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**Basic Principles for Introducing Solid Foods****11.15***How to Feed When Baby is Ready for Solid Foods**Feeding Safety**Watching for Allergic Reactions**Drinking Water**Do Not Feed Babies These Foods**Never Feed Babies These Foods (Can Result in Death of Infant)**Sanitary Food Preparation and Safe Food Handling**Hand Washing**When Should Hands Be Washed?**Cleaning and Sanitizing Food Preparation Areas, Equipment,**Feeding Dishes and Utensils and Dining Areas**Using Commercially Prepared Baby Food**When Purchasing Baby Foods**When Serving Baby Foods in Jars**When Storing Baby Food in Jars*

# Infant Feeding

Good nutrition is essential to the rapid growth and development that occurs during a baby's first year. Providing babies with the right foods will promote good health and give them the opportunity to enjoy new tastes and textures as they establish good eating habits. Feeding also helps babies establish warm relationships with their parents and caregivers. Positive and supportive feeding techniques are essential in allowing babies to eat well and to develop healthy attitudes toward themselves and others.

This section will help schools feed the babies in their care as they change and develop. Parents will also give important information that will assist in feeding their babies. **Communicate frequently with the parents so that the food the babies are being fed at home can be coordinated with the food being fed them at school.** This way the best care for the babies can be assured.

## Infant Meal Pattern

	BIRTH - 3 MONTHS	4 - 7 MONTHS	8 - 11 MONTHS
BREAKFAST	4-6 fluid ounces of formula <sup>1</sup> or breastmilk <sup>2,3</sup>	4-8 fluid ounces of formula <sup>1</sup> or breastmilk <sup>2,3</sup> and  0-3 Tablespoons of infant cereal <sup>1,4</sup>	6-8 fluid ounces of formula, <sup>1</sup> breastmilk, <sup>2,3</sup> or both and  2-4 Tablespoons of infant cereal <sup>1</sup> and  1-4 Tablespoons of fruit, vegetable or both
LUNCH	4-6 fluid ounces of formula <sup>1</sup> or breastmilk <sup>2,3</sup>	4-8 fluid ounces of formula <sup>1</sup> or breastmilk <sup>2,3</sup> and  0-3 Tablespoons of infant cereal <sup>1,4</sup> and  0-3 Tablespoons of fruit and/or vegetable <sup>4</sup> or both	6-8 fluid ounces of formula <sup>1</sup> or breastmilk, <sup>2,3</sup>  and  2-4 Tablespoons of infant cereal <sup>1</sup> and/or 1-4 Tablespoons of meat, fish, poultry, egg yolk, cooked dry beans or peas or <sup>1</sup> / <sub>2</sub> -2 ounces of cheese or 1-4 ounces (volume) of cot- tage cheese or 1-4 ounces (weight) of cheese food or cheese spread  and  1-4 Tablespoons of fruit or vegetable or both

<sup>1</sup> Infant formula and dry infant cereal must be iron-fortified.

<sup>2</sup> Breastmilk or formula, or portions of both, may be served; however, it is recommended that breastmilk be served in place of formula from birth through 11 months.

<sup>3</sup> For some breastfed infants who regularly consume less than the minimum amount of breastmilk per feeding, a serving of less than the minimum amount of breastmilk may be offered, with additional breastmilk offered if the infant is still hungry.

<sup>4</sup> A serving of this component is required only when the infant is developmentally ready to accept it.

## **Meal Requirements for Infants**

All of the following criteria must be met in order for infant feeding programs to be eligible to participate in the National School Lunch (NSLP) and School Breakfast Programs (SBP) in the school:

1. The infants must be enrolled in the school district.
2. There must be an educational component in their care.
3. There must be an approved application on file for each child for which free or reduced-price reimbursement is claimed.
4. Meals served to these children must comply with the required infant meal patterns.

When planning meals for infants aged birth through 11 months, refer to the following information and use the Infant Meal Pattern in this section.

When infants from birth through 11 months of age participate in the NSLP and/or SBP, infant meal patterns must be served. Foods within the infant meal patterns shall be of texture and consistency appropriate for the particular age group being served and shall be served to the infant during a span of time consistent with the infant's eating habits.

For infants four through seven months of age, solid foods are optional and should be introduced only when the infant is developmentally ready. Whenever possible the school should consult with the infant's parent in making the decision to introduce solid foods. Solid foods should be introduced one at a time on a gradual basis with the intent of ensuring health and nutritional well-being.

### **USDA Guidance for Feeding Solid Foods to Infants Younger Than Four Months**

The introduction of solid foods to infants younger than four months of age must be documented by a physician's prescription approving the addition of solid foods, specifying which solid foods, and the quantity and consistency of such foods. Such documentation is required before the addition of other foods to the meal pattern of an infant younger than 4 months of age. If solid foods are introduced before the infant is ready, these foods may displace breastmilk or formula, resulting in inadequate energy and nutrient intake. In addition, because the digestive system is not well developed before 4 to 6 months of age, feeding solids can increase the risk of digestive problems and food allergies. By 4 to 5 months of age, the extrusion reflex of early infancy has disappeared and the ability to swallow non-liquid foods is established.

