

Achieving a Healthy Weight in Children

Medical Nutrition Therapy Protocol and Handouts



Achieving a Healthy Weight in Children

INTRODUCTION

In 2004, there was no published national standard of medical nutrition therapy (MNT) care for children and adolescents who are overweight or at risk of becoming overweight. At that time, an estimated 40% of Pitt County children and adolescents are overweight or at risk for becoming overweight. One recommendation in the *“Moving Our Children Toward A Healthy Weight”* state plan* was to “ensure medical providers, nutritionists/dietitians, mental health care providers and physical activity specialists have the skills needed to effectively communicate with, evaluate, and provide care for children and youth who are overweight or at-risk for overweight”. To assist with this need at a local level, a group of Pitt County dietitians and nutrition educators collaborated to develop a nutrition counseling protocol and patient education materials for use throughout Pitt County medical practices.

Professionals from University Health System, the Brody School of Medicine at East Carolina University, East Carolina University College of Human Ecology, the Growing Up FIT! Project of the North Carolina Agromedicine Institute and the Pitt County Public Health Department participated. The group was called together by the Pediatric Healthy Weight Research and Treatment Center at East Carolina University.

The group contributed their expertise and individual creativity to develop the comprehensive nutrition protocol and education material packet for dietitians and other nutrition professionals, Pitt County physicians, case managers, and others providing nutrition care to children and adolescents. Several models were considered and the group selected the template used by the American Dietetic Association in its Medical Nutrition Therapy Across the Continuum of Care client protocols. As new evidence becomes available the group reviews and considers modification. The medical director joined the group in consideration of the June 2007 American Dietetic Association’s “Pediatric Weight Management Nutrition Practice Guidelines” (from the ADA Evidence Analysis Library) as well as the American Medical Association’s “Expert Committee Recommendations on the Assessment, Prevention, and Treatment of Child and Adolescent Overweight and Obesity. The protocol has been modified where appropriate for the care provided by ECU Pediatric Healthy Weight Research and Treatment Center. The protocol describes a time frame for treatment and goals for different age groups. Seven intervention sessions are outlined. The topics are prioritized based on both the evidence and the clinical experience of the group. The visits are every 2-4 weeks. Patient education materials (available on CD) for each visit are included. These are designed for the child or teen but should be reviewed with parent or guardian. Follow-up contact (e.g. visit, phone call, email) is suggested every 12 weeks

OUTCOMES

In 2006 we had sufficient outcome data to determine the effectiveness and appropriateness of using this protocol in our practice. We now have experience and can claim some outcomes when using this protocol. From August 2004 to June 2006, 181 children had at least 2 visits with the dietitian. At the start, the group believed that it would take seven visits over six months to observe lifestyle changes that would stop or slow excessive weight gain in children already over the 95th percentile BMI for age. Our data indicate that children who had a BMI > 95th percentile and

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who participated in our standardized protocol maintained or lowered their BMI over time, with significant changes occurring by the third visit with the dietitian. In practice, three nutrition visits took place over a

three month time-frame. Lifestyle behaviors that significantly changed after three visits with the dietitian include an increase in fruit and vegetable consumption, a decrease in soda and sweetened beverage consumption, a decrease in amount of times eating out each week, and a decrease in amount of TV watched each week. These results, along with our continued experience, informed revision of the protocol in spring 2007. It is still not known how many nutrition visits or how often children need to be counseled to sustain weight loss or the improved food behaviors.

This protocol continues to be used by the local RD's. Since 2004, the KIDPOWER project has provided nutrition services to more than 10 primary care offices in Pitt County and to over 1200 individual children and their families.

Feedback is welcomed and encouraged. Support for production and distribution of these packets was paid for by a grant from the Pitt Medical Society. In addition, grant monies from the Pitt Memorial Hospital Foundation supported the salary and benefits of four contributing dietitians since 2004. In-kind and financial support has also been provided by the Kate B Reynold's Foundation through the Growing Up FIT! Project. Please contact Kathryn Kolasa PhD, RD, LDN for permission to duplicate these materials.

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For more information contact Sarah Henes, MA, RD, LDN at heness@ecu.edu or Kathryn Kolasa PhD, RD, LDN at kolasaka@ecu.edu

OTHER GUIDELINES

As childhood overweight continues to be a major public health concern, both the medical and dietetic communities agree that an evidence-based, multi-disciplinary approach should be utilized in prevention and treatment. Organizations including the American Dietetic Association (ADA) have now developed evidence based guides for treatment of childhood overweight. In 2006, the ADA published a position statement on the prevention and treatment of childhood overweight and developed the Evidence Analysis Project. In 2007, ADA published treatment guidelines. See www.eatright.org. In December of 2007, the American Academy of Pediatrics (AAP) published guidelines for prevention, assessment, and treatment of childhood obesity. See www.aap.org/. Another resource for childhood obesity prevention and treatment is the National Initiative for Children's Health Care Quality (NICHQ). In early 2008 this organization created "Toolkits" for health care providers and for families to help prevent childhood obesity. See <http://www.nichq.org/NICHQ/Topics/PreventiveCare/Obesity/Tools/>. Also see www.eatsmartmovemoreNC.com for tools such as color-coded BMI charts and the "Prevention and Treatment Guide for Clinicians" based on 2007 AAP guidelines and 2008 recommendations developed by a team of childhood experts at the state level.

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Reimbursement continues to be a barrier in providing MNT to overweight children and their families. However with such initiatives as the **Alliance for a Healthier Generation** launched in 2009 , children and their families will have access to a minimum of 4 visits with an RD for MNT. Eligibility for the new coverage is 3-18 years old.

Our protocol continues to provide evidence based recommendations in helping our children achieve a healthy weight. We will review and update this protocol as appropriate.

Please return comment and evaluation forms to:

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Contents of Medical Nutrition Therapy Packet:

Referral Information

- MNT resources in Pitt County
- with fee division
 - without fee division

Clinical Tools

MNT protocol overview
Expected outcomes of MNT
Clinical assessment grid sheet (for initial measurement and goals)
MNT protocol, divided by sessions
Detailed list for initial assessment/Additional Resources
Estimated Calorie Needs (by Age, Gender, Activity Level) – 2005 Dietary Needs for Americans
Pediatric Obesity Prevention and Treatment Algorithm
Assessment, Prevention, and Treatment Guide for Clinicians
5-3-2-1-Almost None Prescription for Health
Color-Coded CDC Growth Charts (body mass index-for-age)
Blood Pressure Charts for age and gender
90th Percentile Waist Circumference for Boys and Girls
Food Diary
Hunger Scale
MyFITPyramid
Medical Nutrition Therapy Service Components (Highlighted: Necessary Medicaid Components)
SCOFF Questionnaire/Screening Questions for Eating Disorders
ADA Nutrition Diagnostic Terminology (2007)

Patient Education Materials*

*F/B indicates handouts are double-sided.

10 Tips for Families	Together...Let's Try New Foods!
Stoplight Food Guide (3 pages F/B)	Ideas for Helping Your Child Try New Foods
Stoplight Food Guide in Spanish	Tasty Cooking
MyPyramid Kids	Recipes (2 pages, F/B)
Phrases that Help and Hinder	How to Read a Nutrition Facts Label (F/B)
What Does a Serving Size Look Like?	Eating Healthy on a Budget (2 pages, F/B)
Plate Method	Eating for Heart Health
Daily Servings and Portion Sizes for	Omega 3 Fatty Acids and Flax Seed
Preschool-aged Child (F/B)	DASH Diet for Kids- Sample Menus (F/B)
Parents and Guardians as Role models (F/B)	Ways to Lower Your Blood Cholesterol/
Think Before You Drink! (F/B)	Lower Calorie, Lower Fat Alternatives
Fruits & Veggies (F/B)	Fiber- Part of a Healthy Eating Plan
Breakfast	Healthy Guidelines for Weight Management
Eat Smart Lunches (F/B)	Food Diary/Hunger Scale
Healthy Out (F/B)	My FIT! Pyramid
Activity Guidelines 2009	What is BMI?
MyActivity Pyramid 2009	What is Cholesterol?
Rainy Day Activities	What is High Blood Glucose?
Create a Healthy Snack (F/B)	What is High Blood Pressure?
Calcium (F/B)	

While the treatment of overweight and obesity in children is not universal, it is improving. In 2007, Blue Cross Blue Shield of North Carolina began providing reimbursement for 6 visits with a dietitian credentialed in weight management by Blue Cross. North Carolina Medicaid provides reimbursement for Medicaid-eligible children who can receive these services. In 2009, the **Alliance for a Healthier Generation** was launched. Insurance companies such as Aetna and BCBSNC who participate will provide access to a minimum of 4 visits with an RD for MNT to children and their families. Eligibility for the new coverage is 3-18 years old. It is important to note that the reimbursement situation is rapidly changing. It can not be assumed that nutrition visits will be paid for or not paid for, including with Medicaid. It is best to check with each insurance carrier.

In an effort to maximize the resources and reimbursement available, a list of MNT resources is provided below. The listing is divided into sections to assist the health care provider. If you are unsure whether the child is eligible to receive free-, or reduced-rate nutrition consultations, you may prompt them about which lunch service they receive at school. You may refer the child to any of these providers.

For children eligible to receive free school lunch:*

Pitt County Health Department

Appointment: 902-2418

Contact: Jackie Sugg, MS, RD, LDN Health Promotions Nutritionist

Or:

Appointment: 902-2388

Contact: Robin High, MPA, RD, LDN Nutrition Program Director

ECU Family Medicine Center

Appointment: 744-5479 Must specify that child has a weight concern.

Ask for appointment with KIDPOWER dietitian Cara Jenkins, MPH, RD, LDN, or Sarah Henes, MA, RD, LDN

For children eligible to receive reduced-price school lunch:*

ECU Family Medicine Center

Appointment: 744-4611

Ask for appointment with nutrition educator or dietitian

Pediatric Outpatient Center, Brody School of Medicine

Appointment: 744-0766

Ask for appointment with pediatric dietitian

For children who are able to pay full price for school lunch:*

East Carolina University Family Medicine or Pediatrics. See above

ViQuest

Appointment: 847-7914

* Contact individual program for current cost. There may be scholarships and grant funding that make some services available at a reduced rate or at no charge.

Medical Nutrition Therapy Resources for Overweight Youth in Pitt County

ECU Family Medicine Center

Appointment: 744-5479 Must specify that child has a weight concern.

Ask for appointment with: KIDPOWER dietitian Cara Jenkins, MPH, RD, LDN or Sarah Henes, MA, RD, LDN

Pediatric Healthy Weight Research and Treatment Center

Appointment: 744-3538. Need referral from Primary Care Physician.

Includes medical, nutrition, and physical activity assessment.

Pediatric Outpatient Center, Brody School of Medicine

Appointment: 744-0766

Ask for appointment with Mindy Saenz, RD, LDN

Pitt County Health Department

Appointment: 902-2418

Contact: Jackie Sugg , MS, RD, LDN Health Promotions Nutritionist or

Or:

Appointment: 902-2388

Contact: Robin High, MPA, RD, LDN Nutrition Program Director

ViQuest

Appointment: 847-7914

Group Weight Management Programs also offered at ViQuest:

12 week programs: Ages 2-18 years

Contact: Chelsea Farlow 847-7914

Medical Weight Loss Clinic for Employees- Optifast Program at ViQuest

Appointment: 847-6501

** Contact individual programs for current charges. There may be scholarships and grant funding that make some services available at a reduced cost or at no charge.



Pediatric Weight Management Medical Nutrition Therapy Protocol

Setting: Ambulatory Care or adapted for other health care settings. Children 2-20 years old.
(Caregiver is encouraged to attend with all children, but adult must attend with patients 18 years and younger)

Number of sessions: 7

Intervention	Length of contact	Time between interventions	Cost/charge
1	60 minutes	2-4 weeks	
2,3,4,5 & 6	30-45 minutes	2-4 weeks	
7	30-45 minutes	3 months	

Ongoing follow-up contact (visit, phone call, letter or email) every 12 weeks is suggested for optimal weight management.

Target Audience: Children and adolescents (2-20 years) with a BMI that classifies the individual as overweight, obese, or those with 3-4 BMI increase over 12 months.

Classifications for overweight: Using gender-specific CDC growth charts, a child is considered overweight if BMI is 85-94th %tile for their age. A child is considered obese if BMI is $\geq 95^{\text{th}}$ %tile for their age.

Program Goals:

1. Attain and maintain optimal metabolic outcomes within three months following initiation of dietary and behavioral modifications.
2. Modify nutrient and energy intake and lifestyle as appropriate for the prevention and treatment of chronic complications associated with overweight and obesity.
3. Improve health through education and skill development about health promoting food choices.
4. Ensure nutrient requirements are met. Address individual nutrition needs, taking into consideration personal, lifestyle, and cultural preferences while respecting the individual's wishes and willingness to change.

RECOMMENDATIONS FOR WEIGHT GOALS FOR CHILDREN 2-5 YEARS OLD

BMI	Recommendation
85 th – 94 th %tile	Weight maintenance until BMI <85 th percentile or slowing of weight gain.
$\geq 95^{\text{th}}$ %tile	Gradual weight loss, not to exceed 1 lb/month.* If greater loss occurs, monitor for causes.

* Create a daily deficit of 125-250 calories for ¼-½ pound/wk weight loss (~1 lb/month).

RECOMMENDATIONS FOR WEIGHT GOALS FOR CHILDREN > 6 YEARS OLD

BMI	Recommendation
85 th -94 th %tile	Weight maintenance until BMI <85 th percentile or slowing of weight gain.
$\geq 95^{\text{th}}$ %tile	Weight loss not to exceed an average of 2lb/week.* If greater loss occurs, monitor for causes.

*Create a daily deficit of up to 500-1000 calories for 1-2 pound/wk weight loss.

Note: Recommendations adapted from American Medical Association's Expert Committee Recommendations on the Assessment, Prevention, and Treatment of Child and Adolescent Overweight and Obesity (June 2007). Due to clinical relevance and application, recommendations for >95th and 99th percentiles were merged.

Pediatric Weight Management Medical Nutrition Therapy Protocol

Expected Outcomes of Medical Nutrition Therapy

Outcome/assessment factors	visit	visit	visit	visits	<u>Expected outcome</u>	<u>Ideal/goal value</u>
	1	2	3	4-7		
Clinical						
<ul style="list-style-type: none"> Biochemical parameters: <ul style="list-style-type: none"> Serum glucose Lipid profile Serum Insulin C-Peptide (optional) Blood Pressure (BP) 		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Glucose ↓ 10% or at target goal Cholesterol ↓ 6-12% (if elevated) Triglycerides ↓ (if elevated) LDL-C ↓ (if elevated) HDL-C ↑ or no change Serum Insulin ↓ C-Peptide ↓ Blood pressure ↓	Fasting Labs: Glucose 70-99 mg/dL Cholesterol <170 mg/dL Triglyceride < 200 mg/dL LDL-C <110 mg/dL HDL-C >35 mg/dL Insulin 0-17 uU/mL C-Peptide 0.5-2.0 ng/ml Blood pressure < 95 th percentile for age (see attached table)
<p>It may not be feasible to have labs done at these intervals. In cases where labwork is not warranted, continue MNT as protocol describes.</p>					<p>Under the assumption that the patient follows the guidance of the Nutritionist, changes in biochemical measures are expected. Evaluation of intervention is measured in terms of expected outcomes. Measured outcomes (labs) will be evaluated if feasible.</p>	
<ul style="list-style-type: none"> Anthropometrics <ul style="list-style-type: none"> Weight, BMI, waist circumference, growth chart classification (%ile) 		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	↓ or maintain weight as appropriate	Within reasonable body weight. BMI <85 th % tile for age and gender or consistent percentile over time. MNT Goal: Adhere to appropriate meal pattern, exercise and individualized weight management plan (calorie or macronutrient budget) to achieve and maintain healthy body weight, blood glucose, blood pressure, and lipids within target goals.
Behavioral						
<ul style="list-style-type: none"> Food guide <ul style="list-style-type: none"> - anytime, sometimes and rarely foods - food models; portion sizes Food/meal planning <ul style="list-style-type: none"> - sweetened beverages - water - snacks - fruits and vegetables - trying new foods Food label reading Dining out/Fast food Food preparation <ul style="list-style-type: none"> - recipe modification Physical Activity <ul style="list-style-type: none"> - Television budget Additional Topics <p>Additional topics may include: trying new foods, setting goals, and calcium</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<ul style="list-style-type: none"> Understands and uses food guide to make healthy choices and age-appropriate portion sizes Eats meals/snacks at appropriate times Chooses food and amounts per meal plan Selects foods and drinks to fit pattern Uses food labels to make healthful food choices Selects appropriately from restaurant or fast food menu Modifies recipes to ↓ total fat/saturated fat and sugar Uses healthy cooking techniques Increase in physical activity. Goal is 60 mins/d. Decrease in sedentary activity. Limit "screen" time to 2 hrs/d. 	Sessions in which behavioral topics are covered may vary according to client's readiness, skills, resources, and need for lifestyle changes.

Pediatric Medical Nutrition Therapy Protocol for Weight Management

Prior to the first nutrition consultation, provider will review available existing medical information.

1. Determine any existing medical conditions
2. Review medical record
 - Weight, Height, BMI- history of growth/BMI curves
 - Growth chart classification (%tile)
 - Fasting Lipids:
 - Total cholesterol, HDL cholesterol, LDL cholesterol
 - Triglycerides
 - C-Peptide (optional)
 - Fasting glucose
 - Fasting insulin
 - Document presence of acanthosis nigricans
 - Family history (obesity, diabetes, hypertension, heart disease)
 - Personal health history (including physical limitations)

First Session (1 hour)

ASSESSMENT

- Gather anthropometric data (height, weight, waist circumference)
- Determine BMI
- Plot BMI on CDC growth chart
- Determine growth chart percentiles for height, weight, and BMI
- Introduction (build rapport)
- Present growth chart to patient
- Identify perceived risk (re: growth chart, weight gain, lab results)
- Discuss individual's nutrition-related goals
- What is their motivating factor? Readiness to change?
- Discuss previous weight management efforts. What were the barriers?
- Lifestyle and Psychosocial history
- Medications- Prescription and Over-the-Counter (OTC) dietary supplements (i.e. weight loss meds, lipase inhibitors, etc), other Rx
- Nutrition history: Conduct 24-hr recall (Is it reflective of usual intake?)
- Discuss strengths and weaknesses of usual diet
- Determine physical activity pattern(s) (PE, sports, recreational/leisure)
- Amount of sedentary time (TV, Computer, video games, reading)
- Determine Energy needs.

For children/adolescents older than >2 years, use Harris-Benedict formula:

Males: $RMR = 66.5 + (13.75 \times wt \text{ in kg}) + (5 \times ht \text{ in cm}) - (6.8 \times age \text{ in yrs})$

Females: $RMR = 655 + (9.6 \times wt \text{ in kg}) + (1.8 \times ht \text{ in cm}) - (4.7 \times age \text{ in yrs})$

Activity Factors: 1.0 – 1.3 sedentary

*** For obese children up to age 6 (¼ - ½ pound/wk weight loss), subtract 125- 250 kcals/day. For obese children > 6 years, subtract up to 1000 calories/day to achieve no more than 2 lb/week weight loss. Daily energy intake should not be less than 900 calories for 6-12 years and 1200 calories for 13-18 years.

See table defining age-appropriate goals for weight loss. There currently is no published protocol to determine energy needs for this population. Protocol will be updated when national formula is implemented. Energy needs and assessment using above formula and activity factors determined after reviewing AMA and ADA recommendation and review of research. Recognize other formulas exist and used. However, based on clinical experience, this method of determining needs is best suited to this population at present.

Pediatric Medical Nutrition Therapy Protocol for Weight Management

EDUCATION

- Introduce appropriate nutrition prescription and meal plan.
- Provide patient with appropriate handouts, emphasis on Stoplight Guide.
- Focus on limiting sweetened beverages (soda, sweet tea, punches/kool-aid, juice) to age appropriate AAP recommendations.
- Discuss sample meal and snack ideas (using foods the patient typically consumes). Discuss appropriate portion sizes.
- Provide a food diary to use at home (2 week days, 1 weekend day), as appropriate. Mention incentive to be provided upon return of completed diary.
- Refer patient to appropriate source to schedule follow-up.
- Complete documentation in medical chart (paper or electronic).
- Send chart note to referring physician (if applicable)

NUTRITION PRESCRIPTION

Usual nutrition prescription is modified carbohydrate meal planning: 40% Carbohydrate, 30% Protein, 30% Fat; (40-30-30); 45-25-30 may be also be appropriate depending on activity level.

Other nutrition prescriptions to consider:

- If child 12 years or older, and using prescription or OTC lipase inhibitors, Fat Gram Counting should be implemented.
- Refer to the ADA Evidence Analysis Library for evidence and contraindications regarding other dietary approaches.

ADDITIONAL EDUCATIONAL TOPICS AND EDUCATIONAL HANDOUTS

Daily Servings and Portion Sizes for the Preschool-aged Child

Lower Calorie, Lower Fat Alternatives

Dining Out-How to Choose

Food Preparation-What to Do

Recipes

My FIT! Pyramid

Food Group Servings for Children

Hunger Scale

Calcium

Together...Let's Try New Foods

Ideas for Helping Your Child Try New Foods

Modified Food Guide Pyramid (developed by ECU Family Medicine for use with 40/30/30 diet)

DASH and Modified DASH diet (developed by ECU Family Medicine)

Spanish Food Diary

Spanish Food Guide

Spanish Stoplight

Pediatric Medical Nutrition Therapy Protocol for Weight Management

ADDITIONAL RESOURCES

Patient Counseling Guidelines for Families with Overweight Children and Adolescents: Prevention, Detections, Assessment, and Management.

http://www.wellpoint.com/commitments/healthy_parenting.asp

A website designed to help physicians counsel families on how to introduce, model and reinforce positive health behavior in early childhood.

Helping Your Overweight Child, Weight-Control Information Network, NIH Publication No. 97-4096, updated June 2006. www.nlm.nih.gov/medlineplus/ency/article/001999.html

A handout with healthy tips for families; a family-approach to helping children achieve a healthy weight.

If My Child is Overweight, What Should I Do About It? By Joanne Ikeda. University of California, Division of Agriculture and Natural Resources, Publication 21455, Copyright 2004.

A booklet for parents and guide to nutrition, physical activity, and parenting.

www.mypyramid.gov. A website that includes the USDA Dietary Guidelines for Americans, 2005. Information for families, healthcare providers, and includes an interactive website for children.

How to Get Your Child to Eat...But Not Too Much (1987), By: Ellyn Satter. \$16.95 ASIN# 0915950839

A guide for parents through all phases of childhood- newborn through adolescence. Topics range from “picky eaters” to parenting with healthy nutrition messages.

www.bcm.tmc.edu/cnrc is a link to the Children’s Nutrition Research Center at Baylor College of Medicine. This site includes helpful tools to assess BMI and energy needs. There is also a link to the brochure, *Help Your Child with Successful Weight Management*.

www.brightfutures.org is a link to publications and training tools as part of BrightFutures at Georgetown University. Promotes partnerships among healthcare professionals, families, and communities to improve health and well being of infants, children, and adolescents.

www.eatsmartmovemorenc.com. A North Carolina statewide movement to promote increased opportunities for healthy eating and physical activity. Encourages community, school, business, and individual involvement.

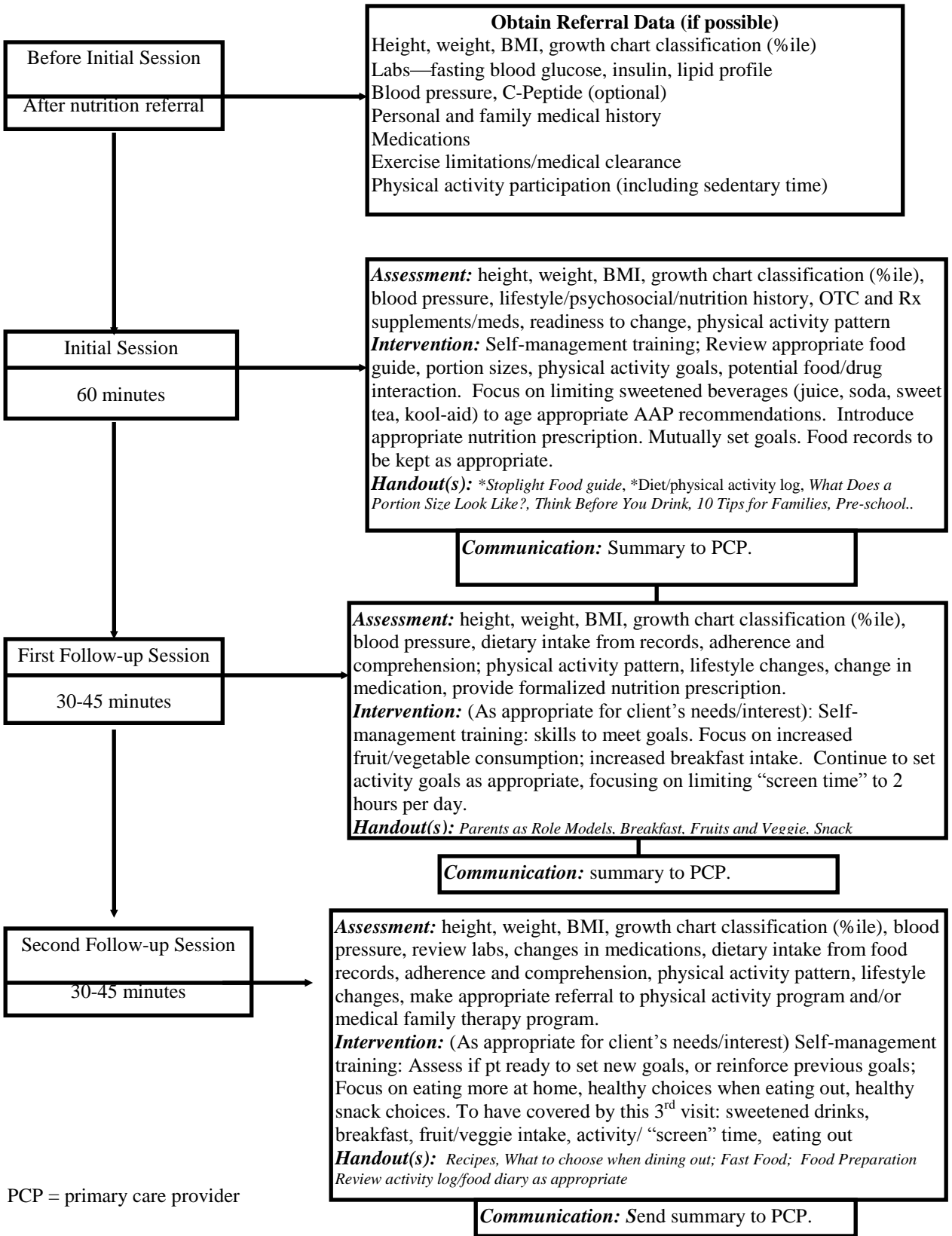
www.fittogethernc.org. A joint initiative by NC Health and Wellness Trust Fund (HWTF) and Blue Cross Blue Shield NC (BCBSNC). Helps link NC communities, individuals, and families with tools to assess health risk and with ways to achieve and maintain a healthy weight and lifestyle.

<http://www.ecu.edu/cs-dhs/pedsweightcenter/index.cfm> The link to the East Carolina University Pediatric Healthy Weight Research and Treatment Center. This site includes information about ECU’s clinical and research programs, and links related to local, state and national information and data related to childhood obesity, nutrition, and physical activity.

www.adaevidencelibrary.com A website for dietetic professionals who are members of the American Dietetic Association. Summaries of the best available research on dietetics and nutrition. Non- ADA members may access by signing up with a username and password.

