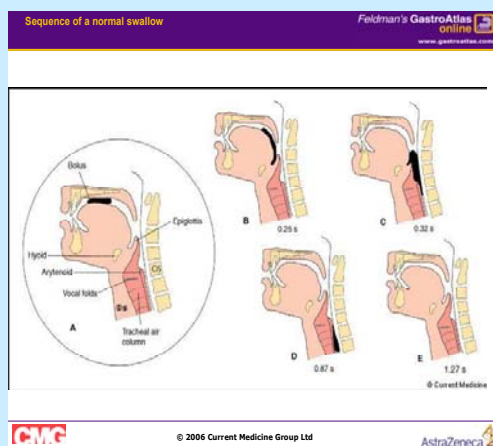
Dysphagia Listserv: This listserve is for professionals and focuses on topics and cases related to swallowing. Primarily an adult dysphagia forum, however includes pediatric discussion as well.

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To send a message:

dysphagia@cyberport.com



Case by Case..... Food refusal and acceptance using a structured behavioral program in the home



History: Dustin was 2 years, 3 months at the start of our treatment in early intervention. His diagnoses included: 30 week gestation, intrauterine growth retardation, g-tube for all nutrition, liver disease and inguinal hernia repair.

His gastrointestinal history included a long history of vomiting (birth – 2 years) and milk intolerance. He was NG fed from birth until 18 months at which time he received a g-tube. He had 2 normal bowel movements per day. He was currently on Prevacid and has been tried on Erythromycin, Reglan, and Periac-tin with no change. A ph probe and UGI in the past were normal.

He had been in oral motor sensory therapy for 1 ½ years with poor improvement.

Feeding: Dustin's feeding at the time consisted of bolus g-tube feeds of Neocate which appeared well tolerated. He was offered oral feeds (crunchy solids and milk throughout the day) which he chewed and then expelled onto a plate. He did not swallow any of his oral foods.

Treatment: Our treatment plan consisted of breaking down the components of oral feeding into steps where Dustin could have success. I asked his parents to stop giving him foods that he chewed and spit. In general, I like to reward or support behaviors we want and eliminate behaviors we don't like. I felt that he was "learning" to spit out all of his foods. However, his parents who had been struggling with his eating felt that despite his spitting of the food it was the only thing he did with food and were reluctant to stop the behavior. We agreed to limit it.

1. We first taught him to accept a dry or empty spoon for a reward (20-30 seconds of play). He was able to do this after one session but we had his parents practice daily for a week.

2. Next, we dipped the spoon in applesauce and asked him to take the dip spoon for a reward.

Over the next few months, we added more volume to the spoon so that Dustin learned to take a bite and swallow the puree. Then we added a variety of flavors.

Typically, I like parents to practice 2-4 times per day, however, because Dustin was in daycare his parents could only practice 1 -2 times. In about 6 months, he learned to take 6-8 ounces of purees at a session. He continued to spit foods out at daycare and at home. This continued until he turned 3 and our therapy ended.

My advice to his parents at discharge centered around the idea of practice. Dustin had proven that he could have success with the program. The only way to get him off of his feeding tube would be to allow him multiple practice sessions per day to increase volume of purees, to eliminate the spitting behavior, and then teach him to chew. I had 3 ideas for increasing practice: his parents could take some time off of work to increase the intensity of the program, train a student to go into the daycare to feed, or go to an intensive feeding program.

Outcome: I lost touch with his parents over the next year and I often thought maybe I was too hard on them at the end with my suggestions. However, I recently received a call from his mother. They are removing Dustin's g-tube now at age 4. They needed time to incorporate the oral feeding sessions into their busy schedule but because of the consistent approach that emphasized oral acceptance and swallowing for a reward, they were able to transition him off of the feeding tube successfully. She called to let me know the techniques they learned allowed them to transition him off the tube as well as troubleshoot through rough periods such as illness and changes in schedule. Eating became easier and easier for Dustin and is now something he enjoys!

It's Time to Reorder The Pediatric Feeding & Dysphagia Newsletter!

- The price \$48.00/year or \$12.00/issue stays the same!
- Current invoice is attached to the email. Please note that this renewal only is for 6 issues from July 08—December 2009 (issues distributed July 08, Oct 08, Jan 09, April 09, July 09, Oct 09). This will allow the Newsletter year to change in 2010 to a calendar year subscription from January—December.
- Upcoming issues to include: articles written by experts, current research, printable handouts to use in practice, case studies, Q & A, and recommendations. Please email suggested topics/comments!



On the Research Front:

Boiron, M., Da Nobrega, L., Roux, S., Henrot, A., Saliba, A. (2007). Effects of oral stimulation and oral support on nonnutritive sucking and feeding performance in preterm infants. *Developmental Medicine and Child Neurology*, 49, 439-444.

This study compared oral stimulation with those of oral support on nonnutritive sucking and feeding parameters in preterm infants. The oral stimulation protocol included stimulation of the cheeks, lips, and tongue to improve muscle contractibility, strength, and orientation of reflexes. Oral support involved chin and cheek support to aid deglutition. Results showed that oral support applied alone enhances sucking parameters and feeding performance, and reduces the transition time to oral feeds.

Valicenti-McDermott, M., McVicar, K., Rapin, I., Wershil, B., Cohen, H., Shinnar, S. (2006) Frequency of Gastrointestinal Symptoms in children with Autistic Spectrum disorders and Association with Family History of Autoimmune Disease. *Developmental and Behavioral Pediatrics*. 27, 2, April, S128-136.

This study compared prevalence of GI symptoms in children with autistic spectrum disorders (ASD) and children with typical development. In the sample, a history of GI symptoms was elicited in 70% of children with ASD compared with 28% of children with typical development and 42% of children with developmental delay. Abnormal stooling patterns and food selectivity was more common in children with ASD.

Fischer E. & Silverman, A. (2007) Behavioral conceptualization, assessment and treatment. *Seminars in Speech and Language*. Aug, 28 (3): 223-231.

Authors review a biobehavioral approach to the assessment and treatment of feeding disorders. This includes; the development of feeding behaviors, behavioral assessment and treatment strategies, and psychology on an interdisciplinary team as well as inpatient behavioral programs.