For infants eight through 11 months of age, the total amount of food authorized in the meal patterns must be provided in order to qualify for reimbursement. Additional foods may be served to infants four months of age and older with the intent of improving their overall nutrition.

The decision regarding which infant formula to feed a baby is one for the baby's doctor and parents/guardian to make together. A parent or guardian may elect to decline the offered infant formula and supply another formula.

Reimbursable meals for infants may contain either breastmilk or iron-fortified infant formula or both supplied by the caregiver or by the parent. However, to receive reimbursement the caregiver must always offer the infant a complete, developmentally appropriate meal. In order to recognize the labor involved in serving meals to infants, the meal must be served and fed to the infant by the caregiver.

Reimbursement for meals provided by parents allows for reimbursement for a meal that includes a substituted food item provided by a parent for medical reason, such as infant formula, as long as the school supplies at least one required meal component. A medical statement is required for all infant formulas that do **not** meet the definition for infant formula. According to regulations, infant formula means “any iron-fortified infant formula, intended for dietary use as a sole source of food for normal, healthy infants served in liquid state at manufacturer’s recommended dilution.” (*See listing of Iron-fortified Infant Formulas which do not require a medical statement.*)

Breastmilk, provided by the infant’s mother, may be served in place of infant formula from birth through 11 months of age. Meals containing breastmilk or iron-fortified infant formula served to infants four months of age or older may be claimed for reimbursement when the other meal component or components are supplied by the school, provided that the school offered a “formula which meets program requirements” and the decision to decline the offered infant formula was made by the parents/guardian. At eight months of age infants should be consuming one-third of their calories as a balanced mixture of cereal, fruits, vegetables, and other foods in order to ensure adequate sources of iron and vitamin C.

### **Fluid Milk**

All milk served shall be pasturized fluid types of milk which meet state and local standards. USDA recommends that whole cow’s milk should not be served to children under one year of age. In meal patterns for infants under one year of age, only breastmilk or iron-fortified infant formula is allowed for a meal to be reimbursable.

A serving of less than the minimum amount of breastmilk per feeding can be offered for some breastfed infants who regularly consume less than the minimum amount of breastmilk per feeding. However, additional breastmilk must be offered if the infant is still hungry. (See page 11.9-11.11 for the list of Iron-Fortified Infant Formulas That Do Not Require a Medical Statement.)

### **Cereal**

Any iron-fortified dry cereal specially formulated for and generally recognized as cereal for infants and routinely mixed with breastmilk or iron-fortified infant formula prior to consumption.

## **Crediting Commercial Infant and Other Food for the Infant Feeding Program**

### **Fruits and Vegetables**

#### **Commercial Baby Foods That Are Reimbursable**

- Commercial baby food fruits and vegetables which list fruit or vegetable as the first ingredient in the ingredient listing on the label are reimbursable as a meal component in the fruit or vegetable category in the Infant Meal Pattern.

- Commercial baby food fruits and vegetables which contain multiple fruits or multiple vegetables and list fruit or vegetable as the first ingredient in the ingredient listing on the label are reimbursable as a fruit or vegetable.

Districts are advised to check with parents to be certain that an infant has tried, and had no reaction to, baby food products containing multiple fruits or vegetables and other ingredients (such as milk, nonfat dry milk, whole milk solids, cheese, whey, wheat flour, or other wheat products, tomato, corn) before serving them. Districts should request that parents furnish a statement signed by a recognized medical authority if their infant is allergic to, and should not be fed, certain foods or ingredients. The statement must be signed by a licensed physician or recognized medical authority if the allergy is severe and life-threatening. The statement should include the medical or other special dietary needs which restricts the infant's diet, the food or foods to be omitted from the infant's diet, and the food or foods to be substituted.

### **Commercial Baby Foods That Are Not Reimbursable**

- Commercial baby food dinners which list fruit or vegetable as the first ingredient are not reimbursable as meal components in the Infant Meal Pattern.
- Commercial baby foods in the jarred cereal with fruit category are not reimbursable as a meal component in the fruit or infant cereal categories in the Infant Meal Pattern.
- Commercial baby foods in the dessert category (these generally have "dessert" or "pudding" as part of the product name on the front of the label) which list a fruit as the first ingredient in their ingredient listing are not reimbursable meal components in the Infant Meal Pattern.
- Commercially prepared fruits or vegetables containing DHA cannot be served to infants as part of a reimbursable meal. DHA is an omega-3 fatty acid known as docosahexaenoic. The source of DHA in some lines of baby food products is egg yolk. Although these products are not labeled or marketed as desserts, these DHA-added products contain similar ingredients (i.e. dried egg yolk, eavy cream, rice flour, vanilla extract) that may not be appropriate for an infant younger than 8 months of age. Introducing these "dessert-like" items into an infant's diet at an earlier age could result in a food sensitivity or a food allergy. Although DHA-added products cannot contribute to the infant meal pattern, they may be served as additional foods to infants 8 months of age or older. It is recommended that schools check with the infant's parent or guardian before serving them.

