Is my kid’s backpack too heavy?

Dr. Lai staggers under the load of her high schooler’s back pack

Although we see in the news that ebooks are replacing textbooks, our kid’s backpacks look heavier than ever. Returning is physical therapist Dr. Deborah Stack with backpack pointers. -Drs. Lai and Kardos

With the return to school, we wanted to remind you of some healthy backpack tips including adjusting your backpack. I recall the first day of school one year when the “first day of school” photo showed my not-quite-100-pound child bending in half under the weight of a backpack, trombone, lunchbox and art portfolio. I quietly decreed that it would not happen again. To make sure it does not happen at your house either, consider a few suggestions to keep your children healthy:

1. A traditional backpack with **two shoulder straps** distributes the weight more evenly than a pack or messenger bag with a single strap.
2. Look for **wide, padded straps**. Narrow straps can dig in and limit circulation.
3. Buckle the **chest or waist strap** to distribute weight more evenly.
4. Look for a **padded back** to protect your child from pointy pencils etc.
5. Look for a **lightweight pack** that does not add much overall weight.
6. **Multiple compartments** can help distribute weight.
7. **Place heavier items** close to the spine instead of in front pockets.
8. **Compression straps** on the sides or bottom of the backpack can compress the contents of the backpack and stabilize the articles.
9. **Reflective material** allows your child to be visible on those rainy mornings.
10. **A well fitting backpack** should match the size of the child. Shoulder straps should fit comfortably on the shoulder and under the arms, so that the arms can move freely. The bottom of the pack should rest in the contour of the lower back. The pack should “sit” evenly in the middle of the back, not “sag down” toward the buttocks.

How much should that tike be toting? The American Academy of Pediatrics recommends no more than 10-20 percent of body weight and the American Physical Therapy Association recommends no more than 15 percent of a child’s weight. Here’s a chart to give you an idea of the absolute maximum a child should carry in a properly worn backpack:

Child's Weight (pounds)	**Maximum Backpack Weight (based on 15% of body weight)** (pounds)
50	7.5
60	9
70	10.5
80	12
90	13.5
100	15
110	16.5
120	18
130	19.5

Here are some ideas to help lighten the load, especially for those middle school kids who have a plethora of textbooks:

1. Find out of your child's textbook can be accessed on the internet. Many schools are purchasing access so the students can log on rather than lug home.
2. Consider buying an extra set of books for home. Used textbooks are available inexpensively online.
3. Limit the "extras" in the backpack such as one free reading book instead of five. I am not exaggerating; one day I found five free reading books in my child's backpack!
4. Encourage your child to use free periods to actually study, and leave the extra books in his locker.
5. Remind your child to stop by her locker between classes to switch books rather than carrying them all at once.
6. Consider individual folders or pockets for each class rather than a bulky 3-ring notebook that holds every subject.

You may need to limit the load even further if your child is still:

- Struggling to get the backpack on by herself
- Complaining of back, neck or shoulder pain
- Leaning forward to carry the backpack

If your child complains of back pain or numbness or weakness in the arms or legs, talk to your doctor or physical therapist.

When used correctly, backpacks are supported by some of the strongest muscles in the body: the back and abdominal muscles. These muscle groups work together to stabilize the trunk and hold the body in proper postural alignment. However, backpacks that are worn incorrectly or are too heavy can lead to neck, shoulder and back pain as well as postural problems. So choose wisely and lighten the load. Happy shopping!

Deborah Stack, PT, DPT, PCS
With nearly 20 years of experience as a physical therapist, Dr. Stack heads The Pediatric Therapy Center of Bucks County in Pennsylvania. She holds both masters and doctoral degrees in physical therapy from Thomas Jefferson University.

Mommy, my friend dumped me

Dr. Kardos says she still remembers when her friend dumped her back in 7th grade. Guest blogging for Two Peds in a Pod, is child and adolescent counselor Dina Ricciardi with advice to help walk your kids through the experience.

It can happen very quickly, and often without explanation: your son or daughter gets "dumped" by his or her best friend or group of friends. One minute they are inseparable; the next, your child is left out and being ignored, and is completely bewildered as to why or what happened. Welcome to cliques, a typical part of the tween and adolescent landscape. While enduring these shifts in peer relationships can be extremely painful for both of you, there are some things you can do to help your child emerge safely on the other side of the experience.

Do empathize. Make sure your child knows that you understand why they are upset, and that you would be too.

Do take your child's grief seriously. We adults know that friendships change and shift over time, and that we all survive. However, your child may see this as the worst thing that has ever happened to her, and she may be right.

Don’t downplay your child’s pain. It’s normal for him to feel hurt and rejected, and to question his own actions and the authenticity of the friendship.

Do keep an eye out for bullying or name-calling. If the situation seems to require it, enlist the support of school personnel to monitor things under their watch.

Don’t disparage or belittle the offending friend(s). It might feel good in the moment, but it can set the wrong example and make it difficult for your child to reconcile if the opportunity presents itself.

As a parent, it is hard to watch your child suffer. Our instinct is often to try to fix the situation, which we need to resist. Part of adolescence is allowing our children to develop their own identity and to learn relationship skills. Through their peer relationships, they learn sophisticated concepts such as trust, loyalty, empathy, compassion, and tolerance. They also start to encounter difficult emotions such as jealousy. The most important thing we can do as parents is be available to help our children sort out their feelings and to give them a different perspective. We can also help them discover that while peers are important, they can be strong and fine on their own, and do not need other people to give them their identity. This helps them value themselves as individuals. In the process, maybe we parents learn something new also. Buckle in; it can be a bumpy ride!

