Healthy Routines Lead to Healthy Children

What are routines?
Regular activities that are repeated are called routines. Creating healthy routines for your program will help children grow strong and develop healthy habits. Routines and schedules help children become organized and feel calm about knowing what comes next. Predictable routines also build strong relationships and trust. Routines give children a sense of security that allows them to learn and try new things. By trying new things, children learn confidence. Over time, routines lay the foundation for life-long habits.

How do routines lead to build healthy habits?
While most adults use clocks to organize their time and the events of the day, children use the order of activities to know what comes next. By regularly repeating the order of activities, healthy actions turn into healthy habits.

Healthy routines in child care programs:
Morning Health Check
Greet each child and his/her family warmly each morning. Observe the child for signs of illness, ask how the child is feeling and what kind of a night and morning she had. Allow parents to communicate needs, priorities and concerns.

Physical activity
Allow plenty of time for vigorous physical activity. Children who are physically active before meals have a better appetite for nutritious food and drink, so plan your day accordingly. And remember that infants need tummy time.

Mealtime
Serve meals and snacks at regular intervals. If a child is not hungry, they know there will be more food served later. Sit with children and participate in conversations with them at mealtime rather than hovering above or running around waiting on them.

How to tell if you should discard food
- Look at the expiration date on unopened containers of food. Do not use food past this date, even if it looks and smells fine.
- Inspect food for spoilage every day. How does it look? How does it smell? If a food smells spoiled or looks moldy, do not serve it to children or eat it yourself. If food is moldy, throw it out. Remember that food does not have to look or smell bad to be unsafe.
- Do not use food in cans that are leaking or have bulges. These bulges are caused by gas produced by dangerous bacteria inside the can.
- Do not serve home-canned foods. Bacteria may grow in foods that are improperly canned and cause serious illness.
- Do not use food in unlabeled cans or packages without labels.
- Do not use foods in cans that are dented or rusted, in jars that are cracked or with broken seals, or in packages that are torn. These openings may allow food inside to become contaminated.
- Leftovers should not be out for more than two hours. Date all leftovers and use or discard them within two days, beginning with the initial refrigeration.
The FDA (U.S. Food and Drug Administration) does not have evidence that triclosan, which is added to soap to give it antibacterial properties, provides extra benefits over soap and water. Therefore, antibacterial soap does not fight illnesses as stated in the marketing campaigns. Triclosan can be found in hand soap, laundry and dish-washing products, plastics like toys and cutting boards, toothpaste, deodorants, cosmetics, and impregnated sponges. Triclosan and other antibacterial agents and their by-products are now found throughout the environment including surface waters, soil, fish tissue, and human breast milk. It’s effects on humans has not been well studied although animal studies have shown that triclosan alters hormone regulation. Other studies have raised the possibility that triclosan contributes to making bacteria more resistant to antibiotics. Environmentalists and the American Medical Association (AMA) have encouraged the FDA to study the issue and a review is expected in spring 2011. Since most illness in childcare programs are caused by viruses, anti-bacterial soap really won’t reduce illness. Until it is shown that anti-bacterial soaps are safe for use with young children and is superior to regular soap, it would be prudent to limit its use. The ingredient label on products will indicate whether triclosan is included.

According to health and safety experts, vigorous hand washing in warm water with plain soap for at least 10 seconds is sufficient to fight germs in most cases, even for health care workers. For extra assurance, when running water is not available, use of an alcohol- or peroxide-based hand sanitizer product is a good option. To reinforce good handwashing, posters can be downloaded from the CCHP website at www.ucsfchildcarehealth.org and handouts such as Sanitize Safely and Effectively can be used for information on child care environmental cleanliness to reduce illness.

References
EBMUD Pollution Prevention: www.ebmud.com/wastewater/residential_pollution_prevention
Triclosan: What Consumers Should Know: www.fda.gov/consumer

by Judy Calder, RN
Problems with Car/Infant Seats and Other Seating Devices in Child Care

Infant equipment must be used thoughtfully. Consider the following information when making choices about where an infant spends her day.

Lack of Tummy Time can lead to motor delay

The “Safe Sleep” campaign has resulted in most babies being placed to sleep on their backs to reduce the risk of Sudden Infant Death Syndrome (SIDS). Unfortunately, some parents and caregivers worry that any time, even when awake, that an infant spends on her tummy could increase the risk of SIDS and infants and toddlers are spending increasing hours of their days in devices such as car seats, infant bouncy chairs, and strollers. As a result, many are not getting enough “tummy time” while awake to allow for normal motor and brain development.