### **Meat/Meat Alternates**

#### **Commercial Baby Foods That Are Reimbursable**

Commercial plain strained baby food meats (including those with beef, chicken, turkey, lamb, veal and ham) are reimbursable as a meal component in the meat/meat alternate category in the Infant Meal Pattern. Gerber "2nd Foods™" baby food meat products (i.e., Beef and Beef Gravy, Chicken and Chicken Gravy, Ham and Ham Gravy, Lamb and Lamb Gravy, Turkey and Turkey Gravy, and Veal and Veal Gravy) are reimbursable even if they do contain additional ingredients, such as cornstarch and, in some cases, lemon juice concentrate. Districts are advised to check with parents to be certain that an infant has tried and had no reaction to a meat product and any other ingredients besides the meat (such as cornstarch which could be a problem if an infant is allergic to corn) before serving them.

### **Commercial Foods and Baby Foods That Are Not Reimbursable**

- Commercial baby food combination dinners are not reimbursable in the Infant Meal Pattern because the actual amount of various food components in the dinners is difficult to determine; however, these foods can be served as additional foods. Information on the exact percentage of ingredients in these dinners is proprietary and thus not available to the public.

Meat sticks or “finger sticks” (which look like miniature hot dogs) are not reimbursable as a meat/meat alternate in the Infant Meal Pattern because they could present a choking risk in infants and, by the manufacturer’s declaration, they are designed to match the skills of children over 12 months of age.

- Commercial fish sticks, other commercial breaded or battered fish or seafood products, canned fish with bones, hot dogs, and sausages are not reimbursable as a meat/meat alternate in the Infant Meal Pattern because these foods are not designed by their manufacturers for consumption by infants (less than 12 months of age). Infants may choke on these food items and there may be an incidental bone in fish sticks and other breaded fish products.
- Yogurt is not reimbursable as a meal component in the Infant Meal Pattern. Yogurt can be served as an additional food if a parent requests that it be served.
- “Pasteurized Prepared Cheese Products” (formerly labeled by Kraft as “cheese spreads” and “cheese foods”) are not creditable for any food based menu planning approach for CN Programs. “Cheese Product” has never been a creditable ingredient in CN Programs. Cheese spread and cheese foods are creditable.
- Nuts, seeds, and nut and/or seed butters are not reimbursable as a meal component in the Infant Meal Pattern. These foods can cause an infant to choke and can also cause allergic reactions in some infants.

### **Bread and Crackers and Infant Cereals**

All meals offered to infants served in the Child Nutrition Programs are not required to include grains/breads or bread/bread alternates. Only breakfast for 8- to 11-month-old infants is required to specifically include infant cereal; infant cereal can be served in addition to or as an alternate to meat/meat alternate foods at lunch and supper for 8- to 11-month-old infants. Further, per regulation, the Infant Meal Pattern specifies the types of foods to be offered and does not indicate that the broad category of “bread alternate” is to be offered in any of the meals in the Infant Meal Pattern. For 8- to 11-month-old infants, as an option in the supplement (snack), infants may be offered bread or cracker-type products (not “bread alternates”) made from whole-grain or enriched meal or flour and which are suitable for an infant to use as a finger food. Infants gradually develop their eating, chewing and swallowing skills and they also need to be gradually introduced to a variety of foods during their first year of life. Therefore, not all grain and bread alternates are appropriate for them. It would be inappropriate to feed certain “bread alternates” to infants because they may contain

ingredients which could cause allergies (e.g., pancakes, waffles, or muffins made with whole eggs), cause choking (e.g., hard pretzels, certain cookies, bread sticks, tortilla chips, granola bars, croutons, pieces of crunchy waffles, many ready-to-eat breakfast cereals), or add additional calories without being nutrient-dense foods (e.g., doughnuts, cake, brownies).

#### **A. Breads and Cracker-type Products That are Reimbursable**

The following foods, which must be made from whole-grain or enriched meal or flour, are reimbursable in the bread and crackers categories of the Infant Meal Pattern:

##### **Bread**

- Breads (white, wheat, whole wheat, French, Italian, and similar breads, all without nuts, seeds, or hard pieces of whole-grain kernels)
- Biscuits
- Bagels (made without nuts, seeds, or hard pieces of whole-grain kernels)
- English muffins
- Pita bread (white, wheat, whole wheat)
- Rolls (white, wheat, whole wheat, potato, all without nuts, seeds, or hard pieces of whole-grain kernels)
- Soft tortillas (wheat or corn)

##### **Cracker-type Products**

- Crackers—saltines or snack crackers made without nuts, seeds, or hard pieces of whole-grain kernels; matzo crackers; animal crackers; graham crackers made without honey (**Honey, even in baked goods, could possibly contain clostridium botulinum spores which can cause a type of serious foodborne illness in infants.**)
- Zwieback
- Teething biscuits

If any of the above items are served, they must be prepared in a form that is suitable for an infant to use as a finger food and reduces the chances of choking (e.g., small thin strips of bread are most appropriate, not a whole or half of an uncut hard bagel, English muffin, pita bread, wheat roll, or soft tortilla). It is advisable that these items only be served if parents agree for them to be served and after they have previously been introduced to an infant, with no problems, by the infant's parents.