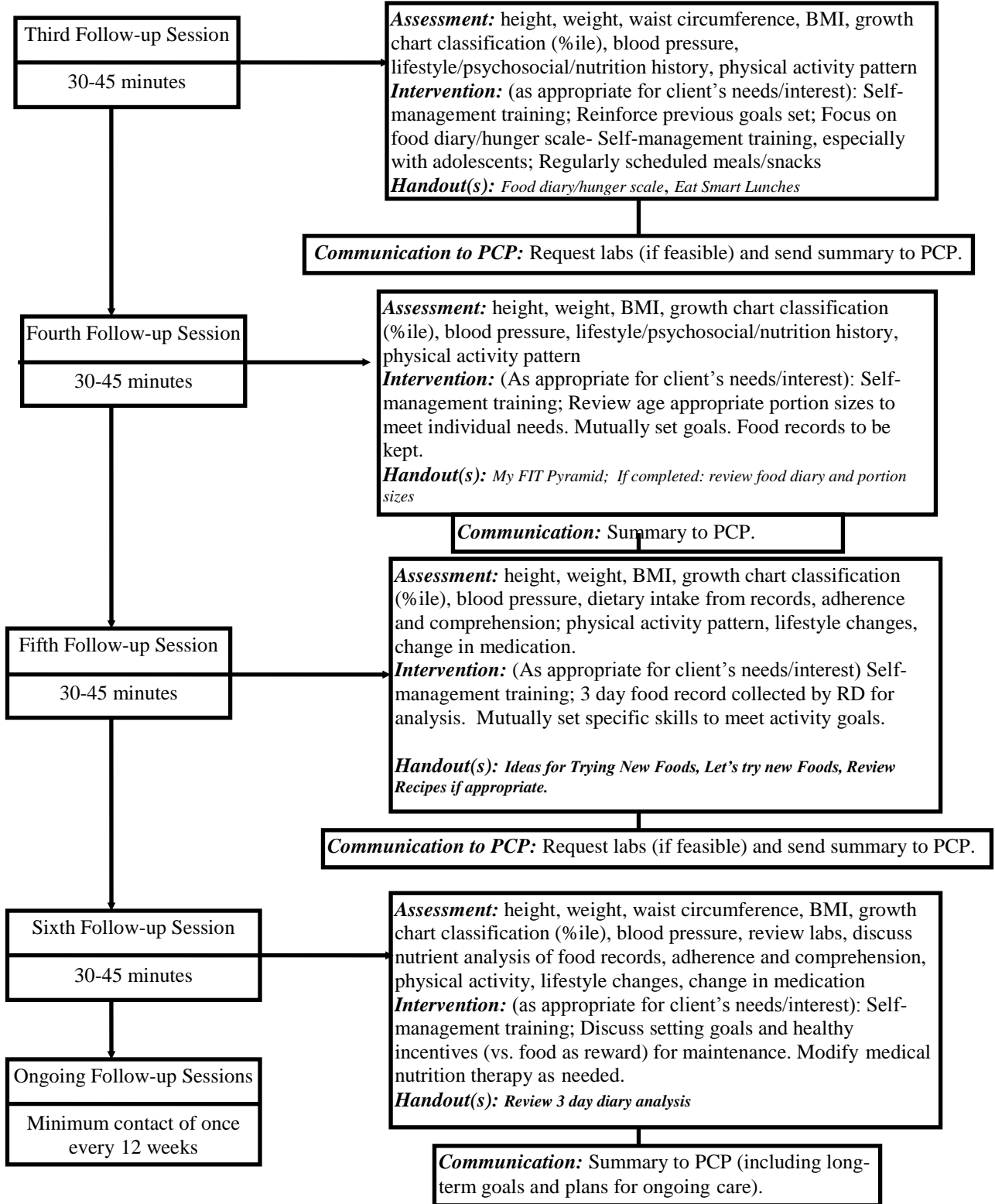
www.nichq.org. The National Initiative for Children’s Healthcare Quality (NICHQ). A link to the Childhood Obesity Action Network- which promotes partnerships among health professionals, public policy leaders, childhood obesity experts, and child health advocates.

Pediatric Weight Management Medical Nutrition Therapy Protocol



PCP = primary care provider

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PCP = primary care provider

. Estimated Calorie Requirements (in Kilocalories) for Each Gender and Age Group at Three Levels of Physical Activity^a

Estimated amounts of calories needed to maintain energy balance for various gender and age groups at three different levels of physical activity. The estimates are rounded to the nearest 200 calories and were determined using the Institute of Medicine equation.

Gender	Age (years)	Activity Level ^{b,c,d}		
		Sedentary ^b	Moderately Active ^c	Active ^d
Child	2-3	1,000	1,000-1,400 ^e	1,000-1,400 ^e
Female	4-8	1,200	1,400-1,600	1,400-1,800
	9-13	1,600	1,600-2,000	1,800-2,200
	14-18	1,800	2,000	2,400
	19-30	2,000	2,000-2,200	2,400
	31-50	1,800	2,000	2,200
	51+	1,600	1,800	2,000-2,200
Male	4-8	1,400	1,400-1,600	1,600-2,000
	9-13	1,800	1,800-2,200	2,000-2,600
	14-18	2,200	2,400-2,800	2,800-3,200
	19-30	2,400	2,600-2,800	3,000
	31-50	2,200	2,400-2,600	2,800-3,000
	51+	2,000	2,200-2,400	2,400-2,800

^a These levels are based on Estimated Energy Requirements (EER) from the Institute of Medicine Dietary Reference Intakes macronutrients report, 2002, calculated by gender, age, and activity level for reference-sized individuals. "Reference size," as determined by IOM, is based on median height and weight for ages up to age 18 years of age and median height and weight for that height to give a

Measurement	Date	My Value	Healthy Numbers			
Blood Glucose or Blood Sugar (fasting)			Normal 70-99 mg/dL	Impaired (pre-diabetes) 100-125 mg/dL		
Lipids (fasting) <ul style="list-style-type: none"> ➤ Total Cholesterol ➤ LDL-C (Lousy) ➤ HDL-C (Healthy) ➤ Triglycerides 			Acceptable (mg/dL) <170	Borderline (mg/dL) 170-199	High (mg/dL) ≥200	
			<110	110-129	≥130	
			>40	Triglyceride (mg/dL) < 200		
			(see American Heart Association Scientific Position – Cholesterol and Atherosclerosis in Children, 2007)			
Insulin (fasting)			Normal = 0-17 uU/mL			
C-Peptide			Normal = 0.5-2.0 ng/mL			
Blood Pressure - Gender, height, and weight are all considered and plotted before determining whether the child has high blood pressure.			Hypertension: <95 th percentile (based from gender, age, and height)			
			Prehypertension:			
			<ul style="list-style-type: none"> • 90-94th percentile (based from gender, age, and height) • adolescents: >120/80 			
Body Mass Index (BMI) - measures body fatness			<85 th percentile (using gender and age-appropriate CDC growth charts)			
Waist Circumference			< 90 th percentile for age and gender (see Peds.2004;145:439-444)			

Blood must be drawn for glucose, lipid, insulin, and C-Peptide measurements. Urine is not used to evaluate any of the above measurements. Fasting means that no food or drink is consumed for 12 hours before the blood is drawn.

Nutrition and physical activity directly impact each of the above measurements. If you make an effort to eat smart and move more, your body will thank you.

Table 4: Signs and Symptoms of Conditions Associated with Obesity, Diagnosis and Referral Recommendations

Symptoms or Signs	Suspected Diagnosis	Appropriate Studies	Referral
Polydipsia, polyuria, weight loss, acanthosis nigricans	Type 2 Diabetes	Random glucose, fasting glucose, 2 hour GTT, urine ketones, HbA1c	Endocrine
Small stature (decreasing height velocity), goiter	Hypothyroidism	Free T4, TSH	Endocrine
Small stature (decreasing height velocity), purple striae, Cushingoid facies	Cushing's Syndrome	Serum cortisol, 24 hour urine free cortisol	Endocrine
Hirsutism, excessive acne, menstrual irregularity	Polycystic Ovary Syndrome	Bioavailable testosterone	Adolescent medicine or Endocrine
Abdominal pain	GE Reflux, Constipation, Gall Bladder Disease	Medication trial for suspected reflux or constipation, ultrasound for GB disease	Gastroenterology
Hepatomegaly, increased LFTs (ALT or AST >60 for ≥6 months)	Nonalcoholic Fatty Liver Disease	ALT, AST, bilirubin, alkaline phosphatase (also see Table 5)	Gastroenterology
Snoring, daytime somnolence, tonsillar hypertrophy, enuresis, headaches, elevated BP	Sleep Apnea, Hypoventilation Syndrome	Sleep Study	ENT or Pulmonology
Hip or knee pain, limp, limited hip range of motion, pain walking	Slipped Capital Femoral Epiphysis	X-rays of hip	Orthopedics
Lower leg bowing	Blount Disease	X-ray of lower extremities and knees	Orthopedics
Severe headaches, papilledema	Pseudotumor Cerebri	Head CT Scan	Neurology or Neurosurgery
Depression, school avoidance, social isolation, sleep disturbances	Depression	Validated depression screen (PSC, MFQ)	Psychiatry or Psychology
Binge eating, vomiting	Bulimia	Validated screen for eating disorder	Psychiatry, psychology, eating disorders center
Dysmorphic features, small hands and feet, small genitalia, no menses, undescended testes	Prader-Willi Syndrome	Chromosomes for Prader Willi Syndrome	Genetics

Table 5: Results Guide for Overweight and Obese Pediatric Patients

Test	Result	Action Plan
Fasting Glucose	<100	Recheck every 2 years.
	100, <126	Pre-diabetes. Provide counseling. Consider oral glucose tolerance test, fasting glucose, HbA1c. Recheck yearly.
	≥126	Refer to endocrine.
Oral GTT (2-hour) or Random Blood Sugar	<140	Recheck every 2 years, more frequently if weight gain continues/accelerates.
	≥140, <200	Pre-diabetes. Provide counseling. Consider referral to endocrine if risks present. Recheck every 2 years, more frequently if weight gain continues/accelerates.
	≥200	Refer to endocrine.
Hemoglobin A1c	≥7	Refer to endocrine. Note that this test is not routinely recommended.
Fasting LDL	<110	Repeat every 5 years.
	≥110, <130	Repeat in 1 year.
	≥130, <160	Obtain complete family history. Provide low cholesterol diet (AHA "Step 1" Diet). Recheck 1 year.
	≥160 w/risks, or any LDL ≥190	Refer to cardiology.
Fasting HDL	≥40	Routine care. Recheck every 2 years, more frequently if weight gain continues/accelerates.
	<40	Increase activity and omega-3 fats (flax/fish oil). Stop smoking. Decrease sugar intake. Recheck 1 year.
Fasting Triglycerides	<200	Routine care. Recheck every 2 years, more frequently if weight gain continues/accelerates.
	≥200, <500	Increase omega-3 intake. Decrease saturated fat, sugar. Recheck 1 year.
	≥500	Refer to cardiology.
BP, ages 3-19 • Plot percentile from BP table • Must confirm with 3 separate measures	<90th%ile	Routine care. Recheck annually.
	≥90th, <95th%ile, ≥120/80 any age (pre-htn)	Increase physical activity. Smoking cessation. DASH diet. If other risks or symptoms, consider BUN/Cr, UA and culture, renal u/s, ECG, fundoscopic exam. Recheck every 6 months.
	95th%ile, <99th%ile + 5 mm Hg (Stage 1 htn)	As above, + CBC, electrolytes (include BUN/Cr), UA and culture, ECG. Consider renal u/s, fundoscopic exam, renin. Refer to cardiology or nephrology (esp. if pre-pubertal). Consider pharmacotherapy. Recheck 1 month.
	≥99th%ile + 5 mm Hg (Stg 2 htn)	As above. Refer to cardiology or nephrology. Recheck within 1 week.
Always elicit sleep history and consider sleep study to r/o OSA as cause of HTN		
Liver function tests	ALT or AST ≥60, <200	Lifestyle modification. Recheck every 3 months.
	ALT or AST ≥60 x 6 months or ≥200 at any time	Refer to GI.



Pediatric Obesity

1. Assess Body Mass Index (BMI) in children ages 2-18 annually.
2. Plot BMI on gender-specific chart to determine BMI-for-age percentile.
3. Diagnose weight category (Table 1).
4. Identify risk (Table 2) and comorbidities (Table 4).
5. History and physical exam, blood pressure, appropriate laboratory tests and referrals (Tables 3, 5).
6. Share prevention messages (5-3-2-1-Almost None).

Assessment and Counseling Tips

Assess current behaviors (consider using questionnaires).

— Eating behaviors

- Fruit and vegetable consumption
- Breakfast consumption (frequency and quality)
- Frequency of family meals prepared at home
- Sugar-sweetened beverage consumption (soda, tea, energy drinks)
- Excess juice consumption (>4-6 oz/day for age 1-6 yrs, >8-12 oz/day for age 7+ yrs)
- Frequency of eating food bought away from home (esp. fast food)
- Portion sizes of meals and snacks
- Atypical eating/nutrition behaviors

— Physical activity behaviors

- Amount of TV and other screen time and sedentary activities
- Amount of daily physical activity
- Role of environmental barriers and accessibility

Assess motivation and attitudes

- Are you concerned about your/your child's weight?
- On a scale of 0 to 10, how important is it for you/child/family to change [specific behavior] or to lose weight?
- On a scale of 0 to 10, how confident are you that you/he/she could succeed?

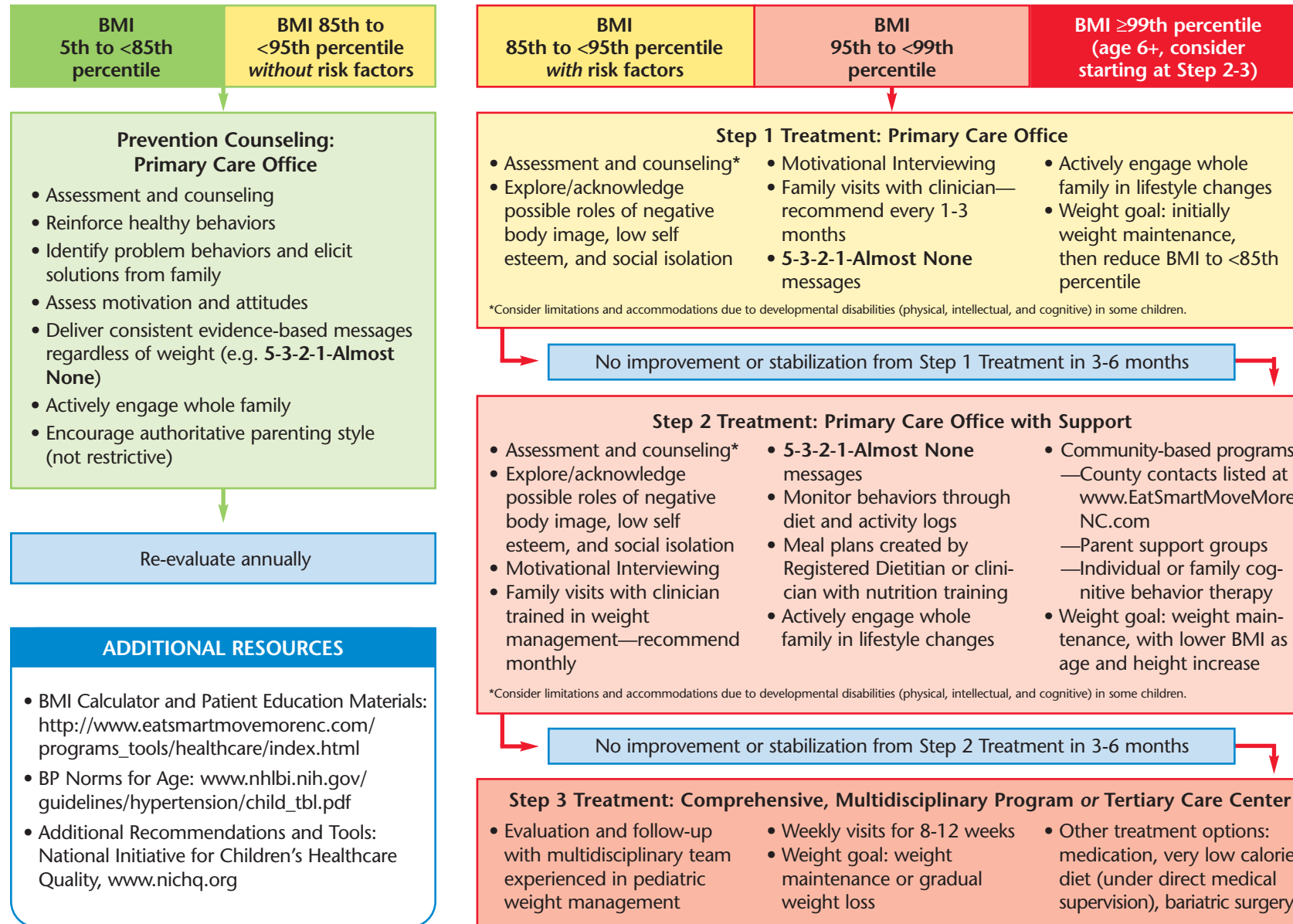
Summarize and probe possible changes

Prevention Messages: 5-3-2-1-Almost None

- 5** or more servings of fruits and vegetables daily
- 3** structured meals daily—eat breakfast, less fast food, and more meals prepared at home
- 2** hours or less of TV or video games daily
- 1** hour or more of moderate to vigorous physical activity daily
- Almost None:** Limit sugar-sweetened beverages to "almost none"

Adapted from the 5-2-1-0 message promoted by the National Initiative for Children's Healthcare Quality (www.nichq.org)

Pediatric Obesity Prevention and Treatment Algorithm



ADDITIONAL RESOURCES

- BMI Calculator and Patient Education Materials: http://www.eatsmartmovemorenc.com/programs_tools/healthcare/index.html
- BP Norms for Age: www.nhlbi.nih.gov/guidelines/hypertension/child_tbl.pdf
- Additional Recommendations and Tools: National Initiative for Children's Healthcare Quality, www.nichq.org

Table 1: Weight Category by BMI*-for-Age Percentile

<5th percentile	Underweight
5th percentile to <85th percentile	Healthy Weight
85th percentile to <95th percentile	Overweight
95th percentile to <99th percentile (or BMI >30)	Obese
≥99th percentile	Obese with Increased Risk

*Accurate BMI assessment depends on accurate height and weight measurements, which may be difficult to obtain in some children with disabilities.

Table 2: Risk Factors for Comorbidities and Future Obesity

Personal Risk Factors	Risk Factors from Family History
<ul style="list-style-type: none"> Elevated blood pressure Ethnicity: African American, Mexican-American, Native American, Pacific Islander Puberty Medications associated with weight gain (steroids, anti-psychotics, antiepileptics) Acanthosis Nigricans Birth history of SGA or LGA Disabilities 	<ul style="list-style-type: none"> Type 2 Diabetes Hypertension High cholesterol Obese parents(s) Mother with Gestational Diabetes Family member with early death from heart disease or stroke

Table 3: Laboratory Evaluation Recommendations

Age	BMI	Risk Factors	Action Plan
<10 years	≥85th %ile	N/A	Consider fasting lipids
≥10 years	85th to <95th %ile	No risk factors or symptoms	Consider fasting lipids
		≥2 risk factors	Biannually: fasting lipid profile, fasting glucose, consider ALT and AST
	≥95th %ile	N/A	Biannually: fasting lipid profile, fasting glucose, ALT and AST, other tests indicated by history and physical

References

An Implementation Guide from the Childhood Obesity Action Network, available at <http://www.nichq.org/NR/rdonlyres/7CF2C1F3-4DA3-4A00-AE15-4E35967F3571/5316/COANImplementationGuide62607FINAL.pdf>, accessed 3/19/08

Expert Committee Recommendations on the Assessment, Prevention and Treatment of Child and Adolescent Overweight and Obesity: *Pediatrics* 2007; 120 Suppl 4:S163-288.

Hannon TS, Rao G, Arslanian SA. Childhood obesity and type 2 diabetes mellitus. *Pediatrics* 2005; 116:473-80.

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Newman TB and Garber AM. Cholesterol screening in children and adolescents. *Pediatrics* 2000; 105:637-8.

Williams CL, Hayman LL, Daniels SR, Robinson TN, Steinberger J, Paridon S et al. Cardiovascular health in childhood: A statement for health professionals from the committee on atherosclerosis, hypertension, and obesity in the young (AHOY) of the council on cardiovascular disease in the young, American Heart Association. *Circulation* 2002; 106:143-60.

Name of Practice/Clinician
Address #1
Address #2

Name of Practice/Clinician
Address #1
Address #2

Name: _____

Date: _____

5-3-2-1-Almost None

5 5 or more servings of fruits and vegetables daily

3 3 structured meals daily—eat breakfast, less fast food, and more meals prepared at home

2 2 hours or less of TV or video games daily

1 1 hour or more of moderate to vigorous physical activity daily

Almost None Limit sugar-sweetened drinks to “almost none”



Adapted from the 5-2-1-0 message promoted by the National Initiative for Children's Healthcare Quality (www.nichq.org)

Name: _____

Date: _____

5-3-2-1-Almost None

5 5 or more servings of fruits and vegetables daily

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Adapted from the 5-2-1-0 message promoted by the National Initiative for Children's Healthcare Quality (www.nichq.org)



Prescription for Health

Name: _____

Date: _____

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Adapted from the 5-2-1-0 message promoted by the National Initiative for Children's Healthcare Quality (www.nichq.org)



Prescription for Health

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Date: _____

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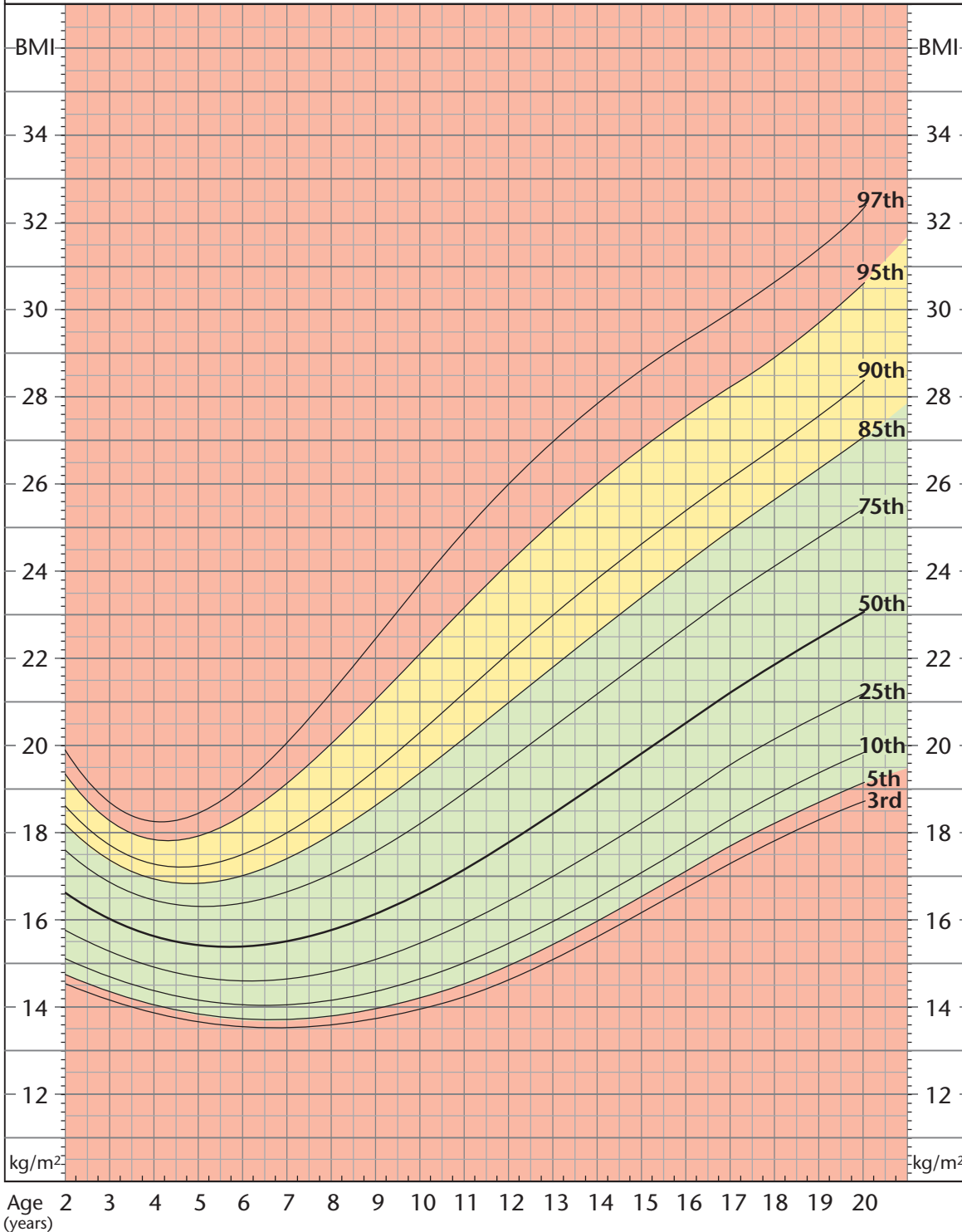
Adapted from the 5-2-1-0 message promoted by the National Initiative for Children's Healthcare Quality (www.nichq.org)



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

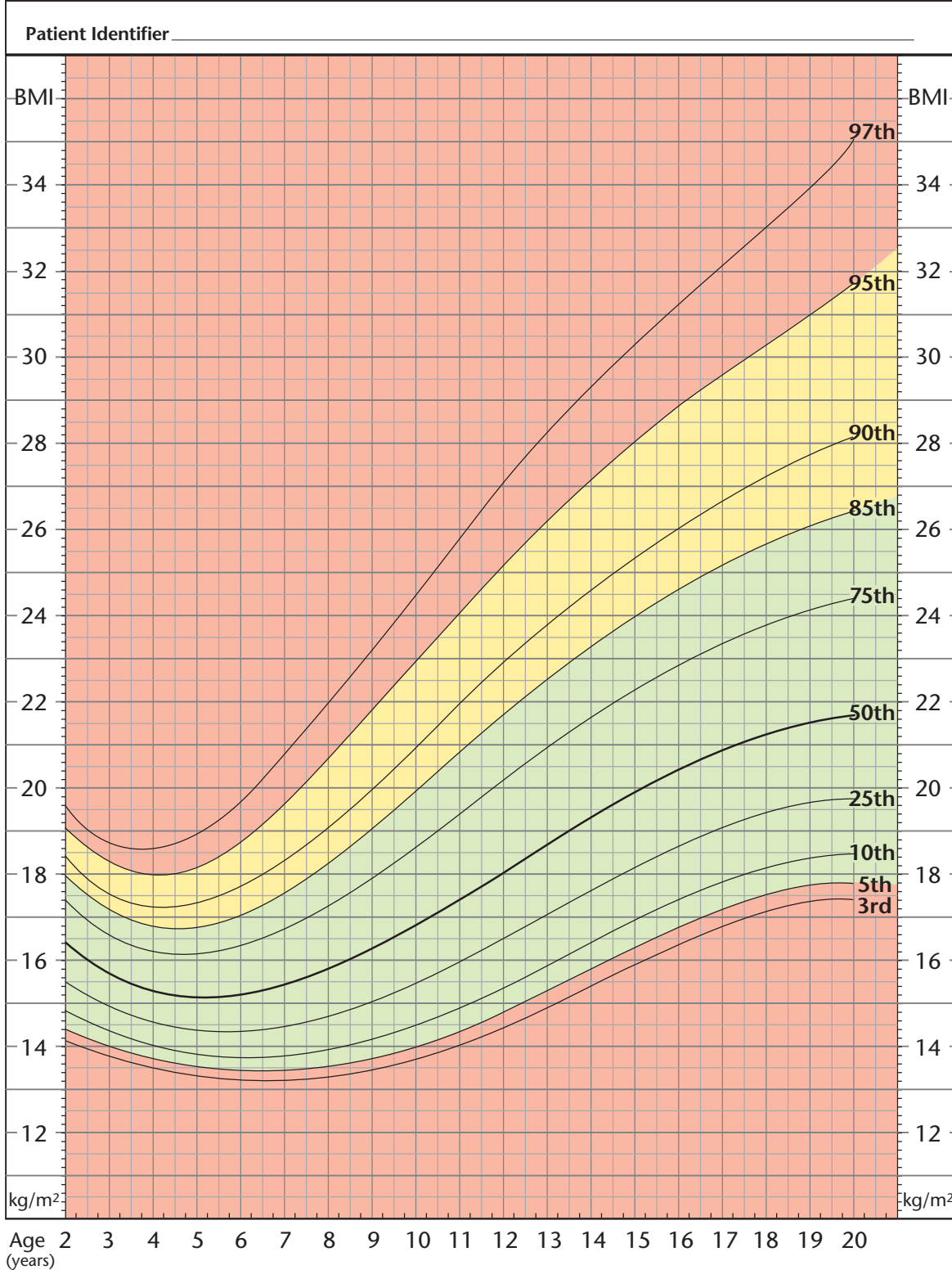
From National Initiative for Children's Healthcare Quality (www.nichq.org)

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

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.

