

What You Should Know About Adolescent Nutrition and Physical Activity

The Problem

Young people are eating more, exercising less, getting heavier, and becoming unhealthier. Among children and teens ages 12-19, 17 percent are overweight, according to NHANES 2003-2004 data. Experts say being overweight at any age increases your risk of developing serious health conditions such as type 2 diabetes and heart disease.

Who or What Is To Blame?

Adolescents today face many challenges when it comes to making food and activity choices:

- Little knowledge of good nutrition and the negative effect of poor nutrition.
- Widespread availability of low-cost, high-fat, high-sugar foods.
- Being bombarded with advertising for unhealthful foods.
- Lack of food selection and preparation skills.
- Limited access to safe physical activity options.
- Too many opportunities to be physically inactive (cell phones, video games, Internet, television, cars).

The Solution

Proper nutrition and regular physical activity are important for good health. Making sensible eating and activity choices begins at home. As parents, there are many things you can do to support good nutrition and physical activity and help your child develop health habits that can last a lifetime.

1. Encourage your adolescent to meet these recommendations.

Eat at least 2 cups of fruit and 2 ½ cups of vegetables each day for a 2,000-calorie diet to support good health and growth. Diets rich in fruits and vegetables, as part of a healthy diet, are associated with decreased risk of some types of cancers and heart disease.

Eat fiber-rich foods every day. Good sources of fiber are beans, sweet potatoes, peas, apples, pears, oranges, oat bran, and many whole-wheat breads, crackers, and breakfast cereals. Read the Nutrition Facts label to find out if the food is a good source of fiber.

Eat/drink 3 cup equivalents of foods from the milk group every day to build and maintain strong bones. Some Americans shy away from calcium-rich milk and milk products because they suffer from lactose intolerance. Use lactose-free milk products and other calcium-rich sources. Other sources of calcium include calcium-fortified juices, soy beverages, black-eyed peas, broccoli, greens, kale, and spinach.

2. Be aware of what they are eating.

With independence comes the responsibility for making appropriate food choices. What youth eat away from home is sometimes a mystery. If they are not eating school lunch, chances are they might not be getting the nutrition they need. Youth often have access to unhealthful fast and convenience foods on school grounds. Meal and snack choices might include chips or a soda and a candy bar from a vending machine. Talk with your adolescent about how food choices can affect health. Encourage him/her to balance food choices and eat a variety of foods. Discuss healthier food selections and assist him/her with planning and selecting meals and snacks.

3. Practice makes perfect.

Have youth participate in meal planning, selection, and preparation. Take them with you to the grocery store; show them how to pick fresh produce and teach them to look for expiration dates. Invite them into the kitchen to prepare a nutritious meal or snack. Point out the safety hazards in the kitchen and how to properly use utensils and other cooking equipment. Teach your child lowfat cooking methods (e.g., substituting lowfat milk in recipes, baking/broiling rather than frying). If armed with the tools and the knowledge, your child will be more likely to prepare his/her own meal or snack when left alone.

4. Keep a variety of food in the home.

Adolescents say that lack of availability is one of the reasons why they do not choose healthier foods. Make healthful snack foods visible and convenient (see grocery list on next page). Wash and cut up their favorite fruits and vegetables ahead of time and place in a clear container in the front of the refrigerator. Have foods on hand that appeal to a variety of cravings.

- *Sweet* – fresh or dried fruit, lowfat pudding, lowfat granola bars, vanilla wafers, fig bars
- *Salty* – pretzels, unbuttered popcorn, baked chips
- *Crunchy* – bread sticks, whole-wheat crackers, ready-to-eat, low-sugar cereals, fresh vegetables

5. Encourage regular physical activity.

Young people need 60 minutes of physical activity each day, or most days. Find out what activities your child likes and help him or her to get involved in a leisure sports activity or a competitive league in your community. Select gifts that encourage physical activity (e.g., skates, balls, jump ropes) and set limits on television watching and computer use. Set aside time to share at least one outdoor activity with your child each week (e.g., go for a walk or hike, clean up the yard, play ball).