#### **B. Cereal That Is Reimbursable**

Infant cereal in the Infant Meal Pattern is defined as "any iron-fortified dry cereal specially formulated for and generally recognized as cereal for infants that is routinely mixed with formula or milk prior to consumption." Iron-fortified dry infant cereal is usually found in the baby food section of grocery stores and includes the following on the package label: "Cereal for Baby." These infant cereals should be fortified to an iron level such that the percent Daily Value for iron on the nutrition label is at least 45 percent.

### **C. Cereals That Are Not Reimbursable**

- Iron-fortified dry infant cereals containing fruit are not reimbursable.
- Commercial jarred baby food cereals (which are “wet,” not “dry”) are not reimbursable.
- Ready-to-eat breakfast cereal (cold dry) and cooked breakfast cereals (such as farina or oatmeal) are not considered iron-fortified dry infant cereal and are thus not reimbursable as a meal component in the infant cereal category in the Infant Meal Pattern. These cereals are not specifically formulated or marketed for infants. In addition, some of these products may be enriched with a form of iron (e.g., ferric phosphate) which is more difficult for infants to absorb than the electrolytic iron found in infant cereals. Although enriched farina, regular oatmeal, and corn grits, for example, are not reimbursable as infant cereal in the Infant Meal Pattern, they can be fed as additional foods if the parent requests that they be served. Such cereal products can be credited as a bread/bread alternate for children 12 months old or older as part of the meal pattern for children. Ready-to-eat cold or cooked breakfast cereals with nuts, seeds, raisins, and hard pieces of whole-grain kernels or other hard food pieces are not recommended as additional foods for infants and young children because they pose a choking risk.

### **Fruit Juice**

Full-strength fruit juice (regular or infant juice) is the only type of juice product which qualifies for reimbursement as a snack for infants ages 8 through 11 months in the Infant Meal Pattern. Although not specified in the regulations, it is recommended that, if juice is served, the following types of juice be selected:

- Fruit juice containing or fortified with vitamin C — vitamin C promotes the absorption of iron in food into the body, and
- Only pasteurized fruit juice. Some kinds of juice and cider have not been pasteurized and may contain harmful bacteria. Frozen concentrate, shelf-stable juice in hermetically-sealed containers, including infant juices, and canned juices are processed or pasteurized to eliminate harmful bacteria.

Vegetable juices and fruit juices with yogurt are not reimbursable in the Infant Meal Pattern because, by regulation, only full-strength fruit juice is reimbursable. Although these juice products are not reimbursable, they can be served as additional foods if a parent requests that they be served.

It is recommended that districts obtain written instructions from parents who, in consultation with their infant’s doctor, request that certain optional or additional foods be fed or specifically not be fed to their infant.

## **Iron-Fortified Infant Formulas (as of 9/28/05) That Do Not Require Medical Statements**

### **Milk-based Infant Formulas**

- Mead Johnson Enfamil with Iron
- Mead Johnson Enfamil Gentlease LIPIL
- Mead Johnson Enfamil Lipil with Iron
- Mead Johnson Enfamil AR
- Mead Johnson Enfamil Lactofree Lipil
- Nestle Good Start Essentials
- Nestle Good Start Supreme
- Nestle Good Start Supreme with DHA & ARA
- Nestle NAN
- Ross Similac with Iron
- Ross Similac Advance with Iron
- Ross Similac Lactose Free with Iron
- CG Nutritionals Kirkland signature with Iron
- PBM (formerly known as Wyeth)-produced Private Label Store Brand Milk-based Infant Formulas:
  - AAFES (Army Air Force Exchange Supply) Baby's Choice
  - Albertson's Baby Basics with Iron
  - Albertson's Baby Basics with Lipids
  - Amway Kozy Kids with Iron
  - Amway Kozy Kids with Lipids
  - AWG Best Choice with Iron
  - BJ's with Lipids
  - Baby Select with Iron
  - Baby Select with Lipids
  - Bright Beginnings with Lipids
  - Demoulas Market Basket with Iron
  - Eckerd with Iron
  - H-E-B Baby with Iron
  - H-E-B Baby with Lipids
  - Home Best with Iron
  - Home Best with Lipids
  - Hy-Vee Mother's Choice with Iron
  - Hy-Vee Mother's Choice with Lipids
  - Kroger Comforts with Iron
  - Kroger Comforts with Lipids
  - Meijer with Iron
  - Meijer with Lipids
  - Nas Finch Our Family With Iron
  - Pathmark with Iron

- Pathmark with Lipids
- Price Chopper with Iron
- Rite Aid with Iron
- Rite Aid with Lipids
- Target with Iron
- Target with Lipids
- Top Care with Iron
- Top Care with Lipids
- Wal-Mart Parent's Choice with Iron
- Wal-Mart Parent's Choice with Lipids
- Walgreen's with Iron
- Walgreen's with Lipids
- Wegman's with Iron
- Wegman's with Lipids
- Weis Markets with Iron
- Western Family with Iron
- Western Family with Lipids