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

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
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	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.



90th Percentile Waist Circumference for Boys and Girls

	*90th Percentile for Boys		*90th Percentile for Girls	
Age (years)	Inches	Cm	Inches	Cm
2	20.0	50.8	20.6	52.2
3	21.3	54.2	21.8	55.3
4	22.7	57.6	22.9	58.3
5	24.0	61.0	24.2	61.4
6	25.4	64.4	25.4	64.4
7	26.7	67.8	26.6	67.5
8	28.03	71.2	27.8	70.5
9	29.4	74.6	28.9	73.6
10	30.7	78.0	30.2	76.6
11	32.04	81.4	31.4	79.7
12	33.4	84.8	32.6	82.7
13	34.7	88.2	33.8	85.8
14	36.1	91.6	34.9	88.8
15	37.4	95.0	36.2	91.9
16	38.7	98.4	37.4	94.9
17	40.1	101.8	38.6	98.0
18	41.4	105.2	39.8	101.0

As adapted from Fernandez et al. Peds 2004;145:439-444.

*** Although there is no set standard, the 90th percentile is typically considered overweight and may be correlated with risk of disease to include cardiovascular disease, hyperinsulinemia, and type 2 diabetes.**

Name: _____ Physician: _____ DOB: ___/___/___

Food Diary Instructions (example diary is shown below):

1. Choose three *consecutive*, typical days to record. Include *two weekdays and 1 weekend day*. For example: Thursday, Friday, and Saturday.
2. Record *all* foods and beverages (including water) that are consumed.
3. List portion sizes of all foods and beverages. Be as *specific* as possible. For example: 2 ounces of chicken breast, ¼ cup mashed potatoes, 8 ounces orange juice. Estimate meat portions *after* cooking.
4. List brand names of foods if known.
5. Describe how each food is prepared. (For example, fried chicken, scrambled eggs, and roasted pork.)
6. Record any “extras”/condiments used and amount. (For example, 1 tablespoon mayonnaise, 1 teaspoon butter, 2 tablespoons Italian salad dressing).
7. List any snacks (foods *and* beverages) consumed in between meals.
8. If you eat away from home, list the name of the restaurant.
9. If a combination food was consumed (such as a casserole, salad, or stew), please list all ingredients and the total amount consumed.

Time	Amount	Food	How Prepared	Where Consumed
7:00 AM	2 cups	Honey-nut Cheerios	n/a	kitchen
	1 1/2 cups	2% milk	n/a	kitchen
	8 oz.	apple juice	n/a	kitchen
	1/2 piece	Wonder White bread	toasted	kitchen
	1/2 tsp.	Promise margarine, regular	n/a	kitchen
	1 tsp.	Smucker's grape jelly	n/a	kitchen
10:00 AM	1	medium apple	n/a	break room
12:30 PM	1	Chicken-Supreme Burrito	n/a	Taco Bell
	1	Beef Soft Taco	n/a	Taco Bell
	16 oz.	Dr. Pepper	n/a	Taco Bell
4:00 PM	1 pkg. (6 crackers)	Lance peanut butter/cheese crackers	prepackaged	home
	12 oz.	water	n/a	home
7:15 PM	4 oz.	chicken breast (no marinade)	grilled	home
	1/2 cup	Ragu alfredo sauce	heated-stove top	home
	1 1/2 cups	spaghetti noodles	boiled in water	home
	1/2 cups	tossed salad (iceburg lettuce, tomatoes)	n/a	home
	2 tbsp.	Kraft fat-free Italian dressing	n/a	home
	8 oz.	lemonade	prepackaged	home
9:00 PM	1/2 cup	Del Monte fruit cocktail (lite syrup)	prepackaged	home

FOOD DIARY

Name: _____

Date: _____

Time	Food	Amount	Brand Name	How Prepared	Where Consumed

Hunger Scale

Most of us eat when we aren't hungry some of the time. Instead of listening to our body's sign of hunger, we eat for other reasons. Sometimes we start eating because it's time to eat, or it's our favorite food. Sometimes our feelings trigger us to eat when we aren't hungry.

For some of us, once we start eating, it is hard to stop. Overeating may be a habit, but overeating can also be triggered by our feelings, the great taste of a favorite food or watching TV while eating.

Try listening to your body's signs of hunger and fullness. Use the HUNGER SCALE to make a note of your hunger before you start and right after you stop eating. Write down how hungry you feel before you start eating – very hungry, hungry, not hungry, and then how you feel when you stop eating – satisfied, full, or stuffed.

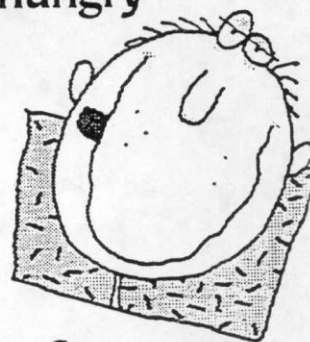
The goal is to learn to eat only when you are hungry and to stop when you are satisfied. This takes practice. Try to be honest with yourself and in touch with your feelings of hunger and fullness.

Very Hungry

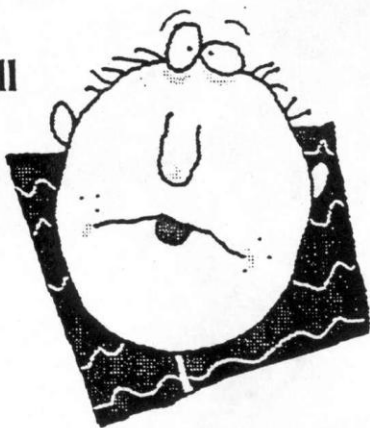


Hungry

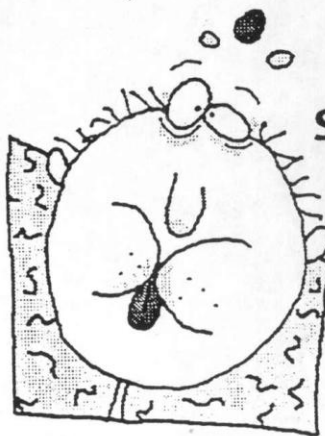
Satisfied... not hungry



Full



Stuffed!



BodyWorks: WK6
June 1998

MyFIT Pyramid – Servings of Each Food Group My Body Needs



Breads, Cereals and Grains:	Vegetables:	Fruits:	Milk and Milk Products:	Meat and Meat Alternatives:
Servings Needed:	Servings Needed:	Servings Needed:	Servings Needed:	Servings Needed:
1 serving=	1 serving=	1 serving=	1 serving=	1 serving=
1 slice bread 1/2 c cereal, rice, pasta 1/2 mini bagel, roll, bun	1/2 c raw or cooked vegetables 1 c salad, green leafy	1/2 c fruit 4-6oz 100% fruit juice	8 oz milk 8 oz yogurt 1 oz cheese	2-3 oz meat, fish poultry 2 tbs peanut butter 2 eggs

Food Group	Servings Eaten Today	Servings Goal	Eat More Servings	Eat Fewer Servings
Bread				
Vegetables				
Fruit				
Milk & Milk Products				
Meat & Meat Alternatives				
Extras				
Scores				

**Medical Nutrition Therapy Service Components
Initial Evaluation and Counseling**

* Please note this form has been developed as a comprehensive Medical Nutrition Therapy Assessment. The topics that have been bolded and italicized indicate the minimum requirements for Medicaid billing and reimbursement.

Demographics:

Name: _____
Date of Birth: _____ **Age:** ___ years ___ months
Gender: ___ M ___ F **Race/Ethnic Background:** _____
Current Phone Numbers: _____ (Home) _____ (Work) _____ (Cell)
Parent/Guardian Name: _____
Relationship of Guardian to patient: _____

I. Medical Management

A. Medical history

- **Patient's primary physician:** _____
- Date of your child's last well-child visit _____
- Doctor/location of last well-child visit. _____
- Do you have any medical appointments scheduled for your child? ___ Yes ___ No
If yes, with whom _____
Reason: ___ Well-child visit ___ Sick visit ___ Follow-up visit ___ Other
Scheduled date: _____ Time: _____

• **Does your child have any of the following medical conditions?**

Medications

Asthma ___ Yes ___ No _____

Diabetes ___ Yes ___ No _____

Type I ___ Yes ___ No _____

Insulin dose _____

FSBS: Frequency _____

Meter Brand: _____

FSBS average values over past week: _____

Lowest and Highest Blood Sugar over past week _____

Last Hgb A1C value: _____

Type II ___ Yes ___ No _____

FSBS: Frequency _____

Meter Brand: _____

FSBS average values over past week: _____

Lowest and Highest Blood Sugar over past week _____

Last Hgb A1C value: _____

High Blood Pressure ___ Yes ___ No _____

High Cholesterol ___ Yes ___ No _____

High Triglycerides ___ Yes ___ No _____

Hyperinsulinemia (Too much insulin production) ___ Yes ___ No _____

Insulin resistance (Body's cells resistant to the action of insulin) ___ Yes ___ No _____

Skin Tags

Acanthosis Nigricans (Dark brown discoloration of the neck) Yes No _____

Sleep Apnea Yes No _____

 If yes, does your child use a CPAP machine? Yes No _____

 Does your child snore? Yes No _____

 Does your child fall asleep during the day or at school? Yes No _____

 Does your child have problems with bedwetting? Yes No _____

Bone /Joint Problems Yes No _____

 If yes, what type of problem _____

 Is your child receiving treatment for this problem? Yes No _____

 If so, what kind treatment? _____

Depression Yes No _____

ADHD Yes No _____

Other Medical Conditions _____

Other medications _____

- ***Does your child have allergies?*** Yes No
 Food _____ Environment _____ Medication _____ Other _____
 If yes, explain. _____
- Do you currently have any concerns regarding your child's health? Yes No
 If yes, please comment: _____
- Has your child been given a prescription by the doctor for a special diet? Yes No
 ○ If so, what is your child's special diet? _____
- Has your child been given a prescription by the doctor for a exercise? Yes No
 ○ If so, what is your child's special exercise prescription? _____
 ○ Has your doctor cleared your child for physical activity? Yes No
 ○ If no, explain restrictions _____

Getting to Know Your Child

1. Do you know your child's Body Mass Index (BMI)? Yes No
 If yes, what is your child's most recent BMI? _____ BMI Percentile: _____
 Did your doctor discuss your child's BMI chart with you? Yes No
2. Over the last 6 months, has your child's weight:
 Increased (Amount: _____ pounds) Decreased (Amount: _____ pounds)
 Stayed the same Unsure
3. Do think your child is overweight/obese or has a problem with his/her weight? Yes No
 What are your feelings about this problem? _____
4. What have you done in the past to help your child control his/her weight? _____

5. How long has your child been overweight?
 Since infancy (0-12 months) Since early childhood (1-5 years)
 Since childhood (6-12 years) Since a teenager (13 years or older)

B. *Psychosocial history*

▪ *Family Information*

- Mother/Guardian Name: _____
 Mother/Guardian Work Number: _____ Work Location: _____
- Father Name: _____
 Father Work Number: _____ Work Location: _____
- If we need to reach you, is it OK to leave a message at your home number? Yes No
- Is it OK to contact you at your work number? Yes No

Names and ages of brothers and sisters who live in the home:

Names, ages, and relation of others living in the home*

(* Place a star beside the name of any person living in the home that is has a problem with weight.)

Who does the patient spend most of his/her time with? _____

Where does the patient eat most meals and snacks when not in school? _____

How is the best way to provide health and nutrition education?

___ Verbal ___ Written handouts ___ Pictures ___ Other (Explain: _____)

▪ **School Information**

School: _____

Grade: _____ Homeroom Teacher: _____

School Nurse: _____

Approve for School Nurse to measure height, weight, and BMI at school? ___ Yes ___ No

How are your child's grades? ___ Great ___ Good ___ Fair ___ Poor ___ Failing grade

Has your child's school performance changed this school year:

___ Up ___ Down ___ Stayed the same

How many school days has your child missed this year due to health issues related to being overweight/obese? (This may include sick days and days missed due to doctor visits related to medical issues related to weight problems.) _____ days

How does your child travel to school? ___ School bus ___ Walk ___ Parent drive

How does your child travel from school? ___ School bus ___ Walk ___ Parent drive

What time does your child leave for school? _____ a.m.

What time does your child arrive home from school? _____ p.m.

Does your child receive a special diet at school? ___ Yes ___ No

If yes, what is this diet? _____

Does your child receive free or reduced meals at school? ___ Yes ___ No

___ Breakfast ___ Lunch ___ Carries lunch from home ___ Purchases extra food in cafeteria

___ Skips ___ Other (Explain: _____)

If no, explain _____

Psychosocial Information

- Some people gain weight because something serious or upsetting has happened in their family or to them. Please check if any of these things has happened in your family and note how old your child was when they happened.

			Comments
Divorce	___ Yes (Age: _____)	___ No	_____
Father remarries	___ Yes (Age: _____)	___ No	_____
Mother remarries	___ Yes (Age: _____)	___ No	_____
Change homes (Move)	___ Yes (Age: _____)	___ No	_____
Change schools	___ Yes (Age: _____)	___ No	_____
Family member incarcerated	___ Yes (Age: _____)	___ No	_____
Death of close family member	___ Yes (Age: _____)	___ No	_____
Death of favorite pet	___ Yes (Age: _____)	___ No	_____
Other: _____	___ Yes (Age: _____)	___ No	_____

- If you answered yes to any of the above questions, please explain:
-

Home Environment

A. Assessment of Living Conditions:

House Mobile Home Homeless Shelter Other (Explain: _____)
 Indoor plumbing (*Source of water:* Public/City Private well, tested)
 Working Stove **Working Refrigerator** **Microwave**
 Heating Source: Central (Oil Gas Electric) Space Heater Kerosene
 Woodstove Electric
 Portable electric None
 Cooling: Air Conditioner (Central System Window unit) Fans None

B. Resources for Food:

Food Stamps WIC Food Bank/ Church Pantry Ministry
 Farmers' Market Home garden Other (Explain: _____)
 Where majority of grocery shopping is done? (Store name) _____
 How often do you go grocery shopping? _____
 Who does most of the grocery shopping? _____
 Do you use store/product coupons when grocery shopping? Yes No
 Do you feel you have adequate funds for food? Yes No

C. Transportation:

Own Vehicle Bus/Public Transportation PATS van
 Taxi Neighbor Relative
 Walk Bicycle

D. Lifestyle Habits

Some lifestyle habits can contribute to excessive weight gain. Which habits does your child have?

Eat in front of TV, computer, video games	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Eat while talking on phone	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Eat when others are not watching	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Vomits after eating too much	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Takes laxatives after eating too much	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Eats when bored	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Eats more than 1 serving at a meal or snack	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Eats snacks at unplanned times ("grazing")	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Eats when friends put pressure on him/her	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Eats when family members put pressure on him/her	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Has television in bedroom	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Sleeps less than 8 hours per night	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If less than 8 hours, how many hours? _____		
Has greater than 2 hours of screen time daily	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If yes, how many hours daily? _____		
Eats at least one meal a day as family seated together at a table	<input type="checkbox"/> Yes	<input type="checkbox"/> No
If no, where are meals eaten? _____		

How do you reward your child for his/her accomplishments? _____

Activity and exercise can have an effect on your child's weight. Please check which habits your child has:

Play sports (basketball, soccer, softball, etc.) _____ Yes _____ No

If yes, how often? _____

Exercises (run, walk fast, swim, dance, etc.) _____ Yes _____ No

If yes, how often? _____

Toning exercise (sit ups, toe touches, leg lifts, etc.) _____ Yes _____ No

If yes, how often? _____

If your child has an afternoon of free time, what would he/she do? _____

Does your child participate in afterschool care? _____. If so where? (afterschool program, daycare, babysitter, family members, etc.) _____

Support System: Other people can be helpful with weight management.

Who can be most helpful to you and your child when trying to get to a healthy weight? _____

Who can be least helpful (make it harder)? _____

Outside of your immediate home, which family members or close friends do you have who are overweight or obese? _____

C. Treatment Plan (as they impact nutrition interventions)

III. Diagnostic nutritional assessment

A. Review and interpretation of pertinent laboratory and anthropometric data

Laboratory Data:

Date	Laboratory Test	Value/Results	Comment

Anthropometric Data:

Date	Height (cm/inches)	Height/Age Percentile	Weight (kg/pounds)	Weight/Age Percentile	BMI	BMI Percentile	Comments

Waist Circumference: inches _____ cm: _____

Blood Pressure: Systolic ___ Diastolic ___ Blood Pressure Percentile for age and gender: _____

Degree of Obesity (based on BMI Grid):

- Normal weight
 Overweight
 Obese
 > 99th percentile

Estimated Ideal Body Weight (IBW):

IBW @ 50th percentile: _____ kg

Percent of IBW: _____ %

Adjusted IBW @ 85th percentile: _____ kg

Percent adjusted IBW: _____ %

Stage of intervention/treatment:

- Step 1
 Step 2
 Step 3
 Stage 1
 Stage 2
 Stage 3
 Stage 4

B. Analysis of dietary and nutrient intake (include physical activity/screen time)*Usual Food Intake****Week Day***

Breakfast Time:	AM Snack Time:	Lunch Time:	PM Snack Time:	Dinner Time:	HS Snack Time:

Weekend Day

Breakfast Time:	AM Snack Time:	Lunch Time:	PM Snack Time:	Dinner Time:	HS Snack Time:

Some eating habits can cause weight gain. Please check which habits your child has:

- Eat breakfast Yes No
 Eat lunch Yes No
 Eat more than 3 snacks per day Yes No
 Skips breakfast Yes No
 Skips lunch Yes No

Skips dinner _____ Yes _____ No
 Drinks 2 or more servings of sweet drinks/day (8 oz) _____ Yes _____ No
 Type: ___Sweet Tea ___Soda ___Kool-Aid ___Fruit Drink/Punch
 Drinks 2 or more 4 ounce servings of 100% juice/day _____ Yes _____ No
 How often eating fast food each week: _____ day(s)
 Typical place and meal: _____

Nutrition Diagnosis

American Dietetic Association Nutrition Diagnostic Terminology for Overweight Children

***Note the codes provided below are suggestions. Assess for appropriateness and revise/add as necessary.**

Intake Domain	Clinical Domain	Behavior/Environmental Domain
Energy Balance: Excessive energy intake NI- 1.5	Weight: Overweight/obesity NC -3.3	Knowledge and Beliefs: Food and nutrition related knowledge deficit NB- 1.1
Nutrient: Imbalance of nutrients NI- 5.5	Weight: Involuntary weight gain NC -3.4	Knowledge and Beliefs: undesirable food choices NB- 1.7
Fat and Cholesterol: Excessive fat intake NI -5.6.2		Physical activity: physical activity NB -2.1
Protein: Excessive protein intake NI -5.7.2	Altered nutrition related laboratory values NC- 2.2	Food safety and access: limited access to food NB- 3.2
Carbohydrate: Excessive carbohydrate intake NI- 5.8.2		
Inappropriate intake of types of carbohydrate NI- 5.8.3		
Inconsistent carbohydrate NI- 5.8.4		
Inadequate fiber intake NI -5.8.5		

#1 Problem: _____
 Etiology: _____
 Signs/Symptoms: _____

#2 Problem: _____
 Etiology: _____
 Signs/Symptoms: _____

B. Determination of nutrient-drug interactions

C. Assessment of feeding skills and methods – structured feeding

IV. Development of an individualized nutrition care plan

1. *Recommendations for nutrient and calorie modification:*

Estimated energy needs: _____ calories per day

Estimated protein needs: _____ grams per day (_____ % protein)

Estimated carbohydrates needs: _____ grams per day (_____ % CHO)

Estimated fat needs: _____ grams per day (_____ % fat)

Nutrition Prescription: _____

American Dietetic Association Nutrition Intervention Terminology for Overweight Children

*Note the codes provided below are suggestions. Assess for appropriateness and revise/add as necessary.

Food and/or Nutrient Delivery	Nutrition Education	Nutrition Counseling	Coordination of Nutrition Care
Meals and snacks: General Healthful Diet ND 1.1	Initial/Brief Nutrition Education: Purpose of the nutrition education E 1.1	Theoretical Basis/Approach: Cognitive-Behavioral Theory C 1.2	Coordination of other care during nutrition care: Team Meeting RC 1.1
Meals and snacks: Modify distribution, type or amount of food and nutrients within meals or at a specified time ND 1.2	Initial/Brief Nutrition Education: Priority Modifications E 1.2	Theoretical Basis/approach Health Belief Model C 1.3	Coordination of other care during nutrition care: Collaboration/referral to other providers RC 1.3
Meals and snacks: Specific foods/beverages ND 1.3	Comprehensive Nutrition Education: Purpose of nutrition education E 2.1	Strategies: Motivational Interviewing: C 2.1	Coordination of Care during nutrition care: Referral to community agencies/programs RC 1.4
Vitamin and Mineral Supplements: Mineral:Calcium ND 3.2.4	Comprehensive Nutrition Education: Recommended Modifications E2.1	Strategies: Self Monitoring C 2.3	
		Strategies: Goal setting C 2.2	

2. *Calculation of a therapeutic diet for certain disease states (i.e. diabetes, renal disease):*

Calculation needed for therapeutic diet? _____

If yes, describe: _____

Suggested Meal Plan:

Grains: _____ ounces/day (total)

- whole grains: _____ ounces/day

Fruit: _____ cups/day

Dairy: _____ cups/day

Vegetables: _____ cups/day

Meat & Beans: _____ ounces/day

Fats/Oils: _____ tsp / tbsp (circle)

Sweets / Extras: _____ calories/day

3. Referral to other health care providers:

<i>Name of Agency</i>	<i>Date of Contact</i>	<i>Reason for Referral</i>

E. Counseling on nutritional/dietary management of nutrition-related medical conditions

Intervention #1: _____

Goal (s): _____

Intervention #2:

Goal (s): _____

Nutrition Monitoring and Evaluation

American Dietetic Association Nutrition Monitoring and Evaluation Terminology for Overweight Children

*Note the codes provided below are suggestions. Assess for appropriateness and revise/add as necessary.

Nutrition Related Behavioral-Environmental Outcomes	Food and Nutrient Intake Outcomes	Nutrition Related Physical Sign/Symptom Outcomes	Nutrition Related Patient/Client Centered Outcomes
Beliefs and Attitudes: Readiness to change: BE 1.1.1	Energy Intake: Total energy intake: FI 1.1.1	Body composition/Growth: Body Mass Index (BMI): S 1.1.1	Nutrition Quality of Life: Psychological factors: PC 1.1.3
Food and Nutrition Knowledge: Level of knowledge: BE 1.2.1	Food intake: Number of food group servings: FI 2.2.2	Body Composition/Growth: Weight/weight change: S 1.1.4	Nutrition Quality of Life: Self image: PC 1.1.4
Behavior: Ability to plan meals/snacks : BE 2.1.1	Fat and cholesterol intake: total fat: FI 5.1.1	Glucose Profile: Glucose, fasting: S 2.5.1	Nutrition Quality of Life: Self efficacy: PC 1.1.5
Behavior: Ability to select healthful meals/food: BE 2.3.1	Carbohydrate intake: sugar : FI 5.3.2	Lipid Profile: Cholesterol S 2.6.1	Nutrition Quality of Life: Social/interpersonal factors: PC 1.1.6
Goal Setting: goal setting ability : BE 2.5.1	Carbohydrate intake: total carbohydrates : FI 5.3.1	Lipid Profile: HDL cholesterol (S 2.6.2); LDL cholesterol (S 2.6.3)	Nutrition Quality of Life: Nutrition quality of life score: PC 1.1.7
Self Monitoring: self monitoring ability: BE 2.81	Fiber intake: total fiber: FI 5.4.1	Lipid profile: Triglycerides: S 2.6.4	
Physical Activity: consistency and frequency: BE 4.3.1	Mineral/element intake: 6.2	Respiratory Quotient: RQ : S 2.10.1	

F. Consultation with the recipient's primary care provider

Name of Health Care Team Member	Date of Contact	Primary Care Provider (yes / no)	Method of Contact (i.e. fax, mail, phone)

G. Education on reading food labels

Handout Used: _____ **Date:** _____

List of handouts given: _____

Counselor's Signature _____

Date _____ **Unit (s),** _____ **Minutes**

ICD-9 Codes: _____

Eating Disorders

DSM-IV 307.50 Eating Disorders, Not Otherwise Specified

Binge Eating Disorder: recurrent episodes of binge eating in the absence of the regular use of inappropriate compensatory behaviors characteristic of Bulimia Nervosa

Research Criteria for Binge-Eating Disorder

- Recurrent episodes of binge-eating, characterized by both of the following:
 - Eating in a discrete period of time (e.g., within any 2-hour period), an amount of food that is definitely larger than most people would eat in a similar period of time under similar circumstances;
 - A sense of lack of control over eating during the episode (e.g., a feeling that one cannot stop eating or control what or how much one is eating).
- The binge-eating episodes are associated with three (or more) of the following:
 - Eating much more rapidly than normal;
 - Eating until uncomfortably full;
 - Eating large amounts of food when not feeling physically hungry;
 - Eating alone because of being embarrassed by how much one is eating;
 - Feeling disgusted with oneself, depressed, or very guilty after overeating
- Marked distress regarding binge-eating is present.
- The binge-eating occurs, on an average at least 2 days for a week for 6 months.
Note: the method of determining frequency differs from that used for bulimia nervosa; future research should address whether the preferred method of setting a frequency threshold is counting the number of days on which binges occur or counting the number of episodes of binge eating.
- The binge-eating is not associated with regular use of inappropriate compensatory behaviors (e.g., purging, fasting, excessive exercise) and does not occur exclusively during the course of anorexia nervosa or bulimia nervosa.

Adapted from ADA Pediatric Manual of Clinical Dietetics, 2nd Ed, Figure 17.3 DSM-IV-TR Criteria for Eating Disorder Not Otherwise Specified and Proposed Research Criteria for Binge-Eating Disorder.

Provisional research criteria for diagnosing BED in children:

- A. Recurrent episodes of binge eating. An episode of binge eating is characterized by both of the following:
 - 1. Food seeking in absence of hunger (e.g. after a full meal)
 - 2. A sense of lack of control over eating (e.g., endorse that, “When I start to eat, I just can’t stop.”)
- B. Binge episodes are associated with one or more of the following:
 - 1. Food seeking in response to negative affect (e.g., sadness, boredom, restlessness)
 - 2. Food seeking as a reward
 - 3. Sneaking or hiding food
- C. Symptoms persist over a period of 3 months
- D. Eating is not associated with the regular use of inappropriate compensatory behaviors (e.g., purging, fasting, excessive exercise) and does not occur exclusively during the course of anorexia or bulimia nervosa

Marcus MD, Kalarchian MA. Binge eating in children and adolescents. *Int J Eat Disord* 2003;34(Suppl):S47-S57.