Dina Ricciardi, LSW, ACSW

Dina Ricciardi is a psychotherapist in private practice treating children, adolescents, and adults in Doylestown, PA. She specializes in eating disorders and pediatric and adult anxiety, and is also trained in Sandtray Therapy. Ricciardi is a Licensed Social Worker and a member of the Academy of Certified Social Workers. She can be reached at dina@nourishcounseling.com.

Dr. Lai adds: Help your kids cultivate their interests. As they do their interests, they will look around and find that those kids will become their friends. The hardest part about adolescence is figuring out your own interests, and not those of your peers.

Does my baby have GERD or spit-up?

Baby spew doesn’t always require reflux medications

In our office, two-month-old Max smiles ear to ear, naked except for a diaper and a bib. His worried mom asks me about the large amounts of spit up Max spews forth daily. “He spits up after every feeding. It seems like everything he eats just

comes back up. It even comes out of his nose!" she says. Max gained the expected amount of weight, an average of one ounce per day, since his one-month check-up. He breastfeeds well and accepts an occasional bottle from his dad. Even after spitting up and drenching everything around him, he remains comfortable and cheerful. He is well hydrated, urinates often, and poops normally.

In short, Max is a "happy spitter" Other than creating piles of laundry, he acts like any healthy baby.

Contrast this to two-month-old "Mona." She also spits up frequently. Sometimes it's right after a feed and sometimes an hour later. She seems hungry, yet she'll cry, arch her back, and pull off the nipple while feeding. She cries before and after spitting up. Her weight gain is not so good– she averaged one-half ounce of gain per day since her one-month visit. She seems more comfortable when upright and more cranky lying down.
Mona is **not** a "happy spitter."
Last story and then the lesson:
"Chloe" is a two-month-old baby who cries. Often. Loudly. Although most of the wailing occurs in the late afternoon and early evening, she also cries other times. She eats great and in fact, seems very happy while she feeds. She smiles at her parents mainly in the morning. She also smiles at her ceiling fan and the desk lamp. Movement calms her and her parents worry that she spends excessive time rocking in their arms or in her swing. Her cries pierce through walls and make her parents feel helpless. She often spits up during crying jags, and erupts with gas. She gained weight well since her last visit.
Here's the lesson:
All babies cry. All babies pee and poop. All babies sleep (at times). AND: all babies spit up. The muscle in the lower esophagus that keeps our food and drink down in our stomachs and prevents it from sloshing upwards, called the "lower esophageal sphincter," is loose in all babies. The muscle naturally tightens up and becomes more effective over the first year of life, which is why younger babies tend to spit

up more than older babies.
Max has **GER (**gastroesophageal reflux) , Chloe has **GER/ colic** and Mona has **GERD (**gastroesophageal reflux disease)**.** Max and Chloe have physiologic, or normal, reflux. Mona has reflux that interferes with her mood, her feedings, and her growth.

GER, GERD **and** colic (excessive crying in an otherwise healthy baby) improve by three to four months of age. If your baby cries often (enough to make you cry as well) then you should see your baby's pediatrician to help determine the cause. It helps, before your visit, to think about when the crying occurs (with feedings? At certain times of the day?), what soothes the crying (feeding? walking/rocking?) and other symptoms that accompany the crying such as spitting up, fever, or coughing. Keeping a three day diary for trends can help pinpoint a diagnosis. We worry a lot when the babies are not "spitting up" but are actually "vomiting." Spit blobs onto the ground. Vomit shoots to the ground. Vomit which is yellow, is accompanied by a hard stomach, is painful, is forceful (think Exorcist), or enough to cause dehydration, all may be signs of blockage in the belly such as pyloric stenosis or vovulus. Seek medical attention immediately.

The treatment for Max, the happy spitter with GER? Lots of bibs for baby and extra shirts for his parents.

Treatment for Chloe, the crier? Patience and tincture of time. You can't spoil a young baby, so hold, rock and sway with her to keep her calm. Enlist a baby sitter or grandparents to help.

The treatment for Mona, the baby with GERD? **Small, frequent feedings** to prevent overload of her stomach, **adding cereal any bottle feeds** to help thicken the milk and weigh down the liquid, thus preventing some of the spit up (ask your doctor if this is appropriate for your baby), and **holding her upright** after feeds for 15-20 minutes. Physicians **no longer advocate** inclining the crib. To prevent Sudden Infant death Syndrome,

she should still be placed on her back to sleep on a flat, firm surface. Sometimes, pediatricians prescribe medication that decreases the acid content of the stomach to help relieve the pain of stomach contents refluxing into the esophagus.

Treatment for parents? Knowing that someday your baby will grow up, no longer need a bib, and probably have a baby who spits up too.

Julie Kardos, MD with Naline Lai, MD

Marijuana: Hashing out Fact from Fiction

With some states now legalizing pot for recreational use, drug education for kids has never been more critical. The American Academy of Pediatrics released a policy statement this past year opposing legalization because of its potential harm to children, teens, and young adults. We welcome Dr. Shannon Murphy who dispels myths surrounding marijuana. – Drs. Kardos and Lai

Why is pot so different today than 30 years ago? Pot is **5 times** stronger than the 1980's.

THC, the psychoactive ingredient in the plant, previously hovered around 3%. Now the average THC level is closer to 16%. As of this year, some plants have been tested with levels reaching between 20-30% THC. There is a new form of pot known as hash oil that is almost pure THC with levels around 90%

I heard pot was not addictive. Is that true? Pot **is addictive**.

In fact, the younger you are when you start using pot, the more likely you are to get addicted.10% of adults and 17% of young adults who try pot will become addicted to it. If one chooses to use on a daily or near daily basis, the addiction rate climbs to 25-50%.

How long does pot stay in your body? Pot is different from many other drugs because it can stay in your body for days after use.