#### **Soy-based Infant Formulas**

- Mead Johnson Enfamil ProSobee
- Mead Johnson Enfamil ProSobee Lipil
- Nestle Good Start Essentials Soy
- Ross Similac Isomil Soy with Iron
- Ross Similac Isomil Advance Soy with Iron
- PBM (formerly Wyeth)-produced Private Label Store Brand Soy-based Infant Formulas:
  - Albertson's Baby Basics Soy with Iron
  - Albertson's Baby Basics Soy with Lipids
  - Amway Kozy Kids Soy with Iron
  - Bright Beginnings Soy with Lipids
  - H-E-B Baby Soy with Iron
  - H-E-B Baby Soy with Lipids
  - Home Best Soy with Iron
  - Home Best Soy with Lipids
  - Hy-Vee Mother's Choice Soy with Iron
  - Hy-Vee Mother's Choice Soy with Lipids
  - Kroger Comforts Soy with Iron
  - Kroger Comforts Soy with Lipids
  - Meijer Soy Protein with Iron
  - Meijer Soy Protein with Lipids
  - Pathmark Soy with Iron
  - Pathmark Soy with Lipids
  - Price Chopper Soy with Iron

- Rite Aid Soy with Iron
- Rite Aid Soy with Lipids
- Target Soy with Iron
- Target Soy with Lipids
- Top Care Soy with Iron
- Top Care Soy with Lipids
- Wal-Mart Parent's Choice Soy with Iron
- Wal-Mart Parent's Choice Soy with Lipids
- Walgreen's Soy with Iron
- Walgreen's Soy with Lipids
- Wegman's Soy with Lipids
- Western Family Soy with Iron
- Western Family Soy with Lipids

## **Follow-up Iron-Fortified Formulas That Do Not Require Medical Statements When They are Served to Infants at the Ages Indicated**

### **When Served to Infants Four Months and Older**

These types of formulas do not require medical statements when they are served to infants four months of age or older. A medical statement is required if any of them are served to infants younger than four months of age.

- Nestle Good Start 2 Essentials
- Nestle Good Start 2 Essentials Soy
- PBM (formerly Wyeth)-produced Private Label Store Brand "Follow-on" Formulas:
  - Albertson's Baby Basics 2 with Lipids
  - H-E-B 2 with Lipids
  - Hy-Vee Mother's Choice Follow On with Lipids
  - Kroger Comforts 2 with Lipids
  - Target 2 with Lipids
  - Wal-Mart Parent's Choice 2 with Lipids
  - Wegman's 2 with Lipids

### **When Served to Infants Nine Through 11 Months**

These types of formulas do not require medical statements when they are served to infants from nine months through 11 months of age. A medical statement is required if any of them are served to infants younger than nine months or to children one year of age and older.

- Ross Similac 2 Older Baby & Toddler Formula with Iron
- Ross Similac Isomil 2 Older Baby & Toddler Soy Formula with Iron

## **How to Store, Handle, and Feed Breastmilk**

Breastmilk must be stored and handled safely to keep it from spoiling. Follow health and safety regulations required by local authorities for safe food handling. Here are general tips for handling breastmilk:

### **Before Arriving at the Facility**

Ask mothers to:

- Store breastmilk in the refrigerator or freezer immediately after collecting it and label the bottles with: the baby's name, and the date and time the breastmilk was collected.
- Store the milk in hard plastic bottles if possible to prevent breakage.
- Fill the bottles with the amount of breastmilk the baby usually drinks at one feeding. The mother can freeze some bottles with 1 to 2 ounces of breastmilk for times when the baby wants some extra breastmilk.
- Carry bottles of fresh or frozen breastmilk to the facility in a cooler with an ice pack to keep the milk at a cold temperature.

### **Handling and Storing Breastmilk at the Facility**

- Breastmilk from a mother is designed specially to meet the needs of her baby. Make sure that each bottle is clearly labeled with the correct child's name. Never accept an unlabeled bottle from a parent.
- Refrigerate bottles immediately when they arrive and until ready to use.
- Use bottles of breastmilk only for the baby for whom they are intended.
- To prevent spoiling, do not allow bottles of breastmilk to stand at room temperature.
- Use refrigerated bottles of fresh breastmilk, kept at 40° Fahrenheit or below, within 48 hours from the time of collection. Discard unused breastmilk if not used within 48 hours. Although some suggest that fresh breastmilk can be stored for longer than 48 hours, the 48-hour period assures safety.
- Breastmilk can be stored in a freezer (with a separate door from the refrigerator), for up to 3 months from when it was collected. Freezer temperature should be 0° Fahrenheit or below. If the freezer is not working or if there is a power failure, frozen milk may thaw out and become spoiled before 3 months.
- Rotate frozen breastmilk, using the oldest milk first.
- Protect breastmilk in an air-tight container (hard plastic bottles are recommended) while in the freezer. Once the breastmilk is removed from the freezer and thawed, refrigerate it at 40° Fahrenheit or below and use it within 24 hours; do not refreeze it.
- Do not save and reuse breastmilk leftover from bottles.
- Wash skin on which breastmilk has spilled with soap and water immediately.

