

How Child Development Centers May Support 5210 Healthy Military Children

5210 Healthy Military Children is a Military-wide plan to improve child health. It spreads a common message throughout children's communities: where families work, live, and play. The message represents four healthy behaviors children should achieve each day:



5 or more servings of fruits and vegetables

2 or fewer hours of recreational screen time+

1 or more hours of physical activity 0 sweetened beverages

Child Development Centers (CDCs) provide high-quality childcare for young children (birth to Pre-K) of Military families, so they are an ideal venue for the promotion of healthy behaviors in young children and their families. Young children are at a developmental age where they are forming lifelong habits. The environments in which they spend time and the behaviors that are fostered by the adults caring for them can support or challenge a healthy lifestyle. The resources assembled in this toolkit are designed to help CDCs promote healthy behaviors in young children, including fruit and vegetable consumption, closely monitoring and limiting screen time, increasing physical activity, and decreasing sweetened beverage intake (the "5", "2", "1", and the "0" of "5210").

The following materials are available for CDCs:

- 1. Tips For Child Development Centers handout targets CDC staff and provides them with tips to increase young children's fruit and vegetable consumption, closely monitor and limit screen time, increase their physical activity, and decrease their sweetened beverage consumption while at the CDC.
- 2. **Tips For Child Development Centers posters** includes enlarged versions of the Tips For Child Development Centers handout that are available in two sizes (27" x 40" and 38" x 56") to hang in highly visible locations.
- 3. **Definitions & Recommendations handout** explains the 5210 message and its research basis.
- 4. Partner With And Educate Families handout provides tips to help CDC staff reach out to families to help them learn about and adopt the 5210 behaviors.
- 5. Phrases That HELP And HINDER handout outlines helpful and harmful things to say to children during feeding.
- 6. Feeding Infants handout contains details about how and what to feed infants from birth to 12 months.
- 7. Feeding Toddlers And Preschoolers handout provides information about how and what to feed young children from 1 to 5 years.
- 8. Screen Time And The Very Young handout provides the evidence-based screen time recommendations for infants and children from the American Academy of Pediatrics.
- 9. Quick Physical Activity Breaks handout displays ideas for quick and active breaks throughout the day and ways to incorporate them.

[†] review guidelines on parenting strategies to ensure quality screen time (AAP, 2015)

- 10. **Healthy Dates To Celebrate handout** lists dates that provide opportunities throughout the year to promote healthy behaviors, for example National Physical Fitness and Sports Month in May.
- 11. **5210** and Healthy Sleep handout lists ways that the 5210 behaviors support healthy sleep habits in children.
- 12. **It Takes 2 To Tune In handout** describes the American Academy of Pediatrics (2015) guidelines on parenting strategies to ensure quality screen time.
- 13. **Healthy Eating In A Hurry and Healthy Shopping On A Budget handout** provides tips on ways to create quick, healthy meals on a busy schedule and provides tips on ways to purchase healthy foods cost effectively.

We recommend hanging the poster in highly visible locations in the CDC, for example close to the entrance where parents enter to drop off and pick up their children, in restrooms, and on the classroom doors. In addition, we advise CDCs to place the handouts at the front desk and in the children's take-home folders where they are likely to be seen and used by families. Digital versions of all materials are available, and these may be inserted into any newsletters developed by CDCs and uploaded to the DoD Military Childcare website and via social media.

For more information, visit 5210 online at www.5210.psu.edu or email us at 5210@psu.edu. We will be happy to answer your questions!





Tips for Child Development Centers





or more servings of fruits and vegetables

Fruits and vegetables can provide children with a lot of nutrients, water, fiber, and phytochemicals that help prevent diseases and keep their bodies healthy. Young children are still learning how to be competent eaters, so they're more likely to eat something that their peers or teachers are eating – be a good model! They also tend to reject new foods at first – it may take several exposures to a new food before it is accepted so keep trying!

- Offer a variety of fruits and vegetables and other healthy foods at planned times throughout the day and let children choose whether and how much they eat.
- Shred or puree fruits and vegetables and use them as ingredients to increase a food's fruit and vegetable content try shredded zucchini in breakfast bread or pureed cauliflower in macaroni and cheese.
- Let children help make snacks so they learn how to prepare healthy foods.



or fewer hours of recreational screen time⁺

[†]review guidelines on parenting strategies to ensure quality screen time (AAP, 2015)

Recreational screen time is free time spent in front of screens – like televisions, video games, and the internet. It is possible to get enough physical activity and still engage in an unhealthy amount of screen time. The American Academy of Pediatrics recommends NO screen time for children under two years of age.

- Provide screen-free childcare.
- Work to foster children's love for music and dancing, reading, making art, exploring the outdoors, interacting with others, building, creating, and imagining.
- Help educate parents about healthy screen time habits like removing televisions from bedrooms, turning off media during mealtimes, and setting and enforcing limits.



or more hours of physical activity

Active play time is important for many reasons: it gives young children opportunities to move their bodies, use their imagination, practice problem solving, and engage in social interactions that promote self-awareness and empathy. Plus, it increases physical fitness!