In addition, the more you use pot, the longer it stays in your body. For regular users, it can remain in your body for several weeks. As a result, there is a sub acute impairment that persists with many users once the initial “high” has worn off.

When used, pot is distributed throughout one’s body. These areas include the brain and spinal cord, heart, lungs, muscles, and fatty tissues. In fact, it is stored in fatty tissue. If one is pregnant and one uses pot, not only will the mom be affected by pot, but so will her unborn child. It also concentrates in breast milk. People who use marijuana should **NOT** breastfeed their baby.

Isn’t pot safe to use? I heard it was safer than other drugs. Pot is harmful to the brain, heart, and lungs.

Regular use of marijuana, particularly at a young age, can create biochemical and structural changes to the brain. Some of these changes are not reversible. Moreover, the effects are dose dependent. The more you use, the more likely to affect

change.

Marijuana causes cognitive impairment. It harms learning, memory, attention, and critical decision-making. A recent study showed that regular use of marijuana at a young age causes a **permanent** decrease in IQ of up to 8 points.

Marijuana is linked to the development of mental health issues including anxiety, depression, and psychosis. Research has shown that regular daily to weekend use of pot increased one's risk of psychosis 3-5 times that of the general population. Sadly, we are seeing this played out in states like Colorado where people have died from psychosis related events.

The American Lung Association has reported that pot has more cancer causing agents than tobacco smoke. Like tobacco, it causes chronic cough, wheeze, phlegm production, and frequent infections.

Marijuana has cardiac effects as well. Temporal links have been found between using pot and arrhythmias, stroke, and other major cardiac events.

What are "edibles"?

In 2014, with the legalization of pot in Colorado, the marijuana industry began selling food products with infused THC. These products, which include candy, cereal, pop tarts, and sodas, are indistinguishable from regular food.

In fact, exposure of kids to marijuana increased by 200% over this last year because of these products. These accidental poisonings were secondary to exposure of kids to edibles typically in their home. Many kids ended up in the ER, some with serious complications like seizures and difficulty breathing.

What does "dabbing" mean?

Dabbing is inhaling vapors from heating a concentrated form of

pot. Dabs, which are also known as BHO (butane hash oil), “budder”, “honeycomb”, or “earwax” contain much higher concentrates of THC, usually upwards of 90%. Dabs are much stronger than a single joint and the high is administered all at once.

How does smoking pot affect driving?

Driving high is dangerous to the driver, others in the vehicle, and people sharing the road. In fact, marijuana is the number one illicit drug found in the blood stream of drivers involved in fatal car accidents.

Pot impairs skills needed to drive safely. It negatively impacts alertness, coordination, and reaction time.

Pot and alcohol don’t mix. Using both drugs at the same time has been shown to increase the THC level in one’s blood stream. This makes for a deadly combination on the road.

Is it okay to use pot while pregnant?

It is **NOT** okay to use pot while pregnant. As mom gets high and feels the effects of the drug, so does the unborn child.

Studies have shown that children exposed to marijuana in utero have lower scores on visual and motor coordination as well as lower scores on visual analysis and problem solving. In utero exposure is also associated with decreased attention span and behavioral problems. Finally, studies have shown that teens are more likely to be marijuana users if their mom used while pregnant.

What if my teen says that since pot isn’t a big deal anymore and many of their friends are using it?

Now more than ever, it is incredibly important to speak clearly regarding the risks of pot use. Many teens see legal as meaning safe, so we are entering a critical time when it comes to our kids and marijuana use. Here are a few

suggestions when it comes to talking to your kids about drug use in general.

Talk early and often. This should not be a one-time conversation.

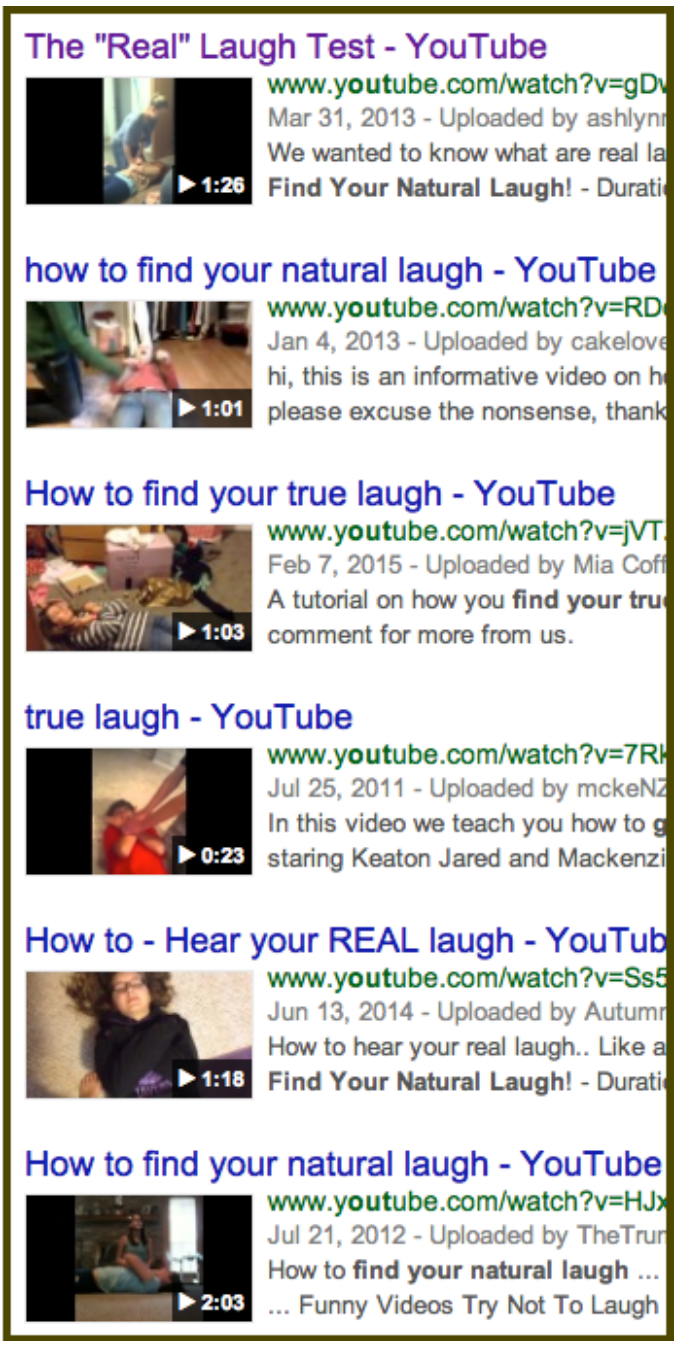
Make sure your child knows your rules on drug use and set clear consequences if these rules are broken. Role-play real life situations so kids can know how to respond when confronted with scenarios that may involve drugs.Base education about pot and other drugs on facts.

