



How Fitness 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

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

Military community members who use fitness centers likely understand the health benefits of exercise. These health-conscious individuals may be receptive to and enthusiastic about supporting the 5210 message in their community. With that in mind, the resources assembled in this toolkit are designed to help fitness centers support their patrons' healthy lifestyles and provide ideas for promoting healthy behaviors in patrons' families and communities.

The following materials are available for fitness centers:

1. **Tips At Fitness Centers handout** – targets fitness center patrons and provides them with exercise-minded tips to increase fruit and vegetable consumption, be physically active, and decrease sweetened beverage consumption.
2. **Tips At Fitness Centers posters** – includes enlarged versions of the Tips At Fitness 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. **Most People Don't Need Sports And Energy Drinks handout** – provides information about the ingredients in, recommendations for using, and possible effects of consuming sports and energy drinks.
5. **Fill Up Here! poster** – advertises locations where reusable water bottles may be filled with drinking water.
6. **Refresh! poster** – promote the use of water fountains and list locations where reusable water bottles may be filled.
7. **Thirst Quencher posters** – advertises drinking fountain locations.

We recommend hanging the poster in highly visible locations in the fitness center, placing the handouts at the reception area and in the locker rooms, and bringing attention to water fountains with the Fill Up Here!, Refresh!, and Thirst Quencher posters. Digital versions of all materials are available and may be inserted into newsletters and uploaded to websites 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!



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.letsqo.org.



5 or more servings of fruits and vegetables

Fruits and vegetables are important additions to a healthy lifestyle and make great workout snacks! They contain water to keep you hydrated, antioxidants to repair cellular damage from strenuous exercise, electrolytes to help your nerves and muscles work, and, because they're low in fat, most of their calories come from readily available carbohydrates (nearly 100% in apples) and proteins (24% in cucumbers, 38% in mushrooms, and a whopping 49% in spinach!)

- Vary your vegetables and fruits - eating a mix of colors will ensure that you consume a variety of healthy antioxidants!
- Fuel up with a fruit and vegetable smoothie! Smoothies are quick to drink, quick to digest, and quick sources of carbohydrates and other nutrients that will help you have a great workout!
- Replenish electrolytes naturally! Salting your food provides sodium and chloride, and these fruits and vegetables are good sources of magnesium (Mg), calcium (Ca), and/or potassium (K): dark leafy greens like spinach and kale (Mg, Ca, K), lima beans (Mg, K), bananas (Mg, K), okra (Mg), broccoli (Ca), and potatoes (K).

2 or fewer hours of recreational screen time⁺

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

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 – so encourage your family to find other fun ways to spend their free time!

- Turn off televisions and put away cell phones during meals and enjoy spending time together as a family.
- Work with your children to identify a variety of activities they enjoy that do not involve screens. Encourage these activities during leisure time and serve as a role model.
- Make televisions, video games, and the internet less convenient to use during free time so that healthier choices are easier to make.

1 or more hours of physical activity

Participating in regular exercise is a great way to strengthen your entire musculoskeletal system, burn calories, improve your mood, boost your energy, prevent cancer and cardiovascular diseases, and help you sleep better at night!

- One of the best ways to prevent disease is to engage in aerobic activities! During your week, aim for at least 2 ½ hours of moderate-intensity or 1 ¼ hours of vigorous-intensity activity.
- Strength-train at least two days per week.
- If you're new to exercise or are returning after a hiatus, it's fine to work your way up to these recommendations – any increase in activity is good for you!
- Make water the norm for quenching your thirst. Too boring? Add sliced fruit or herbal tea bags for flavor.
- Many sports drinks contain added sugars. Watch out for the following ingredients: sugar, honey, sweetener, syrup (e.g., corn syrup, brown rice syrup), and/or ingredients ending in "ose" (e.g., glucose, dextrose).
- 100% vegetable juices contain beneficial nutrients and calories, so think of them as foods that contribute towards your diet rather than as thirst quenchers.

0 sweetened beverages

It is important to drink fluids to stay healthy and hydrated, but sweetened beverages add extra sugar and calories to your diet. Maintain all the good you've done at the gym and skip the sweeteners!

