Identifying Nutrition-Related Health Problems

Nutrition Screening — Identifying Concerns

The degree to which a child with special needs is at risk of impaired nutrition status depends on the nature and duration of risk factors. Nutrition screening is the process of identifying infants and children who have nutrition-related risk factors or concerns. A parent, caregiver, teacher, health professional or other adult must identify a problem before action can be taken to help the child.

The three-step nutrition screening process is as follows:

1. A child is identified for screening, preferably when enrolled in an early intervention program, school system program, or upon entering a public health or medical care system.

2. A parent/caregiver or health professional completes the screening form and obtains a recent weight and height for the child (and previous measurements if available).

3. A person trained to review the screening form determines the degree of nutrition risk using the scoring system described.

Anyone working to assure the health of infants or children with special needs may use the nutrition screening form to identify a nutrition problem. Parents can complete the form on their own, with review by a health professional. Or, nurses, educators, intake workers, care coordinators, nutritionists or other health professionals can interview parents/caregivers at a clinic, school, or home visit. If the parent/caregiver completes the form outside of an interview and any screening form questions are answered “yes,” the reviewer or another trained health professional must follow up with the parent/caregiver to assess the concerns further and plan for action to improve the child’s nutrition status.

The information on the nutrition screening form is used to identify concerns that directly affect a child’s health. Thus, it is critical to obtain accurate and detailed information. The form itself — A Look at Nutrition — and instructions for its use are included in this section. Additional information about food intake, if desired, can be obtained using the dietary screening tool, Foods My Child Eats.
Nutrition Scoring System — Determining Level of Nutrition Risk

Once nutrition concerns are identified using the screening form, it is important to determine which children need additional nutrition services. A scoring system coordinated with the screening form provides a quick and easy way to determine what action to take —to review information and give appropriate nutrition guidance to the parent/caregiver, and whether to also generate a referral for a more in-depth nutrition or medical assessment.

Adding up the points assigned to each screening question produces a screening score indicating the degree of nutrition risk: no risk (total score of 0), low risk (total score of 1 to 4), or high risk (total score of 5 or more). See Nutrition Screening Scoring System in this section for complete details.

Outcomes of Nutrition Screening — What You Can Do

When a nutrition-related health concern is identified, what can you do to help? You can provide anticipatory guidance and information for children with low levels of nutrition risk, potentially preventing the need for further nutrition services. For those children with a high level of nutrition risk, you can take initial action and refer them to other resources that will help them start on the path toward better health.

Use the contents of this manual to provide parents/caregivers with information on specific nutrition problems. Each section contains facts about a nutrition-related health concern and its implications for children with special needs. You will also find suggestions for assessing the problem further, and strategies to enable parents/caregivers to begin addressing the nutrition concerns of their children. Use printed education materials when appropriate, but always explain the information verbally as well.

For example, if a child is not gaining enough weight, you can help determine why by asking further assessment questions (see the Strategies pages in the Underweight section). Then, if inadequate food intake is identified as the problem, you can help the parent/caregiver select high-calorie foods to include at meals and snacks (using the education materials in the Underweight section).
Continuing this example, you could also refer the child to one or more of the following:

♦ The Women, Infants and Children Supplemental Nutrition Program (WIC) program (if the child is under age 5) to obtain supplemental food.

♦ A physical or occupational therapist, if the child’s neurological condition is making it difficult for the child to chew and swallow.

♦ A nutritionist who can address growth delays, a special diet, or multiple problems.

♦ A physician for follow up on nutrition-related medical concerns.

♦ A feeding team for complex feeding problems requiring a team assessment that includes behavioral, neuromotor, and nutritional components.

All referrals should follow your program’s referral policy and be discussed with the parent/caregiver first.
Instructions for A Look at Nutrition —
Nutrition Screening Form

Use the following information as a guide to complete the nutrition screening form, A Look at Nutrition, during an interview with the parent/caregiver. Or, use it as a guide to review a form completed by a parent/caregiver.

Demographic Information

Record the date of screening (Today’s Date). While it is true that name, address, birth date and the like are often available from other resources (e.g., a medical chart), gather this information again to make sure it is current and accurate.

Health Questions

Where indicated, gather information beyond a “Yes” or “No.” Refer to Definitions of Nutrition Concerns (in this section) for definitions and examples of each health problem. A “Yes” answer usually warrants further assessment (see sections in the manual corresponding to each problem) and the development of a plan for action. If the score on the nutrition screening form is five or more, follow your program’s policy in referring the child for additional nutrition services.

Ethnicity and Diagnosis

Record what the parent/caregiver reports. Medical diagnoses can be confirmed with medical records later.

Obtaining Weight and Height Measurements

Information regarding current weight and height, as well as previous growth measurements, is best obtained when conducting the interview or when the child is available to be measured, rather than waiting until the form is being reviewed. For instructions on accurately obtaining this information, refer to Guidelines for Weighing and Measuring Children (in this
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Be sure to complete this part, either during an interview or when reviewing the form. It includes information vital to helping children and their families address their nutrition-related health problems and documents appropriate referrals.

♦ **Person** — Write your name and agency, then check the category that most closely identifies your role.

♦ **Weight/Height** — Record and plot the measurements on the appropriate growth chart. For most children, this is the NCHS chart included in this manual. Growth charts for children with Down Syndrome are also included in this section of the manual. For more information on how to plot growth measurements, see *Recording and Plotting Measurements on Growth Charts* (in this section). After plotting the measurements you will be able to determine how this child’s weight and height compare to other children’s of the same age, as well as the child’s risk for overweight, underweight or delayed growth.

♦ **Biochemical Values** — Record any values available to you (such as from a medical chart), especially serum iron, hemoglobin or hematocrit as an indicator of anemia.