Check out the National Institute of Drug Abuse website for up to date information. To learn more visit www.learnaboutsam.org .

Shannon Murphy, MD, FAAP

Dr. Murphy is a board certified general pediatrician who currently serves on the American Academy of Pediatrics Practice Advisory Committee for Adolescent Substance Use. She heads a non-profit coalition, SAM Alabama, whose goal is to educate parents and kids on the public health issues and safety concerns associated with marijuana.

It’s no laughing matter: another tween game in town



A snippet from a quick search on youtube for “true laugh”

There’s another game in town called “Find your true laugh,” but it is no laughing matter. One kid lies down and another kid either sits on the recumbent kid’s chest or pushes hard on the recumbent kid’s chest with his hands (think CPR chest compressions). As the recumbent kid starts to laugh, his laugh purportedly changes. In this case, in addition to compromising a kid’s airway, the force of another person pushing hard on the chest can lead to rib fractures and, as one of our patients discovered painfully, even a fractured sternum. Rib

fractures are acceptable as a side effect of CPR but are not an acceptable side effect of a game.

Tweens in particular seem vulnerable to trying the “Hey, this looks fun, let’s try it, ” airway blocking games. Explain to your tween that anything that can possibly interfere with breathing can hurt him.

Dr. Kardos tells tween patients:

Your nose is for breathing air. NOT for breathing fumes from glue or markers in order to get high. Called “huffing,” this can lead to sudden fatal heart arrhythmias.

Your mouth is also for breathing. Tweens can all recite the dangers of smoking cigarettes, but they can find it amusing to breathe in crushed candy, which can irritate lungs, or to try to swallow a spoonful of cinnamon while taking the “cinnamon challenge.”The coughing and vomiting that result from this challenge are evidence of its potential danger.

Air moves through your neck to reach your lungs. Tweens play the “choking game” by strangling themselves in order to get a brief high before passing out. Tell your kids to never tie or loop anything around their necks, for obvious reasons. Kids have died playing this game.

Your lungs are in your chest. To get back to the find your true laugh game: this game involves smushing the chest. Point out that lungs can’t expand to hold air if someone is crushing your chest.

Earlier in this summer, Dr Lai turned around at a party to find a pile of tween girls on the rug giggling and trying to push in each other’s rib cages. After explaining to the girls why one should never block her airway, one of the girls ferevently nodded and said , “I see, like the bologna game?”

“What bologna game?” asked Dr. Lai

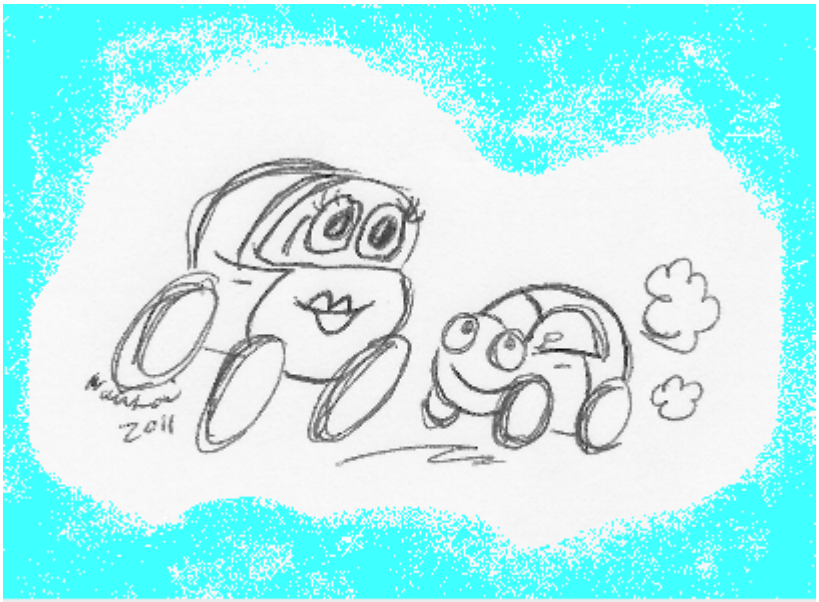
” The one where you take a piece of bologna, cover your mouth and inhale it in.”

“Yes, like the bologna game, ” said Lai with a sigh.

What will they think of next?

Julie Kardos, MD with Naline Lai, MD

The gassy baby



"My, my you are a little gassy today"

Gas is another topic most people don’t think much about until they have a newborn. Then suddenly gas becomes a huge source of parental distress, even though parents are not the ones with the gas. It’s the poor newborn baby who suffers, and as all parents know, our children’s suffering becomes OUR suffering.