### **Preparing and Using Stored Breastmilk for Feeding**

- Wash your hands.
- Thaw a bottle of frozen breastmilk in the refrigerator or hold it under running cold water. Thaw only as much frozen breastmilk as you think a baby will need for a feeding.
- Do not thaw frozen breastmilk at room temperature, by heating on a stove, or in a microwave. Liquid may become very hot when microwaved even though the bottle feels cool. The hot liquid could seriously burn babies. Also, heating damages special substances in breastmilk that protect baby's health.
- If breastmilk has a bad odor after thawing, it may have spoiled and should be discarded.

- Once thawed, do not refreeze breastmilk.
- For those babies who prefer a warm bottle, hold the bottle under running warm (not hot) water immediately before feeding the baby. Warm only as much breastmilk as you think a baby will need for a feeding. Feed breastmilk immediately after warming.
- Shake the bottle of breastmilk before feeding the baby because the breastmilk separates into two layers when it is stored.
- After a feeding, discard any unused breastmilk left in a bottle and wash the bottle with soap and hot water immediately.
- Follow the baby's lead in the amount of breastmilk to feed. Feed the baby until he or she is no longer hungry.
- Clean and sanitize bottles and their parts before reusing or filling with new expressed breastmilk. Throw out disposable nursing bags, if used, after each use.

### **Purchasing, Storage, Sanitary Preparation and Handling of Infant Formula**

Infant formula needs to be purchased, stored, prepared and handled properly in order to be safe for a baby. Follow the specific health and safety regulations that are required by the state and local health authorities for safe food handling. General tips for use of infant formula follow.

#### **Purchasing Cans of Formula**

- Ready-to-feed formula is the most convenient and sanitary.
- If you are preparing liquid concentrate or dry powdered formula, it must be mixed very carefully according to directions on the container. Adding too little water to formula puts a burden on the baby's kidneys and digestive system and may lead to dehydration. Adding too much water to formula may interfere with the baby's proper growth because it does not contain adequate calories and nutrients and can cause water intoxication.
- Instructions on using special formulas should be provided by the baby's doctor.
- Make sure the label says "with iron" or "iron-fortified."
- Do not purchase cans of infant formula that have dents, bulges, pinched tops or bottoms, puffed ends, leaks or rust spots. The formula in such cans may be unsafe.
- Check the formula's expiration date on the lid or label to make sure the product is not too old. If the expiration date has passed, the nutrient quality of the formula may have deteriorated and you should not select the can.

#### **Storing Cans of Formula**

- Before using stored formula, check the expiration date on the lid or label to make sure the product is not too old. If the expiration date has passed, throw out the can.
- Store unopened cans of infant formula in a cool, dry indoor place—not in a refrigerator or in vehicles, garages, or outdoors (in these places, the cans are exposed to water and temperature extreme which can rust the can or affect the quality of the formula).

#### **Handling of Formula Prepared By Parents**

If parents prepare formula themselves and bring it to the facility, ask them to:

- Label the bottles with: the baby's name and the date and time the formula was prepared.
- Store the formula in hard plastic bottles if possible to prevent breakage.

- Disinfect nipples, bottles, rings and caps by boiling for 5 minutes in a pot with enough water to cover, then remove with sanitized tongs, let cool, and air dry.
- If disposable plastic bottle liners are used:  
Throw out the bag after one use; and  
Clean and sterilize the nipples, rings and caps as described above.
- Before opening a formula can, wash can lid with soap and clean water and rinse to remove dirt that could contaminate the formula. Before using, wash the can opener with soap and hot water.
- Prepare the formula properly according to directions on the formula container.
- Put a clean nipple right side up on each bottle and cover with a nipple cap.
- Do not put cereal or other food in a bottle because this interferes with the baby's natural ability to obtain the right amount of calories, forces the baby to eat cereal, and may cause the baby to choke. Feeding cereal does not affect baby's ability to sleep.

### **Storing Bottles of Formula**

- Make sure the bottles are labeled with the baby's name and the date and time the formula was prepared. Use bottles of formula only for the baby for which they are intended.
- Refrigerate prepared bottles until ready to use and use them within 48 hours from the time they were prepared. Store in the back of the refrigerator (colder area).
- To prevent spoiling, do not allow prepared bottles of formula to stand at room temperature. Do not feed a baby a bottle left out of the refrigerator for 1 hour or longer. Throw out prepared formula not used within 48 hours.
- Opened cans of formula should be covered, refrigerated, and used within 48 hours. Throw out formula that is not used within 48 hours.
- Do not freeze infant formula.
- Throw out any unused formula left in a bottle after a feeding and rinse the bottle in cool water to remove formula. Do not reuse a bottle containing formula after the baby has fed from it. The mixture of formula with baby's saliva promotes the growth of disease-causing germs.
- Clean and sanitize bottles and their parts before reusing them.