♦ **Action Taken** — Use the *Definitions of Nutrition Concerns* and the *Nutrition Screening Scoring System* (in this section) to determine what action to take, and whether you need to request a referral for nutrition services. Your program should establish a referral policy indicating when it is appropriate to send a letter to the child’s physician requesting a nutrition referral and when it is appropriate to refer the child to an agency that provides nutrition services, such as the state Title V Program for Children with Special Health Care Needs (CSHCN).

Usually the best way to make a referral is to discuss the need for a referral with the parent/caregiver and give him or her a copy of the nutrition screening form. At the same time, copy the screening form and complete the referral letter to the child’s physician or appropriate agency, with the applicable concerns identified (see sample referral letter in this section). You may also check other boxes under “action taken,” as they apply.
A LOOK AT NUTRITION
(Nutrition Screening Form)

Child's Name:__________________________________________  Today's Date: _____________________
Address: ______________________________________________  Phone: (___) _______________________
City: _________________________________________  State: _______________  Zip Code: ___________
Birthdate: ______ /______ /________  Birthweight: ___ ___ pounds ________ ounces_________ grams

Current Age:________________  Sex:  □ Male  □ Female

(2 pts. if <2 y.o. and LBW or PM)
Was your child premature (born early)?  □ Yes  □ No
If yes, how many weeks was he/she born early? _____ weeks
Did you breastfeed your child?  □ Yes  □ No  If yes, for how long? _______  months

The following questions will help us learn more about your child. Please answer each of the following questions.

1.  How does your child appear to you?  □ overweight (3)  □ underweight (4)  □ just right  □ short (2)

2.  Do any of the following apply to your child’s food intake?  □ Yes (3)  □ No
   If Yes, check all that apply:
   □ refuses many foods  □ drinks more than 40 oz. milk per day  □ eats too much
   □ refuses solid foods  □ has a poor appetite  □ eats too little
   □ eats fewer than 3 times a day  □ other: ______________________________________

3.  Does your child have any feeding or eating problems?  □ Yes (4)  □ No
   If Yes, check any of the following that apply:
   □ difficulty sucking  □ difficulty feeding self  □ chokes on solids
   □ difficulty chewing foods  □ chokes on liquids  □ loses food from mouth
   □ using bottle after age 2 years  □ difficulty drinking from cup
   □ other: _______________________________________________________________________

4.  Does your child have a feeding tube?  □ Yes (5)  □ No

5.  Is your child on a special diet for a medical condition (e.g., diabetes, PKU,…)  □ Yes (4)  □ No
   If Yes, what kind? ________________________________________________________________

6.  Is your child allergic to, or intolerant of, any foods?  □ Yes (2)  □ No
   If Yes, what foods? __________________________________________________________________

7.  Does your child regularly have diarrhea?  □ Yes (3)  □ No

8.  Does your child regularly have constipation?  □ Yes (2)  □ No

9.  Does your child regularly vomit?  □ Yes (3)  □ No

10. In the past six months was your child found to be anemic (low blood iron)?  □ Yes (2)  □ No

11. Does your child currently have dental problems?  □ Yes (2)  □ No

12. Does your child take medications?  □ Yes (2)  □ No
   If yes, what medication and for how long? _____________________________________________

13. Does your child take vitamins/minerals/home remedies?  □ Yes (1)  □ No
   If yes, name of supplement(s): _____________________________________________________
14. What is your child’s activity level?
- ☐ walks independently
- ☐ needs help walking (braces/walker) (2)
- ☐ does not walk
- ☐ not old enough to walk

15. Do you have trouble buying enough food to feed your family?
- ☐ Yes (3)
- ☐ No

16. Does your child participate in any of the following programs? (check all that apply)
- ☐ WIC
- ☐ CHDP/EPSDT
- ☐ State Disabilities Program (Regional Center)
- ☐ Early Intervention
- ☐ SSI
- ☐ Head Start
- ☐ Special Education
- ☐ Private Insurance
- ☐ Food Stamps
- ☐ State CSHCN program (CCS)
- ☐ Other: _________________

17. Do you have additional concerns about your child’s growth, nutrition or eating?
- ☐ Yes (1)
- ☐ No

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**Child’s Ethnicity** (check major one)

- Caucasian
- Hispanic/Latino
- Native American
- African American/Black
- Southeast Asian
- Asian
- Pacific Islander
- Native Hawaiian
- Unknown
- Other: _________________

**Child’s Medical Diagnosis** (check any which apply)

- Asthma/Pulmonary Disease
- Autism/Pervasive Dev. Del. (PDD)
- Bronchopulmonary Disease (BPD)
- Cancer
- Cardiac (Heart) Disease
- Cerebral Palsy
- Chromosome Disorder (e.g., Down Syndrome)
- Craniofacial (e.g., Cleft Lip/Palate)
- Cystic Fibrosis
- Developmental Delay
- Epilepsy/Seizures
- Gastrointestinal Disorder (GI)
- Gluten Intolerance
- HIV/AIDS
- Mental Retardation
- Metabolic/Endocrine Disorders
- Muscular Dystrophy
- Neurological Disorder
- Orthopedic Problems
- Renal (Kidney) Disease
- Sensory Impairment (blind, deaf)
- Spina Bifida
- Unknown Diagnosis
- Other: _________________

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PERSON FILLING OUT THIS FORM:
- ☐ Parent or caregiver
- ☐ Case manager
- ☐ Educator/teacher
- ☐ Nutritionist
- ☐ Intake worker
- ☐ Health professional (OT, MD, RN, SW, PT, SLP)

**WEIGHT and HEIGHT MEASUREMENTS:**

Weight: ______ lbs./ or _____ Kg.  Length/Height: ______ in./or _____ cm.  Head Circumference: ______ in./or _____ cm.