- Give children plenty of chances to get outside in every season.
- Provide children with access to playgrounds, grass fields, portable equipment, like balls, and riding toys, like tricycles and scooters.
- Feel free to join in the fun after all, adults need physical activity too!



sweetened beverages

It is important to drink fluids to stay healthy, but sweetened beverages add extra sugar and calories to the diet. Watch out for drinks with the following ingredients: sugar, honey, sweetener, syrup (e.g., corn syrup, brown rice syrup), and/or ingredients ending in "ose" (e.g., glucose, dextrose).

- Make water the norm for quenching thirst drink water when you are thirsty, and offer water to thirsty children.
- Ensure that drinking water is easily accessible at all times.
- Nonfat and 1% milk and 100% vegetable juices contain beneficial nutrients and calories - they are healthy foods that promote a nutritious diet; they are not beverages to drink when thirsty.

Contact 5210 at 5210@psu.edu or <u>www.5210.psu.edu</u> for help identifying programs and resources targeting nutrition, physical activity, and screen time!



References:

Birch, L. L. (1980). Effects of peer models' food choices and eating behaviors on preschoolers' food preference. Child Development, 51(2), 489-496.

Birch, L. L. & Marlin, D. W. (1982). I don't like it; I never tried it: Effects of exposure on two-year-old children's food preferences. Appetite, 3(4), 353-360.

Brown, A., Shifrin, D.L., Hill, D.L. (2015). Beyond turn it off: How to advise families on media use. American Academy of Pediatric News, 36(10), 1-1.

Burdette, H. L., Whitaker, R. C., & Daniels, S. R. (2004). Parental report of outdoor playtime as a measure of physical activity in preschool-aged children. *Archives of Pediatrics and Adolescent Medicine*, 158(4), 353-357.

Ginsburg, K. R. (2007). The importance of play in promoting healthy child development and maintaining strong parent-child bonds. Pediatrics, 119(1), 182-191.

Gortmaker, S., Long, M., & Wang, Y. C. (2009). The negative impact of sugar-sweetened beverages on children's health. Retrieved from http://www.rwjf.org/en/research-publications/find-rwjf-research/2009/11/the-negative-impact-of-sugar-sweetened-beverages-on-children-s-h.html

Hendy, H. M., & Raudenbush, B. (2000). Effectiveness of teacher modeling to encourage food acceptance in preschool children. Appetite, 34(1), 61-76.

Heyman, M. B., & Abrams, S. A. (2017). Fruit Juice in Infants, Children, and Adolescents: Current Recommendations. Pediatrics, e20170967.

National Association for Sport and Physical Education. (2009). *Active start: A statement of physical activity guidelines for children from birth to age 5.* Retrieved from http://www.aahperd.org/naspe/standards/nationalGuidelines/ActiveStart.cfm

Nicaise, V., Kahan, D., & Sallis, J. F. (2011). Correlates of moderate-to-vigorous physical activity among preschoolers during unstructured outdoor play periods. *Preventive Medicine*, 53(4), 309-315.

Office of Disease Prevention & Health Promotion, U.S. Department of Health and Human Services. (2008). 2008 physical activity guidelines for Americans. Retrieved from http://www.health.gov/paguidelines/guidelines/default.aspx

Popkin, B. M., Armstrong, L. E., Bray, G. M., Caballero, B., Frei, B., & Willett, W. C. (2006). A new proposed guidance system for beverage consumption in the United States. *American Journal of Clinical Nutrition*, 83(3), 529-542.

Satter, E. (1995). Feeding dynamics: Helping children to eat well. Journal of Pediatric Health Care, 9(4), 178-184.

Spill, M. K., Birch, L. L., Roe, L. S., & Rolls, B. J. (2011). Hiding vegetables to reduce energy density: An effective strategy to increase children's vegetable intake and reduce energy intake. *American Journal of Clinical Nutrition*, 94(3), 735-741.

U.S. Department of Agriculture. (n.d.). ChooseMyPlate.gov. Retrieved from http://choosemyplate.gov

U.S. Department of Agriculture & U.S. Department of Health and Human Services. (2010). *Dietary guidelines for Americans 2010*. Retrieved from http://www.cnpp.usda.gov/DGAs2010-PolicyDocument.htm

Winston, C., & Beck, L. (1999). Phytochemicals: Health protective effects. Canadian Journal of Dietetic Practice and Research, 60(2), 78-84.



Definitions & Recommendations



or more servings of fruits and vegetables

One serving of fruits and vegetables is:

- 1 medium fruit
- ½ cup of chopped, canned, or cooked fruit
- 1/4 cup of dried fruit
- 1 cup of raw leafy greens
- ½ cup of raw or cooked vegetables
- ½ cup of 100% fruit or vegetable juice



The Dietary Guidelines for Americans 2010¹ provide the following recommendations:

- Increase fruit and vegetable intake.
- Eat a variety of vegetables, especially dark-green, red, and orange vegetables, and beans and peas.

The American Academy of Pediatrics² has the following recommendations for consuming fruit juice:

- Do not give juice to infants younger than 12 months.
- Limit juice to 4 oz per day in children under 4 years.
- Limit juice to 4-6 oz per day in children 4 to 6 years.
- Limit juice to 8 oz per day in children and adolescents 7 years and older.
- Fruit juice offers no nutritional benefits over whole fruits, and whole fruits provide fiber and other nutrients.

The United States Department of Agriculture recommends that half of a person's plate should be fruits and vegetables³. This recommendation is reflected on the current U.S. Food Guidance System, MyPlate, which is shown to the left.

- 1. U.S. Department of Agriculture & U.S. Department of Health and Human Services. (2010). Dietary Guidelines for Americans 2010. Retrieved from http://www.cnpp.usda.gov/DGAs2010-PolicyDocument.htm
- 2. Heyman, M. B., & Abrams, S. A. (2017). Fruit Juice in Infants, Children, and Adolescents: Current Recommendations. Pediatrics, e20170967.
- 3. U.S. Department of Agriculture. (n.d.). ChooseMyPlate.gov. Retrieved from http://choosemyplate.gov



or fewer hours of recreational screen time+

⁺review guidelines on parenting strategies to encourage quality screen time (AAP, 2015)

Recreational screen time is free time spent sitting or reclining in front of televisions, computers, tablets, and similar screens.

Children will engage in screen time as fully as they do in any other activity and screen time can have its positive and negative effects. So, the American Academy of Pediatrics¹ makes these recommendations:

- Become involved in children's media use and set limits around screen time.
- Help children learn to distinguish and choose programs that contain quality content.
- Become role models for children, demonstrating the value of productive time spent away from screens.
- Attempt to keep children under the age of 2 years away from screens entirely.
- 1. Brown, A., Shifrin, D.L (2015). Beyond turn it off: How to advise families on media use. American Academy of Pediatrics News, 36(10), 1-1.





or more hours of physical activity

Physical activity is any movement of the body that raises one's heart rate above resting.

Structured physical activities are planned, and unstructured physical activities are freeplay.

Aerobic physical activities involve moving large muscle groups. Moderate and vigorous aerobic activities make a person's heart, lungs, and muscles work noticeably harder. Examples include bicycling, swimming, and playing chasing games, like tag.

Muscle-strengthening physical activities include climbing and swinging on playground equipment, doing sit-ups and push-ups, and resistance training.

Bone-strengthening physical activities create an impact on bones, such as hitting a tennis ball, jumping rope, or practicing gymnastics.

For children 5 years and younger, the National Association for Sport and Physical Education¹ has developed the following recommendations:

- Infants under 12 months of age should engage in structured and unstructured physical activities each day that are devoted to exploring movement and developing motor skills.
- Toddlers (12 to 36 months old) should engage in structured physical activities for at least 30 minutes per day plus unstructured physical activities for at least 60 minutes (and up to several hours) per day.
- Preschoolers (3 to 5 years old) should engage in structured physical activities for at least 60 minutes per day plus unstructured physical activities for at least 60 minutes (and up to several hours) per day.

For children and adolescents 6 years and older, the U.S. Department of Health and Human Services² provides the following recommendations:

- Children and adolescents (6 to 17 years old) should engage in 1 hour of physical activity per day.
 - Most of the 1 hour should be moderate- or vigorous-intensity aerobic physical activities.
 - Muscle-strengthening physical activities should be included at least 3 days per week.
 - Bone-strengthening physical activities should be included at least 3 days per week.
- 1. National Association for Sport and Physical Education. (2009). Active Start: A Statement of Physical Activity Guidelines for Children From Birth to Age 5. Retrieved from
- http://www.aahperd.org/naspe/standards/nationalGuidelines/ActiveStart.cfm
- 2. Office of Disease Prevention & Health Promotion, U.S. Department of Health and Human Services. (2008). 2008 Physical Activity Guidelines for Americans. Retrieved from http://www.health.gov/paguidelines/guidelines/default.aspx



Sweetened beverages are fruit drinks, sodas, sports drinks, and other beverages with caloric sweeteners like sugars and syrups.

Researchers from the Robert Wood Johnson Foundation Healthy Eating Research program¹ made the following conclusion following an examination of current evidence:

- Reducing sweetened beverage intake "would have no negative effect on children's health and would reduce the risk of childhood obesity and many other health problems, including type 2 diabetes, poor nutrition, excess caffeine consumption, and dental decay."
- 1. Gortmaker, S., Long, M., & Wang, Y. C. (2009). The Negative Impact of Sugar-Sweetened Beverages on Children's Health. Retrieved from http://www.rwjf.org/en/research-publications/find-rwjfresearch/2009/11/the-negative-impact-of-sugar-sweetened-beverages-on-

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CLEARINGHOUSE This material is based upon work supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, and the Office of Fomily Policy Children of Many Chil and the Office of Family Policy, Children and Youth, U.S. Department of Defense under Award No. 2010-48709-21867 developed in collaboration with The Clearinghouse for Military Family Readiness at Penn State University. 5210 Healthy Military Children is adapted from Let's Go! www.letsgo.org.



Partner With & Educate Families



One of the most effective ways to promote a healthy lifestyle and behaviors for children is to adopt healthier habits as a family. According to the American Academy of Pediatrics, "families have a critical role in influencing children's health, and health is a real characteristic of the familly lifestyle."



Here are a few way, you can partner with and educate families:

- Ask one of your kid's parents to be a representative for your 5-2-1-0 program at local meetings.
- Ask parents to become a part of your team (parents can attend conference without the need of a substitute).
- Send letters home to parents letting them know about your 5-2-1-0 program, what the messages and strategies are, and how they can support your work.
- Ask parents to send only healthy snacks and meals in with their child and share ideas with them that can make it more affordable.
- Utilize the skills of parents (e.g. nutritionist, carpenter, artist). Pull them into 5-2-I-0 projects!
- Encourage fundraisers that support 5-2-1-0 messages and strategies.

Parents can benefit from this relationship too!



Children who eat healthy and have an active lifestyle are more likely to:

- maintain a healthy weight
- have better self esteem
- sleep better
- do better academically
- avoid health issues such as heart disease, type 2 diabetes, bone and joint problems, etc

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References

Davis, M. M., Gance-Cleveland, B., Hassink, S., Johnson, R., Paradis, G., & Resnicow, K. (2007). Recommendations for prevention of childhood obesity. *Pediatrics*, 120(S4), S229-S253.

Ekeland, E., Heian, F., & Hagen, K. B. (2005). Can exercise improve self-esteem in children and young people? A systematic review of randomized controlled trials. *British Journal of Sports Medicine*, *39*(11), 792-798.

Florence, M. D., Asbridge, M., & Veugelers, P. (2008). Diet quality and academic performance. Journal of School Health, 78(4), 209-215.

Goran, M. I., & Sothern, M. S. (Eds.). (2006). Handbook of pediatric obesity. Boca Raton, FL: Taylor & Francis Group.

Koplan, J. P., Liverman, C. T., & Kraak, V. I. (Eds.). (2005). Preventing childhood obesity: Health in the balance. Washington, D. C.: The National Academies Press.

Nixon, G. M., Thompson, J. M. D., Han, D. Y., Becroft, D. M. O., Clark, P. M., Robinson, E., Waldie, K. E., Wild, C. J., Black, P. N., & Mitchell, E. A. (2009). Falling asleep: The determinants of sleep latency. *Archives of Disease in Childhood*, *94*(9), 686-689.

Singh, A., Uijtdewilligen, L., Twisk, J. W. R., van Mechelen, W., & Chinapaw, M. J. M. (2012). Physical activity and performance at school: A systematic review of the literature including a methodological quality assessment. *Archives of Pediatrics and Adolescent Medicine*, 166(1), 49-55.

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Phrases that *HELP* and *HINDER*



As the caregiver, you play the biggest role in your child's eating behavior. What you say has an impact on developing healthy eating habits. Negative phrases can easily be changed into positive, helpful ones!

Phrases that HINDER

INSTEAD OF ...

Eat that for me.

If you do not eat one more bite, I will be mad.

Phrases like these teach your child to eat for your approval and love. This can lead your child to have unhealthy behaviors, attitudes, and beliefs about food and about themselves.

INSTEAD OF ...

You're such a big girl; you finished all your peas. Jenny, look at your sister. She ate all of her bananas. You have to take one more bite before you leave the table.

Phrases like these teach your child to ignore fullness. It is better for kids to stop eating when full or satisfied than when all of the food has been eaten.

INSTEAD OF ...

See, that didn't taste so bad, did it?

This implies to your child that he or she was wrong to refuse the food. This can lead to unhealthy attitudes about food or self.

INSTEAD OF ...

No dessert until you eat your vegetables. Stop crying and I will give you a cookie.

Offering some foods, like dessert, in reward for finishing others, like vegetables, makes some foods seem better than others. Getting a food treat when upset teaches your child to eat to feel better. This can lead to overeating.

TRY ...

This is kiwi fruit; it's sweet like a strawberry. These radishes are very crunchy!

Phrases that HELP

Phrases like these help to point out the sensory qualities of food. They encourage your child to try new foods.

TRY ...

Is your stomach telling you that you're full?
Is your stomach still making its hungry growling noise?
Has your tummy had enough?

Phrases like these help your child to recognize when he or she is full. This can prevent overeating.

TRY ...

Do you like that? Which one is your favorite? Everybody likes different foods, don't they?

Phrases like these make your child feel like he or she is making the choices. It also shifts the focus toward the taste of food rather than who was right.

TRY ...

We can try these vegetables again another time. Next time would you like to try them raw instead of cooked? I am sorry you are sad. Come here and let me give you a big hug.

Reward your child with attention and kind words. Comfort him or her with hugs and talks. Show love by spending time and having fun together.



Feeding Infants (birth to 12 months)

HOW TO FEED

Your infant is the best judge of how much food they need, and it is normal for an infant's appetite to vary greatly from day to day. Feed your infant when they show hunger cues and stop feeding your infant when they show fullness cues:

Hunger cues:

- Putting fists in mouth
- Rooting (when an infant opens his or her mouth and moves it toward objects)
- Excited arm and leg movements
- Sucking or smacking lips
- Crying (this is a *late* hunger cue try to feed your infant before they get upset)

Fullness cues:

- Clamping lips together
- Turning head away
- Spitting out nipple
- Pushing away bottle
- Decreased or stopped sucking
- Dribbling out of the corner of mouth

Ignoring fullness cues may cause children to lose the ability to tell when they are hungry or full and lead to overeating. These tips can help your infant grow up to be a healthy eater!

- Never restrict infants to a meal schedule! Instead, feed them when they show hunger cues.
- Let infants eat their way fast, slow, steady, start-and-stop, much, or little.
- Never force an infant to keep eating after they are full! Instead, stop feeding them when they show fullness cues.
- Start with small amounts and go back for more if your infant is still hungry. This helps avoid waste while honoring your infant's hunger and fullness cues.

For more information visit us at https://5210.psu.edu or email at 5210@psu.edu.



WHAT TO FEED

The foods infants need change as they grow and develop:

Before 6 months

Water

Juice

Cow's milk

Solid foods

doctor)

(unless directed by a

YES

fortified infant

formula

Human milk or iron-

NOT YET

Human milk or ironfortified infant formula

YES

- Small amounts of water
- Appropriate solid foods

NOT YET

Juice

From 6 to 12 months

- Cow's milk
- Honey
- Choking hazards (e.g., nuts, grapes, candies)

Before 6 months the normal food for infants is human milk. Infants who are not breastfed should be given iron-fortified infant formula. Infant tummies are not mature enough for other foods and beverages. Unless directed by a doctor, you should wait until your infant is 6 months old, and has reached the developmental milestones described to the right, before feeding solid foods.

Infants should continue to drink human milk until 12 months or longer. Infants who are not breastfed should be given iron-fortified infant formula. After 6 months infants are ready for solid foods when they can sit in a feeding chair and maintain good head control, seem interested and eager to try solid foods, and can move food from a spoon into the throat. Be careful to avoid choking hazards!

- Introduce one single-ingredient food at a time and if your infant has an allergic reaction, stop feeding that food.
- Offer a variety of nutrient-dense foods such as fortified infant cereals and pureed fruits, vegetables, grains, poultry, and meats. Mix these foods with breastmilk or iron-fortified infant formula to thin their consistency. Do not add salt or sweeteners.
- It may take up to 10-15 exposures to a new food before an infant accepts it so keep trying!

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References:

American Academy of Pediatrics. (2012). Policy statement: Breastfeeding and the use of human milk. Pediatrics, 129(3) e827-e841.

American Academy of Pediatrics. (n.d.). Infant - Food an Feeding. Retrieved from http://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/HALF-Implementation-Guide/Age-Specific-Content/Pages/Infant-Food-and-Feeding.aspx

Birch, L. L. & Marlin, D. W. (1982). I don't like it; I never tried it: Effects of exposure on two-year-old children's food preferences. Appetite, 3(4), 353-360.

Hurley, K. M., Cross, M. B., & Hughes, S. O. (2011). A systematic review of responsive feeding and child obesity in high-income countries. Journal of Nutrition, 141(3), 495-501.

Satter, E. (1995). Feeding dynamics: Helping children to eat well. Journal of Pediatric Health Care, 9(4), 178-184.





Feeding Toddlers and Preschoolers (1 to 5 years)

HOW TO FEED

Young children are usually good judges of how much food they need. To encourage healthy eating follow a division of responsibility for feeding your child:

CAREGIVERS are responsible for WHEN, WHERE, and WHAT foods are offered.

CHILDREN are responsible for **WHETHER** and **HOW MUCH** they eat.

CAREGIVER RESPONSIBILITIES	WHEN	Offer meals and snacks at about the same time every day. Children need to feel secure that food will be available to them in a predictable way.
	WHERE	Offer meals and snacks at a table or other feeding location. Set up the
		feeding environment to be free of televisions, toys, and other distractions so
		that children may pay attention to eating and when their bodies tell them when they're full.
	WHAT	Offer a variety of nutrient-dense foods. Offer the same foods to everyone at the table. If a new food is being offered, offer it alongside a familiar food that is liked (e.g., bread, apple, cheese). When asking children for help deciding what to offer, give choices and make sure they're nutritionally similar (e.g., carrot sticks or orange slices instead of carrot sticks or cookies).
CHILD RESPONSIBILITIES	WHETHER	It is normal for children's appetites and food preferences to vary. Let children decide whether they want to eat all, some, or none of the foods offered. Never coerce, pressure, bribe, or reward children to get them to eat. Don't tell children you will be happy or angry because of what they choose to eat. These external signals to start and stop eating may cause children to ignore their own hunger and fullness signals and may lead to overeating.
	ноw мисн	As soon as children are able, let them serve themselves. Help children take small portions and let them know that they may have more if they are still hungry. Let children eat as much as they need. It is normal for children to eat more some days than others.

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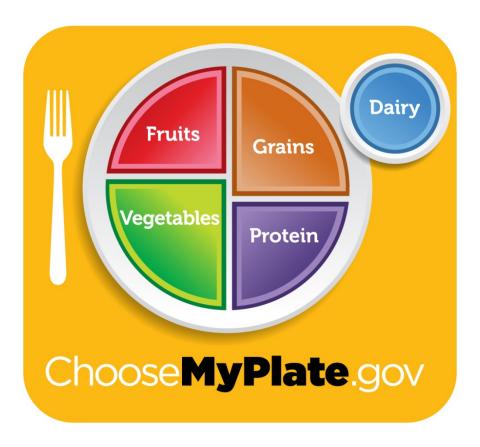
Adapted from:

Satter, E. (2014). Ellyn Satter's division of responsibility in feeding. Retrieved from: http://ellynsatterinstitute.org/dor/divisionofresponsibilityinfeeding.php



WHAT TO FEED

Young children should eat a variety of nutrient-dense foods.
The USDA's food guidance system, *MyPlate*, shows what a healthy variety looks like:



- <u>Keep your child's overall diet in mind</u>. Children may not eat a variety of food groups at a single meal. They are more likely to eat a variety of food groups over the course of a day.
- Offer a variety of nutrient-dense foods in the different food groups. Minimize added sweeteners, salt, and solid fats. Be aware that small, round foods such as whole grapes and cherry tomatoes, and foods that are especially gummy or difficult to chew may increase the risk of choking cut foods into pieces no larger than ½ inch.
- It may take up to 10-15 exposures to a new food before a child accepts it keep trying! An exposure may include looking at a food, smelling it, touching it, licking it, or spitting it out. These are all normal behaviors. Vegetables, in particular, may not be accepted at first because they can be bitter or have strong flavors. Some children prefer raw vegetables instead of cooked vegetables, or may be willing to try a vegetable if it is offered with dip.

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References

Birch, L. L. & Marlin, D. W. (1982). I don't like it; I never tried it: Effects of exposure on two-year-old children's food preferences. *Appetite, 3*(4), 353-360. Satter, E. (1995). Feeding dynamics: Helping children to eat well. *Journal of Pediatric Health Care, 9*(4), 178-184.

U.S. Department of Agriculture. (n.d.). ChooseMyPlate.gov. Retrieved from http://choosemyplate.gov





Screen Time and the Very Young

The American Academy of Pediatrics recommends NO screen time for children under 2 years of age. Excessive screen time (over two hours a day) can put young children at risk. Listed below are some of the effects that screen time can have on the very young.

Excessive screen time...

- can be habit-forming. The more time a young child is engaged with screens, the harder time they have turning them off as older children.
- for children under 3 is linked to irregular sleep patterns and delayed language acquisition.
- takes time away from meaningful interactions with parents, family members and caretakers.
- can be associated with problems in later childhood, including lower math and school achievement, reduced physical activity, social issues, and increased BMI.
- has been associated with increased early childhood aggression.
- simply put, means less time involved in creative play—the foundation of learning, constructive problem solving, and creativity.

Reduced screen time...

- may lead to decreased interest in it as older children.
- can help prevent childhood obesity by allowing time for more physical activity and less exposure to television advertising for unhealthy foods targeted at children.
- lows for doing better in school, having a healthier diet, being more physically active and having the opportunity to better engage in school as older children.
- can start now! Limiting exposure before age 6 greatly reduces the risks of excessive screen time.

Do yourself and your young children a favor—create an electronic-media-free bedroom, and be a role model by reducing your own recreational screen time.

For more information visit us at https://5210.psu.edu or email at 5210@psu.edu.

Adapted from Kids and Screens, Campaign for a Commercial-Free Childhood. www.commercialfreechildhood.org,

American Academy of Pediatrics Council on Communications and Media. (2013). Children, adolescents, and the media. Pediatrics, 132(5), 958-961. -(Continued on the next page) -



References, continued:

Chonchaiya, W. & Pruksananonda, C. (2008). Television viewing associates with delayed language development. Acta Paediatrica, 97(7), 977-982.

Christakis, D., & Zimmerman, F. (2006). Early television viewing is associated with protesting turning off the television at age 6. *Medscape General Medicine*, 8(2), 63.

Coolahan, K., Fantuzzo, J., Mendez, J., & McDermott, P. (2000). Preschool peer interactions and readiness to learn: Relationships between classrooms peer play and learning behaviors and conduct. *Journal of Education Psychology*, *92*(n3), 458-465.

Epstein, L. H., Roemmich, J. N., Robinson, J. L., Paluch, R. A., Winiewicz, D. D., Fuerch, J. H., & Robinson, T. N. (2008). A randomized trial of the effects of reducing television viewing and computer use on body mass index in young children. *Archives of Pediatrics and Adolescent Medicine*, 162(3), 239-245.

Jago, R., Baranowski, T., Baranowski, J. C, Thompson, D., & Greaves, K. A. (2005). BMI from 3-6 y of age is predicted by TV viewing and physical activity, not diet. *International Journal of Obesity*, 29(6), 557-565.

Landhuis, E. C., Poulton, R., Welch, D. & Hancox, R. J. (2008). Programming obesity and poor fitness: The long-term impact of childhood television. *Obesity*, *16*(6), 1457-1459.

Moore, M. & Russ, S. W. (2008). Follow-up of a pretend play intervention: Effects on play, creativity, and emotional processes in children. *Creativity Research Journal*, 20(4), 427-436.

Pagani, L., Fitzpatrick, C., Barnett, T. A., & Dubow, E. (2010). Prospective associations between early childhood television exposure and academic, psychosocial, and physical well-being by middle childhood. *Archives of Pediatrics and Adolescent Medicine*, 164(5), 425-431.

Thompson, D. A., & Christakis, D. (2005). The association between television viewing and irregular sleep schedules among children less than 3 years of age. *Pediatrics*, 116(10), 851-856.

Vandewater, E. A., Bickham, D. S., & Lee, J. H. (2006). Time well spent? Relating television use to children's free-time activities. *Pediatrics*, 117(2), 181-191

Wyver, S. R., & Spence, S. H. (1999). Play and divergent problem solving: Evidence supporting a reciprocal relationship. *Early Education and Development*, 10(4), 419-444.

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Quick Physical Activity Breaks

High Knee Run/March	Run or march in place, lifting your knees in front of you as high as you can.
Hula Hoop	Around Your Waist. Do the best you can and have fun! Keep moving your hips! Hula hoop twirling builds abdominal strength. Twirling two hula hoops builds hand-eye coordination.
Tree Pose	Balance on one foot. Place your other foot on the inside of your balanced leg. Your knee should be pointing to the side and your heel pointing up your leg. It is okay to leave your toes on the ground if you need to. Bring your hands together in front of you or overhead. Change legs after a count to 30.
Wood Chopper	Stand with your feet hip distance apart. Squat down with arms extended in front of you with a ball between your hands or just bring your hands together in a fist. As you lower in a squat bring the ball towards the ground. As you rise up, bring the ball over your head. Keep your eyes looking straight ahead the entire time.
Chair Pose	Feet together. Legs together. Keeping your knees together, sit back like you were sitting in a chair. Hold that position as long as you can. Relax when you need to, and then try again.
Skate in Place	Pretend to ice skate in place as you hop side to side bringing your heel behind you as high as you can. Swing your arms side to side. You can do this without hopping by stepping side to side.
Agility Ladder	Form a line at one end of the ladder. Run through the ladder without stepping on the white bars. Pick your knees up high! Run up the ladder and then jog around to the end of your class line.
Jump the Hurdles	Form a line at the cone. The first person begins by stepping/jumping over the hurdles. When the student before you gets to the 3rd hurdle, the next person begins. Keep the line moving!
Squeeze the Ball	Place a ball between your hands, elbows pointing out to the side. Squeeze your palms in towards the ball. Feel your arms working hard!
Jump Rope	You can pretend jump rope or use a real jump rope. Keep moving! Jumping rope builds endurance. Jumping rope is an activity recommended for both children and adults, and can be done individually or in a group setting.
Hands to Knee	Extend your arms overhead. Lock your thumbs together. Lift one knee up as you pull your arms down to touch that knee. Arms go back overhead as that foot goes back down to the ground. Lift the other knee as you pull your arms down to touch the knee. Stand nice and tall to help your abdominal muscles get strong!

These activity breaks came from Kerra Cartwright, First Grade teacher, Young Elementary School, Saco, 2008

There are several ways to incorporate the above ideas into the day. You could:

- 1. Use them in the classroom as a quick and easy physical activity break
- 2. Put a few together for indoor recess
- 3. Combine them all for use at a health fair or field day

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Healthy Dates to Celebrate

MONTH	SPECIAL	OBSERVATIONS
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January	Family Fit Lifestyle Month National Soup Month
Fobmuom.	National Snack Month
February	American Heart Month
N 4 l-	National School Breakfast Week
March	
	National Nutrition Month
April	Earth Day
	National Public Health Week
May	National Physical Fitness and Sports Month
	National Screen-Free Week
June	National Dairy Month
	National Fresh Fruit and Vegetable Month
July	National Picnic Month
,	National Recreation and Parks Month
August	Family Meals Month
Ü	National Farmers Market Week
September	National Childhood Obesity Awareness Month
	Ethnic Foods Month
October	International Walk to School Day
00000	National School Lunch Week
November	American Diabetes Month
11010111001	Great American Smokeout
December	Hand Washing Awareness Week
December	Tropical Fruits Month
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United States Department of Agriculture Team Nutrition. (2014). Features of the month. Retrieved from http://healhymeals.nal.usda.gov/features-month-1

United States Department of Health and Human Services. (2014). National health observances 2014 at a glance. Retrieved from http://healthfinder.gov/NHO/nhoyear.apx?year=2014





5210 and Healthy Sleep

Support Healthy Sleep Patterns with 5210!

- 5 servings of fruit and vegetables daily is part of a healthy diet which helps promote quality sleep
- 2 Any screen time viewed within one hour of bedtime has been associated with difficulty falling asleep, anxiety around bedtime, and fewer sleeping hours
- Engaging in regular physical activity helps improve sleep quality
- O Caffeinated beverages close to bedtime may contribute to difficulty falling asleep

Create an environment conducive to good sleep



Improve Healthy Sleep by...

- ensuring your child has a consistent sleep and wake time
- ensuring your child has a consistent bedtime routine
- removing all electronics from the bedroom
- ensuring your child has a cool, quiet, dark and comfortable sleep environment

Reduce screen time in the evenings to help children go to bed on time and get sufficient sleep.

Getting a good night's sleep allows your child to engage physical activity during the day.

Children who get inadequate sleep tend to make unhealthy food choices.



With enough sleep, it may be easier to refrain from those caffeinated sweetened beverages to stay awake!

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CLEARINGHOUSE FOR MILITARY FAMILY READINESS

This material is based upon work supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, and the Office of Family Policy, Children and Youth, U.S. Department of Defense under Award No. 2010-48709-21867 developed in collaboration with The Clearinghouse for Military Family Readiness at Penn State University.

5210 Healthy Military Children is adapted from Let's Go! www.letsgo.org.

References

American Academy of Sleep Medicine (2009). Better Sleep Across Both Weekdays and Weekends is Associated with Improved Academic Success - American Academy of Sleep Medicine (AASM). Retrieved from http://www.aasmnet.org/articles.aspx?id=1328

Drescher, A., Goodwin, J., Silva, G., & Quan, S. (2011). Caffeine and screen time in adolescence: associations with short sleep and obesity. *Journal Of Clinical Sleep Medicine: JCSM: Official Publication Of The American Academy Of Sleep Medicine, 7*(4), 337.

Fox, K. (1999). The influence of physical activity on mental well-being. Public Health Nutrition, 2(3a), 411-418.

Health.mil,. (2014). *Help Your Children Recharge through Sleep*. Retrieved from http://www.health.mil/News/Articles/2014/04/24/Help-Your-Children-Recharge-through-Sleep

Peuhkuri, K., Sihvola, N., & Korpela, R. (2012). Diet promotes sleep duration and quality. Nutrition Research, 32(5), 309-319.

Sleepfoundation.org. (2014). *National Sleep Foundation - Sleep Research & Education*. Retrieved from http://sleepfoundation.org

Sleepfoundation.org,. (2014). Taste: What You Eat Can Affect Sleep - National Sleep Foundation. Retrieved from http://sleepfoundation.org/bedroom/taste.php

Stt Onge, M., McReynolds, A., Trivedi, Z., Roberts, A., Sy, M., & Hirsch, J. (2012). Sleep restriction leads to increased activation of brain regions sensitive to food stimuli. *The American Journal Of Clinical Nutrition*, *95*(4), 818t 824.

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It Takes 2 to Tune In



The American Academy of Pediatrics developed new recommendations to help parents and caregivers manage technology in their children's lives. It is still important to limit nonproductive screen time and break up time spent sitting during productive time in front of screens, no matter your age.

Since face-to-face interactions promote language development most effectively, the Academy recommends co-viewing with infants and toddlers.



Children over the age of 2 will engage in screen time as fully as they do any other activity. And, like any other activity, it can have its positive and negative effects. So, parents and caregivers should **Set** limits around screen time and be involved in children's media use, just as they do with other activities.

we should become role models for children, demonstrating the value of productive time spent away from screens. When children practice away-from-screen activities, they have more fun and learn more about navigating in the real world.





The AAP states that the quality of the content is more important than the device or hours of screen time.

Rather than just setting a limit of how much screen time children can have, participate with children around recreational screen time.

For more information visit us at https://5210.psu.edu or email at 5210@psu.edu.

References

Brown, A., Shifrin, D. L., & Hill, D. L. (2015). Beyond 'turn it off': How to advise families on media use. AAP News, 36(10), 54-54. Council on Communications and the Media. (2011). Policy Statement: Children, Adolescents, Obesity, and the Media. Pediatrics, 128(1), 201-208.





Healthy Eating in a Hurry



- Use the slow cooker. Use time to your advantage! It only takes a few minutes to assemble most slow cooker recipes. The meal will cook during the day and be ready at dinnertime.
- Plan ahead for the week's meals. Buy and prep meals once a week on your least busy day. This allows you to portion foods and save money by buying in bulk.
- Make a shopping list that includes everything needed for the upcoming week. This ensures you have everything on hand when it is time to get cooking, and will eliminate trips to the grocery store mid-week.



- Avoid fast food restaurants. If you know you're going out, look at the menu options that are marked healthier choices, smaller sandwiches, salads, and limit fried foods.
- Meep the pantry well stocked with healthy choices for the week.
- Chop fruits and veggies ahead of time and serve with low fat dressings or dips.
- **Cook in large batches and freeze.** Cook more than needed for one meal and freeze the leftovers in single serving size containers.
- Stash snacks. Keep a supply of healthy snacks in your desk drawer, in the car, and at work.
- When time is tight, **consider pre-cooked protein options** like a rotisserie chicken, canned tuna or chicken, or pre-cooked shrimp. For a quicker cooking option, try fresh fish filets that are on the thinner side (like tilapia) and vegetarian protein foods like tofu and canned beans.



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Website sources:

http://www.diabetes.org/mfa-recipes/tips/2014-09/15-ways-to-eat-healthy-in-a.html

 $\frac{http://consumer.healthday.com/encyclopedia/food-and-nutrition-21/food-and-nutrition-news-316/eating-healthy-in-a-hurry-648424.html}{}$

http://www.mankatofreepress.com/news/health and fitness/speaking-of-health-healthy-eating-even-when-you-re-in/article_edf5d7cc-e637-11e4-bb35-e339ff29a252.html





Healthy Shopping on a Budget



- **Buy store brands.** You will get the same or similar product for a cheaper price. If your grocery store has a membership card, sign up for even more savings.
- Make a shopping list and stick to it. Make sure it includes everything needed for the upcoming week.



Don't shop when you're hungry. You'll be more tempted by snack foods.



- **Buy in-season produce**, which is often easier to find, more flavorful, and less expensive. If you are not going to use them all right away, buy some that still need time to ripen.
- Prepare yourself rather than buy ready-to-eat. Buy vegetables and fruits in their simplest form. Pre-cut, pre-washed, ready-to-eat, and processed foods are convenient, but often cost much more than when purchased in their basic forms.
- **Buy canned or frozen fruits and vegetables.** For canned items, choose fruit canned in 100% fruit juice and vegetables with "low sodium" or "no salt added" on the label.
- **Buy in bulk.** It is almost always cheaper to buy foods in bulk. Smart choices are family packs of chicken, steak, or fish and larger bags of frozen vegetables. Before you shop, remember to check if you have enough freezer space.



When time is tight, **consider making large batches** of your favorite recipes by doubling or tripling the recipe). Freeze in individual containers. Use them throughout the week and you won't have to spend money on takeout meals.

For more information visit us at https://5210.psu.edu or email at 5210@psu.edu.

Website sources:

http://www.choosemyplate.gov/budgetosemyplate.gov/budget http://www.cnpp.usda.gov/USDAFoodPlansCostofFood