So what to do?

First, I reassure you that ALL young babies are gassy. Yes, all. But some newborns are not merely fussy because of their gas. Some become fussy, ball up, grunt, turn red, wake up from a sound sleep, and scream because of their gas. In other

words, some babies really CARE about their gas.
Remember, newborns spend nine months as a fetus developing in fluid, and have no experience with air until they take their first breath. Then they cry and swallow some air. Then they feed and swallow some air. Then they cry and swallow some more air. Eventually, some of the air comes up as a burp. To summarize: Living in Air=Gas Production.
Gas expelled from below comes from a different source. As babies drink formula or breast milk, some liquid in the intestines remains undigested, and the normal gut bacteria "eat" the food. The bacteria produce gas as a byproduct of their eating. Thus: a fart is produced.
The gas wants to escape, but young babies are not very good at getting out the gas. Newborns produce thunderous burps and expulsions out the other end. I still remember my bleary-eyed husband and I sitting on the couch with our firstborn. On hearing a loud eruption, we looked at each other and asked simultaneously, "Was that YOU?" Then looked at our son and asked "Was that HIM?"
Gas is a part of life. If your infant is feeding well, gaining weight adequately, passing soft mushy stools that are green, yellow, or brown but NOT bloody, white, or black (for more about poop, see our post The Scoop on Poop), then the grunting, straining, turning red, and crying with gas is harmless and does not imply that your baby has a belly problem or a formula intolerance. However, it's hard to see your infant uncomfortable.
Here's what to do if your young baby is bothered by gas:

- Start feedings before your infant cries a long time from hunger. When infants cry from hunger, they swallow air. When a frantically hungry baby starts to feed, they will gulp quickly and swallow more air than usual. If your infant is wide awake crying and it's been at least one or two hours from the last feeding, try to quickly start another feeding.
- Burp frequently. If you are breastfeeding, watch the clock, breastfeed for five minutes, change to the other breast. As you change positions, hold her upright in attempt to elicit a burp, then feed for five more

minutes on the second breast. Then hold your baby upright and try for a slightly longer burping session, and go return her to the first breast for at least five minutes, then back to the second breast if she still appears hungry. Now if she falls asleep nursing, she has had more milk from both breasts and some opportunities to burp before falling asleep.

- If you are bottle feeding, experiment with different nipples and bottle shapes (different ones work better for different babies) to see which one allows your infant to feed without gulping too quickly and without sputtering. Try to feed your baby as upright as possible.
- Hold your infant upright for a few minutes after feedings to allow for extra burps. If a burp seems stuck, lay her back down on her back for a minute and then bring her upright and try again.
- To help expel gas from below, lay her on her back and pedal her legs with your hands. When awake, give her plenty of tummy time. Unlike you, a baby can not change position easily and may need a little help moving the gas out of their system.
- If your infant is AWAKE after a feeding, place her prone (on her belly) after a feeding. Babies can burp AND pass gas easier in this position. PUT HER ONTO HER BACK if she starts to fall asleep or if you are walking away from her because she might fall asleep before you return to her. Remember, all infants should SLEEP ON THEIR BACKS unless your infant has a specific medical condition that causes your pediatrician to advise a different sleep position.
- Parents often ask if changing the breast feeding mother’s diet or trying formula changes will help decrease the baby’s discomfort from gas. There is not absolute correlation between a certain food in the maternal diet and the production of gas in a baby. However, a nursing mom may find a particular food “gas

inducing.” Remember that a nursing mom needs nutrients from a variety of foods to make healthy breast milk so be careful how much you restrict. Try any formula change for a week at a time and if there is no effect on gas, just go back to the original formula.

- Do gas drops help? For flatulence, if you find that the standard, FDA approved simethecone drops (e.g. Mylicon Drops) help, then you can use them as the label specifies. If they do not help, then stop using them.

The good news? The discomfort from gas will pass. Gas discomfort typically peaks at six weeks and improves immensely by three months. At that point, even the fussiest babies tend to mellow. The next time your child’s gas will cause you distress won’t be until he becomes a preschooler and tells “fart jokes” at the dinner table in front of Grandma. Now THAT is a gas.

Julie Kardos, MD with Naline Lai, MD

The natural medicine cabinet in your kitchen

You may not think of your kitchen as a convenient pharmacy, but parents used common kitchen items successfully to treat various maladies long before CVS and Walgreens were invented.

Crisco– May not be healthy to eat, but smeared on skin, it's an old fashioned but effective treatment for eczema or dry skin.

Oatmeal– Crush and put into the end of a hosiery sock. Float the sock in the bathtub for a natural way to moisturize skin.

Olive Oil–

- Put a couple drops into the ear three times a day to loosen ear wax (don't put in if your child has a hole in their ear drum eg. myringotomy tubes).
- For cradle cap, rub into your baby's scalp and use your fingernail or a soft brush to loosen the greasy flakes.
- Also use to kill lice. Work the oil through the scalp,

tuck hair into a shower cap and wash off in the morning. Although studies are unclear on how well this method works on lice, it certainly is worth a try.

White vinegar-If swimmer's ear is suspected, mix rubbing alcohol one to one with vinegar and drop a couple drops in the ear to stop the swimmer's ear from progressing (don't put in if your child has a hole in their ear drum eg. myringotomy tubes).

Ginger– Boil ginger to make a tea to take the edge off nausea

Honey– Shown to soothe coughs-give a teaspoon of dark (buckwheat, for example) honey three times a day. However, NEVER give honey to a child who is younger than one year of age because it may cause infant botulism

Lemon– An old singer's trick–combine lemon juice with honey in tea to alleviate hoarseness

Salt– Mixed into lukewarm water, gargling with salt water will help ease sore throat pain

Baking soda:

- Mix with water to make a paste to help soothe itchy skin, from maladies such as poison ivy .
- Can also be mixed with water to make toothpaste if you run out of your usual minty whitener.
- Another use of baking soda: one part baking soda with 4 parts corn starch makes a natural underarm deodorant.