Wt/Age Percentile: __________ Ht/Age Percentile: __________  Wt/Ht Percentile: __________

ABOVE MEASUREMENTS OBTAINED FROM - check one of the following (please list the date of measurement):
- ☐ Measured by clinic staff at this visit, date ______________
- ☐ Record (medical), date ______________
- ☐ Stated by caregiver, date ______________

LAB VALUES:  Iron (Hgb, Hct, serum iron) __________ Date: ______________  Other: ______________

ACTION TAKEN:  Screening Score = __________
- ☐ No Risk  ☐ Low Risk (<5): Nutrition Information Given  ☐ High Risk (5 or more): Information and Referral
- ☐ Referred to nutritionist, Name: __________________________ Date: ______________
- ☐ Previously seen by nutritionist, Location: __________________________ Date: ______________
- ☐ Currently receiving nutrition services, specify: __________________________ Date: ______________
- ☐ Referral for other services, specify: __________________________ Date: ______________

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EVALUACIÓN DE NUTRICIÓN
(Nutrition Screening Form)

Nombre del Niño: ______________________________________  Fecha (este día): ___________________
Domicilio: _____________________________________________  Teléfono: (___) _____________________
Ciudad: ______________________________________  Estado:______________  Zona Postal: _________
Fecha de Nacimiento: ____ / ______ / ______  Peso al Nacer: ________libras _______ onzas _______ gramos
Edad Actual: ________________  Sexo: □ Masculino □ Femenino

¿Nació su bebé prematuro (antes de tiempo)? □ Sí □ No
Si fue prematuro, cuantas semanas antes? ______ semanas
¿Le dió pecho a su hijo? □ Sí □ No  ¿Por cuanto tiempo? ______ meses

Las siguientes preguntas nos ayudarán a saber más de las salud nutricional de su niño(a). Por favor marque su contestación a cada una de las preguntas.

1. ¿Cómo ve usted a su hijo(a)?
   □ sobrepeso (3)  □ bajo de peso (4)  □ como debe estar  □ bajo de estatura (2)

2. ¿Cuales declaraciones aplican a su hijo(a) para comer?
   Marque las respuestas que corresponden:
   □ rehúsa muchas comidas  □ toma más de 40 oz. de leche cada día  □ come mucho
   □ rehusa comida sólida  □ tiene poco apetito  □ come muy poco
   □ come menos de 3 veces al día  □ otros:______________________________

3. ¿Tiene su hijo(a) problemas para poder comer o alimentarse?
   Si tiene problemas, marque los apropiados:
   □ dificultad para mamar  □ dificultad para comer solo  □ se ahoga con comida solida
   □ dificultad para masticar  □ se ahoga con líquidos  □ loses food from mouth
   □ toma en botellas después de 2 años  □ dificultad para tomar de una taza
   □ otros:__________________________________________________________

4. ¿Tiene su hijo(a) un tubo gástrico para comer?                      □ Sí (5) □ No

5. ¿Requiere su hijo(a) una dieta especial (e.g., diabético, PKU, etc.)?
   Si tiene una dieta especial, cual es?____________________________________
   □ Sí (4) □ No

6. ¿Su hijo(a) es alérgico o no tolera ciertas comidas?
   Si es alérgico, a cuales comidas?
   □ Sí (2) □ No

7. ¿Tiene su hijo(a) diarrea con regularidad?                      □ Sí (3) □ No

8. ¿Tiene su hijo(a) estreñimiento con regularidad?
   □ Sí (2) □ No

9. ¿Su hijo(a) está vomitando con regularidad?
   □ Sí (3) □ No

10. ¿En los últimos seis meses, encontraron que su hijo(a) padece o
decía de anemia?  □ Sí (2) □ No

11. ¿Ahora tiene su hijo(a) problemas dentales?                      □ Sí (1) □ No

12. ¿Su hijo(a) está tomando medicamentos?
   Si está tomando medicinas, cuales son y por cuanto tiempo? ________________________________
   □ Sí (2) □ No

13. ¿Su hijo(a) está tomando vitaminas o minerales o remedios caseros?
   Si está tomando vitaminas o minerales o remedios caseros, cuales son? _________________________
   □ Sí (1) □ No
14. ¿Cuál es el nivel de actividad de su hijo(a) actualmente?
- [ ] camina independientemente
- [ ] necesita ayuda para caminar (aparatos especiales) (2)
- [ ] no camina
- [ ] no tiene edad suficiente para caminar

15. ¿Es difícil comprar suficiente comida para alimentar a su familia?
- [ ] Sí (3)
- [ ] No

16. Recibe su hijo(a) servicios de los siguientes programas? (marque todos los que está recibiendo ahora)
- [ ] WIC
- [ ] CHDP/EPSDT
- [ ] State Disabilities Program (Centro Regional)
- [ ] Early Intervention
- [ ] SSI
- [ ] Head Start
- [ ] Educación Especial
- [ ] TANF
- [ ] Medicaid (MediCal)
- [ ] Seguro Privado (o HMO)
- [ ] Estampillas de Comida
- [ ] Programa de Terapia Privada
- [ ] State CSHCN program (CCS)
- [ ] Other: _______________________________________________________________________________

17. ¿Tiene otras preocupaciones acerca del crecimiento, nutrición o de comer de su hijo(a)?
- [ ] Sí (1)
- [ ] No

<table>
<thead>
<tr>
<th>Origen étnico (marque uno, por favor)</th>
<th>Diagnóstico médico (marque todos los que están usando ahora)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucesco</td>
<td>Asma/Enfermedad Pulmonar</td>
</tr>
<tr>
<td>Hispano/Latino</td>
<td>Autismo/Pervasive Dev. Del. (PDD)</td>
</tr>
<tr>
<td>Indio Americano</td>
<td>Displasia Bronchopulmonar (BPD)</td>
</tr>
<tr>
<td>Negro</td>
<td>Cancer</td>
</tr>
<tr>
<td>Sur-Este Asiatico</td>
<td>Enfermedad Cardiaca</td>
</tr>
<tr>
<td>Asiático</td>
<td>Parálisis Cerebral</td>
</tr>
<tr>
<td>Islas del Pacífico</td>
<td>Trastornos Cromosomales (p.ej.: Sindrome de Down)</td>
</tr>
<tr>
<td>Nativo de Hawaii</td>
<td>Anomalia Craniofacial (p.ej.: fisura en el labio/paladar)</td>
</tr>
<tr>
<td>Desconocido</td>
<td>Fibrosis Quistica</td>
</tr>
<tr>
<td>Otro:</td>
<td>Retraso en el Desarollo</td>
</tr>
</tbody>
</table>

