



Provider Toolkit



What's Inside

Below is a list of the materials included in this toolkit. Feel free to photocopy them for your use. If you have questions about Healthy Kids U, please call us at 309.671.4828.

- HKU Pediatric Obesity Tools
- Healthy Active Living Handout
- Physical Activity and Nutrition Survey
- Family Friendly Recipes
- Nutrition Tips
- Weekly Log
- Activity Pyramid
- 10 Nutrition Tips – Be A Healthy Role Model
- BMI
 - Boys
 - Girls
- BPT
 - Boys
 - Girls
- Choose My Plate
- COAN Implementation Guide
- Prescription AAP
- Rx for Nature
- Serving Portion by Age
- Problem Solving Tips
- Serving Size Poster Handout



Prevention, Assessment and Diagnostic Office Tools

I. Eat Smart, Move More website – www.eatsmartmovemorenc.com/PediatricObesityTools/PediatricObesityTools.html

A. Pediatric Obesity Assessment, Prevention and Treatment Algorithm

Clinician Reference Guide (Professional Print Version)

This reference guide is based on the AMA Expert Committee Recommendations. A committee of North Carolina physicians led the development of this tool, with input from a larger group of contributors and reviewers. It is intended to be printed, front and back, on 8.5 x 14" paper and tri-folded.

B. Color-Coded BMI Charts

BMI Chart for Boys

BMI Chart for Girls

These color-coded versions of the 2000 CDC BMI charts also provide the 99th percentile BMI cut-points for childhood obesity.

C. Blood Pressure Tables

Blood Pressure Table for Boys

Blood Pressure Table for Girls

These tables provide gender-specific blood pressure levels by age and height percentile. They are available in color and black/white.

American Academy of Pediatrics Healthy Active Living Tools

Prevention and Treatment of Childhood Overweight and Obesity website – www.aap.org/obesity/clinical_resources.html

*NEW 5, 2, 1, 0 The Pediatric Obesity Clinical Decision Support Chart

Available for purchase from the AAP bookstore. This convenient flip chart provides child health care professionals practical support and guidance to help improve care and outcomes for overweight youth. It is consistent with the December 2007 Expert Panel Recommendations for Treatment of Child and Adolescent Overweight and Obesity (AAP Endorsed).

Management and Treatment Office Tools

I. Specialty Referral Information – www.childrenshospitalofillinois.org

A. Information for Provider:

Referral Form

Healthy Kids U Clinic Information

B. Information for Patient/Family

Appointment Instructions

Map/Directions

II. Patient Education Printable materials – www.ChooseMyPlate.gov

A. 10 Tips Nutrition Education Series

B. MyPlate Mini Poster

C. Sample Menus and Recipes

D. Daily Food Plans

E. Healthy Eating on a Budget

III. Coding and Billing Tools

Obesity Related CPT Codes – www.aap.org/obesity/pdf/ObesityCodingFactSheet0208.pdf

IV. Additional Websites with Printable Tool

A. www.nichq.org/childhood_obesity/toolkit_prevention_family.html

B. www.nichq.org/childhood_obesity/tools/AreyouaHealthyKid.pdf

C. www.chicagochildrenresearch.org/pprg/resources/obesity

D. www.extension.missouri.edu/fnep/MyActivity.pdf



Fact Sheet: Healthy Active Living for Families

Healthy nutrition starts as early as infancy with breastfeeding. Once your baby begins eating solid foods, introduce nutritious foods early on and often. Sometimes toddlers need to try a food 10 times before they actually accept and enjoy it. It is also important to encourage play time as soon as they start crawling and walking. As your children grow, continue to help them live a healthy active lifestyle.

To lead a healthy active life, families can strive to reach these goals:

- 5 fruits and vegetables a day,
- 2 hours or less of screen time (TV, computer, video games) per day,
- 1 hour of physical activity a day, and
- 0 limit sugar-sweetened drinks.

To help children live healthy active lives, parents can:

- be role models themselves by making healthy eating and daily physical activity the norm for their family.
- create a home where healthy choices are available and encouraged
- make it fun - find ways to engage your children such as:
 - playing a game of tag,
 - cooking healthy meals together,
 - creating a rainbow shopping list to find colorful fruits and vegetables,
 - go on a walking scavenger hunt through the neighborhood, or
 - grow a family garden.

In addition to 5, 2, 1, 0, families can make small changes in their family routines to help everyone lead healthier active lives. Try:

- Eating breakfast every day;
- Eating low-fat dairy products like yogurt, milk, and cheese;
- Regularly eating meals together as a family;
- Limiting fast food, take out food, and eating out at restaurants;
- Preparing foods at home as a family;
- Eating a diet rich in calcium; and
- Eating a high fiber diet.

Help your children form healthy habits now.
Healthy active children are more likely to be healthy active adults!

Physical Activity and Nutrition Survey



Are You a Healthy Kid?

Patient Name: _____ **Age:** _____ **Date:** _____

While you are waiting to see your clinician, please take a moment to answer questions 1–10 below. For each of the following questions, circle “yes” or “no.”

- | | | |
|--|-----|----|
| 1. Do you eat five or more fruits and vegetables per day? | Yes | No |
| 2. Do you have a favorite fruit or vegetable that you eat every day? | Yes | No |
| 3. Do you eat breakfast every day? | Yes | No |
| 4. Do you watch TV, videos, or play computer games for two hours or less per day? | Yes | No |
| 5. Do you take gym class or participate in sports or dance in or outside of school three or more times a week? | Yes | No |
| 6. Do you have a favorite sport or physical activity that you love to do? | Yes | No |
| 7. Do you eat dinner at the table with your family at least once a week? | Yes | No |
| 8. Do you have a TV in your bedroom? | Yes | No |
| 9. Do you eat in front of the TV? | Yes | No |
| 10. Do you drink more than one soda, juice, or other sugar-sweetened drink a week? | Yes | No |

5-2-1 Daily Prescription for Better Health (to be completed by clinician)

Height: _____ Weight: _____ BMI: _____ BMI Percentile: _____

To help you get healthy and grow strong, begin doing what we’ve discussed and I’ve marked below.

At Least 5 Fruits & Vegetables

Servings (1/2 cup)

- _____ Apples/Bananas/Oranges
- _____ Apricots/Pears/Plums
- _____ Asparagus/Broccoli
- _____ Beans/Lentils/Peas
- _____ Berries/Grapes/Kiwi
- _____ Carrots/Celery/Spinach
- _____ Dates/Figs/Raisins
- _____ Guava/Mango/Papaya
- _____ Lettuce/Tomatoes/Peppers
- _____ Other:

No More Than 2 Hours of Screen Time

Minutes

- _____ TV/Videos/DVDs
- _____ Video/Computer
- _____ Games
- _____ Game Boy
- _____ Movies
- _____ Computer/IM Chat
- _____ Other:

At Least 1 Hour of Physical Activity

Minutes

- _____ Aerobics/Dance
- _____ Baseball/Softball/Basketball
- _____ Bicycle/Swim/Tennis
- _____ Football/Soccer
- _____ Gymnastics/Martial Arts
- _____ Hockey/Field Hockey
- _____ Ice-skate/Roller-skate
- _____ Jump Rope/Run/Walk
- _____ Skate-Snowboard/Ski
- _____ Other:

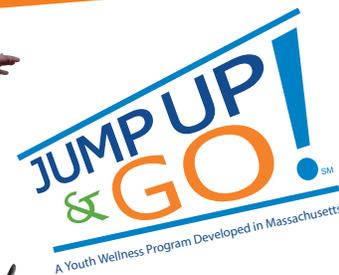
Weekly Recommendations:

No more than one sugar-sweetened beverage: _____ Soda _____ Fruit Drink _____ Sports Drink

Other Suggestions/Recommendations:



Family-Friendly Recipes



Let's Get Cookin'

One great way to make sure you get five fruits and veggies a day is to make a healthy recipe. Spend some family time together in the kitchen and make one—or all—of these easy, delicious recipes. From snacks to sandwiches and breakfast and side dishes, there's something here for everyone.

Want to know more? Look on the back of each card for complete nutritional information.

Banana Peanut Butter Sandwiches

Ingredients:

- 2 tablespoons peanut butter
- 4 slices whole wheat bread
- 1 firm, small banana, peeled and sliced

To make the sandwiches:

1. Spread peanut butter on 2 bread slices.
2. Arrange banana slices over peanut butter. Top with remaining bread.
3. Place sandwiches on cutting board and cut into quarters.

Makes two servings



continued

Breakfast Parfait

Ingredients:

- 2 cups chopped fresh pineapple
- 1 cup frozen raspberries, thawed
- 1 cup lowfat vanilla yogurt
- 1 firm, medium banana, peeled and sliced
- 1/3 cup chopped dates
- 1/4 cup unsalted roasted almonds, sliced

To make the parfait:

1. Using four small or medium glasses; place a layer of pineapple in each glass. Then add to each glass a layer of raspberries, yogurt, banana, and dates. Sprinkle the top with almonds.

Makes four servings



continued

Fruit Smoothie

Ingredients:

- 1 very ripe, medium banana, peeled
- 3/4 cup pineapple juice
- 1/2 cup lowfat vanilla yogurt
- 1/2 cup strawberries, rinsed and stems removed

To make the smoothie:

1. Break banana into small pieces and put in the blender with pineapple juice, yogurt, and strawberries. Secure lid and blend until smooth.
2. Divide shake between two glasses and serve immediately.



continued

Broccoli Forest

Ingredients:

- 2 carrots, peeled
- 3 cups broccoli florets
- 4 cherry tomatoes
- 3 tablespoons parsley leaves

Dipping Sauce:

- 1/4 cup plain nonfat yogurt
- 1/4 cup light sour cream
- 2 teaspoons honey
- 2 teaspoons spicy brown mustard

To make the broccoli forest:

1. First, make the sauce by combining yogurt, sour cream, honey, and mustard in a small bowl.
2. Second, make "tree trunks" by cutting carrots against cutting board and trimming off ends.



continued

Family-Friendly Recipes

Breakfast Parfait

Nutritional Information

(per serving):

258 calories
6g protein
5g fat (1g sat.)
47g carbohydrate
43mg sodium
3mg cholesterol

Banana Peanut Butter Sandwiches

Nutritional Information

(per serving):

278 calories
9g protein
9g fat (2g sat.)
39g carbohydrate
260mg sodium
0mg cholesterol

Broccoli Forest

Cut each carrot in half, crosswise, then lengthwise to make four pieces.

3. Arrange each plate by putting two carrot pieces side-by-side in the center. Arrange broccoli around the carrots, forming a cluster (tops of the trees). Arrange the tomatoes at the top of the plate. Spoon dip around the base of carrots and sprinkle with parsley.

Makes four servings

Nutritional Information

(per serving):

84 calories
3g protein
2g fat (2g sat.)
12g carbohydrate
74mg sodium
1mg cholesterol

Fruit Smoothie

Nutritional Information

(per serving):

168 calories
4g protein
1g fat (0.59g sat.)
35g carbohydrate
43mg sodium
3mg cholesterol



Get a Healthy Start on Eating Smart

One of the best ways you can help your family stay healthy is to focus on good nutrition and develop smart eating habits early. You may not realize it, but you are the best example your children have when it comes to developing their own eating habits. Use this opportunity, and the following tips, to show them the best way to get a healthy start on eating smart.

Guidelines for Eating Smart

Eat breakfast. Teach your children that breakfast is the most important meal of the day. By skipping breakfast, you're setting your child up to be tired and hungry throughout the day.

Drink water. By keeping your children's beverage intake mostly to water, you're teaching them a healthier way to quench their thirst. Fruit-flavored drinks and soda both contain extra, empty calories. Try to have your child drink at least four large glasses of water each day, and more if they're very active.

Can the soda. A 12-ounce can of regular soda has at least 10 teaspoons of sugar in it, and while diet soda may seem like a good alternative, it still contains artificial ingredients as well as caffeine.

Downsize, not supersize. How much you eat is just as important as what you eat. Keep in mind that serving sizes vary. Learn to keep an eye on how big the plate is and how much you eat, both at home and when dining out.

Snack attack. Most snack foods are high in calories and fat. Instead of snack cakes, candy bars, or chips, try offering your child these foods instead: dried fruit, lowfat yogurt, air-popped popcorn, fruit cocktail in light syrup or juice, unsalted roasted nuts, frozen grapes, bananas, or all-fruit pops.

Filling, fantastic fiber. Foods rich in dietary fiber are great for many reasons. First, they're filling. Second, they can help improve digestion and provide long-term energy. Foods rich in fiber include bran cereals, fresh and dried fruits, broccoli, asparagus, peas, corn, cabbage, brussels sprouts, whole grain breads, brown rice, lentils, and popcorn—air-popped with a small amount of salt.

Calcium for strong bones. To ensure that your child's bones grow strong, make sure that they're getting enough calcium. Aim for three to four servings each day. Foods rich in calcium include skim milk, lowfat yogurt or cheese, cottage cheese, certain green vegetables (like broccoli and spinach), calcium-fortified orange juice, calcium-fortified tofu, and salmon. A great after-school snack loaded with calcium is a smoothie made with lowfat vanilla yogurt, lowfat milk, and a frozen banana. (You can also try adding frozen strawberries, blueberries, or raspberries.)

Lean protein. Protein is a key nutrient. Lean protein foods should be the main source of protein in your diet. These foods include skinless chicken or turkey breast, fish, shellfish, ham, Canadian bacon, lean red meats, egg whites, lowfat milk, lowfat yogurt, lowfat cheeses, legumes (such as baked beans, kidney beans, chick peas, lima beans), tofu, and soybeans.

Nutrition Tips

Fast foods are fat foods. Today's families are often busy, and the convenience of fast food is very appealing. However, most fast-food restaurants offer selections that are high in fat and calories. If you are eating out, make the healthiest choices you can. Bring home a pizza with vegetable toppings. Go for a small plain hamburger, a grilled chicken sandwich, or a green salad with lowfat dressing.

Variety is valuable. Offering your children a variety of foods from an early age will encourage them to try new things. Many parents assume that kids will only stick to one or two foods they enjoy, but the more you offer them different things, the more likely they are to try—and enjoy—healthy options.

Don't diet. Low-carb, no carb, high-protein, low-protein. No matter what you may hear, diets are just short-term attempts to fix what requires a long-term solution. Don't diet yourself, and never put your child on a diet. Eat modest portions of a variety of foods, including lots of fresh fruits and vegetables, and your child will learn that it's moderation and variety that matter.

Reading Food Labels:

The new food labels carry an up-to-date, easier-to-use nutrition information guide which is required on almost all packaged foods. The Nutrition Facts labels serve as a key to help in planning a healthy diet.

Serving sizes. All values on the label are based on the serving size. If you eat two servings, multiply all values by two. Use serving sizes to compare two different products.

List of nutrients covers those most important to the health of today's consumers, most of whom need to worry about getting too much of certain nutrients (fat, for example), rather than too few vitamins or minerals, as in the past.

The label of larger packages may now tell the number of calories per gram of fat, carbohydrate, and protein.

Nutrition Facts			
Serving Size 1 cup (228g)			
Servings Per Container 2			
Amount Per Serving			
Calories 260		Calories from Fat 120	
		% Daily Value*	
Total Fat 13g			20%
Saturated Fat 5g			25%
Cholesterol 30mg			10%
Sodium 660mg			28%
Total Carbohydrate 31g			10%
Dietary Fiber 0g			0%
Sugars 5g			
Protein 5g			
Vitamin A 4%	•	Vitamin C 2%	
Calcium 15%	•	Iron 4%	
* Percent Daily Values are based on a 2,000-calorie diet. Your daily values may be higher or lower depending on your calorie needs:			
	Calories:	2,000	2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g
Calories per gram:			
Fat 9	•	Carbohydrate 4	• Protein 4

New title signals that the label contains the newly required information.

Calories from fat are now shown on the label to help consumers meet dietary guidelines that recommend people get no more than 30 percent of the calories in their overall diet from fat.

% Daily Value shows how a food fits into the overall daily diet.

Daily Values. Some are maximums, as with fat (65 grams or less); others are minimums, as with carbohydrate (300 grams or more). The daily values for a 2,000- and 2,500-calorie diet must be listed on the label of larger packages.

Your Weekly Log

Growing Up Healthy and Strong Is as Easy as 5-2-1!

- 5**—Record the servings of fruits and veggies you eat each day. **5 or more** each day is the healthy way.
- 2**—Limit your screen time; try not to guess—you'll be a success if it's **2 hours or less**.
- 1**—Add up your time to get the activity score—get **1 hour or more** to build a strong core.



Track your progress every day. Record each amount in the chart below.

Family Member Name _____

Week of _____

5

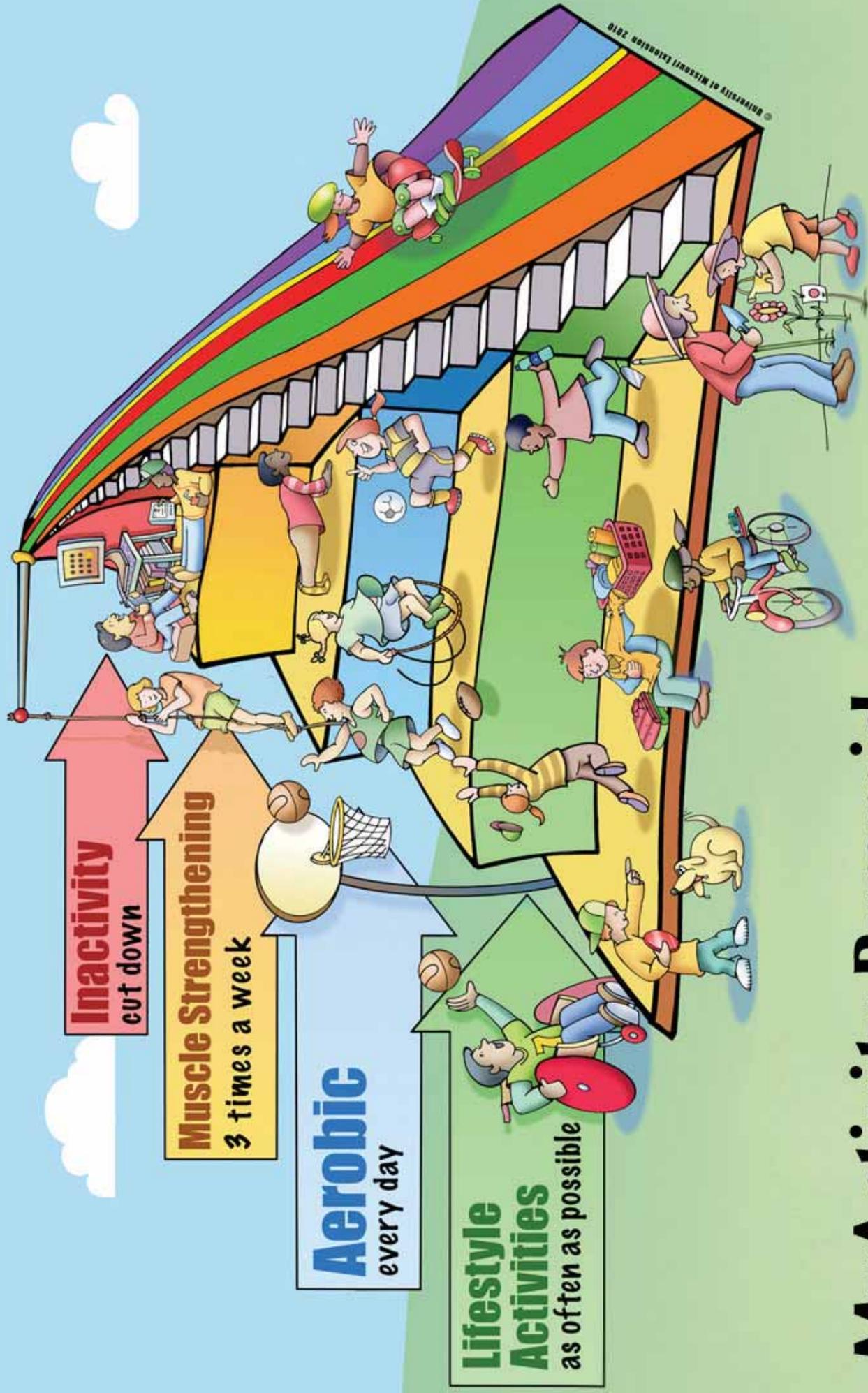
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1

	Mon Date:	Tues Date:	Wed Date:	Thurs Date:	Fri Date:	Sat Date:	Sun Date:
Fruits and Veggies	1 _____	1 _____	1 _____	1 _____	1 _____	1 _____	1 _____
	2 _____	2 _____	2 _____	2 _____	2 _____	2 _____	2 _____
	3 _____	3 _____	3 _____	3 _____	3 _____	3 _____	3 _____
	4 _____	4 _____	4 _____	4 _____	4 _____	4 _____	4 _____
	5 _____	5 _____	5 _____	5 _____	5 _____	5 _____	5 _____
Screen Time	<input type="checkbox"/> 2 hrs or under						
	<input type="checkbox"/> Over 2 hrs Describe: _____ _____ _____						
Physical Activity	<input type="checkbox"/> 1 hr or more						
	<input type="checkbox"/> 30 minutes or more Describe: _____ _____ _____						

Completed by participating family member _____

Confirmed by another family member _____



MyActivity Pyramid

Be physically active at least 60 minutes, up to several hours every day.

MyActivity Pyramid

Be physically active 60 minutes, up to several hours every day.
 Use these suggestions to help meet your goal:

<h3>Lifestyle Activities</h3> <p>As often as possible</p> <ul style="list-style-type: none"> • Play outside • Help with chores • Take the stairs • Pick up toys • Walk 	<h3>Aerobic</h3> <p>Every day</p> <ul style="list-style-type: none"> • Dance • Skateboard • Tag • Ride your bike • Martial arts, like karate • Sports <ul style="list-style-type: none"> ◦ Ice or field hockey ◦ Basketball ◦ Swimming ◦ Tennis ◦ Soccer 	<h3>Muscle Strengthening</h3> <p>3 times a week</p> <ul style="list-style-type: none"> • Tug-of-war • Rope climb • Pull-ups • Sit-ups • Push-ups <p>Muscle-strengthening exercises help your bones get stronger so you can run and play.</p> 	<h3>Inactivity</h3> <p>Cut down</p> <ul style="list-style-type: none"> • Screen time (TV, computer, video games*) • Sitting longer than 60 minutes <p>Instead of watching sports on TV, go outside and play a sport!</p> <p>* Video games that require physical activity may count toward your 60 minutes.</p> 
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Find your balance between food and fun:

- Move more. Aim for at least 60 minutes every day.
- Walk, dance, bike, rollerblade – it all counts. How great is that!

This publication is adapted from the USDA's MyPyramid and the 2008 Physical Activity Guidelines for Americans, chapter 3. Funded in part by USDA SNAP. Running out of money for food? Contact your local food stamp office or go online to dss.mo.gov/food/istamp. For more information, call MU Extension's Show Me Nutrition line at 1-888-515-0016.

be a healthy role model for children



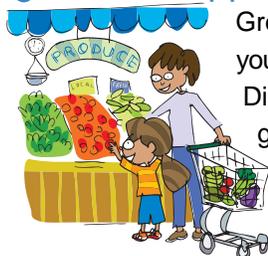
10 tips for setting good examples

You are the most important influence on your child. You can do many things to help your children develop healthy eating habits for life. Offering a variety of foods helps children get the nutrients they need from every food group. They will also be more likely to try new foods and to like more foods. When children develop a taste for many types of foods, it's easier to plan family meals. Cook together, eat together, talk together, and make mealtime a family time!

1 show by example

Eat vegetables, fruits, and whole grains with meals or as snacks. Let your child see that you like to munch on raw vegetables.

2 go food shopping together



Grocery shopping can teach your child about food and nutrition. Discuss where vegetables, fruits, grains, dairy, and protein foods come from. Let your children make healthy choices.

3 get creative in the kitchen

Cut food into fun and easy shapes with cookie cutters. Name a food your child helps make. Serve “Janie’s Salad” or “Jackie’s Sweet Potatoes” for dinner. Encourage your child to invent new snacks. Make your own trail mixes from dry whole-grain, low-sugar cereal and dried fruit.

4 offer the same foods for everyone

Stop being a “short-order cook” by making different dishes to please children. It’s easier to plan family meals when everyone eats the same foods.



5 reward with attention, not food

Show your love with hugs and kisses. Comfort with hugs and talks. Choose not to offer sweets as rewards. It lets your child think sweets or dessert foods are better than other foods. When meals are not eaten, kids do not need “extras”—such as candy or cookies—as replacement foods.

6 focus on each other at the table

Talk about fun and happy things at mealtime. Turn off the television. Take phone calls later. Try to make eating meals a stress-free time.



7 listen to your child

If your child says he or she is hungry, offer a small, healthy snack—even if it is not a scheduled time to eat. Offer choices. Ask “Which would you like for dinner: broccoli or cauliflower?” instead of “Do you want broccoli for dinner?”

8 limit screen time

Allow no more than 2 hours a day of screen time like TV and computer games. Get up and move during commercials to get some physical activity.

9 encourage physical activity

Make physical activity fun for the whole family. Involve your children in the planning. Walk, run, and play with your child—instead of sitting on the sidelines. Set an example by being physically active and using safety gear, like bike helmets.



10 be a good food role model

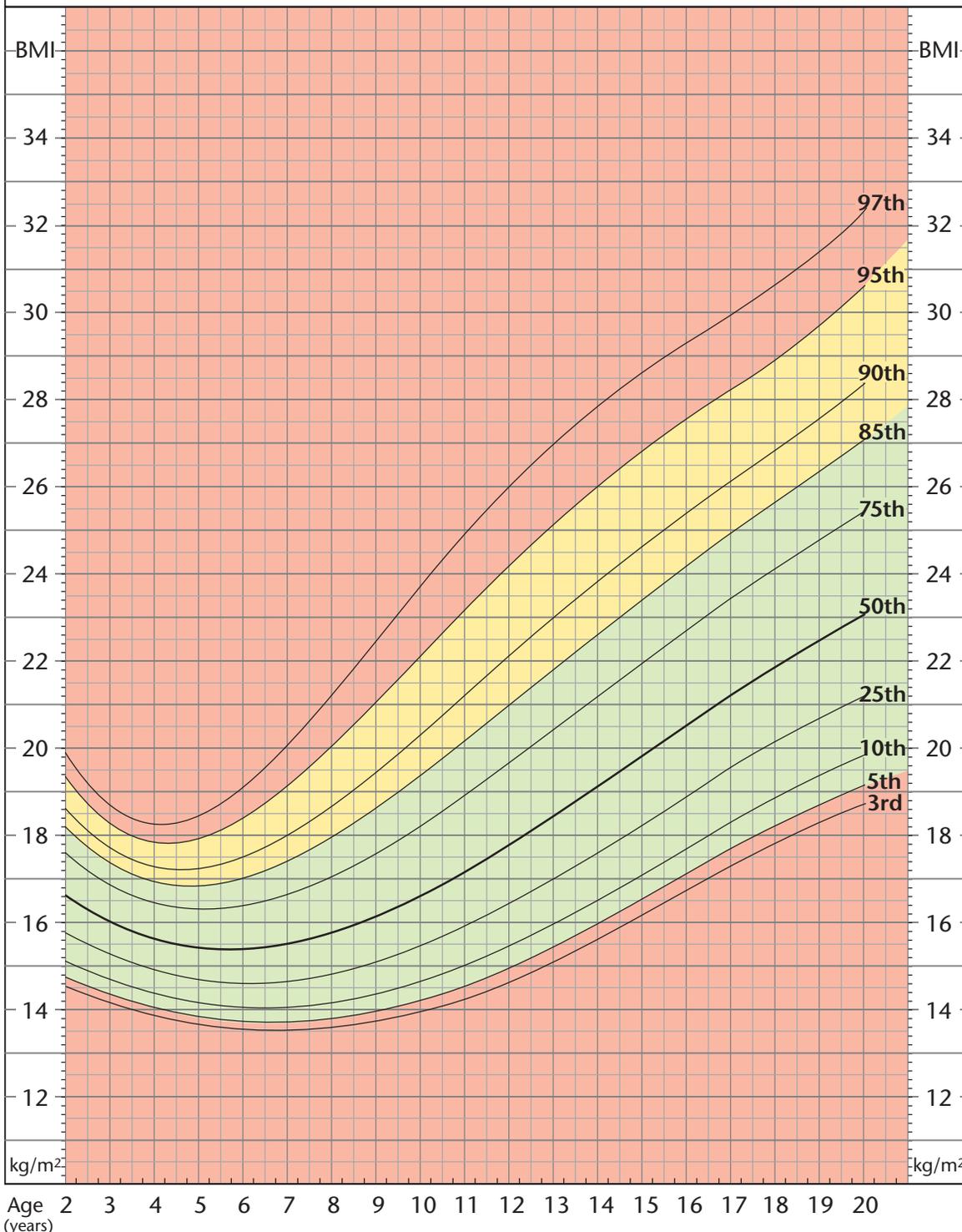
Try new foods yourself. Describe its taste, texture, and smell. Offer one new food at a time. Serve something your child likes along with the new food. Offer new foods at the beginning of a meal, when your child is very hungry. Avoid lecturing or forcing your child to eat.



Body Mass Index 2 to 20 years

BOYS

Patient Identifier _____



To calculate BMI:

Kilograms and meters:
 $\text{weight (kg)} / [\text{height (m)}]^2$

Pounds and inches:
 $\text{weight (lb)} / [\text{height (in)}]^2 \times 703$

BOYS:
99th percentile cut-points

AGE	BMI
5	20.1
6	21.6
7	23.6
8	25.6
9	27.6
10	29.3
11	30.7
12	31.8
13	32.6
14	33.2
15	33.6
16	33.9
17	34.4

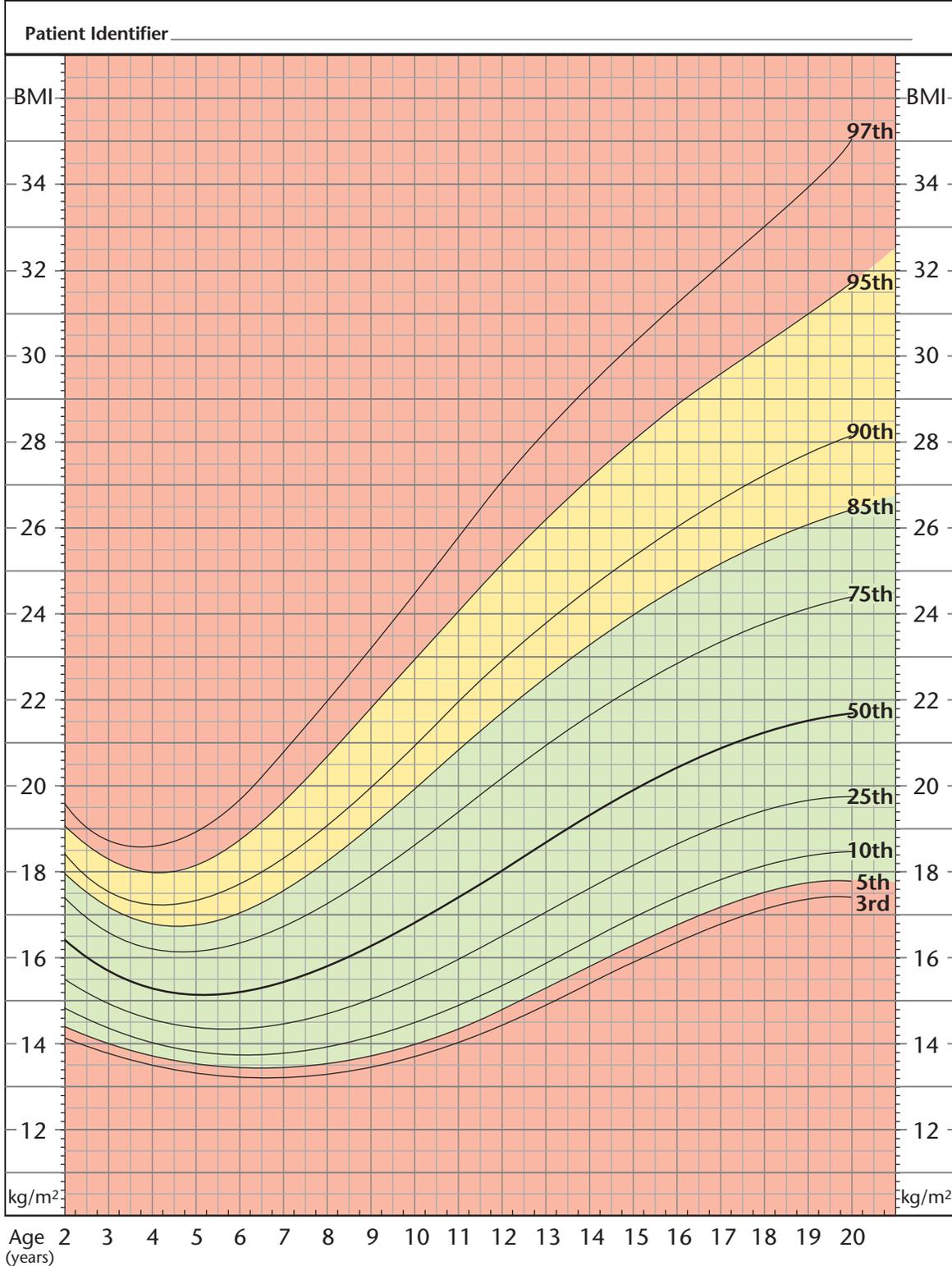
From National Initiative for Children's Healthcare Quality (www.nichq.org)

Color coding of the 2000 CDC BMI charts by UNC's Department of Pediatrics and Center for Health Promotion and Disease Prevention (CDC Cooperative agreement U48-DP-000059) for research and clinical purposes



Body Mass Index 2 to 20 years

GIRLS



To calculate BMI:

Kilograms and meters:
 $\text{weight (kg)} / [\text{height (m)}]^2$

Pounds and inches:
 $\text{weight (lb)} / [\text{height (in)}]^2 \times 703$

**GIRLS:
99th percentile cut-points**

AGE	BMI
5	21.5
6	23.0
7	24.6
8	26.4
9	28.2
10	29.9
11	31.5
12	33.1
13	34.6
14	36.0
15	37.5
16	39.1
17	40.8

From National Initiative for Children's Healthcare Quality (www.nichq.org)

Blood Pressure Levels by Age and Height Percentile

BOYS

Age (Year)	BP Percentile	SYSTOLIC BP (mmHg) Percentile of Height							DIASTOLIC BP (mmHg) Percentile of Height						
		5th	10th	25th	50th	75th	90th	95th	5th	10th	25th	50th	75th	90th	95th
1	50th	80	81	83	85	87	88	89	34	35	36	37	38	39	39
	90th	94	95	97	99	100	102	103	49	50	51	52	53	53	54
	95th	98	99	101	103	104	106	106	54	54	55	56	57	58	58
	99th	105	106	108	110	112	113	114	61	62	63	64	65	66	66
2	50th	84	85	87	88	90	92	92	39	40	41	42	43	44	44
	90th	97	99	100	102	104	105	106	54	55	56	57	58	58	59
	95th	101	102	104	106	108	109	110	59	59	60	61	62	63	63
	99th	109	110	111	113	115	117	117	66	67	68	69	70	71	71
3	50th	86	87	89	91	93	94	95	44	44	45	46	47	48	48
	90th	100	101	103	105	107	108	109	59	59	60	61	62	63	63
	95th	104	105	107	109	110	112	113	63	63	64	65	66	67	67
	99th	111	112	114	116	118	119	120	71	71	72	73	74	75	75
4	50th	88	89	91	93	95	96	97	47	48	49	50	51	51	52
	90th	102	103	105	107	109	110	111	62	63	64	65	66	66	67
	95th	106	107	109	111	112	114	115	66	67	68	69	70	71	71
	99th	113	114	116	118	120	121	122	74	75	76	77	78	78	79
5	50th	90	91	93	95	96	98	98	50	51	52	53	54	55	55
	90th	104	105	106	108	110	111	112	65	66	67	68	69	69	70
	95th	108	109	110	112	114	115	116	69	70	71	72	73	74	74
	99th	115	116	118	120	121	123	123	77	78	79	80	81	81	82
6	50th	91	92	94	96	98	99	100	53	53	54	55	56	57	57
	90th	105	106	108	110	111	113	113	68	68	69	70	71	72	72
	95th	109	110	112	114	115	117	117	72	72	73	74	75	76	76
	99th	116	117	119	121	123	124	125	80	80	81	82	83	84	84
7	50th	92	94	95	97	99	100	101	55	55	56	57	58	59	59
	90th	106	107	109	111	113	114	115	70	70	71	72	73	74	74
	95th	110	111	113	115	117	118	119	74	74	75	76	77	78	78
	99th	117	118	120	122	124	125	126	82	82	83	84	85	86	86
8	50th	94	95	97	99	100	102	102	56	57	58	59	60	60	61
	90th	107	109	110	112	114	115	116	71	72	72	73	74	75	76
	95th	111	112	114	116	118	119	120	75	76	77	78	79	79	80
	99th	119	120	122	123	125	127	127	83	84	85	86	87	87	88
9	50th	95	96	98	100	102	103	104	57	58	59	60	61	61	62
	90th	109	110	112	114	115	117	118	72	73	74	75	76	76	77
	95th	113	114	116	118	119	121	121	76	77	78	79	80	81	81
	99th	120	121	123	125	127	128	129	84	85	86	87	88	88	89
10	50th	97	98	100	102	103	105	106	58	59	60	61	61	62	63
	90th	111	112	114	115	117	119	119	73	73	74	75	76	77	78
	95th	115	116	117	119	121	122	123	77	78	79	80	81	81	82
	99th	122	123	125	127	128	130	130	85	86	86	88	88	89	90

Blood Pressure Levels by Age and Height Percentile for BOYS (Continued)

Age (Year)	BP Percentile	SYSTOLIC BP (mmHg) Percentile of Height							DIASTOLIC BP (mmHg) Percentile of Height						
		5th	10th	25th	50th	75th	90th	95th	5th	10th	25th	50th	75th	90th	95th
11	50th	99	100	102	104	105	107	107	59	59	60	61	62	63	63
	90th	113	114	115	117	119	120	121	74	74	75	76	77	78	78
	95th	117	118	119	121	123	124	125	78	78	79	80	81	82	82
	99th	124	125	127	129	130	132	132	86	86	87	88	89	90	90
12	50th	101	102	104	106	108	109	110	59	60	61	62	63	63	64
	90th	115	116	118	120	121	123	123	74	75	75	76	77	78	79
	95th	119	120	122	123	125	127	127	78	79	80	81	82	82	83
	99th	126	127	129	131	133	134	135	86	87	88	89	90	90	91
13	50th	104	105	106	108	110	111	112	60	60	61	62	63	64	64
	90th	117	118	120	122	124	125	126	75	75	76	77	78	79	79
	95th	121	122	124	126	128	129	130	79	79	80	81	82	83	83
	99th	128	130	131	133	135	136	137	87	87	88	89	90	91	91
14	50th	106	107	109	111	113	114	115	60	61	62	63	64	65	65
	90th	120	121	123	125	126	128	128	75	76	77	78	79	79	80
	95th	124	125	127	128	130	132	132	80	80	81	82	83	84	84
	99th	131	132	134	136	138	139	140	87	88	89	90	91	92	92
15	50th	109	110	112	113	115	117	117	61	62	63	64	65	66	66
	90th	122	124	125	127	129	130	131	76	77	78	79	80	80	81
	95th	126	127	129	131	133	134	135	81	81	82	83	84	85	85
	99th	134	135	136	138	140	142	142	88	89	90	91	92	93	93
16	50th	111	112	114	116	118	119	120	63	63	64	65	66	67	67
	90th	125	126	128	130	131	133	134	78	78	79	80	81	82	82
	95th	129	130	132	134	135	137	137	82	83	83	84	85	86	87
	99th	136	137	139	141	143	144	145	90	90	91	92	93	94	94
17	50th	114	115	116	118	120	121	122	65	66	66	67	68	69	70
	90th	127	128	130	132	134	135	136	80	80	81	82	83	84	84
	95th	131	132	134	136	138	139	140	84	85	86	87	87	88	89
	99th	139	140	141	143	145	146	147	92	93	93	94	95	96	97

BP = blood pressure

The 90th percentile is 1.28 SD, 95th percentile is 1.645 SD, and the 99th percentile is 2.326 SD over the mean.

National High Blood Pressure Education Program Working Group on High Blood Pressure in Children and Adolescents.

The fourth report on the diagnosis, evaluation, and treatment of high blood pressure in children and adolescents.

Pediatrics 2004; 114:555-76.



Blood Pressure Levels by Age and Height Percentile

GIRLS

Age (Year)	BP Percentile	SYSTOLIC BP (mmHg) Percentile of Height							DIASTOLIC BP (mmHg) Percentile of Height						
		5th	10th	25th	50th	75th	90th	95th	5th	10th	25th	50th	75th	90th	95th
1	50th	83	84	85	86	88	89	90	38	39	39	40	41	41	42
	90th	97	97	98	100	101	102	103	52	53	53	54	55	55	56
	95th	100	101	102	104	105	106	107	56	57	57	58	59	59	60
	99th	108	108	109	111	112	113	114	64	64	65	65	66	67	67
2	50th	85	85	87	88	89	91	91	43	44	44	45	46	46	47
	90th	98	99	100	101	103	104	105	57	58	58	59	60	61	61
	95th	102	103	104	105	107	108	109	61	62	62	63	64	65	65
	99th	109	110	111	112	114	115	116	69	69	70	70	71	72	72
3	50th	86	87	88	89	91	92	93	47	48	48	49	50	50	51
	90th	100	100	102	103	104	106	106	61	62	62	63	64	64	65
	95th	104	104	105	107	108	109	110	65	66	66	67	68	68	69
	99th	111	111	113	114	115	116	117	73	73	74	74	75	76	76
4	50th	88	88	90	91	92	94	94	50	50	51	52	52	53	54
	90th	101	102	103	104	106	107	108	64	64	65	66	67	67	68
	95th	105	106	107	108	110	111	112	68	68	69	70	71	71	72
	99th	112	113	114	115	117	118	119	76	76	76	77	78	79	79
5	50th	89	90	91	93	94	95	96	52	53	53	54	55	55	56
	90th	103	103	105	106	107	109	109	66	67	67	68	69	69	70
	95th	107	107	108	110	111	112	113	70	71	71	72	73	73	74
	99th	114	114	116	117	118	120	120	78	78	79	79	80	81	81
6	50th	91	92	93	94	96	97	98	54	54	55	56	56	57	58
	90th	104	105	106	108	109	110	111	68	68	69	70	70	71	72
	95th	108	109	110	111	113	114	115	72	72	73	74	74	75	76
	99th	115	116	117	119	120	121	122	80	80	80	81	82	83	83
7	50th	93	93	95	96	97	99	99	55	56	56	57	58	58	59
	90th	106	107	108	109	111	112	113	69	70	70	71	72	72	73
	95th	110	111	112	113	115	116	116	73	74	74	75	76	76	77
	99th	117	118	119	120	122	123	124	81	81	82	82	83	84	84
8	50th	95	95	96	98	99	100	101	57	57	57	58	59	60	60
	90th	108	109	110	111	113	114	114	71	71	71	72	73	74	74
	95th	112	112	114	115	116	118	118	75	75	75	76	77	78	78
	99th	119	120	121	122	123	125	125	82	82	83	83	84	85	86
9	50th	96	97	98	100	101	102	103	58	58	58	59	60	61	61
	90th	110	110	112	113	114	116	116	72	72	72	73	74	75	75
	95th	114	114	115	117	118	119	120	76	76	76	77	78	79	79
	99th	121	121	123	124	125	127	127	83	83	84	84	85	86	87
10	50th	98	99	100	102	103	104	105	59	59	59	60	61	62	62
	90th	112	112	114	115	116	118	118	73	73	73	74	75	76	76
	95th	116	116	117	119	120	121	122	77	77	77	78	79	80	80
	99th	123	123	125	126	127	129	129	84	84	85	86	86	87	88

Blood Pressure Levels by Age and Height Percentile for GIRLS (Continued)

Age (Year)	BP Percentile	SYSTOLIC BP (mmHg) Percentile of Height							DIASTOLIC BP (mmHg) Percentile of Height						
		5th	10th	25th	50th	75th	90th	95th	5th	10th	25th	50th	75th	90th	95th
11	50th	100	101	102	103	105	106	107	60	60	60	61	62	63	63
	90th	114	114	116	117	118	119	120	74	74	74	75	76	77	77
	95th	118	118	119	121	122	123	124	78	78	78	79	80	81	81
	99th	125	125	126	128	129	130	131	85	85	86	87	87	88	89
12	50th	102	103	104	105	107	108	109	61	61	61	62	63	64	64
	90th	116	116	117	119	120	121	122	75	75	75	76	77	78	78
	95th	119	120	121	123	124	125	126	79	79	79	80	81	82	82
	99th	127	127	128	130	131	132	133	86	86	87	88	88	89	90
13	50th	104	105	106	107	109	110	110	62	62	62	63	64	65	65
	90th	117	118	119	121	122	123	124	76	76	76	77	78	79	79
	95th	121	122	123	124	126	127	128	80	80	80	81	82	83	83
	99th	128	129	130	132	133	134	135	87	87	88	89	89	90	91
14	50th	106	106	107	109	110	111	112	63	63	63	64	65	66	66
	90th	119	120	121	122	124	125	125	77	77	77	78	79	80	80
	95th	123	123	125	126	127	129	129	81	81	81	82	83	84	84
	99th	130	131	132	133	135	136	136	88	88	89	90	90	91	92
15	50th	107	108	109	110	111	113	113	64	64	64	65	66	67	67
	90th	120	121	122	123	125	126	127	78	78	78	79	80	81	81
	95th	124	125	126	127	129	130	131	82	82	82	83	84	85	85
	99th	131	132	133	134	136	137	138	89	89	90	91	91	92	93
16	50th	108	108	110	111	112	114	114	64	64	65	66	66	67	68
	90th	121	122	123	124	126	127	128	78	78	79	80	81	81	82
	95th	125	126	127	128	130	131	132	82	82	83	84	85	85	86
	99th	132	133	134	135	137	138	139	90	90	90	91	92	93	93
17	50th	108	109	110	111	113	114	115	64	65	65	66	67	67	68
	90th	122	122	123	125	126	127	128	78	79	79	80	81	81	82
	95th	125	126	127	129	130	131	132	82	83	83	84	85	85	86
	99th	133	133	134	136	137	138	139	90	90	91	91	92	93	93

BP = blood pressure

The 90th percentile is 1.28 SD, 95th percentile is 1.645 SD, and the 99th percentile is 2.326 SD over the mean.

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choose MyPlate

10 tips to a great plate



Making food choices for a healthy lifestyle can be as simple as using these 10 Tips. Use the ideas in this list to *balance your calories*, to choose foods to *eat more often*, and to cut back on foods to *eat less often*.

1 balance calories

Find out how many calories YOU need for a day as a first step in managing your weight. Go to www.ChooseMyPlate.gov to find your calorie level. Being physically active also helps you balance calories.

2 enjoy your food, but eat less

Take the time to fully enjoy your food as you eat it. Eating too fast or when your attention is elsewhere may lead to eating too many calories. Pay attention to hunger and fullness cues before, during, and after meals. Use them to recognize when to eat and when you've had enough.



3 avoid oversized portions

Use a smaller plate, bowl, and glass. Portion out foods before you eat. When eating out, choose a smaller size option, share a dish, or take home part of your meal.

4 foods to eat more often

Eat more vegetables, fruits, whole grains, and fat-free or 1% milk and dairy products. These foods have the nutrients you need for health—including potassium, calcium, vitamin D, and fiber. Make them the basis for meals and snacks.



5 make half your plate fruits and vegetables

Choose red, orange, and dark-green vegetables like tomatoes, sweet potatoes, and broccoli, along with other vegetables for your meals. Add fruit to meals as part of main or side dishes or as dessert.

6 switch to fat-free or low-fat (1%) milk

They have the same amount of calcium and other essential nutrients as whole milk, but fewer calories and less saturated fat.



7 make half your grains whole grains

To eat more whole grains, substitute a whole-grain product for a refined product—such as eating whole-wheat bread instead of white bread or brown rice instead of white rice.

8 foods to eat less often

Cut back on foods high in solid fats, added sugars, and salt. They include cakes, cookies, ice cream, candies, sweetened drinks, pizza, and fatty meats like ribs, sausages, bacon, and hot dogs. Use these foods as occasional treats, not everyday foods.

9 compare sodium in foods

Use the Nutrition Facts label to choose lower sodium versions of foods like soup, bread, and frozen meals. Select canned foods labeled “low sodium,” “reduced sodium,” or “no salt added.”



10 drink water instead of sugary drinks

Cut calories by drinking water or unsweetened beverages. Soda, energy drinks, and sports drinks are a major source of added sugar, and calories, in American diets.

Expert Committee Recommendations on the Assessment, Prevention and Treatment of Child and Adolescent Overweight and Obesity - 2007

- An Implementation Guide from the Childhood Obesity Action Network -

Overview:

In 2005, the AMA, HRSA and CDC convened an Expert Committee to revise the 1997 childhood obesity recommendations. Representatives from 15 healthcare organizations submitted nominations for the experts who would compose the three writing groups (assessment, prevention, treatment). The initial recommendations were released on June 6, 2007 in a document titled “Appendix: Expert Committee Recommendations on the Assessment, Prevention and Treatment of Child and Adolescent Overweight and Obesity” (www.ama-assn.org/ama/pub/category/11759.html)

In 2006, the National Initiative for Children’s Healthcare Quality (NICHQ) launched the Childhood Obesity Action Network (COAN). With more than 40 healthcare organizations and 600 health professionals, the network is aimed at rapidly sharing knowledge, successful practices and innovation. This Implementation Guide is the first of a series of products designed for healthcare professionals by COAN to accelerate improvement in the prevention and treatment of childhood obesity.

The Implementation Guide combines key aspects of the Expert Committee Recommendations summary released on June 6, 2007 and practice tools identified in 2006 by NICHQ from primary care groups that have successfully developed obesity care strategies (www.NICHQ.org). These tools were developed before the 2007 Expert Recommendations and there may be some inconsistencies such as the term *overweight* instead of *obesity* for BMI ≥ 95%ile. The tools are intended as a source of ideas and to facilitate implementation. As tools are updated or new tools developed based on the Expert Recommendations, the Implementation Guide will be updated. The Implementation Guide defines 3 key steps to the implementation of the 2007 Expert Committee Recommendations:

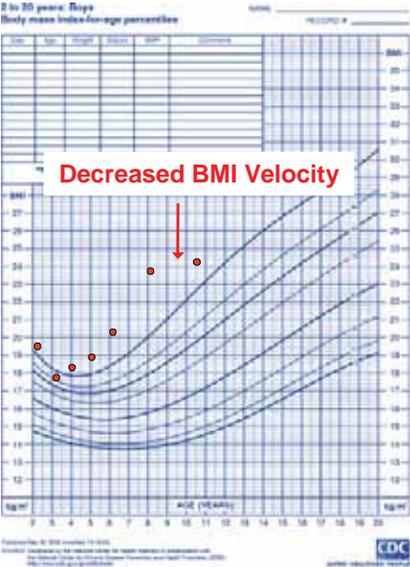
- **Step 1 – Obesity Prevention at Well Care Visits** (Assessment & Prevention)
- **Step 2 – Prevention Plus Visits** (Treatment)
- **Step 3 – Going Beyond Your Practice** (Prevention & Treatment)

Step 1 – Obesity Prevention at Well Care Visits (Assessment & Prevention)

Action Steps	Expert Recommendations	Action Network Tips and Tools
Assess all children for obesity at all well care visits 2-18 years	Physicians and allied health professional should perform, at a minimum, a yearly assessment.	A presentation for your staff and colleagues can help implement obesity prevention in your practice.
Use Body Mass Index (BMI) to screen for obesity	<ul style="list-style-type: none"> ▪ Accurately measure height and weight ▪ Calculate BMI BMI (English):$[\text{weight (lb)} \div \text{height (in)} \div \text{height (in)}] \times 703$ BMI (metric):$[\text{weight (kg)} \div \text{height (cm)} \div \text{height (cm)}] \times 10,000$ ▪ Plot BMI on BMI growth chart ▪ Not recommended: skinfold thickness, waist circumference 	BMI is very sensitive to measurement errors, particularly height. Having a standard measurement protocol as well as training can improve accuracy. BMI calculation tools are also helpful. Use the CDC BMI %ile-for-age growth charts .
Make a weight category diagnosis using BMI percentile	<ul style="list-style-type: none"> ▪ < 5%ile Underweight ▪ 5-84%ile Healthy Weight ▪ 85-94%ile Overweight ▪ 95-98%ile Obesity ▪ ≥ 99%ile 	Until the BMI 99%ile is added to the growth charts, Table 1 can be used to determine the 99%ile cut-points. Physicians should exercise judgement when choosing how to inform the family. Using more neutral terms such as <i>weight, excess weight, body mass index, BMI, or risk for diabetes and heart disease</i> can reduce the risk of stigmatization or harm to self-esteem.
Measure blood pressure	<ul style="list-style-type: none"> ▪ Use a cuff large enough to cover 80% of the upper arm ▪ Measure pulse in the standard manner 	Diagnose hypertension using NHLBI tables . An abbreviated table is shown below (Table 2).
Take a focused family history	<ul style="list-style-type: none"> ▪ Obesity ▪ Type 2 diabetes ▪ Cardiovascular disease (hypertension, cholesterol) ▪ Early deaths from heart disease or stroke 	A child with one obese parent has a 3 fold increased risk of becoming obese. This risk increases to 13 fold with 2 obese parents. Using a clinical documentation tool can be helpful.

Take a focused review of systems	Take a focused review of systems	See Table 3 . Using a clinical documentation tool can be helpful.
Assess behaviors and attitudes	<p>Diet Behaviors</p> <ul style="list-style-type: none"> ▪ Sweetened-beverage consumption ▪ Fruit and vegetable consumption ▪ Frequency of eating out and family meals ▪ Consumption of excessive portion sizes ▪ Daily breakfast consumption <p>Physical Activity Behaviors</p> <ul style="list-style-type: none"> ▪ Amount of moderate physical activity ▪ Level of screen time and other sedentary activities <p>Attitudes</p> <ul style="list-style-type: none"> ▪ Self-perception or concern about weight ▪ Readiness to change ▪ Successes, barriers and challenges 	Using behavioral risk assessment tools can facilitate history taking and save clinician time.
Perform a thorough physical examination	Perform a thorough physical examination	See Table 3 . Using a clinical documentation tool can be helpful.
Order the appropriate laboratory tests	<p>BMI 85-94%ile <u>Without</u> Risk Factors</p> <ul style="list-style-type: none"> ▪ Fasting Lipid Profile <p>BMI 85-94%ile Age 10 Years & Older <u>With</u> Risk Factors</p> <ul style="list-style-type: none"> ▪ Fasting Lipid Profile ▪ ALT and AST ▪ Fasting Glucose <p>BMI ≥ 95%ile Age 10 Years & Older</p> <ul style="list-style-type: none"> ▪ Fasting Lipid Profile ▪ ALT and AST ▪ Fasting Glucose ▪ Other tests as indicated by health risks 	<p>Consider ordering ALT, AST and glucose tests beginning at 10 years of age and then periodically (every 2 years). Provider decision support tools can be helpful when choosing assessment and treatment options.</p> <p>Delivering lab results can be one way to open the conversation about weight and health with a family.</p>
Give consistent evidence-based messages for all children regardless of weight	<ul style="list-style-type: none"> ▪ Limit sugar-sweetened beverages ▪ Eat at least 5 servings of fruits and vegetables ▪ Moderate to vigorous physical activity for at least 60 minutes a day ▪ Limit screen time to no more than 2 hours/day ▪ Remove television from children’s bedrooms ▪ Eat breakfast every day ▪ Limit eating out, especially at fast food ▪ Have regular family meals ▪ Limit portion sizes 	<p>An example from the Maine Collaborative:</p> <ul style="list-style-type: none"> ▪ 5 fruits and vegetables ▪ 2 hours or less of TV per day ▪ 1 hour or more physical activity ▪ 0 servings of sweetened beverages <p>Exam and waiting room posters and family education materials can help deliver these messages and facilitate dialogue. Encourage an authoritative parenting style in support of increased physical activity and reduced TV viewing. Discourage a restrictive parenting style regarding child eating. Encourage parents to be good role models and address as a family issue rather than the child’s problem.</p>
Use Empathize/Elicit - Provide - Elicit to improve the effectiveness of your counseling	<p>Assess self-efficacy and readiness to change. Use Empathize/Elicit - Provide - Elicit to improve the effectiveness of your counseling.</p> <p>Empathize/Elicit</p> <ul style="list-style-type: none"> ▪ Reflect ▪ What is your understanding? ▪ What do you want to know? ▪ How ready are you to make a change (1-10 scale)? <p>Provide</p> <ul style="list-style-type: none"> ▪ Advice or information ▪ Choices or options <p>Elicit</p> <ul style="list-style-type: none"> ▪ What do you make of that? ▪ Where does that leave you? 	<p>A possible dialogue:</p> <p>Empathize/Elicit</p> <p>“Yours child’s height and weight may put him/her at increased risk for developing diabetes and heart disease at a very early age.”</p> <p>“What do make of this?”</p> <p>“Would you be interested in talking more about ways to reduce your child’s risk?”</p> <p>Provide</p> <p>“Some different ways to reduce your child’s risk are…”</p> <p>“Do any of these seem like something your family could work on or do you have other ideas?”</p> <p>Elicit</p> <p>“Where does that leave you?”</p> <p>“What might you need to be successful?”</p> <p>Communication guidelines can helpful when developing communication skills.</p>

Step 2 – Prevention Plus Visits (Treatment)

Action Steps	Expert Recommendations	Action Network Tips and Tools
<p>Develop an office based approach for follow up of overweight and obese children</p>	<p>A staged approach to treatment is recommended for ages 2-19 whose BMI is 85-94thile with risk factors and all whose BMI is \geq 95thile.</p> <p>In general, treatment begins with Stage 1 Prevention Plus (Table 4) and progresses to the next stage if there has been no improvement in weight/BMI or velocity after 3-6 months and the family is willing/ready.</p> <p>The recommended weight loss targets are shown in Table 5.</p> <p>Stage 1 - Prevention Plus</p> <ul style="list-style-type: none"> ▪ Family visits with physician or health professional who has had some training in pediatric weight management/behavioral counseling. ▪ Can be individual or group visits. ▪ Frequency - individualized to family needs and risk factors, consider monthly. ▪ Behavioral Goals – <ul style="list-style-type: none"> - Decrease screen time to 2 hr/day or fewer - No sugar-sweetened beverages - Consume at least 5 servings of fruits and vegetables daily - Be physically active 1 hour or more daily - Prepare more meals at home as a family (the goal is 5-6 times a week) - Limit meals outside the home - Eat a healthy breakfast daily - Involve the whole family in lifestyle changes - More focused attention to lifestyle changes and more frequent follow-up distinguishes Prevention Plus from Prevention Counseling ▪ Weight Goal – weight maintenance or a decrease in BMI velocity. The long term BMI goal is <85thile although some children can be healthy with a BMI 85-94thile. ▪ Advance to Stage 2 (Structured Weight Management) if no improvement in weight/BMI or velocity in 3-6 months and family willing/ready to make changes. 	<p>Prevention Plus visits may include:</p> <ul style="list-style-type: none"> ▪ Health education materials ▪ Behavioral risk assessment and self-monitoring tools ▪ Action planning and goal setting tools ▪ Clinical documentation tools ▪ Counseling protocols ▪ Other health professionals such as dietitians, psychologists and health educators <p>Besides behavioral and weight goals, improving self-esteem and self efficacy (confidence) are important outcomes. Although weight maintenance is a good goal, more commonly, a slower weight gain reflected in a decreased BMI velocity is the outcome seen in lower intensity behavioral interventions such as Prevention Plus. Measuring and plotting BMI after 3-6 months is an important step to determine the effectiveness of obesity treatment.</p> 
<p>Use motivational interviewing at Prevention Plus visits for ambivalent families and to improve the success of action planning</p>	<p>Use patient-centered counseling – motivational interviewing</p>	<p>Research suggests that motivational interviewing may be an effective approach to address childhood obesity prevention and treatment. Motivational interviewing is particularly effective for ambivalent families but can also be used for action planning. Instead of telling patients what changes to make, you elicit “change talk” from them, taking their ideas, strengths, and barriers into account. Communication guidelines and communication training can be helpful with skill development.</p>
<p>Develop a reimbursement strategy for Prevention Plus visits</p>		<p>Coding strategies can help with reimbursement for Prevention Plus visits. Advocacy through professional organizations to address reimbursement policies is another strategy.</p>

Step 3 – Going Beyond Your Practice (Prevention & Treatment)

Action Steps	Expert Recommendations	Action Network Tips and Tools
Advocate for improved access to fresh fruits and vegetables and safe physical activity in your community and schools	<p>The Expert Committee recommends that physicians, allied healthcare professionals, and professional organizations advocate for:</p> <ul style="list-style-type: none"> ▪ The federal government to increase physical activity at school through intervention programs as early as grade 1 through the end of high school and college, and through creating school environments that support physical activity in general. ▪ Supporting efforts to preserve and enhance parks as areas for physical activity, informing local development initiatives regarding the inclusion of walking and bicycle paths, and promoting families’ use of local physical activity options by making information and suggestions about physical activity alternatives available in doctors’ offices. 	<p>Physicians and health professionals can play a key role in advocating for policy and built environment changes to support healthy eating and physical activity in communities, child care settings, and schools (including after-school programs). Advocacy tools and resources can be helpful in advocacy efforts. Partnering with others and using evidence-based strategies are also critical to the success of multi-faceted community interventions.</p>
Identify and promote community services which encourage healthy eating and physical activity	<p>Promote physical activity at school and in child care settings (including after school programs), by asking children and parents about activity in these settings during routine office visits.</p>	<p>Public Health Departments and Parks and Recreation are good places to start looking for community programs and resources.</p> <p>You can work on developing your own partnerships with community organizations (Physical Activity Directory template and/or referral forms).</p>
Identify or develop more intensive weight management interventions for your families who do not respond to Prevention Plus	<p>The Expert Committee recommends the following staged approach for children between the ages of 2 and 19 years whose BMI is 85-94thile with risk factors and all whose BMI is ≥ 95thile:</p> <ul style="list-style-type: none"> ▪ Stage 2 - Structured Weight Management (Family visits with physician or health professional specifically trained in weight management. Monthly visits can be individual or group.) ▪ Stage 3 - Comprehensive, Multidisciplinary Intervention (Multidisciplinary team with experience in childhood obesity. Frequency is often weekly for 8-12 weeks with follow up.) ▪ Stage 4 - Tertiary Care Intervention (Medications - sibutramine, orlistat, Very-low-calorie diets, weight control surgery - gastric bypass or banding.) Recommended for select patients only when provided by experienced programs with established clinical or research protocols. Gastric banding is in clinical trials and not currently FDA approved. 	<p>Stage 2 could be done without a tertiary care center if community professionals from different disciplines collaborated. For example, if a physician provided the medical assessment, a dietitian provided classes, and the local YMCA provided an exercise program.</p> <p>Partnering with your community tertiary care center can be an effective strategy to develop or link to more intensive weight management interventions (Stages 3 and 4) as well as referral protocols to care for families who do not respond to Prevention Plus visits. Provider decision support tools can be helpful when choosing appropriate treatment and referral options. Weight management protocols and curriculum can also be helpful when getting started.</p>
Join the Childhood Obesity Action Network to learn from your colleagues and accelerate progress		<p>The Childhood Obesity Action Network has launched “The Healthcare Campaign to Stop the Epidemic.” Join the network (www.NICHQ.org) to learn from our national obesity experts, share what you have learned and access the tools in this guide. <i>Together we can make a difference!</i></p>

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Table 1 – BMI 99%ile Cut-Points (kg/m²)

Age (Years)	Boys	Girls
5	20.1	21.5
6	21.6	23.0
7	23.6	24.6
8	25.6	26.4
9	27.6	28.2
10	29.3	29.9
11	30.7	31.5
12	31.8	33.1
13	32.6	34.6
14	33.2	36.0
15	33.6	37.5
16	33.9	39.1
17	34.4	40.8

Table 2 – Abbreviated NHLBI Blood Pressure Table

Blood Pressure 95% by Age, Sex and Height %

AGE	BOYS HEIGHT %		GIRLS HEIGHT %	
	50%	90%	50%	90%
2 Yr	106/61	109/63	105/63	108/65
5 Yr	112/72	115/74	110/72	112/73
8 Yr	116/78	119/79	115/76	118/78
11 Yr	121/80	124/82	121/79	123/81
14 Yr	128/82	132/84	126/82	129/84
17 Yr	136/87	139/88	129/84	131/85

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Table 3 – Symptoms and Signs of Conditions Associated with Obesity

Symptoms	Signs
<ul style="list-style-type: none"> ➤ Anxiety, school avoidance, social isolation (Depression) ➤ Polyuria, polydipsia, weight loss (Type 2 diabetes mellitus) ➤ Headaches (Pseudotumor cerebri) ➤ Night breathing difficulties (Sleep apnea, hypoventilation syndrome, asthma) ➤ Daytime sleepiness (Sleep apnea, hypoventilation syndrome, depression) ➤ Abdominal pain (Gastroesophageal reflux, Gall bladder disease, Constipation) ➤ Hip or knee pain (Slipped capital femoral epiphysis) ➤ Oligomenorrhea or amenorrhea (Polycystic ovary syndrome) 	<ul style="list-style-type: none"> ➤ Poor linear growth (Hypothyroidism, Cushing’s, Prader-Willi syndrome) ➤ Dysmorphic features (Genetic disorders, including Prader-Willi syndrome) ➤ Acanthosis nigricans (NIDDM, insulin resistance) ➤ Hirsutism and Excessive Acne (Polycystic ovary syndrome) ➤ Violaceous striae (Cushing’s syndrome) ➤ Papilledema, cranial nerve VI paralysis (Pseudotumor cerebri) ➤ Tonsillar hypertrophy (Sleep apnea) ➤ Abdominal tenderness (Gall bladder disease, GERD, NAFLD) ➤ Hepatomegaly (Nonalcoholic fatty liver disease (NAFLD)) ➤ Undescended testicle (Prader-Willi syndrome) ➤ Limited hip range of motion (Slipped capital femoral epiphysis) ➤ Lower leg bowing (Blount’s disease)

Table 4 – A Staged Approach to Obesity Treatment

	BMI 85-94%ile No Risks	BMI 85-94%ile With Risks	BMI 95-98%ile	BMI >= 99%ile
Age 2-5 Years	Prevention Counseling	Initial: Stage 1 Highest: Stage 2	Initial: Stage 1 Highest: Stage 3	Initial: Stage 1 Highest: Stage 3
Age 6-11 Years	Prevention Counseling	Initial: Stage 1 Highest: Stage 2	Initial: Stage 1 Highest: Stage 3	Initial: Stage 1-3 Highest: Stage 3
Age 12-18 Years	Prevention Counseling	Initial: Stage 1 Highest: Stage 3	Initial: Stage 1 Highest: Stage 4	Initial: Stage 1-3 Highest: Stage 4

Stage 1	Prevention Plus	Primary Care Office
Stage 2	Structured Weight Management	Primary Care Office with Support
Stage 3	Comprehensive, Multidisciplinary Intervention	Pediatric Weight Management Center
Stage 4	Tertiary Care Intervention	Tertiary Care Center

Table 5 – Weight Loss Targets

	BMI 85-94%ile No Risks	BMI 85-94%ile With Risks	BMI 95-98%ile	BMI >= 99%ile
Age 2-5 Years	Maintain weight velocity	Decrease weight velocity or weight maintenance	Weight maintenance	Gradual weight loss of up to 1 pound a month if BMI is very high (>21 or 22 kg/m ²)
Age 6-11 Years	Maintain weight velocity	Decrease weight velocity or weight maintenance	Weight maintenance or gradual loss (1 lb per month)	Weight loss (average is 2 pounds per week)*
Age 12-18 Years	Maintain weight velocity. After linear growth is complete, maintain weight	Decrease weight velocity or weight maintenance	Weight loss (average is 2 pounds per week)*	Weight loss (average is 2 pounds per week)*

* Excessive weight loss should be evaluated for high risk behaviors

R_x for Healthy Active Living

Name _____ Date _____

Ideas for Living a Healthy Active Life

- 5** Eat at least 5 fruits and vegetables every day.
- 2** Limit screen time (for example, TV, video games, computer) to 2 hours or less per day.
- 1** Get 1 hour or more of physical activity every day.
- 0** Drink fewer sugar-sweetened drinks. Try water and low-fat milk instead.

My Goals (*choose one you would like to work on first*)

- Eat _____ fruits and vegetables each day.
- Get _____ minutes of physical activity each day.
- Reduce screen time to _____ minutes per day.
- Reduce number of sugared drinks to _____ per day.

Patient or Parent/Guardian signature

Doctor signature

From Your Doctor



American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN™



Healthy Active Living
An initiative of the American Academy of Pediatrics

Rx for Outdoor Activity

Weekday Outdoor Schedule

Weekend Outdoor Schedule

Child signature

Provider signature



For more information, visit www.believegitm.com

Take a Hike

- Forest Park Nature Center Walking Trails
- * Hikes from the Nature Center
- Wilderness Trail..... 1 mile
- Pimiteoui Trail..... 1 1/4 mile (one way)
- Valley Trail..... 1 mile (round trip)
- Valley Loop Trail..... 3/4 mile
- Bee Tree Trail..... 1 1/4 mile
- Deer Run Trail..... 1 3/4 mile
- Wakerobin Trail..... 2 3/4 mile



Food Portion Size by Age

Estimates below are based on 30-60 min exercise/day and should be increased or decreased based on activity level

Food	Portion Size/Age			
Age	2 years	4 years	6 years	10 years
<p>Calories/Sex</p> <p style="text-align: center;">1000 both</p>	1400 both	1600 M 1400 F	1800 both	
<p>Grains (<i>Make 1/2 your grains whole</i>)</p> <p>In general, 1 slice of bread, 1 cup of ready-to-eat cereal, or 1/2 cup of cooked rice, cooked pasta, or cooked cereal can be considered as 1 ounce equivalent from the grains group. In general, 1 slice of bread, 1 cup of ready-to-eat cereal, or 1/2 cup of cooked rice, cooked pasta, or cooked cereal can be considered as 1 ounce equivalent</p>	2 oz	5 oz	5 oz M 5 oz F	6 oz
<p>Vegetables</p> <p>Any vegetable or 100% vegetable juice counts as a member of the vegetable group. Vegetables may be raw or cooked; fresh, frozen, canned, or dried/dehydrated; and may be whole, cut-up, or mashed.</p>	1 Cup	1 1/2 Cups	2 Cups M 1 1/2 Cups F	2 1/2 Cups
<p>Fruits</p> <p>Any fruit or 100% fruit juice counts as part of the fruit group. Fruits may be fresh, canned, frozen, or dried, and may be whole, cut-up, or pureed.</p>	1 Cup	1 1/2 Cups	1 1/2 Cups	2 cups
<p>Milk Yogurt Cheese</p> <p>In general, 1 cup of milk or yogurt, 1 1/2 ounces of natural cheese, or 2 ounces of processed cheese can be considered as 1 cup from the milk group.</p>	2 Cups	2 Cups	3 Cups M 2 Cups F	3 Cups
<p>Meats, poultry, fish, dry beans and peas, eggs and nuts</p> <p>In general, 1 ounce of meat, poultry or fish, 1/4 cup cooked dried beans, 1 egg, 1 tablespoon of peanut butter, or 1/2 ounce of nuts or seeds can be considered as 1 ounce equivalent from the meat and beans group</p>	2 oz	4 Oz	5 Oz M 4 Oz F	5 Oz
Extras Fats and Sugars	Limit to 165 cals/day	Limit to 170 cals/day	Limit to 130 M 170 F cals/day	Limit to 265 cals/day
Oils	3 tsp./day	4 tsp./day	5 M/4 F tsp./day	6 tsp./day

Food Portion Size by Age

Estimates below are based on 30-60 min exercise/day and should be increased or decreased based on activity level

Tips: Use what you have on hand

- *A fist or cupped hand = 1 cup*
- *Your thumb tip = 1 teaspoon*
- *A handful = 1-2 ounces of snack food*

Meat	2-3 ounces	Your palm (no fingers) or a deck of cards
Pasta or rice, Vegetables, or a piece of fruit	½ cup	A tennis ball
Bread, ½ bagel	1 slice	Computer disc
Peanut Butter	2 tablespoons	Ping Pong Ball
Cheese	1 ounce	Your thumb or 4 dice



National Initiative for Children's Healthcare Quality

ADDRESSING PATIENT, FAMILY, AND ENVIRONMENTAL BARRIERS TO CHANGE -

THE REALITY CHECK

I. PATIENT EATING BEHAVIORS

A) Constant Grazing

- Healthy food choices and eating behaviors should be a goal for all family members.
- Structured meal and snack times can improve eating patterns, offer food every 4-5 hours, 3 meals, 1-2 snacks.
- Have available lower density calorie snacks (fewer calories per weight) for after school. Use ziplock snack bags for portion size. When old enough, children can participate in choosing some of these at the grocery and help to decide what portion sizes they should eat.
- If snacking, portion out a serving size in bowl, not the whole bag.
- Family rules should be made about no food where the TV is.
- With overly food focused children, use distraction techniques by keeping busy with other activities if asking for food outside of usual meal and snack time.
- Substitution of water or sugar free mints/gum or availability of low density foods if distraction does not succeed.

B) Fast Eating/Satiety

- It takes 20 minutes for one's body to register that it is full. Play a game as a family to slow down eating by seeing who did the best with putting his fork down in between bites.
- Finish a glass of water/milk before one asks for seconds.
- Offer an appetizer like a salad with vegetables, no cheese, eggs, nuts, bacon bits and fruit with water before the main meal.
- If still hungry encourage seconds of fruits or vegetables most of the time.
- Portion 1/2 of the main meal on a smaller plate and then offer the second half after the first is complete.
- Use a hunger/satiety scale, a diagram similar to a pain scale on a score of 1 to 7 to help children gauge how full or hungry their bodies' are.
- Purchase smaller plates, bowls and cups.
- Place any extra food on the stove in the kitchen, not on the dinner table. Seconds should be an effort.
- Skipping Breakfast: not a "morning person" or in a rush.. plan a fast small meal.

C) Picky eaters

- Make a list of always and sometimes fruits and vegetables. Consistently purchase and serve these.

- Have your child participate in shopping and preparation with new items. Serve these along-side the usual fruits and vegetables. It takes 14 tries to get use to something new.
- Flavoring with low fat or fat free dressings, yogurt or parmesan cheese can help improve taste.
- Freezing some fruits and making "popsicles" from them can make them more palatable.
- Grate some vegetables into casseroles in order to ease your child into tasting new vegetables.
- Don't pressure a child into eating or finishing what is on his plate. Children will consume more fruits and vegetables if you set an example of eating them rather than "pressuring" them into it.

D) Peer and social eating

- Check nutrition information of restaurants and decide ahead of time what are the healthiest choices available on the menu.
- Take half home or share an order of food.
- When going out with friends at a fast food restaurant, decide ahead of time, how you will order. Consider a salad or a soup with a smaller entrée.
- Before social events, discuss portions sizes of appetizers and snacks.
- Fill the plate with one serving or taste of any of what is offered, but take seconds of low density foods when available.
- If no low calorie beverages, bring a water bottle or diet soda to drink.

II. FAMILY NUTRITIONAL ENVIRONMENT:

A) Household availability of healthy choices

- No matter what a sibling's size, all family members benefit from eating healthy.
- Ask your children's assistance in planning and shopping for healthier options for meals and snack times. Have them pick a new fruit or vegetable for the week.
- Stick to your grocery shopping list and do not shop when you are hungry: increase lower calorie dense foods and snacks, few processed foods, more fruits and vegetables, low fat dairy items, and little to no sweetened beverages.
- Have scheduled meal and snack times.
- Have available fixed/individual portion sizes for family snacks with healthier choices like fruits, vegetables and low fat dairy. Elicit the help of children in packing individual portion sizes so that they are a part of this process and learn what a portion size looks like.

B) Families with time constraints

- Plan ahead for busy nights with healthier quick choices, e.g. grocery store baked chicken and deli sandwiches.
- Go out less than 1 time/week and avoid buffets.
- When eating out, plan ahead of time healthier choice offerings based on available nutrition information. If there are larger portion sizes, share entrees or box up half of the restaurant serving to take home.

- Meal plan and cook ahead on a "free day" like Sundays. One pot meals or crock pot meals can be useful on busy days.
- Have older children help with meal planning and assist with prepping for family dinners during busy or late work nights.
- Increase family meal times by what is realistically possible given the family's schedule and dynamic. This could be breakfast time and not dinnertime.

C) Families with financial constraints

- Buy fresh fruits and vegetables in-season and on sale.
- Frozen and canned fruits (no sugar added) and vegetables are less expensive and just as healthy.
- Beans are a less expensive and a higher fiber protein source. A protein/meat portion is only 3 oz. which means that we need to shop for less meat than we think.
- Soups and stews are affordable ways of getting a variety of vegetables into our diet and to reduce the amount of meat protein we consume.

D) Sweetened beverages:

- Have plenty of cold water available; have fun water bottles available. May have diet drinks available if desired if substitute needed.
- Negotiate a soda free and sweetened beverage free house for 3-4 weeks to examine results.

III. FAMILY SOCIAL/CULTURAL MILIEUS:

A) Family buy-in and Multiple Caretakers

- Discuss family meetings and strategies for communication and agreement.
- Request other family members to attend an appointment and use patient-centered techniques and motivational interviewing to engage them.
- Elicit input into how the family can be successful in helping the patient become healthier.

B) Cultural influence on food preferences

- Have a patient-centered discussion regarding food preferences.
- Use on-line references like Oldways: Health through heritage <http://oldwayspt.org> which have culturally oriented food pyramids and healthy eating tips.

IV. FAMILY ACTIVITY ENVIRONMENT:

A) Screen Time:

- Plan more structured after-school time, e.g. outside time, chore time.
- Gradual weans from screens, e.g., reduce 30 minutes per day per week to desired daily total time of less than 2 hours.
- Gradual reduction of family screen time during meals, e.g., weekday meals are screen free.

- Substitute family games and other activities after meals rather than TV.
- Keep TV's and computers in common living spaces, e.g. begin by reducing screen time in bedrooms gradually until there is minimal usage; institute family rules with no screen time at least 1 hour before bed time.

B) Physical Activity Barriers:

- Start with a family activity like walking together after dinner. Take a ball along and toss it. Bike together or bowl together. Walk the dog together.
- If a child resists team sports, single sport activities like karate, tennis, swimming can be great alternatives.
- When weather is in-climate, finding active videogaming activities to do as a family can be an alternative.
- With unsafe neighborhoods: check into resources like local park district recreation centers, Boys and Girls Club activities, church activities, cousins/neighborhood friends who might pair up to do these activities in other venues, after school clubs. Scholarships are often available to park district sites or YMCA's for memberships.

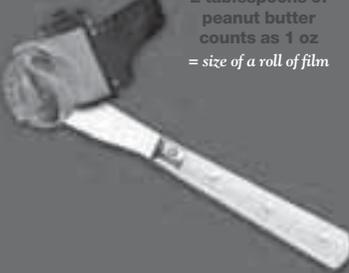
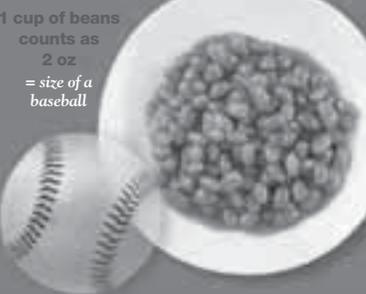
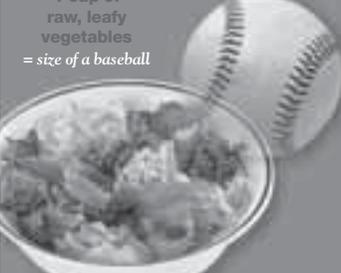
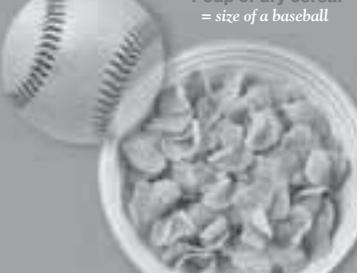
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What size is your serving?

Compare the Pyramid Servings
with what you eat in a day.



How Many Each Day?	What Counts as a Serving		
<p>2 to 3 Servings</p> <p>Milk Group</p>	<p>8 oz. glass of milk = size of a small milk carton</p> 	<p>1 1/2 oz. of natural cheese = size of two 9-volt batteries</p> 	<p>8 oz. cup of yogurt = size of a baseball</p> 
<p>2 to 3 Servings (total of 5 to 7 ounces)</p> <p>Meat & Beans Group</p>	<p>2-3 oz. of meat, poultry or fish = size of a deck of cards</p> 	<p>2 tablespoons of peanut butter counts as 1 oz = size of a roll of film</p> 	<p>1 cup of beans counts as 2 oz = size of a baseball</p> 
<p>3 to 5 Servings</p> <p>Vegetable Group</p>	<p>1 cup of raw, leafy vegetables = size of a baseball</p> 	<p>10 french fries = size of a deck of cards</p> 	<p>1/2 cup of peas or other vegetables = size of a small computer mouse</p> 
<p>2 to 4 Servings</p> <p>Fruit Group</p>	<p>3/4 cup of fruit juice = size of a 6 oz can</p> 	<p>1/2 cup of sliced fruit = size of a small computer mouse</p> 	<p>1 medium fruit = size of a baseball</p> 
<p>6 to 11 Servings</p> <p>Grains Group</p>	<p>1 slice of bread = size of a disk</p> 	<p>1 cup of dry cereal = size of a baseball</p> 	<p>1/2 cup of pasta = size of a small computer mouse</p> 



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