Lack of tummy time and physical activity is so widespread that infants are
- developing flat heads from having them constantly in contact with a firm surface like a mattress or a car seat.
- developing developmental delays in their motor and social development.
- at risk for being more sedentary in childhood, increasing their risk for obesity

Spending time in the prone (on the tummy) position is important for many aspects of a child’s development. Using the upper body muscles to raise and hold the head, neck, trunk, and shoulders up when lying prone are the first steps in an infant’s progress toward supporting their upper body with their elbows and then their hands and finally sitting and standing.

Injuries associated with use of car seats as infant carriers

Using car and infant seats as infant carriers is also a common cause of injury to infants.
- Infants in these devices are placed on elevated surfaces such as counters and tables and then fall onto hard surfaces. Infants can surprise us and rock a seat across a surface leading to a fall.
- Infants who are unbuckled in car seats being used as carriers also risk injury from tumbling out of the seat while they are being carried in it. In 1997, 8700 infants were treated in emergency rooms for falls from seats. Falls from infant carriers have been found to cause more serious head injuries than falls down stairs.
- Seats placed on soft surfaces such as beds or couches can overturn, causing suffocation of the infant. While car seat instructions may advise against placing car seats on elevated or soft surfaces, many parents and caregivers say they are unaware of these instructions.

Use of infant carriers outside of cars is also associated with the risk of “sudden life threatening events.” These are caused by infants falling asleep restrained in their seats in a relatively upright position. This occurs when the seat is placed on a hard surface indoors. This position can lead to forward bending of the infant’s relatively heavy head onto the chest, resulting in marked narrowing of the upper airway and a drop in blood oxygen levels. This problem is more common in premature infants. The American Academy of Pediatrics now recommends that premature infants undergo a period of observation in their car seat prior to hospital discharge, to make sure they don’t experience sudden drops in oxygen while riding in their car seats.

Car and infant seat use and emotional and cognitive development

Recent research shows that infants spend more time in seating devices than on the floor or being held by child care providers. In light of research suggesting that increased physical contact between mothers and infants makes mothers more responsive to their infants and promotes the development of more securely attached infants, these findings are troubling. Touch facilitates physical, cognitive, and social development within the first year of life. For many reasons, it is time to reconsider our use of equipment when caring for infants.

References

by Vickie Leonard, RN, FNP, PhD
Portion Distortion and the Rise in Obesity

In the past few decades there has been a steady rise in overweight and obesity in America. This increase causes concern since it is related to so many health problems. For years, public health officials have been studying the increase and trying to find ways to reverse the trend.

Many factors have lead to the current rates of obesity. With modern conveniences and changes in commute practices, people spend more time in sedentary activities than ever before. Hours spent in cars, behind computers, and watching TV, have all increased and people have become less physically active. At the same time, there has been an overall increase in calorie intake. People eat out more often, convenience foods have become more popular and less time is spent preparing and enjoying meals.

In 1970, the average calorie intake for women was 1542 calories per day while today it is closer to 1900 calories per day. Many of these extra calories come from an increased consumption of sugary drinks and from eating larger portions of food.

What is Portion Distortion?
Research shows what people think is a normal portion size has changed in the past 20 years. This occurs when people see larger portion sizes as the right amount to eat for a meal or snack. This thinking leads to an increase in the amount of calories that people eat and can lead to overweight and obesity. Studies also show that when people are offered larger amounts of food, they tend to eat more even though they may not be hungry for the full serving.

Here are some examples of how portions have changed:

<table>
<thead>
<tr>
<th>Twenty Years Ago</th>
<th>Today</th>
</tr>
</thead>
<tbody>
<tr>
<td>Portion</td>
<td>Calories</td>
</tr>
<tr>
<td>Bagel 3” diameter</td>
<td>140</td>
</tr>
<tr>
<td>Cheeseburger</td>
<td>1 333</td>
</tr>
<tr>
<td>Soda 8 ounces</td>
<td>100</td>
</tr>
</tbody>
</table>

Tips for Better Portion Control
- Share food with a friend.
- Eat on smaller plates.
- Bring leftovers home.
- Read labels for servings per package.
- Weigh and measure food until you recognize the recommended serving size.
- Avoid getting the larger portion just because it gives you more for the price than a smaller portion.
- Ask yourself how much the extra calories will cost you in health care.
- Don’t eat straight from the package. Instead, serve food in a small bowl.
- Eat slowly, recognize feeling of fullness and stop eating then. You can save the rest for later.