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PERSON FILLING OUT THIS FORM:
- [ ] Parent or caregiver
- [ ] Case manager
- [ ] Educator/teacher
- [ ] Nutritionist
- [ ] Intake worker
- [ ] Health professional (OT, MD, RN, SW, PT, SLP)

WEIGHT and HEIGHT MEASUREMENTS:
- Weight: _____ lbs./or ____ Kg.
- Length/Height: _____ in./or _____ cm.
- Head Circumference:_____ in./or _____ cm.
- Wt/Age Percentile:_______
- Ht/Age Percentile:_______
- Wt/Ht Percentile:_______

ABOVE MEASUREMENTS OBTAINED FROM - check one of the following (please list the date of measurement):
- [ ] Measured by clinic staff at this visit, date _____________
- [ ] Record (medical), date _________________
- [ ] Stated by caregiver, date _______________

LAB VALUES: Iron (Hgb, Hct, serum iron) _____________ Date:______________ Other: _________________

ACTION TAKEN:
- [ ] No Risk
- [ ] Low Risk (<5): Nutrition Information Given
- [ ] High Risk (5 or more): Information and Referral
- [ ] Referred to nutritionist, Name: __________________________________________________________________________ Date: ________________
- [ ] Previously seen by nutritionist, Location: ____________________________________________________________________ Date: ________________
- [ ] Currently receiving nutrition services, specify: _________________________________________________________________ Date: ________________
- [ ] Referral for other services, specify: __________________________________________________________________________ Date: ________________

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Definitions of Nutrition Concerns

The following is a list of concerns, or health problems, which might be identified on the screening form, and the definitions. Use the nutrition screening scoring system (next item in this section) to determine if a child should be referred for individualized nutrition services.

<table>
<thead>
<tr>
<th>CONCERN</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prematurity or Low Birth Weight</td>
<td>Child is currently less than two years of age AND was born more than 3 weeks premature (less than 37 weeks gestational age) or has a birth weight less than 2500 grams = 5 pounds 8 ounces (LBW).</td>
</tr>
<tr>
<td>Overweight</td>
<td>Child’s weight for height is &gt;95th percentile on NCHS growth charts, or child has recently gained weight at a faster than normal rate.</td>
</tr>
<tr>
<td>Underweight</td>
<td>Child’s weight for height is &lt; 5th percentile on NCHS growth charts, or child has recently lost any weight.</td>
</tr>
<tr>
<td>Short stature</td>
<td>Child’s height for age is &lt; 5th percentile on NCHS growth charts, or child’s growth rate is slowing.</td>
</tr>
<tr>
<td>Inadequate food intake</td>
<td>Child does not eat any foods from an entire food group (milk products, meat/poultry/fish/beans, fruits, vegetables, or grain products). Child consumes a large amount of one food at the expense of others (such as drinking over one quart of milk and eating few solid foods). Child is a “picky” eater — refusing to eat foods of a certain texture or color, refusing to eat at certain times or refusing to eat adequate amounts of foods.</td>
</tr>
<tr>
<td>Feeding difficulties</td>
<td>Child’s eating skills are inappropriate for his/her age due to mechanical feeding problems (e.g., choking, difficulty sucking or chewing) or delayed feeding skill development (e.g., difficulty feeding self or drinking from a cup).</td>
</tr>
<tr>
<td>Feeding tube</td>
<td>Child receives any type of tube feeding for all or a portion of daily nutrition.</td>
</tr>
<tr>
<td>Special diet</td>
<td>Child requires a special diet to manage a medical condition such as diabetes, renal disease, PKU, galactosemia, allergy, etc.</td>
</tr>
</tbody>
</table>

Continued on next page
<table>
<thead>
<tr>
<th>CONCERN</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Food intolerance or allergy</strong></td>
<td>Child has a physiological sensitivity or reaction to specific foods, food components, or entire food groups.</td>
</tr>
<tr>
<td><strong>Diarrhea</strong></td>
<td>Child has frequent and fluid bowel movements <strong>not</strong> associated with acute illness or taking medication.</td>
</tr>
<tr>
<td><strong>Constipation</strong></td>
<td>Child has infrequent or difficult passage of hard, dry stools <strong>not</strong> associated with acute illness or taking medication.</td>
</tr>
<tr>
<td><strong>Vomiting</strong></td>
<td>Child vomits all or part of a feeding on a daily basis.</td>
</tr>
<tr>
<td><strong>Anemia</strong></td>
<td>Child’s hemoglobin (Hgb) or hematocrit (Hct) meets the following age-specific values:</td>
</tr>
<tr>
<td>![Age (years)]</td>
<td>![Gender]</td>
</tr>
<tr>
<td>1 - &lt; 2</td>
<td>both</td>
</tr>
<tr>
<td>2 - &lt; 5</td>
<td>both</td>
</tr>
<tr>
<td>5 - &lt; 8</td>
<td>both</td>
</tr>
<tr>
<td>8 - &lt; 12</td>
<td>both</td>
</tr>
<tr>
<td>12 - &lt; 15</td>
<td>female</td>
</tr>
<tr>
<td>12 - &lt; 15</td>
<td>male</td>
</tr>
<tr>
<td>15 - &lt; 18</td>
<td>female</td>
</tr>
<tr>
<td>15 - &lt; 18</td>
<td>male</td>
</tr>
<tr>
<td>≥ 18</td>
<td>female</td>
</tr>
<tr>
<td>≥ 18</td>
<td>male</td>
</tr>
<tr>
<td><strong>Dental problems</strong></td>
<td>Child has dental caries or other problems related to dental health (e.g., bruxism, malocclusion, gum hypertrophy).</td>
</tr>
<tr>
<td><strong>Chronic medication</strong></td>
<td>Child is taking medications (e.g., anticonvulsant, stimulant, antibiotic) on an ongoing basis.</td>
</tr>
<tr>
<td><strong>Supplements</strong></td>
<td>Child is consuming supplements like vitamins and/or minerals (prescribed by a physician or not) or home remedies.</td>
</tr>
<tr>
<td><strong>Low-income family/food insecurity</strong></td>
<td>Child’s family has insufficient resources to meet basic needs and may be eligible for additional services, including supplemental food programs. Parent/caregiver reports difficulty providing enough food for the family, or specifically for the child with special needs.</td>
</tr>
<tr>
<td><strong>Parental concerns</strong></td>
<td>Child’s parent/caregiver has concerns or questions related to nutrition.</td>
</tr>
</tbody>
</table>
Nutrition Strategies for Children with Special Needs