### **Warming Infant Formula**

- For babies who prefer a warm bottle, warm the bottle immediately before feeding by holding it under running warm water. Warm only as much formula as you think the baby will need for a feeding.
- Always test the temperature of the liquid before feeding to make sure it is not too hot or cold. Shake the bottle well and test the temperature by squirting a couple of drops of the liquid onto your wrist or back of your hand. The temperature is correct when it feels neither warm nor cold.
- Never use a microwave oven to heat the bottles — this is dangerous. Liquid may become very hot when microwaved even though the bottle feels cool. The liquid could seriously burn babies. Covered bottles, especially vacuum-sealed, metal-capped bottles of ready-to-feed formula, can explode when heated in a microwave.

## Basic Principles for Introducing Solid Foods

- Talk with the parents before introducing solid foods. Only introduce solid foods when babies are developmentally ready for them.
- Coordinate with each baby's parents so that the same new foods and textures are introduced at the same time as at home.
- Do not serve solid foods to a baby younger than 4 months of age without a doctor's written instructions.

## How to Feed When Baby is Ready for Solid Foods

- Sit directly in front of the baby to encourage the baby. Offer the spoon. Wait for the baby's mouth to open before attempting to feed. If babies are not ready to eat from a spoon, they are not ready to eat solid foods.
- In feeding solid foods, use a small spoon and place a tiny amount of food between a young baby's lips. At first much of it may slide out of the mouth, but gradually the baby will learn to move the food to the back of the mouth for swallowing.
- Do not force the baby to finish the serving. Babies are the best judge of how much food they need. Let them decide how much they eat. Feed until the baby indicates fullness by: not opening the mouth, pulling away from the spoon, turning away, pushing food or spoon back out of the mouth, or throwing the food on the floor.
- Be calm and friendly but not overwhelming. Follow the baby's lead on when to feed, what to feed, and how much to feed.
- Do not put cereal or any other solid food in a bottle or infant feeder. Use a spoon for feeding instead. An infant feeder is a hard plastic container with a spout at one end and a plunger at the other end which is used to push a liquid mixture of solid food into a baby's mouth. Babies fed food in a bottle or infant feeder are forced to eat the food, can choke, and may not learn to eat foods properly.
- **Any special equipment needed for feeding children with disabilities should be used. Consult with the parents on how to feed babies with special needs.**
- Make the texture of the food appropriate for the baby's stage of development. Providing new textures encourages the baby's further development.

## Feeding Safety

- Test the temperature of foods before feeding them to make sure they are not too hot.
- When feeding solid foods, seat babies in highchairs appropriate for their age and development. Fasten the baby into the highchair with safety straps before feeding. Keep the highchair away from the table, counter, wall, or other surface so that the baby cannot push off from it.
- Babies being fed and older babies learning to feed themselves should be closely supervised by an adult seated at the same table or next to the baby's highchair. Make sure that the baby does not eat while talking, crying, or laughing. Also, the adult can watch for "squirreling" (keeping several pieces of food in the mouth without swallowing) which can cause choking.
- To prevent choking, make sure that babies (and children) are not eating while they are talking, crying, laughing, crawling, walking, running, playing, lying down, or riding in a vehicle.

- Use a small spoon, made of unbreakable material that will not splinter, that easily fits into the mouth (do not use plastic utensils). Place food in a clean small plastic unbreakable bowl or dish with edges that are not sharp.
- Keep hot liquids or foods out of reach of babies and children, not on the edge of a counter or table, or on a tablecloth that could be pulled down. Make sure that Child Nutrition staff do not consume hot liquids near babies or children. Babies and children can be burned from hot liquids or foods tipped over.

### **Watching for Allergic Reactions**

- Reinforce the introductions of new foods by serving the same foods as the parents are feeding. Wait at least 1 week between introducing new foods to watch for reactions (diarrhea, rashes, vomiting, coughing, wheezing, general irritability, hives, stomach pain).
- If a baby seems to be having a severe reaction to a food (e.g. hives, difficulty breathing, or shock), contact the rescue squad or Emergency Medical Service and the baby's parents immediately.
- If a baby does not like the taste of a new food at first, you can try offering it again 3 or 4 weeks later after discussing this with the parents.

### **Drinking Water**

- A baby's doctor may recommend feeding a small amount of sterile water in a cup when solid foods are introduced. Consult with the baby's parents about the feeding of water. Sterile water is water that is brought to a very bubbly boil, boiled for 1 to 2 minutes, and then allowed to cool.

### **Do Not Feed Babies These Foods:**

- Cow's Milk—is not as nutritious and may cause anemia in babies. Breastmilk or infant formula are best for the first year of life.
- Hard pieces of raw vegetable or raw fruit—can cause choking and be difficult to digest.
- Egg white, whole eggs, shellfish (shrimp, lobster, crab, oysters, clams, scallops, crawfish), and chocolate and cocoa may cause allergic reactions in babies.
- Shark, swordfish, king mackerel, or tilefish—may contain high levels of harmful mercury.
- Citrus (e.g., orange, tangerine, grapefruit), pineapple, or tomato juices or foods before 6 months of age may cause allergic reactions in babies.
- Home-prepared beets, carrots, collard greens, spinach, and turnips should not be fed before 6 months of age.
- Peanut butter and other nut and seed butters (e.g., soy nut, almond, cashew, or sunflower seed butter) and nuts and seeds can cause choking and may cause allergic reactions in some babies.
- Commercially prepared baby food desserts or commercial cakes, cookies, candies, and sweet pastries tend to be high in sugar and may contain less of the key nutrients that babies need.
- Sugar, maple syrup, corn syrup, molasses, glucose, or other syrups should not be added to food or beverages.
- Foods, beverages, or powders containing artificial sweeteners should not be fed to babies.
- Foods that could cause choking.

