

# Fit Family Challenge



Contributors

University of Colorado
Department of Family Medicine
School of Medicine



American Academy of Pediatrics • Colorado Chapter

This project was made possible by:



The Colorado Health Foundation™

# Fit Family Challenge

#### Fit Family Challenge Clinical Guide

This guideline is designed to assist the primary care provider in the prevention and treatment of childhood obesity. It is not intended to replace a clinician's judgment or establish a protocol for all patients.

For national recommendations, references, and additional copies of the guideline go to www.coloradoafp.org or call (303)695-6655.

This guideline was supported through funds from The Colorado Health Foundation.

# INTRODUCTION

#### Welcome to the Colorado Academy of Family Physicians Pediatric Obesity Initiative



The Colorado Academy of Family Physicians Fit Family Challenge Clinical Guide was developed by a team of experts as a resource for any primary care practitioner and support staff to help improve comprehensive multidisciplinary care to patients who are overweight or obese. Resources in this clinical guide are intended to simplify the process of diagnosis, prevention, and treatment of pediatric obesity. The clinical guide provides current recommendations from national standards and collective resources from other initiatives with proven outcomes in childhood obesity prevention and treatment.

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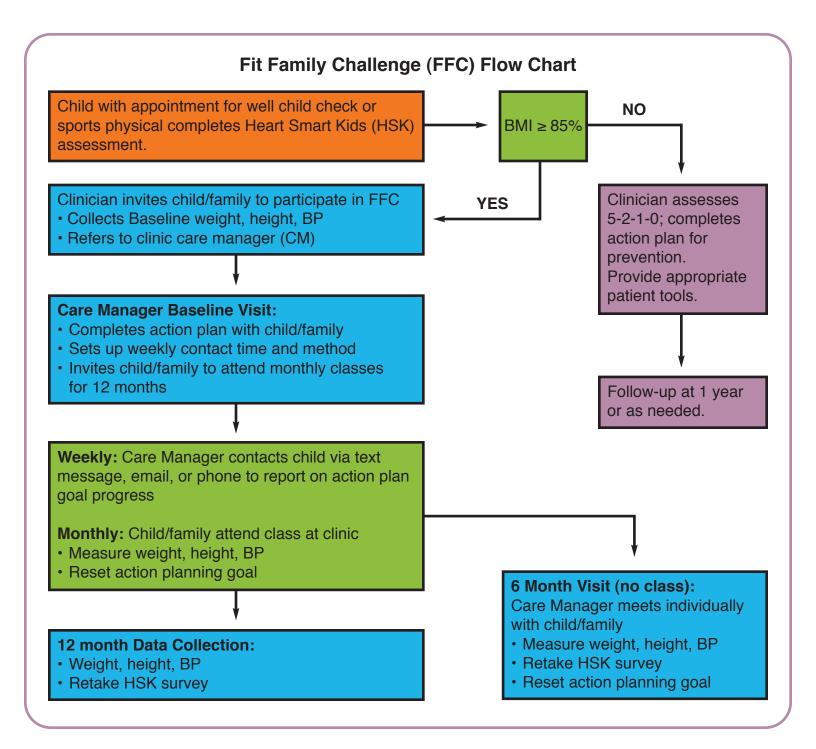


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#### **Getting Started in Your Practice**

Screening, prevention, and treatment of obesity is not like many of the other medical conditions you may have addressed in the past. Addressing this growing challenge may require new techniques for your office to learn; the words you use with your patients and families may need to be adjusted to reflect the sensitive nature of weight issues in our culture; and there really isn't a simple cure. All of this may make you wary of starting this work; however, our patients are looking to us to help them. You don't need to take on the whole epidemic of obesity. There are organizations working in our schools, childcare centers and at the local, state and national level to help our patients and families make healthy choices around physical activity and healthy eating.





# **Fit Family Challenge**

## **PROVIDER TOOLS**

Obesity is Preventable

#### Screen for Obesity and Co-Morbidity



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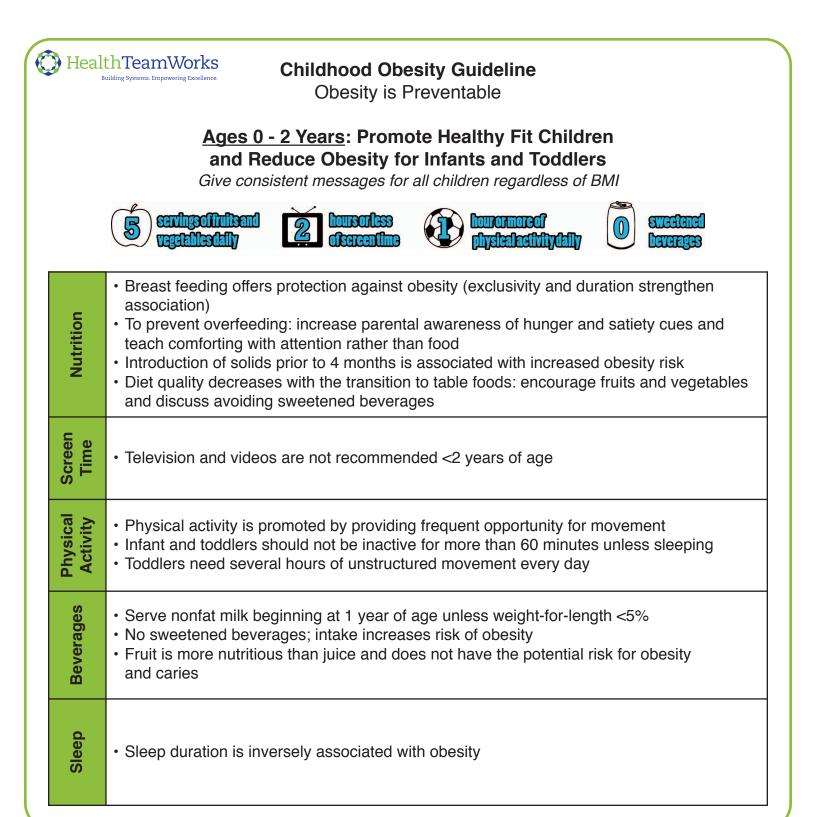






Growth	<ul> <li>Birth to 2 years: use CDC weight-for-length charts</li> <li>2-18 years: use CDC BMI %ile charts</li> <li>Breast fed infants: use WHO breast feeding charts</li> <li>Excessive weight gain prior to 6 months of age is associated with later obesity</li> <li>Overweight = 85-94%ile, Obese ≥95%ile</li> </ul>
<b>Blood Pressure</b> Systolic and Diastolic	<ul> <li>Begin routine screening at 3 years of age</li> <li>Pre-hypertension: BP 90-94%, Stage I: 95-99% + 5mm, Stage II: &gt;99% + 5mm</li> <li>Obtain 3 measurements on separate days for diagnosis of HTN (except if stage II)</li> </ul>
History	<ul> <li>Screen all patients, regardless of BMI status, for healthy behaviors using 5-2-1-0:</li> <li>5 fruits and vegetables daily, less than 2 hours of screen time daily,</li> <li>1 hour or more of daily physical activity,</li> <li>0 sweetened beverages</li> <li>Family history of obesity, gestational diabetes, type 2 diabetes, early cardiovascular event in parents or grandparents (prior to 55 years in males and 65 years in females) = increased risk</li> </ul>
Lab Screening	<ul> <li>If BMI &gt;95%ile + 10 years or older: non-fasting lipids, HbA1C, ALT</li> <li>If family history of early cardiovascular event, obtain lipids beginning at 2 years of age to rule out genetic dyslipidemia</li> </ul>

5 servingsoffullsand 2 hoursorless of concentine bourarmare of beverages			
Engage Patient/Parent	<ul> <li>Have you heard of 5-2-1-0?</li> <li>5-2-1-0 are recommended daily behaviors which improve fitness, health, and weight (see definition of 5-2-1-0 below).</li> </ul>		
Advise	<ul> <li>How is your family doing with 5-2-1-0?</li> <li>Do you have any ideas for improvement?</li> <li>If No: Are there one or two goals on this Action Plan that your family is ready to work on?</li> </ul>		
Elicit	<ul> <li>On a scale of 1-10, how confident are you that you will be able to make this change?</li> </ul>		
Assist	<ul> <li>May I (or someone from my office) follow up with you in 2 weeks to discuss your progress or difficulties with these goals?</li> </ul>		





Obesity is Preventable

Ages 3 - 18 Years: Promote Healthy Fit Children and Reduce Obesity for Older Children

Give consistent messages for all children regardless of BMI



Nutrition	<ul> <li>Encourage plate method: ½ plate fruit and vegetables, ¼ lean protein, ¼ whole grain carbohydrate</li> <li>Vegetables may be fresh, frozen or canned</li> <li>Family meals are associated with higher dietary quality</li> <li>Portion sizes are often excessive when eating out</li> <li>Skipping breakfast is associated with a higher risk of obesity and decreased academic performance</li> <li>Food insecurity is associated with higher obesity risk</li> </ul>
Screen Time	<ul> <li>Television in bedrooms is associated with sleep disruption and increased viewing</li> <li>Limit screen time to less than 2 hours daily</li> <li>Empower parents to unplug their children</li> </ul>
Physical Activity	<ul> <li>Physical activity is associated with improved mood, focus and academic achievement</li> <li>Outside time is associated with increased activity, improved Vitamin D status, and improved focus</li> <li>Family role modeling and peer support are associated with increased levels of activity</li> </ul>
Beverages	<ul> <li>Nonfat milk and water are preferred for nutrient value and hydration</li> <li>No sweetened beverages: intake increases risk of obesity (soda, fruit drinks, and sport drinks)</li> </ul>
Sleep	<ul> <li>Sleep duration is inversely associated with obesity</li> </ul>