A completed nutrition screening form should be reviewed by a care coordinator, health professional, or teacher trained to determine the level of nutrition risk. Any questions marked with a “yes” answer should be verified with the person completing the form, based on the definitions listed on the previous two pages. For example, underweight status should be checked by plotting the weight for age (either reported or obtained by weighing) and weight for height on the appropriate charts, then comparing this with the definition of underweight (less than the 5th percentile weight for height or child has recently lost any weight) to determine if the child is underweight.

To assist in determining which children are at low and high risk for nutrition concerns, the scores assigned below are based on the severity of the nutrition risk factors. Using the chart below, add the scores corresponding to the problems identified to obtain a total score. On the Nutrition Screening Form, scores are printed in parentheses to the right of each corresponding answer. There is a space to record the total score under “Action Taken” on the second page of the Nutrition Screening Form.

<table>
<thead>
<tr>
<th>‘Yes’ answer to the following:</th>
<th>Score:</th>
</tr>
</thead>
<tbody>
<tr>
<td>♦ Child has a feeding tube</td>
<td>5</td>
</tr>
<tr>
<td>♦ Child has feeding difficulties</td>
<td></td>
</tr>
<tr>
<td>♦ Child is underweight (verify with a measurement)</td>
<td>4</td>
</tr>
<tr>
<td>♦ Child is on a special diet</td>
<td></td>
</tr>
<tr>
<td>♦ Child is overweight (verify with a measurement)</td>
<td></td>
</tr>
<tr>
<td>♦ Child regularly has diarrhea</td>
<td></td>
</tr>
<tr>
<td>♦ Child vomits regularly</td>
<td>3</td>
</tr>
<tr>
<td>♦ Child eats too much or too little</td>
<td></td>
</tr>
<tr>
<td>♦ Caregiver has difficulty providing food</td>
<td></td>
</tr>
<tr>
<td>♦ Child is short (verify with a measurement)</td>
<td></td>
</tr>
<tr>
<td>♦ Child was born prematurely or with low birth weight and is under 2 years of age</td>
<td>2</td>
</tr>
<tr>
<td>♦ Child is allergic/intolerant to foods</td>
<td></td>
</tr>
<tr>
<td>♦ Child is constipated regularly</td>
<td></td>
</tr>
<tr>
<td>♦ Child has been anemic in last six months</td>
<td></td>
</tr>
<tr>
<td>♦ Child has difficulty crawling/walking</td>
<td></td>
</tr>
<tr>
<td>♦ Child is taking medications on an ongoing basis</td>
<td></td>
</tr>
<tr>
<td>♦ Child has dental problems</td>
<td></td>
</tr>
<tr>
<td>♦ Child is taking vitamin/mineral supplements or home remedies</td>
<td>1</td>
</tr>
<tr>
<td>♦ Caregiver has other nutrition concerns</td>
<td></td>
</tr>
</tbody>
</table>
The table at left shows the criteria for determining no, low, or high nutrition risk. Steps to take for each level of risk are outlined below.

<table>
<thead>
<tr>
<th><strong>Total Score</strong></th>
<th><strong>Nutrition Risk</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>No Risk</td>
</tr>
<tr>
<td>1 to 4</td>
<td>Low Risk</td>
</tr>
<tr>
<td>5 or more</td>
<td>High Risk</td>
</tr>
</tbody>
</table>

**No Risk: Screening Score = 0**

When no nutrition risk factors are identified, the reviewer files the screening form with the child’s educational/medical records. The child is re-screened at least annually, when health status changes (e.g., before/after surgery or major illness), or when the child transitions to a new program.

**Low Risk: Screening Score = 1 to 4**

When a low level of nutrition risk is identified (total screening score is between one and four points), the reviewer:

- Asks the questions under *Assess Further* in the *Strategies* sections of this manual pertaining to each concern identified.
- Gives the parent/caregiver appropriate suggestions and any education materials.
- Files the screening form, along with a notation of what was done (under *Action Taken*) with the child’s educational/medical records.

The child is re-screened at least annually, when health status changes (e.g., before/after surgery or major illness), or when the child transitions to a new program.

**High Risk: Screening Score = 5 or More**

When a high level of nutrition risk is identified, which requires a nutrition referral (total screening score is five points or more), the reviewer:

- Discusses the concerns with the parent/caregiver, asking questions from the *Strategies* sections in the area(s) of concern. Provides information and/or suggestions and education materials (such as *Choose What You Can Use* materials).
- Discusses the need for referral for further assessment and nutrition services (if the child is not currently seeing a nutritionist or dietitian) with the parent/caregiver and obtains consent if required.
Identifies the appropriate place for referral: a health professional/agency (see the Resources section) and/or the child’s physician (regular medical care provider or case manager), depending on the program’s referral policy. Each program conducting screening should develop its own list of local professionals and referral procedures.

Generates a referral letter (sample provided in this section) and makes two copies of it plus the screening form. Gives one set of copies to the parent/caregiver and sends the letter and a copy of the screening form to the appropriate health professional/agency identified for referral.

