

How Grocery Stores May Support 5210 Healthy Children

521 Healthy Children is a community-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 encourage quality screen time (AAP, 2015)

Grocery stores are central part of family's food environment because most food purchases are made at full-service supermarkets. Grocery stores can play an important role in supporting healthy eating and drinking in families. The resources assembled in this toolkit are designed to help commissaries promote fruit and vegetable consumption and decrease sweetened beverage intake (the "5" and the "0" of "5210").

The following materials are available for commissaries:

- 1. Tips At Grocery Stores handout targets shoppers, and provides them with grocery store-specific tips to increase fruit and vegetable consumption and decrease sweetened beverage consumption.
- 2. Tips At Grocery Stores posters enlarged versions o the Tips A Grocer Store handou are available in two sizes (27" 40 an 38 56" t han i highlyC visible locations.
- 3. **Definitions & Recommendations handout** explains the 5210 message and its research basis.
- 4. Healthy Shopping On A Budget handout provides shoppers with money-saving tips to make healthy food purchases.
- 5. Healthy Brown Bag Lunches handout outlines a healthy lunch for each day in a week and includes a shopping
- 6. Understanding Food Labels handout describes how to locate and make sense of the important information provided o food labels.
- 7. To Have Fruits And Vegetables Year-Round, Add Frozen Or Canned handout lists some of the benefits of having frozen and canned produce available year-round, and includes ideas for use.
- 8. Healthy Kids' Snacks handout provides shoppers who are parents with a list of healthy snacks they may purchase at the grocery store.
- 9. **Healthy Eating In A Hurry handout** provides tips on ways to create quick, healthy meals on a busy schedule.

We recommend hanging the poster in highly-visible locations in the grocery store and placing the handouts at the customer service desk, on café tables, and in high-traffic areas in the store where they are likely to be seen and used. Digital versions are available and may be inserted into the grocery store newsletters and uploaded to the store's 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 at Grocery Stores





or more servings of fruits and vegetables

Making good choices when you're at the grocery store can set your family up for a week of healthy eating! For some people, creating a menu before grocery shopping is a helpful way to try out new recipes, incorporate more fruits and vegetables in the diet, create a more accurate shopping list, and ensure that less produce goes to waste.

- Vary your vegetables and fruits eating a mix of colors will ensure that you consume a variety of healthy antioxidants!
- Coupon clipping can be a great way to save money but don't let the availability of a coupon derail you from making healthy choices! Look for fruit and vegetable specials offered at your local grocery store.
- Frozen produce can contain more nutrients than out-ofseason fresh produce, often lacks the salt found in canned foods, doesn't spoil, and can be added to anything from omelets to soups to casseroles—so stock up!



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 with friends or 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.



or more hours of physical activity

Moving your body is a great way to burn calories, improve your mood, boost your energy, prevent cancer and cardiovascular diseases, and help you sleep better at night – plus, it's easy to sneak a few minutes of physical activity into your schedule at the grocery store!

- When you only have a few items on your shopping list, consider walking or riding your bike to the grocery store.
- Build a few extra minutes of physical activity into your day by choosing a far-away parking spot.
- When you get home, turn on your favorite music and have a dance party while you put away your groceries!



sweetened beverages

It is important to drink fluids to stay healthy, but sweetened beverages add extra sugar and calories to your family's diet. The grocery store is the perfect place to check out a beverage's ingredient list so you can make informed purchases.

- Avoid buying 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).
- Consider purchasing sparkling water, lemons to slice and add to still water, or a box of fruity herbal tea to drink hot or iced – they're all tasty, calorie-free alternatives to plain water!
- Nonfat and 1% milk and 100% vegetable juices contain beneficial nutrients and also calories, so think of them as foods that contribute towards your family's diet.

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

Academy of Nutrition and Dietetics. (2013). Position of the Academy of Nutrition and Dietetics: Total diet approach to healthy eating. *Journal of the Academy of Nutrition and Dietetics*, 113(2), 307-317.

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

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

Ludwig, D. S. (2009). Artificially sweetened beverages: Cause for concern. Journal of the American Medical Association, 302(22), 2477-2478.

McNeill, L. H., Kreuter, M. W., & Subramanian, S. V. (2006). Social environment and physical activity: A review of concepts and evidence. *Social Science & Medicine*, 63(4), 1011-1022.

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

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-

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



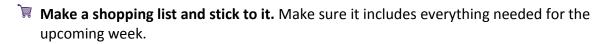
CLEARINGHOUSE This material is based upon work supported by the National Institute of Food and Agriculture, U.S. Department of Agriculture, and the Office of Family Policy, Children and Youth, U.S. Department of Defense under Award No. 2010-48709-21867 developed in collaboration with The Clearinghouse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



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.