Obesity is Preventable

#### Treatment for Overweight and Obese Children



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Basic Lifestyle Intervention	<ul> <li>Use motivational interviewing techniques and action plan to set at least 1 nutrition and/or physical activity goal for the entire family. (This may be done by medical staff, registered dietitian or healthcare provider.)</li> <li>Track family goals and refer to community resources: www.healthteamworks.org</li> <li>Follow up in two weeks, then monthly via office visit, phone or email to assess progress and barriers to change</li> <li>After success with one behavior, begin work on another behavior</li> <li>Re-evaluate behaviors, BMI %ile and co-morbidities at 3-6 months</li> </ul>
Structured Lifestyle	<ul> <li>If no success with basic lifestyle intervention, refer motivated families to a family-based program which incorporates nutrition, physical activity and behavioral components and involves &gt;25 hours of contact over a 6 month period</li> </ul>
Physician/RD Specialty Consult	<ul> <li>Consult/refer if co-morbidities persist or if no improvement after 6 months of structured lifestyle</li> </ul>



Obesity is Preventable

#### **Obesity Co-Morbidities**









Disease	Evaluation	Diagnostic Criteria	Rules Out
Insulin Resistance	Fasting glucose HbA1C	Fasting glucose 100-125 mg/dl or HbA1C 5.7-6.4%	
Type 2 Diabetes	HbA1C	HbA1C ≥ 6.5% Fasting glucose >125	
Hypertension	Blood Pressure x3 UA, Creatinine, CBC, electrolytes, renal US	Age/gender/height tables	
Dyslipidemia	Non-fasting Lipid Panel	LDL >100 mg/dl, Non HDL-C >120, Trig >150, HDL <40	If LDL >130, TG >250 or non HDL-C >145 obtain R/O thyroid, liver, renal disease, or diabetes
Non Alcoholic Steatohepatitis (NASH)	ALT - If ALT >60 order liver profile	ALT > AST, normal bilirubin & albumin Exclude other liver diseases if ALT >100 or ALT >60 after 3 months	Hepatitis screen, ANA, Anti LKM antibody, Anti smooth muscle ab, Alpha 1 antitrypsin phenotype, ceruloplasmin, alcohol, drugs, toxins, liver, ultrasound

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#### **Obesity Co-Morbidities - CONTINUED**



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Disease	Evaluation	Diagnostic Criteria	Rules Out
Polycystic Ovary Syndrome (PCOS)	Testosterone: free and total DHEAS Prolactin Thyroid profile FSH	Requires 2 of: Oligo- or amenorrhea <9 periods/year Hyperandrogenism clinical or biochemical Polycystic ovaries on US	Hyperprolactinemia Congenital adrenal hyperplasia Cushing's syndrome Ovarian/Adrenal tumors (if testosterone >150 ng/dl or DHEAS >700 mcg/dl)
Depression	PHQ-9 (11-18 years) PSC (6-16 years)	Score ≥11 or Q12 or 13 yes Score ≥30 or Q36 or 37 yes	
Sleep Apnea	Pediatric sleep questionnaire	Sleep study	
Genetic Syndrome	Developmental delay, short stature or dysmorphic		
Endocrine Causes	Decreased height velocity	Hypothyroidism, Cushing's	TSH, Free T4, Cortisol AM
Slipped Capital Fermoral Epiphysis (SCFE)	Hip X-ray		
Pseudotumor Cerebri	Papillidema/headache		

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#### **Childhood Obesity Guideline**

Obesity is Preventable

#### Healthy Lifestyle Screening and Childhood Action Plan to Promote Healthy and Fit Families



#### **Collaborative Goal Setting**

Collaborative goal setting is an important part of helping patients make sustainable health behavior changes. This involves two things: goal setting is the process, and action plans are the result of the process. The actions are highly specific, such as walking around the block twice on Monday, Wednesday, and Friday before lunch, or reducing consumption of cookies from three to one per day.

#### S.M.A.R.T.

Using S.M.A.R.T. can help your overweight and obese pediatric patients and their families set specific goals and develop an action plan:

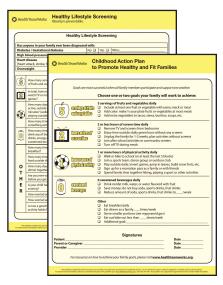
#### S.M.A.R.T. goal setting:

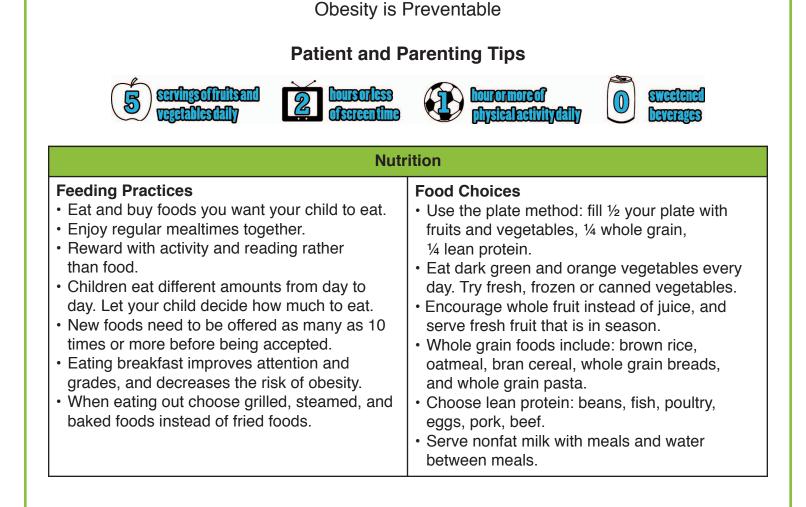
- Specific (what are you going to do and how often)
- Measurable (how will you know if you have done it each day)
- · Attainable (can you do it)
- · Realistic (can you do it given everything you have going on right now)
- Time-limited (when will you do this by)

#### Healthy Lifestyle Screening

#### and Childhood Action Plan to Promote Healthy and Fit Families

When using the Healthy Lifestyle Screening and Childhood Action Plan to Promote Healthy and Fit Families (found in the patient tool section), it is suggested that you collaboratively ask the patient and family which goal(s) they would like to set. It is important that the patient/family set only 1-2 goals. The child/family can then choose the specific change they are going to make (i.e. if they choose reducing screen time, they can choose to remove TVs from bedroom). Then ask the child and family member to sign the action plan and make a copy to put in their chart. The family should go home with the original action plan.





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#### **Patient and Parenting Tips - CONTINUED**



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#### Physical Activity (Minimum of 60 minutes throughout the day)

- Play and have fun together as a family or with peers.
- Improve your health and the planet's health: walk, bike or use public transit when possible.
- Find physical activities your child/teen enjoys, i.e. sports, dance, outdoor activities.
- Join a recreation center, YMCA or boys and girls club.
- Television and screens in bedrooms interfere with sleep and increase usage.
- · Enjoy nature and activities as a family: get outside!
- Toddlers and preschool children need several hours of unstructured movement every day in addition to 30 minutes of structured daily activity. Avoid periods of inactivity more than 60 minutes at a time.

#### Resources

Nutrition www.letsmove.gov www.mypyramid.gov http://wecan.nhlbi.nih.gov www.operationfrontline.org www.eatrightcolorado.org Physical Activity www.nwf.org/Get-Outside www.bgca.org www.bam.gov www.naturefind.com www.fitness.gov/funfit/kidsinaction.html

For additional resources, visit www.healthteamworks.org

The Childhood Obesity Guideline was adapted from HealthTeamWorks

#### **15-Minute Obesity Prevention Protocol**

Step 1: Assessment		
Action	Sample Language	
Weight and height, convert to BMI. Provide BMI information.	We checked your child's body mass index (BMI), which is a way of looking at weight and taking into consideration how tall someone is. Your child's BMI is in the range where we start to be concerned about extra weight causing health problems.	
Elicit parent's concern.	What concerns, if any, do you have about your child's weight? <i>He did jump two sizes this year. Do you think he might get diabetes someday?</i>	
Reflect/probe.	So you've noticed a big change in his size and you are concerned about diabetes down the road. What makes you concerned about diabetes in particular? Etc.	
Sweetened beverages, fruits and vegetables, TV viewing and other sedentary behavior, frequency of fast-food or restaurant eating, consumption of breakfast, and others	(Use verbal questions or brief questionnaires to assess key behaviors.) Example: About how many times a day does your child drink soda, sports drinks, or powdered drinks like Kool-Aid?	
Provide positive feedback for behavior(s) in optimal range. Elicit response. Reflect/probe.	You are doing well with sugared drinks. I know it's not healthy. He used to drink a lot of soda, but now I try to give him water whenever possible. I think we are down to just a few soda's a week. So you have been able to make a change without too much stress.	
Provide neutral feedback for behavior(s) NOT in optimal range. Elicit response. Reflect/probe	Your child watches 4 hours of TV on school days. What do you think about that? <i>I know it's a lot, but he gets bored otherwise and starts</i> <i>picking an argument with his little sister.</i> So watching TV keeps the household calm.	

#### 15-Minute Obesity Prevention Protocol - CONTINUED

Step 2: Agenda Setting			
Action	Sample Language		
Query which, if any, of the target behaviors parent/child/adolescent may be interested in changing or might be easiest to change.	We've talked about eating too often at fast-food restaurants, and how TV viewing is more hours than you'd like. Which of these, if either of them, do you think you and your child could change? Well, I think fast food is somewhere we could do better. I don't know what he would do if he couldn't watch TV. Maybe we could cut back on fast food to once a week.		
Agree on possible target behavior.	That sounds like a good plan.		
Step 3: Assess Motivation and Confidence			
3A: Willingness/Importance On a scale of 0 to 10, with 10 being very important, how important is it for you to reduce the amount of fast food he eats?          0       1       2       3       4       5       6       7       8       9       10			
Not at all	Somewhat Very		
<b>3B: Confidence</b> On a scale of 0 to 10, with 10 being v of fast food he eats, how confident a	very confident, assuming you decided to change the amount re you that you could succeed?		
0 1 2 Not at all	3 4 5 6 7 8 9 10 Somewhat Very		
<b>3C: Explore IMPORTANCE and CONFIDENCE ratings with the following probes:</b> Benefits, Barriers, and Solutions	E ratings with the BEFLECTION: So there are benefits for both you and him. What would it take you to move to an 82		

#### **15-Minute Obesity Prevention Protocol - CONTINUED**

Step 4: Summarize and Probe Possible Changes		
Action	Sample Language	
Query possible next steps.	So where does that leave you? <b>OR</b> From what you mentioned it sounds like eating less fast food may be a good first step. <b>OR</b> How are you feeling about making a change?	
Probe plan of attack.	What might be a good first step for you and your child? OR What might you do in the next week or even day to help move things along? OR What ideas do you have for making this happen? If patient does not have any ideas If it's OK with you, I'd like to suggest a few things that have worked for some of my patients.	
Summarize change plan, provide positive feedback.	Involving child in cooking or meal preparation. Ordering healthier at fast-food restaurants Trying some new recipes at home	
Step 5: Schedule Follow-up		
Agree to follow up within X weeks/months.	Let's schedule a visit in the next few weeks/months to see how things went.	
If no plan is made	Sounds like you aren't quite ready to commit to making any changes now. How about we follow up with this at your child's next visit? <b>OR</b> Although you don't sound ready to make any changes, between now and our next visit you might want to think about your child's weight gain and lowering his diabetes risk.	

15-Minute Obesity Prevention Protocol was adapted from Maine Youth Overweight Collaborative Keep ME Healthy Toolkit

#### **Effective Communication with Families**

#### **Communication Techniques**

#### Lifestyle Advice - Well child or urgent visit

- < 1 minute
- Children not currently at risk for overweight

#### Brief Focused Advice - Well child visit

- < 3 minutes</p>
- Children who are overweight
   or at risk for overweight

#### Brief Negotiation & Cognitive Behavioral Skills - Follow up visit or weight management intervention

- 10 + minutes: single or multiple sessions
- Children who are overweight
   or at risk for overweight

#### Who Do You Communicate With?

#### 2 - 5 Years Old

- Communicate with Parent
- Child in Room

#### 6 - 12 Years Old

- Communicate with Parent or Both
- The First Encounter Consider taking parent to your office to discuss in private first

#### Over 12 Years Old

- Communicate with Teen or Both
- The First Encounter Consider having parent leave exam room first

#### **Brief Negotiation Skills**

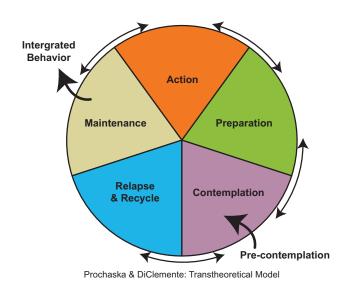
Particularly effective for contemplative/ambivalent patients

- Asking open ended questions
- Reflective Listening
- Summarizing
- Clinician Style: empathic, accepting, collaborative

#### **Behavior Skills**

For patients ready and willing to make changes

- Develop awareness of eating habits, activity and parenting behavior
- · Identification of problem behaviors
- Problem solving and modification of problem behaviors
- Weekly goal setting for children and parents on dietary, activity and self-esteem/parenting goals
- Positive reward systems
- Record keeping
- Weight checks



#### Lifestyle Advice - Every Visit

## To stay healthy and energized try 5210 everyday!

- · 5 servings of fruit and vegetables daily
- 2 hours or less of screen time
- 1 hour or more of physical activity
- 0 sweetened beverages daily

#### Brief Advice - < 3 minutes

#### Step 1: Engage the Patient / Parent

- Can we take a few minutes together to discuss your health and weight?
- How do you feel or what do you think about your health and weight?

#### Step 2: Share Information (optional)

- Your weight is increasing faster than your height.
- Your current weight puts you at risk for developing heart disease and diabetes.
- · What do you make of this?
- · Some ideas for staying healthy include...
- What are your ideas for working toward a healthy weight?

#### Step 3: Ask Permission / Make a Key Advice Statement

- Do you mind if I tell you what the recommendations are?
  - Get up and play hard, 30-60 minutes a day
  - Limit TV and video games to 2 hours or less a day
  - Eat 5 helpings of fruits or vegetables every day
  - Limit sodas & juice drinks to 1 cup or less a day
  - Use patient ideas from Step 2

#### Step 4: Arrange for Follow up

- Would you be interested in more information on ways to reach a healthier weight? AND / OR
- Let's set up an appointment in \_\_\_\_ weeks to discuss this further.

#### Brief Negotiation - 10+ Minutes or Multiple Sessions

#### **Open the Encounter**

#### **Ask Permission**

- Would you be willing to spend a few minutes discussing your health/weight?
- Are you interested in discussing ways to stay healthy and energized?

### Ask an Open-Ended Question, Listen and Summarize

- What do you think / how do you feel about your health/ weight?
- What have you tried so far to work toward a healthier weight?
  - Share BMI / Weight / Risk Factors (optional)
- Your current weight puts you at risk for developing heart disease and diabetes.
- Ask for the patient's interpretation: *"What do you make of this?"*
- Add your own interpretation or advice as needed AFTER eliciting the patient's/parent's response

#### Overweight Sensitivity "Do no harm"

- Obesity
- Ideal Weight
- Personal
   Improvement
- Focus on Weight
- Diets or "Bad Foods"
- Exercise

- Overweight Healthier Weight
- Featurier weightFamily
- Improvement
- Focus on Lifestyle
- Healthier Food Choices
- Physical Activity

#### Negotiate the Agenda

- There are a number of ways to achieve a healthy weight. They include:
  - 5 servings of fruit and vegetables daily
  - 2 hours or less of screen time
  - 1 hour or more of physical activity
  - 0 sweetened beverages daily
- Is there one of these you'd like to discuss further today? Or perhaps you have another idea that isn't listed here.

#### Assess Readiness

#### Importance/Confidence

0 1 2 3 4 5 6 7 8 9 10

On a scale from 0 to 10, how ready are you to consider... [option chosen above]

- Straight question: Why a 5?
- Backward question: Why a 5 and not a 3?
- Forward question: What would it take to move you from a 5 to a 7?

#### **Explore Ambivalence**

#### Step 1: Ask a pair of questions to help the patient explore the pros and cons of the issue

- What are the things you like about\_\_\_\_? **AND** What are the things you don't like about\_\_\_\_? **OR**
- What are the advantages of keeping things the same? **AND** What are the advantages of making a change?

#### Step 2:

- Summarize Ambivalence: Let me see if I understand what you've told me so far (begin with reasons for maintaining the status quo, end with reasons for making a change)
- Ask: Did I get it all? / Did I get it right?

#### **Tailor the Intervention**

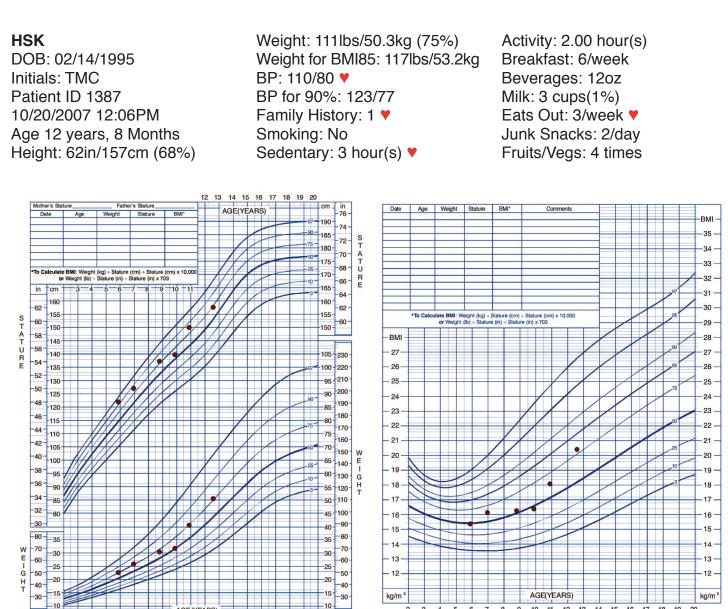
Stage of Readiness	Key Questions	
Not Ready 0 – 3 • Raise Awareness • Elicit Change Talk • Advise and Encourage	<ul> <li>Would you be interested in knowing more about reaching a healthy weight?</li> <li>How can I help?</li> <li>What might need to be different for you to consider a change in the future?</li> </ul>	
<b>Unsure 4 – 6</b> • Evaluate Ambivalence • Elicit Change Talk • Build Readiness	<ul> <li>Where does that leave you now?</li> <li>What do you see as your next steps?</li> <li>What are you thinking / feeling at this point?</li> <li>Where does fit into your future?</li> </ul>	
<b>Ready 7 – 10</b> <ul> <li>Strengthen Commitment</li> <li>Elicit Change Talk</li> <li>Facilitate Action Planning</li> </ul>	<ul> <li>Why is this important to you now?</li> <li>What are your ideas for making this work?</li> <li>What might get in the way? How might you work around the barriers?</li> <li>How might you reward yourself along the way?</li> </ul>	

#### **Close the Encounter**

- Summarize:
- Our time is almost up. Let's take a look at what you've worked through today...
- Show Appreciation / Acknowledge willingness to discuss change: *Thank you for being willing to discuss your weight.*
- Offer advice, emphasize choice, express confidence: I strongly encourage you to be more physically active. The choice to increase your activity, of course, is entirely yours. I am confident that if you decide to be more active you can be successful.
- Confirm next steps and arrange for follow up: Are you able to come back in 1 month so we can continue to work together?

