Can a video game help kids with ADHD?

UCSF study shows one-third no longer fit criteria for ADHD after four weeks’ play

HELPING YOUR CHILD DEVELOP HEALTHY SELF-ESTEEM

Clinical Psychologist Stephanie Rosso, PhD, answers parents’ questions about factors that can affect children’s self-esteem.

30 EVERY 3 SUNSCREEN RULE

Director of Dermatology Dr. Renee Howard shares her advice on sun protection.
At the clinic, each runner participates in the Runners Biomechanic Screen, which includes:
- Slow-motion video analysis.
- Footwear, strength, flexibility, and posture assessment.

Runners will receive:
- Individualized running and training exercises based off of their Runners Biomechanic Screen.
- Runner-specific nutrition information from our sports nutrition-registered dietitian.
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Redefining possible: A patient perspective

High school senior Avery Sweet submitted her essay on how her Children’s Hospital experience helped her redefine her possibilities

I thought I was a normal teenager living a normal high school freshman life. But on May 12, 2015, everything changed. I walked into the Children's Hospital MRI Lab in Walnut Creek with my mom by my side like it was a normal day, but nothing could’ve prepared me for the news I would soon receive. After being inside a noisy tube for about an hour and a half, a nurse asked my mom and me to stay in a waiting room while the radiologist read my scans. Typically, MRI results are given to the patient weeks after the scan, but I didn't think twice about being asked to wait.

About 30 minutes had passed when the nurse returned to the waiting room and asked to speak to my mom privately. This confused me, but, again, nothing serious ever crossed my mind. After about 10 minutes, my mom walked back into the waiting room with a very strange expression on her face. She sat down next to me, looked me in the eyes, and softly said, “So, the doctors found something they don’t like. Everything will be okay, but...you have a brain tumor.” [Avery had been diagnosed with a pilocytic astrocytoma, a benign, slow-growing tumor near her cerebellum. For Avery, surgery to remove the golf ball-sized tumor was the only cure. Although benign, Avery would have eventually died without the surgery.]

Back in September of 2014, I began experiencing strange dizziness whenever I lay flat on my back. I thought this peculiar occurrence would soon subside, but after a few months I decided to tell my pediatrician about what was going on with my head. He performed many different neurological tests and concluded that my symptoms were most likely being caused by dislodged “crystals” inside of my ears. Although my neurologist was convinced my dizziness was inner ear-related, he ordered a routine brain MRI just to rule out the slim chance of it being something more serious, like a brain tumor.

Fifteen days after my first MRI, at about 8:30 a.m. on May 27, I said goodbye to my parents for what felt like would be the last time. Before my procedure began, I went into the bathroom, looked at myself in the mirror and said, “You can do this.” I then walked into my operating room, lay down on the table, and handed my life over to my surgeon, Dr. Peter Sun of Children’s Hospital, Oakland.

After a 16-hour brain surgery, I woke up cured and healthy – not only because of Dr. Sun, but also because of the hard work that every single person in that hospital put into my well-being. Although I can’t say much about my week-long stay at Children’s – because being doped up on morphine really takes a toll on your memory – I know that throughout my visit, not only did I feel safe, but my entire family knew I was in the care of dozens of miracle workers.

I began my journey feeling scared, helpless, and all-around frightened of Children’s Hospital. But after spending countless hours at Children’s, I have come to realize that Children’s Oakland is much more than just a hospital. UCSF Benioff Children’s Hospital Oakland is a sanctuary full of love and support, and it is made up of a team of guardian angels working to save the lives of thousands of children – just like me – year in and year out.

Now, I’m 17 years old and starting my senior year at California High School in San Ramon, where I have been a varsity cheerleader and involved in student leadership. In May 2015, everything changed, and I learned that life is not always just fun and games. From conquering a life-threatening condition to returning to a normal high school routine of proms, tests, and searching for the right college, Dr. Sun and UCSF Benioff Children’s Hospital have given me the chance to have a normal life and redefine what is possible.
PUZZLE #18 Answer

PROBLEM:

50 chocolate candies are in a box.
- 30 of them are caramel-filled.
- 25 are coconut-filled.
- 10 of them have both.
- The rest are plain chocolate.

Which image best represents the box of chocolates?

Answer:
Diagram C. There are 20 caramel candies in the box, 15 coconut and 5 (50 – [20+15+10]) plain chocolate ones.

PUZZLE #19 - THE LAST PUZZLE EVER!