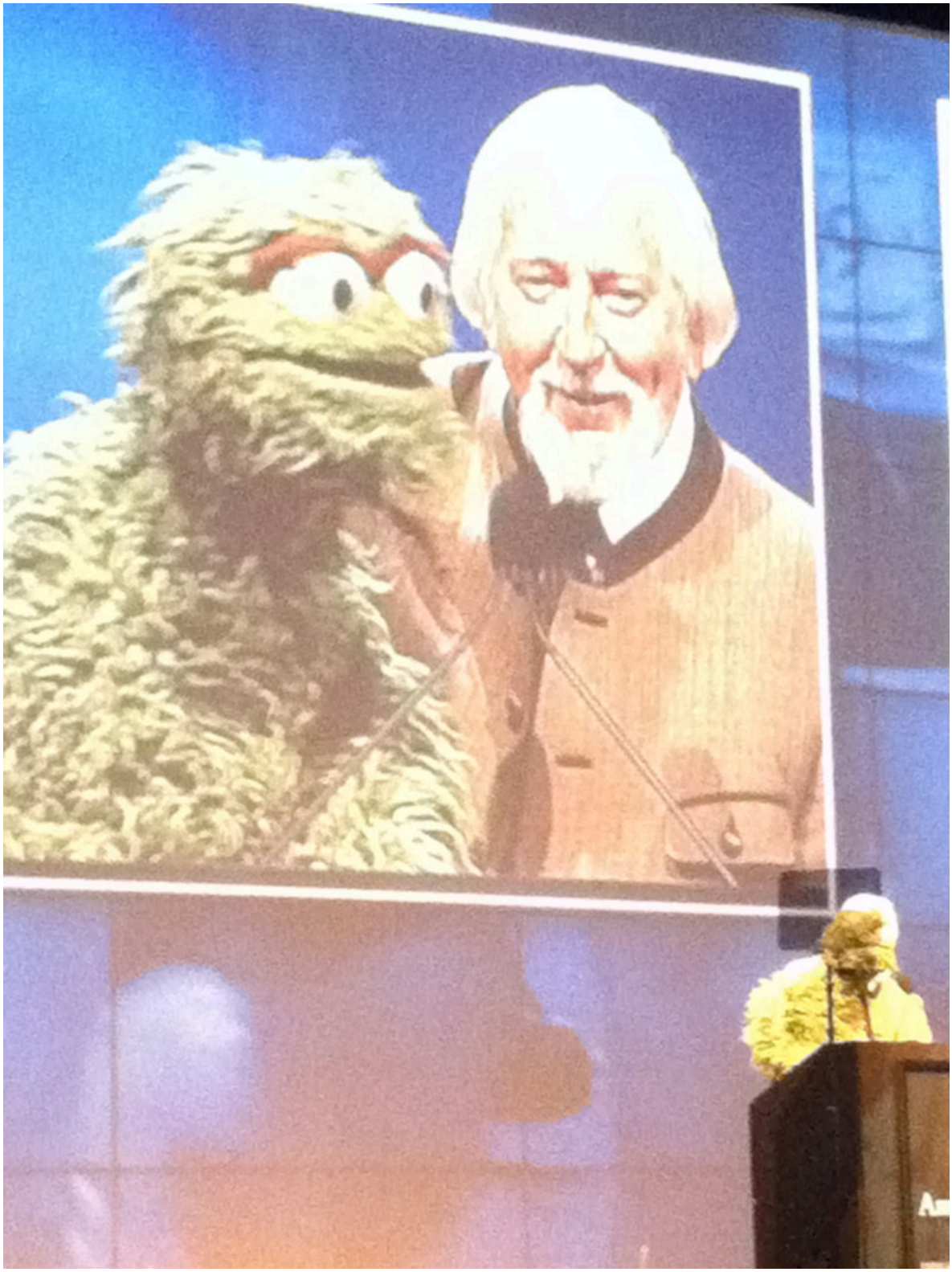
Sugar: Mix sugar into weak tea (or your ginger tea from above) and give small amounts frequently to soothe your **older** child's nausea and help rehydrate after vomiting.

Ice: Ice not only decreases swelling when applied to injuries, it can also be used to combat the itch of bug bites and poison ivy.

Kitchen sink: This is an excellent place to wash any cut, scrape, or bleeding wound under running water with soap. Immediately after a burn, rinse the burned skin under cold water for several minutes to limit the extent of the heat injury. Contrary to popular lore, DO NOT put butter on a burn. You may, however, put butter on your toast. In small amounts.

Naline Lai, MD and Julie Kardos, MD

Happy Birthday! Two Peds in a Pod turns Six Years Old!



Caroll Spinney, a.k.a. Bird Bird and Oscar the Grouch, addresses the American Academy of Pediatrics National Conference in 2011 (Dr. Lai's iPhone 3 or 4 captured this "high" quality photo)

Today, as Two Peds in a Pod turns six years old, we think about our favorite six-year-old, Big Bird.

A friend sent me this link to an interview with Caroll Spinney on NPR. Now 81 years old, Caroll Spinney has played Big Bird on *Sesame Street* since the show first aired in 1969. According to the puppeteer, Big Bird has always been six years old.

Spinney wanted Big Bird to forever bubble over with the curiosity and enthusiasm for learning which characterize a six year old's development. In kindergarten or first grade, a six-year-old rapidly gains new skills. They learn how to read at this age if not earlier.

They like to belong to a group and feel included.