Children's binge eating disorder scale	
<u>Item</u>	<u>Response Choice</u>
1. Do you ever want to eat when you are not even hungry?	Yes/No
2. Do you ever feel that when you start eating you just cannot stop?	Yes/No
3. Do you ever eat because you feel bad, sad, bored, or any other mood?	Yes/No
4. Do you ever want food as a reward for doing something?	Yes/No
5. Do you ever sneak or hide food?	Yes/No
6. How long have you been doing this? (transformed to weeks)	Yes/No
7. Do you ever do anything to get rid of the food you ate?	Yes/No

BED criteria may be met if child responds affirmatively to questions 1 and 2, and at least one of questions 3, 4, or 5, had symptoms that persisted greater than 3 months (question 6), and answers no to question 7.

Shapiro JR, Woolson SL, et al. Evaluating binge eating disorder in children: development of the children's binge eating disorder scale (C-BEDS). *Int J Eat Disord* 2007; 40:82-89.

SCOFF Questionnaire to Screen for Eating Disorders (Anorexia nervosa or Bulimia nervosa)

- Do you make yourself sick because you feel uncomfortably full?
- Do you worry you have lost control over how much you eat?
- Have you recently gained more than one stone (14 pounds or 6.35 kg) in a 3 month period?
- Do you believe yourself to be fat when others say you are too thin?
- Would you say that food dominates your life?

*One point for every "yes"; a score of ≥ 2 indicates a likely case of anorexia nervosa or bulimia.

Morgan JF, Reid F, Lackey JH. *BMJ* 1999, Dec 4, 319; 1467-8.

Nutrition Diagnosis has three general domains

- Intake
 - Excessive or Inadequate intake compared to requirements (actual or estimated)
- Clinical
 - Medical or physical conditions that are outside normal
- Behavioral-Environmental
 - Relate to knowledge, attitudes, beliefs, physical environment, access to food, or food safety

Writing a PES Statement

- P/Nutrition Diagnostic Label _____
- As Related to (etiology) _____
- As Evidenced by (Signs and symptoms)

An example for pediatric obesity:

Inadequate knowledge of nutrition, related to inability to interpret the nutrition facts label as evidenced by stating there were only 30 calories in a container that had 5 servings of 30 calories each

Excessive calorie intake, related to ad lib juice consumption, as evidenced by a 1 pound weight gain in 1 week.

Evaluating the PES statement

- Can the RD resolve the nutrition diagnosis?
 - Can you envision an intervention that would address the etiology and thus resolve the problem?
 - If not is your intervention targeted to reducing or eliminating the signs and symptoms?
- Does your nutrition assessment data support the Nutrition Diagnosis, etiology, and signs and symptoms?
- Is the etiology listed the “root cause”?
 - (Ask Why 5 times)
- Will measuring the Signs and Symptoms tell you if the problem is resolved?
- Are the Signs and Symptoms specific enough that you can measure/evaluate changes at the next visit to document resolution of the nutrition diagnosis?
- When all things are equal and you have a choice between stating the PES statement using two nutrition diagnosis labels in different domains...you might consider the intake nutrition diagnosis.

For more information, see: American Dietetic Association. Nutrition Diagnosis and Intervention.

Handouts and Worksheets

10 Tips to Help Your Child and Teen Achieve a Healthy Weight



1. **Be a ROLE MODEL.** Eat smart and move more. Your children learn by watching you make healthy choices. Encourage healthy food choices without being overly restrictive.
2. **Limit sugar-sweetened beverages.** Drink water, sugar free beverages, or low fat milk. Sugar-sweetened drinks like soda, sweet tea, Kool-aid, energy and sports drinks provide little or no nutritional value and the extra calories can promote weight gain. Limit 100% fruit juice to less than 6 ounces for kids seven and under, and 12 ounces for older kids.
3. **Eat 5 servings of fruit and vegetables a day.** Aim to eat at least five fruits and vegetables a day. They are great sources of vitamins, minerals, and fiber and make great snacks. Try to include one at every meal and snack.
4. **Eat a healthy breakfast every day.** Eating breakfast has been shown to increase test scores, attendance, and class participation. Help your child be ready to learn by eating a healthy breakfast, not just on test days. Healthy choices include fruit, whole grain cereals and oatmeal, toast, yogurt, low fat milk.
5. **Limit eating out especially fast food.** Fast food is often high in fat, calories, and sodium. Eat family meals—goal of 5-6 times a week. Sit down to eat and turn off the TV while eating. Children and adults are more likely to eat vegetables when eating together at home.
6. **Limit portion sizes.** Be aware of large portions especially when eating out. When you order food, always choose the “kid’s meal,” or small or regular-sized portions. Use the nutrition information about menu items to guide your choices. At home, start with a small portion and offer a second helping only if your child is still hungry and asks for it.
7. **Limit screen time to less than 2 hours a day and no TV in bedrooms.** When your child is watching TV or playing video games, he or she is not using up many calories and is often snacking. Encourage your child to do something active instead like riding a bike, playing basketball or soccer, or dancing.
8. **Engage in 60 minutes of moderate to vigorous activity daily.** Get active with your child—walk, bike, or play together. Encourage your child to get 60 minutes of physical activity each day.
9. **Make sure your child gets a good night’s sleep.** Studies have shown that children who do not get enough sleep are more likely to be overweight. Experts recommend children 18 months-3 years get 12-14 hours, 3-5 years 11-13 hours, 5-12 years 10-11 hours, and teens 9.25 hours per night.
10. **Reward your child with non-food items.** Give your child praise, a hug, buy a new book or toy, or just spend time together!

For more information on how to achieve a healthy weight in children, visit the ECU Pediatric Healthy Weight Research and Treatment Center website at www.ecu.edu/pedsweightcenter

The Stoplight Food Guide

The Stoplight Food Guide lists ANYTIME, SOMETIMES and RARELY foods from each of the food groups.



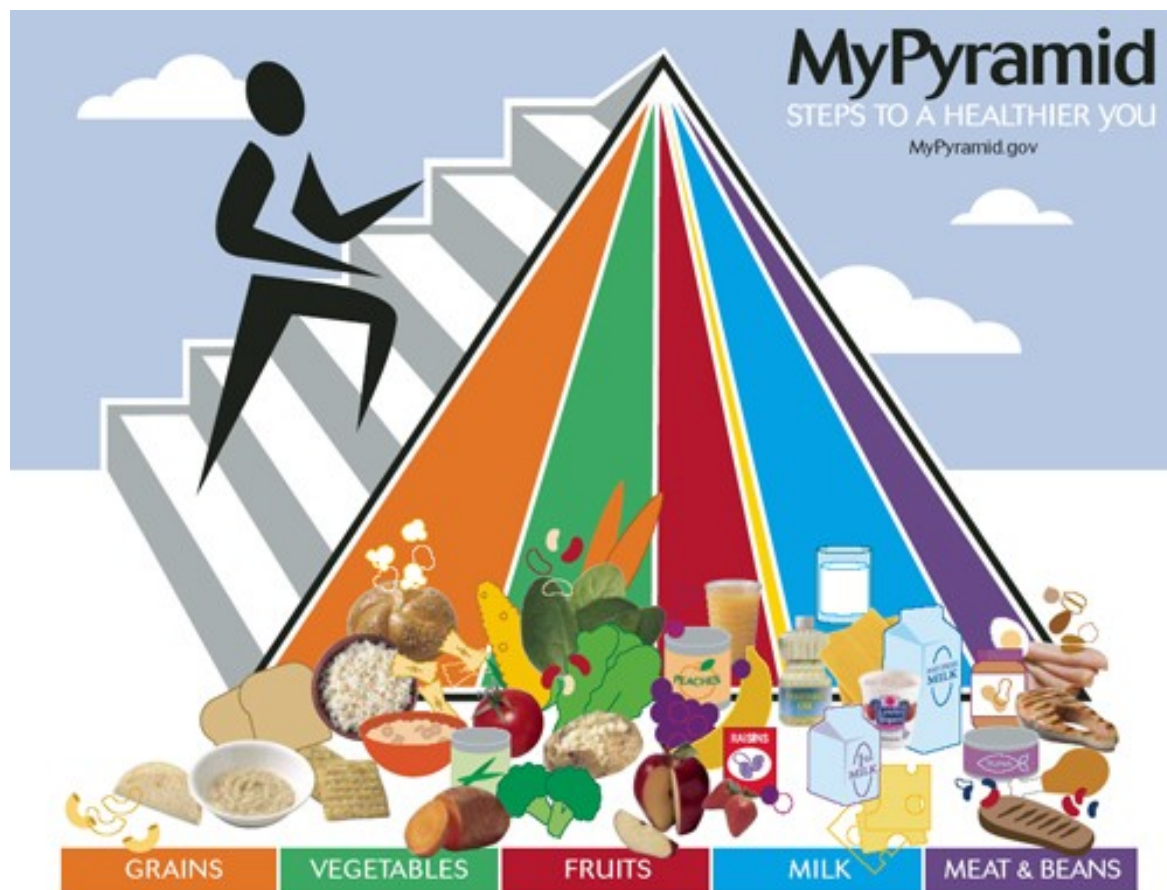
ANYTIME FOODS are part of a healthy diet. Most are low in fat, sugar and calories. They are the best choices within a food group. Try to eat as many of the recommended daily servings from this group as you can. *Keep in mind that portion control is still necessary with these foods to be part of a healthy weight meal pattern.*



SOMETIMES FOODS are high in many nutrients that are needed for good health, but many are also higher in fat, sugar or calories than ANYTIME FOODS. Try to limit these foods to no more than one serving a day from each group.



RARELY FOODS have more fat, sugar and calories than foods on the SOMETIMES or ANYTIME lists. Eat these foods no more than 1-2 times per week.



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Daily Servings

Grains: 5-7 ounce equivalents

Remember to make ½ your grains

1 serving = 1 ounce equivalent

Whole Grains!

1 slice bread, ½ 6 in flour tortilla

1 ounce ready-to-eat cereal

½ cup cooked cereal, rice, pasta, (try for whole wheat)

½ of a bun, English muffin, sub roll, or “mini” (2 in) bagel



Anytime

Bagel (“mini” 2 in) Grits
Oatmeal Plain pasta
English muffin Rice
Fat-free crackers Sub roll
Fat-free muffin Spaghetti
Hamburger bun Hotdog bun
Flour Tortilla (6 in)
Low-sugar cereal (not frosted)
Loaf bread: Whole wheat, White
Wheat, Pita

Sometimes

Low fat: Cereal bars
Granola
Muffins
Crackers
Granola bars

Corn bread (baked) Stuffing
Pancakes Waffles
Sweetened cereal Triscuits
Low fat Macaroni and Cheese

Rarely

Biscuits Regular Granola
Buttered popcorn Muffins
Doughnuts Macaroni & Cheese
Granola bars Breadsticks
Hard taco shell Hush puppies
Townhouse crackers Nabs
Captain Wafers Ritz Crackers

Fruits: 3-4 Servings (1 ½- 2 cups)

1 serving =

½ cup 100% juice*,

1 piece fresh, ¼ cup dried fruit

½ cup canned or fresh

* Limit juice intake to 1-2 servings/day



Anytime

Fresh, frozen or canned fruit or juice, no added sugar

Apples Oranges
Bananas Peaches
Blueberries Pears
Cantaloupe Plums
Grapes Strawberries
Kiwi Watermelon

Sometimes

Canned fruit packed in light syrup
Cranberry juice
Dried fruit
Frozen juice bar
Sweetened applesauce

Rarely

Canned fruit in heavy syrup
Coconut
Fruit cobbler

Daily Servings

Vegetables: 3-5 Servings (1 ½-2 ½ c)

1 serving =

1 cup raw leafy

½ cup chopped, raw or cooked

½ cup vegetable juice

*Remember to 'color' your plate- with green, orange, yellow veggies. Try to add these colors in addition to starchy veggies (like potato) *



Anytime

Fresh, frozen or canned vegetables, no added fat or sugar, steamed or with fat-free cheese

Broccoli	Mushrooms
Butter beans	Mustard greens
Carrots	Okra
Cabbage	Onions
Cauliflower	Peas
Celery	Peppers
Collards	Potato/ Sweet potato
Corn	Spinach
Cucumbers	Squash
Fat-free coleslaw	Swiss chard
Green beans	Tomato
Lettuce	
Tossed salad (no dressing/fat free dressing)	

Sometimes

Coleslaw with low fat mayonnaise
 Potato salad with low fat mayonnaise
 Tossed salad with low fat dressing

 Oven-baked fries

 Broccoli, cauliflower, squash or other veggies with low fat (2%) cheese

Rarely

Vegetables with added fat (fat back, margarine, etc.)
 Vegetables with cheese
Fried vegetables:
 Onion rings, French fries
 Tater tots, hash browns

Vegetable Salads: Tossed Salad with regular dressing, potato salad, coleslaw

Creamed Vegetables:
 Corn, peas, spinach

Dairy: 2-4 Servings (2-4c)

1 serving =

1 cup milk or yogurt

1 cup calcium fortified soy milk

1 ½ ounces cheese, 1/3 c shredded cheese

½ cup frozen yogurt, 1 cup cottage cheese



Anytime

Fat-free and artificially sweetened: pudding, ice cream, and frozen yogurt

Soy milk	Skim milk
Fat-free yogurt	½ - 1% lowfat milk
Fat-free cheese	Lowfat cottage cheese

Sometimes

1% chocolate milk	Low fat pudding
2% milk	Low fat yogurt
Low fat frozen yogurt	Buttermilk
Low fat ice cream	Mozzarella cheese
Reduced fat cheese (2%)	

Rarely

Ice Cream Whole milk

Cheese spreads: Pimiento cheese, Cheez Wiz
Regular cheese: Cheddar, American, Monterey Jack, Colby, Muenster

Daily Servings

Protein: 2-3 Servings (5-7 ounces)

1 serving =

2 ½ to 3 ounces of cooked meat, poultry, or fish

2 eggs 4 oz. tofu

½ cup seeds/nuts 1 cup cooked dried beans

2 tablespoons peanut butter



Anytime

All meats and poultry should be: baked, broiled, boiled, steamed, roasted or grilled.

Dried beans and peas Tofu
 Fish Tuna
 Fat-free hot dogs Turkey
 Ham Veggie (soy) burgers
 Lean beef Vegetarian baked beans
 Lean pork Venison (deer)
 Pinto Beans Egg Whites
 Skinless chicken (in water)

Sometimes

Tuna or chicken salad with Low fat mayonnaise
 Chicken with skin Low fat hot dogs
 Eggs Peanut butter
 Hamburger Baked beans
 Turkey bacon Turkey Sausage
 Turkey Pepperoni Nuts/Seeds
 Hamburger helper with “90/10” ground beef or with ground turkey

Rarely

Tuna or chicken salad with regular mayonnaise
 Bacon Pepperoni
 Bologna Pork BBQ
 Fried Chicken Ribs
 Fried fish Salami
 Hot dogs Vienna sausages
 Tuna packed in oil Sausage
 Treet or Spam (potted) meat
 Hamburger Helper

Other Foods are not needed for healthy diet, but add enjoyment to eating. There are no recommended serving sizes or number of servings a day.

Anytime

Fat-free: margarine, mayonnaise, salad dressing, sour cream, cream cheese, whipped topping.

BBQ sauce Fruit spread
 Butter flavored granules Mustard
 Ketchup Salsa
 Cooking spray Lemon juice
 Vinegar

Sometimes

Low fat: margarine, mayonnaise, salad dressing, sour cream, cream cheese, and whipped topping

Bacon bits Jelly Olives
 Croutons Honey Syrup
 Jam Low fat gravy Guacamole

Rarely

Butter Cream cheese
 Meat grease Sour cream
 Dips Salad dressing
 Fat back Vegetable oil
 Margarine Whipped cream
 Gravy Mayonnaise

Drinks and Snacks can be eaten with or between meals. Remember that all anytime foods make great snacks.

Anytime

Sugar-free: Jell-O, Kool-Aid, diet soda, or plain tea with Equal or Splenda.

Fruits/vegetables Sugar free Gum
 Graham crackers Dill pickles
 Rice cakes Plain popcorn
 Fat-free dips Pretzels
 Flavored water (no sugar added)

Sometimes

Low fat microwave popcorn
 Angelfood cake Ginger snaps
 Low fat cookies Fruit snacks
 Hard candy Low fat desserts
 Fruit roll-ups Jell-O
 Fruit Newtons Low fat toaster-pastries
 Baked chips Vanilla Wafers

Rarely

Cakes Danish
 Regular soda Candy bars
 Doughnuts Sweet tea
 Chocolate Honey buns
 Toaster pastries Cookies
 Pies Tortilla chips
 Corn chips Potato chips
 Turnovers Kool Aid/Punch

El Semáforo de los Alimentos

El semáforo de los Alimentos nos indica alimentos de En cualquier momento, A Veces, y Casi nunca



TODO EL TIEMPO: son parte de una dieta sana. La mayoría son bajos en grasa, azúcar, y calorías. Son la mejor elección dentro de los grupos de alimentos. Trate de comer las más porciones que pueda de las recomendaciones diarias de este grupo.



A VECES: Son altas en muchos nutrientes que se necesitan para una buena salud, pero algunos tienen contenido más alto de grasa, azúcar, y caloría que los del grupo TODO EL TIEMPO. Trate de limitar estos alimentos a no más de una porción por día por grupo.



CASI NUNCA: Estos alimentos tienen más grasa, azúcar, y calorías que los de TODO EL TIEMPO, A VECES. Coma estos alimentos no más de 1 a 2 veces por semana.



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Porción Diaria:

Granos o Cereals: 5-7onzas

1 porción = 1 onza

1 rebanada de pan, ½ 6in tortilla

1 onza de cereal instantáneo

½ taza de cereal, arroz o pasta cocidos

½ de un bollo, madalena (muffin), panecillo redondo (“mini”) (bagel) o pan dulce (roll).



Todo el Tiempo

Panecillo redondo (2in-”mini”)
 Pita Palitos de pan
 Pasta Spaghetti
 Galletas sin grasa
 Madalena (muffin) sin grasa
 Sémola Pan alargado
 Pan para hamburguesa
 Pan para hot dog Tortilla de maiz
 Cereal bajo en azucar (no escarchado)
 Rebanada de pan
 Avena Arroz (sin aceitar)

A Veces

Bajo en grasa: Barra de cereal
 Granola
 Madalena (muffin)
 Galletas
 Barra de granola
 Pan de maiz
 Waffles (Gofres)
 Hot cakes or Panqueques
 Rellenos (por ejemplo el del pavo)
 Cereal endulzado
 Triscuits

Casi Nunca

Bizcocho
 Palomitas con mantequilla
 Captain Wafers
 Donas
 Granola
 Granola en barra
 Tacos duros
 Hush Puppies
 Madalena
 Nabs
 Galletas Ritz
 Galletas Townhouse

Frutas: 3-4 Porciones (1 ½- 2 taza)

1 porción =

½ taza de jugo* (4-6 onzas)

1 trozo de fruta fresca

½ taza fruta enlatada

¼ taza de fruta seca

*limit 1-2 por dia



Todo el Tiempo

Fruta fresca, congelada o enlatada o jugo, sin agregar azúcar

Manzanas Naranjas
 Plátanos Duraznos
 Arándanos azules Peras
 Ciruelas Melón
 Uvas Fresas
 Kiwi Sandia

A Veces

Fruta enlatada en miel (almibar) clara
 Jugo de arándano
 Fruta seca
 Barra de jugo congelada
 Mermelada de manzana endulzada

Casi Nunca

Fruta enlatada en miel (almibar) espesa
 Coco
 Pies (tortas) de fruta

Porción Diaria:

Vegetales: 3-5 porciones (1 ½-2 ½ tazas)

1 porción =

½ taza de vegetal picado, crudo, o cocido

1 taza de vegetal de hojas crudas

½ taza de jugo



Todo el Tiempo

Vegetales frescos, congelados o enlatados, sin agregar grasa o azúcar

Brócoli	Okra
Champinones/hongos	Col
Frijoles blancos, portoto de manteca (sin aceitar)	Zanahorias
Chicharos (guisantes, arvejas)	Apio
Elote o mazorca de maíz	Espinaca
Pepinos	Pimientos/Chiles
Ensalada de col sin aderezo	Tomate
Ejotes, habichuelas ternas	Papa
Coliflor	Calabacita
Jicama	Acelgas
Berzas	Cebolla

A Veces

Ensalada de col con mayonesa baja en grasas
Papas horneadas en lugar de fritas

Ensalada de papa con mayonesa baja en grasas
Ensalada con aderezo de bajas calorías

Casi Nunca

Vegetales a los que se les agrega grasa (mantequilla, margarina, etc.)

Vegetales con queso

Vegetales Fritos:

Anillos de cebolla, papas fritas, tator tots, paps de desmenuzadas, frijoles fritos

Ensalada de Vegetales: ensalada con aderezo regular, ensalada de papa y ensalada de col.

Vegetales con Crema:

Elote (maíz), chicharos espinaca

Lácteos : 2-4 porciones (2-4 tazas)

1 porción =

1 taza de leche o yogurt (8 onzas)

1 taza de leche de soya fortificada con calcio

1 ½ onzas de queso

1 taza de requesón

½ taza de yogurt congelado



Todo el Tiempo

Pudines, helado y yogurt congelado, libres de grasa y endulzados con edulcorantes

Yogurt sin grasa	Leche de soya
Queso sin grasa	Leche sin crema
Requesón bajo en grasa	
Leche baja en grasa al ½ o 1%	

A Veces

Leche con chocolate al 1%
Leche 2%
Yogurt congelado bajo en grasas
Helado bajo en grasas
Pudín bajo en grasas
Queso mozzarella
Queso reducido en grasas

Casi Nunca

Leche entera
Helado

Queso para untar: Pimiento cheese, Cheeze Wiz

Queso normal: Cheddar, Americano, Monterrey Jack, Colby, Muenster

Porción Diaria:

Proteínas: 2-3 porciones (5-8 onzas)

- 1 porción =
- 2 ½ to 3 onzas de carne, aves o pescados cocidos
- 2 huevos
- ½ taza de nueces
- 2 cucharadas de mantequilla de cacahuete
- 1 taza de frijoles cocidos
- 4 onzas alimento hecho de soya (de tofu)



Todo el Tiempo	A Veces	Casi Nunca
Todos las carnes y aves deben ser: asadas, horneadas, cocidas, rostizadas, o hechas al vapor Frijoles y chícharos secos Atún Pescado Frijoles vegetarianos Hot dogs sin grasa Pavo Jamon Hamburgurguesas de soya Carne sin grasa Venado Puerco sin grasa Clara de huevos Pollo sin piel hervido Frijoles pintos	Ensalada de pollo o atún con mayonesa baja en grasas Pollo con piel Huevos Hamburguesas Hot dog bajo en grasa Mantequilla de cacahuete Frijoles horneados	Ensalada de polla o atun con mayonesa regular Tocina Pepperoni Salchicha Puerco a la barbacoa Pollo frito Costillas Pescado frito Salami Hot dogs Chorizo Atun enlatado en aceite

Otros Alimentos: Estos no son necesarios para un dieta sana, pero el comerlos nos agrega placer y sabor. No hay recommendations en la cantidad y tamaño de las porciones diarias.

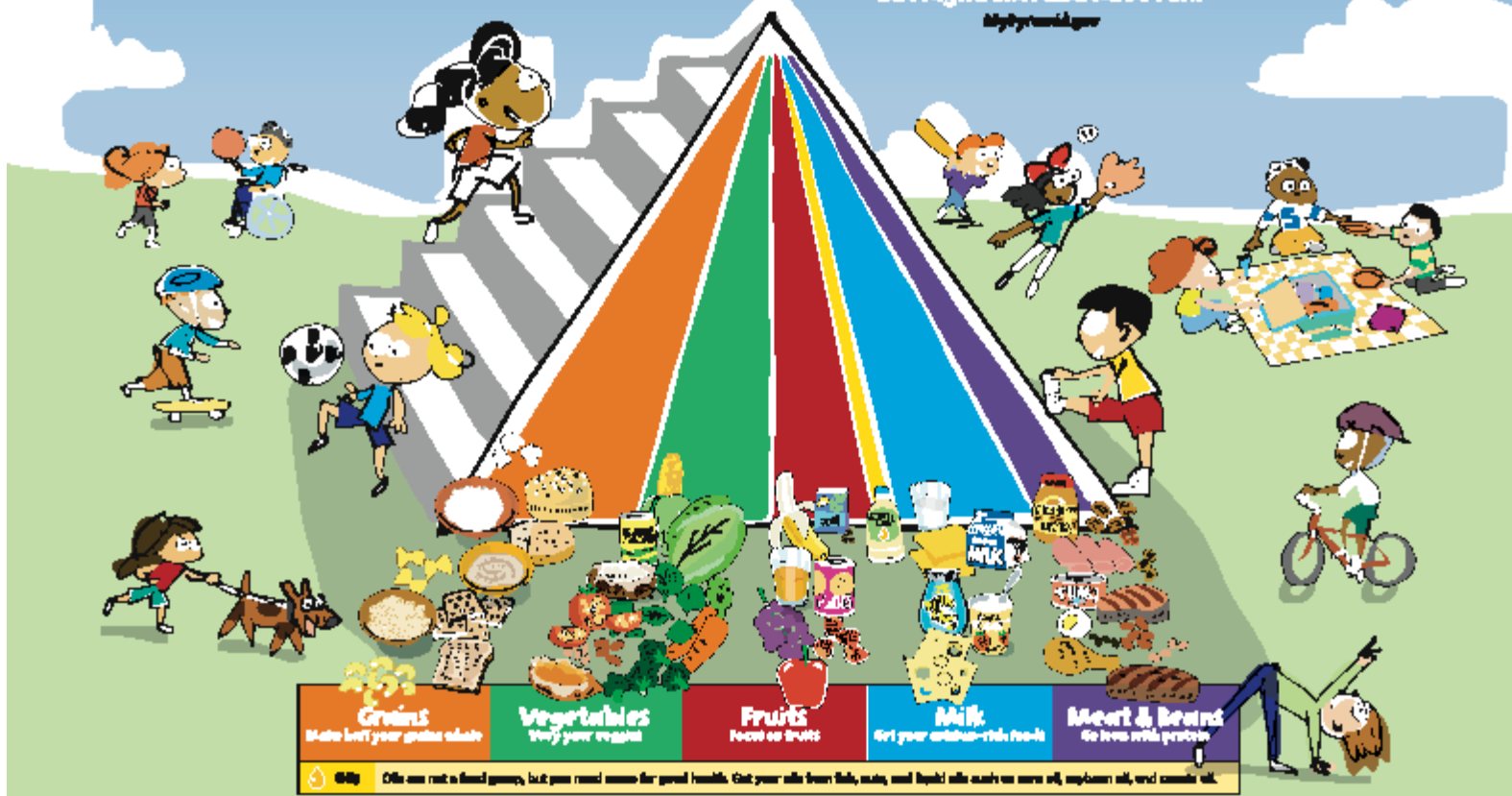
Todo el Tiempo	A Veces	Casi Nunca
Sin grasa: Margarina, mayonesa, aderezo, crema, queso crema, crema batida sin grasa Salsa de barbacoa Salsa Gránulos con sabor a mantequilla Ketchup Mostaza Spray para concinar Frutas para untar Vinagre Jugo de limon	Baja en grasa: Margarina, mayonesa, aderezo, crema, queso crema, y crema batida baja en grasa Trozo de tocino Miel Crotones Salsa baja en grasa Mermelada Aceitunas Jalea Almíbar Guacamole	Mantequilla Grasa de la carne Queso crema Aderezo Dips Margarina Crema agria Grasa Aceite vegetal Gravy (salsa) Crema batida Mayonesa

Bebidas Y Bocadillos: Puedan ser ingeridos entre comidas. Recuerde que todos los alimentos aparecen en la lista **Todo el Tiempo** son magnificos bocadillos.

