Nutrition Risk Factors
Infants

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✓ Risk Conditions marked with a check (✓) are considered high risk by the SA.
LAs have the option of declaring any additional client as high risk by using
“Professional Discretion High Risk”.

✓  Risk Conditions marked with a computer mouse (✓ ) are auto-assigned by the
KWIC system.

✓  *Risk Conditions marked with a computer mouse (✓ ) and asterisk (*) are auto-
assigned by the KWIC system in situations when qualifying pertinent data exists in
the KWIC system. However staff must assess and manually assign the risk factor if
pertinent data is not part of the WIC record.

The definition for each Risk Condition is by followed the priority and the date the
condition was last revised by the Risk Identification and Selection Collaborative.
Feeding a Substitute for Breastmilk or Iron Fortified Formula

- Routinely using a substitute for breastmilk or for FDA approved iron-fortified formula as the primary nutrient source during the first year of life. Examples of substitutes include:
  - Low iron formula without iron supplementation;
  - Cow’s milk, goat’s milk, or sheep’s milk (whole, reduced fat, low-fat, skim);
  - Canned evaporated or sweetened condensed milk; and
  - Imitation or substitute milks (such rice- or soy-based beverages, non-dairy creamer), or other “homemade concoctions,”

Inappropriate Use of Bottles or Cups

- Routinely using nursing bottles or cups improperly. Examples of improper uses include:
  - Using a bottle to feed fruit juice;
  - Feeding any sugar-containing fluids, such as soda/soft drinks, gelatin water, corn syrup solutions, sweetened tea;
  - Allowing the infant to fall asleep or be put to bed with a bottle at naps or bedtime;
  - Allowing the infant to use the bottle without restriction (e.g., walking around with a bottle) or as a pacifier;
  - Propping the bottle when feeding;
  - Allowing infant to carry around and drink from a covered or training cup throughout the day; and
  - Adding any food (cereal or other solid foods) to the infant’s bottle.

Inappropriate Introduction of Complementary Foods

- Routinely offering complementary foods or other substances that are inappropriate in type or timing. Examples of inappropriate complementary foods include:
  - Adding sweet agents such as sugar, honey, or syrups to any beverage (including water) or prepared food, or used on a pacifier; and
  - Any food other than breastmilk or iron-fortified infant formula before 6 months of age.

Feeding Practices that Disregard Developmental Needs

- Routinely using feeding practices that disregard the developmental needs or stages of the infant, such as:

1 Complementary foods are any foods or beverage other than breastmilk or infant formula.
• Inability to recognize, insensitivity to, or disregarding the infant’s cues for hunger and satiety (e.g., forcing an infant to eat a certain type and/or amount of food or beverage or ignoring an infant’s hunger cues);
• Feeding foods of inappropriate consistency, size, or shape that put infants at risk of choking;
• Not supporting an infant’s need for growing independence with self-feeding (e.g., solely spoon-feeding an infant who is able and ready to finger-feed and/or try self-feeding with appropriate utensils); and
• Feeding an infant food with an inappropriate texture based on his/her developmental stage (e.g., feeding primarily pureed or liquid food when the infant is ready and capable of eating mashed, chopped or appropriate finger foods).

Feeding Foods that Could be Contaminated
• Feeding Foods to an infant that could be contaminated with harmful microorganisms. Examples of potentially harmful foods for an infant include:
  • Unpasteurized fruit or vegetable juice;
  • Unpasteurized dairy products or soft cheeses such as feta, Brie, Camembert, blue-veined, and Mexican-style cheese;
  • Honey (added to liquids or solid foods, used in cooking, as part of processed foods, on a pacifier, etc.);
  • Raw or undercooked meat, fish, poultry, or eggs;
  • Raw vegetable sprouts (alfalfa, clover, bean, and radish);
  • Deli meats, hot dogs, & processed meats (avoid unless heated until steaming hot).
  • Donor human milk acquired directly from individuals or the Internet.

Improperly Diluted Formula
• Routinely feeding inappropriately diluted formula.
  • Failure to follow manufacturer’s dilution instructions (to include stretching formula for household economic reasons).
  • Failure to follow specific instructions accompanying a prescription.

Inappropriate Frequency of Nursing the Exclusively Breastfed Infant
• Routinely limiting the frequency of nursing of the exclusively breastfed infant when breastmilk is the sole source of nutrients. Examples of inappropriate frequency of nursing include:
  • Scheduled feedings instead of demand feedings; and
  • Less than 8 feedings in 24 hours if less than 2 months of age.
Diet Very Low in Calories and/or Essential Nutrients

- Routinely feeding a diet very low in calories and/or essential nutrients. Examples include:
  - Strict vegan diet;
  - Macrobiotic diet; and
  - Any other diet restricting calories and/or essential nutrients.

Inappropriate Handling of Formula or Breastmilk

- Routinely using inappropriate sanitation in preparation, handling, and storage of expressed breastmilk or formula. Examples of inappropriate practices (including but not limited to):
  - Limited or no access to a:
    - Safe water supply (documented by appropriate officials e.g. municipal or health department authorities);
    - Heat source for sterilization; and/or
    - Refrigerator or freezer for storage.
  - Failure to prepare, handle and store bottles or storage containers or breast pumps properly. Published guidelines on the handling and storage of breastmilk may differ among pediatric nutrition authorities. However, the following breastmilk feeding, handling and storage practices, for example, are considered inappropriate and unsafe:
    - **Human Milk**
      - Thawing/heating in a microwave
      - Refreezing
      - Adding freshly expressed unrefrigerated breastmilk to frozen breastmilk
        - Adding freshly pumped chilled breastmilk to frozen breastmilk in an amount that is greater than the amount of frozen human milk
      - Feeding thawed refrigerated breastmilk more than 24 hours after it was thawed
      - Saving breastmilk from a used bottle for another feeding
      - Failure to clean breastpump per manufacturer’s instruction
  - **Formula**
    - Storing at room temperature for more than 1 hour
    - Failure to prepare and/or store formula per manufacturer’s or physician instructions

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2 The appropriate and safe practice is to add chilled freshly expressed breastmilk, in an amount that is smaller than the milk that has been frozen for no longer than 24 hours.
- Using formula in a bottle one hour after the start of a feeding
- Saving formula from a used bottle for another feeding
- Failure to clean baby bottle properly

**Intake of Dietary Supplements with Potentially Harmful Effects**
- An infant consuming inappropriate or excessive amounts of dietary supplements not prescribed by a physician. Including:
  - Single or multiple vitamins;
  - Mineral supplements; and
  - Herbal or botanical supplements/remedies/teas.
  - Examples of teas with potentially harmful effects to infants include: licorice, comfrey leaves, sassafras, senna, buckhorn bark, cinnamon, wormwood, woodruff, valerian, foxglove, pokeweed, periwinkle, nutmeg, catnip, hydrangea, juniper, Mormon tea, thorn apple, yohimbe bark, lobelia, oleander, Maté, kola nut or gotu cola, and chamomile.

**Inadequate Vitamin/Mineral Supplementation**
- Routinely not providing vitamin/mineral supplements as recognized as essential by national public health policy when an infant’s diet alone cannot meet nutrient requirements. Such as:
  - Infants who are 6 months of age or older who are ingesting less than 0.25 mg of fluoride daily when the water supply contains less than 0.3 ppm fluoride; and
  - Breastfed infants who are ingesting less than 1 quart per day of vitamin D fortified formula and are not taking a supplement of 400 IU of vitamin D; and
  - Non-breastfed infants who are ingesting less than 1 quart per day of vitamin D fortified formula and are not taking a supplement of 400 IU of vitamin D.

**Tobacco Smoke Exposure in the Home**
- Living with someone who smokes inside the home. KWIC will assign if Environmental Tobacco Smoke Exposure: Household Smoking is “Yes...” on most recent Health Interview record.

**Breastfeeding Infant of Woman at Priority 1 Nutritional Risk**
- Breastfeeding infant whose mother has been determined to be at priority 1 nutritional risk. Do not use if the infant has already been determined to be at
priority 1 nutritional risk. Note: If the mother was certified first and the infant’s priority does not match, KWIC displays a warning. Then staff can assign the appropriate breastfeeding dyad risk factor to make the client with a lower priority equal to the other dyad member’s priority.

Priority 1
04/01

Breastfeeding Infant of Woman at Priority 4 Nutritional Risk
- Breastfeeding infant whose mother has been determined to be at priority 4 nutritional risk. Do not use if the infant has already been determined to be at priority 1, priority 2 or priority 4 risk. Note: If the mother was certified first and the infant’s priority does not match, KWIC displays a warning. Then staff can assign the appropriate breastfeeding dyad risk factor to make the client with a lower priority equal to the other dyad member’s priority.

Priority 4
04/01

Assumed Risk for Infants and Children between 4 and 24 Months
- An infant greater than or equal to four (≥4) months of age who has begun to or is expected to begin to 1) consume complementary foods and beverages, 2) eat independently, 3) be weaned from breast milk or infant formula, or 4) transition from a diet based on infant/toddler foods to one based on the Dietary Guidelines for Americans, is at risk of inappropriate complementary feeding. This risk factor may only be assigned after the Kansas WIC Program Infant or Toddler Diet Questionnaire has been assessed and no other risk factors are identified.

Priority 4
03/05

Potential Breastfeeding Complications
- A breastfed infant with any of the following complications or potential complications for breastfeeding:
  - Jaundice;
  - Weak or ineffective suck;
  - Difficulty latching onto mother’s breast;
  - Inadequate stooling (for age, as determined by a physician or other health care professional), and/or less than 6 wet diapers per day.

Priority 1
04/01

Oral Health Conditions
- Diagnosis of oral health conditions a physician, dentist, or someone working under a physician’s orders as self-reported by client; or as reported or documented by a physician or dentist, or someone working under physician’s orders. Includes, but is not limited to:
  - Dental caries/cavities/tooth decay;
• Periodontal disease (either stage – gingivitis or periodontitis); and
• Tooth loss, ineffectively replaced teeth or oral infections which impair the ability to ingest food in adequate quantity or quality.

Disabilities Interfering with the Ability to Eat

• Developmental, sensory or motor disabilities that restrict the ability to consume chew or swallow food or require tube feeding to meet nutritional needs. Disabilities include but are not limited to:
  • Minimal brain function;
  • Feeding problems due to a developmental disability such as pervasive development disorder (PDD) which includes autism;
  • Birth injury;
  • Head trauma;
  • Brain damage; or
  • Other disabilities.

Nutrient Deficiency or Disease

• Any currently treated or untreated nutrient deficiency or disease as diagnosed by a physician as self-reported by caregiver; or as reported or documented by a physician, or someone working under physician’s orders. Diseases include, but are not limited to:
  • Protein Energy Malnutrition;
  • Scurvy;
  • Rickets;
  • Beriberi;
  • Hypocalcemia;
  • Osteomalacia;
  • Vitamin K Deficiency;
  • Pellagra;
  • Xerophthalmia, and
  • Iron Deficiency.

Cancer

• Presence of cancer diagnosed by a physician as self-reported by caregiver; or as reported or documented by a physician, or someone working under physician’s orders. The current condition, or the treatment for the condition, must be severe enough to affect nutritional status.
**Celiac Disease**

- Presence of Celiac Disease (CD) diagnosed by a physician as self-reported by caregiver; or as reported or documented by a physician or someone working under physician's orders. CD is an autoimmune disease precipitated by the ingestion of gluten (a protein in wheat, rye, and barley) that results in damage to the small intestine and malabsorption of the nutrients from food. Celiac Disease is also known as:
  - Celiac Sprue;
  - Gluten Enteropathy; or
  - Non-tropical Sprue.

**Central Nervous System Disorders**

- Presence of central nervous system disorders diagnosed by a physician as self-reported by caregiver; or as reported or documented by a physician, or someone working under physician's orders. Central Nervous System Disorders are conditions which affect energy requirements, ability to feed self, or alter nutritional status metabolically, mechanically, or both. These include, but are not limited to:
  - Epilepsy;
  - Cerebral Palsy (CP);
  - Neural tube defects (NTDs), such as spina bifida;
  - Parkinson’s Disease; or
  - Multiple Sclerosis.

**Diabetes Mellitus**

- Presence of diabetes mellitus diagnosed by a physician, as self-reported by caregiver; or as reported or documented by a physician, or someone working under a physician’s orders.
  - Diabetes mellitus consists of a group of metabolic diseases characterized by inappropriate hyperglycemia resulting from defects in insulin secretion, insulin action or both.

**Failure to Thrive**

- Presence of failure to thrive. The condition must be diagnosed by a physician as self-reported by the caregiver; or as reported or documented by a physician, or someone working under physician’s orders.
Fetal Alcohol Syndrome
- Presence of Fetal Alcohol Syndrome diagnosed by a physician as self-reported by the caregiver; or as reported or documented by a physician, or someone working under physician’s orders.

Priority 1
04/01

✓ Neonatal Abstinence Syndrome
- Presence of Neonatal abstinence syndrome (NAS) within the first 6 months of life, diagnosed by a physician as self-reported by the caregiver; or as reported or documented by a physician, or someone working under physician’s orders.

Neonatal abstinence syndrome (NAS) is a drug withdrawal syndrome that occurs among drug-exposed (primarily opioid-exposed) infants as a result of the mother’s use of drugs during pregnancy. NAS is a combination of physiologic and neurologic symptoms that can be identified immediately after birth and can last up to 6 months after birth.

Priority 1
05/17

Food Allergies
- Presence of food allergies diagnosed by a physician as self-reported by the caregiver; or as reported or documented by a physician, or someone working under physician’s orders. Food allergies are adverse health effects arising from a specific immune response that occurs reproducibly on exposure to a given food.

Priority 1
06/12

Gastrointestinal Disorders
- Presence of gastrointestinal disorders diagnosed by a physician, as self-reported by caregiver; or as reported or documented by a physician, or someone working under physician’s orders. Gastrointestinal disorders are diseases and/or conditions that interfere with the intake, digestion, and/or absorption of nutrients. The diseases and/or conditions include, but are not limited to:
  - Gastroesophageal reflux disease (GERD);
  - Peptic ulcer;
  - Post-bariatric surgery;
  - Short bowel syndrome;
  - Inflammatory bowel disease, including ulcerative colitis or Crohn’s disease;
  - Liver disease;
  - Pancreatitis; or
  - Biliary tract diseases.

Priority 1
07/09
Genetic and Congenital Disorders

- Presence of a hereditary or congenital condition at birth that causes physical or metabolic abnormality, such as genetic and congenital disorders as diagnosed by a physician as self-reported by caregiver; or as reported or documented by a physician, or someone working under physician’s orders. The current condition must alter nutrition status metabolically, mechanically, or both. May include, but is not limited to:
  - Cleft lip or palate;
  - Down’s syndrome;
  - Thalassemia major;
  - Sickle cell anemia (not sickle cell trait); and
  - Muscular dystrophy.

Hypertension and Prehypertension

- Presence of hypertension or prehypertension diagnosed by a physician as self-reported by caregiver; or as reported or documented by a physician, or someone working under physician’s orders.
  - Hypertension during childhood is age-specific, and is defined as blood pressure readings greater than the 95th percentile for age, gender, and height on at least three separate occasions.
  - Blood pressure reading between the 90th and 95th percentile is considered prehypertension.

Hypoglycemia

- Presence of hypoglycemia diagnosed by a physician, as self-reported by caregiver; or as reported or documented by a physician, or someone working under a physician’s orders.

Inborn Errors of Metabolism

- Presence of inherited metabolic disorder caused by a defect in the enzymes or their co-factors that metabolize protein, carbohydrate, or fat, diagnosed by a physician as self-reported by caregiver; or as reported or documented by a physician, or someone working under physician’s orders. Inborn errors of metabolism (IEM) generally refer to gene mutations or gene deletions that alter metabolism in the body, including but not limited to:
• **Amino Acid Disorders** - Amino Acid Metabolism Disorders are characterized by the inability to metabolize a certain essential amino acid. The build-up of the amino acid that is not metabolized can be toxic. Treatment of amino acid disorders involves restricting one or more essential amino acids to the minimum required for growth and development and supplying the missing product due to the blocked reaction.
  - Phenylketonuria (includes clinically significant hyperphenylalaninemia variants);
  - Maple syrup urine disease;
  - Homocystinuria;
  - Tyrosinemia;

• **Carbohydrate Disorders** - This group of disorders includes an enzyme deficiency or its cofactor that affects the catabolism or anabolism of carbohydrate. Carbohydrate disorders are complex and affect neurological, physical, and nutritional status.
  - Galactosemia
  - Glycogen storage disease type I
  - Glycogen storage disease type II (see also Pompe disease)
  - Glycogen storage disease type III
  - Glycogen storage disease type IV (Andersen Disease)
  - Glycogen storage disease type V
  - Glycogen storage disease type VI
  - Hereditary Fructose Intolerance (Fructose 1-phosphate aldolase deficiency, Fructose 1, 6, biphosphatase deficiency, fructose kinase deficiency)

• **Fatty Acid Oxidation Disorders** - Fatty acid oxidation defects include any enzyme defect in the process of mitochondrial fatty acid oxidation (FAO) system. The biochemical characteristic of all FAO defects is abnormally low ketone production as a result of the increased energy demands. This results in fasting hypoglycemia with severe acidosis secondary to the abnormal accumulation of intermediate metabolites of FAO, which can result in death.
  - Medium-chain acyl-CoA dehydrogenase deficiency
  - Long-chain 3-hydroxyacyl-CoA dehydrogenase deficiency
  - Trifunctional protein deficiency type 1 (LCHAD deficiency)
  - Trifunctional protein deficiency type 2 (mitochondrial trifunctional protein deficiency)
  - Carnitine uptake defect (primary carnitine deficiency)
  - Very long-chain acyl-CoA dehydrogenase deficiency

• **Organic Acid Metabolism Disorders** - Organic Acid Disorders are characterized by the excretion of non-amino organic acids in the urine. Most of the disorders are caused by a deficient enzyme involving the catabolism of specific amino acid(s). As a result, the non-metabolized substance accumulates due to the blockage of the specific metabolic pathway, which is toxic to certain organs and may also cause damage to the brain.
  - Isovaleric acidemia
  - 3-Methylcrotonyl-CoA carboxylase deficiency
  - Glutaric acidemia type I
- **Glutaric acidemia type II**
- 3-hydroxy-3-methylglutaryl-coenzyme-A lyase deficiency
- **Multiple carboxylase deficiency** (Biotinidase deficiency, Holocarboxylase synthetase deficiency)
- Methylmalonic academia
- Propionic academia
- Beta-ketothiolase deficiency

- **Lysosomal Storage Diseases** - Lysosomal storage diseases are a group of related conditions characterized by increased storage of undigested large molecules in lysosomes. Lysosomes are cellular organelles responsible for intracellular degradation and recycling of macromolecules. Due to a defect in a specific lysosomal enzyme, the macromolecule that normally would be metabolized is not broken down; instead, it accumulates in the lysosomes. This leads to tissue damage, organ failure and premature death. Common clinical features include bone abnormalities, organomegaly, developmental impairment and central, peripheral nervous system disorders.
  - Fabry disease (α-galactosidase A deficiency)
  - Gauchers disease (glucocerebrosidase deficiency)
  - Pompe disease (glycogen storage disease Type II, or acid α-glucosidase deficiency)

- **Mitochondrial Disorders** - Mitochondrial Disorders are caused by the dysfunction of the mitochondrial respiratory chain, or electron transport chain (ETC). Mitochondria play an essential role in energy production. The ETC dysfunction increases free radical production, which causes mitochondrial cellular damage, cell death and tissue necrosis and further worsens ETC dysfunction and thus forms a vicious cycle. The disorders can affect almost all organ systems. However, the organs and cells that have the highest energy demand, such as the brain and muscles (skeletal and cardiac) are most affected. The clinical features vary greatly among this group of disorders, but most have multiple organ dysfunctions with severe neuropathy and myopathy.
  - Leber hereditary optic neuropathy
  - Mitochondrial encephalomyopathy, lactic acidosis, and stroke-like episodes (MELAS)
  - Mitochondrial neurogastrointestinal encephalopathy disease (MNGIE)
  - Myoclonic epilepsy with ragged-red fibers (MERRF)
  - Neuropathy, ataxia, and retinitis pigmentosa (NARP)
  - Pyruvate carboxylase deficiency

- **Peroxisomal Disorders** - There are two types of peroxisomal disorders: single peroxisomal enzyme deficiencies and peroxisomal biogenesis disorders. These disorders cause severe seizures and psychomotor retardation. Peroxisomes are small organelles found in cytoplasm of all cells. They carry out oxidative reactions which generate hydrogen peroxides. They also contain catalase (peroxidase), which is important in detoxifying ethanol, formic acid and other toxins. Single peroxisomal enzyme deficiencies are diseases with dysfunction of a specific enzyme, such as acyl coenzyme A oxidase deficiency. Peroxisomal
biogenesis disorders are caused by multiple peroxisome enzymes such as Zellweger syndrome and neonatal adrenoleukodystrophy.
- **Zellweger Syndrome Spectrum**
- **Adrenoleukodystrophy (x-ALD)**
- **Urea Cycle Disorders** - Urea Cycle Disorders occur when any defect or total absence of any of the enzymes or the cofactors used in the urea cycle results in the accumulation of ammonia in the blood. The urea cycle converts waste nitrogen into urea and excretes it from the kidneys. Since there are no alternate pathways to clear the ammonia, dysfunction of the urea cycle results in neurologic damages.
  - **Citrullinemia**
  - **Argininosuccinic aciduria**
  - **Carbamoyl phosphate synthetase I deficiency**

**Infectious Diseases - Acute**
- A disease which is characterized by a single or repeated episode of relatively rapid onset and short duration. Infectious diseases come from bacteria, viruses, parasites, or fungi and spread directly or indirectly from person to person. Infectious diseases may also be zoonotic, which are transmitted from animals to humans, or vector-borne, which are transmitted from mosquitoes, ticks, and fleas to humans. These diseases and/or conditions include, but are not limited to the following table. An extensive listing of infectious diseases can be found at [https://medlineplus.gov/infections.html](https://medlineplus.gov/infections.html).

<table>
<thead>
<tr>
<th>Common Acute Infectious Diseases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatitis A</td>
</tr>
<tr>
<td>Hepatitis E</td>
</tr>
<tr>
<td>Meningitis (Bacterial/Viral)</td>
</tr>
<tr>
<td>Parasitic Infections</td>
</tr>
</tbody>
</table>

The infectious disease must be present within the past six months, and diagnosed by a physician as self-reported by the client/caregiver; or as reported or documented by a physician or someone working under a physician’s orders.

**Infectious Diseases - Chronic**
- Conditions likely lasting a lifetime and require long-term management of symptoms. Infectious diseases come from bacteria, viruses, parasites, or fungi and spread directly or indirectly from person to person. Infectious diseases may also be zoonotic, which are transmitted from animals to humans, or vector-borne, which are transmitted from mosquitoes, ticks, and fleas to humans. These
diseases and/or conditions include, but are not limited to the following table. An extensive listing of infectious diseases can be found at https://medlineplus.gov/infections.html.

<table>
<thead>
<tr>
<th>Common Chronic Infectious Diseases</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV-Human Immunodeficiency Virus</td>
</tr>
<tr>
<td>AIDS-Acquired Immunodeficiency Syndrome</td>
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<tr>
<td></td>
</tr>
</tbody>
</table>

Presence of condition diagnosed by a physician as self-reported by the client/caregiver; or as reported or documented by a physician or someone working under a physician’s orders.

Priority 1
06/2016

Lactose Intolerance

- Presence of lactose intolerance diagnosed by a physician as self-reported by caregiver; or as reported or documented by a physician, or someone working under physician’s orders. Lactose intolerance is the syndrome of one or more of the following: diarrhea, abdominal pain, flatulence, and/or bloating, that occurs after lactose ingestion.

Priority 1
06/12

Other Medical Conditions

- Presence of medical condition(s) with nutritional implications that are not included in any of the other medical conditions diagnosed by a physician as self-reported by caregiver; or as reported or documented by a physician, or someone working under physician’s orders. The current condition, or treatment for the condition, must be severe enough to affect nutritional status. Includes, but is not limited to:
  - Juvenile rheumatoid arthritis (JRA);
  - Lupus erythematosus;
  - Cardiorespiratory diseases;
  - Heart disease;
  - Cystic fibrosis; or
  - Persistent asthma (moderate or severe) requiring daily medication.

Priority 1
04/01

✔ Recent Major Surgery, Trauma, Burns

- Major surgery, trauma or burns severe enough to compromise nutritional status. Any occurrence:
  - within the past two (≤2) months may be self-reported;
• more than two (>2) months previous must have the continued need for nutritional support diagnosed by a physician or a health care provider working under the orders of a physician.

Renal Disease
• Presence of renal disease diagnosed by a physician as self-reported by caregiver; or as reported or documented by a physician, or someone working under physician’s orders. Any renal disease including pyelonephritis and persistent proteinuria, but excluding urinary tract infections (UTI) involving the bladder.

Thyroid Disorders
• Presence of a thyroid disorder diagnosed by a physician as self-reported by caregiver; or as reported or documented by a physician, or someone working under physician’s orders. Thyroid dysfunctions that occur during fetal development, and in childhood are caused by the abnormal secretion of thyroid hormones. The medical conditions include, but are not limited to, the following:
  • Hyperthyroidism - Excessive thyroid hormone production (most commonly known as Graves’ disease and toxic multinodular goiter).
  • Hypothyroidism - Low secretion levels of thyroid hormone (can be overt or mild/subclinical). Most commonly seen as chronic autoimmune thyroiditis (Hashimoto’s thyroiditis or autoimmune thyroid disease). It can also be caused by severe iodine deficiency.
  • Congenital Hyperthyroidism - Excessive thyroid hormone levels at birth, either transient (due to maternal Grave’s disease) or persistent (due to genetic mutation).
  • Congenital Hypothyroidism - Infants born with an under active thyroid gland and presumed to have had hypothyroidism in-utero.

Drug Nutrient Interactions
• Use of prescription or over-the-counter drugs or medications that have been shown to interfere with nutrient intake, absorption, distribution, metabolism, or excretion, to an extent that nutritional status is compromised.

Elevated Blood Lead Levels
• Blood lead level of greater than or equal to five (≥ 5) μg/deciliter within the past 12 months.
*Infant Born to a WIC Eligible Woman

- An infant less than (<) six months of age whose mother was a WIC Program client during pregnancy or whose mother’s medical records document that the woman was at nutritional risk during pregnancy because of detrimental or abnormal nutritional conditions detectable by biochemical or anthropometric measurements or other documented nutritionally related medical conditions. KWIC will auto-assign if the infant is less than or equal to 6 months of age and the Health Interview record has *Mother On WIC During Pregnancy?* as “On WIC in Kansas” or “On WIC in Other Program”.
- *Staff must assess and manually assign if the mother was not on WIC during pregnancy.

*Foster Care*

- An infant who has entered the foster care system during the previous six months or moving from one foster care home to another foster care home during the previous six months.

*Underweight, weight/length*

- Less than or equal to (≤) the 2.3rd percentile weight-for-length as plotted on the CDC Birth to 24 months gender specific growth charts based on 2006 World Health Organization international growth standards.

*At Risk of Underweight, weight/length*

- Greater than (>) the 2.3rd percentile and less than or equal to (≤) the 5th percentile weight-for-length as plotted on the CDC Birth to 24 months gender specific growth charts based on 2006 World Health Organization international growth standards.
Slowed/Faltering Growth Pattern

<table>
<thead>
<tr>
<th>Infant Age</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infants Birth to 2 weeks</td>
<td>Excessive weight loss after birth, defined as ≥ 7% birth weight</td>
</tr>
<tr>
<td>Infants 2 weeks to 6 months</td>
<td>Any weight loss. Use two separate weight measurements taken at least eight weeks apart. This can include birth weight.</td>
</tr>
</tbody>
</table>

KWIC will auto-assign based on the infant’s current age and age of anthropometric measures.

Priority 1
06/16

High Weight for Length
- Greater than or equal to (≥) the 97.7th percentile weight/length as plotted on the CDC Birth to 24 months gender specific growth charts based on 2006 World Health Organization international growth standards.

Priority 1
05/11

Short Stature, recumbent length
- Less than or equal to (≤) the 2.3rd percentile length for age (or adjusted gestational age) as plotted on the CDC Birth to 24 months gender specific growth charts based on 2006 World Health Organization international growth standards. For infants with a history of prematurity this factor is based upon adjusted gestational age. Instructions for adjusting for gestational age are found in Attachment A of this document.

Priority 1
05/11

At Risk of Short Stature, recumbent length
- Greater than (> the 2.3rd percentile and less than or equal to (≤) the 5th percentile length for age as plotted on the CDC Birth to 24 months gender specific growth charts based on 2006 World Health Organization international growth standards. For infants with a history of prematurity this factor is based upon adjusted gestational age. Instructions for adjusting for gestational age are found in Attachment A of this document.

Priority 1
05/11
Large for Gestational Age
- Birth weight greater than or equal to (≥) 9 pounds.  

Very Low Birth Weight
- Less than (<) 24 months of age with a birth weight less than or equal to (≤) 3 pounds 5 ounces (1500 g).

Low Birth Weight
- Less than (<) 24 months of age with a birth weight greater than (> ) 3 pounds 5 ounces (1500 g) and less than or equal to (≤) 5 pounds 8 ounces (2500 g).

Preterm Delivery
- Infant born ≤ 36 6/7 weeks gestation.
- KWIC will auto-calculate based on the infant’s gestational age in whole weeks as entered into KWIC by staff (Anthropometric Measures screen.)

Early Term Delivery
- Infant born ≥ 37 0/7 and ≤ 38 6/7 weeks gestation.
- KWIC will auto-calculate based on the infant’s gestational age in whole weeks as entered into KWIC by staff (Anthropometric Measures screen.)

Low Hemoglobin / Hematocrit
- Infants greater than or equal to 6 months of age
  - Hemoglobin less than (<) 11.0 g/dl
  - Hematocrit concentration less than (<) 33%

3 Infants who were preterm usually fall in the lower percentiles before adjusting for gestational age. Instructions for adjusting for gestation age are found in Attachment A of this document.
**Woman or Primary Caregiver with Limited Ability**

- A woman or infant/child whose primary caregiver is assessed to have a limited ability to make appropriate feeding decisions and/or prepare food. Examples include, but are not limited to a woman or an infant/child of primary caregiver with the following:
  - Documentation or self-report of misuse of alcohol, use of illegal substances, use of marijuana, or misuse of prescription medications.
  - Mental illness, including clinical depression diagnosed, documented, or reported by a physician or psychologist or someone working under a physician’s orders, or as self-reported by applicant/client/caregiver.
  - Intellectual disability diagnosed, documented, or reported by a physician or psychologist or someone working under a physician’s orders, or as self-reported by applicant/client/caregiver.
  - Physical disability to a degree which impairs ability to feed infant/child or limits food preparation abilities.
  - ≤ 17 years of age.

- For Infants, KWIC will auto-assign if any of the following are true of the linked mother in the current assessment.
  - Has NRF Alcohol and Substance Use assigned
  - Has NRF Depression assigned
  - Is ≤ 17 years of age.
- Staff must also assess for other possible reasons and manually assign if appropriate.

---

**Migrancy**

- An infant who is a member of a family which contain at least one individual whose principal employment is in agriculture on a seasonal basis, who has been so employed within the last 24 months, and who establishes, for the purposes of such employment, a temporary abode.

---

**Homelessness**

- An infant who lacks a fixed and regular nighttime residence; or
- An infant whose primary nighttime residence is:
  - a supervised publicly or privately operated shelter (including a welfare hotel, a congregate shelter, or a shelter for victims of domestic violence) designed to provide temporary living accommodations;
  - an institution that provides a temporary residence for individuals intended to be institutionalized;
- a temporary accommodation of not more than 365 days in the residence of another individual; or
- a public or private place not designed for, or ordinarily used as, a regular sleeping accommodation for human beings.

Priority 7
04/01

Transfer of Certification

- Person with current valid Verification of Certification (VOC) document from another State Agency. The VOC is valid until the certification period expires, and shall be accepted as proof of eligibility for program benefits. If the receiving local agency has waiting lists for participation, the transferring participant shall be placed on the list ahead of all other waiting applicants.

- This risk is not used when active clients transfer between Kansas Local Agencies because KWIC transfers all existing risk factors with the client.

- KWIC will auto-assign this risk factor when a staff member completes the Transfer from Out of State process.

Priority 1
04/01
### Table 1 - Risk Factors for Infants with Priority & USDA Risk Code

For a listing of the USDA risk codes and priorities for all categories, see PPM CRT 07.00.00 - Nutrition Eligibility.

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Priority</th>
<th>USDA Risk Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assumed Risk for Infants and Children between 4-24 months</td>
<td>4</td>
<td>428</td>
</tr>
<tr>
<td>At Risk of Underweight (weight/length)</td>
<td>1</td>
<td>103</td>
</tr>
<tr>
<td>At Risk of Short Stature (recumbent length)</td>
<td>1</td>
<td>121</td>
</tr>
<tr>
<td>Breastfeeding Infant of Priority 1 Woman</td>
<td>1</td>
<td>702</td>
</tr>
<tr>
<td>Breastfeeding Infant of Priority 4 Woman</td>
<td>4</td>
<td>702</td>
</tr>
<tr>
<td>Cancer</td>
<td>1</td>
<td>347</td>
</tr>
<tr>
<td>Celiac Disease</td>
<td>1</td>
<td>354</td>
</tr>
<tr>
<td>Central Nervous System Disorders</td>
<td>1</td>
<td>348</td>
</tr>
<tr>
<td>Diabetes Mellitus</td>
<td>1</td>
<td>343</td>
</tr>
<tr>
<td>Diet Very Low in Calories and/or Essential Nutrients</td>
<td>4</td>
<td>411.8</td>
</tr>
<tr>
<td>Disabilities Interfering with the Ability to Eat</td>
<td>1</td>
<td>362</td>
</tr>
<tr>
<td>Drug Nutrient Interactions</td>
<td>1</td>
<td>357</td>
</tr>
<tr>
<td>Early Term Delivery</td>
<td>1</td>
<td>142</td>
</tr>
<tr>
<td>Elevated Blood Lead Levels</td>
<td>1</td>
<td>211</td>
</tr>
<tr>
<td>Failure to Thrive</td>
<td>1</td>
<td>134</td>
</tr>
<tr>
<td>Feeding a Substitute for Breastmilk or Iron Fortified Formula</td>
<td>4</td>
<td>411.1</td>
</tr>
<tr>
<td>Feeding Foods that Could Be Contaminated</td>
<td>4</td>
<td>411.5</td>
</tr>
<tr>
<td>Feeding Practices Disregarding Developmental Needs</td>
<td>4</td>
<td>411.4</td>
</tr>
<tr>
<td>Fetal Alcohol Syndrome</td>
<td>1</td>
<td>382</td>
</tr>
<tr>
<td>Food Allergies</td>
<td>1</td>
<td>353</td>
</tr>
<tr>
<td>Foster Care</td>
<td>7</td>
<td>903</td>
</tr>
<tr>
<td>Gastrointestinal Disorders</td>
<td>1</td>
<td>342</td>
</tr>
<tr>
<td>Genetic and Congenital Disorders</td>
<td>1</td>
<td>349</td>
</tr>
<tr>
<td>High Weight for Length</td>
<td>1</td>
<td>115</td>
</tr>
<tr>
<td>Homelessness</td>
<td>7</td>
<td>801</td>
</tr>
<tr>
<td>Risk Factor</td>
<td>Priority</td>
<td>USDA Risk Code</td>
</tr>
<tr>
<td>----------------------------------------------------</td>
<td>----------</td>
<td>----------------</td>
</tr>
<tr>
<td>Hypertension and Prehypertension</td>
<td>1</td>
<td>345</td>
</tr>
<tr>
<td>Hypoglycemia</td>
<td>1</td>
<td>356</td>
</tr>
<tr>
<td>Improperly Diluted Formula</td>
<td>4</td>
<td>411.6</td>
</tr>
<tr>
<td>Inadequate Vitamin/Mineral Supplementation</td>
<td>4</td>
<td>411.11</td>
</tr>
<tr>
<td>Inappropriate Frequency of Nursing the Exclusively Breastfed Infant</td>
<td>4</td>
<td>411.7</td>
</tr>
<tr>
<td>Inappropriate Handling of Formula/Breastmilk</td>
<td>4</td>
<td>411.9</td>
</tr>
<tr>
<td>Inappropriate Introduction of Complementary Foods</td>
<td>4</td>
<td>411.3</td>
</tr>
<tr>
<td>Inappropriate Use of Bottles or Cups</td>
<td>4</td>
<td>411.2</td>
</tr>
<tr>
<td>Inborn Errors of Metabolism</td>
<td>1</td>
<td>351</td>
</tr>
<tr>
<td>Infant born to a WIC Eligible Woman</td>
<td>2</td>
<td>701</td>
</tr>
<tr>
<td>Infectious Diseases - Acute</td>
<td>1</td>
<td>352a</td>
</tr>
<tr>
<td>Infectious Diseases - Chronic</td>
<td>1</td>
<td>352b</td>
</tr>
<tr>
<td>Intake of Dietary Supplements with Harmful Effects</td>
<td>4</td>
<td>411.10</td>
</tr>
<tr>
<td>Lactose Intolerance</td>
<td>1</td>
<td>355</td>
</tr>
<tr>
<td>Large for Gestational Age</td>
<td>1</td>
<td>153</td>
</tr>
<tr>
<td>Low Birth Weight</td>
<td>1</td>
<td>141</td>
</tr>
<tr>
<td>Low Hemoglobin/Hematocrit</td>
<td>1</td>
<td>201</td>
</tr>
<tr>
<td>Migrancy</td>
<td>7</td>
<td>802</td>
</tr>
<tr>
<td>Neonatal Abstinence Syndrome</td>
<td>1</td>
<td>383</td>
</tr>
<tr>
<td>Nutrient Deficiency or Disease</td>
<td>1</td>
<td>341</td>
</tr>
<tr>
<td>Oral Health Conditions</td>
<td>1</td>
<td>381</td>
</tr>
<tr>
<td>Other Medical Conditions</td>
<td>1</td>
<td>360</td>
</tr>
<tr>
<td>Potential Breastfeeding Complications</td>
<td>1</td>
<td>603</td>
</tr>
<tr>
<td>Preterm Delivery</td>
<td>1</td>
<td>142</td>
</tr>
<tr>
<td>Recent Major Surgery, Trauma, Burns</td>
<td>1</td>
<td>359</td>
</tr>
<tr>
<td>Renal Disease</td>
<td>1</td>
<td>346</td>
</tr>
<tr>
<td>Short Stature (recumbent length)</td>
<td>1</td>
<td>121</td>
</tr>
<tr>
<td>Slowed/Faltering Growth Pattern</td>
<td>1</td>
<td>135</td>
</tr>
<tr>
<td>Thyroid Disorders</td>
<td>1</td>
<td>344</td>
</tr>
<tr>
<td>Risk Factor</td>
<td>Priority</td>
<td>USDA Risk Code</td>
</tr>
<tr>
<td>----------------------------------------------------</td>
<td>----------</td>
<td>----------------</td>
</tr>
<tr>
<td>Tobacco Smoke Exposure in the Home</td>
<td>1</td>
<td>904</td>
</tr>
<tr>
<td>Transfer of Certification</td>
<td>1</td>
<td>502</td>
</tr>
<tr>
<td>Underweight (weight/length)</td>
<td>1</td>
<td>103</td>
</tr>
<tr>
<td>Very Low Birth Weight</td>
<td>1</td>
<td>141</td>
</tr>
<tr>
<td>Woman or Primary Caregiver with Limited Ability</td>
<td>4</td>
<td>902</td>
</tr>
</tbody>
</table>
Table 2 - High-Risk Risk Factors for Infants

For information on providing nutrition education for high-risk clients, see [PPM NED 02.03.00 - Nutrition Education Contact - Second, High Risk].

<table>
<thead>
<tr>
<th>Risk Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>At Risk of Underweight, weight/length</td>
</tr>
<tr>
<td>Cancer</td>
</tr>
<tr>
<td>Celiac Disease</td>
</tr>
<tr>
<td>Diabetes Mellitus</td>
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<td>Disabilities Interfering with the Ability to Eat</td>
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<tr>
<td>Genetic and Congenital Disorders</td>
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<td>High Weight for Length</td>
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<tr>
<td>Inborn Errors of Metabolism</td>
</tr>
<tr>
<td>Infectious Diseases - Acute</td>
</tr>
<tr>
<td>Infectious Diseases - Chronic</td>
</tr>
<tr>
<td>Low Birth Weight</td>
</tr>
<tr>
<td>Low Hemoglobin / Hematocrit</td>
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<tr>
<td>Neonatal Abstinence Syndrome</td>
</tr>
<tr>
<td>Nutrient Deficiency or Disease</td>
</tr>
<tr>
<td>Potential Breastfeeding Complications</td>
</tr>
<tr>
<td>Recent Major Surgery, Trauma, Burns</td>
</tr>
<tr>
<td>Renal Disease</td>
</tr>
<tr>
<td>Slowed/Faltering Growth Pattern</td>
</tr>
<tr>
<td>Underweight, weight/length</td>
</tr>
<tr>
<td>Very Low Birth Weight</td>
</tr>
</tbody>
</table>
Table 3 - Risk Factors Requiring Documentation of Physician Diagnosis

For the following risk factors the condition must be diagnosed by a physician as self-reported by caregiver; or as reported or documented by a physician, or someone working under physician’s orders. Self-reporting of a diagnosis by a medical professional should not be confused with self diagnosis, where a person simply claims to have or to have had a medical condition without any reference to professional diagnosis. This should be documented by marking the [Risk Assigned Based on MD Diagnosis] check box on the Assign Risk Factors Window in KWIC.

<table>
<thead>
<tr>
<th>Risk Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cancer</td>
</tr>
<tr>
<td>Celiac Disease</td>
</tr>
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<td>Central Nervous System Disorders</td>
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<td>Infectious Diseases - Chronic</td>
</tr>
<tr>
<td>Lactose Intolerance</td>
</tr>
<tr>
<td>Neonatal Abstinence Syndrome</td>
</tr>
<tr>
<td>Nutrient Deficiency or Disease</td>
</tr>
<tr>
<td>Other Medical Conditions</td>
</tr>
<tr>
<td>Oral Health Conditions(^4)</td>
</tr>
<tr>
<td>Recent Major Surgery, Trauma, Burns(^5)</td>
</tr>
<tr>
<td>Renal Disease</td>
</tr>
<tr>
<td>Thyroid Disorders</td>
</tr>
<tr>
<td>Woman or Primary Caregiver with Limited Ability</td>
</tr>
</tbody>
</table>

\(^4\) Oral Health Conditions can also be assigned based on diagnosis, documentation or report by a dentist.

\(^5\) Any occurrence more than two (>2) months previous must have the continued need for nutritional support diagnosed by a physician or a health care provider working under the orders of a physician.
Attachment A - Calculating Gestation-Adjusted Age

INSTRUCTIONS*:

- Document the infant’s gestational age in weeks. (Mother/caregiver can self-report, or referral information from the medical provider may be used.)

- Subtract the infant’s gestational age in weeks from 40 weeks (gestational age of term infant) to determine the adjustment for prematurity in weeks.

- Subtract the adjustment for prematurity in weeks from the infant’s chronological postnatal age in weeks to determine the infant’s gestation-adjusted age.

* For WIC nutrition risk determination, adjustment for gestational age should be calculated for all premature infants for the first 2 years of life. This adjustment is automatically done by the KWIC system.

EXAMPLE:

Randy was born prematurely on March 19. His gestational age at birth was determined to be 30 weeks based on ultrasonographic examination. At the time of the June 11 clinic visit, his chronological postnatal age is 12 weeks. What is his gestation-adjusted age?

- 30 = gestational age in weeks
- 40 - 30 = weeks adjustment for prematurity
- 12 - 10 = 2 weeks gestation-adjusted age

His measurements should be plotted on a growth chart as a 2-week-old infant.

---

6 Adapted from the Centers for Disease Control and Disease Prevention (CDC) internet training module: “Overview of the CDC Growth Charts”; www.cdc.gov/nccdphp/dnpa/growthcharts/trainingmodules/module2/text/page5itext.