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

References

- 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.
- 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>
- Haskell, W. L., Lee, I. M., Pate, R. R., Powell, K., E., Blair, S. N., Franklin, B. A., ... & Bauman, A. (2007). Physical activity and public health: Updated recommendation for adults from the American College of Sports Medicine and the American Heart Association. *Circulation*, 116(9), 1081-1093.
- 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>
- 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.
- Salmon, J., Timperio, A., Telford, A., Carver, A., & Crawford, D. (2005). Association of family environment with children's television viewing and with low level of physical activity. *Obesity Research*, 13(11), 1939-1951.
- 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>
- U. S. Department of Agriculture Agricultural Research Service. (n.d.). *National nutrient database for standard reference*. Retrieved from <http://www.ars.usda.gov/Services/docs.htm?docid=8964>
- Winston, C., & Beck, L. (1999). Phytochemicals: Health protective effects. *Canadian Journal of Dietetic Practice and Research*, 60(2), 78-84.



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.letsqo.org.

5 or more servings of fruits and vegetables

One serving of fruits and vegetables is:

1 medium fruit

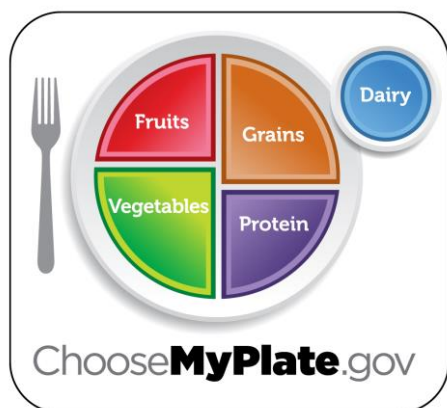
½ cup of chopped, canned, or cooked fruit

¼ 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>

2 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.



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 free-play.

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>



0 sweetened beverages

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-rwjf-research/2009/11/the-negative-impact-of-sugar-sweetened-beverages-on-children-s-h.html>

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



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.lets-go.org.



What drink does everyone need?

Water!

Water is the best thirst quencher!

Your body needs water to function.

Water keeps you hydrated when you're physically active.

Water doesn't contain calories and doesn't contribute to extra weight.

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

Reference:

Sawka, M. N., Burke, L. M., Eichner, E. R., Maughan, R. J., Montain, S. J., & Stachenfeld, N. S. (2007). ACSM position stand: Exercise and fluid replacement. *Medicine & Science in Sports & Exercise*, 39(2), 377-390.

Sports drinks

Are marketed as beverages to help athletes stay hydrated and replenish their electrolytes. Examples include Gatorade and Powerade.

Are only recommended for individuals who have been doing intense physical activity for an hour or more, such as long-distance running or playing soccer.

In addition to water, they usually contain:

- Sweeteners (e.g., sugar, syrup, ingredients ending in "ose" like sucrose or fructose)
- Electrolytes (e.g., sodium, potassium, magnesium, calcium)
- Flavorings and colorings



Contain calories and may contribute to excess weight gain if consumed as a thirst quencher.

Energy drinks

Are marketed as beverages that provide mental and physical energy. Examples include 5-hour ENERGY, Red Bull, AMP, Monster, Rockstar, Full Throttle, and Starbucks Doubleshot Energy.

Are not recommended for anyone, and should NEVER be given to children or adolescents.

In addition to water, they usually contain:

- Sweeteners (e.g., sugar, syrup, ingredients ending in "ose" like sucrose or fructose)
- B Vitamins (e.g., B1/thiamine, B2/riboflavin, B3/niacin, B5/pantothenic acid, B6/pyridoxine, B7/biotin, B9/folic acid, B12/cobalamin)
- Amino acids (e.g., taurine, tyrosine, phenylalanine)
- Stimulants (e.g., caffeine)
- Herbal supplements (e.g., guarana, ginseng)
- Flavorings and colorings

Contain ingredients that may increase your heart rate and blood pressure, and may lead to trouble sleeping, anxiety, difficulty concentrating, and caffeine toxicity.

5210 Every Day!

FILL UP HERE!

Refill
your
water
bottles
here!



LET'S GO!

www.lets-go.org



5210 Every Day!

REFRESH!

A healthy body needs water.

FILL UP!



THIRST QUENCHER

5210 Every Day!

A healthy body
needs water.

FILL UP!



Healthy Military Children



www.letsgo.org