Resources and References
For more information and a portion distortion quiz, go to the National Heart Lung and Blood Institute, Portion Distortion and Serving Size (NHLBI) Website: www.nhlbi.nih.gov/health/public/heart/obesity/wecan/eat-right/distortion.htm

by Bobbie Rose, RN

Play dough
Children love the tactile experience of playing with play dough. How to make it:
1 cup water
1 tablespoon cooking oil
Food coloring
1 cup flour
½ cup salt
1 tablespoon cream of tartar (buy in the spice section)

Boil the water and oil. Remove from heat, add food coloring. Add flour, salt and cream of tartar. Allow to cool then knead until smooth. Store the play dough in an airtight container.

Tips for keeping it safe and healthy in child care programs:
- For ages 3 and up
- Make play dough when children are not present to prevent burns from boiling water
- Have children wash their hands before and after playing with play dough
- Give each child their own play dough
- Store in individual air tight containers, with each child’s name, for future use
- Discard play dough that has been soiled with body fluids or is visibly dirty
Minimizing Exposure to Toxic Flame-Retardants

Studies show that toddlers and preschoolers have higher amounts of fire retardant chemicals in their blood—typically 3 times higher than their mothers. Two recent studies also confirm that California’s children, compared to other parts of the world, including Europe and Mexico, have remarkably higher levels of toxic chemicals called Polybrominated Diphenyl Ethers (PBDEs). A growing body of research is suggesting that exposure to these flame retardants is dangerous. These chemicals disrupt hormones and are potentially harmful, especially to the brains of young children.

What are flame-retardants?
Flame retardants are chemicals added to consumer products, especially in highly flammable synthetic materials, to meet the government’s flammability standards. They are used in household, office, and baby products such as textiles, furniture, strollers, nursing pillows, construction materials and electronic equipment to prevent and limit burning.

PBDEs are used in foam furniture and the plastic of TVs and computer monitors. Only two forms of PBDEs used in foam furniture were withdrawn from the U.S. market in 2005, after high levels of PBDEs were reported in the blood, milk and body tissues. However, a third form of PBDE is still used in electronics and is required by California fire code regulation to be used in baby products, and upholstered furniture and mattresses in California.

Where are flame-retardants found?
Flame-retardant chemicals are almost everywhere—in our homes, child care, schools, offices and products we use every day. Since 2005, newer foam items may not have PBDEs. However, foam items such as mattress pads, couches, easy chairs, foam pillows (including breastfeeding pillows), and carpet padding purchased before 2005, are likely to have them. They were also used in vehicle seating, car seats, and office furniture.

Why minimize exposures?
Laboratory tests conducted for the Environmental Working Group found flame retardants in 19 out of 20 U.S. families. In total, 11 different flame-retardants were found in these children, and 86 percent of the time the chemicals were present at higher levels in the children than their mothers.

The Consumer Product Safety Commission is strongly discouraging the use of fire retardant in home furniture, including baby products. Many of these chemicals are considered harmful, and have been linked to a range of adverse health effects including thyroid disorders, learning disabilities, hyperactivity, behavioral changes, problems with hearing and memory, reproductive problems, birth defects and, possibly cancer.

Most people are unaware of these flame retardants, or they do not know that companies are not required to prove that their chemicals are safe for human health.

How to reduce toxic fire retardant chemicals
The Green Science Policy Institute is suggesting the following simple steps:

- **Wash your hands frequently.** Fire-retardant chemicals are found on hands, and hand to mouth contact is believed to be a major path for exposure.
- **Use a vacuum fitted with a HEPA filter and wet mop to reduce dust.**
- **Avoid PBDEs in foam.** Furniture with foam that is labeled meeting California TB 117, is likely to contain toxic fire retardants.
- **Consider buying wooden furniture or furniture filled with polyester, down, wool, or cotton, as they are unlikely to contain added fire retardant chemicals.**
- **Consider buying upholstered furniture with the foam thickly covered or wrapped inside the cushion so the chemicals in it are less likely to escape.**
- **Use a minimum of carpeting and draperies.** These can be treated with fire retardant chemicals. Mattresses should not pose a health hazard because they use a barrier technology rather than adding chemicals to foam.
- **Avoid PBDEs in electronics.** Prevent young children from touching and mouthing items with fire-retardant especially your cell phone or remote control.