Submit your answer by August 25, 2017 to:
CHILDREN’S HOSPITAL OAKLAND
MARKETING DEPT.
747 52ND ST., OAKLAND, CA 94609

NAME ___________________________________________ AGE _____________
ADDRESS _________________________________________________________
CITY _____________________________________________________________
STATE ________________________ ZIP _______________________________

Answer__________________
Video Game Promotes Better Attention Skills in Some Children with Sensory Processing Dysfunction

UCSF Study Shows One-Third No Longer Fit Criteria for ADHD After Four Weeks’ Play

A video game under development as a medical device boosts attention in some children with sensory processing dysfunction, or SPD, a condition that can make the sound of a vacuum or contact with a clothing tag intolerable for young sufferers.

In a study published on April 5 in *PLOS ONE*, researchers at UC San Francisco measured the impact of a “digital intervention” on attention among 38 children with the disorder and compared these kids with 25 typically developing counterparts, matched by age and gender.

The researchers found that 20 of the children with sensory processing dysfunction also met criteria for attention deficit hyperactivity disorder (ADHD), using parent reports. These children exhibited reduced midline frontal theta activity, a neural measure of attention revealed through the examination of brain wave patterns.

After playing the video game over four weeks, this group of children showed improvements in attention. Seven of the 20 (one third) showed such marked improvements that they no longer met research criteria for ADHD. Significantly, parent-reported improvements were noted nine months after the intervention.

Game Design Engages Young Players

The study participants, whose ages ranged from 8 to 11, were instructed to play the video game that uses a digital platform called Project: EVO™. The platform is designed to feel like a consumer product, with a high-level interface and engaging visual and auditory feedback. The core technology is based on patent-pending neuroscience designed to strengthen the brain’s ability to process and prioritize thoughts and external stimuli. It was originally discovered in the lab of Adam Gazzaley, MD, PhD, of UCSF.

The platform uses proprietary algorithms to automatically assess a child’s ability level, adjusting the difficulty of the tasks as they become more proficient. Users navigate a character through winding paths, avoiding walls and obstacles, while responding selectively to colored targets.

The researchers found that after playing the video game for 25 minutes, five days a week for four weeks, children with sensory processing dysfunction and inattention showed improvements in attention, according to both parent reports and an increase in midline frontal theta activity. While previous research has shown how the brain of a child with sensory processing dysfunction is structurally different from their typically developing counterparts, the new study shows that some children have measurable functional differences that can be improved with this intervention.

“These findings are also important to consider from the perspective that one size doesn’t fit all, as there were selective benefits of this intervention for some of these children compared to their counterparts without attentional deficiencies,” said lead author Joaquin A. Anguera, PhD, director of the clinical program in the Neuroscape center and assistant professor in the UCSF departments of neurology and psychiatry.

“Moreover, this study highlights the importance of conducting individual assessments from multiple perspectives – parental reports, attention testing and neuroimaging – to have a robust understanding of why this approach was beneficial in the first place.”

Alternative to Medication

Marco said that the intervention may prove to be an appealing alternative to medication for the subset of children with sensory processing dysfunction and inattention.

“We believe that all children with sensory processing dysfunction should be assessed for attention challenges. We expect that about 40 percent will have deficits in this important neurodevelopment domain and could benefit from cognitive training,” she said.

If the technology is approved as a medical device by the Food and Drug Administration, it may be available through a child’s medical provider and eventually covered by health insurance companies.

The technology was developed by Akili Interactive Labs in Boston and San Francisco. Authors of the current study report that they have no financial interests in Akili. The study’s co-authors are Anne Brandes-Aitken, Ashley Antovich, Camarin Rolle and Shivani Desai – all of the department of neurology at UC San Francisco.
Maternal and Paternal Tobacco Use Impacts Leukemia Cells in Offspring

Smoking by either parent helps promote genetic deletions (the total loss or absence of a gene) in children that are associated with the development and progression of the most common types of childhood cancer, according to research headed by UC San Francisco. While the strongest associations were found in children whose parents smoked during their infancy, these deletions were also noted in the offspring of parents who may have quit smoking even before conception.

The link between acute lymphoblastic leukemia (ALL) and parental smoking – especially paternal smoking – has already been established, but this is the first study that points to specific genetic changes in the tumor cells of children with the cancer.

DNA Error Causes Unchecked Growth

ALL, which is one of two primary types of leukemia in children, occurs when white blood cells called lymphocytes develop errors in their DNA, causing unchecked growth that crowds out healthy cells. Genetic deletions found in ALL patients wipe out cell-cycle control proteins and critical transcription factors required for the development of cells that play a key role in the immune response.

Approximately 3,100 children and teens are diagnosed each year with ALL, according to the American Cancer Society. While the five-year survival rate is high – 90 percent for children under 15 and 75 percent for 15- to 19-year-olds, according to the National Cancer Institute – long-term effects, which include an elevated risk for secondary cancers, may be serious and life-threatening.

In a study published on April 1 in the journal Cancer Research, UCSF scientists and their colleagues at UC Berkeley, Stanford University and University of Southern California looked at pre-treatment tumor samples from 559 ALL patients collected by the California Childhood Leukemia Study, an initiative that investigates the causes of the disease. The scientists wanted to see if any of the eight genes that are frequently deleted in ALL patients were found to be missing in the samples.

Questionnaires were given to parents to find out if smoking habits impacted the number of genetic deletions. Data was corroborated by a biomarker in newborns’ blood samples that indicates exposure to maternal smoking during pregnancy.

The scientists found that approximately two-thirds of the tumor samples (353) contained at least one deletion. Deletions were considerably more common in children whose mothers had smoked during pregnancy and after birth. For each five cigarettes smoked daily during pregnancy, there was a 22-percent increase in the number of deletions; and for each five cigarettes smoked daily during breastfeeding, there was a 74-percent increase in the number of deletions.

Child’s Age at Diagnosis Linked to Preconception Smoking

Smoking of five cigarettes daily by the mother or father before conception also was associated with a 7- to 8-percent higher number of deletions. One intriguing finding was the link between fathers’ pre-conception smoking and their child’s age at diagnosis.

Male children were found to be more sensitive to the effects of maternal smoking, including smoking that occurred pre-conception. This could be explained by the fact that male fetuses grow more rapidly, leading to increased vulnerability of developing lymphocytes to toxins that cause genetic damage, the authors noted.

“Our study indicates that the more tobacco exposure, the more cumulative DNA damage is evident in the ALL cell,” said senior author Joseph Wiemels, PhD, professor in the Department of Epidemiology and Biostatistics at the UCSF Helen Diller Family Comprehensive Cancer Center.

Smoking Just One Factor in ALL

“While causes of ALL are multifactorial – including the inborn genetic makeup of the child, patterns of infection, pesticides and other environmental exposure – if there was no smoking in the environment, then there would likely be fewer children with the disease,” Wiemels said.

“We may add ALL to the long list of diseases impacted by smoking, and in this case affecting one of our most vulnerable populations – our children.”

The study was supported by funding from the National Cancer Institute, Alex’s Lemonade Stand Foundation, Children with Cancer U.K., Swiss National Science Foundation, Sutter-Stöttner Foundation and the SiCPA Foundation. The study’s coauthors are Maneet Kaur, MPH, who served as co-first author; Semira Gonseth, MD; Steve Selvin, PhD; Luoping Zhang, PhD; Xiaorong Shao; Alice Kang, MPH; and Catherine Metayer, MD, PhD, who served as co-senior author – all of UC Berkeley, California; Alyson Endicott; Ritu Roy; Helen Hansen and Kyle Walsh, PhD – all of UCSF; Gary Dahl, MD, of Stanford University, California; and Roberta McKean-Cowdin, PhD, of University of Southern California in Los Angeles.
If you have ever wondered why some medical professionals choose to work in pediatrics, Gregg Helton, MD, a pediatric cardiologist at UCSF Benioff Children's Hospital Oakland, offers his response:

“I have followed Jackson since he was a baby, and I feel happy and grateful that he is doing so well. This is why we do this job. It is rewarding to help improve the lives of a child and his family. This kid is an inspiration for anybody who has had a serious heart condition.”

When Jackson Flannery was born November 21, 2001, his parents, Wendy and Shawnn Flannery, were told the baby had a heart murmur. Two weeks later, when they took Jackson to see their doctor, the murmur was still there.

“Our local family physician decided to send us to the closest facility to our home in Sonora that had a cardiologist, Doctors Medical Center in Modesto,” Wendy recalls. “The cardiologist diagnosed Jackson with a serious birth defect called ‘tetralogy of Fallot,’ and they sent him by ambulance to the University of California, San Francisco (UCSF).”

Tetralogy of Fallot was named after French physician Etienne-Louis Fallot, who described the condition in 1888 as a cause of “blue baby syndrome.” The rare condition includes four heart defects – a hole between the lower chambers of the heart (left and right ventricles), a narrowing of the pulmonary valve that separates the right ventricle from the main artery leading to the lungs, a thickening of the muscle surrounding the right ventricle, and an abnormal position of the aorta. These defects in the heart’s structure cause oxygen-poor blood to flow out of the heart to the rest of the body. That’s why infants with tetralogy of Fallot may have blue-tinted skin, because their blood does not carry enough oxygen.

After monitoring Jackson carefully for a few weeks, former UCSF pediatric cardiac surgeon Tom Karl, MD, performed surgery January 10, 2002, to repair the baby's heart.

The surgery closed the hole between the ventricles and inserted a patch across the pulmonary valve. In May 2003, Jackson underwent another procedure at UCSF to have a stent inserted in the left pulmonary artery to increase blood flow. Dr. Helton paid his first visit to see Jackson in Sonora two months later, in July 2003.

“The Flannery family’s pediatrician at Foothill Pediatrics suggested that they should have a cardiologist see Jackson in Sonora, rather than drive the baby back and forth to the Bay Area,” Dr. Helton explains. “Children’s Oakland has worked with patients at Foothill Pediatrics for many years, and I go up there every month. When I first saw Jackson, he was doing well, but about three years later, he had some narrowing of the left pulmonary artery that had been stented.”

Dr. Helton decided to send Jackson to Children’s Oakland for cardiac catheterization and ballooning of the pulmonary artery stent. That procedure was performed at Children’s in June 2006 by pediatric interventional cardiologist Ziad Saba, MD. Between April 2009 and October 2013, Jackson had to have three more major procedures – open-heart surgery to replace his faulty pulmonary valve with a “bioprosthetic” valve of animal origin.
tissue, a second cardiac catheterization by Dr. Saba, and a third procedure to replace the bioprosthetic valve with an artificial one, using a catheter instead of open-heart surgery.

“The catheter narrows the stent with the valve so it can be inserted into the heart, and then it pops open once it is in the right place,” Wendy explains. “The new valve seemed magic because it worked well, and Jackson felt well. The only problem was that the metal shell of the valve needed time to grow tissue around it, so Jackson had to be physically inactive for six months.”

“Inactive” is not a word people would use to describe Jackson, who loves to ski, bike, hike and participate in other sports. “I don’t remember much about any of my previous surgeries, but I do remember getting the second valve,” he says. “It was an easy surgery, and I spent only one night in the hospital, but I hated having such a long period of restricted activity.”

The new valve continued to work well for three years, but in late November 2016, Jackson told his mom, “Something is not right.”

“Jackson had run a mile that day, and he said he didn’t feel well, and that his running time was slower,” Wendy notes. “I called and booked an appointment for Wednesday, November 30, at the Children’s clinic in Walnut Creek since Dr. Helton was not scheduled to come to Sonora that soon. Dr. Helton performed an echocardiogram to check on the pulmonary valve function. When he came into the room afterward, his face was stricken, and he announced that something was wrong with the valve. He said it could be a collapsed valve, but he also ordered blood cultures to exclude an infection.”

The culture came back with positive results for infection on Saturday night, December 3, while Dr. Helton was out of town. The cardiologist on call telephoned the Flannerys, saying they should get to Children’s right away.

“We drove down to Oakland the next morning, and Jackson spent nine days in the hospital on intravenous antibiotics,” Wendy says. “The lab was right at the hospital, and they did cultures twice a day. We had to wait until three cultures showed the antibiotics were working before we could take him home. The nurses at the hospital taught me how to administer Jackson’s IV antibiotics at home. That was never a skill I wanted to have to learn.”

Ann Petru, MD, FAAP, Division Co-Director of Pediatric Infectious Diseases at Children’s Oakland, explains that Jackson’s infection was very rare, indeed. “He had an infection caused by an organism called ‘Cardiobacterium hominis,’” she says. “The organism involved is very slow-growing. It seldom causes disease in children, but when it does, it is known as a rare cause of heart infections. The bacterium causes only about one out of every 1,000 cases of endocarditis, and 75 percent of those cases are in patients who have artificial heart valves, like Jackson’s second valve, or other types of abnormal valves. These infections are extremely rare in people with normal hearts.”

“Jackson’s valve had extensive ‘vegetations,’ or growths of bacteria, inside the valve,” Dr. Petru adds. “We kept him on IV antibiotics at home for seven weeks and managed to get rid of the bacteria circulating in his blood while he was receiving the antibiotics, but we could not eliminate the vegetations that were clogging the inside of the valve. The only option was to replace the valve again.”

Jackson was dismayed at the prospect of facing another long period of inactivity following surgery. “I halfway joked that I would prefer open-heart surgery with only six weeks of restricted activity, rather than another catheter procedure to insert an artificial valve that required six months of inactivity,” he says. “I was relieved to learn they were going to use an actual human valve this time, and they could sew it in place during open-heart surgery, rather than use the catheter.”

The surgery was performed January 19 at Children’s Oakland by UCSF’s Chief of Pediatric Cardiothoracic Surgery Mohan
Reddy, MD, and surgeon Peter Kouretas, MD, PhD. Fortunately, Jackson did find activities to keep him occupied while undergoing antibiotic treatment prior to this surgery, and again after surgery while on IV antibiotics for six days at Children’s and for two more weeks at home.

His father, Shawnn, had discovered professional artist Bob Ross on Netflix, and the TV show inspired Jackson to try his hand at art. He also had played guitar for three years, so he continued that pursuit in the hospital as well.

“I took up painting before the surgery,” Jackson notes. “I always liked art, but I hadn’t done any painting. I ordered oil paints and tried it for the first time, following instructions from Bob Ross on TV. It was therapeutic, and it helped me through those times when I couldn’t do physical activity. Also, the Brocchini family – friends of my family – gave me a new guitar before surgery. They are Native Americans, and they attached a hawk feather to the guitar and blessed it for me. That was incredibly special and supportive.”

On his last day in the Intensive Care Unit at Children’s, Jackson serenaded his nurses on guitar, playing “Parachute” by Chris Stapleton and “Thinking Out Loud” by Ed Sheeran.

“I wanted to surprise the nurses, who had taken such good care of me,” he explains. “I also became very good friends with Dr. Petru, who is a really awesome person. And I wouldn’t have wanted to have anyone else but Dr. Helton for my cardiologist. I have known him for a really long time. He is extremely kind and compassionate.”

Dr. Helton saw Jackson on March 9 in Sonora, giving him the “green light” to return to normal activities. Jackson jumped back into skiing, biking and other sports. In fact, six weeks after his final surgery, he took second place in the giant slalom event for the high school division at a skiing competition near Sonora.

“Since the skiing competition, Jackson has been great,” Wendy reports. “He was golfing for his high school team in the spring, and he plans to go backpacking this summer. He also got his driving permit in May. Plus, even though he missed months of school, he maintained a 4.1 grade point average.”

So, what’s next for Jackson? “I hope to study wildlife biology or zoology in college because I want a career doing something I like,” he says. “I think one of my purposes for being around is to help save our planet. I was born with an awesome family and a beautiful place to live, so despite my health issues, I believe it’s important to stay positive and make the most of the opportunities I have been given.

“Of course, for college, I’m taking locations into consideration,” he adds. “I want to be in the mountains where I can ski and enjoy the outdoors.”
What Should Children Be Drinking?

A child’s beverage intake is an important part of a healthy diet. It can make a big difference in diet quality and overall health, either by providing valuable nutrition and hydration or by adding empty calories and excess sugar. The American Academy of Pediatrics (AAP) recommends primarily drinking milk and water for optimal nutritional status.

Calcium: Milk has long been considered a nutritious beverage for growing children. Not only is it a substantial source of protein, but it is also a great source of calcium, with 300-400 milligrams per cup. Relative to adults and younger children, adolescents have higher calcium needs because bone mass develops at an increased rate during puberty. The 2010 Recommended Daily Allowance (RDA) of calcium for children from 9 to 18 years old is 1,300 milligrams to promote proper bone, muscle, and hormonal development.

Children can meet more than half of their calcium needs by following the current dietary guidelines for milk each day, which are two cups from age 2 to 3, two and a half cups from age 4 to 8, and three cups from age 9 to 18. To reduce saturated fat and retain nutrients, the AAP recommends fat-free and low-fat milk for children more than two years old. Plant-based milks such as soy, almond, rice, and coconut are generally fortified with a comparable amount of calcium, but the protein content in all but the soy milk is very low, and sugar may be added.

Limit sugar-sweetened beverages: Research supports limiting sugar-sweetened beverages. Sugar-sweetened beverages often replace milk in childhood and adolescence. In addition to displacing key nutrients with empty calories and excess sugar, overconsumption of sugar-sweetened beverages has been linked to nutrient deficiencies, excess weight gain, poor growth, chronic diarrhea, and dental caries. Sugar-sweetened beverages may also play a key role in the increasing incidence of childhood overweight and obesity and the development of chronic diseases.

Juice: Juices can provide vitamins and minerals, but they can also be a source of excess sugar if consumed too frequently. Excessive juice intake can lead to carbohydrate malabsorption, chronic diarrhea, and decreased appetite. The AAP recommends limiting daily juice consumption to no more than 6 ounces from 1 to 6 years old and 12 ounces from 7 to 18 years old. Juice should not be introduced to infants under 6 months of age, and infants from 6 to 12 months old should consume no more than 4 ounces of juice. Juice provided within these recommendations should be 100% fruit juice.


Tips to encourage drinking milk and water:

- Mix a small amount of chocolate syrup to plain milk to add flavor without adding too much sugar.
- Make “spa water” by adding fresh seasonal produce (such as watermelon and mint or melon and strawberries) to a pitcher of water, giving the water flavor without adding calories or sugar.
- Add a squeeze of lemon, orange, or grapefruit to sparkling water.
- Make ice cubes with berries in them to add to water.
- For those who just do not like water, add a splash of 100% fruit juice to a glass of water.

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<th>Calcium</th>
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<td>1 to 3 years old</td>
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<td>9 to 18 years old</td>
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Lead poisoning

What are the effects of long-term lead poisoning?
When children present with very high, toxic levels of lead in the blood, this can lead to acutely severe symptoms such as coma or seizures. Even chronically low levels of lead in the blood can affect your child’s IQ, attention span and academic performance.

Previously, the Center for Disease Control and Prevention’s definition of a high lead level was above 10 to 20 micrograms per deciliter, but now even a level of 5 micrograms per deciliter warrants further investigation and follow-up.

How do you get lead poisoning?
Since toddlers often put things in their mouths, they are at an increased risk to ingest lead if it is present in their environment.

If any individual is exhibiting “pica behavior,” which is eating non-food items that might contain lead, they are also at risk for high blood levels.

How can you prevent a child from getting it?
Talk with your pediatrician if your child is at risk for elevated blood levels. A blood test will determine if your child has a high lead level in the blood and can be performed at any time. The test is often done when your child reaches one year old and can also be obtained in these situations:

• Your child is exhibiting pica behavior – i.e., eating non-food items, especially dirt.
• You and your child are residing in a home built before 1978, after which lead was removed from household paint. This should especially be checked if you see paint chips or dust, and/or there have been recent home renovations.
• A parent works in an environment at risk for lead exposure.
• You have toys or toy jewelry on the lead recall list (www.cpsc.gov).
• There is exposure to medicinal herbal remedies or ceremonial makeup that might contain lead.

How do you treat lead poisoning?
The first approach to treating lead poisoning is to identify the lead source to stop the exposure. Subsequent chelation therapy is dependent on how high the lead level is, and how acute and sudden the exposure is. Children with higher lead levels can often have concurrent iron deficiency, which also needs to be treated.

If your child has been found to have a high lead level, your pediatrician will contact your local county health department’s Lead Poisoning Prevention Program for assistance in investigating the source of the lead exposure, to ensure that your house is safe for your child. Your pediatrician and the health department will also contact our hematology center should there be further management issues.

Resources: CDC Childhood Lead Poisoning Prevention Program (www.cdc.gov/nceh/lead/); Dr. Jean Woo, California Department of Public Health, Childhood Lead Poisoning Prevention Branch; Dr. Timur Durrani, Medical Director, Zuckerberg SF General Occupational Health Services; Assistant Medical Director, San Francisco Division, California Poison Control System.

Poison Control Center
Your child swallowed it. Or breathed it in. Or spilled it on his skin. Don’t guess; be sure. Get help from an expert anytime. Call the Poison Control Line at 1-800-222-1222.

Here’s What Happens When You Call 1-800-222-1222
They will need this information:

• Was it medicine? A cleaner? A plant? An insect? If possible, have it with you when you call.
• What’s going on? They will ask you some questions to assess the situation and tell you quickly, right over the phone, what to do.

Usually, they will be able to help take care of the problem with one phone call, and they will advise when they think you need to go to an emergency room. The poison control expert will call the Emergency Department ahead to alert them that you’re coming so you don’t have to wait. If necessary, they will call you back to check on your child’s progress.
Helping Young Kids Adjust to a Move

Our little family recently survived a cross-country move. Although I knew it would be a big adjustment for my husband and me, the person I’ve been thinking about most is our four-year-old son. Knowing that kids thrive on routine and familiarity, I worried.

I thought I’d share some things that we did that seemed to help. These suggestions are most relevant to young children, but I’ve found that many of the strategies transcend age; those that seem to have helped my son get through this change have also helped me.

Sometime (not too long) before the move occurs, talk your child through what will happen. We made sure to explain that we were all going together and that all of our belongings were coming with us, and we showed him pictures of our new home. My son and I searched for fun things to do in our new city and saved them on a Pinterest board. He frequently asked to look at the “fun stuff pictures.” We were also honest with him about cherished family members and friends who wouldn’t be coming with us and answered questions he had about why we had to move in the first place.

Let kids make some decisions. This was one of the great suggestions from our son’s preschool teacher. Even small things, like allowing him to decide which toy trains to keep with him in a suitcase and which to send with the moving truck, seemed to make a difference.

Keep a routine. Moving is, by nature, chaotic. At various points we were without our belongings, staying with friends, and we had a few weeks away from his dad. But both during and after the move, we tried to keep some things constant. We kept the same sleep schedule. We ate dinner together. And, after the move, we signed up for daily swimming lessons. I think it really helped ground us in our new city to have a month of going to the same place each morning to swim.

Find the familiar. I think it has really helped our little guy to see that, although some things are different, there are a lot of things about life that will remain the same. For us, this meant an early trip to the local public library to get our library cards and check out some books. The building is different, but the process is the same. He and I were both excited when we found a Trader Joe’s close to our house—all of the same favorite foods we were used to.

Celebrate the new. In addition to finding comfort in the familiar, we are enjoying the excitement of the new and shiny. We are cultivating gratitude for the things in this new chapter of life that might even be better—the favorite new park (with a splash pad!), the great science museum, the house with a yard, the reasonably-priced gym (for us grown-ups) with a playroom. Each day we are exploring a little bit and having fun finding the places we had seen in pictures and talked about.

Make new friends, but keep the old. We have been so blessed with supportive friends, family, and neighbors on both sides of the move. We continue to talk about our “California friends” and stay in touch via Skype. A trip to see extended family at the familiar “Nonna and Opa’s house” shortly after the move seemed to help my son feel connected. And, we’ve been lucky enough to have a wonderful welcome from new friends here in Texas.

Allow and validate feelings. It’s a good idea to go in expecting strong feelings from even young children about a move. They get it and are completely aware of big changes, probably even more than we realize. Tantrums, crying, and mood swings are all pretty common. Our son coined the term “sad-icited” = sad + excited, for how he was feeling, which I thought was actually a pretty good description of how most people feel about moving. It helps to tell kids that however they are feeling is okay and normal.

Be kind to each other. Be a little flexible. Let small things go. Change is hard. It won’t be perfect. But, maybe with the right combination of finding the familiar, enjoying the new, and maintaining connections with supportive friends and family, it just might be okay.

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Helping Your Child Develop Healthy Self-Esteem

Clinical Psychologist Stephanie Rosso, PhD, answers parents’ questions about factors that can affect children’s self-esteem

How can I help my child develop a healthy sense of self-esteem?
A healthy sense of self-esteem is based on a realistic view of ourselves, including our strengths and weaknesses, and an acceptance of our individuality. This includes embracing our uniqueness, talents, and even our quirks that make us who we are.

You can help children develop positive self-esteem by acknowledging their achievements with praise that is authentic and specific. Instead of giving global praise such as “You’re the best,” give specific praise. For example, you could say something like, “Good job working so hard on your math homework!”

Help your children identify their unique strengths, talents and interests by letting them try different activities. They may not want to continue some activities, but eventually they will find ones that are a good fit. Acknowledge that we all have things that are difficult for us, and explain that it is okay to make mistakes as they grow and learn.

Open, respectful communication is key. When your children talk to you, don’t “half-listen” while checking your cell phone or doing something else. Be fully present and listen carefully to show them that their thoughts and feelings matter. Take their concerns seriously.

Childhood problems might not seem very serious compared to adult problems, but they are important to the child. How you respond can affect whether your children will tell you about other, more serious problems as they grow older.

When children seem concerned about their physical appearance, how can parents help them accept and appreciate their own bodies?
Our feelings about our bodies are part of our overall sense of self-esteem. Hopefully, those feelings are part of a bigger overall picture of how we see ourselves as unique, likeable people. We want to find ways to accept all parts of ourselves, including our body parts.

If your child expresses concerns about body image, discuss the subject in a loving, supportive manner, emphasizing that we don’t all look like people on TV or in magazines. It may help to find a good book about how our bodies work and the stages of body development. When talking about a child’s body, be careful about the words you use and avoid saying something that could be hurtful or critical, even if you are trying to be helpful. Sometimes we don’t realize the impact of our words. Ask yourself if you would say that same thing to your best friend. How would you feel if your spouse or friend said that to you? Is there a way to say difficult things in a way that’s supportive and constructive?

Try to emphasize all of the amazing ways we can use our bodies, such as hiking, swimming, playing, dancing and so forth, focusing on health and strength instead of on body shape or size. Make healthy eating and choices a part of your child’s everyday lives. It is also important to model positive behavior about how you feel and talk about your own body. If you are very self-critical of your own body, it can impact how your children view and talk about themselves.

Can stress from schoolwork, sports or other activities have a negative impact on my child’s self-esteem?
Stress can be valuable in motivating us to work towards achieving our goals. But there is an optimal amount of stress for each of us, and too much stress can overwhelm us and have negative impacts on our physical and mental health. We need to find the right balance between activities that are challenging and stressful and those that come easier and make us feel successful.

Schoolwork can definitely impact a child’s self-esteem. It is important to evaluate whether your child might need more support in school to be successful, especially if the child has learning challenges. If your children show signs of stress about other activities, help them learn how to recognize the signs of stress in their bodies so that they can be aware of stress and find ways to cope with it. Does their stomach ache? Do they get headaches? Do they get quiet?

We all need to find ways to cope with stress in our lives and learn which tools work best for us. We can model for children and support them in finding ways to cope with stress – listening to music, taking slow breaths, practicing yoga, walking around the block or calling a friend. We often have to explore and see what works best for each person.
Top 10 Sun Protection Pointers for You and Your Child
by Renee Howard, MD

1. **Cover the skin.** Don’t rely on sunscreen alone to protect the skin from the sun’s rays. Seek shade under a tree or umbrella, and use a cover on the stroller and shade tent at the beach.

2. **Use a sunscreen with a sun protection factor (SPF) of 30.** This number represents how long one can stay in the sun with the sunscreen versus without sunscreen before sunburn occurs. Higher SPFs provide only slightly more sun protection; those with big numbers like “SPF 100” give consumers the mistaken idea they can stay in the sun longer without burning.

3. **Choose a sunscreen that is broad-spectrum.** This means it protects from the midday, sun-burning ultraviolet B (UVB) rays as well as the longer ultraviolet A (UVA) rays that peak early and late in the day. Important active ingredients that add UVA coverage include zinc, titanium (both minerals that reflect the UV energy), avobenzone and mexoryl (chemicals that process the energy in the skin).
   - Many of the most effective sunscreens have a combination of mineral and chemical agents. Mineral agents tend to be less irritating and are better for those with eczema or sensitive skin.
   - Use an unscented sunscreen, as fragrance can also be irritating and lead to skin allergies down the line.

4. Reapply sunscreen every 3 hours. Use this to remember the rule: “30 every 3.”

5. **Apply an adequate volume of sunscreen to achieve the level of SPF protection on the label.** Use at least one ounce, or two tablespoons, for the whole-adult sized body. Apply a glob with the palm of the hand, not a small dot with the tip of the finger. Apply like moisturizer cream, not like perfume.

6. **For typical days of school and work with minimal sun exposure, it is most important to protect the face.** Include sunscreen application to the face into your family’s morning routine. On the weekends for sports and outdoor activities, include arms, legs and all exposed skin.

7. **For areas like the scalp especially in men with thinning hair, or babies with scant hair, find a sunscreen with a gel or liquid base for easy application.** Better yet, keep that hat on!

8. **Don’t rely on marketing or random websites alone to learn about the effectiveness of sunscreens.** *Consumer Reports* tests sunscreen every year for effectiveness. The Skin Cancer Foundation also provides lists of good sunscreens. Ask your dermatologist or primary care provider for specific suggestions.

9. **Remember special conditions that intensify the sun’s energy and thus multiply risk of sunburn.** This includes activities on the beach, in the water, and on the snow, when the sunlight is reflected from below as well as shining from above.

10. **Remember you can get sunburned on cloudy or foggy days.** Eighty-five percent of the sun’s energy gets through cloud cover. Sunburn increases risk of melanoma, the most serious form of skin cancer.
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- Watch and complete the online videos and learn the necessary skills at your own pace.
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