Documents what was done (on the bottom of the screening form and/or on separate paper) and files it (with a copy of the referral letter) with the child’s educational/medical records.

Plans for follow-up to ensure that the child saw the health professional to which he or she was referred and that the health problem is being addressed or is resolved.

The child is re-screened at least annually, when health status changes (e.g., before/after surgery or major illness), or when the child transitions to a new program.
**Guidelines for Weighing & Measuring Children**

### WEIGHING
- Make sure the scale reads zero with no weight on it.
- Remove the child’s shoes and all but minimal indoor clothing (remove diapers).
- When reading the weight on the scale, check to see that the child is not moving and that the scale is in balance.
- Confirm the weight (two readings agree within 4 ounces or 100 grams) before recording.
- Record the weight.

### If child is less than 2 years of age or cannot stand:

#### MEASURING LENGTH
- Have an assistant help position the child on the length board.
- Place the child lying on his/her back.
- Correctly position the child so that:
  - the body is in line with the tape or yardstick.
  - the crown of the head is firmly touching the headboard.
  - the child’s line of sight is at a right angle to the body.
  - the knees are pushed down and the body is fully extended.
- When all the above are in position, the footboard is pushed against the bottom of the feet.
- Confirm the measurement (two readings agree within ½ inch or 1 cm) before recording.
- Record the measurement.

### If child is more than 2 years of age and can stand:

#### MEASURING HEIGHT
- Have an assistant help position the child.
- Stand the child with his/her back to the measuring surface.
- Correctly position the child so that:
  - the shoulder blades, buttocks, and heels are touching the wall or measuring surface.
  - the child’s line of sight is at a right angle to the body.
  - the legs are straight and knees together.
  - the shoulders are relaxed and arms at sides.
  - the heels are flat on the floor and the knees are straight (locked).
- Lower the headboard until it is firmly touching the crown of the head.
- Confirm the measurement (two readings agree within ½ inch or 1 cm) before recording.
- Record the measurement.
Precise, reproducible measurements require correct equipment which is maintained and regularly checked for proper functioning and accuracy. Equipment used to obtain length/height and weight measurements for CHDP exams must, at a minimum, meet the criteria listed in this guide. If your equipment does not meet these specifications, contact your local CHDP Program for equipment approval. If you need to purchase equipment, your local CHDP Program can provide you with a partial list of equipment vendors in your area. (Instructions for taking accurate measurements can be found in the CHDP publication "Nutritional Screening of Children: A Manual for Screening and Followup").

Minimum Criteria for Equipment Measuring Stature

Equipment for measuring length or height should be constructed of durable, easy to clean materials with no sharp edges or unfinished parts. Digital or electronic measuring devices should have lock in length/height features and low battery indicators or automatic shutoff. In addition to this general criteria, specific criteria must be met for recumbent and standing measuring equipment.

A. Equipment for Measuring Length - Recumbent

1. Measuring tape
   a. Attached to a firm, flat, horizontal surface
   b. Flat, no rounded tape
   c. Clearly marked to one-eighth inch (1/8") or less
   d. Made of non-stretchable material

2. Headboard
   a. Rigid and attached to horizontal surface
   b. Perpendicularly mounted (always at right angle (90°) to the measurement surface)
   c. Minimum 6 inches wide

3. Footboard
   a. Movable and non-flexible
   b. Perpendicularly mounted (always at right angle (90°) to the measurement surface)
   c. Minimum 6 inches wide

B. Equipment for Measuring Height - Standing

1. Measuring tape
   a. Attached to a firm, flat, vertical surface (entire tape mounted on a board or attached to a wall without floor molding)
   b. Flat, no rounded tape
   c. Clearly marked to one-eighth inch (1/8") or less
   d. Made of non-stretchable material

2. Headboard
   a. Movable and attached to vertical surface
   b. Perpendicularly mounted (always at right angle (90°) to the measurement surface)
   c. Minimum 2 inches wide

C. Maintenance of Measuring Equipment

1. Clean regularly
2. Replace movable parts that are worn or loose
3. Check the alignment of the headboard and footboard

* Some children 18 months to 2 years may be exceptions
** Some children 18 months to 3 years may be exceptions
**Minimum Criteria for Weighing Equipment**

Equipment for measuring weight should be constructed of durable, easy to clean materials with no sharp edges or unfinished parts. Beam balance scales with non-detachable weights, preferably without built-in measuring rods, are recommended for routine clinic use. A good quality electronic scale may be satisfactory. Spring balance scales, such as bathroom scales, are not recommended as over time the spring counter balance mechanism loses its accuracy.

A scale must have an adjustment mechanism so it can be balanced at zero with a provision for immobilizing the zeroing weight, a screw type is preferred. Digital or electronic scales should have automatic-zero, automatic-tare and lock in weight features. In addition to this general criteria, specific criteria must be met for recumbent and standing scales.

A. Equipment for Measuring Weight - Recumbent
   - Table model scale for ages birth to 2 years*
     1. Adequate infant tray that is sturdy and easy to clean
     2. Scale marked in increments 1 ounce or less, accurate to this degree
     3. Capacity of at least 35 pounds

B. Equipment for Measuring Weight - Standing
   - Floor model scale for ages 2 years and older**
     1. Adequate platform that is sturdy and easy to clean
     2. Scale marked in increments of 1/4 pound or less, accurate to this degree
     3. Capacity of at least 300 pounds

C. Maintenance of Weighing Equipment
   1. The zero balance should be checked before every clinic session, routinely in the clinic and after the scale has been moved.
   2. The accuracy should be checked Routinely in clinic and professionally.
      a. Routine clinic maintenance - All scales should be tested by weighing a number of weights on a regular basis. A set of certified calibrated (standard) weights are needed for this task. An adequate scale should be equally accurate with a 10 pound or a 60 pound load.
      b. Professional Service - Scales should be calibrated by vendors, at least annually, through the full range of weight that the scale measures. A vendor selling and repairing scales will calibrate the scales and sell standard weights for routine office checks. Most vendors offer a service contract for regular annual / semi-annual scale checkups upon request. These vendors should be registered with the State Department of Weights and Measures.