Sit in the back of a first grade classroom and listen to the class have a conversation. The teacher may ask the kids, "Who has ever been to the ocean?" and watch all the hands go up. As she calls on each child to tell his story about going to the beach, some kids tell about their beach vacations, some talk about which relative or friend they visited at the beach, and at least one six-year-old will say "I never saw the ocean, but I have a dog!" because they want so desperately to belong to the conversation.

As part of their interest in others, they will join sports teams, scouts, begin religious school or specialized language schools.

Although they may seem interested in everything, be careful not to over schedule. This might be the first year of "all day" school, and even a child who attended an all day childcare or kindergarten can tire out after a full day of learning. Also, as part of their interest in group participation, children may start to form "clubs" as they play. To ward off future bullying, teach your child," You can't be friends with everyone. You just have to be nice."

Six-year-olds still have a great sense of wonder

and imagination.

They believe in Santa Claus and the Tooth Fairy. They also are interested in science and nature, planets and dinosaurs, and how things work. They can simultaneously believe in the very real and concrete and believe in magic.

Six-year-olds ask "Why?"

And they are not shy about it: Why do I have to go to bed? Why does that man have only one leg? Why do helium balloons float? Why do people die? Sometimes the "Why's" can lead into whining, but luckily, six-year-olds can be easily distracted out of their perceived injustices.

Kids at this age tend to concern themselves with body integrity

They may cry over a relatively minor injury such as a paper cut or skinned knee. If you want attention from a room full of six-year-olds, put a Band-Aid on your arm and they will all ask, " Why do you have a Band-Aid?"

We are excited that Two Peds in a Pod® turns six today. Like Big Bird, we hope to forever ask "Why," as well as "How?" and "When?" May your children continue to inspire a sense of wonder and curiosity in your lives, whether they are six months, six years, sixteen, or sixty!

Julie Kardos, MD and Naline Lai, MD

Click here to read our very first post from six years ago.

The surprising first signs of dehydration

It’s 100 degrees Fahrenheit outside. We’re hiking around the Southern Utah desert and one of my kids vomits once. Nope,

it’s not the stomach bug; that was last vacation. This time one of my kids vomited because of dehydration. Strangely, humans don’t always complain of thirst once they start becoming parched, and my kid was no exception.

Right now many kids are at camp running about in high temperatures and soon enough, kids will be called back to school for sport practices. Before they go off, let them know that the first signs of dehydration are usually a vague headache and nausea. Warn them not to depend solely on their sense of thirst to signal them to hydrate. If they “just don’t feel right,” take a break. Other signs of heat exhaustion and stroke are outlined here http://www.cdc.gov/extremeheat/warning.html

For kids who play only for an hour or so, water is a good choice for hydration. For the more competitive players who churn up a sweat or participate in vigorous activity, electrolyte replenishers such as Gatorade® and Powerade® become important, because after 20-30 minutes of sweating, a body can lose salt and sugar as well as water. In fact, my sister, an Emergency Medicine doctor, tells the story of a young woman who played ultimate frisbee all day, and lost a large amount of salt through sweating. Because she also drank large amounts of water, she “diluted” the salt that was still in her blood and had a seizure.

If your child plays an early morning sport, start the hydration process the night before so that they don’t wake up already behind on fluids. If your child goes more than six to eight hours without urinating, she needs to drink more.

Avoid caffeine which is found in some sodas, iced tea and many of the energy drinks. Caffeine dehydrates. The American Academy of Pediatrics recommends that children and teens never drink “energy drinks” because of the adverse effects of the stimulants they all contain. Some of the newer highly touted rehydration fluids of the adult world such as coconut water or

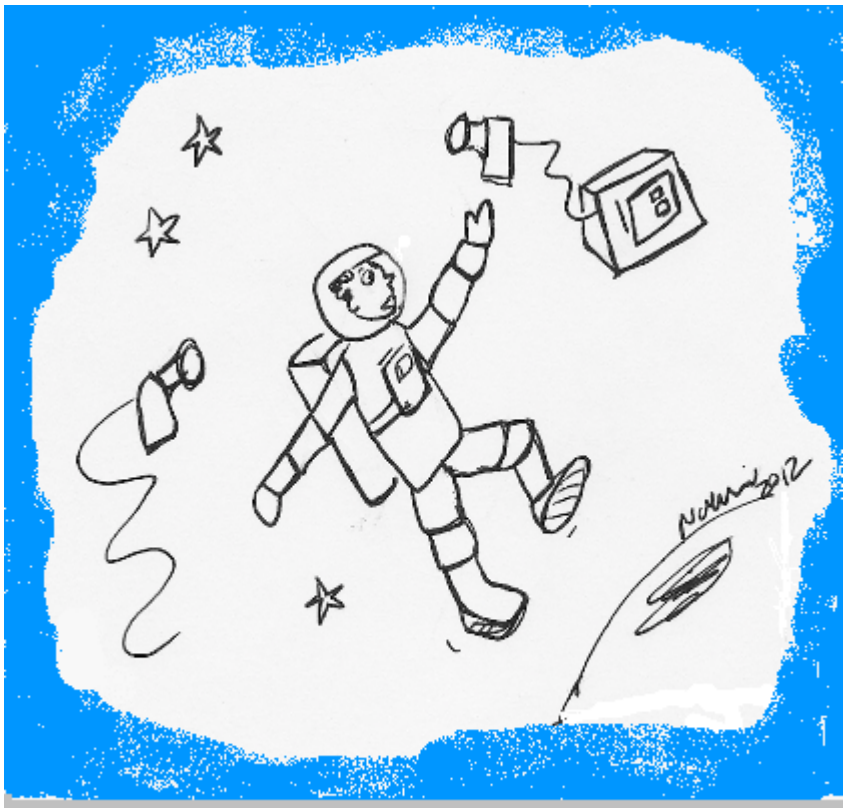
chocolate milk are fine.