6. Set an example.

Be a role model by showing that nutrition and physical activity are important to you!

Grocery List

At the store buy the following...

Foods high in vitamins A and C

Sweet potatoes	100% Orange juice
Dark leafy greens: turnip, mustard, spinach, beet greens, collards	Citrus fruits
Peas and carrots	100% Apple juice w/vitamin C
Broccoli	Red and green peppers
Tomatoes	Cantaloupe
Apricots	Strawberries
100% Cranberry juice w/vitamin C added	Peaches

Sources of calcium

Low/non-fat yogurt, milk, pudding	Cereal fortified with calcium
Lowfat cheeses (part-skim ricotta, mozzarella, Parmesan, Swiss)	Black-eyed peas
Dark leafy greens	100% juices fortified with calcium
	Salmon, canned w/bones

Foods high in fiber

Whole-wheat bread, muffins, crackers (100% whole-wheat flour is the first ingredient)	Whole-grain cereals
Cooked dry beans	Cornmeal (whole)
Oat bran	Potatoes with skin
Dried fruits	Popcorn (air popped)
Mixed vegetables	Bran ready-to-eat cereal
Apple with skin	Sweet potato
	Almonds
	Broccoli

Whole-grain foods

Whole-wheat bread, muffins, crackers (100% whole-wheat flour is the first ingredient)	Whole-grain cereals
Wild rice	Brown rice
Whole-grain barley	Oatmeal
Whole-grain corn	Whole rye
	Buckwheat
	Popcorn

Healthful Cooking

Making small changes in the kitchen can add up to big gains in your health. But who said you have to sacrifice taste for nutrition? Try the following tips and substitutions to make the meals you serve better for health.

When sautéing onion for flavoring stews, soups, and sauces	—	Use nonstick spray, water, or stock.
When making a salad dressing	—	Use equal parts water and vinegar and half as much oil. To make up for less intense flavor, add more mustard and herbs.
When making chocolate desserts	—	Use 3 tablespoons of cocoa instead of 1 ounce of baking chocolate (if fat is needed to replace the fat in chocolate, add 1 tablespoon or less of vegetable oil).
When making cakes and soft-drop cookies	—	Use no more than 2 tablespoons of fat for each cup of flour.
When making muffins, quick breads, biscuits	—	Use no more than 1-2 tablespoons of fat for each cup of flour. Substitute ½ whole-wheat flour for white flour.
When making muffins or quick breads	—	Use 3 ripe, very well mashed bananas or ½ cup applesauce instead of ½ cup butter or oil.
When baking or cooking	—	Use 3 egg whites and 1 yolk instead of 2 whole eggs; use 2 egg whites instead of 1 whole egg.
When making pie crust	—	Use only ½ cup margarine for every 2 cups of flour.
When you need sour cream	—	Blend 1 cup lowfat cottage cheese with 1 tablespoon skim milk and 2 tablespoons lemon juice; substitute plain, nonfat or lowfat yogurt; or try some of the reduced-fat sour cream substitutes.
When a recipe calls for butter, lard or shortening	—	Choose soft margarine with liquid vegetable oil as the first ingredient listed on the label.
To cut saturated fat	—	Use regular soft margarine made with vegetable oil instead of butter or lard. In general, diet margarine should not be used in baking.