* Some children 18 months to 2 years may be exceptions
** Some children 18 months to 3 years may be exceptions
Growth Measurements

There are two ways to describe growth measurements:

1. **Numerical measurements**: weight (in pounds or kilograms); height (in inches or centimeters); and head circumference (in inches or centimeters).

2. **Plotted measurements (percentiles)**: weight for age; height for age; weight for height; Body Mass Index (BMI) for age, and head circumference for age.

Steps in Plotting and Assessing Growth Measurements

1. Use a pencil to plot growth measurements so errors can be corrected easily. If you are using the same growth chart for more than one child, cover the chart with a plastic sleeve to determine (“plot”) the percentiles without making a permanent mark on the growth chart.

2. Plot measurements immediately after they are taken or reported. This will assist in verifying unusual values and effectively communicating with parents/caregivers.

3. Determine the child’s correct age.
   - For infants and toddlers (up to 3 years), calculate age to the nearest half month.
   - Correct for prematurity if applicable. Calculate corrected age of child born prematurely as follows: subtract the number of weeks that the infant was born premature from his or her chronological age. For example, an infant who was born 6 weeks premature (1½ months) and is currently 10 months old, would have a corrected age of 8½ months (10 months minus 1½ months). Plot both the corrected age and the chronological age on the growth chart for at least the first year. It may be useful to continue plotting the corrected age until the second or third birthday or as long as catch-up growth continues.
   - For children over age 3, round off to the nearest month.

4. Select a growth chart appropriate for the sex and age of the child. (NCHS Growth Charts) – either BOYS or GIRLS:
   - Birth to 36 months: Weight, Length, Head Circumference, Weight/Length
   - 2 to 20 years: Weight, Stature (Height), Weight/Stature, Body Mass Index
5. Plot growth measurements on the chart.

- Locate the child’s age on the horizontal axis of the chart. Locate the weight scale on the vertical axis (pounds or kilograms). At the point on the chart where a line straight up from the age intersects a line straight across from the weight, make a small dot or an ‘X’.

- Determine the percentile by comparing where the dot is with the percentile curves (5th through 95th percentile). Do this for weight, length or height, and head circumference (for children under age 3).

- For children under age 10 (or less than 145 cm), plot weight for height, by finding the point where the child’s weight measurement (vertical axis) and length or height measurement (horizontal axis) intersect. Age is not utilized in determining the weight/height percentile.

- For children age 2 to 20, determine Body Mass Index using the following formulas, then find the BMI percentile for age on the chart:
  - Metric formula: weight in kg divided by height in meters divided by height in meters = BMI  
  - English formula: weight in pounds divided by height in inches divided by height in inches multiplied by 703 = BMI

- The percentile for each plotted measurement is usually expressed as the closest percentile line to the dot (e.g., 10th percentile if the dot is on the 10th percentile line) or as a range (e.g., 10th to 25th percentile if the dot is between the 10th and 25th percentile lines). Record the percentile on the nutrition screening form (under “For Office Use Only”), or in the child’s medical/educational records.

6. Compare these plotted measurements with growth data from earlier records to assess growth rate. A normal rate of growth follows the same pattern as the lines in the chart.

7. See the definitions below of overweight, at risk for overweight, underweight, and short stature to determine if the child’s current measurements and/or growth rate are a health concern.

<table>
<thead>
<tr>
<th>CONCERN</th>
<th>DEFINITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overweight</td>
<td>Child’s weight for height or BMI for age is &gt;95th percentile on NCHS growth charts</td>
</tr>
<tr>
<td>At Risk for</td>
<td>Child’s weight for height or BMI for age is between the 85th and 95th percentile, or child has recently gained weight at a faster than normal rate.</td>
</tr>
<tr>
<td>Overweight</td>
<td></td>
</tr>
<tr>
<td>Underweight</td>
<td>Child’s weight for height is &lt; 5th percentile on NCHS growth charts, or child has recently lost any weight.</td>
</tr>
<tr>
<td>Short stature</td>
<td>Child’s height for age is &lt; 5th percentile on NCHS growth charts, or child’s growth rate is slowing.</td>
</tr>
</tbody>
</table>
Instructions for Foods My Child Eats
— Dietary Screening Tool

Purpose

The Foods My Child Eats Dietary Screening Tool is designed to help those conducting nutrition screening to gain more information about the foods a child eats or does not eat. Although this information is not essential in order to provide nutrition advice and generate referrals, it can aid in determining which children are at dietary risk. A nutrition counselor uses this information to tailor nutrition advice to the child’s specific situation.

Background

The Food Guide Pyramid shows five main groups of foods that people can eat to stay healthy (see the Pyramid in the Food Guidelines section). The goal for children and adults is to eat foods from each of the five main food groups every day. The number of recommended servings from each food group depends on the type of food as well as a person’s age, size and activity level.

Bread, cereal, rice and pasta comprise the food group from which the greatest amount of food should be eaten. These foods are found at the bottom of the Pyramid. They are the foundation of a healthy diet; that is, it is best to get most energy (calories) from foods in this group. Foods from all of the groups, except the top group, contain specific kinds and amounts of vitamins, minerals, protein and other nutrients. Eaten in the proportions recommended, foods from these groups provide adequate amounts of nutrients for most healthy people. The fats and sweets shown at the top of the Pyramid should be eaten less often and in small amounts, since they do not provide significant amounts of nutrients, except for energy (calories).
Instructions

♦ Ask the parent/caregiver to complete the Dietary Screening Tool, *Foods My Child Eats*.

- For each food group, circle foods the child eats.

- Indicate how often the child eats foods from each food group by checking one box at the side of each food group.