References and Resources
Environmental Working Group at www.ewg.org
Environmental Health News by the Environmental Health Sciences at www.EnvironmentalHealthNews.org
Toxicological fact sheet for PBDEs by the Agency for Toxic Substances and Disease Registry at www.atsdr.cdc.gov/tfacts68-pbde.html
Green Science Policy Institute at www.greensciencepolicy.org

by A. Rahman Zamani, MD, MPH
Folic Acid and Prevention of Neural Tube Defects

Neural tube defects (NTDs) remain an important, preventable cause of mortality and morbidity. According to the Centers for Disease Control (CDC), each year more than 3000 babies are born with central nervous system defects that are among the most devastating human developmental defects. Although we do not know the exact cause of NTDs, we know that genetic and environmental factors contribute to NTDs. Up to 70% of NTDs can be prevented if pregnant women take folic acid (also known as vitamin B9 and folate), before and during pregnancy.

What is a Neural Tube Defect?
The spinal cord of the embryo begins as a flat region which rolls into a tube called the neural tube. This occurs very early, before many women even know they are pregnant. When the neural tube does not close completely, it develops a NTD, which can cause a range of physical, mental, and social problems. There are two main types of neural tube defects: spina bifida, when the spinal cord or its coverings do not develop properly, and anencephaly, when the brain is not properly formed. The risk of both of these birth defects can be reduced by taking an appropriate amount of folic acid at least one month before pregnancy and during the first trimester.

What is Folic Acid?
Folic acid is necessary for the production and maintenance of new cells. The human body needs folic acid to grow and be healthy. It not only protects babies from the birth defects, but may also protect a mother’s health by lowering the risks of heart disease, stroke, and some types of cancers.

How much folic acid do you need?
The Spina Bifida Association recommends that women take 400 mcg (0.4 mg) of folic acid each day during their childbearing years to help prevent NTD. Women who could become pregnant should take folic acid one month before conception and for 3 months after conception (first trimester). Women who have a child or sibling with spina bifida should take a higher dosage, about 4000 mcg (4.0 mg) of folic acid, and must see their doctor when planning to get pregnant.

Where can you get folic acid?
Many foods such as cereals, breads, pastas, rice, and other grain products are fortified with folic acid. Some cereals contain the full 100% of folic acid you need each day. Other natural foods such as liver, broccoli, spinach, deep green leafy vegetables, dried beans, bananas, nuts, lean beef, veal, and oranges are good sources of folic acid. Vitamin supplements are also good sources of folic acid. Pregnant women should talk to their health care provider about nutrition and vitamin supplements.

References & Resources
Web MD www.webmd.com/baby/folic-acid-and-pregnancy

Healthy Routines Lead to Healthy Children  continued from page 1

Hygiene
Hand-washing, tooth-brushing and covering coughs and sneezes all need to become habits since young children do not understand how germs cause illness or how cavities can occur without proper tooth-brushing. Repeat the steps and order of these very important routines so that they become habits for children.

Naptime
Sleep is important for brain development and learning. Plan a predictable sequence for transitioning to sleep. Read stories, talk gently, singing or pat a child gently to sleep. Children older than 12 months may want to use their own blanket and/or a stuffed toy from home.

Resources and References
CSEFEL, Responsive Routines Inventory www.vanderbilt.edu/csefel/resources/trainings/2.4.pdf
CCHP Morning Health Check mini-poster www.ucsfchildcarehealth.org/pdfs/posters/stop_disease/Morning_EN.pdf

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Transportation Safety

To prevent transportation injuries:

• Develop transportation safety policies with clear rules for staff, parents and children. Be sure to include rules and procedures for making sure that no child is left alone in any vehicle.

• Provide education and training to all staff, family and children on car seat safety. Include information about local seat belt and safety restraint laws. Post the California child restraint law (this is a licensing requirement).

• Find trainings on the correct use of restraints. Safety seats and booster seats are not properly used 85–95% of the time. Children should always be in the back seat in approved seats or boosters, and rear-facing safety seats should not be used in front of an airbag.

• Provide training for staff, family and children on traffic safety around vehicles and on being a good pedestrian. Young children are not easily seen by drivers. Because their height is often lower than the fender of a car, a driver can easily back over them or be unable to stop in time when moving his or her car out between vehicles in a parking lot.

• Teach everyone that children should hold hands in a parking lot. They should cross streets at corners or at crosswalks. They should always stop and wait to see the driver’s face, making sure that the driver sees them and stops before they cross in front of a vehicle.

• Provide training to staff, parents and children about riding toys. Children using riding equipment should have helmets and use them regularly and properly. (Helmets must be removed when children are finished biking and move on to use other play equipment, as the helmets are a potential danger for strangulation.)

Common problems when using car seats

Safety seat checkups held in counties throughout the state reveal levels of misuse at 95 percent. These are some common mistakes found at car seat checkups:

• A child not riding in a safety seat or sitting in the seat without using the harness adjusted securely.

• An infant facing the front of the car. Babies should generally face the rear until they are at least 12 months of age and 20 pounds.

• An infant riding in the front seat where there is a passenger air bag. Move the infant to the back seat facing the rear.

• Children riding in the front seat when a back seat is available. Children under age 13 should ride in the back seat.

• Too many people in the car. Each person must have his/her own safety belt.

• The car seat not secured tightly to the car. Tighten the seat so that it does not move more than one inch to the side or the front of the car.

Source: CCHP’s Injury Prevention module, curriculum for Child Care Health Advocates. Available online at www.ucsfchildcarehealth.org/pdfs/Curricula/CCHA/11_CCHA_Injury_0506.pdf

California Childcare Health Program's Resources on Child Passenger Safety

Safe and Healthy Travel at www.ucsfchildcarehealth.org/pdfs/factsheets/safehealthytravelen011804.pdf


Field Trip Safety at www.ucsfchildcarehealth.org/pdfs/healthandsafety/fieldtripsen070604_adr.pdf
The Maternal and Child Health Library released a new edition of the knowledge path, Physical Activity and Children and Adolescents. This electronic guide points to resources that analyze data, describe public health campaigns and other promotion programs, and report on research aimed at identifying promising strategies for improving physical activity levels within families, schools, and after-school programs, child care and early childhood education settings, and communities. The knowledge path also presents resources about physical activity for children and adolescents with special health care needs. Online at www.mchlibrary.info/KnowledgePaths/kp_phys_activity.html.

A series of safety videos from the Safe Kids and the MetLife Foundation highlight how to help prevent injuries to children with physical, developmental or cognitive disabilities. The series profiles three families, all of whom have a child with a different special need. The focus of the videos includes fire and burn prevention, drowning, choking and falls prevention. It will help viewers learn safety guidelines and step-by-step instructions geared towards making safety improvements in the home. www.safekids.org/safety-basics/special-needs/.

The National Environmental Education Foundation’s (NEEF) Children and Nature Initiative (www.neefusa.org/health/children_nature.htm) addresses two important issues—preventing serious health conditions like obesity and diabetes and reconnecting children to nature. A growing body of research indicates that unstructured outdoor activities may improve children’s health by increasing physical activity, reducing stress, and serving as a support mechanism for attention disorders. For more information, please see the Children’s Health and Nature Fact Sheet www.neefusa.org/assets/files/NIFactSheet.pdf which highlights key studies from the literature review NEEF conducted. www.neefusa.org/health/children_nature.htm

American Academy of Pediatrics offers sound advice on autism
Audio interviews with developmental pediatricians, neurologist, autism researchers, parents and other advocates answering common questions about autism spectrum disorders such as:
• What causes autism? How common is it?
• What are the early signs of autism?
• How can families learn about early intervention services in their area?
• What are the most effective therapies for autism?
• What guidance would you offer parents who want to explore complementary and alternative therapies?

Listen to Sound Advice on Autism at www.aap.org/audio/autism/.

This data book offers a comprehensive overview of the state of Latino children by integrating a range of key factors and outcomes in the areas of demography, citizenship, family structure, poverty, health, education, and juvenile justice. It provides an overview of current national and state-level trends for Latino children under age 18 relative to non-Hispanic White and Black children, documenting both regional variations and changing trends since the year 2000. Online at www.nclr.org/section/audience/researchers/latino_child_well_being.

A new public publication from Prevention Institute, Addressing the Intersection: Preventing Violence and Promoting Healthy Eating and Active Living, provides an explanation of the inter-relationship between violence and healthy eating and activity. The recommendations offered in this paper tie in safety strategies into community efforts to promote healthy eating and physical activity, and can support practitioners and advocates in their work to prevent chronic disease in communities heavily impacted by violence.” http://preventioninstitute.org/component/jlibrary/article/id-267/127.html.