Adapted from Regional Health Education- Kaiser Permanente Northern California

#### HeartSmart Kids - Heart Print



Charts from US CDC

kg lb 2 3 4 5

AGE (YEARS)

2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

lb kg 6

7 8 9 10 11 12 13 14 15

16 17 18 19 20

#### HeartSmart Kids - Heart Print CONTINUED

#### Initials: TMC Birthday: 1995-02-14

#### Your Recommendations:

Experts advise not making many changes at the same time. Choose one or two items from each section to work on for several weeks.

#### Activity:

- · Limit daily "screen time" (TV, computers and video games) to less than 2 hours
- Remove the TV, computer or phone from your childs bedroom
- Turn off the TV at meal times and talk with your family instead

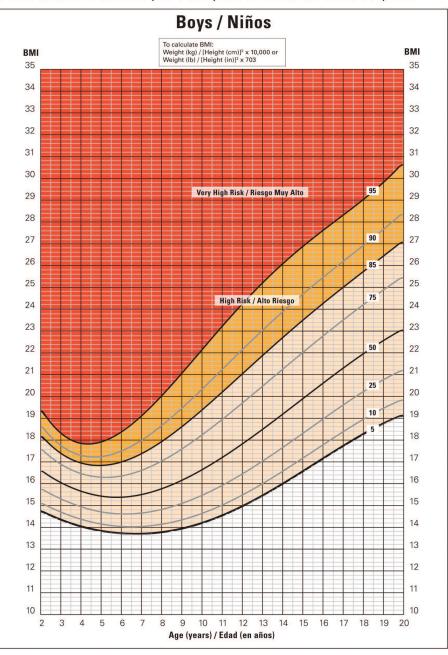
#### Nutrition:

- Do not eat out more than two times per week
- · Eat meals together as a family whenever you can

#### Notes:

#### **BMI Index**

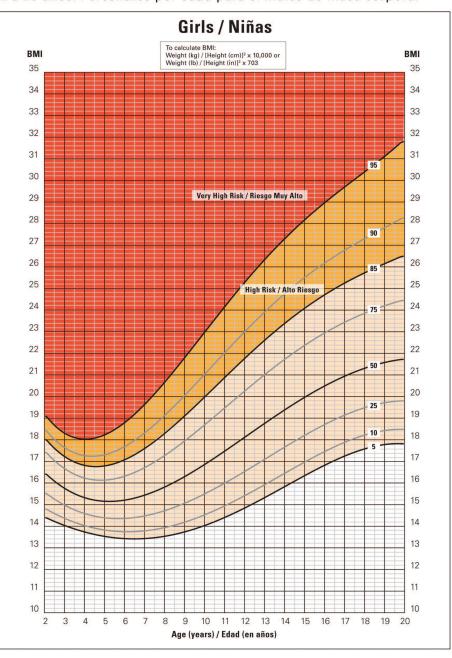
2 to 20 years: Body mass index-for-age percentiles 2 a 20 años: Percentiles por edad para el índice de masa corporal



Source: Centers for Disease Control and Prevention.

#### **BMI Index**

2 to 20 years: Body mass index-for-age percentiles2 a 20 años: Percentiles por edad para el índice de masa corporal



Source: Centers for Disease Control and Prevention.

#### Hypertension

#### **Definition of Hypertension**<sup>a</sup>

- Hypertension is defined as average SBP and/or DBP that is ≥95th percentile for gender, age, and height on ≥3 occasions.
- Prehypertension in children is defined as average SBP or DBP levels that are ≥90th percentile but <95th percentile.
- As with adults, adolescents with BP levels 120/80 mm Hg should be considered prehypertensive.
- A patient with BP levels >95th percentile in a physician's office or clinic, who is normotensive outside a clinical setting, has "whitecoat hypertension." ABPM is usually required to make this diagnosis.

#### **Clinical Evaluation of Confirmed Hypertension**

Study of Procedure	Purpose	Target Population	
Evaluation for Indentifiable Causes			
History, including sleep history, family history, risk factors, diet, and habits such as smoking and drinking alcohol; physical examination	History and physical examination help focus subsequent evaluation	All children with persistent BP ≥95th percentile	
BUN, creatinine, electrolytes, urinalysis, and urine culture	R/O renal disease and chronic pyelonephritis	All children with persistent BP ≥95th percentile	
СВС	R/O anemia, consistent with chronic renal disease	All children with persistent BP ≥95th percentile	
Renal U/S	R/O renal scar, congenital anomaly, or disparate renal size	All children with persistent BP ≥95th percentile	

#### Clinical Evaluation of Confirmed Hypertension - CONTINUED

Study of Procedure	Purpose	Target Population	
Evaluation for Co-Morbidity			
Fasting lipid panel and fasting glucose	Identify hyperlipidemia, identify metabolic abnormalities	Overweight patients with BP at 90th–94th percentile; all patients with BP ≥95th percentile; family history of hypertension or CVD; child with chronic renal disease	
Drug screen	Identify substances that might cause hypertension	History suggestive of possible contribution by substances or drugs.	
Polysomnography	Identify sleep disorder in association with hypertension	History of loud, frequent snoring	
Ev	valuation for Target-Organ Dama	ge	
Echocardiogram	Identify LVH and other indications of cardiac involvement	Patients with comorbid risk factors <sup>b</sup> and BP 90th–94th percentile; all patients with BP ≥95th percentile	
Retinal exam	Identify retinal vascular changes	Patients with comorbid risk factors and BP 90th–94th percentile; all patients with BP ≥95th percentile	

#### **Clinical Evaluation of Confirmed Hypertension - CONTINUED**

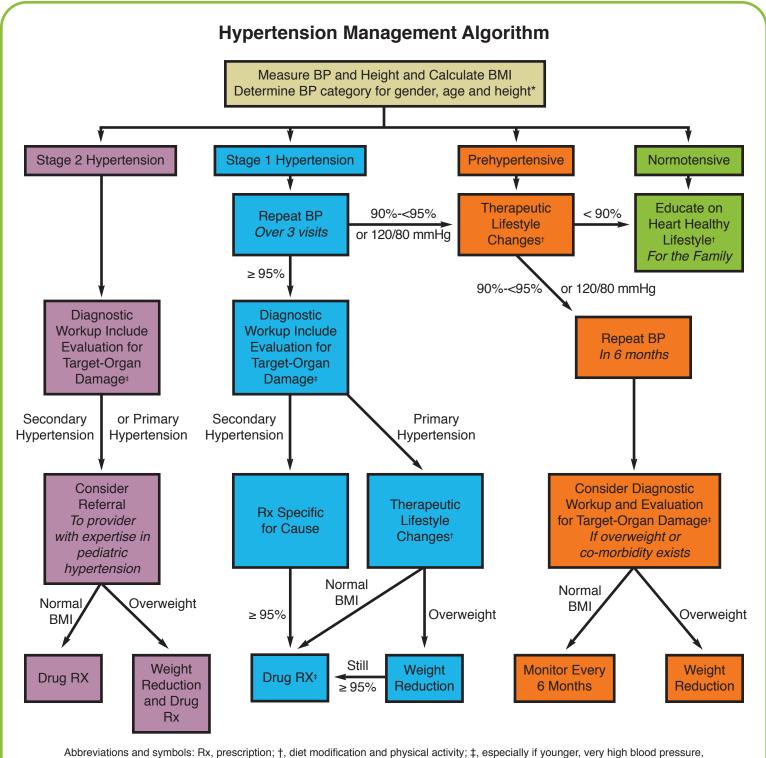
Study of Procedure	Purpose	Target Population						
Additional Evaluation as Indicated								
АВРМ	Identify white-coat hypertension, abnormal diurnal BP pattern, BP load	Patients in whom white-coat hypertension is suspected, and when other information on BP pattern is needed						
Plasma renin determination	Identify low renin, suggesting mineralocorticoid-related disease	Young children with stage 1 hypertension and any child or adolescent with stage 2 hypertension Positive family history of severe hypertension						
Renovascular Imaging Isotopic scintigraphy (renal scan) MRA Duplex Doppler flow studies 3-Dimensional CT Arteriography: DSA or classic	Identify renovascular disease	Young children with stage 1 hypertension and any child or adolescent with stage 2 hypertension						
Plasma and urine steroid levels	Identify steroid-mediated hypertension	Young children with stage 1 hypertension and any child or adolescent with stage 2 hypertension						
Plasma and urine catecholamines	Identify catecholamine-mediated hypertension	Young children with stage 1 hypertension and any child or adolescent with stage 2 hypertension						

Abbreviations: SBP, systolic blood pressure; DBP, diastolic blood pressure; BP, blood pressure; ABPM, ambulatory blood pressure monitoring; BUN, blood urea nitrogen; R/O, rule out; CBC, complete blood count; U/S, ultrasound; CVD, cardiovascular disease; LVH, left ventricular hypertrophy; MRA, magnetic resonance angiography; CT, computed tomography; DOA disited evidence blood count; U/S, ultrasound; CVD, cardiovascular disease; LVH, left ventricular hypertrophy; MRA, magnetic resonance angiography; CT, computed tomography;

DSA, digital-subtraction angiography.

<sup>a</sup> Selected excerpts from The fourth report on the diagnosis, evaluation, and treatment and high blood pressure in children and adolescents. Pediatrics. 2004;114:555–576.

<sup>b</sup> Comorbid risk factors also include diabetes mellitus and kidney disease.



little or no family history, diabetic, or other risk factors.

#### Hypertension

#### **Therapeutic Lifestyle Changes**

- Weight reduction is the primary therapy for obesity-related hypertension. Prevention of excess or abnormal weight gain will limit future increases in blood pressure.
- Regular physical activity and restriction of sedentary activity will improve efforts at weight management and may prevent an excess increase in blood pressure over time.
- Dietary modification should be strongly encouraged in children and adolescents who have blood pressure levels in the prehypertensive range as well as those with hypertension.
- Family-based intervention improves success.

#### Indications for Antihypertensive Drug Therapy in Children

- Symptomatic hypertension
- · Secondary hypertension
- Hypertensive target-organ damage
- Diabetes (types 1 and 2)
- Persistent hypertension despite nonpharmacologic measures

Selected excerpts from The fourth report on the diagnosis, evaluation, and treatment and high blood pressure in children and adolescents. Pediatrics. 2004;114:555–576

#### **Blood Pressure for Boys**

#### BLOOD PRESSURE LEVELS FOR THE 90TH AND 95TH PERCENTILES OF BLOOD PRESSURE FOR BOYS AGE 1 TO 17 YEARS BY PERCENTILES OF HEIGHT

	Systolic BP (mm Hg) Height					Diasto	olic BP	(mm	Hg)						
Age	Percentiles* BP†	→ <u>5%</u>	10%	25%	50%	75%	90%	95%	5%	10%	25%	50%	75%	90%	95%
1	90th 95th	94 98	95 99	97 101	98 102	100 104	102 106	102 106	50 55		52 56	53 57	54 58	54 59	55 59
2	90th 95th	98 101	99 102	100 104	102 106	104 108	105 109	106 110	55 59		56 60	57 61	58 62	59 63	59 63
3	90th 95th	100 104	101 105	103 107	105 109	107 111	108 112	109 113	59 63		60 64	61 65	62 66	63 67	63 67
4	90th 95th	102 106	103 107	105 109	107 111	109 113	110 114	111 115	62 66		63 67	64 68	65 69	66 70	66 71
5	90th 95th	104 108	105 109	106 110	108 112	110 114	112 115	112 116	65 69		66 70	67 71	68 72	69 73	69 74
6	90th 95th	105 109	106 110	108 112	110 114	111 115	113 117	114 117	67 72		69 73	70 74	70 75	71 76	72 76
7	90th 95th	106 110	107 111	109 113	111 115	113 116	114 118	115 119	69 74		71 75	72 76	72 77	73 78	74 78
8	90th 95th	107 111	108 112	110 114	112 116	114 118	115 119	116 120	71 75		72 76	73 77	74 78	75 79	75 80
9	90th 95th	109 113	110 114	112 116	113 117	115 119	117 121	117 121	72 76		73 78	74 79	75 80	76 80	77 81
10	90th 95th	110 114	112 115	113 117	115 119	117 121	118 122	119 123	73 77		74 79	75 80	76 80	77 81	78 82
11	90th 95th	112 116	113 117	115 119	117 121	119 123	120 124	121 125	74 78		75 79	76 80	77 81	78 82	78 83
12	90th 95th	115 119	116 120	117 121	119 123	121 125	123 126	123 127	75 79		76 80	77 81	78 82	78 83	79 83
13	90th 95th	117 121	118 122	120 124	122 126	124 128	125 129	126 130	75 79		76 81	77 82	78 83	79 83	80 84
14	90th 95th	120 124	121 125	123 127	125 128	126 130	128 132	128 132	76 80		77 81	78 82	79 83	80 84	80 85
15	90th 95th	123 127	124 128	125 129	127 131	129 133	131 134	131 135	77 81		78 83	79 83	80 84	81 85	81 86
16	90th 95th	125 129	126 130	128 132	130 134	132 136	133 137	134 138	79 83		80 84	81 85	82 86	82 87	83 87
17	90th 95th	128 132	129 133	131 135	133 136	134 138	136 140	136 140	81 85		82 86	83 87	84 88	85 89	85 89

\*Height percentile determined by standard growth curves. †Blood pressure percentile determined by a single measurement.

#### **Blood Pressure for Girls**

#### BLOOD PRESSURE LEVELS FOR THE 90TH AND 95TH PERCENTILES OF BLOOD PRESSURE FOR GIRLS AGE 1 TO 17 YEARS BY PERCENTILES OF HEIGHT

	Systolic BP (mm Hg) Height					]	Diasto	lic BP	(mm	Hg)					
Age	Percentiles*	→5%	10%	25%	50%	75%	90%	95%	5%	10%	25%	50%	75%	90%	95%
1	BP† 90th	97	98	99	100	102	103	104	53	53	53	54	55	56	56
1	95th	101	102	103	100	102	105	104	57	57	57	58	59	60	60
2	90th	99	99	100	102	103	104	105	57	57	58	58	59	60	61
	95th	102	103	104	105	107	108	109	61	61	62	62	63	64	65
3	90th	100	100	102	103	104	105	106	61	61	61	62	63	63	64
	95th	104	104	105	107	108	109	110	65	65	65	66	67	67	68
4	90th	101	102	103	104	106	107	108	63	63	64	65	65	66	67
	95th	105	106	107	108	109	111	111	67	67	68	69	69	70	71
5	90th	103	103	104	106	107	108	109	65	66	66	67	68	68	69
	95th	107	107	108	110	111	112	113	69	70	70	71	72	72	73
6	90th	104	105	106	107	109	110	111	67	67	68	69	69	70	71
	95th	108	109	110	111	112	114	114	71	71	72	73	73	74	75
7	90th	106	107	108	109	110	112	112	69	69	69	70	71	72	72
	95th	110	110	112	113	114	115	116	73	73	73	74	75	76	76
8	90th	108	109	110	111	112	113	114	70	70	71	71	72	73	74
	95th	112	112	113	115	116	117	118	74	74	75	75	76	77	78
9	90th	110	110	112	113	114	115	116	71	72	72	73	74	74	75
	95th	114	114	115	117	118	119	120	75	76	76	77	78	78	79
10	90th	112	112	114	115	116	117	118	73	73	73	74	75	76	76
	95th	116	116	117	119	120	121	122	77	77	77	78	79	80	80
11	90th	114	114	116	117	118	119	120	74	74	75	75	76	77	77
	95th	118	118	119	121	122	123	124	78	78	79	79	80	81	81
12	90th	116	116	118	119	120	121	122	75	75	76	76	77	78	78
	95th	120	120	121	123	124	125	126	79	79	80	80	81	82	82
13	90th	118	118	119	121	122	123	124	76	76	77	78	78	79	80
	95th	121	122	123	125	126	127	128	80	80	81	82	82	83	84
14	90th	119	120	121	122	124	125	126	77	77	78	79	79	80	81
	95th	123	124	125	126	128	129	130	81	81	82	83	83	84	85
15	90th	121	121	122	124	125	126	127	78	78	79	79	80	81	82
	95th	124	125	126	128	129	130	131	82	82	83	83	84	85	86
16	90th	122	122	123	125	126	127	128	79	79	79	80	81	82	82
	95th	125	126	127	128	130	131	132	83	83	83	84	85	86	86
17	90th	122	123	124	125	126	128	128	79	79	79	80	81	82	82
	95th	126	126	127	129	130	131	132	83	83	83	84	85	86	86

\*Height percentile determined by standard growth curves. †Blood pressure percentile determined by a single measurement.

#### **Reference Values**

Plasma Glucose Criteria for the Diagnosis of Impairs Glucose Tolerance in Diabetes <sup>a</sup>							
Plasma Glucose	Normal, mg/dL	Impaired, mg/dL	Diabetes, mg/dL				
Fasting	<100	100-125 (IFG)	≥126				
Oral glucose-tolerance test, 2 h PG	<140	140-199 (IGT)	≥200				
Random			≥200 + symptoms <sup>ь</sup>				

Abbreviations: IFG, impaired fasting glucose; 2 h PG, plasma glucose at 2 hours postingestion of glucose; IGT, impaired glucose. <sup>a</sup> From Hannon TS, Rao G, Arslanian SA. Childhood obesity and type 2 diabetes mellitus. Pediatrics. 2005;116:475. <sup>b</sup> Polyuria, polydipsia, weight loss.

Cholesterol							
Category	Total Cholesterol, mg/dL	Low-Density Lipoprotein, mg/dL	High-Density Lipoprotein, mg/dL				
Acceptable	<170	<110	>40				
Borderline	170-199	110-129					
Abnormal	≥200	≥130	<40 is low				
	of Dedictrice Committee on Nutrition (		1				

<sup>a</sup> Adapted from American Academy of Pediatrics Committee on Nutrition. Cholesterol in children. Pediatrics. 1998;101:145.

Triglycerides					
Norma	al, mg/dL				
Male	Female				
25-90	30-115				
30-105	35-130				
35-130	40-125				
40-145	40-125				
	Male         25-90       30-105         35-130       35-130				

<sup>a</sup> From the Third National Health and Nutrition Examination Survey (NHANES III), 1988–1994.

Note: Alanine transaminase, aspartate transaminase, blood urea nitrogen, and creatinine reference values vary by laboratory. Consult local laboratory values.

### **Coding for Obesity and Related Co-Morbidities**

While coding for the care of children with obesity and related co-morbidities is relatively straightforward, ensuring that appropriate reimbursement is received for such services is a more complicated matter. Many insurance carriers will deny claims submitted with "obesity" codes (eg, **278.00**), essentially carving out obesity-related care from the scope of benefits. Therefore, coding for obesity services is fundamentally a two-tiered system, in which the first tier requires health care professionals to submit claims using appropriate codes and the second tier involves the practice-level issues of denialmanagement and contract negotiation.

The following is a guide to coding for obesityrelated health care services taken from "Obesity and Related Co-Morbidities Coding Fact Sheet for Primary Care Pediatricians." For strategies for pediatric practices to handle carrier denials and contractual issues, see "Obesity and Related Co-Morbidities Coding Fact Sheet for Primary Care Pediatricians"

(www.aap.org/obesity/Obesity%20CodingFact-SheetAugust07.pdf).

### Procedure Codes (Current Procedural Terminology [CPT ®] Codes)

### **Body Fat Composition Testing**

There is no separate Current Procedural Terminology (CPT®) code for body fat composition testing. This service would be included in the examination component of the evaluation and management (E/M) code reported.

### Calorimetry

**94690** Oxygen uptake, expired gas analysis; rest, indirect (separate procedure)

or

94799 Unlisted pulmonary service or procedure [Note: Special report required.]

### **Glucose Monitoring**

**95250** Glucose monitoring for up to 72 hours by continuous recording and storage of glucose values from interstitial tissue fluid via a subcutaneous sensor (includes hookup, calibration, patient initiation and training, recording, disconnection, downloading with printout of data)

### **Routine Venipuncture**

- 36415 Collection of venous blood by venipuncture
- **36416** Collection of capillary blood specimen (eg, finger, heel, ear stick)

### Venipuncture Necessitating Physician's Skill

- **36406** Venipuncture, younger than 3 years, necessitating physician's skill, not to be used for routine venipuncture; other vein
- **36410** Venipuncture, 3 years or older, necessitating physician's skill (separate procedure), for diagnostic or therapeutic purposes (not to be used for routine venipuncture)

### **Digestive System Surgery Codes**

- Laparoscopy, surgical, gastric restrictive procedure; with gastric bypass and Roux-en-Y gastroenterostomy (Roux limb 150 cm or less)
- Laparoscopy, surgical, gastric restrictive procedure; with gastric bypass and small intestine reconstruction to limit absorption
- Laparoscopy, surgical, gastric restrictive procedure; placement of adjustable gastric band (gastric band and subcutaneous port components)
- Laparoscopy, surgical, gastric restrictive procedure; revision of adjustable gastric band component only
- Laparoscopy, surgical, gastric restrictive procedure; removal of adjustable gastric band component only
- Laparoscopy, surgical, gastric restrictive procedure; removal and replacement of adjustable gastric band component only
- Laparoscopy, surgical, gastric restrictive procedure; removal of adjustable gastric band and subcutaneous port components
- Gastric restrictive procedure, without gastric bypass, for morbid obesity; vertical-banded gastroplasty
- Gastric restrictive procedure, without gastric bypass, for morbid obesity; other than vertical-banded gastroplasty

- Gastric restrictive procedure with partial gastrectomy, pyloruspreserving duodenoileostomy and ileoileostomy (50 to 100 cm common channel) to limit absorption (biliopancreatic diversion with duodenal switch)
- Gastric restrictive procedure, with gastric bypass for morbid obesity; with short limb (150 cm or less) Roux-en-Y gastroenterostomy
- Gastric restrictive procedure, with gastric bypass for morbid obesity; with small intestine reconstruction to limit absorption
- Revision of gastric restrictive procedure for morbid obesity; other than adjustable gastric band (separate procedure)

### Healthcare Common Procedure Coding System (HCPCS) Level II Procedure and Supply Codes

CPT codes are also known as Healthcare Common Procedure Coding System (HCPCS) Level I codes. HCPCS also contains Level II codes. Level II codes (commonly referred to as HCPCS ["hick-picks"] codes) are national codes that are included as part of the Health Insurance Portability and Accountability Act of 1996 (HIPAA) standard procedural transaction coding set along with CPT codes.

HCPCS Level II codes were developed to fill gaps in the CPT nomenclature. While they are reported in the same way as CPT codes, they consist of 1 alphabetic character (A–V) followed by 4 digits. In the past, insurance carriers did not uniformly recognize HCPCS Level II codes. However, with the implementation of HIPAA, carrier software systems must now be able to recognize all HCPCS Level I (CPT) and Level II codes.

### HCPCS Education and Counseling Codes

- **S9445** Patient education, not otherwise classified, nonphysician provider, individual, per session
- **S9446** Patient education, not otherwise classified, nonphysician provider, group, per session
- **S9449** Weight management classes, nonphysician provider, per session
- **S9451** Exercise class, nonphysician provider, per session

S9452	Nutrition class, nonphysician provider,
	per session
S9454	Stress management class, nonphysician

**S9455** Diabetic management program,

group session

- **S9460** Diabetic management program, nurse visit
- **S9465** Diabetic management program, dietitian visit
- **S9470** Nutritional counseling, dietitian visit

### Diagnosis Codes (International Classification of Diseases, Ninth Revision, Clinical Modification [ICD-9-CM] Codes)

### **Circulatory System**

- 401.9 Essential hypertension; unspecified
- 429.3 Cardiomegaly Congenital Anomalies
- 758.0 Down syndrome
- 759.81 Prader-Willi syndrome
- 759.83 Fragile X syndrome
- **759.89** Other specified anomalies (Laurence-Moon syndrome)

### **Digestive System**

530.81 Esophageal reflux

- 564.00 Constipation, unspecified
- **571.8** Other chronic nonalcoholic liver disease Endocrine, Nutritional, Metabolic
- **244.8** Other specified acquired hypothyroidism
- 244.9 Unspecified hypothyroidism
- **250.00** Diabetes mellitus without mention of complication, type 2 or unspecified type, not stated as uncontrolled
- **250.02** Diabetes mellitus without mention of complication, type 2 or unspecified type, uncontrolled
- **253.8** Other disorders of the pituitary and other syndromes of diencephalohypophysial origin
- **255.8** Other specified disorders of adrenal glands
- 256.4 Polycystic ovaries
- **259.1** Precocious sexual development and puberty, not elsewhere specified
- 259.9 Unspecified endocrine disorder
- 272.0 Pure hypercholesterolemia
- 272.1 Pure hyperglyceridemia
- 272.2 Mixed hyperlipidemia
- **272.4** Other and unspecified hyperlipidemia
- 272.9 Unspecified disorder of lipoid metabolism
- 277.7 Dysmetabolic syndrome X/metabolic syndrome
- 278.00 Obesity, unspecified
- 278.01 Morbid obesity
- 278.02 Overweight
- 278.1 Localized adiposity
- 278.8 Other hyperalimentation

### **Genitourinary System**

611.1 Hypertrophy of the breast

### **Mental Disorders**

- 300.00 Anxiety state, unspecified
- 300.02 Generalized anxiety disorder
- 300.4 Dysthymic disorder
- 307.50 Eating disorder, unspecified
- 307.51 Bulimia nervosa
- 307.59 Other and unspecified disorders of eating
- **308.3** Other acute reactions to stress
- 308.9 Unspecified acute reaction to stress
- **311** Depressive disorder, not elsewhere classified
- 313.1 Misery and unhappiness disorder
- 313.81 Oppositional defiant disorder

### Musculoskeletal System and Connective Tissue

**732.4** Juvenile osteochondrosis of lower extremity, excluding foot

### Nervous System and Sense Organs

- **327.23** Obstructive sleep apnea (adult or pediatric)
- **327.26** Sleep-related hypoventilation/hypoxemia in conditions classifiable elsewhere
- 327.29 Other organic sleep apnea
- 348.2 Benign intracranial hypertension

### Skin and Subcutaneous Tissue

701.2 Acquired acanthosis nigricans

Sympto	oms, Signs, and III-Defined Conditions
780.51	Insomnia with sleep apnea, unspecified
780.52	Insomnia, unspecified
780.53	Hypersomnia with sleep apnea,
	unspecified
780.54	Hypersomnia, unspecified
780.57	Unspecified sleep apnea
	Chronic fatigue syndrome
780.79	Other malaise and fatigue
783.1	
	Feeding difficulties and mismanagement
783.40	Lack of normal physiological
	development, unspecified
	Short stature
783.5	- <b>3</b> - <b>1</b>
783.6	51 5
783.9	Other symptoms concerning nutrition,
	metabolism, and development
	Shortness of breath
789.1	Hepatomegaly
	Impaired glucose tolerance test (oral)
790.29	5 /1
	not otherwise specified
790.4	Nonspecific elevation of levels of
	transaminase or lactate
	dehydrogenase (LDH)
790.6	Other abnormal blood chemistry
	(hyperglycemia)

### Other

NOTE: The ICD-9-CM codes that follow are used to deal with occasions in which circumstances other than a disease or injury are recorded as diagnoses or problems. Some carriers may request supporting documentation for the reporting of V codes.

- V18.0 Family history of diabetes mellitus
- V18.1 Family history of endocrine and metabolic diseases
- V49.89 Other specified conditions influencing health status
- V58.67 Long-term (current) use of insulin
- V58.69 Long-term (current) use of other medications
- V61.0 Family disruption
- V61.20 Counseling for parent-child problem, unspecified
- V61.29 Parent-child problems; other
- V61.49 Health problems with family; other
- V61.8 Health problems within family; other specified family circumstances
- V61.9 Health problems within family; unspecified family circumstances
- V62.81 Interpersonal problems, not elsewhere classified
- V62.89 Other psychological or physical stress not elsewhere classified; other
- V62.9 Unspecified psychosocial circumstance
- V65.19 Other person consulting on behalf of another person
- V65.3 Dietary surveillance and counseling
- V65.41 Exercise counseling
- V65.49 Other specified counseling
- V69.0 Lack of physical exercise

### Other - CONTINUED

- V69.1 Inappropriate diet and eating habits
- V69.8 Other problems relating to lifestyle; self-damaging behavior
- V69.9 Problem related to lifestyle, unspecified
- V85.51 Body mass index, pediatric, less than 5th percentile for age
- V85.52 Body mass index, pediatric, 5th percentile to less than 85th percentile for age
- V85.53 Body mass index, pediatric, 85th percentile to less than 95th percentile for age
- V85.54 Body mass index, pediatric, greater than or equal to 95th percentile for age

### **Tips for Busy Clinicians**

### **Treatment Interventions**

### Communication

- Deliver a set of consistent key messages-5210.
- Keep a list of good Web sites to give your patients. Have appropriate books and magazines available in your waiting room.
   Provide books, puzzles, and activity sheetsespecially for children-that help promote healthy eating and active living.
- Display educational posters and create a bulletin board for community partners to update.
- Frame your discussions to expand the patient/family perception of what healthy lifestyle changes they can make. Keep goals small, simple, and concrete. Allow for personal choices. Selections a child enjoys will be more easily sustained.
- Have patients set specific behavioral goals and action plans and be sure to ask about these during the next visit or follow-up contact.
- Be aware of the cultural norms of the patient, significance of meals/eating for the family/community, beliefs about special foods, and feelings about body size.

### **Team Approach**

- Be a good role model-be physically active every day and work to make healthy food choices.
- Involve the clinical team in planning and implementing treatment intervention.
- Know your community resources and refer patients to them. These will help support families once they leave your office.
- Behavior change is a long-term process and involving other qualified staff will help ensure success.
- Encourage involvement and change for the whole family and all caregivers.

### ABCs of Counseling and Motivating Overweight Children and Families

### Ask Open-Ended Questions

- How do you feel about us talking about your physical activity, TV watching, and eating today?
- How concerned are you about your child's weight? Why?
- What are some of the things you might like to change?

### **Tips for Busy Clinicians - CONTINUED**

### **Body Language**

- Put patient at ease.
- Use eye contact without barriers.
- · Convey respect.
- Counsel in a private setting.

### Care and Empathy

- Do not criticize.
- Acknowledge patient's feelings.
- Answer questions without sign of judgment.
- Use language that is nonjudgmental
  - "Healthier" food vs "bad" food
  - "Healthier" weight vs "ideal" weight

### **Website Resources**

**BMI Calculators and Information** 

2000 CDC Growth Charts www.cdc.gov/growthcharts/ **BMI Adults National Heart, Lung,** & Blood Institute www.nhlbisupport.com/bmi **CDC BMI Calculator** http://apps.nccd.cdc.gov/dnpabmi/Calculator.aspx **CDC Z Score Data Files** www.cdc.gov/nchs/about/major/nhanes/growthch arts/zscore/zscore.htm Children's BMI Risk Category Dependent on Age www.cdc.gov/nccdphp/dnpa/bmi/bmi-for-age.htm Children's BMI Calculator including plot to graph (for parents) www.kidsnutrition.org/bodycomp/bmiz2.html Free Download for Palm OS Handhelds www.statcoder.com/growthcharts.htm Medscape: Using the BMI-for-Age Growth Charts www.medscape.com/vewprogram/2640

### **National Resources**

Action for Healthy Kids www.healthymainekids.org American Academy of Family Physicians www.aafp.org American Academy of Pediatrics www.aap.org/obesity Bright Futures www.brightfutures.aap.org/web/

Call to Action: Health School Nutrition **Environments** www.fns.usda.gov/tn/healthy/calltoaction.html **Childhood Health Awareness** www.fitwits.org Harvard Prevention Research Center www.hsph.harvard.edu/prc/ Information for kids, teens, parents, childcare, healthcare proivders, schools and workplaces www.letsgo.org Let's Move www.letsmove.gov National Initiative for Children's Healthcare **Quality-Childhood Obesity Action Network** www.nichg.org/NICHQ/Programs/ConferencesAndTraining/ChildhoodObesity ActionNetwork htm

### **Resources for Parents and Kids**

Healthy eating and activities for kids & parents www.kidnetic.com KidsHealth www.kidshealth.org My Pyramid www.mypyramid.gov Overview of the VERB campaign www.cdc.gov/youthcampaign/ VERB Tween interactive website www.verbnow.com

### **Website Resources**

### **Colorado Resources**

**Colorado Academy of Family Physicians** www.coloradoafp.org **Colorado Academy of Pediatrics** www.coloradoaap.org Live Well Colorado www.livewell.org **Health TeamWorks** www.healthteamworks.org Colorado Dietetic Association www.eatrightcolorado.org Heart Smart Kids www.heartsmartkidslive.com **Coalition for Activity and Nutrition** to Defeat Obesity www.candoaonline.org **Cooking Matters** www.operationfrontline.org **Central Colorado Area Health Education** Center (AHEC) www.centeralcoahec.org **Colorado Physical Activity & Nutrition** www.cdphe.state.co.us/pp/copan/copan.HTML **Colorado WIC** www.cdphe.state.co.us/ps/wic/ **County Social Services** http://www.cdhs.state.co.us/servicebycounty.htm **Colorado Department of Agriculture** www.coloradoagriculture.com **Colorado State Parks** www.parks.state.co.us



**OFFICE TOOLS** 

### Creating a Healthy Pediatric/Family Practice Office Environment

The physician's office and their practice teams can be a powerful tool for encouraging patients to lead healthy living through physical activity and healthy eating. Your practice can become active participants in creating a "healthy office" by making simple changes in both your staff's personal lives and the environment of your office.

Consider the following strategies to being the process:

### 1. Develop a Healthy Culture!

### Physical Activity Focus

- · Display physical activity and nutrition posters in waiting areas and examine rooms
- Wear identity items (t-shirts, pedometers, buttons) that promote fitness and elicit questions from patients
- Create "Healthy Living" bulletin board

Monthly or quarterly updates can feature patient activities in their communities Post resources & news articles for parents and children Post seasonal activities

- Fruit or vegetable of the month
- Display books, puzzles, and activity sheets that support healthy eating and active living to entertain children
- Play videos that show children taking part in nontraditional sports and other physical activities

### **Nutrition Focus**

- Display Food Guide Pyramid throughout office
- · Create a healthy recipes share board where both staff and patients can share healthy recipes
- Install a water cooler in break rooms and waiting rooms
- · Post a chart showing the number of calories in various portions of fast foods

### 2. Cultivate Healthy Staff Champions!

- Raise awareness among clinicians and staff regarding their own personal physical activity and nutrition
- Start an office walking group at lunch time
- Encourage friendly internal competitions or group activities related to fitness
- · Start a "healthy lunch" program, providing a healthy lunch for the entire office
- Purchase pedometers for staff
- Create a buddy system for working out
- Participate in local walks/runs as a practice team



### Resources

### Americans In Motion · Website: www.aafp.org

The American Academy of Family Physicians is one of the largest national medical organizations, representing more than 97,600 family physicians, family medicine residents and medical students nationwide. Founded in 1947, its mission has been to preserve and promote the science and art of Family Medicine and to ensure high-quality, cost-effective health care for patients of all ages.

### National Initiative for Children's Health Care Quality · Website: www.nichq.org

For more than a decade, through the expertise of clinical and improvement leaders and parents, NICHQ has directly shaped the quality of care for children and youth in the areas of access and efficiency in office practice, asthma, autism, children in foster care, diabetes, attention deficit hyperactivity disorder, cystic fibrosis, hearing loss, epilepsy, obesity, oral health, neonatal care, prevention and spina bifida.





**PATIENT TOOLS** 



03-98-00

# Pierre la construction de la con

Soda has no nutritional value and is high in sugar. Just nine ounces of soda has 1 10-150 empty calories. Many sodas also contain caffeine, which kids don't need. Energy drinks are NOT sports drinks and should <u>never</u> replace water during exercise.

Water is fuel for your body:

- Water is the most important nutrient for active people.
- Between 70-80% of a child's body is made up of water.
- When you exercise, you sweat, and when you sweat you LOSE water and minerals – it is important to replace the water you lose when you sweat.
  - Water is the #1 thirst quencher!

### Redy's Rules Water

## Keep It Handy, Keep It Cold:

- Keep bottled water or a water bottle on hand.
- Add fresh lemon, lime, or orange wedges to water for some natural flavor.
- Fill a pitcher of water and keep it in the fridge.
- Drink water when you're thirsty. It's the best choice.
- Cut back slowly on sugar-sweetened drinks.
- Replace soda with water, instead of other sugar-sweetened beverages, such as juice or sports drinks.

## Be A Role Model:

- Grab a glass of water instead of soda.
- Try mixing seltzer with a small amount of juice.

### Encourage low fat milk instead of sugar-sweetened drinks.

## According to the national dairy council:

- Children ages 4-8 years old should be consuming three 8-ounce glasses of milk or other dairy each day.
- Children ages 9-18 years old should be consuming four and a half 8-ounce glasses of milk or other dairy each day.

The recommendation is that children over the age of two drink low fat milk. Gradually make the change from whole milk to low fat milk.

Make a milkshake using low fat milk, ice, and your favorite berries.



# The Good Behavior Game:

- Write a short list of good behaviors on a chart. Mark the chart with a star every time you see the good behavior.
- After your child has earned a small number of stars, give him or her a reward.
- Give your child extra play time before or after meals as a reward for finishing homework.
- Avoid giving your child extra time in front of the screen as a reward.
- Choose fun, seasonal activities.
- Encourage your child to try a new sport or join a team.



or more servings of fruits & vegetables
hours or less recreational screen time
hour or more of physical activity
sugary drinks, more water & low fat milk



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Tic from Redu	<ul> <li>Make Physical Activity Easier.</li> <li>Make gradual changes to increase your level of physical activity.</li> <li>Incorporate physical activity into your daily routines.</li> <li>Iror off the TV and computer and keep them out of the bedroom.</li> <li>Timit recreational computer time.</li> <li>Init recreational computer time.</li> <li>Encourage lifelong physical activity fun!</li> <li>Keep physical activity fun!</li> <li>Step physical activity fun!</li> <li>The physical activity fun!</li> <li>The a padometer.</li> </ul>
Redu's Rules	Move An Hour Every Day: The courage at least an hour of daily physical activity for kids and adults: Encourage at least an hour of daily physical activity for kids and adults: Tere and Funit Tere a valk with your family Telate a valk with your family Telate a valk with your family Telate a bike ride (remember to wear your helmet) Turn on music and dance Unmp rope Ten on music and dance Ten of the stairs Telate the end Telate the end Telate the stairs <ptelate p="" stairs<="" the=""> Telate the stairs <ptela< th=""></ptela<></ptelate>
<b>Pic</b>	<ul> <li>And like hiking or dancing by sical activity means:</li> <li>Doing activities where you breathe hiking or dancing.</li> <li>Doing activities where you sweat.</li> <li>Hakes you feel good</li> <li>Helps you keep a healthy weight.</li> <li>Hakes you heart happ.</li> <li>Makes you heart happ.</li> </ul>



Life is lots more fun when you join in! Try these activities instead of watching TV.

- Ride a bike
- Go on a nature hike
- Put together a puzzle
- Turn on the music and dance
- Read a book or magazine
- Spend time catching up with your family
- Take your kids to the park or beach
  - Play board games
    - Walk, run, or jog
- Start a journal
- Play ball (basketball, catch, soccer, etc.)
- Go to the library
- Explore gyms in your community
- Rollerblade
  - Charades
- Sled, ski, or snowshoe



S or more servings of fruits & vegetables
P hours or less recreational screen time
hour or more of physical activity
sugary drinks, more water & low fat milk



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Limit recreational TV or computer use to <u>two hours</u> or less.



<b>Tipy from Redy</b> Help your child plan television viewing in advance.	<ul> <li>Keep books, magazines, and board games in the family room.</li> <li>Make a list of fun activities to do instead of being in front of a screen.</li> <li>Set family guidelines for age-appropriate shows.</li> </ul>	<ul> <li>Follow your own rules. Because children model behavior, set a good example with your own TV viewing habits.</li> <li>Avoid watching programs containing adult content when your child is in the room or nearby.</li> </ul>	
Redy's Rules	Tame the TV and Computer! Participate - keep TVs, computers, DVD players, and video games out of your child's room.	<ul> <li>Watching a family activity.</li> <li>Watch TV with your child and discuss the program. Ask them questions and express your views.</li> <li>This will also let you know what your children are watching.</li> </ul>	Set Limits – know how huch TV your child is watching. Set some basic rules such as no TV or computer before homework or chores are done. Do not watch TV during indexime. Use a timer. When the bell rings its time to turn off the TV or eliminate TV time during the week.
30	Screentime includes TV, computer, Plavstation. and Gamebox. All are impor-	<ul> <li>American children and adolescents spend</li> <li>American children and adolescents spend</li> <li>22-28 hours per week viewing television, more than any other activity except sleeping. By the age of 70 they will have spent</li> <li>7 to 10 years of their lives watching TV.</li> <li>The Kaiser Family Foundation</li> </ul>	<ul> <li>Watching TV is associated with more snacking and increased obesity.</li> <li>Too much TV has been linked to lower reading scores and attention problems.</li> <li>Healthy Screen Time: <ul> <li>No TV/computer under the age of 2</li> <li>No TV/computer in the room the child sleeps</li> <li>One hour of educational TV/computer time between ages 2 and 5</li> <li>After the age of 5, 2 hours or less</li> </ul> </li> </ul>



Tipy from Redy Offer Non-Food Rewards. • Have your family put together a list of fun, non- food rewards that don't cost much. Post it where the whole family can see it. Examples:	<ul> <li>Playing outdoors, a family game night, going to a ball game, buying a new book, extra reading time before bed.</li> <li>Put Limits on Juice.</li> <li>Juice products labeled "-ade," "drink," or "punch" often contain 5% juice or less. The only difference between these "juices" and soda is that they're fortified with Vitamin C.</li> <li>Always try to choose whole fruits over juice.</li> <li>If you choose to serve juice, buy 100% juice.</li> </ul>	<ul> <li>Make changes slowly by adding water to your child's juice.</li> <li>Try mixing seltzer with a small amount of juice.</li> <li>Each day, juice should be limited to: <ul> <li>4-6 ounces for children 1-6 years old</li> <li>8-12 ounces for children 7-18 years old</li> <li>Children 6 months and under should not be given juice</li> </ul> </li> <li>Be a Role Model.</li> <li>Snack on fruits and veggies.</li> <li>Have the family help plan meals.</li> </ul>	
Try the three bite rule. Offer new fruits and	<ul> <li>veggles different ways and try at least three bites each time—it can take 7 to 10 tries before you like a new food.</li> <li>Many fruits and veggles taste great with a dip or dressing. Try a low fat salad dressing with yogurt or get protein with peanut butter.</li> <li>Make a fruit smoothie with low fat yogurt.</li> <li>Mix it.</li> <li>Add them to foods you already make, like pasta, soups, casseroles, pizza, rice, etc.</li> </ul>	<ul> <li>Add fruit to your cereal, parakes, or other breakfast foods.</li> <li>Be a good role model for your family and have at least one veggie at every meal.</li> <li>Slice it: <ul> <li>Wash and chop veggies and fruits so they are ready to grab and eat.</li> <li>Most people prefer crunchy foods over mushy ones.</li> <li>Enjoy them fresh or lightly steamed.</li> </ul> </li> </ul>	
Bo	A diet rich in fruits and vegetables provides vitamins and minerals, important for supporting growth and development, and for optimal immune function.	Most fruits and vegetables are low in calories and fat, making them a healthy choice anytime. They may also contain phytochemicals (fight-o-chemicals) that work together with fiber to benefit your health in many ways. Different phyotchemicals are found in different fruits based on their color- that's why it's important to put a rainbow on your plate.	

Goals are most successful when all family members participate and support one another.				
	Choose one or two goals your family will work to achieve:			
5	servingsofficits andvegetables	5 s _ _ _	ervings of fruits and vegetables daily Include at least one fruit or vegetable with every snack or meal Add color: make ½ your plate fruits or vegetables at most meals Add extra vegetables to tacos, stews, burritos, soups, etc.	
2	loursorlessof sercentine	2 o       	r less hours of screen time daily Remove TV and screens from bedrooms Enjoy time outside: daily green hour without any screens Unplug the family for 1-2 weeks, plan activities without screens Join after school activities or community centers Turn off TV during meals	
	hourormoreof physicalactivity	1 o 	<b>r more hours of physical activity daily</b> Walk or bike to school (or at least the last 5 blocks) Join a sports team, dance group or outdoor club Play outside daily: invent games, jump in leaves, build snow forts, etc. Sign up for a recreation pass as a family or with friends Spend family time together hiking, playing a sport or other activities	
	streetened beverages	<ul> <li><b>0 sweetened beverages daily</b></li> <li>Drink nonfat milk, water, or water flavored with fruit</li> <li>Save money: do not buy soda, sports drinks, fruit drinks</li> <li>Reduce amount of soda, sports drinks, fruit drinks to/week</li> </ul>		
		Oti D D D	<b>ner</b> Eat breakfast daily Eat dinner as a familytimes/week Serve smaller portions (see mypyramid.gov) Eat out/take out less thantimes/week Additional goal:	
Patient	aregiver		Signatures Date Date	
			Date Date	
	For resources on ho	w to	achieve your family goals, please visit <b>www.healthteamworks.org</b> .	

### **Patient and Parenting Tips**

Obesity is preventable.



**HealthTeamWorks** 







### Nutrition

### **Feeding Practices**

- Eat and buy foods you want your child to eat.
- Enjoy regular mealtimes together.
- Reward with activity and reading rather than food.
- Children eat different amounts from day to day. Let your child decide how much to eat.
- New foods need to be offered as many as 10 times or more before being accepted.
- Eating breakfast improves attention and grades, and decreases the risk of obesity.
- When eating out choose grilled, steamed, and baked foods instead of fried foods.

### Food Choices

- Use the plate method: fill ½ your plate with fruits and vegetables, ¼ whole grain, ¼ lean protein.
- Eat dark green and orange vegetables every day. Try fresh, frozen or canned vegetables.
- Encourage whole fruit instead of juice, and serve fresh fruit that is in season.
- Whole grain foods include: brown rice, oatmeal, bran cereal, whole grain breads, and whole grain pasta.
- Choose lean protein: beans, fish, poultry, eggs, pork, beef.
- Serve nonfat milk with meals and water between meals.

### **Physical Activity**

(Minimum of 60 minutes throughout the day)

- Play and have fun together as a family or with peers.
- Improve your health and the planet's health: walk, bike or use public transit when possible.
- Find physical activities your child/teen enjoys, i.e. sports, dance, outdoor activities.
- Join a recreation center, YMCA or boys and girls club.
- Television and screens in bedrooms interfere with sleep and increase usage.
- Enjoy nature and activities as a family: get outside!

Nutrition

• Toddlers and preschool children need several hours of unstructured movement every day in addition to 30 minutes of structured daily activity. Avoid periods of inactivity more than 60 minutes at a time.

### Resources

### **Physical Activity**

- www.letsmove.gov
- www.mypyramid.gov
- http://wecan.nhlbi.nih.gov
- www.operationfrontline.org
- www.eatrightcolorado.org

- www.nwf.org/Get-Outside
- www.bgca.org
- www.bam.gov
- www.naturefind.com
- www.fitness.gov/funfit/kidsinaction.html

### For additional resources, visit <u>www.healthteamworks.org</u>.

This guideline is designed to assist the primary care provider in the prevention and treatment of childhood obesity. It is not intended to replace a clinician's judgment or establish a protocol for all patients. For national recommendations, references, and additional copies of the guideline go to <u>www.healthteamworks.org</u> or call (720) 297-1681. This guideline was supported through funds from The Colorado Health Foundation.