♦ Use this information when developing a plan according to the suggestions in the *Strategies* sections. Include a copy of this form when making a referral for nutrition counseling.
<table>
<thead>
<tr>
<th>Category</th>
<th>Foods</th>
<th>How Often</th>
</tr>
</thead>
</table>
| **Breads, Cereals and Pastas**                     | ![Bread, Cereal, Pasta Images]                                         | □ Less than 3 times a day  
□ 3 to 4 times a day  
□ 5 or more times a day |
| **Orange and Dark Green Fruits and Vegetables**    | ![Fruits, Vegetables Images]                                           | □ Less than 3 times a week  
□ 3 or more times a week |
| **Other Fruits and Vegetables**                    | ![Other Fruits, Vegetables Images]                                    | □ Less than 2 times a day  
□ 2 or more times a day |
| **Milk, Yogurt and Cheese**                        | ![Milk, Yogurt, Cheese Images]                                         | □ Less than 3 times a day  
□ 3 to 4 times a day  
□ 5 or more times a day |
| **Meat, Poultry, Fish, Dry Beans, Eggs, and Nuts** | ![Meat, Poultry, Fish, Dry Beans, Eggs, Nuts Images]                   | □ Less than 2 times a day  
□ 2 or more times a day |
| **Nutritional Supplements**                        | ![Nutritional Supplements Images]                                     | □ Never  
□ Not every day  
□ Every day |
| **Fats, Oils and Sweets**                          | ![Fats, Oils, Sweets Images]                                          | □ 2 to 3 times a day  
□ 1 to 2 times a day  
□ 3 or more times a day |
<table>
<thead>
<tr>
<th>Comida</th>
<th>Marcas de frecuencia de consumo</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pan, Cereales y Pastas</td>
<td>Menos de 3 veces al día</td>
</tr>
<tr>
<td></td>
<td>3 a 4 veces al día</td>
</tr>
<tr>
<td></td>
<td>5 o más veces al día</td>
</tr>
<tr>
<td>Frutas y Verduras de Color Naranja y Verde</td>
<td>Menos de 3 veces a la semana</td>
</tr>
<tr>
<td></td>
<td>3 o más veces a la semana</td>
</tr>
<tr>
<td>Otras Frutas y Verduras</td>
<td>Menos de 2 veces al día</td>
</tr>
<tr>
<td></td>
<td>2 o más veces al día</td>
</tr>
<tr>
<td>Leche, Yogurt y Queso</td>
<td>Menos de 3 veces al día</td>
</tr>
<tr>
<td></td>
<td>3 o 4 veces al día</td>
</tr>
<tr>
<td></td>
<td>5 o más veces al día</td>
</tr>
<tr>
<td>Carnes, Aves Caseras, Huevos, Pescado, Frijoles, y Nueces</td>
<td>Menos de 2 veces al día</td>
</tr>
<tr>
<td></td>
<td>2 o más veces al día</td>
</tr>
<tr>
<td>Suplementos Nutricionales (Pediasure, Boost, Sustacal, Ensure o productos similares)</td>
<td>Nunca</td>
</tr>
<tr>
<td></td>
<td>No todos los días</td>
</tr>
<tr>
<td></td>
<td>Todos los días</td>
</tr>
<tr>
<td>Grasas, Aceites y Dulces</td>
<td>2 o 3 veces al día</td>
</tr>
<tr>
<td></td>
<td>1 o 2 veces al día</td>
</tr>
<tr>
<td></td>
<td>3 o más veces al día</td>
</tr>
</tbody>
</table>
Sample Referral Letter

Use this letter when nutrition screening indicates a high level of risk and you need to alert the child’s physician and request a referral to a nutritionist. This letter could also be used to refer a child to another agency, such as a Regional Center or Children with Special Health Care Needs program. A version of the letter suitable for reproducing on letterhead stationery is on the following page. Be sure to fill in the necessary information.

[Date]
[Physician or Agency name]
[Physician or Agency address]

RE: [Child’s name]
  Date of birth: [child’s date of birth]
  Parent/caregiver: [parent or caregiver’s name]

Dear [Physician or Agency name]:

As a result of nutrition screening, the child named above was found to be at increased risk for nutrition-related health problems. The child’s parent or caregiver and our staff identified the concerns checked below:

☐ appears overweight for height
☐ appears underweight for height
☐ appears short
☐ has an inadequate diet
☐ has feeding difficulty
☐ requires tube feeding
☐ is on a special diet
☐ has a food intolerance/allergy
☐ has chronic diarrhea
☐ has chronic constipation
☐ vomits/regurgitates regularly
☐ may be anemic
☐ has dental problems
☐ regularly uses medication

We believe it is important to follow up on these concerns and to consider the desirability of a nutrition evaluation in order to prevent more serious developmental problems. A copy of the nutrition screening tool with the identified concern(s) is included. We have provided the parent or caregiver with some written information that may assist them in dealing with the child’s nutrition risk.

Please let us know what follow up care is provided.

Sincerely,

cc: [Name(s) of parents or caregivers]
RE:

Date of birth:
Parent/caregiver:

Dear

As a result of nutrition screening, the child named above was found to be at increased risk for nutrition-related health problems. The child’s parent or caregiver and our staff identified the concerns checked below:

- [ ] appears overweight for height
- [ ] appears underweight for height
- [ ] appears short
- [ ] has an inadequate diet
- [ ] has feeding difficulty
- [ ] requires tube feeding
- [ ] is on a special diet
- [ ] has a food intolerance/allergy
- [ ] has chronic diarrhea
- [ ] has chronic constipation
- [ ] vomits/regurgitates regularly
- [ ] may be anemic
- [ ] has dental problems
- [ ] regularly uses medication

We believe it is important to follow up on these concerns and to consider the desirability of a nutrition evaluation in order to prevent more serious developmental problems. A copy of the nutrition screening tool with the identified concern(s) is included. We have provided the parent or caregiver with some written information that may assist them in dealing with the child’s nutrition risk.

Please let us know what follow up care is provided.

Sincerely,

cc: