Pack healthy school lunches: beware of junk food disguised as healthy foods

Junk food in disguise

Need ideas on how to pack healthy school lunches? Beware of junk food masquerading as healthy food. Dr. Roxanne Sukol, an internist who writes the popular nutrition blog Your Health is on Your Plate , mom of three children, and friend of Dr. Kardos's from medical school, shares her insights.

What should we pack in our children's lunch bags?

The key to retraining our children to eat real food is to restore historical patterns of food consumption. My great-grandparents didn't eat potato chips, corn chips, sun chips, or moon chips. They ate a slice of whole-grain rye bread with a generous smear of butter or cream cheese. They didn't eat

fruit roll-ups. They ate apricots, peaches, plums, and grapes. Fresh or dried. Depending on where your family originated, you might have eaten a thick slice of Mexican white cheese (queso blanco), or a generous wedge of cheddar cheese, or brie. Sunflower seeds, dried apples, roasted almonds. Peanut butter or almond butter. Small containers of yogurt. Slices of cucumbers, pickles, or peppers. All of these make good snacks or meals. My mom is proud to have given me slices of Swiss cheese when I was a hungry toddler out for a stroll with my baby brother. Maybe that's how I ended up where I am today.

When my own children were toddlers, I gave them tiny cubes of frozen tofu to grasp and eat. I packed school lunches with variations on the following theme: 1) a sandwich made with whole grain bread, 2) a container of fruit (usually apple slices, orange slices, kiwi slices, berries, or slices of pear), and 3) a small bag of homemade trail mix (usually peanuts + raisins). The sandwich was usually turkey, mayo and lettuce; or sliced Jarlsberg cheese, sliced tomato, and cream cheese; or tuna; or peanut butter, sometimes with thin slices of banana. On Fridays I often included a treat, like a few small chocolates.

Homemade trail mix is one terrific snack.

It can be made with any combination of nuts, seeds, and/or dried fruit, plus bits of dark chocolate if desired. Remember that dark chocolate is good for you (in small amounts). Dried apple slices, apricots, kiwi or banana chips, raisins, and currants are nutritious and delicious, and so are pumpkin seeds and sunflower seeds, especially of course in homes with nut allergies. Trail mix can be simple or involved. Fill and secure baggies with ¼ cup servings, and refrigerate them in a closed container until it's time to make more. I would include grains, like rolled oats, only for children who are active and slender.

What do I consider junk food?

Chips of all kinds, as well as those "100 calorie packs," which are invariably filled with 100 calories of refined carbohydrate (white flour and sugar) in the form of crackers (®Ritz), cereal (®Chex), or cookies (®Chips Ahoy).

You can even find junk food snacks for babies and toddlers now: The main ingredients in popular Gerber Puffs® are refined flour and sugar. Reviewers tout: "You just peel off the top and pour when you need some pieces of food, then replace the cap and wait for the next feeding opportunity." **Are we at the zoo**? "He would eat them all day long if I let him." **This is not a benefit. It means that the product is not nutritious enough to satisfy the child's hunger.**

A note about drinks

Beware not only of drinks that contain minimal amounts of juice, but also of juice itself. Even 100% fruit juice is simply a concentrated sugar-delivery system. A much better approach is to teach children to drink water when they are thirsty, (See my post entitled **One Step at a Time**) and to snack on fresh fruit when they are hungry. Milk works, too, especially if they are both hungry and thirsty!

Roxanne Sukol, MD

Roxanne B. Sukol, MD is board-certified in Internal Medicine and practices Preventive Medicine in the Wellness Institute at the Cleveland Clinic in Ohio. Dr. Sukol's nutrition blog Your Health is on Your Plate *celebrates ten years of blogging this summer. Since **her** patients (the grown-ups) are the ones packing the school lunches for **our** patients, we thank her for this post.*

Julie Kardos, MD and Naline Lai, MD
Reviewed 2019

No more night owl! How to adjust your child's sleep schedule for school

Great-horned owl, NPS Photo, Big Bend National Park

Okay, we admit it: our kids are definitely in summertime stay up late/sleep late sleep mode. With school starting soon, many of us now have to shift our children from summer to school year sleep schedules. Because school start times are constant (and early), the kids will have an easier time if you help them shift their bedtimes gradually over the period of a week or two toward the desired earlier bedtime. Remember, the average school-aged child needs 10-11 hours of sleep at night and even teenagers function optimally with 9-10 hours of slumber per night.

Here are some straight forward ways to help ensure good quality sleep for your child:

1) **Keep sleep onset and wake up times as consistent as possible 7 days a week.** If you allow your child to

"sleep in" during the weekends, she will have difficulty falling asleep earlier on Sunday night, have difficulty waking up Monday morning, and start off her week over-tired, more cranky, and less able to process new information—not good for learning. That said, you can allow your teens, who generally have a much earlier school start time than their biological clocks desire, to sleep in an hour or so on weekends to catch up on sleep.

2) **Limit or eliminate caffeine intake.** Often teens who feel too sleepy from lack of sleep drink tea, coffee, "energy drinks" or other caffeine laden beverage in attempt to self-medicate in order to concentrate better. What many people don't realize is that caffeine stays in your body for 24 hours so it is entirely possible that the caffeine ingested in the morning can be the reason your child can't fall asleep later that night. Know also that kids who drink "pre-work out" drinks may not realize that caffeine is one of the ingredients. Better to pre-hydrate with water. Caffeine can have side effects of jitteriness, heart palpitations, increased blood pressure, and gastro-esophageal reflux (heartburn). If your child already has a daily ice-tea, coffee, or other caffeine containing drink, let her wean down gradually- abrupt caffeine withdrawal can cause headaches.

3) **Keep a good bedtime routine.** Just as a soothing, predictable bedtime ritual can help babies and toddlers settle down for the night, so too can a bedtime routine help prepare older kids for sleep. Prevent your child from doing homework on his bed- better to associate work with a desk or the kitchen table and his bed with sleep.

4) **Avoid TV/computer/ screen time/smart phones just before bed.** Although your child may claim the contrary, watching TV is known to delay sleep onset. We highly

recommend no TV in a child's bedroom, and suggest that parents confiscate all cell phones and electronic toys, which kids may otherwise hide and use without parent knowledge, by one hour prior to bedtime. Quiet activities such as taking a bath, reading for pleasure, and listening to music are all known to promote falling asleep. Just be sure your kids put down the book, turn off the music, and turn off the light to allow time to relax in their beds and fall asleep. Many use this time for prayer or meditation.

5) **Encourage regular exercise.** Kids who exercise daily have an easier time falling asleep at night than kids who don't exercise. Gym class counts. So does playing outside, dancing, walking, and taking a bike ride. Participating in a team sport with daily practices not only helps insure better sleep but also has the added benefit of promoting social interactions.

Getting enough sleep is important for your child's academic success as well as for their mental health. We pediatricians have had parents ask about evaluating their children for attention-deficit hyperactivity disorder because of an inability to pay attention, only to find that their youngster's focusing issues stem from tiredness. Teens are often so over-involved in activities that they average 6 hours of sleep or less per night. Increasing the amount of sleep in these kids will alleviate their attention problems and resolve any hyperactivity.

Additionally, sleep deprivation can cause symptoms of depression. Just recall the first few weeks of having a newborn: maybe you didn't think you were depressed but didn't you cry from sheer exhaustion at least once? A cranky kid or sullen teen may become much more upbeat and pleasant if they get an extra hour of sleep each night.

Unfortunately for children, the older they get, their natural circadian rhythm shifts them toward the "night owl" mode of

staying up later and sleeping later, and yet the higher-up years in school start earlier so that teens in high school start school earliest at a time their bodies crave sleeping late. A few school districts in the country have experimented with starting high school later and grade school earlier and have met with good success. Unless you live in one of these districts, however, your teens need to conform until they either go to college and when they can choose classes that start later in the day or choose a job that allows them to stay up later and sleep later in the day.

For kids of all ages, a night time ritual of “tell me about your day” can help kids decompress, help them fall asleep, and keep you connected with your child.

Julie Kardos, MD and Naline Lai, MD

Poison Ivy: Soothe the itch

Teach your child to recognize poison ivy: “leaves of three,

let’em be!”

Recently we’ve had a parade of itchy children troop through our office. The culprit: poison ivy.

Myth buster: Fortunately, **poison ivy is NOT contagious**. You can catch poison ivy ONLY from the plant, not from another person.

Also, **contrary to popular belief, you can not spread poison ivy on yourself through scratching.** However, where the poison (oil) has touched your skin, your skin can show a delayed reaction- sometimes up to two weeks later. Different areas of skin can react at different times, thus giving the illusion of a spreading rash.

Some home remedies for the itch :

- **Hopping into the shower and rinsing off within fifteen minutes** of exposure can curtail the reaction. Warning, a bath immediately after exposure may cause the oils to simply swirl around the bathtub and touch new places on your child.
- **Hydrocortisone 1%**. This is a mild topical steroid which decreases inflammation. We suggest the ointment- more staying power and unlike the cream will not sting on open areas, use up to four times a day
- **Calamine lotion – a.k.a. the pink stuff**. This is an active ingredient in many of the combination creams. Apply as many times as you like.
- **Diphenhydramine (brand name Benadryl)- take orally** up to every six hours. If this makes your child too sleepy, once a day Cetirizine (brand name Zyrtec) also has very good anti itch properties.
- **Oatmeal baths** – Crush oatmeal, place in old hosiery, tie it off and float in the bathtub- this will prevent oat meal from clogging up your bath tub. Alternatively buy the commercial ones (e.g. Aveeno)

- **Do not use alcohol or bleach**– these items will irritate the rash more than help

The biggest worry with poison ivy rashes is not the itch, but the chance of infection. With each scratch, your child is possibly introducing infection into an open wound. Unfortunately, it is sometimes difficult to tell the difference between an allergic reaction to poison ivy and an infection. Both are red, both can be warm, both can be swollen. However, **infections cause pain –** if there is pain associated with a poison ivy rash, think infection. **Allergic reactions cause itchiness**– if there is itchiness associated with a rash, think allergic reaction. Because it usually takes time for an infection to "settle in," an infection will not occur immediately after an exposure. Infection usually occurs on the 2nd or 3rd day of scratching. If you have any concerns take your child to her doctor.

Generally, any poison ivy rash which is in the area of the eye or genitals (difficult to apply topical remedies), appears infected, or is just plain making your child miserable needs medical attention.

When all else fails, comfort yourself with this statistic: up to 85% of people are allergic to poison ivy. If misery loves company, your child certainly has company.

Naline Lai, MD and Julie Kardos, MD

Time out from summer for an

important flu update

Time out from summer for a flu update

We interrupt your summer to bring you a Flu vaccine reminder and update.

Although flu (influenza) may be far from your minds, as we enter hot July, pediatricians are already ordering flu vaccines in preparation for Back to School. When the time comes, parents should add “schedule flu vaccine” to their back-to-school list as flu vaccines will arrive in offices as early as late August. Even immunizations given in August will last the entire winter season.

For fans of the nasal spray version of the flu vaccine—bad news. Turns out, data from the past 3 years shows the nasal spray is not nearly as effective as the injectable version. The American Academy of Pediatrics and the American Center for Immunization Practices both recommend giving only the injectable version of flu prevention for protection against

influenza.

Nonetheless, for the inconvenience of a pinch, the vaccine is still worthwhile. A total of 77 children died from flu in the US during the 2015-2016 flu season and many more children were hospitalized with flu related complications such as pneumonia and dehydration. Flu is highly contagious and spreads rapidly within households and schools, including daycare centers. People are contagious from flu one day prior to showing any symptoms of flu.

While most people who become sick with the flu survive, they will tell you it is a tough week. In addition to having a high fever that can last 5-7 days, a hacking cough, and runny nose, those stricken will tell you that every part of their bodies hurt. Even the movement of their eyes can hurt. In addition to the physical effects, our high school and college level patients are particularly distraught about the amount of schoolwork they miss while recovering from the flu.

An ounce of prevention is worth a pound of cure, which is why the flu vaccine is so terrific. There is no “cure” for the flu- you have to let your body fight it out. Unfortunately antiviral medications such as oseltamivir at best shorten the duration of flu symptoms by about one day. Flu vaccines work by jump starting your body’s natural immune system to produce disease fighting cells called antibodies. Vaccines are given yearly because flu virus strains often morph between flu seasons.

For more Two Peds In a Pod posts about flu and about vaccines in general: How to tell the difference between the common cold and the flu, Fact or Fiction: a flu vaccine quiz, Getting back to basics: how vaccines work.

OK, now back to your summer fun!

Julie Kardos, MD and Naline Lai, MD

Bring on the heat: Hot Tub Folliculitis

Note that the hot tub folliculitis rash is worse under the area of the swimming suit at the top of the thigh.

From the start, a family I know was suspicious of the hot tub

sanitation at the resort where they recently stayed. As time went by, even though the water looked clear, the hot tub seemed less chlorinated, and the water more tepid. They dubbed the tub "the scuz tub." After their return, one of the kids broke out in the rash of hot tub folliculitis pictured above. You could say, they figured out just what the "scuz wuz".

Hot tub folliculitis is a skin rash caused by a bacteria called pseudomonas aeruginosa. The rash appears a day or two after soaking in a hot tub. A light pink bump appears around hair follicles (hence the name). As you can see in this photo, the rash is typically worse on areas of skin where bacteria was trapped under a swimming suit. The rash can cover all body surfaces, including the face, if your child dunked his head under water.

The rash can be slightly itchy but is not usually painful. No other symptoms develop such as fever or sore throat. The rash is not contagious, but often other people who swam in the same hot tub also break out.

Treatment is to wait it out. Typically by one to two weeks, provided your child does not go back into the hot tub, the rash resolves on its own. If your child feels very itchy, you can treat her with oral diphenhydramine (brand name Benedryl). Rarely, just like mosquito bites, the rash can become infected with other bacteria if your child scratches too much.

Pseudomonas thrives in warm wet places. In fact, it's the same bacteria that causes "swimmer's ear." Tight control of chlorine and acid content of the hot tub water limit the growth of the bacteria. Unfortunately, you cannot tell the pseudomonas content of water just by eyeing it.

May you bring back a better souvenir than this family did on your next vacation.

Julie Kardos, MD and Naline Lai, MD

Mom “nose” best: Happy Mother’s Day 2016

This Mother’s Day, we honor Dr. Kardos’s mom, who passed earlier this year.

Dr. Kardos and I had been planning a post on nasal congestion in kids, but because we couldn’t have said it any better, we share a poem that Dr. Kardos’s mom wrote on this topic.

–Drs. Lai and Kardos

Runny Noses

My grandsons seem always to have runny noses;

They drip from their noses and land on their toeses;

One kid especially, his name is Aaron,

Will hug you so tight that what’s runnin’ you’re sharin’.

Alex will wipe with the back of his hand;

His runs in the house, on the beach, on the sand.

Jacob is older and he’ll use a tissue,

So his runny nose is not much of an issue.

In case they have colds, I hand each one a sweater,

But wearing a sweater does not make things better.

Allergic to dust? That’s the answer I’m seeking;

But while I keep dusting, their noses keep leaking.

They eat well and sleep well and play hard all day

In spite of their dripping that won’t go away.

So I’ve come to conclude, and I’m happy to say

That the noses of kids prob’ly just come that way.

by Felice Kardos (1943-2016)

The best sunscreen: questions answered

An inadvertent sunburn tattoo

I was greatly relieved recently when my teen arrived back from a music department trip to Disney without a sunburn. I had pictured a bright red cherry tomato coming off the plane. For those of us stuck in the middle of an East Coast perpetual rain cloud, it's hard to believe that anyone outside of the South needs to worry about sunscreen. But soon enough, you will be scratching your head in a pharmacy aisle asking yourselves these questions:

What is SPF?

- SPF stands for Sun Protection Factor. SPF gives you an idea of how long it may take you to burn. SPF of 15 means you will take 15 times longer to burn without sunscreen. If you would burn after one minute in the sun, that's only 15 minutes of protection!
- The American Academy of Pediatrics recommends applying a minimum of SPF 15 to children, while the American Academy of Dermatology recommends a minimum of SPF 30. We both apply sunscreen with SPF 30 to our own kids (mom hint: the high SPF sunscreens tend to be watery).
- Apply all sunscreen liberally and often– at least every two hours. More important than the SPF is how often you reapply the sunscreen. All sunscreen will slide off of a sweaty, wet kid. Even if the label says "waterproof," reapply after swimming.
- Watch out for sunlight reflecting off water as well as sunburning on cool days. One pediatrician mom I know was aghast at seeing signs posted at her kid's school reminding parents to apply sun screen "because it will be in the 80's." Kids burn on 60 degree days too. Lower temperatures do not necessarily mean less UV light.

Why does the bottle of sunscreen say to "ask the doctor" about applying sunscreen to babies under 6 months of age?

- Sunscreens were not safety-tested in babies younger than 6 months of age, so the old advice was not to use sunscreen under this age. The latest American Academy of Pediatrics recommendation is that it is more prudent to avoid sunburn in this young age group than to worry about possible problems from sunscreen. While shade and clothing are the best defenses against sun damage, you can also use sunscreen on exposed body areas.
- Clothing helps to block out sunlight. In general, tighter weaves protect better than loose weaves. Expensive "sun-protective clothing" is not always

better– a study from 2014 suggests regular clothing may be as protective.
- Hats help prevent burns as well.
- Remember that babies burn more easily than older kids.

Which brand of sunscreen is best for babies and kids?

- Although clothing and shade block harmful rays the best, no one brand of sunscreen is better for children than another. We both tell our patients to apply a "test patch" the size of a quarter to an arm or leg of your baby and wait a few hours. If no rash appears, then use the sunscreen on whatever body parts you can't keep covered by clothing. Look for UVA and UVB protection. More expensive does not always mean "better" and SPF above 50, according to the American Academy of Dermatology, has not been proven to be more effective than 50.

What do we know about the ingredients in sunscreen such as oxybenzone? In the United States sunscreen ingredients are considered medications and are regulated by the FDA. Oxybenzone is one of the oldest broad-spectrum (UVA and UVB) sunscreens, and was approved by the FDA in 1978. Oxybenzone's main side effect is that it can cause allergic reactions of the skin. Recently, some people question whether oxybenzone can be a hormone disrupter and have questioned the use of oxybenzone. At this point, no hormonal disturbances have been clearly found in humans and the American Academy of Dermatology continues to support the use of oxybenzone.

Sunscreens made with zinc oxide and titanium dioxide (the white stuff on a lifeguard's nose) have not garnered any questions nor sparked any debate about safety. Interestingly, zinc oxide is not only an effective sunscreen but also you will recognize it as the main ingredient in many newborn diaper rash creams.

Any info about the popular sprays? For spray formulations of

any type of sunscreen, many doctors are concerned that any aerosolized oily substance will irritate the lungs and are looking into long term effects now. Avoid spraying sun screen near a child's head to avoid inhalation. Also with the spray, some dermatologists worry that people might not be as thorough when they apply a spray as when they apply a cream.

Can I use last year's sunscreen? Most sunscreens have expiration dates, as long as your bottle hasn't expired, then it should be effective. In general, sunscreens are designed to last about three years before they expire.

Remember when we used to call sunscreen lotion "suntan lotion," and when tolerating red, blistering shoulders was considered a small price to pay for a tan? Live and learn.

Naline Lai, MD and Julie Kardos

The best antihistamine for your kid



Lately, whenever I take my dog for her walk, she sneezes as soon as we get outside. I find it interesting that my vet says I can give her Claritin—the same dose that I take for my own seasonal allergies. Must be time to repost our allergy medicine post featuring Dr. Lai's poem.

—Drs. Kardos and Lai

The Quest for the Best (antihistamine)

Junior's nose is starting to twitch
His nose and his eyes are starting to itch.
As those boogies flow, you ask oh why, oh why can't he learn to blow?

It’s nice to finally see the sun
But the influx of pollen is no fun.
Up at night, he’s had no rest,
But which antihistamine is the best?

It’s a riddle with a straight forward answer. The best antihistamine, or “allergy medicine” is the one which works best for your child with the fewest side effects. Overall, I don’t find much of a difference between how well one antihistamine works versus another for my patients. However, I do find a big difference in side effects.

Oral antihistamines differ mostly by how long they last, how well they help the itchiness, and their side effect profile. During an allergic reaction, antihistamines block one of the agents responsible for producing swelling and secretions in your child’s body, called histamine. Prescription antihistamines are not necessarily “stronger.” In fact, at this point there are very few prescription antihistamines. Most of what you see over-the-counter was by prescription only just a few years ago. And unlike some medications, the recommended dosage over-the-counter is the same as what we used to give when we wrote prescriptions for them.

The oldest category, the first generation antihistamines work well at drying up nasal secretions and stopping itchiness but don’t tend to last as long and often make kids very sleepy. Diphendydramine (brand name Benadryl) is the best known medicine in this category. It lasts only about six hours and can make people so tired that it is the main ingredient for many over-the-counter adult sleep aids. Occasionally, kids become “hyper” and are unable to sleep after taking this medicine. Another first generation antihistamine is Clemastine (eg.brand name Tavist).

The newer second generation antihistamines cause less sedation and are conveniently dosed only once a day. Loratadine (eg. brand name Alavert, Claritin) is biochemically more removed

from diphenhydramine than Cetirizine (eg. brand Zyrtec) and runs a slightly less risk of sleepiness. However, Cetirizine tends to be a better at stopping itchiness.
Now over-the-counter, fexofenadine (eg brand name Allegra) is a third generation antihistamine. Theoretically, because a third generation antihistamine is chemically the farthest removed from a first generation antihistamine, it causes the least amount of sedation. The jury is still out.

If you find your child's allergies are breaking through oral antihistamines, discuss adding a different category of oral allergy medication, eye drops or nasal sprays with your pediatrician.
Because of decongestant side effects in children, avoid using an antihistamine and decongestant mix (often, first generation antihistamines such as brompheniramine are combined in this fashion).

Back to our antihistamine poem:

Too many choices, some make kids tired,
Paradoxically, some make them wired.
Maybe while watering flowers with a hose,
I'll just turn the nozzle and wash his nose.

Naline Lai, MD with Julie Kardos, MD

Updated from the original post April 10, 2011

Update on Lyme disease: Is it

bug-check season in your area of the United States?

The classic bullseye rash of Lyme

Our infectious disease colleagues warn us that this year, winter in the Northeast United States was not cold enough for long enough to kill off as many ticks as usual. Thus, we folks in Pennsylvania are in for a more burdensome Lyme disease season. We've already had children come to our office this spring with concerns of tick bites, so here's an update on Lyme disease:

Lyme disease is spread to people by blacklegged ticks. Take heart- even in areas where a high percentage of blacklegged

ticks carry the bacteria that causes Lyme disease, the risk of getting Lyme from any one infected tick is low. Niney-nine percent of the little critters DON'T carry Lyme disease… but there are an awful lot of ticks out there. Blacklegged ticks are tiny and easy to miss on ourselves and our kids. In the spring, the ticks are in a baby stage (nymph) and can be as small as a poppy seed or sesame seed. In order to spread disease, the tick has to be attached and feeding on human blood for more than 36 hours, and engorged.

In areas in the United States where Lyme disease is prevalent (New England and Mid-Atlantic states, upper Midwest states such as Minnesota and Wisconsin, and California), parents should be vigilant about searching their children's bodies daily for ticks and for the rash of early Lyme disease. Tick bites, and therefore the rash as well, especially like to show up on the head, in belt lines, groins, and armpits, but can occur anywhere. When my kids were young, I showered them daily in summer time not just to wash off pool water, sunscreen, and dirt, but also for the opportunity to check them for ticks and rashes. Now that they are older I call through the bathroom door periodically when they shower: "Remember to check for ticks!" Read our post on how to remove ticks from your kids.

"I thought that Lyme is spread by deer ticks and deer are all over my yard." Nope, it's not just Bambi that the ticks love. Actually, there are two main types of blacklegged ticks, *Ioxdes Scapularis* and *Ioxdes Pacificus*, which both carry Lyme and feed not only on deer, but on small animals such as mice. (Fun fact: *Ioxdes Scapularis* is known as a deer tick or a bear tick.)

Most kids get the classic rash of Lyme disease at the site of a tick bite. The rash most commonly occurs by 1-2 weeks after the tick bite and is round, flat, and red or pink. It can have some central clearing. The rash typically does not itch or hurt. **The key is that the rash expands to more than 5 cm**, and can become quite large as seen in the above photo. This

finding is helpful because if you think you are seeing a rash of Lyme disease on your child, you can safely wait a few days before bringing your child to the pediatrician because the rash will continue to grow. The Lyme disease rash does not come and then fade in the same day, and the small (a few millimeters) red bump that forms at the tick site within a day of removing a tick is not the Lyme disease rash. Knowing that a rash has been enlarging over a few days helps us diagnose the disease. Some kids have fever, headache, or muscle aches at the same time that the rash appears.

If your child has primary Lyme disease (enlarging red round rash), the diagnosis is made by a doctor examining your child. Your child does not need blood work because it takes several weeks for a person's body to make antibodies to the disease, and blood work tests for antibodies against Lyme disease, not actual disease germs. In other words, the test can be negative (normal) when a child does in fact have early Lyme disease.

The second phase of Lyme disease occurs if it is not treated in the primary phase. It occurs about one month from the time of tick bite. Children develop a rash that looks like the primary rash but appears in multiple body sites all at once, not just at the site of the tick bite. Each circular lesion of rash looks like the primary rash but typically is smaller. Additional symptoms include fever, body aches, headaches, and fatigue without other viral symptoms such as sore throat, runny nose, and cough. Some kids get the fever but no rash. Some kids get one-sided facial weakness. This stage is called Early Disseminated disease and is treated similarly to the way that Early Lyme disease is treated- with a few weeks of antibiotics.

The treatment of early Lyme disease is straightforward. The child takes 2-3 weeks of an antibiotic that is known to treat Lyme disease effectively such as amoxicillin or doxycycline. Your pediatrician needs to see the rash to make the diagnosis. This treatment prevents later complications of the disease.

While the disease can progress if no treatment is undertaken, fortunately children do not get “chronic Lyme disease.” Once treatment is started, the rash fades over several days. Sometimes at the beginning of treatment the child experiences chills, aches, or fever for a day or two. This reaction is normal but you should contact your child’s doctor if it persists for longer.

Later stages of Lyme disease may be treated with the same oral antibiotic as for early Lyme but for 3-4 weeks instead of 2-3 weeks. The most common symptom of late stage Lyme disease is arthritis (red, swollen, mildly painful joint) of a large joint such as a knee, hip, or shoulder. Some kids just develop joint swelling without pain and the arthritis can come and go.

For some manifestations, IV antibiotics are used. The longest course of treatment is 4 weeks for any stage. Children do not develop “chronic Lyme” disease. If symptoms persist despite adequate treatment, sometimes one more course of antibiotics is prescribed, but if symptoms continue, the diagnosis should be questioned. No advantage is shown by longer treatments. Some adults have lingering symptoms of fatigue and aches years after treatment for Lyme disease. While the cause of the symptoms is not understood, we do know that prolonged courses of antibiotics do not affect symptoms.

For kids eight years old or older, if a blacklegged tick has been attached for well over 36 hours and is clearly engorged, and if you live in an area of high rates of Lyme disease-carrying ticks, your pediatrician may in some instances choose to prescribe a one time dose of the antibiotic doxycycline to prevent Lyme disease. The study that this strategy was based on and a few other criteria that are considered in this situation are described here.* Your pediatrician can discuss the pros and cons of this treatment.

Bug checks and insect repellent. Protect kids with DEET containing insect repellents. The Centers for Disease Control

recommends 10 to 30 percent DEET- higher percent stays on longer. Spray on clothing and exposed areas and do not apply to babies under two months of age. Grab your kids and preform daily bug checks- in particular look in crevices where ticks like to hide such as the groin, armpits, between the toes and check the hair. Be suspicious of random scabs. Dr. Lai once had a elementary school patient who had a blacklegged tick in the middle of his forehead. The mother noticed it at breakfast, tried to brush it off, thought it was a scab and sent the boy to school. Later that day the teacher called saying, “I think your son has a bug on his face.”

Misinformation about this disease abounds, and self proclaimed “Lyme disease experts” play into people’s fears. While pediatricians who practice in Lyme disease endemic areas are usually well versed in Lyme disease, if you feel that you need another opinion about your child’s Lyme disease, the “expert” that you could consult would be a pediatric infectious disease specialist.

For a more detailed discussion of Lyme disease, look to the Center for Disease Control website: www.cdc.gov.

Julie Kardos, MD and Naline Lai, MD

*link corrected 4/18/2016

Rolling along: Teach your child to ride a bike

Helmets on, ready to roll
photo credit: Sylvia Aptacy pixabay

About 95 percent of all Americans know how to ride a bike and who taught them? Probably their parents. Joining us today is frequent guest blogger Dr. Deb Stack with pointers on teaching your kid how to ride. – Drs. Lai and Kardos

I live in beautiful Bucks County, PA, an area known for its rolling hills, bike paths and covered bridges. With spring here, it's a great time to head out for a family ride.

Yet with less outdoor playtime, more and more children are struggling with learning to ride. A child's readiness is very individual. My own children ranged in age from 6-11 years old when they learned. Interestingly, my oldest learned by hopping

on a friend’s bike and being pushed down a gentle, grassy hill by the neighborhood children while I huddled out of sight around the corner. It turns out, their technique was right.

Riding a bike is an interplay of several components:

1. INTEREST – if the child is not interested, it is not time to try.
2. ABILITY to maintain PEDALing at a walking speed at least, even with distraction.
3. ABILITY to BALANCE when sitting.
4. STEERING
5. STARTING and STOPPING

After making sure your child is interested, check the bike:

The seat should be low enough that the rider can place both feet flat on the ground at the same time.

If there are hand brakes, the brake to the front wheel should be disconnected. This will prevent the rider from accidently squeezing only the front brake and being sent over the handlebars.

Remove the pedals or practice balancing on a Skuut bike, or balance bike, (two-wheeler without pedals). These are readily available and not too costly, but tend to be needed for only a short time.

Mountain bikes or BMX style bikes are not recommended for learning. Look for a bike where the pedals are nearly directly under the seat and the child does not have to raise the knees too high at the top of the pedal cycle.

Wear a helmet and make sure it is securely fastened under the chin.

Location: Look for a gently sloping grass hill (the kids were right!) or a large, fairly level, empty parking lot

What to do:

1. Practice pedaling separately if possible. Try a trike or stationary bike and practice pedaling at a steady rate and even singing or carrying on a conversation without stopping before heading out to try a two-wheeler.
2. Practice balancing: Use both feet to push off the ground and glide forward as far as the rider is able. Have the rider place feet down if he feels uncomfortable and then push again. Practice for about 15-20’. Keep practicing, trying to decrease the number of pushes per overall distance. Make sure the rider is looking ahead. Everyone, but most especially children, relies heavily on vision to balance.
3. Practice balancing and using hand brakes (if equipped). Work on glide-squeeze-feet down. This will allow the rider to slow down using the brakes and then place the feet down to stop or remain upright once stopped. It also allows the child to be in control of the speed.
4. Add the pedals back to the bike. Practice gliding. This time trying to place feet on the pedals for the glide. At this point, it can be helpful for the rider to start by being pushed by a spotter. Getting started and getting feet on the pedals is the most difficult part of riding and should be the last step taught.
5. Teach the rider how to start. Either pushing two to three times with both feet and placing on pedals, or with one foot while keeping the other on the pedal both work. Children will quickly let you know their preference.
6. Keep practicing in a large, open space and go in large circles before trying to make sharper turns. Make sure to practice going in circles both to the

left AND the right to practice both types of turns. Once the child has good control, you can transition to wide bike paths.

Some helpful reminders:

To keep a bike upright, the rider must lean into the turn, or in other words, turn handles into a fall rather than away.

Training wheels often teach the children to lean the wrong way and often slow learning. Better not to start them!

If you want to use a handle to attach to the back of the bike, make sure it is the type that clamps onto the seat post or frame. Your hand should hover over the top of the handle and just tap it gently to help a child rebalance; don't hold on. You can use an open hand on the end of the handle to push the child to start.

If your child is not quite ready, you can still enjoy a family ride; tag-along bikes foster good bike habits and let you bring along a child who is not quite ready to go solo. Don't miss the beautiful spring. Head out and ride!

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