Adapted from National Institutes of Health Heart Healthy Cookbook

TRY...**INSTEAD OF...**

Broiling, steaming, roasting/baking, microwaving, grilling, braising/stewing, boiling, simmering, stir-frying with a little bit of oil	Frying, basting with fat, cooking in fatty sauces and gravies
Lean meats such as round, sirloin, chuck arm pot roast, loin, lean and extra lean ground beef	Regular ground beef
Chicken and turkey with skin removed	Fried chicken
Baked or broiled fish, tuna packed in water	Fried fish, tuna packed in oil
Beans made with smoked turkey parts	Beans made with lard, ham hock
Small amount of vegetable oil	Lard, butter, or other fats that are solid at room temperature
Turkey bacon, lean ham, Canadian bacon	Pork bacon, sausage
Ground turkey breast	Ground beef or pork
Lowfat or fat-free milk	Whole milk or 2% milk
Lowfat or part-skim milk cheeses (check labels)	Whole-milk cheeses
Evaporated skim milk	Cream
Mustard, lowfat mayo and salad dressing	Regular mayo and creamy salad dressing
Vegetables prepared without added fat	Vegetables made with butter or seasoned with meats
Low-sodium bouillon and broth	Regular bouillon and broth

For healthful recipes**Check out the following websites:**

www.intelihealth.com
www.cookinglight.com
www.deliciousdecision.org
www.allrecipes.com
www.mealforyou.com

Or healthful cookbooks:

More Healthy Homestyle Cooking,
 Evelyn Tribole
AHA Meals in Minutes, American Heart
 Association

Adapted from National Institutes of Health Heart Healthy Cookbook

Mushroom Brown Rice Pilaf

Ingredients:

1/2	large onion, chopped
1 cup	sliced mushrooms (4-5 mushrooms)
1 Tbsp	olive or canola oil
1 cup	brown rice
2 cups	chicken or vegetable broth

1. Heat the oil in a large saucepan and brown onion and mushrooms for about 5 minutes.
2. Add one cup brown rice and stir to coat grains in oil.
3. Add two cups broth, bring to a boil, then turn down to a simmer.
4. Simmer for about 45 minutes or until all liquid is absorbed. Cooking time for whole-grain rice varies according to the variety of rice; check package directions.

Nutrition Facts:

Makes 6 servings

Nutrients Per Serving

Calories	98	Saturated Fat	.3 g	Iron	.9 mg
Protein	2.9 g	Cholesterol	0 mg	Calcium	14.1 mg
Carbohydrate	15.2 g	Vitamin A	0 IU	Sodium	130 mg
Total Fat	3 g	Vitamin C	7.2 mg	Dietary Fiber	2 g

Quick and Easy Whole Grain Recipes from the Whole Grains Council
www.wholegrainscouncil.org

Mouth-Watering Oven-Fried Fish

Ingredients:

2 lbs	fish fillets
1 Tbsp	lemon juice, fresh
¼ cup	nonfat milk or 1% buttermilk
2 drops	hot pepper sauce
1 tsp	garlic, fresh, minced
¼ tsp	white pepper, ground
¼ tsp	salt
¼ tsp	onion powder
½ cup	cornflakes, crumbled or regular brand bread crumbs
1 Tbsp	vegetable oil (for greasing baking dish)
1	lemon fresh, cut in wedges

1. Preheat oven to 475°F.
2. Wipe fillets with lemon juice and pat dry.
3. Combine milk, hot pepper sauce, and garlic.
4. Combine pepper, salt, and onion powder with cornflake crumbs and place on a plate.
5. Let fillets sit in milk briefly. Remove and coat fillets on both sides with seasoned crumbs. Let stand briefly until coating sticks to each side of fish.
6. Arrange on lightly oiled shallow baking dish.
7. Bake 20 minutes on middle rack without turning.
8. Cut into 6 pieces. Serve with fresh lemon.

Nutrition Facts:

Makes 6 servings

Nutrients Per Serving

Calories	167	Saturated Fat	.5 g	Iron	2.4 mg
Protein	28.9 g	Cholesterol	86 mg	Calcium	65.8 mg
Carbohydrate	3.9 g	Vitamin A	139.5 IU	Sodium	225 mg
Total Fat	3.4 g	Vitamin C	6.8 mg	Dietary Fiber	.4 g

Vegetables With a Touch of Lemon

Ingredients:

1/2 small head	cauliflower, cut into florets
2 cups	broccoli, cut into florets
2 Tbsp	lemon juice
1 Tbsp	olive oil
1 clove	garlic, minced
2 tsp	fresh parsley, chopped

1. Steam broccoli and cauliflower until tender (about 10 minutes).
2. In a small saucepan, mix the lemon juice, oil, and garlic, and cook over low heat for 2 or 3 minutes.
3. Put the vegetables in a serving dish. Pour the lemon sauce over the vegetables. Garnish with parsley.

Nutrition Facts:

Makes 6 servings

Nutrients Per Serving

Calories	42	Saturated Fat	.3 g	Iron	.5 mg
Protein	2 g	Cholesterol	0 mg	Calcium	29.4 mg
Carbohydrate	4 g	Vitamin A	748.1 IU	Sodium	17.2 mg
Total Fat	2.5 g	Vitamin C	50.9 mg	Dietary Fiber	2.1 g

Oven-Baked Sweet Potato Fries

Ingredients:

nonstick cooking spray
 1 1/2 lbs (2 large) fresh sweet potatoes
 1/8 tsp black pepper
 1/2 tsp salt

1. Preheat oven to 400°F.
2. Lightly spray a 10" x 14" cookie sheet with nonstick cooking spray.
3. Scrub potatoes under tap water with a vegetable brush. With a knife, remove any bad spots or defects on the potato. Do NOT peel.
4. Cut each potato into stick-fry size, approximately, 1" x 1" x 3".
5. Spread potato sticks evenly on cookie sheet, and lightly spray potatoes with nonstick cooking spray.
6. Sprinkle salt and pepper evenly over the potatoes.
7. Place cookie sheet in oven and bake for approximately 20 minutes or until potatoes are just tender. If desired, the potatoes can be placed under the oven broiler for about 3 minutes, turn the potatoes and broil 3 minutes on the other side.
8. Remove from oven and serve.

Nutrition Facts:

Makes 6 servings

Nutrients Per Serving

Calories	117	Saturated Fat	.03 g	Iron	.5 mg
Protein	2 g	Cholesterol	0 mg	Calcium	32.1 mg
Carbohydrate	27.6 g	Vitamin A	24,745.8 IU	Sodium	205.1 mg
Total Fat	less than 1 g	Vitamin C	27.9 mg	Dietary Fiber	3.4 g

1-2-3 Peach Cobbler

Ingredients:

1/2 tsp	cinnamon, ground
1 Tbsp	vanilla extract
2 Tbsp	cornstarch
1 cup	peach nectar
1/4 cup	pineapple juice or peach juice
2	16-oz. cans peaches, sliced, packed in juice, drained (or 1 3/4 lbs fresh)
1 Tbsp	tub margarine, nonstick cooking oil spray (for baking dish)
1 cup	pancake mix, dry
2/3 cup	all-purpose flour
1/2 cup	sugar
2/3 cup	evaporated nonfat milk

Topping:

1/2 tsp	nutmeg
1 Tbsp	brown sugar

Directions:

1. Combine cinnamon, vanilla, cornstarch, peach nectar, and pineapple or peach juice in a saucepan over medium heat. Stir constantly until mixture thickens and bubbles.
2. Add sliced peaches to mixture.
3. Reduce heat and simmer for 5 to 10 minutes.
4. In another saucepan, melt margarine and set aside.
5. Lightly spray an 8-inch-square glass dish with cooking oil spray. Pour hot peach mixture into the dish.
6. In another bowl, combine pancake mix, flour, sugar, and melted margarine. Stir in milk.
7. Quickly spoon this mixture over peach mixture.

8. Combine nutmeg and brown sugar. Sprinkle mixture on top of batter.
9. Bake at 400°F for 15 to 20 minutes or until golden brown.
10. Cool and cut into 8 squares.

Nutrition Facts:

Makes 8 servings
 Serving Size: 1 square

Nutrients Per Serving					
Calories	213	Saturated Fat	.08 g	Iron	1.3 mg
Protein	4.7 g	Cholesterol	1 mg	Calcium	120.6 mg
Carbohydrate	47.4 g	Vitamin A	502.2 IU	Sodium	213.3 mg
Total Fat	.4 g	Vitamin C	4.8 mg	Dietary Fiber	2.6 g

The Competitive Edge

Eating and drinking the right foods and fluids gives you the energy you need to play and perform at your best.

Follow *MyPyramid* Each Day

By eating the recommended amounts from each food group, you can be sure that you are at the top of your game. As an active youth, you may need to eat more from each food group to keep your energy up. No one can eat the perfect diet every day, but the better you eat the healthier you'll feel. Make small changes every day. You'll soon notice the difference.

Game Day

On competition days, it is especially important to pay attention to what you eat and drink. Most of the energy you will use comes from the food you eat and drink that day. Healthful foods to fuel your best performance have carbohydrates and very little fat. Carbohydrates are an important source of energy for intense sports, like running or basketball. Foods such as pasta, rice, breads, and fruits are good examples of "healthful carbohydrates." High-fat and high-protein foods stay in your stomach longer, and during exercise can cause stomach cramps, nausea, and even vomiting. Eating sugary foods can also make your stomach hurt during sports activities.

Fuel Up Before You Are Physically Active

Below are some suggestions you may wish to consider about fueling up on game day.

- Foods to eat 3 to 4 hours before physical activity: fruit or vegetable juice, fresh fruit, bagel with lowfat cream cheese, bread or English muffin with peanut butter, lean meat, lowfat yogurt, baked potato, lowfat cheese, cereal with fat-free or lowfat (1%) milk, pasta with tomato sauce.
- Foods to eat 2 to 3 hours before physical activity: fruit or vegetable juice, fresh fruit, bagel, bread, English muffin. Avoid cream cheese and peanut butter; the fat in these foods might make you feel sick while exercising.
- Foods to eat 1 to 2 hours before physical activity: fruit or vegetable juice, fresh fruit (especially low-fiber fruits such as bananas, plums, melons, cherries, and peaches).
- Don't eat right before you are physically active. Digestion takes energy and food that is left undigested can leave you feeling full and/or sick.
- Don't eat high-fat foods. High-fat foods take longer to digest. Eating a high-fat food before you are physically active can make you feel tired and sluggish and may cause stomach cramps or vomiting.
- Don't eat high-sugar foods. Eating sugary foods such as soda and candy bars before physical activity can make you run out of energy too soon.
- Don't eat high-fiber foods such as bran cereals, beans, or popcorn before physical activity. They can cause gas and discomfort. Instead, eat these foods on days when you do not have an important game or competition.

Drink Up

- Proper hydration is important when participating in physical activity. Two steps that help avoid dehydration during prolonged physical activity or when it is hot include: (1) consuming fluid regularly during the activity and (2) drinking several glasses of water or other fluid after the physical activity is completed.

During Exercise

- Drink 3 to 4 ounces (about ½ cup) of water every 15 minutes to replace lost fluid.

Tip: If you will be exercising longer than 1 hour, you should refuel with carbohydrates. For example, try juice mixed with water or a sports drink.

Why is water the best for you?

Of all drinks, water is absorbed easiest by your body and it is usually free or relatively inexpensive. Sports drinks can be costly and can be high in added sugar. Soda is loaded with both sugar and caffeine, a combination that can give you stomach cramps. Caffeine also pulls fluid from your body and dehydrates you even more.

After Exercising

- Eat a high-carbohydrate meal or snack to refuel your body. Try fresh fruit or vegetables, bean burritos, sandwiches, spaghetti.
- Drink at least 2 cups of water after exercising to replace the fluid you lost from sweating. If it is a hot day or you just feel thirsty, drink more.

Looking Good and Feeling Great

Break-Outs and Pimples

Frustrated by those unexpected and uninvited guests that always appear at the worst possible time? You are not alone.

Here are some things you can do:

- Keep your face clean by washing twice a day, especially after exercising. Avoid using rough surfaces to clean your skin as they can cause more irritation. Use your hands, plain soap and water, or oil-free products for best results!
- Avoid the temptation to pick and pop. By picking at or popping pimples, you run the risk of spreading the bacteria that cause pimples in the first place. You can also irritate your skin even more and cause permanent scarring.
- Try not to get stressed out! Relax, try exercising and meditating to reduce your stress.

Getting Sick All the Time

Does it seem as if each month you notice the same symptoms: the scratchy throat, the heavy head, that overall achy feeling, fever, chills? And before you know it, you have come down with a cold.

To help maintain health, try these tips:

- Increase your fruit and vegetable consumption. Fruits and vegetables provide antioxidants that help boost your immune system, strengthening your body's ability to resist infection and improve its ability to heal wounds.
- Get enough sleep. Your body needs rest in order to be able to fight off disease. Experts recommend at least 9 hours of sleep, every night.
- Get regular exercise.
- Avoid sharing drinking cups, silverware, or towels with other people.

- Wash your hands frequently even if they do not look dirty. Germs can appear on all types of surfaces, door handles, poles, railings.
- Try not to get stressed. When your body is under stress it is unable to fight off infection, making it easier for you to get sick.
- Stay clear of cigarette smoke.

Feeling Stressed

Whether it's the math test you have next week or the school dance next month, young people have a lot on their minds. It is easy to feel overwhelmed, under pressure, and stressed out by everyday life.

Here are some things you can do to help manage your stress level:

- Be physically active. Regular activities such as walking, biking, and playing basketball are all good ways to deal with stress.
- Hang out with friends more frequently.
- Adopt a hobby to keep your mind off things.
- Remember to breathe deeply. Increased oxygen to the body and brain helps you to feel more relaxed and calm.

For more information on these and other teen health issues, visit the Teens Health Web site at www.kidshealth.org.

Sample Menu Guidelines Memo

Date: _____
TO: Catering Manager
FR: Client _____
RE: Menu Guidelines for our event

Since we are an organization dedicated to promoting good health to our members, we have made a commitment to “practicing what we preach.” Therefore, we are requesting that when catering meals for our organization, you make every effort to follow the menu guidelines listed below.

Menu Guidelines

1. Provide a variety of fruits and vegetables. Examples include whole or cut-up fruit, fruit or vegetable salads, cooked vegetables, or raw vegetables with lowfat dip. Include dark green and orange vegetables and orange fruits. Add cooked dry beans or peas to salads or soups.
2. Offer a variety of grains, especially whole-grain foods. Examples include whole-grain breads, bagels, cereals, lowfat crackers, lowfat muffins, and lowfat granola bars. Other examples include whole-grain pasta and brown rice, oatmeal, and popcorn.
3. Serve fat-free, lowfat, or low-calorie foods and beverages. Some examples are fat-free or lowfat dressings or toppings such as salsa or lowfat yogurt dressing; lowfat or low-calorie desserts such as angel food cake; lowfat or fat-free milk, lowfat yogurt or cheeses; and lean meats, poultry, or fish, cooked dry beans, peas and lentils.
4. Offer foods and beverages low in added sugars. Serve unsweetened cereals, fruit spreads, water, 100% fruit or vegetable juices, and regular and decaffeinated coffee or tea.
5. Serve foods that are low in salt (sodium), such as unsalted pretzels, popcorn, or baked chips; grilled or roasted entrees; and entrees cooked with spices and herbs instead of salt.
6. Serve smaller portions such as lowfat mini-muffins or lowfat mini-bagels, or 1-inch lowfat cheese squares. Cut up breads, sandwiches, and other such foods into halves or quarters.