Keep in mind it’s not only sports that can dehydrate kids. Years ago I knew of a tuba player who went to the emergency room after marching band practice on a hot August day.

Next vacation we’ll definitely buy some water bottles to make sure we don’t get dehydrated. Not having enough water can be so dangerous! We’ll also take along paper towels and cleaning fluid too.

Naline Lai, MD and Julie Kardos, MD

Breast feeding and returning to work



Amy the astronaut pumped at work despite the challenges.

Picture this: you are going back to work after a too-short maternity leave. Briefcase? Check. Lunch? Check. Breast pump? Check. Photo of your baby to put on your pump for inspiration? Check.

Many moms ask how to continue breastfeeding when they return to work. Because babies should receive breast milk or formula for at least their first year, here is how you can incorporate breastfeeding into your work routine:

Offer bottles by four weeks of age. Bottles can contain breast milk or formula, but you need to give your baby practice taking milk from a bottle by four weeks old. If you wait much longer, your baby will likely refuse the bottle. Have someone other than yourself give at least one bottle per day or every other day. In this way, your baby learns to accept nutrition from someone else.

Store breast milk using the simple and conservative "rule of twos." Leave breast milk in a bottle at room temperature for no more than two hours, store breast milk in the refrigerator for no more than two days, and store in the freezer for no more than two months. If your baby has already sucked out of a breast milk bottle, that milk is only good for up to two

hours. Remember to write the date on your milk storage bags and use the oldest ones first.

Now select from the following breast feeding menu, understanding that you might start with an earlier option and then change to a later one. **The best option is the one that works best for you and your baby.**

Option 1: Continue to breast feed at work. This option works for moms who work from home, moms who have child care in their work setting, and moms close enough to dash home to breast feed during the day or who have caregivers willing to drive babies over to work for feedings.

Advantage: no pumping, no buying formula, no bottle washing. **Disadvantage**: may require some creative scheduling.

Option 2: **Breast feed when home and pump and store breast milk at work**. The baby gets breast milk in bottles during the work day. This method allows moms to provide exclusively breast milk to their babies. Start pumping after the first morning feeding (or any other feeding that you feel you produce a bit more than your baby needs for that particular feeding) beginning when your baby is around four weeks old. Also pump if your baby happens to sleep through a feeding. Store this milk in two or three ounce amounts in your freezer. You can obtain breast milk freezer bags from lactation consultants and baby stores, or you can store milk in zip lock bags. As you continue to pump after the same feeding each day, your body will produce more milk at that feeding.

Pumping should not take longer than 15 minutes if you're pumping both breasts at the same time and can take as short as 7-10 minutes. Remember to wash your hands before pumping.

What kind of breast pump should you buy/rent? If you are in it for the long haul, we recommend the higher-end electric double pumps with adjustable suction. Ask the hospital nurses, your midwife, or your obstetrician for names of people who rent or

sell pumps in your area.

Once you have some breast milk stored and you are a few days out from returning to work, try pumping during the feedings you will miss while at work. Have someone else feed your baby breast milk bottles for these feedings. Finally, when you return to work, continue to pump at the same schedule and leave the stored breast milk for your child's caregivers. Consider leaving some formula in case caregivers run out of breast milk. Remind them never to microwave the milk (this kills the antibodies in breast milk as well as creates a potential burn hazard) but rather to thaw the milk by placing in a hot water bath.

This method becomes easier as babies get older. Once babies start solid foods, they breast feed fewer times per day. Somewhere between six to nine months, your baby eats three solid food meals per day and breastfeeds four or five times per 24 hours. Thus, the number of times you need to pump decreases dramatically.

Advantage to this option: breast milk with its germ-fighting antibodies given through the first year and no expense of formula. **Disadvantage**: having to pump at work.

Option 3: Breast feed before and after work and give your baby formula while you are at work. If you do not pump while at work, your body will not produce milk at these times. If you work full time, then on weekends you might find it easiest on your body to continue your "work time" feeding schedule. If you choose this method, wean your baby from daytime breast feeding over that last week or so before returning to work. Suddenly going a long time without draining your breasts can lead to engorgement, subsequent plugged ducts, and mastitis.

Advantage: baby continues to receive breast milk. No need to pump at work. **Disadvantage**: you still have to wash bottles and have the added cost of formula.

Option 4: Breast feed until you return to work, then formula feed. Wean over the last week you are home with your baby to avoid engorgement and leaking while at work. Your baby still benefits from even a few weeks of breast milk.

Advantage: No need to incorporate pumping into your work schedule. Baby still gets adequate nutrition. **Disadvantage**: babies who are in childcare and exposed to many germs miss out on receiving extra antibodies in breast milk. However, weaning your baby off breast milk will not cause illness. Do what works for your family. Another disadvantage: more expensive to buy formula and time-consuming to wash bottles.

Finally, remember that the calorie count and nutritional content of breast milk and formula are the same. So do NOT feel guilty if pumping does not pan out and you and end up giving some formula. Your baby is almost always going to be more efficient than a breast pump and some breasts just don't produce milk well during pumping sessions. In contrast, some of my patients never got the hang of breast feeding and their moms pumped breast milk and bottle fed them for the entire first year. Dr. Lai and I have each had patients who refused to take a bottle at childcare but just waited patiently for their moms to arrive. These babies got the nutrition they needed by nursing throughout the night. The babies didn't mind what time of day they ate. Just like many aspects of parenting, sometimes with breast feeding and returning to work, you just have to "go with the flow."

Julie Kardos, MD with Naline Lai, MD