Todo el Tiempo	A Veces	Casi Nunca
Sin Azucar: Gelatina (Jell-O), Kool-Aid, Soda dieta, o te endulzado con sacarina (Equal o Splenda) Frutas y vegetales Chicle sin azucar Galletas Graham Pepinos encurtidos Pasteles de arroz Palitos salados Agua con sabor , sin azucar Salsa para mojar sin grasa	Pastel Angel Food Postres bajos en grasas Galletas bajas en grasa Gelatina Dulces Pastelitos bajos en grasa Rollos de fruta Ponche/refrescos de fruta Galletas rellenas de fruta Galletas de jengibre Papapitas horneadas Chiclosos de fruta	Kool-Aid Pastel dulce de hojaldre Pasteles Golosina en barra Refrescos regulares Donas Te endulzado Chocolate Bollos de miel Reposteria para tostar Pies Tortilla chips Papitas de maiz Papitas Empanada/hojaldre Galletas

MyPyramid ^{For Kids}

Eat Right. Exercise. Have Fun.
 mypyramid.gov



★ Find your balance between food and fun ★ Fat is not sugar — lower your fats

<http://mypyramid.gov/>



TIPS FOR FAMILIES



EAT RIGHT

- 1 Make half your grains whole.** Choose whole-grain foods, such as whole-wheat bread, oatmeal, brown rice, and lowfat popcorn, more often.
- 2 Vary your veggies.** Go dark green and orange with your vegetables—eat spinach, broccoli, carrots, and sweet potatoes.
- 3 Focus on fruits.** Eat them at meals, and at snack time, too. Choose fresh, frozen, canned, or dried, and go easy on the fruit juice.
- 4 Get your calcium-rich foods.** To build strong bones serve lowfat and fat-free milk and other milk products several times a day.
- 5 Go lean with protein.** Eat lean or lowfat meat, chicken, turkey, and fish. Also, change your tune with more dry beans and peas. Add chick peas, nuts, or seeds to a salad; pinto beans to a burrito; or kidney beans to soup.
- 6 Change your oil.** We all need oil. Get yours from fish, nuts, and liquid oils such as corn, soybean, canola, and olive oil.
- 7 Don't sugarcoat it.** Choose foods and beverages that do not have sugar and caloric sweeteners as one of the first ingredients. Added sugars contribute calories with few, if any, nutrients.



EXERCISE

- 1 Set a good example.** Be active and get your family to join you. Have fun together. Play with the kids or pets. Go for a walk, tumble in the leaves, or play catch.
- 2 Take the President's Challenge as a family.** Track your individual physical activities together and earn awards for active lifestyles at www.presidentschallenge.org.
- 3 Establish a routine.** Set aside time each day as activity time—walk, jog, skate, cycle, or swim. Adults need at least 30 minutes of physical activity most days of the week; children 60 minutes everyday or most days.
- 4 Have an activity party.** Make the next birthday party centered on physical activity. Try backyard Olympics, or relay races. Have a bowling or skating party.
- 5 Set up a home gym.** Use household items, such as canned foods, as weights. Stairs can substitute for stair machines.
- 6 Move it!** Instead of sitting through TV commercials, get up and move. When you talk on the phone, lift weights or walk around. Remember to limit TV watching and computer time.
- 7 Give activity gifts.** Give gifts that encourage physical activity—active games or sporting equipment.

HAVE FUN!



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Phrases that *HELP* and *HINDER*

As the caregiver, you play the biggest role in your child's eating behavior. What you say has an impact on developing healthy eating habits. Negative phrases can easily be changed into positive, helpful ones!



Phrases that *HINDER*

INSTEAD OF ...

Eat that for me.
If you do not eat one more bite, I will be mad.

Phrases like these teach your child to eat for your approval and love. This can lead your child to have unhealthy behaviors, attitudes, and beliefs about food and about themselves.

INSTEAD OF ...

You're such a big girl; you finished all your peas.
Jenny, look at your sister. She ate all of her bananas.
Your have to take one more bite before you leave the table.

Phrases like these teach your child to ignore fullness. It is better for kids to stop eating when full or satisfied than when all of the food has been eaten.

INSTEAD OF ...

See, that didn't taste so bad, did it?

This implies to your child that he or she was wrong to refuse the food. This can lead to unhealthy attitudes about food or self.

INSTEAD OF ...

No dessert until you eat your vegetables.
Stop crying and I will give you a cookie.

Offering some foods, like dessert, in reward for finishing others, like vegetables, makes some foods seem better than others. Getting a food treat when upset teaches your child to eat to feel better. This can lead to overeating.

Phrases that *HELP*

TRY ...

This is kiwi fruit; it's sweet like a strawberry.
These radishes are very crunchy!

Phrases like these help to point out the sensory qualities of food. They encourage your child to try new foods.

TRY ...

Is your stomach telling you that you're full?
Is your stomach still making its hungry growling noise?
Has your tummy had enough?

Phrases like these help your child to recognize when he or she is full. This can prevent overeating.

TRY ...

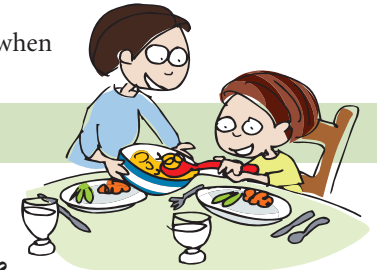
Do you like that?
Which one is your favorite?
Everybody likes different foods, don't they?

Phrases like these make your child feel like he or she is making the choices. It also shifts the focus toward the taste of food rather than who was right.

TRY ...

We can try these vegetables again another time. Next time would you like to try them raw instead of cooked?
I am sorry you are sad. Come here and let me give you a big hug.

Reward your child with attention and kind words. Comfort him or her with hugs and talks. Show love by spending time and having fun together.



What does a Serving Size look like?

Fruit: 1 medium fruit is equal to the size of a baseball



Vegetables: 1/2 cup cooked is the size of a computer mouse



Pasta: 1/2 cup cooked is the size of a computer mouse

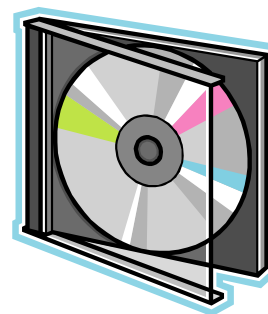
Cheese: 1 ounce, or the size of 2 dice



Meat, Poultry, or Fish: 3 ounces is the size of a deck of cards or a small box of crayons



Bread: 1 ounce is the size of a CD case



Peanut Butter: 2 Tbsp is the size of a ping-pong ball



The Plate Method

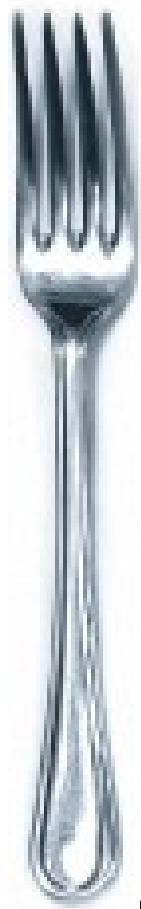
Beverage:

1/2 Fruits & Vegetables



**1/4 Grains/
Starch**

**1/4
Protein**



Daily Servings and Portion Sizes for the Preschool-aged Child

Food Group	Recommended Daily Servings	Portion Size Guideline	
		1-3 years	4-5 years
Grain Group ❖ Choose whole grain, whole wheat or white wheat breads and cereals. Bread Buns, bagels, muffins Crackers Dry cereal Cooked cereal Rice, pasta Biscuits	≥ 6 servings	1/4-1/2 slice 1/4-1/2 2-3 1/4-1/3 cup 1/4-1/3 cup 1/4-1/3 cup 1/2 small (3-inch biscuit)	1 slice 1/2 4-6 1/2 cup 1/2 cup 1/2 cup 1 small (3-inch biscuit)
Fruit/Vegetable Group <i>Examples: Citrus fruits, kiwi, pineapple, melon, berries, apples, broccoli, sweet potatoes, greens, green beans, tomatoes, etc.</i> Whole Cooked, canned in own juice, or chopped raw 100% fruit juice (unsweetened) ❖ No more than half of servings should come from juice. ❖ We do not recommend fruit drinks such as Sunny D, Hi-C, Hawaiian Punch, Jungle Juice, Bright n' Early, lemonade.	≥ 5 servings	1/2 small 1/4-1/3 cup 1/4-1/3 cup	1/2-1 small 1/2 cup 1/2 cup
Milk, Yogurt, or Cheese Group Milk , yogurt Cheese	≥ 3 servings	1/2 cup (4 oz) 1/2 oz	3/4 cup (6 oz) 3/4 oz
Meat Group Lean meat, chicken, fish Dry beans and peas Egg Peanut butter	2 servings	1-3 Tbsp 2-4 Tbsp 1 1 Tbsp	1-3 Tbsp 4-5 Tbsp 1 1-2 Tbsp
Fat and Oils Group Margarine, butter, oils	3-4 servings	1 tsp 1 Tbsp "light"	1 tsp 1 Tbsp "light"

Adapted from American Dietetics Association Pediatric Nutrition Manual, "Nutrition for the Preschool Child." 2nd edition, 2003.



Recommended Total Daily Amounts for Children Ages 1-8 years

Food Group	1 year	2-3 years	4-8 years
Fat Free or Low Fat Milk or Yogurt	16 oz* (2 cups)	16 oz (2 cups)	24 oz (3 cups)
Cheese (1 ounce of cheese is equivalent to 1 cup of milk)			
*The American Academy of Pediatrics recommends that low-fat/reduced fat milk not be started before age 2.			
Lean Meat/Beans Girls Boys	1.5 oz	2 oz	3 oz 4 oz
Vegetables Girls Boys	$\frac{3}{4}$ cup	1 cup	1 cup 1.5 cups
Fruits Girls and Boys	1 cup	1 cup	1.5 cups
Grains** Girls Boys	2 oz	3 oz	4 oz 5 oz

**1 oz = 1 slice bread  = 1 cup dry cereal  = $\frac{1}{2}$ cup cooked cereal, rice or pasta 

Adapted from Gidding et al. Dietary Recommendations for Children and Adolescents: A Guide for Practitioners. *Pediatrics* 2006;117;544-559.



Younger Children Need Smaller Amounts...Give your child age-appropriate portions.

SAMPLE MENU FOR THE 1- TO 2-YEAR-OLD CHILD

<p>BREAKFAST Whole milk (1/2 cup) Oatmeal (1/3 cup) Mandarin Oranges (1/4 cup) Margarine (1/2 tsp) Whole-wheat toast (1 slice) Jam or fruit spread (optional)</p>	<p>LUNCH Whole milk (1/2 cup) Grilled cheese Sandwich (1/2) Cooked carrots (2 Tbsp) Banana (1/2)</p>	<p>DINNER Whole milk (1/2 cup) Chicken (1 ½ oz) Gravy (2 Tbsp) Dinner roll (1) Cooked peas (2 Tbsp) Margarine (1/2 tsp) Mashed potatoes (2 Tbsp)</p>
<p>MIDMORNING SNACK Vanilla Wafers (2) Orange Juice (1/2 cup or 4 oz)</p>	<p>MIDAFTERNOON SNACK Fruit yogurt (1/2 cup) Bug Bites or animal crackers (3-4) Water</p>	<p>EVENING SNACK Applesauce (1/4 cup) Graham Crackers (2 squares) Whole milk (1/2 cup)</p>

SAMPLE MENU FOR THE 2- TO 3-YEAR-OLD CHILD

<p>BREAKFAST Skim, 1% low-fat milk (1/2 cup) Oatmeal (1/3 cup) Mandarin Oranges (1/4 cup) Margarine (1/2 tsp) Whole-wheat toast (1 slice) Jam or fruit spread (optional)</p>	<p>LUNCH Skim, 1% low-fat milk (1/2 cup) Grilled cheese sandwich (1/2) Cooked carrots (2 Tbsp) Banana (1/2)</p>	<p>DINNER Skim, 1% low-fat milk (1/2 cup) Chicken (1 ½ oz) Gravy (2 Tbsp) Dinner roll (1) Cooked peas (2 Tbsp) Margarine (1/2 tsp) Mashed potatoes (2 Tbsp)</p>
<p>MIDMORNING SNACK Vanilla Wafers (2) Orange Juice (1/2 cup or 4 oz)</p>	<p>MIDAFTERNOON SNACK Fruit yogurt (1/2 cup) Bug Bites or animal crackers (4-5) Water</p>	<p>EVENING SNACK Applesauce (1/4 cup) Graham Crackers (2) Skim, 1% low-fat milk (1/2 cup)</p>

SAMPLE MENU FOR THE 4- TO-5-YEAR-OLD CHILD

<p>BREAKFAST Skim, 1% low-fat milk (1/2 cup) Ready-to-eat low-sugar cereal (1/2 cup) Mandarin Oranges (1/2 cup) Margarine (1/2 tsp) Whole-wheat toast (1 slice) Jam or fruit spread (optional)</p>	<p>LUNCH Skim or 1% low-fat milk (1/2 cup) Peanut butter and jelly sandwich (whole) Carrot sticks (1/3 cup) Banana (1 small)</p>	<p>DINNER Skim or 1% low-fat milk (1/2 cup) Chicken (2 oz) Gravy (3 Tbsp) Dinner roll (1) Cooked peas (1/4 cup) Margarine (1/2 tsp) Mashed potatoes (1/4 cup)</p>
<p>MIDMORNING SNACK Vanilla wafers (3) Orange juice (1/2 cup or 4 oz)</p>	<p>MIDAFTERNOON SNACK Fruit yogurt (1 cup) Bug Bites or animal crackers (6) Water</p>	<p>EVENING SNACK Applesauce (1/2 cup) Part-skim string cheese (3/4 oz) Whole-wheat crackers (5) Skim or 1% low-fat milk (1/2 cup)</p>

Parents & Guardians as Role Models

What can you do?

- Eat smart and move more. Your children will learn by watching you make healthy choices.
- Try new foods with your child
- Eat meals as a family
- Eat lunch with your child at school
- Get active with your child (walk, bike, play)
- Provide meals with foods from each food group
- Reward your child with non food items
 - Give them praise!!!
 - Take them to the movies
 - Buy them a book or tape of their choice
- Talk to your child about healthy eating
- Keep healthy snacks in your house
- Limit fast food and restaurant meals
- Limit time in front of the T.V.
 - 2 hours per day maximum
- Eat at the kitchen table and turn the TV off when eating
- Avoid criticizing or name calling
- Try to turn negatives into positives
 - Example: If your child wants to eat a candy bar and soda for a snack
 - Negative response: “You shouldn’t eat that because you are going to get fat”
 - Positive response: “How about a granola bar that has chocolate chips and a flavored water or milk”



My Goals as a Parent or Guardian:

1. _____

2. _____

3. _____

Signature: _____

Date: _____

Think Before You Drink!!!

Q. Can some drinks cause me to gain too much weight?

A. YES!! Drinks sweetened with sugar give your body calories but no nutrition from protein, vitamins and minerals.

WHAT YOU SHOULD DRINK:

LOW-FAT MILK (1% or Skim)

2-3 cups (3-9 yrs)

3-4 cups (≥ 10 yrs)



Enjoy Milk:

- * with meals
- * on low sugar cereals
- * in hot beverages

Low- or Non-fat Yogurt

- * on the go
- * as a Smoothie

WATER

Drink plenty!!!

Consume at least:

5-6 Cups (1-3 yrs)

7-8 Cups (4-8 yrs)

10-11 Cups (9-18 yrs)

9-13 Cups (18yrs-adults)



Ways to Enjoy Water

- * Keep a water bottle with you: in the car, at work, at school, at home
- * Add a Crystal Light™ or sugar-free drink mix to your water
- * Try low-calorie flavored waters (like Propel™)
- * Encourage children to drink more water: with meals and snacks
- * Drink water before, during, and after being active

Limit Your Juice Intake

Look for 100% juice

No more than **4-6 oz per day** for children 6 months to 7 years

No more than **8-12 oz per day** for children 7 to 18 years

Choose the whole fruit as often as possible:

There's more fiber and often less calories in fresh, frozen, or canned fruit

Think Before You Drink!!!

Use this table to help you choose a smart drink.

1 cup (8 oz)	Calories	Sugars (g)	Calcium (mg)
Water (plain or flavored)	0	0	0
Crystal Light or other sugar –free powders	5	1	0 (some types are fortified)
Milk, Skim	85	12	300
Milk, 2%	130	12	300
G2 Sports Drink	30	8	
Sports Drink- Gatorade	76	19	0
Sweet Tea	90	23	0
100% Orange Juice	105	24	30 (some types are fortified)
Regular Soft Drink/Lemonade	108	27	0
Energy Drink (MonsterEnergy) [™]	100	27	0
Fruit Drinks or Punch	116	29	0
Sunny Delight	130	30	0
Cranberry Cocktail	144	36	7
Sweetened coffee drinks	210-310 with whipped cream: 310-410	36-49	0-100 depends on the amount of added milk

Having one extra cup of a sweetened drink every day for one month can cause your body weight to go up by one pound. That is equal to 12 pounds in one year!!

Eat a Rainbow of Fruits & Veggies

Red - strawberry, watermelon, apple, cherry, cranberry, raspberry, red pepper, red onion, tomato

Yellow/Orange - orange, apricot, mango, nectarine, peach, tangerine, squash, carrot, yellow pepper, pumpkin, corn, sweet potato, cantaloupe, pineapple

White - banana, cauliflower, jicama, mushroom, onion, white potato, shallot, turnip

Green - apple, grape, kiwi, pepper, asparagus, broccoli, green bean, okra, pea, celery, zucchini, cabbage, cucumber, lettuce, spinach, turnip/collard/mustard greens, honeydew

Blue/Purple - blackberry, blueberry, plum, fig, grape, raisin, purple cabbage, eggplant, dried plum

What is a Serving?

A serving of **fruit** equals:

1 medium piece of fruit

3/4 cup (6 oz) of juice

1/4 cup of dried fruit

1/2 c of canned* or frozen fruit

*fruit should be canned in own juices

A serving of **vegetables** equals:

1/2 cup of chopped raw or cooked vegetables

1 cup of raw leafy vegetables



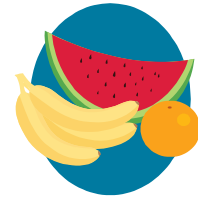
Get your children involved! Teach them how to plan, shop, & prepare for meals & snacks using fruits & vegetables...then let them help out!



Be a positive role model!
Make sure your child sees you eating fruits & veggies. Make positive comments as you serve and eat fruits & veggies.

Fruits & Vegetables provide nutrients such as Vitamin A and C, fiber, and folic acid. Try to eat fruits & vegetables that are different colors to get all the nutrients your body needs to stay healthy!

Healthy Tips



- Fresh, canned, & frozen fruit are all healthy choices. Remember to buy canned fruit that only contains fruit juice, not syrup.
- Many fruit drinks and juices contain added sugar. The best choice is 100% fruit juice. Because of the sugar content, even 100% fruit juice should be limited to 3/4 cup (6 oz) per day. Instead of drinking juice, eat the fruit instead!
- Make fruits & veggies available! Store washed & cut up veggies in the fridge where children can see them. Display a bowl of fresh fruit on the counter. Keep single servings of dried or canned fruit easily accessible for a snack at home or on-the-go.
- Add fruits & veggies to your family's favorites! Offer sliced bananas with cereal. Add chopped veggies or pineapple to pizza. Add carrot slices to chicken noodle soup. Add frozen &/or chopped veggies to casseroles, meatballs, & omelets. Puree veggies & add to spaghetti sauce, chili, or stews.
- Introduce a new vegetable (along with a familiar one) when your child is hungry. Encourage him to try at least one bite. Don't make a big deal about it if he declines. Offer the food again the next time you prepare it. Remember, a child may have to see & try a new vegetable as many as 10 times before accepting it.



Delicious ways to enjoy Fruits & Vegetables

Frozen Grapes: Wash, dry, & freeze grapes for a refreshing snack at home or on-the-go.

Create-a-Salad: Build a custom salad by adding your favorite fruit & veggie toppings to leafy greens: mandarin oranges, dried cranberries, carrot sticks, cucumbers, broccoli, peppers, tomatoes, celery.

Fruit Smoothie: Start with your favorite frozen fruit. Add some low-fat yogurt and milk and blend away!

PB & Banana: A twist on the traditional peanut butter & jelly - instead of the jelly, slice a banana on your sandwich.

Chilly Banana - Peel a banana & cut in half. Insert a popsicle stick in the center. Wrap a banana in foil & freeze. Enjoy frozen banana plain or with 1 teaspoon of peanut butter.

Caterpillar Crawl - Fill a celery stalk with 1 teaspoon peanut butter & add several raisins for the body. Add cut up carrot sticks for the antennae.

Rainbow Fruit Salad - Make a colorful fruit salad with all of the children's favorite fruits (fresh and/or canned) that they picked out at the supermarket.

Fruit Parfait - Stir low-fat or fat-free granola into a bowl of low-fat or fat-free yogurt. Top with fresh or frozen berries.

DAILY SPECIALS - BREAKFAST

BREAKFAST OF CHAMPS

Whole grain cereal & low-fat milk topped with sliced bananas

PROTEIN POWER

Turkey and low-fat swiss cheese on whole wheat sandwich bread

OATS & MORE

Microwavable oatmeal with chopped apples and walnuts made with low-fat milk

ROLL IT UP

Whole wheat tortilla wrapped around low-fat string cheese with a side of grapes

PB & B

Whole wheat toast with peanut butter and sliced bananas served with low-fat milk

BAGEL BREAKFAST

Toasted whole grain bagel half layered with apple slices & reduced fat cheddar cheese

BREAKFAST PARFAIT

Low-fat vanilla yogurt swirled with crunchy high-fiber cereal and blueberries

MIX IT UP

Whole grain cereals, raisins, sunflower seeds, and pretzels mixed to perfection

MORNING GRAHAMS

Graham crackers dipped in low-fat yogurt with apple juice to drink

CHEESEY TOAST

Low-fat cheese melted on whole-grain toast with 100% grape juice to drink

CINNA-TOAST

Whole grain cinnamon-raisin toast topped with low-fat yogurt

TORTILLA

Whole grain tortilla filled with scrambled eggs or beans, topped with cheese & salsa

EGGS-ELLENT

Whole wheat pita pocket filled with scrambled eggs and topped with grated cheese

SUNRISE SMOOTHIE

Frozen mixed berries, low-fat vanilla yogurt, and orange juice blended together

Drive-thru breakfast? Choose wisely!

When eating out for breakfast, look for healthy choices on the menu, such as...

Chick-Fil-A: chicken, egg, & cheese bagel (request grilled chicken); fruit cup, carrot & raisin salad, low-fat milk, orange/apple juice, water

McDonalds: scrambled eggs, English McMuffin, Egg McMuffin (no butter), fruit & yogurt parfait, apple dippers, low-fat milk, orange/apple juice, water

BoJangles: grilled chicken filet on a bun (no mayo), buffalo bites, low-fat chocolate milk, orange juice, or water

Burger King: ham omelet sandwich, apple fries, low-fat milk, orange/apple juice, water

Rise and Dine! Start your day off right!

Eating a healthy breakfast...every day...does your body good!

- * Choose foods from 2 or 3 food groups to give your body the “fuel” it needs to get through the day.
- * If you run short on time in the morning, plan ahead!! Make your own “grab-and-go” breakfast the night before and eat it on the way to school.
- * Not hungry in the morning? Start with something small such as fruit, string cheese, or a piece of toast.
- * See below for some healthy ideas that can also make great “grab-and-go” breakfasts!

GRAIN GROUP

Whole wheat bagel, bread
Whole wheat pita
Whole grain cereal
English muffin
Oatmeal, Grits
Whole grain crackers
Whole wheat tortilla
Whole grain granola bar-
(look for 2g or more fiber
and 12g or less sugar)

FRUIT GROUP

Fresh - banana, apple, grape,
plum, clementine, mango,
strawberry, blueberry,
melon, pineapple, orange
Dried - raisins, dried plum,
dried cranberry
Canned - in light syrup or
in its own juice
100 % fruit juice

Got breakfast? Breakfast really *is* the most important meal of the day!! Eating a healthy breakfast helps us **achieve and maintain a healthy weight**. People who eat breakfast take in **more nutrients and fewer calories** over the course of a day. Breakfast can also help **improve heart health and blood pressure**.

Hey kids, don't forget about...

School Breakfast!



Studies show that kids who eat breakfast **do better in school** than kids who don't. Breakfast eaters tend to have:

- * Better Math & Reading scores
- * Better classroom behavior
- * Better school attendance
- * Improved memory, alertness and concentration
- * Less stomachaches/headaches

MILK GROUP

Fat-free (skim) milk
Low-fat (1%) milk
Low-fat flavored milk
Low-fat yogurt
Low-fat sliced cheese
Low-fat string cheese
Low-fat grated cheese
Low-fat cottage cheese
Pudding made with
low-fat milk

PROTEIN GROUP

Lean deli meat
Walnuts, peanuts
Almonds, cashews
Sunflower seeds
Tuna
Peanut butter
Hard boiled or
scrambled egg
Beans
Turkey bacon/sausage



Parents, encourage your children to eat breakfast every day, whether at home or at school. Be a good breakfast-eating role model...your kids are more likely to eat breakfast if you do, too. Studies suggest that adults who skip breakfast are at *greater* risk for obesity, while those who eat breakfast have healthier weights. Kids and teens who eat breakfast are also less likely to be overweight.

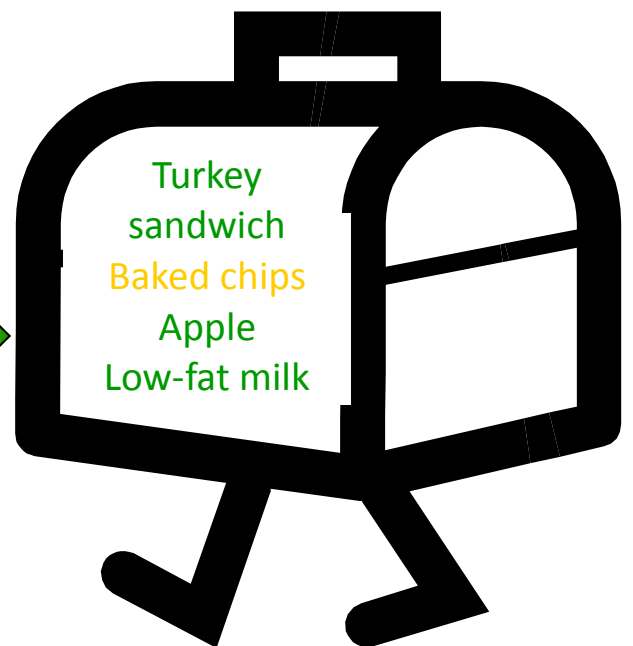
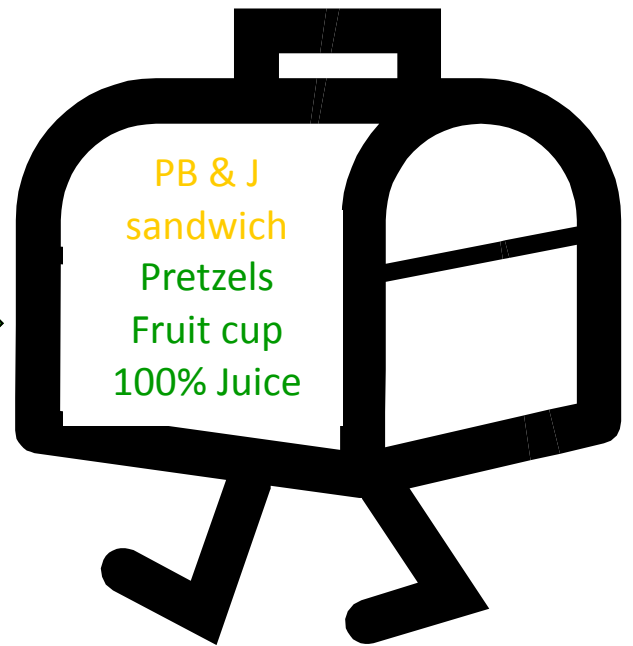
Eat Smart Lunches

Lunch time is a great time to make healthy choices that will fill you up and give you energy to get through the rest of the school day. Be smart when packing your lunch...use the Stoplight Food Guide to help you choose “anytime” foods (**green**) over “sometimes” (**yellow**) or “rarely” (**red**) foods.

Instead of...



Choose...



Tips for Packing a Healthy Lunch

- Look for **whole grain breads** - 100% whole wheat bread, tortillas, bagels, English muffins, etc. If your child prefers the taste and texture of white bread, choose White Wheat bread...it has the same nutrition as whole wheat bread, plus added calcium!
- Switch from high-fat meats such as bologna, salami, and pastrami to **low-fat alternatives** such as turkey breast, chicken breast, or ham.
- Pack or ask for milk at school that is **fat-free (skim) or low-fat (1%)**.
- Use cheese on sandwiches that is **low-fat or fat-free**.
- Pack a **water or other sugar-free beverage** instead of fruit drinks or soda.
- Choose **Winner's Circle** items! These healthy foods & drinks are marked with a * on your school lunch menu.
- Prepared lunch kits such as Lunchables are often high in fat and sugar. Make your own lunchables by combining...
 - English muffin, pizza sauce, turkey pepperoni, low-fat mozzarella cheese
 - Turkey breast slices, lite string cheese, whole grain crackers
 - Mini-bagel, peanut butter & jelly, fruit cup

Instead of...

Chips
Cookies
Snack Cakes
Bologna
Soda
Fruit Punch

Choose...

Baked chips, pretzels
Graham crackers
Angel food cake
Turkey
Diet Soda
Sugar-free drink

Plan ahead!

The best time to plan for lunch is the night before. Make sandwiches, put non-perishable items by your lunch bag, and put refrigerated items together in the front of the fridge.

Other **Healthy** Lunch Ideas...

PB & J sandwich
Turkey, cheese, tortilla roll-up
Carrot sticks & light ranch dip
Fresh or canned fruit
Applesauce
Light string cheese
Soup - vegetable, chicken noodle

Yogurt w/ low-fat granola
Almonds, peanuts, walnuts
Plain popcorn
Cereal - Frosted Mini Wheats, Honey Nut Cheerios, Rice Chex
Make-your-own trail mix - cereal, nuts, sunflower seeds, raisins, pretzels

Choose Wisely when Eating Out

Use the Stoplight Food Guide to lead you in the right direction when eating out. Choose green and yellow foods more often instead of red foods.

INSTEAD OF...

CHOOSE...

Bojangles

- Biscuit or Biscuit sandwich
- Fried chicken
- Seasoned fries

Grilled chicken filet on a bun (no mayo)
Buffalo bites
Pintos, Cole slaw, Green beans, Rice, Mashed potatoes
(no gravy)

Burger King

- Biscuit sandwich or Croissant'wich
- Tendercrisp garden salad
- Whopper w/ cheese
- Crispy chicken sandwich
- French fries

Ham omelet sandwich
Tendergrill garden salad w/ light dressing
Whopper Jr. (no mayo) or Veggie burger (no mayo)
Grilled chicken sandwich (no mayo)
Apple fries

Chick-Fil-A

- Bacon, egg, & cheese biscuit
- Crispy chicken sandwich
- Chicken strips or nuggets
- Waffle fries

Chicken (request grilled), egg, & cheese bagel
Chargrilled chicken sandwich or Grilled chicken salad
2 strips or 4 nuggets kids meal
Fruit cup or Side salad with fat-free or light dressing

McDonalds

- Breakfast biscuit sandwich
- Quarter Pounder w/ cheese
- McChicken/Crispy chicken sandwich
- 6 or 10 pc nuggets, Chicken strips
- French fries

Scrambled eggs, English muffin, or Egg McMuffin
Hamburger
Grilled chicken sandwich (no mayo), snack wrap, or salad
4 pc nuggets
Apple dippers, Fruit & yogurt parfait, Fruit & walnut
salad, or Side salad with low-fat dressing

Subway

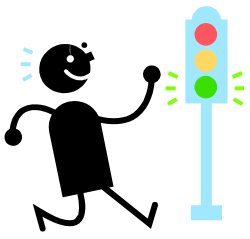
- 12" regular sub
- Regular potato chips

6" Fresh Fit sub (6g of fat or less) - with lots of veggies
& mustard or fat-free dressing instead of mayo
Apple slices, Baked potato chips, or Low-fat yogurt

Wendy's

- Chicken BLT or Southwest salad
- Double cheeseburger or Nuggets
- French fries

Mandarin chicken salad or Chicken ceasar salad
*ask for fat-free or light salad dressing
Jr. hamburger, Grilled chicken sandwich or Wrap
Mandarin oranges, Side salad, Baked potato (light sour
cream & go light on the butter) or small Chili



Smart Eating On The Go

Tips for Eating Healthy when Eating Out

Order Wisely—Choose grilled, steamed, or broiled dishes over fried foods or remove the breading from fried foods before eating.

Beware of Large Portions—Choose the smallest size burger and fries. Skip the super-sized meal and order from the kids menu. Or, share your meal with a family member or friend.

Be Smart with Salads—Order salads with grilled instead of crispy chicken with low-fat or fat-free dressings. Hold the cheese, croutons, and bacon bits.

Be Smart with Sides and Extras—Choose fruits as side items instead of fries whenever possible. Substitute mustard or ketchup for mayo on burgers and sandwiches.

Don't Drink your Dinner—Order water, unsweetened tea, diet soda, or low-fat milk instead of soda, sweet tea, lemonade, or fruit punch.

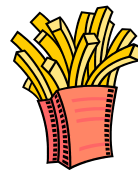
Look for Healthy Dining Icons—Many restaurants now designate healthy options right on their menu. Choose these items or look for nutrition information on menu boards, brochures in restaurants, or nutrition information on the restaurant's website.

Explore Your Options...

Most restaurants offer a variety of menu items. Look for ways you can make your usual meal healthier.



Instead of: 2 cheeseburgers



Large Fries



Large Milkshake



Choose: 1 Grilled Chicken Sandwich



Small Fries



Diet Soda

(Eat Smart...) And MOVE MORE!



Children and adolescents need at least **60 minutes (1hr)** of physical activity **EVERY DAY.**

This includes:

Aerobic Activity (like riding your bike, running, and dancing)

Muscle-Strengthening Activity (like climbing trees, sit-ups, and swinging on playground bars)

Bone-Strengthening Activity (hopscotch, jumping rope, and sports like basketball and volleyball)

Try to do a combination of all three of these types of activities on most days of the week. Remember to include variety and activities that you really enjoy!

The 60 minutes of activity do not have to be all at once.

Minutes of physical activity I get at school each day: _____

Minutes of physical activity I get at home each day: _____

Minutes of physical activity I get on weekend days: _____

How many minutes do I need to add to reach my goal? _____

Learn more about physical activity guidelines at:

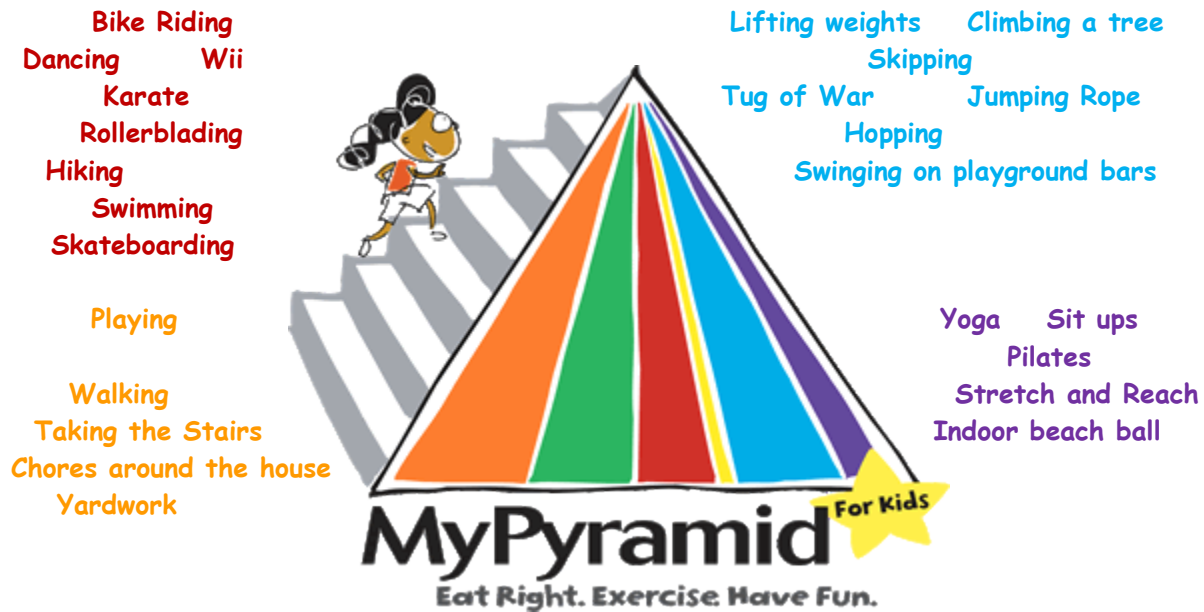
<http://www.health.gov/Paguidelines/guidelines/chapter3.aspx>

You can use a pedometer to count your steps - with a goal of at least 10,000 steps each day. *Think of this: 2100 steps = 1 mile = using 75-100 calories

Help Set Your Own Activity Goals:

1. _____
2. _____
3. _____

BUILDING YOUR OWN "MY ACTIVITY" PYRAMID



The “base” of your activity pyramid includes everyday activities. List 3 fun things you can do everyday – you can use from the list of **Lifestyle Activities** and add your own.

1. _____ 2. _____ 3. _____

Now add to your activity pyramid aerobic and sports activities that get your heart pumping. Choose from the fun things listed in the **Sports and Recreation Activities** and add your own.

1. _____ 2. _____ 3. _____

Climb your activity pyramid and add fun strengthening exercises that keep your muscles strong. These are activities to do 3-5x/week - choose from the list of **Muscle and Fitness Activities** (and add your own!) 1. _____ 2. _____

3. _____

Finish your activity pyramid with 3 fun activities that strengthen your bones and keep you flexible. See some ideas in the list of **Flexibility Exercises Activities**. Add your own ideas.

1. _____ 2. _____ 3. _____

Finally: Remember to CUT DOWN on TV, sitting at the computer or video games, and sitting more than 30 minutes at a time.... KEEP MOVING!

Why is it important to be active every day? Being active helps you to do better on school work and helps to achieve and maintain a healthy weight!

Rainy Day Activities

Can't get outside? Pick from this list of indoor activities to help you reach your Physical Activity goal every day...even on rainy days!

Make an indoor **obstacle course** or fort out of furniture, blankets, pillows, and cushions.

Ideas for obstacle course:

Jump into a pile of pillows

Scoot on the kitchen floor

Jump rope 10 times in a row

Crawl/bend backwards underneath an elevated broom



Skip around toys

Run/crawl up a staircase

Do a somersault

Make a hopscotch course

Indoor **scavenger hunt** - Take turns hiding & finding. Set a time limit and move quickly!

Play an **active game!** Hide-and-seek, Simon Says, Twister, Balloon/Beach Ball Volleyball

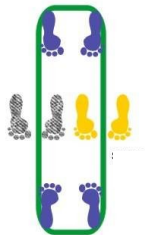
March around the house! Pretend to be in a marching band playing different instruments.

Circuit training - Create a routine using the following exercises: sit-ups, jumping jacks, wall push-ups, toe touches, knee lifts, side bends, stretching, invisible jump rope.

Exercise videos/DVDs



Chinese Jump Rope - Have 2 players hold a rope around their legs, creating a long rectangle. The 3rd player jumps in & out with one or both feet on different sides of the rectangle. If you have 1 or 2 players, place the rope around the legs of two chairs to create the rectangle.



Dance Party/Freeze Dance - A fun way to exercise is to have a dance party. Clear a space where you have room to move around easily, put on some music, and dance by yourself or with family and friends. Make up your own dance moves if you want. A variation you can play with your friends is freeze dance: when the music stops, you have to freeze in place. Play the music and stop it at random. See who can be the most still or freeze the fastest!



Red Light, Green Light - Stand 15 giant steps away from a partner, facing each other. When you say Green light, your partner can run towards you, but when you say Red light, he has to freeze in place. You can also choose fun ways for him to walk to you, like hopping, skipping, or pretending to be an airplane or bird. To add another twist, you can also call out Yellow light, which means he has to walk or move in slow motion.



Rainy Day Activities

Sports Moves - act out the following sports moves; do each for at least 10 seconds before moving on to the next; then repeat!

Shooting a jump shot
Running through tires
Batting a baseball
Serving a tennis ball
Spiking a volleyball

Throwing a football
Dunking a basketball
Swimming underwater
Shooting a hockey puck
Fielding a ground ball and throwing it to first base

Shooting an arrow
Juggling a soccer ball
Swinging a golf club
Downhill skiing



As if - act out the following movements for at least 10 seconds before moving on to the next; then repeat! (Adapted from <http://www.ncpe4me.com/energizers.html>)

Jog in place **as if** a big scary bear is chasing you
Walk forward **as if** you're walking through chocolate pudding
Jump in place **as if** you are popcorn popping
Reach up **as if** grabbing balloons out of the air
March in place and play the drums **as if** you are in a marching band
Paint **as if** the paint brush is attached to your head
Swim **as if** you are in a giant pool of Jell-O
Move your feet on the floor **as if** you are ice skating
Shake your body **as if** you are a wet dog

Indoor Olympics - Set up an Olympic challenge for yourself using things in your house. *Hand and Knees Crawl* - Set up a finish line at the other end of the room with pillows or tape and see how fast you can crawl to it. *Crab Walk* - Set up a finish line at the other end of the room with pillows or tape. Get on your hands and feet like a crab (with your stomach facing the ceiling) and see how long it takes you to crawl to the finish line. *Long Jump* - Stand on the first stair up from the ground. Jump. Try it from two steps up, then three. *World-Class Can Lifting* - Pick the largest cans in your pantry and use them as dumbbells. See how many times you can do curls with them. Try it in a row on the same arm or alternate back and forth.

Mall Laps - To be active indoors but outside of your house, walk laps inside your local mall.

Limit screen time (TV, computer, video games) to less than 2 hours per day - If you do watch TV, participate in active commercial breaks - choose an activity from this handout and do it during commercials.

Whether a mid-morning “pick-me-up” or an afterschool mindful munchie, healthy snacks boost energy, provide additional nutrients, and can help prevent overeating at mealtimes. Use the suggestions as a guide to help plan low fat/low sugar and tasty snacks. A healthy snack should be about 200 calories and should contain more than one food group.



Fruits/Vegetables

- Fresh fruit and low fat yogurt dip
- Fresh veggies and low fat salad dressing (Ranch, Honey Mustard, 1000 Island) or dips
- Fresh or canned fruit cups
- Dried fruit (apricots, raisins, pineapple, apple, plums) mixed with nuts (1/4-1/2 cup)
- Apple or banana slices spread with 1 Tbsp peanut butter

Dairy/Protein

- String cheese (1-2) or low fat cheese cubes (from 2% milk) (1 oz serving)
- Low fat/low sugar pudding cups
- Nuts (1/4 cup)
- Trail mix (1/3 cup)
- Cottage cheese and fruit
- 4 saltine crackers with 1 Tbsp peanut butter
- Lean deli meats—ham, turkey, roast beef (2 oz)
- Light yogurt (fruit or low fat plain) with $\frac{1}{4}$ cup low fat granola



Grain-based Snacks

- Baked chips, pretzels, goldfish crackers, animal crackers (1/2 cup) with a glass of low fat milk
- Vanilla wafers (about 8) spread with 1 Tbsp peanut butter
- Vanilla wafers (about 8) with low fat, sugar free pudding
- $\frac{1}{2}$ -1 mini bagel with 2-3 thin slices of deli meat or 1 slice low fat cheese
- Low fat/low sugar breakfast or granola bar with 1 glass low fat milk
- 2-3 graham crackers with 1 glass of low fat milk or 1 Tbsp peanut butter
- Baked tortilla chips (about 12) dipped in salsa or low fat bean dip



HEALTHY SNACKS

Create a healthy snack with more than one food group.
Select a food from at least 2 different columns.



Fruit	Vegetable	Dairy	Grains	Meats/Protein
Apples	Carrots	Light yogurt	Whole grain or	Lean luncheon meats
Berries	Celery	Low-fat milk (plain or flavored)	White-wheat bread	(turkey, ham, roast beef)
Banana	Cauliflower	String cheese	Tortilla	Canned tuna (in water)
Grapes	Broccoli	Cheese (slices, cubed, shredded)	Baked tortilla chips	Refried beans
Nectarines	Cucumbers	Cottage cheese	Crackers	Peanut butter (2 tbsp)
Melon	Asparagus	Ricotta cheese	Pretzels	Hard-boiled egg
Mango	Tomatoes	Low-fat cream cheese	Dry cereal	Nuts (1/4 cup)
Pineapple	Bell peppers		Low-fat popcorn	Low-fat bean dip
Peaches	Jicama		Oatmeal	Hummus
Pears	Radishes		Instant Grits	Low-fat hot dog
Canned fruit (in own juice)	Salsa			Veggie dog or burger
Applesauce	Lettuce			
Dried fruits (1/4 cup)	Snow Peas			
	Olives			
	Zucchini			

Calcium



Why do I need calcium?

Calcium helps keep your bones and teeth strong. It also helps your heart work well and your muscles contract. Calcium also might help control your weight.

How much calcium do I need?

Age	Calcium
1-3 years	500 mg
4-8 years	800 mg
9-18 years	1300 mg

Where is calcium?

Food	Serving size	Calcium (mg)*
Lowfat milk	8 ounces	300
Lowfat yogurt	6-8 ounces	300 - 400
Cheese pizza	$\frac{1}{4}$ of 14" pizza	360
Pudding with lowfat milk	1 cup	260
Lowfat cheese	1 ounce	200 - 275
Mozzarella string cheese	1 stick	210
Frozen yogurt, ice cream	$\frac{1}{2}$ cup	110, 90
Orange	1 medium	50
Collards, Broccoli	$\frac{1}{2}$ cup steamed	130, 50
Oatmeal	$\frac{1}{2}$ cup	160
Almonds	$\frac{1}{2}$ cup	150

*Average of all brands. Refer to the food label for most accurate calcium information

Calcium Fortified Foods and Supplements

There are a number of foods that have calcium added to them including orange juice, bread, and cereal. You can use the label to help you figure out how much calcium is in a food. Of course we want you to get your calcium from food, but if you can't, there are many calcium supplements that can be used.

Ways to get more calcium

- ❖ Sprinkle almonds on your yogurt, oatmeal, and ice cream.
- ❖ Add cheese to your sandwiches, salads, or vegetable dishes.
- ❖ Grab a mozzarella string cheese and an apple for a quick snack.
- ❖ Pour pudding into ice cube trays, add a popsicle stick and freeze for a cool summer treat.
- ❖ Remember the '5-3-2-1- Almost NONE' message to limit sugar-sweetened beverages to *Almost NONE* and replace them with lowfat milk, lowfat soy milk, or 4-6 ounces of calcium fortified 100% fruit juices.

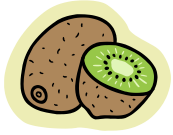
Reading a Nutrition Facts Label for Calcium

Nutrition Facts: Skim Milk	
Serving Size 1 cup (236 ml)	
Servings Per Container 1	
Amount Per Serving	
Calories 80 Calories From Fat 0	
% Daily Value	
Total Fat 0 g	0%
Saturated Fat 0 g	0%
Trans Fat 0 g	
Cholesterol 20 mg	5%
Sodium 120 mg	5%
Total Carbohydrate 11 g	4%
Fiber 0 g	0%
Sugars 11 g	
Protein 9 g	
Vitamin A	10%
Vitamin C	4%
Calcium	30%
Iron	0%
Vitamin D	25%
*Percent Daily Values are based on a 2000 calories diet. Your Daily Values may be higher or lower depending on your calorie needs.	
	Calories: 2000 2500
Total Fat	Less Than 65 g 80 g
Sat Fat	Less Than 20 g 25 g
Cholesterol	Less Than 300 mg 300 mg
Sodium	Less Than 2400 mg 2400 mg
Total Carbohydrate	300 g 375 g
Fiber	25 g 30 g

To figure out the amount of calcium simply drop the % and add a zero. In this example using skim milk, an 8 oz serving gives you 300 mg of calcium- That's 25-30% of the calcium you need for the whole day!

Examples of food sources to meet calcium needs for one day

Age group	Daily calcium needs	Examples of food sources	Amount of calcium
1-3 years	500 mg	1 cup lowfat milk	300 mg
		$\frac{3}{4}$ cup lowfat yogurt	<u>200 mg</u>
			500 mg
4-8 years	800 mg	1 cup lowfat milk	300 mg
		1 mozzarella cheese stick	210 mg
		$\frac{1}{2}$ cup pudding with lowfat milk	130 mg
		$\frac{1}{2}$ cup oatmeal	<u>160 mg</u>
			800 mg
9-18 years	1300 mg	1 cup lowfat milk	300 mg
		1 cup lowfat yogurt	350 mg
		1 mozzarella cheese stick	210 mg
		$\frac{1}{2}$ cup oatmeal or 1 cup calcium-fortified cereal	160 mg
		Sandwich with 1 ounce lowfat cheese	200 mg
		$\frac{1}{2}$ cup steamed broccoli	<u>50 mg</u>
			1270 mg



Let's Try New Foods!



Enjoy all kinds of foods! That's good advice for kids- and for you. Why? When kids learn to enjoy many foods, they have more choices for smart eating throughout life. That's good because different foods promote growth and health in different ways.

Food variety makes eating more interesting and fun, too. Remember: seeing, trying, comparing, and talking about different foods is part of learning.

Good feelings about trying new foods help lead to a lifetime of healthful eating. Try new fruits and vegetables as fun experiences with your child.

- **Offer a new food first**, before foods your child eats already. Kids usually are more willing to try new foods when they're hungry.
- **Have your child choose a new food as you shop**. Trying new foods is more fun for kids when they pick them.
- **Do a taste test**. Talk about a new food. Have your child describe the color, shape, feel, sound, and taste- not whether they like it or dislike it. No "yucks" allowed.
- **Go for at least "one bite"**. Avoid forcing your child to taste anything. Keep food sampling positive.
- **Prepare new foods in different ways**. Offer cooked veggies for a dinner and the same veggies raw with a snack. (For example: Broccoli cooked with fat free cheese, raw broccoli with low fat dressing dip.)
- **Try and try again**. Many kids need to try a new food many times before they like it. It's normal for kids to be cautious at first.
- **Relax**. Your child doesn't need to like every food. Everyone has different food favorites.

Ideas for Helping Your Child Try New Foods




Bread, Cereal, Rice, Pasta

- **Brown rice.** Use instead of white rice to add fiber and a nutty flavor to your recipes.
- **Couscous.** Add canned tomatoes, mixed veggies, and Parmesan cheese.
- **Whole wheat pasta.** For more fiber, use these noodles in place of the usual white pasta.

- **Yellow squash or broccoli.** Cook and top with low-fat cheese.
- **Sweet potatoes.** Lightly coat raw slices with cooking spray and bake (25-35 minutes at 375 degrees) until softened.

Fruits

- **Kiwi.** Peel, slice, and eat! You can also chop the top off and eat it out of the skin with a spoon (like a bowl). 
- **Clementine.** Similar to a tangerine. Usually seedless. Very yummy!
- **Papaya and Mango.** Fresh, frozen or canned (tropical fruit mixture)
- **Berries.** Check the freezer section for frozen mixed berries (blueberries, blackberries, raspberries and strawberries), or pick them fresh at the patch!

Vegetables

Vegetable stir-fry. Use fresh or frozen mixed vegetables to create a colorful meal. Heat a small amount of oil or cooking spray to a non-stick skillet. Add veggies (like broccoli, green and red bell peppers, mushrooms, and onions) and your own special seasonings. Cook mixture until veggies are soft. Enjoy!



Ideas for Helping Your Child Try New Foods

Milk, Yogurt, and Cheese

- **Yogurt smoothie.** Put ice cubes, light yogurt, and fruit in a blender for a healthy snack.
- **Soymilk.** Try calcium-fortified, low-fat soymilk with oatmeal or cereal. Some sugar-free varieties are flavored too!
- **Reduced-fat cheese** is a tasty way to get calcium! String cheese is an example of a lower-fat cheese.
- **Low-fat cottage cheese** is good served alone, or with fresh or canned fruit.

Meat, Fish and Protein

- **Salmon.** Bake or grill salmon with a mixture of orange juice, low sodium soy sauce, and garlic. Or, make salmon patties from canned salmon.
- **Black beans.** Cook with chopped onions and serve over brown rice. Add salsa and fat-free sour cream if desired.

Trying new foods doesn't mean that you must try something unusual. If your child has never eaten a carrot or tomato, then those would be examples of new foods to try.

If your child doesn't like it the first few times, **don't give up.** Many kids need to try a new food 5-10 times before they like it.

What are some new foods that you would like to introduce?

- 1.
- 2.
- 3.

RECIPES

HERB AND GARLIC FISH

¼ cup Miracle Whip Light Dressing

1 tsp Italian seasoning

½ tsp garlic powder

4 fillets (4 oz each, 1 lb total) cod or orange roughy fillets

1 Tbsp lemon juice

1. Preheat broiler. Mix dressing and seasonings in small bowl.
2. Place fish on greased rack of broiler pan. Brush with dressing mixture.
3. Broil, 2 to 4 inches from heat, 6 to 8 minutes or until fish flakes easily with fork. Place on serving plate; sprinkle evenly with lemon juice.

Per fillet: Calories 135, Fat 4g (Saturated 0.6g), Cholesterol 52.5mg, Carbohydrate 3g, Fiber 0g, Protein 20g, Sodium 207mg.

FISH STICKS

1 Tbsp. canola oil

1 egg

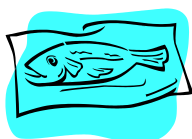
2/3 cup instant potato flakes

2 lb. firm white fish fillets, such as Pollack, cod, or haddock, cut into 16 4-inch-long, ½-inch-wide strips

Pinch of seasoned salt

Pinch of cayenne pepper

1. Preheat oven to 400°F.
2. Grease a baking sheet with the oil. Beat the egg in a small shallow bowl, and pour the potato flakes in a pie plate or shallow bowl.
3. One at a time, dip the fish fillets in the egg mixture. Then, dredge in the potato flakes, pressing with your fingers to help the flakes adhere. Place the fish on the prepared baking sheet.



4. Sprinkle the fish with the seasoned salt and cayenne pepper. Bake, turning once, until puffy and golden, 20 to 25 minutes.

Makes: 8 servings. Serving size: 2 sticks

Per 2 sticks: Calories 126, Total Fat 3 g (Saturated 0 g), Cholesterol 75 mg, Sodium 78 mg, Carbohydrate 3 g, Fiber 0 g, Protein 21 g

CHICKEN NUGGETS

Canola oil spray

2 boneless, skinless chicken breast halves

1 to 2 Tbs. flour

2 egg whites, lightly beaten

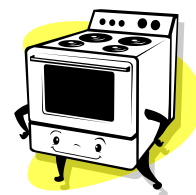
1/2 cup plain bread crumbs

1/8 tsp. salt

1/8 tsp. pepper

1. Heat oven to 350°F.
2. Spray a baking sheet with canola oil and set aside.
3. Slice chicken into nugget-size pieces and sprinkle with salt and pepper. Dust chicken with flour, dip in egg whites, and coat with breadcrumbs. Bake until golden brown, 10 to 15 minutes, turning once halfway through cooking time.

½ recipe: Calories 202, Total fat 2g (Saturated 1g), Cholesterol 34 mg, Carbohydrate 23 g, 1 g fiber, 437mg sodium, Protein 21g.



TURKEY AND BLACK BEAN CHILI

1 lb ground turkey breast

1 can (28oz) diced tomatoes, undrained

1 jar (16oz) chunky salsa

2 cans (15oz each) black beans, drained, rinsed

1 medium green bell pepper, chopped

1 Tbsp. chili powder

1. Cook turkey in large saucepan on medium-high heat until no longer pink, stirring frequently.
2. Add remaining ingredients; mix well. Bring to a boil.
3. Reduced heat to low; simmer 20 minutes, stirring occasionally.

Makes 8 servings.

Per serving: Calories 200, Total fat 1.5g (Saturated 0g), Cholesterol 30mg, Carbohydrate 27g, Fiber 8g, Protein 22g, Sodium 560mg.

SLOPPY JOES

1 lb ground round (may substitute ground turkey breast)

1 large green bell pepper, chopped

1 large onion, chopped

1 ½ cans (10.75 oz each) reduced-sodium tomato soup

6 Whole-wheat or White wheat hamburger buns

1. In a nonstick frying pan, cook the ground meat, onion, and pepper until the meat is browned and the vegetables are tender, about 7 to 10 minutes.
2. Drain the meat well and return the mixture to the frying pan.
3. Add the tomato soup to the ground beef mixture and stir well. Simmer for at least 10 minutes.
4. To serve, place 2/3 cup of the Sloppy Joe mixture on each hamburger bun. Serve immediately. Makes 6 Sloppy Joes.

1 Sloppy Joe: Calories 318, Total fat 13g (Saturated 5g), Protein 23 g, Carbohydrate 29 gm, Fiber 3g, Cholesterol 57 mg, Sodium 399 mg.



CHEESY QUESADILLAS

1 ½ cups Reduced-fat Mexican-style shredded cheese

12 flour tortillas

¾ cup salsa



1. Spoon 2 Tbsp cheese onto center of each tortilla; fold tortilla over to completely enclose filling.
2. Spray large skillet with cooking spray. Cook 1 or 2 quesadillas at a time on medium-high heat 2 to 3 minutes on each side or until crisp and lightly browned on both sides.
3. Cut each quesadilla into thirds. Serve warm with the salsa.

Makes 12 quesadillas.

Per Quesadilla (3 triangles) with 1 Tbsp salsa: Calories 133, Fat 5.75g (Saturated 2.75g), Cholesterol 10 mg, Carbohydrate 14g, Fiber 0.4 g, Protein 5g, Sodium 395 mg.

MACARONI AND CHEESE

2 ½ tbsp light butter

2 tbsp flour

1 cup low-fat milk or evaporated milk

4 ounces reduced-fat sharp cheddar cheese, grated

5 cups cooked macaroni

1. In medium saucepan on low heat, melt butter and stir in flour until it makes a paste.
2. Gradually stir in milk until smooth. Cook until thickened.
3. Add cheese and cook until melted.
4. Stir in macaroni. Pour into a serving dish and top with reserved cheese. Makes approximately 5 cups.

Per ½ cup: Calories 184, Fat 5.7g (Saturated 1.8g), Cholesterol 7.5mg, Carbohydrate 24g, Fiber 1.3g, Protein 8g, Sodium 116mg.



FRENCH FRIES

1 package (32 oz) frozen French Fries

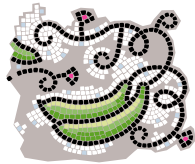
1. Follow package directions, using oven method.
2. Drain on paper towels.
3. Serve immediately.

Per 14 pieces: Calories 120, Fat 3.5g, Saturated fat 0.5, Cholesterol 0mg, Carbohydrate 20g, Fiber 2g, Protein 2g, Sodium 350 mg.

BROCCOLI SUPREME

2 packages (10-ounces each) frozen chopped broccoli

1 cup reduced-sodium chicken broth
2 tablespoons reduced-fat mayonnaise
2 teaspoons dried minced onion (optional)



1. Combine broccoli, chicken broth, mayonnaise, and minced onion in large saucepan.
2. Simmer, covered, stirring occasionally until broccoli is tender.
3. Uncover, continue to simmer, stirring occasionally, until liquid is evaporated.

Makes: 7 servings.

Per $\frac{3}{4}$ cup: Calories 31, Total fat 1 g (Saturated <1g), Cholesterol 1mg, Carbohydrate 4g, Fiber 2 g, Protein 2g, Sodium 26 mg.

SAUTEED SUMMER SQUASH

2 cups summer squash (yellow or zucchini), sliced

Cooking spray

1 cup minced onions

$\frac{1}{4}$ tsp salt

$\frac{1}{4}$ tsp pepper

Parmesan cheese

1. Spray sauté pan with cooking spray.
2. Add onions and sauté until golden brown.
3. Add squash and cooking until tender, about 10 minutes, stirring carefully to keep squash from sticking.
4. Sprinkle with grated parmesan cheese and serve. Makes 4 servings.

$\frac{1}{4}$ recipe: Calories 15, Total Fat 0 g (Saturated 0g), Protein 1g, Total Carbohydrate 3g, Fiber 1 g, Sodium 125 mg.

PEAR POPS

16 oz can pear slices or halves, drained

8 oz low-fat yogurt with fruit, any flavor

1. Pour fruit and yogurt into blender and blend until smooth.
2. Divide mixture among Popsicle molds or small paper cups; insert sticks.
3. Freeze until firm, about 3 hours.

Variations: Place bits of fruit or whole blueberries in the mold before pouring in pear mixture. Makes 4 pops.

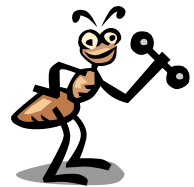
Per pop: 98 calories; 1 g fat; 2 mg cholesterol; 36 mg sodium; 22 g carbohydrate; 1 g fiber; 3 g protein.

ANTS ON A LOG

2 celery stalks

2 tbsp peanut butter

2 tbsp raisins



1. Wash the celery and cut in half (each piece should be about 5 inches long).
2. Spread peanut butter in u-shaped part of celery, from one end to the other.
3. Press raisins gently into peanut butter. Enjoy your ants on a log! Serves 2.

$\frac{1}{2}$ recipe: Calories 130, Fat 8g (Saturated 1.75g), Protein 5g, Cholesterol 0mg, Carbohydrate 13g, Fiber 2.5g, Sodium 125mg.

ANGEL FOOD SURPRISE

- 1 Angel Food cake
- 1 lg. box instant sugar-free vanilla pudding
- 2 c. low-fat or fat free milk
- 1/2 c. low-fat sour cream
- 1 1/2 pts. fresh strawberries, sliced
- 1 (8 oz.) light whipped topping

1. Tear cake in medium size chunks and put half of the chunks into bottom of 9 x 12 inch pan.
2. In a separate bowl, mix pudding with milk. Add sour cream and blend together.
3. Pour pudding over cake chunks.
4. Place berries on pudding layer. Put remaining cake chunks over berries.
5. Cover with whipped topping and chill.

1/12 recipe: Calories 242, Fat 4.4g (Saturated 3.2g), Cholesterol 6.3 mg, Carbohydrate 46g, Fiber 1g, Protein 5.6g, Sodium 640 mg.



BERRY BLAST SMOOTHIE

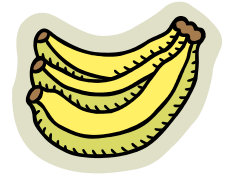
- 1/2 cup fat free or 1% low-fat milk
- 1/2 cup fat free plain or light vanilla yogurt
- 1 cup frozen, unsweetened berries (blueberries, strawberries, raspberries, etc)
- 1 packet Splenda, sucralose, or preferred low-calorie sweetener, or 1 tsp honey

1. Put all ingredients into a blender and blend until smooth.

Makes 1 delicious, bone-friendly smoothie.

1 Recipe (made with fat free milk, light vanilla yogurt, blueberries): Calories 170, Total fat 1.5g (Saturated 0g), Cholesterol 5gm, Carbohydrate 34g, Fiber 4g, Protein 9g, Sodium 120 mg.

BANANA PUDDING



- 2 (1 oz) packages sugar-free instant vanilla pudding mix
 - 4 cups low-fat or fat free milk
 - 3 bananas
 - 1/2 box (12 oz) vanilla wafers
 - 2 cups Light or Fat-free whipped topping
1. In mixing bowl, combine pudding mix and milk; mix well.
 2. Slice bananas.
 3. In 9 x 9-inch or 7 x 11-inch casserole, layer vanilla wafers, bananas, and pudding.
 4. Repeat layers.
 5. Top with whipped topping.
 6. Chill at least 2 hours before serving.
- Makes 10 servings.

1/10 recipe: Calories 217, Total Fat 8g, (Sat 3.3g), Cholesterol 5mg, Carbohydrate 33g, Fiber 1.8g, Protein 4.6g, Sodium 179mg.

For more recipes and meal ideas, visit the following websites:

www.5aday.gov

www.3aday.org

www.diabeticcooking.com

www.mealsmatter.org

www.mealtime.org

<http://kidsinthekitchen.ajli.org/?nd=home>





Tasty Cooking for a Healthy Family

Kitchen Tips:

- Let the kids help -- they love to cook and it's a great way to teach them healthy eating! Take them to the grocery store with you and let them pick out a new fruit or vegetable to try!
- Bake, broil, microwave, roast, steam, grill or stir-fry with pan spray in a non-stick pan.
- When baking, use applesauce in place of half the butter, shortening, or oil.
- Rinse canned beans and use them in place of half the ground beef in recipes. Cook ground beef separately and ahead of time. Cool and remove fat that has come to the top of the pan.
- Make half your grains whole-grain - look for the word "whole" as the first ingredient.

Kick up the flavor the Low-Fat way:

- Add lemon juice or a twist of lime, hot sauce or salsa, mustard, parmesan cheese, salt substitute, low-fat salad dressings, or flavored vinegars.
- Try new herbs and spices - oregano, basil, cilantro, parsley, cayenne, cumin, paprika

Individual Homemade Pizzas!

Ingredients:

- 1 whole grain bagel (3-1/2" diameter or 71g), or whole grain tortilla (6" diameter)
- Tomato sauce
- Low fat mozzarella cheese
- Toppings like diced green pepper, chopped onion, or chopped tomato
- Seasonings like oregano, basil, and pepper

Directions:

1. Set oven to low heat.
2. Spread tomato sauce on each bagel half or over tortilla.
3. Sprinkle the shredded cheese all over the tomato sauce.
4. Add your favorite toppings. Avoid high fat toppings such as pepperoni or sausage.
5. Put a light sprinkling of seasonings over toppings.
6. If you are using tortillas, roll your pizza up like a taco.
7. Put tiny pizzas on a baking sheet.
8. Bake in the oven on low heat for about 5 to 8 minutes. You'll know they're done when the cheese is bubbly.
9. Let cool for a minute, then enjoy your very own homemade pizza!



Choose any of the following foods

Milk, Yogurt, & Cheese

Evaporated fat free (skim) or reduced fat milk
2%, 1%, or skim milk
Sorbet, sherbet, low-fat frozen yogurt or ice milk
Light or fat-free Cool Whip
Light or fat-free sour cream
1/3-less fat (Neufchatel) cream cheese
Reduced-fat cheeses or fat-free singles
String Cheese
Lower Fat cottage cheese
Part-skim ricotta cheese
1% milk or nonfat dry milk powder



Meat, Poultry, Fish, & Eggs

Fat Free hot dogs
Ham or Turkey
Extra-lean ground beef/ground sirloin (97% lean)
Skinless breast (white) meat
Water-packed tuna
Grilled, baked, or broiled fish or shrimp
Egg whites
Pinto beans
Veggie (soy) burgers
Veggie (soy) sausage patties or links
Tofu



Bread, Cereal, Rice, & Pasta

English muffin or fat free muffin
Sub roll
Pita bread
2 inch Bagel
White Wheat or Whole Wheat Loaf bread
Oatmeal or lower-sugar (less than 12 grams) whole-grain cereal
*** Remember to make the above choices 'whole grain'!**

Fruit & Vegetables

Fresh, frozen or canned fruit or
juice, no added sugar
and
Fresh, frozen or canned vegetables,
no added fat or sugar



Other Foods

Mustard, ketchup, BBQ sauce,
Salsa, cooking spray, ketchup, vinegar,
Lemon juice



Eating Healthy on a Budget

These are some tips to help you eat healthy within your budget!

Eat first, and then shop later!

- Eat a snack before you shop and leave any impulse shoppers at home. When we're hungry, high calorie foods seem more appealing.

Make a list

- Plan ahead by taking a look at your cupboards and planning your meals for the week. Always write out your list at home and do not add items. The longer you are in the grocery store, the more money you will spend.

Buy less

- Buy foods you use most and can be used in a variety of recipes. For example, when buying skinless boneless chicken breast you can use it for a baked chicken nugget recipe, a chicken stir fry recipe and a low fat chicken quesadilla recipe.

Be smart about fruits and veggies

- Shop what is in season and compare frozen, fresh and canned to select the best option.
- Check out local Farmer's Market and Farm Stands for fresh produce. Some produce may be less expensive, and local food means less fuel to transport it.

Eat and cook at home more often instead of buying ready-made meals

- Most pre-packaged meals are high in sodium and fat. You'll feel more satisfied after tackling a new recipe or putting your own spin on an old one. It's both economical and often healthier for

you and your family. Buying items in bulk such as rice, dried beans, or oatmeal may be less expensive than instant products.

- Use buying clubs to get discounts on bulk items, and then split the order with friends.
- Buying in bulk those items you use often is usually less expensive. You can then cook larger batches of food and freeze portions to enjoy later. Portioning out your food also ensures you eat the right amount for your appetite. Using leftovers in stews omelets, soups and stir fry is economical and also saves time.

Limit amount of sugar sweetened beverages

- Sodas and fruit drinks may sometimes cost less than milk and 100% juice, but they don't provide the nutrients that we need.

Avoid bottled water or vitamin waters

- These often cost as much as gasoline. Tap water is always the best choice!

Limit chips, cookies and high calorie snack foods

- These are often high in fat, calories, sodium and sugar. Opt for fruit and yogurt or veggies with low calorie salad dressing. These healthy snacks give you more nutrition 'bang for your buck'!

Choose a different protein

- Meat is usually the biggest expense of our grocery costs. Substitute kidney, pinto, black or other beans in for your meat or poultry. Add a couple of bean-based meals twice a week to save money and add fiber.

Shop “stock up” sales and “buy one get one free” sales if it's for items you use.

- Beware of these types of sales of foods you do not normally use. It's not always worth the deal to buy more food than we need or can use.
- Use coupons for only what your family needs and if it costs less than another store. Sometimes coupons promote pricier or unhealthy items that you might not usually buy.

Choose the less expensive store or generic brands

- Brand-name items are often more expensive due to marketing costs. The store or generic brands usually have the same ingredients and are just as nutritious.

Check out the highest and lowest levels of the shelves

- Higher priced brands, that also tend to be high in sugar and calories, are often placed at eye level.

Pay attention to unit price

- The price per ounce or pound can clue you into the most economical product. If it's not listed on the shelf simply divide the price of the product by the number of ounces.

Check out dates

- Always check the “sell by” or expiration dates on products. Look at the “reduced” section in the store. Often these items are close to the sell date. Remember foods are safe to eat and cook or freeze up to at least two days after the sell date.

Always review your receipts and track your spending

- You'll be able to determine how much you spend on what items and how much you are saving weekly, monthly and yearly.



How to Read a Nutrition Facts Label With Focus on Achieving a Healthy Weight

There are many ‘lessons’ to learn in reading a food label- serving sizes, calories, fat, and nutrients like fiber, calcium and sugars. In weight loss or maintenance the first thing to learn is what is a serving size for a certain food.

2% Milk

Nutrition Facts			
Serving Size 1 cup (236 ml)			
Servings Per Container 1			
Amount Per Serving			
Calories 120		Calories From Fat 45	
% Daily Value			
Total Fat	5 g		8%
Saturated Fat	3 g		15%
Trans Fat	0 g		
Cholesterol	20 mg		7%
Sodium	120 mg		5%
Total Carbohydrate	11 g		4%
Fiber	0 g		0%
Sugars	11 g		
Protein	9 g		
Vitamin A			10%
Vitamin C			4%
Calcium			30%
Iron			4%
Vitamin D			25%
*Percent Daily Values are based on a 2000 calories diet. Your Daily Values may be higher or lower depending on your calorie needs.			
		Calories:	2000 2500
Total Fat	Less Than	65 g	80 g
Sat Fat	Less Than	20 g	25 g
Cholesterol	Less Than	300 mg	300 mg
Sodium	Less Than	2400 mg	2400 mg
Total Carbohydrate		300 g	375 g
Fiber		25 g	30 g

←Start Here→

The 1st ‘lesson’ is to focus on what a serving size is for that food.

Controlling portions and choosing foods with less calories per serving is key in achieving a healthy weight.

****For this example, in the same 1 cup serving, skim milk has less calories and a lot less fat than 2% milk. For a healthy weight, skim milk would be the better choice.**

Skim Milk

Nutrition Facts			
Serving Size 1 cup (236 ml)			
Servings Per Container 1			
Amount Per Serving			
Calories 80		Calories From Fat 0	
% Daily Value			
Total Fat	0 g		0%
Saturated Fat	0 g		0%
Trans Fat	0 g		
Cholesterol	20 mg		5%
Sodium	120 mg		5%
Total Carbohydrate	11 g		4%
Fiber	0 g		0%
Sugars	11 g		
Protein	9 g		
Vitamin A			10%
Vitamin C			4%
Calcium			30%
Iron			0%
Vitamin D			25%
*Percent Daily Values are based on a 2000 calories diet. Your Daily Values may be higher or lower depending on your calorie needs.			
		Calories:	2000 2500
Total Fat	Less Than	65 g	80 g
Sat Fat	Less Than	20 g	25 g
Cholesterol	Less Than	300 mg	300 mg
Sodium	Less Than	2400 mg	2400 mg
Total Carbohydrate		300 g	375 g
Fiber		25 g	30 g

- Another “label lesson” is when shopping for cereal, breads or whole grains (like crackers and cereal bars) look at the “Total Carbohydrate” section for:
 - Less than 12 grams of sugar
 - More than 2-3 grams of fiber



Eating for Heart Health



The **American Heart Association** made a new plan in 2006 for heart health. The plan is flexible to meet the needs of growth, development, and aging. The American Heart Association wanted to focus this plan on **whole diet** that will be sure to include all needed nutrients and balance food with activity.

The Eating Plan

Focus food choices on eating many types of veggies and fruits

- Eat lots of whole grains with a focus on fiber
 - Legumes (beans, lentils), vegetables (such as green leafy veggies and broccoli), fruits (such as apple and berries), and oat bran
- Eat non-fried fish low in mercury 2 times a week like:
 - Shrimp, light canned tuna, salmon, Pollack, and catfish
- Limit saturated fats which are found in fried foods (like French fries) and fatty meats like bacon, sausage, hot dogs, and bologna. Instead, eat more:
 - Lean meats, beans and veggie alternatives
 - Fat free and low-fat dairy foods like yogurt
- Avoid trans fats which are found in
 - Many "junk foods" and sweets
 - Cakes, cookies, margarine, potato chips. Read labels to see the amounts of trans fats in foods
- Eat foods with little or no salt
- Drinks lots of water and avoid sugary drinks

Remember the heart healthy eating plan also when you are eating away from home!

Remember to be Active

Try for a total
60 minutes each day of
moderate to vigorous activity-
Jumping rope, dancing, riding bikes, playing
tag and active computer games all count!



Omega 3 Fatty Acids and Flaxseed

The American Heart Association (AHA) recommends eating foods with omega 3 fatty acids because they are healthy for our hearts and also help lower triglyceride levels and blood pressure.

Eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA): are omega 3 fatty acids found in fatty fish like tuna and salmon. The AHA recommends eating a variety of fatty fish at least twice per week up to about 12 oz.

Alpha-linolenic acid which is found in plant sources like flaxseed and walnuts can become omega 3 fatty acid in our body. Canola and soybean oils are also sources of alpha-linolenic acid.

We recommend getting omega 3 fatty acids from the foods you eat rather than in capsules or supplements. It is not recommended for children to take these supplements unless prescribed by your doctor. It is also recommended that young children **do not eat** fish such as Shark, Swordfish, Mackerel, and Tilefish and to limit “white” tuna to 3-6 oz per week due to higher mercury levels. Local fish such as Bass, Bowin (black fish), and Catfish (wild) may also have high mercury levels. Check your local advisories about the safety of locally caught fish.

0.5-1.8 grams per day of EPA and DHA and 1.5-3 grams per day of alpha-linolenic acid are considered beneficial for heart health. Below are some sources of Omega 3 fatty acids and the amounts.

Food*	Amount of Omega 3 (g)
Salmon, cooked (baked or grilled)	1.8 g per 3 oz
Tuna, light, canned in water, drained solids	.23 g per 3 oz
Shrimp, cooked (steamed or grilled)	.27 g per 3 oz
Pollock	.45 g per 3 oz
Flaxseeds	3.5 g (alpha linolenic acid) per 2 tbs
Walnuts	2.27 g (alpha linolenic acid) per ¼ c

* **Remember to bake or grill fish; omega 3 acids are not found in fried fish**

Enjoy a recipe for **Blueberry Flax Pancakes**



INGREDIENTS:

1 ½ cups dry pancake mix 2 eggs (or 4 egg whites for lower fat version)
 ½ cup flax seed meal 1 cup fresh or thawed frozen
 1 cup skim milk blueberries

DIRECTIONS:

1. Set nonstick skillet over medium heat
2. In a medium bowl, stir together the pancake mix and flax seed meal. In a separate bowl or measuring cup, whisk together the milk and eggs. Pour the liquid into the dry ingredients and stir until moistened.
3. Spoon ¼ cupful of batter onto hot skillet. Sprinkle with as many blueberries as desired. Cook until bubbles appear on the surface, then flip and cook until browned on the other side.

Nutrition Info (per serving- 2-3 pancakes)

Calories: 355 / Protein: 13.6 g / Fat (using whole eggs): 10.3 g / Carbohydrate: 53.4g / Fiber 6.4 g
 Calcium: 356 mg/ Sodium: 798 mg



DASH Diet for Kids

What is the DASH Diet?

DASH stands for Dietary Approaches to Stop Hypertension or high blood pressure. This means choosing plenty of fruits, veggies, non-fat or low fat dairy and whole grains to help keep blood pressure under control. Look for foods with "No Added Salt" on the label and don't add salt to your foods. For more information on the DASH diet check out the National Heart, Lung and Blood Institute website, <http://www.nhlbi.nih.gov>.

Sample Menus for 1000 calorie diet

This means 3 ounces of grains, 1 cup of vegetables, 1 cup of fruit, 2 ounces of lean meat/beans and 2 cups of dairy products daily.

<p style="text-align: center;">BREAKFAST</p> <p>$\frac{1}{2}$ cup cooked oatmeal, $\frac{1}{4}$ cup mandarin oranges, $\frac{1}{2}$ cup 2% milk</p> <p style="text-align: center;">MID-MORNING SNACK</p> <p>2 vanilla wafers and $\frac{1}{2}$ cup apple juice</p> <p style="text-align: center;">LUNCH</p> <p>$\frac{1}{2}$ cup 2% milk, $\frac{1}{2}$ low fat grilled cheese and ham sandwich and $\frac{1}{2}$ apple</p> <p style="text-align: center;">MID-AFTERNOON SNACK</p> <p>$\frac{1}{2}$ cup low fat yogurt and 3-4 animal crackers</p> <p style="text-align: center;">DINNER</p> <p>$\frac{1}{2}$ cup 2% milk, 1 ounce chicken baked, 1 slice whole wheat bread, $\frac{1}{3}$ cup cooked carrots, 2 tbsp mashed potatoes</p> <p style="text-align: center;">EVENING SNACK</p> <p>$\frac{1}{4}$ cup applesauce, 2 graham crackers squares, $\frac{1}{2}$ cup 2% milk</p>	<p style="text-align: center;">BREAKFAST</p> <p>$\frac{1}{2}$ cup ready to eat low sugar cereal, $\frac{1}{2}$ cup 2% milk, $\frac{1}{4}$ cup peaches</p> <p style="text-align: center;">MID-MORNING SNACK</p> <p>3-4 animal crackers $\frac{1}{2}$ cup orange juice</p> <p style="text-align: center;">LUNCH</p> <p>$\frac{1}{2}$ cup 2% milk, $\frac{1}{2}$ peanut butter and jelly sandwich, $\frac{1}{2}$ banana, 2 tbsp green beans</p> <p style="text-align: center;">MID-AFTERNOON SNACK</p> <p>$\frac{1}{2}$ oz low fat cheese and $\frac{1}{4}$ cup applesauce</p> <p style="text-align: center;">DINNER</p> <p>$\frac{1}{2}$ cup 2% milk, 2 tbsp cooked beans, $\frac{1}{4}$ cup each of rice, broccoli, and corn</p> <p style="text-align: center;">EVENING SNACK</p> <p>$\frac{1}{4}$ cup pears, 2 vanilla wafers, $\frac{1}{2}$ cup 2% milk</p>	<p style="text-align: center;">BREAKFAST</p> <p>$\frac{1}{2}$ cup oatmeal, $\frac{1}{4}$ cup peaches, $\frac{1}{2}$ cup 2% milk</p> <p style="text-align: center;">MID-MORNING SNACK</p> <p>2 graham cracker squares, $\frac{1}{2}$ cup apple juice</p> <p style="text-align: center;">LUNCH</p> <p>$\frac{1}{2}$ cup 2% milk, $\frac{1}{2}$ grilled low fat cheese sandwich, 2 tbsp carrots cooked, $\frac{1}{3}$ cup pineapple</p> <p style="text-align: center;">MID-AFTERNOON SNACK</p> <p>$\frac{1}{2}$ cup low fat yogurt, 3-4 animal crackers</p> <p style="text-align: center;">DINNER</p> <p>$\frac{1}{2}$ cup 2% milk, 1.5 ounces baked fish, $\frac{1}{4}$ cup each of rice, sweet potato and green beans</p> <p style="text-align: center;">EVENING SNACK</p> <p>$\frac{1}{2}$ cup applesauce, 2 vanilla wafers, $\frac{1}{2}$ cup 2% milk</p>
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DASH Sample Menus for 1400 Calories

This means 5 ounces of grains, 1.5 cups of vegetables, 1.5 cups of fruit, 4 ounces of lean meat/beans, and 2 cups of dairy products daily.

<p>BREAKFAST $\frac{1}{2}$ cup skim or 1% milk, $\frac{1}{2}$ cup low sugar cereal, $\frac{1}{2}$ cup applesauce, 1 slice whole wheat toast, 1 tsp margarine</p> <p>MID-MORNING SNACK 3-4 vanilla wafers, $\frac{1}{2}$ cup orange juice</p> <p>LUNCH $\frac{1}{2}$ cup skim or 1% milk, grilled low fat cheese sandwich, $\frac{1}{2}$ cup carrot sticks, 1 small banana</p> <p>MID-AFTERNOON SNACK 1 cup low fat yogurt, 6 animal crackers</p> <p>DINNER $\frac{1}{2}$ cup skim or 1% milk, 2 ounces baked chicken, 1 dinner roll, $\frac{1}{4}$ cup each of cooked peas and mashed potatoes</p> <p>EVENING SNACK $\frac{1}{2}$ cup applesauce, $\frac{3}{4}$ ounce part skim string cheese, 5 whole wheat crackers, $\frac{1}{2}$ cup skim or 1% milk</p>	<p>BREAKFAST 1 hard boiled egg, 1 small (3 inch) biscuit, 1 tsp jam, 1 tsp margarine, $\frac{1}{2}$ cup peaches in light syrup, $\frac{1}{2}$ cup skim or 1% milk</p> <p>MID-MORNING SNACK 4-6 graham crackers, $\frac{1}{2}$ cup orange juice</p> <p>LUNCH $\frac{1}{2}$ cup skim or 1% milk, peanut butter and jelly sandwich, $\frac{1}{2}$ cup celery sticks, $\frac{1}{2}$ cup mandarin oranges</p> <p>MID-AFTERNOON SNACK 1 cup low fat yogurt, 6 animal crackers</p> <p>DINNER $\frac{1}{2}$ cup skim or 1% milk, 4 tbsp cooked beans, $\frac{1}{2}$ cup each of rice, broccoli and corn</p> <p>EVENING SNACK $\frac{1}{2}$ cup applesauce, $\frac{3}{4}$ cup yogurt, $\frac{1}{2}$ cup skim or 1% milk</p>	<p>BREAKFAST $\frac{1}{2}$ cup skim or 1% milk, $\frac{1}{2}$ cup oatmeal, $\frac{1}{2}$ cup mandarin oranges, 1 slice whole wheat toast, 1 tsp margarine</p> <p>MID-MORNING SNACK 3-4 vanilla wafers, $\frac{1}{2}$ cup apple juice</p> <p>LUNCH $\frac{1}{2}$ cup skim or 1% milk, low fat cheese and turkey sandwich on whole wheat, $\frac{1}{2}$ cup pineapple in light syrup/juice, $\frac{1}{2}$ cup carrot sticks</p> <p>MID-AFTERNOON SNACK 1 cup low fat yogurt, 6 animal crackers</p> <p>DINNER $\frac{1}{2}$ cup skim or 1% milk, 2 ounces baked fish, $\frac{1}{2}$ cup each of rice, sweet potato and green beans</p> <p>EVENING SNACK $\frac{1}{2}$ cup mandarin oranges, $\frac{3}{4}$ ounce part skim string cheese, 5 whole wheat crackers, $\frac{1}{2}$ cup skim or 1% milk</p>
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DASH Sample Menus for 1600 calories

This means 5 ounces of grains, 2 cups of vegetables, 1.5 cups of fruit, 5 ounces of lean meat/beans and 3 cups of dairy products daily.

<p>BREAKFAST 1 cup skim or 1% milk, 1 cup low sugar cereal, 1 slice whole wheat toast, 1 tsp margarine and jelly, $\frac{1}{2}$ banana</p> <p>LUNCH $\frac{1}{2}$ cup skim or 1% milk, peanut butter and jelly sandwich on whole wheat, $\frac{1}{2}$ cup each of celery and carrots, 1 tbsp lite ranch dressing, $\frac{1}{2}$ cup strawberries</p> <p>DINNER 3 ounces turkey, 1 whole wheat bun, lettuce/tomato, $\frac{1}{2}$ cup of string beans, $\frac{1}{2}$ cup peaches</p> <p>SNACK 1 part skim string cheese, $\frac{1}{4}$ cup raisins</p>	<p>BREAKFAST 1 cup skim or 1% milk, $\frac{1}{2}$ cup oatmeal, $\frac{1}{2}$ cup blueberries</p> <p>LUNCH 1 cup low fat yogurt, 1 cup low fat granola, 1 small box raisins, $\frac{1}{2}$ cup celery</p> <p>DINNER 3 ounces baked fish, $\frac{1}{2}$ cup rice, 1 cup broccoli, $\frac{1}{2}$ cup carrots, $\frac{1}{2}$ cup sliced pears</p> <p>SNACK 1 cup skim or 1% milk, 4-6 graham crackers, 1 tbsp peanut butter</p>	<p>BREAKFAST 1 hard boiled egg, 1 small (3 inch) biscuit, 1 tsp margarine, 1 tsp jam/jelly, 1 banana, 1 cup skim or 1% milk</p> <p>LUNCH 2 cups romaine lettuce, 2 ounces grilled chicken, 1 ounce low fat cheese, $\frac{1}{2}$ cup tomatoes, $\frac{1}{4}$ cup cucumbers, $\frac{1}{2}$ cup mandarin oranges, 2 tbsp lite salad dressing</p> <p>DINNER 1 cup skim or 1% milk, peanut butter and jelly sandwich on whole wheat, $\frac{1}{2}$ cup sliced pears</p> <p>SNACK 1 ounce or 9 mini pretzels, $\frac{1}{4}$ cup raisins</p>
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DASH Sample Menus for 1800 Calories

This means 6 ounces of grains, 2.5 cups of vegetables, 1.5 cups of fruit, 5 ounces of lean meat/beans and 3 cups of dairy products daily.

<p>BREAKFAST $\frac{1}{2}$ cup apple juice, 1 hard boiled egg or $\frac{1}{4}$ cup egg beaters, 1 slice whole wheat toast, 1 tsp margarine, 1 tsp jelly/jam, 1 cup low sugar cereal, 1 cup skim or 1% milk</p> <p>LUNCH 2 slices whole wheat bread, 2 ounces lean turkey, 1 slice/ounce low fat cheese, 1 tsp mustard, $\frac{1}{2}$ cup peaches in light syrup, 1 cup carrots and celery sticks</p> <p>DINNER 3 ounces baked fish, 1 cup steamed rice, 1 cup asparagus, 1 whole wheat roll</p> <p>SNACK 1 cup low fat yogurt, $\frac{1}{2}$ cup blueberries</p>	<p>BREAKFAST 1 small banana, 2 whole grain waffles, 2 tbsp low sugar syrup, 4 ounces low fat yogurt</p> <p>LUNCH $\frac{1}{2}$ small baked potato, $\frac{1}{2}$ cup bean and lean beef chili, 1 tbsp low fat sour cream, $\frac{1}{2}$ cup steamed spinach, $\frac{1}{2}$ cup grapes, 1 cup skim or 1% milk</p> <p>DINNER 3 ounces grilled lean steak, 1 cup romaine lettuce, $\frac{1}{2}$ cup sliced red peppers, 1 ounce low fat shredded low fat cheese, 2 tbsp lite salad dressing, $\frac{1}{2}$ cup cucumber slices, $\frac{1}{2}$ cup rice</p> <p>SNACK $\frac{1}{2}$ cup low fat pudding, 4-6 graham cracker squares</p>	<p>BREAKFAST 1 cup low fat granola, 1 small orange, 1 cup low fat yogurt, 1 scrambled egg white</p> <p>LUNCH Grilled lean ham and low fat cheese on wheat bread, 1 cup low sodium tomato soup, $\frac{1}{2}$ cup applesauce</p> <p>DINNER 2/3 cup whole wheat pasta, 3 ounces grilled chicken, 1 cup mixed green, yellow and red pepper steamed, $\frac{1}{2}$ cup steamed broccoli, 1 cup skim or 1% milk</p> <p>SNACK 4 ounces low fat yogurt, $\frac{1}{2}$ cup raspberries</p>
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Ways to Lower Your Blood Cholesterol: Eat Less Saturated Fat and More Dietary Fiber

Keeping blood cholesterol levels lowered and including more dietary fiber in your eating plan are recommended by the American Heart Association (AHA) as ways to reduce you and your child's risk of heart disease. Remember making small changes can mean big health benefits- see below for ways to make eating heart healthy a fun part of your lifestyle.

Instead of.....	Eat more of
<ul style="list-style-type: none">• Bologna & high-fat lunch meat• Bacon or sausage• High fat ground beef• Regular burgers, hot dogs• Fatty cuts of beef• Fatty cuts of pork• Poultry with skin or dark meat• Oil-packed tuna, fried fish• Whole eggs• Butter, shortening• Bacon grease, ham hocks• Coconut oil, palm oils• Whole milk/dairy, cheeses• Take out pizza with meat toppings• French fries• "Creamy" salad dressings• Commercial baked goods (muffins, doughnuts); "Little Debbie" cakes• Pound cake, sheet cake• Potato chips (Doritos, cheetos), Crackers (butter, cheese) "Nabs"• High fat cookies• Ice cream	<ul style="list-style-type: none">• Light bologna & lean deli meats (turkey, ham, chicken)• Turkey bacon and Canadian bacon• Ground sirloin• Veggie burgers, turkey or chicken hot dogs• Lean cuts: round, sirloin, chuck, loin• Lean cuts: tenderloin, fresh leg or arm• Skinless breast (white) meat• Light tuna (in water) ; grilled shrimp, salmon, pollock• Egg whites or egg substitute• Benecol, Promise Activ margarines; "PAM" spray• Molly McButter, chicken, beef, or vegetable bouillon• Safflower, sunflower, canola, olive , peanut oils• Low-fat or no fat dairy, yogurt and part-skim cheeses• Homemade pizza made with low-fat cheeses and topped with veggies vs. meats; whole wheat crust• Baked potato topped with low/no fat cheese• "Light" , fat-free, and vinegar- based dressings• Homemade lower-fat options made with soft margarine or from unsaturated oils- canola, safflower, sunflower, soybean, corn, cotton-seed oils• Angel food cake, recipes made with above oils• Pretzels, baked chips, "light" ,or air-popped popcorn, nuts, saltines, animal crackers, graham crackers, dried fruits• Vanilla wafers, ginger snaps, fig/fruit bar cookies• Sherbet, sorbet, 100% fruit juice bars, lowfat yogurt



FIBER- Part of a Healthy Eating Plan



Eating foods that are high in fiber is a way to lower your cholesterol and is part of healthy eating. Fiber is only found in plant foods, not in dairy or meat foods. Good sources of fiber are legumes, oat products, fruits, and vegetables.

The recommended amount of fiber is:

19 grams per day for children 1-3 years

25 grams per day for children 4-8 years

Up to 38 grams for children 9-18 years

Remember that foods with 3 grams of fiber per serving is a "good source"

And foods with 5 grams of fiber per serving is an "excellent source"

The amount of fiber in some foods

Air Popped popcorn, 3 cups: 4 grams

Whole Wheat Bread, 1 slice: 3 grams

Multi-Grain Cheerios, 1 cup: 3 grams

Chex Multi Bran Cereal, 1 cup: 7 grams

Oatmeal, 1 instant packet: 3 grams

Strawberries, 1 cup: 3 grams

Apple with Skin, 1 medium: 3 grams

Banana, 1 medium: 3 grams

Baked Potato with Skin, 1 medium: 4 grams

Cooked Broccoli, 1/2cup: 3 grams

Cooked Carrots, 1/2cup: 3 grams

Crunchy Peanut Butter, 2 Tablespoons: 2-3 grams

Here are some fun ways to eat more fiber:

- Spread crunchy peanut butter on apple slices (leave the peel on)
- Mix a high fiber cereal like Crunchy Corn Bran or Bran Chex with a lower fiber cereal like Cheerios or Kix
- Make a trail mix with higher fiber cereal (see above), dried fruits, nuts and sunflower seeds
- Make low fat popcorn balls with dried fruits and nuts
- Raw broccoli, carrots, celery and green peppers dipped in low fat ranch dressing or bean dip
- Dip apple slices (leave peel on), peach slices, and cantaloupe in low fat vanilla yogurt - by itself or mixed with low fat granola
- Make vegetable or fruit "kabobs" on popsicle sticks
- Spread crunchy peanut butter on a multi-grain "light" English Muffin or whole wheat bread
- Make a quesadilla with low fat cheese and beans on a whole wheat tortilla
- Top oatmeal with raisins



Healthy Guidelines for Weight Management

Your child has been identified as being overweight or at risk for becoming overweight. Weighing too much increases the risk that children will suffer complications from diseases such as high blood pressure, heart disease, diabetes, cancer, and sleep apnea.

It is important to work together as a family to help your child achieve a healthy weight. As the parent or guardian, you must model healthy eating and physical activity habits.

These are just a few tips to get your family on the right track. The whole family will need to practice eating healthier and being more active. Think of these changes as "being healthy", instead of "dieting":

- Eat regular meals (breakfast, lunch, dinner).
- Eat smaller portions, especially of high fat foods.
- Eat more fruits and vegetables (fresh, frozen, canned in natural juice).
- Drink more water or sugar-free beverages.
 - Avoid regular soda and other sugar-sweetened beverages (Kool-Aid, Gatorade, juice, punch, and sweet tea).
 - Limit juice intake to 4-6 ounces per day.



- Read the food label. It is important to be aware of the amount of calories each food provides per serving. Your child's energy needs depend on his/her body size, age, and activity level. For a "ball park" figure, use this table to estimate your child's energy needs. Keep in mind that these recommendations are for children who are less active. If your child is active, they will need more calories each day.

Age (years)	Calories*	Carbohydrate (grams)	Protein (grams)	Fat (grams)
1-3	1000-1200	138-180	25-45	33-40
4-8	1200-1400	125-210	45-105	40-47
9-13	1600-1800	160-270	60-135	53-60
14-18 girls	1800-2000	180-275	67-150	60-67
14-18 boys	2200-2400	220-330	83-180	73-81

*Energy needs based on IOM Estimated Caloric Requirements for Sedentary to minimum Moderately Active Activity Level. Macronutrient range distribution is as follows for >3y: Carbohydrate (40-60%), protein (15-30%), and fat (30%).

Nutrition Facts
Serving Size 1/2 cup (114g)
Servings Per Container 4

Amount Per Serving	Calories from Fat 30	% Daily Value*
Calories 90		
Total Fat 3g		5%
Saturated Fat 0g		0%
Cholesterol 0mg		0%
Sodium 300mg		13%
Total Carbohydrate 13g		4%
Dietary Fiber 3g		12%
Sugars 3g		
Protein 3g		
Vitamin A 80%	Vitamin C 60%	
Calcium 4%	Iron 4%	



Healthy Guidelines for Weight Management

- Choose lean meats, poultry, and fish such as:
 - Chicken or turkey **without** the **skin**
 - Lean cuts of beef (ground round, flank steak, sirloin, tenderloin)
 - Lean pork trimmed of visible fat (tenderloin, center loin)
 - Any fish that is not breaded or fried (broiled, baked, and grilled are healthy choices)
 - Low-fat deli meat (less than 3 grams of fat per serving)
- Choose low-fat dairy products.
 - Switch from whole milk to 2% and eventually 1% or skim milk.
 - Eat lower-fat cheeses: cottage cheese, string cheese, fat-free cheese slices, ricotta, and feta.
 - Eat low-fat or fat-free ("light") yogurt.
- Avoid high-fat and high-sugar snack foods.
 - Beware of foods that are fat-free or sugar-free. They may still have a lot of calories, and it's tough to control portions.
 - Be creative with your snacks! A healthy snack includes smaller portions from 2 different food groups.
- Instead of frying foods, try baking, grilling, boiling, or broiling.
 - Use non-stick pans or cooking spray (ex: Pam) instead of oil.
- Move more and sit less!
 - Do not watch more than 2 hours of TV each day.
 - Make an effort to be active as a family.
 - Encourage your child to play at least 60 minutes **every day**.



For an individual nutrition evaluation, make an appointment with a registered dietitian. The dietitian will work with your child to develop personal goals to achieve a healthy weight. It is important for parents or guardians to attend these meetings for support and understanding of the issue. Your pediatrician will be able to provide you with the referral information you will need to schedule an appointment.

Name: _____ Physician: _____ DOB: ___/___/___

Food Diary Instructions (example diary is shown below):

1. Choose three *consecutive*, typical days to record. Include *two weekdays and 1 weekend day*. For example: Thursday, Friday, and Saturday.
2. Record *all* foods and beverages (including water) that are consumed.
3. List portion sizes of all foods and beverages. Be as *specific* as possible. For example: 2 ounces of chicken breast, ¼ cup mashed potatoes, 8 ounces orange juice. Estimate meat portions *after* cooking.
4. List brand names of foods if known.
5. Describe how each food is prepared. (For example, fried chicken, scrambled eggs, and roasted pork.)
6. Record any “extras”/condiments used and amount. (For example, 1 tablespoon mayonnaise, 1 teaspoon butter, 2 tablespoons Italian salad dressing).
7. List any snacks (foods *and* beverages) consumed in between meals.
8. If you eat away from home, list the name of the restaurant.
9. If a combination food was consumed (such as a casserole, salad, or stew), please list all ingredients and the total amount consumed.

Time	Amount	Food	How Prepared	Where Consumed
7:00 AM	2 cups	Honey-nut Cheerios	n/a	kitchen
	1 1/2 cups	2% milk	n/a	kitchen
	8 oz.	apple juice	n/a	kitchen
	1/2 piece	Wonder White bread	toasted	kitchen
	1/2 tsp.	Promise margarine, regular	n/a	kitchen
	1 tsp.	Smucker's grape jelly	n/a	kitchen
10:00 AM	1	medium apple	n/a	break room
12:30 PM	1	Chicken-Supreme Burrito	n/a	Taco Bell
	1	Beef Soft Taco	n/a	Taco Bell
	16 oz.	Dr. Pepper	n/a	Taco Bell
4:00 PM	1 pkg. (6 crackers)	Lance peanut butter/cheese crackers	prepackaged	home
	12 oz.	water	n/a	home
7:15 PM	4 oz.	chicken breast (no marinade)	grilled	home
	1/2 cup	Ragu alfredo sauce	heated-stove top	home
	1 1/2 cups	spaghetti noodles	boiled in water	home
	1/2 cups	tossed salad (iceburg lettuce, tomatoes)	n/a	home
	2 tbsp.	Kraft fat-free Italian dressing	n/a	home
	8 oz.	lemonade	prepackaged	home
9:00 PM	1/2 cup	Del Monte fruit cocktail (lite syrup)	prepackaged	home

Hunger Scale

Most of us eat when we aren't hungry some of the time. Instead of listening to our body's sign of hunger, we eat for other reasons. Sometimes we start eating because it's time to eat, or it's our favorite food. Sometimes our feelings trigger us to eat when we aren't hungry.

For some of us, once we start eating, it is hard to stop. Overeating may be a habit, but overeating can also be triggered by our feelings, the great taste of a favorite food or watching TV while eating.

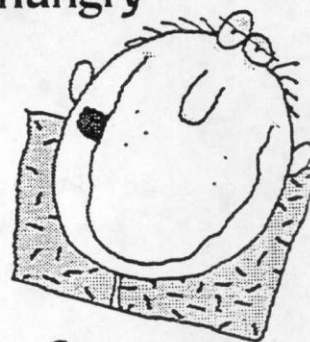
Try listening to your body's signs of hunger and fullness. Use the HUNGER SCALE to make a note of your hunger before you start and right after you stop eating. Write down how hungry you feel before you start eating – very hungry, hungry, not hungry, and then how you feel when you stop eating – satisfied, full, or stuffed.

The goal is to learn to eat only when you are hungry and to stop when you are satisfied. This takes practice. Try to be honest with yourself and in touch with your feelings of hunger and fullness.

Very Hungry



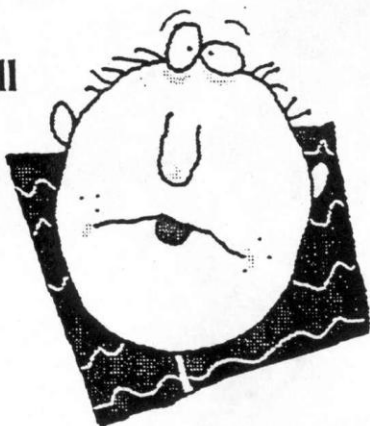
Satisfied... not hungry



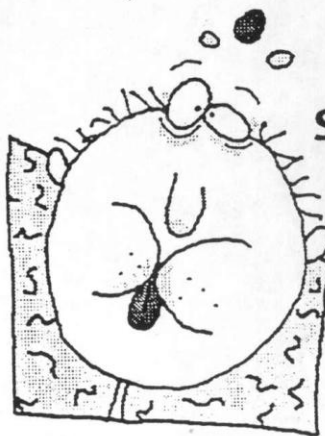
Hungry



Full



Stuffed!



BodyWorks: WK6
June 1998

MyFIT Pyramid – Servings of Each Food Group My Body Needs



Breads, Cereals and Grains:	Vegetables:	Fruits:	Milk and Milk Products:	Meat and Meat Alternatives:
Servings Needed:	Servings Needed:	Servings Needed:	Servings Needed:	Servings Needed:
_____	_____	_____	_____	_____
1 serving=	1 serving=	1 serving=	1 serving=	1 serving=
1 slice bread 1/2 c cereal, rice, pasta 1/2 mini bagel, roll, bun	1/2 c raw or cooked vegetables 1 c salad, green leafy	1/2 c fruit 4-6oz 100% fruit juice	8 oz milk 8 oz yogurt 1 oz cheese	2-3 oz meat, fish poultry 2 tbs peanut butter 2 eggs

Food Group	Servings Eaten Today	Servings Goal	Eat More Servings	Eat Fewer Servings
Bread				
Vegetables				
Fruit				
Milk & Milk Products				
Meat & Meat Alternatives				
Extras				
Scores				

Lab Measures, Goals, and Handouts

What is BMI?

Body Mass Index (BMI) is a number that is calculated for children and adults using height and weight measurements. For children (ages 2-20), this number is plotted on the CDC growth charts to compare BMI with other children of the same age and gender.

If you want to determine BMI, use the calculation below:

Weight (lb) / Height (in) / Height (in) x 703

What is Body Mass Index?

Body Mass Index (BMI) is a number that is calculated for children and adults using height and weight measurements. For children (ages 2-20), this number is plotted on the U.S. Centers for Disease Control (CDC) growth charts to compare with other children of the same age and sex.

How should I interpret my child's BMI?

The curved lines on the CDC growth chart show how your child's BMI ranks compared to other children his or her age and sex. For example, if a child is plotted on the 75th percentile line for BMI-for-age, it means that 75 of 100 children (75%) of the same age and sex have a **lower** BMI-for-age. It also means that 25 of 100 children (25%) of the same age and sex have a **higher** BMI-for-age.

According to the CDC, children with a BMI:

- Between the 85th and 95th percentile are **at risk for overweight**
- Greater than the 95th percentile are **overweight**.

How is BMI decreased?

Body Mass Index will decrease if:

- Height is gained and weight remains the same
- Height is gained and weight is lost
- Height remains the same and weight is lost

It is not necessary to focus on weight. As children grow, if they are able to maintain their weight, their BMI will eventually decrease. This will reduce the risk of future health implications that are related to being overweight as a child. If your child is considerably overweight, they will work with their dietitian or health care provider to lose weight at a healthy rate. Eating smart and moving more are two important goals to build on as your child moves toward achieving a healthier weight.

It is important to keep track of your child's measurements at each doctor's office visit. This helps you see if there are any big changes in your child's growth. If your child's BMI changes a lot in one year, you should talk with your doctor about it.

What is cholesterol?

Cholesterol is a natural substance found in animal foods and also is made by our liver. High blood cholesterol may be partly due to genetics. It may also be a result of being overweight and eating food high in saturated fat and low in dietary fiber. If left untreated, poor blood flow may result and cause sudden heart attacks and strokes. High cholesterol can be “treated” by food, physical activity, and/or diet.

What are the “good” and “bad” cholesterol?

HDL= Healthy or “good”. HDL particles help remove cholesterol from the arteries and helps return cholesterol to the liver.

LDL= Lousy or “bad”. LDL can stay in blood vessels over time and lead to atherosclerosis (narrowing of the arteries due to fat deposits in the blood vessels). Studies have shown that high levels of LDL cholesterol are linked to a greater risk for stroke and heart attacks.

What are triglycerides?

Triglycerides are a type of fat made by the body or from fats eaten in foods. High triglyceride levels in the blood can lead to heart disease and early heart attacks

What should my child’s cholesterol be?

Measurement	Optimal	Borderline	High
Total cholesterol	<170 mg/dl	170-199 mg/dl	>200 mg/dl
LDL cholesterol	<110 mg/dl	110-129 mg/dl	≥ 130 mg/dl
HDL cholesterol	≥ 35 mg/dl		
Triglycerides	<150 mg/dl		

What can I do to help my child achieve normal cholesterol and triglyceride levels?

- Achieve and maintain a healthy weight. Excess body weight is linked with high cholesterol, low HDL cholesterol, high triglycerides, diabetes, and higher risk of heart disease and early death.
- Eat foods low in saturated fat, cholesterol, and trans fat
 - Limit your intake of saturated fat. Eat less fried foods and foods seasoned with fat
 - Use non-fat, and low fat dairy products. Limit coconut and palm kernel oils
 - Avoid foods with trans fatty acids like hard margarines. Look for margarines like Benecol and Promise Activ.
 - Limit French fries. Try a baked or sweet potato instead.
 - Eat higher fiber foods, fruits and vegetables
 - Eat more fish like water-packed light tuna, canned salmon, and shrimp up to 12 oz/wk. Eat skinless chicken.
 - Choose lean beef (90-95% lean) for making hamburgers, and low fat or nonfat hot dogs. Eat these foods less often
 - Eat take out pizza less often- You can make pizza with low fat cheeses and add veggies instead of meat
 - Choose the Winner’s Circle foods at school and when eating out.
 - Be physically active most days of the week for at least 60 minutes. Even mild yet regular exercise has been shown to raise HDL cholesterol levels and lower triglycerides. This works even better while achieving and maintaining a healthy weight with low fat, high fiber foods.

What is high blood glucose?

Blood glucose is a measure of the sugar level in your blood. If the level is high, it means that there is too much sugar. If your blood glucose level remains high for a long period of time it can lead to damage of your blood vessels and organs and may lead to developing diabetes.

If your glucose lab value was elevated, there are several changes you can make in your diet before you have an appointment with a nutritionist.

1. Begin to cut back on the number of sweetened beverages you drink including sodas, sweet tea, Kool-Aid, Jungle Juice and fruit punch. For children ages 1-6 years old, limit sweetened beverages to 4-6 oz per day and for children 7-18 years old, limit sweetened beverages to 8-12 oz per day.

Better choices include: plain or flavored water, diet sodas, Crystal Light, sugar-free Kool-Aid, or unsweetened tea with a sweetener such as Splenda or Equal.

If you drink juice, choose 100% juice and count this toward the sweetened beverages limit for the day.

2. Choose cereals wisely. Try to limit cereal to 1-cup servings. Limit intake of sugar-sweetened cereals such as Frosted Flakes, Fruit Loops, Fruity Pebbles or Coco Puffs. Instead, choose a cereal with less than 10 grams of sugar and at least 3 grams of fiber per serving.
3. Choose snacks wisely. Avoid eating snacks that have a lot of sugar. Healthier snack choices include graham crackers, string cheese, low-fat popcorn, carrot sticks, or fruit.

If you have any questions about your lab values and/or what you can do to improve them, be sure to consult your nutritionist or health care provider. They will educate you and your child about making healthier choices to help lower blood glucose levels.

What is high blood pressure?

Blood pressure is the force in the arteries when the heart beats (systolic pressure) and when the heart is at rest (diastolic pressure). It's measured in millimeters of mercury (mm Hg). In children and adolescents, high blood pressure (hypertension) is based on age, weight and height. If the child's blood pressure is greater than 95% of other children of the same age, height, and weight, they are considered to have high blood pressure.

Children and adolescents are considered to have prehypertension if their blood pressure percentile is between 90 and 94. For adolescents, a blood pressure greater than 120/80 is also an indicator of prehypertension.

Uncontrolled high blood pressure can cause damage to organs such as your kidneys and heart. In order to prevent potential health problems, it is important to reduce blood pressure levels as soon as possible.

Recommendations for lowering Blood Pressure

- Eat more fruit and vegetables. Strive for recommended servings each day.
- Meet your daily calcium needs from dairy foods or calcium supplement.

Ages: 1-3	500mg
4-8	800mg
9-13	1300mg
14-18	1300mg
- Increase intake of unsalted nuts, seeds and legumes.
 - Try to consume 1/3 cup unsalted almonds, pecans, peanuts or 2 tablespoons of peanut butter 3-4 times per week.
- Increase physical activity. Try to accumulate 30-60 minutes of physical activity each day. Do something you enjoy. Examples of physical activity include: bicycle riding, walking, swimming, skipping, jumping on a trampoline or playing basketball.