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



Healthy Brown Bag Lunches

Monday:

- 1/2 cup low-fat cottage cheese
- 10-15 whole wheat crackers with 1-2 tablespoons almond butter, peanut butter or sunflower seed butter
- Assorted vegetables (e.g. tomatoes, sweet peppers, carrots, broccoli, etc.)
- Tea, coffee or water*

Tuesday:

- 1/2 of a large or 1 mini whole wheat bagel
- I-2 tablespoons almond butter, peanut butter or sunflower seed butter
- Apple or banana
- 6 ounces low-fat, low-sugar yogurt
- Tea. coffee or water*

Wednesday:

- 6 inch whole wheat tortilla with 2-3 ounces turkey, I ounce low-fat cheddar cheese, 2 tablespoons hummus and assorted vegetables (e.g. tomatoes, sweet peppers, carrots, broccoli, sugar snap peas, etc.)
- Grapes
- 8-10 whole wheat pita chips or multigrain tortilla chips
- Tea, coffee or water*

Thursday:

- Burrito made with ½ cup black beans, ½ cup brown rice, salsa and 2 tablespoons low-fat plain Greek yogurt on a 6 inch whole wheat tortilla (feel free to add any other vegetables you like on burritos like lettuce, onion, and peppers, too)
- Orange
- Tea, coffee or water*

*Healthy Choice

If you think you'll need more food than listed here to fill you up, increase your portions of fruits and vegetables first!



Friday:

- 3-4 ounces grilled chicken on salad greens with assorted vegetables (e.g. tomatoes, sweet peppers, carrots, broccoli, sugar snap peas, etc.)
- I ounce feta cheese, and I-2 tablespoons oil-based or light creamy dressing
 - 3 cups air-popped popcorn
- Tea, coffee or water*

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



Shopping List:

- Lean deli turkey
- Raw vegetables of your preference (e.g. tomatoes, sweet peppers, carrots, broccoli, sugar snap peas, etc.)
- 6 inch whole wheat tortilla
- Hummus
- Grapes
- Low-fat cottage cheese
- Whole wheat crackers
- Whole wheat bagels (large or mini size)
- Almond butter or peanut butter

- Low-fat, low-sugar yogurt (look for 20 grams of sugar or less per serving)
- Brown rice
- Black beans
- Salsa
- Low-fat plain Greek yogurt
- Orange
- Grilled chicken
- Salad greens
- Feta cheese
- Oil-based or light creamy dressing





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

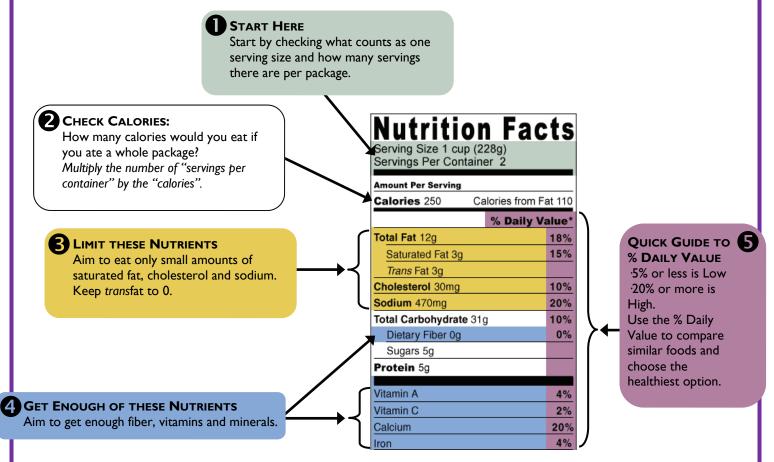




Understanding Food Labels

What can I use the Nutrition Facts label for?

- Getting a general idea about what's in a food (i.e. how nutritious a food is).
- Figuring out what counts as one serving and how many calories are in each serving.
- Comparing two similar products to choose the healthiest option.



Watch out for these common misconceptions:

- Assuming sugar-free or fat-free means calorie-free; it's not true!
- ▶ Buying something because it says "organic", "natural", "multigrain" or has some other "healthy" claim. These statements do not mean a product is good for you!
- Assuming that because a package looks like it should only be one serving it actually is. Many beverage bottles and packages of chips, cookies and candy are actually 2 or 3

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

The U.S.Food and Drug Administration. (2000). How to understand and use the nutrition facts label. Retrieved from http://www.fda.gov/Food/ IngredientsPackagingLabeling/LabelingNutrition/ucm274593.htm#twoparts





Fruits and Vegetables Year-Round

For health:

- Just as good for you as fresh fruit and vegetables—nutrients are preserved in the canning and freezing process
- Choose fruit packed in their natural juice, not in syrup
- Choose canned vegetables that are salt free and season to taste

For savings:

■ Cost less than fresh fruit and vegetables

For convenience:

- Always in season
- Lots of choices
- Easily stored
- Already washed and cut—ready for your favorite recipe



Eat at least five fruits and vegetables a day!





Use Frozen and Canned by Adding:

Vegetables to:

- Chili
- Soup or stews
- Stir fry

Tomatoes for sauce

Black beans & corn to spice up a Mexican dish

Chick peas, kidney or garbanzo beans to any salad

Fruits to:

- Smoothies
- Yogurt parfaits
- Plain yogurt
- Fruit salad
- Cereal
- Stir fry (pineapple)

Or use as a side dish!

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





Healthy Kids Snacks

Snacks are a bigger part of kids' diets than in the past. Snacks can make positive or negative contributions to ki diets — depending on the choices we offer. Next time yo children say, "I'm hungry," or if you need to get them through to the next meal, reach for one of these healthy snacks.



Vegetables

Most of the snacks served to children should be fruits and vegetables, since most kids do not eat the recommended five to thirteen servings of fruits and vegetables each day. Popular vegetables that can be served raw with dip or salad dressing include:

- Broccoli
- Baby carrots
- Celery sticks
- Cucumber
- Peppers
- Snap peas
- Snow peas
- String beans
- Grape or cherry tomatoes
- Yellow summer squash
- Zucchini slices

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

Low Fat Dairy Foods

Dairy foods are a great source of calcium, which can help to build strong bones. However, dairy products also are the biggest sources of artery-clogging saturated fat in kids' diets. To protect children's bones and hearts, make sure all dairy foods are low fat or nonfat.

- Yogurt
- Lower fat cheese
- Low fat pudding and frozen yogurt – Serve only as occasional treats because they are high in added sugars.

For dips: Try salad dressings such as nonfat ranch or Thousand Island, store-bought light dips, bean dips, guacamole, hummus (which comes in dozens of flavors), salsa, or peanut butter.

Fruit

Fruit is naturally sweet, so most kids love it. Fruit can be served whole, sliced, cut in half, cubed, or in wedges. Canned, frozen, and dried fruits often need little preparation.

- Apples
- Apricots
- Bananas
- Blackberries
- Blueberries
- Cantaloupe
- Cherries
- Grapefruit
- Grapes (red, green, or purple)
- Honeydew melon
- Kiwifruit
- Mandarin oranges
- Mangoes
- Nectarines
- Oranges
- Peaches
- Pears

(continued on next page)



Healthy Kids' Snacks (continuted)

- Pineapple
- Plums
- Raspberries
- Strawberries
- Tngerines
- Watermelon

Other popular fruit forms:

- Applesauce (unsweetened), fruit cups, and canned fruit
- Dried fuit Try raisins, apricots, apples, cranberries, and fruit leathers with little or no added sugars.
- Frozen fruit
- Fruit salad Get kids to help make a fruit salad.
- Popsicles Look for popsicles made from 100% fruit juice with no added caloric sweetners.



For more tips, go to

Science IN THE Public Interest

Www.cspinet.org/nutritionpolicy

Healthy Grains

Try to serve mostly whole grains, which provide more fiber, vitamins, and minerals than refined grains.

- Whole wheat English muffins, pita, or tortillas
- Breakfast cereal Either dry or with low fat milk, whole grain cereals like Cheerios, Grape-Nuts, Raisin Bran, Frosted Mini-Wheats, and Wheeties make good snacks. Look for cereals withno more than about 8 grams of sugar per serving.
- Whole grain crackers like Triscuits
- Rice cakes
- Popcorn
- Baked tortilla chips
- Granola and cereal bars -Look for whole grain granola bars that are low in fat and sugars.
- Pretzels, breadsticks, and flatbreads - These low fat items can be offered as snacks now and then. However, most of these snacks are not whole grain and most pretzels are high in salt.

Important!

Water should be the main drink served to kids at snack times. Water satisfies thirst and does not have sugar or calories. (Plus, it is low cost!) If kids are used to getting sweetened beverages at snack times, it may take a little time for them to get used to drinking water.



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





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.



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

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