### **Never Feed Babies These Foods (Can Result in Death of Infant)**

- Honey—Honey and products containing honey, including sources used in cooking or baking (such as in honey graham crackers), should never be fed to babies. Honey is sometimes contaminated with *Clostridium botulinum* spores which may cause a type of illness called infant botulism.
- Raw milk—Raw cow's or goat's milk could be contaminated with harmful substances which can make a baby very sick. Only pasteurized milk products should be used once milk is introduced at 12 months of age.
- Raw or undercooked eggs, meat, poultry, or fish—These foods when raw or undercooked can contain harmful bacteria, parasites, and other harmful substances that can make a baby very sick.
- Home-canned foods—These foods may contain harmful bacteria if improperly canned.

### **Sanitary Food Preparation and Safe Food Handling**

Babies are more susceptible to bacteria than older children, and unsanitary food conditions can cause serious infections. General cleanliness, proper food selection, and sanitary food preparation and storage are key to preventing illnesses related to food contamination in babies. Take extra care when handling babies' food, bottles, and utensils to make sure they are safe and clean. Contact your local health department to obtain the local regulations and standards for food safety and sanitation and to ask about a local food handler course in your area.

### **Hand Washing**

Proper hand washing can help prevent the spread of illness in child care settings. Make sure to wash your hands thoroughly by following these steps:

- Wet your hands with warm running water.
- Add soap.
- Wash all surfaces on hands. Rub vigorously for at least 20 seconds. Wash carefully between fingers, around the tops and palms of hands, over wrists, and under nails using a clean nail brush.
- Rinse your hands well under warm running water; leave the water running while drying hands.
- Dry your hands with a clean, disposable paper towel.
- Turn off the faucet, using the disposable paper towel, instead of your clean bare hands.

### **When Should Hands Be Washed?**

Wash your hands thoroughly **before** you:

- Bottle feed a baby,
- Handle, prepare, serve, or touch food or bottles,
- Handle food utensils and set the table,
- Touch raw meat, poultry, or fish,
- Eat, drink, or feed food to babies or children,
- Put away clean dishes,
- Give medication.

Wash your hands thoroughly **after** you:

- Arrive at the site for the day,
- Handle raw meat, poultry, fish, or eggs,
- Change a baby's or child's diaper and/or clothing,
- Use the bathroom or assist a child in the bathroom,
- Handle a baby or child who is ill or give medication,
- Come in contact with any bodily fluids (e.g., soiled diapers, urine, blood, feces, vomit, mucus, spit, breastmilk),
- Sneeze or cough into tissues or hands,
- Get your hands dirty, or have been cleaning, or working outside, wipe noses, mouths, bottoms, sores or cuts,
- Handle pets, or other animals, or garbage.

Make sure to wash a baby's or child's hands before and after eating meals and snacks, and after changing a diaper (many babies place their hands in the diaper area during changing).

### **Cleaning and Sanitizing Food Preparation Areas, Equipment, Feeding Dishes and Utensils, and Dining Areas**

Clean and sanitize all food preparation, foodservice, and dining areas (including countertops, tables, and high chairs) before and after each meal. Clean and sanitize all food preparation equipment, dishes, and utensils for serving and feeding after each use and store them in a clean and sanitary manner.

Before and after preparing and serving food, the following should be washed with soap and hot water and then rinsed thoroughly with hot water:

- All surfaces used to prepare food, including countertops and tables,
- Food preparation equipment and utensils (including food warmers),
- Foodservice and dining areas (including highchairs).

After washing, sanitize all of the above according to applicable federal, state, and local foodservice rules and regulations for public institutions serving food to infants and children.

### **Using Commercially Prepared Baby Food**

Keep the baby's food clean to keep it safe. Remember to wash your hands before handling any food.

### **When Purchasing Baby Foods**

- Look at the "use-by" date on the baby food jar. If the date has passed, do not use the food.
- Buy baby food jars that are clean on the outside and do not have a broken vacuum seal. The seal is broken if the button on the center of the top is popped out.
- Single-ingredient baby foods, like single vegetables, fruits, and meats provide more nutrition ounce for ounce than baby food combination dinners and baby food desserts. Plain meats and plain vegetables or fruit can be mixed together if the baby likes the taste. Fruit can be served instead of a baby food dessert.

- Read the ingredient list on the baby food label. This way you can tell if foods contain vegetable, fruit, or meat as the first ingredient and if salt, butter, oil or cream, sugar, corn syrup, or other ingredients have been added.

#### **When Serving Baby Foods in Jars**

- Look at the “use-by” date on the baby food jar. If the date has passed, do not use the food.
- Wash the lid and jar of baby food before opening.
- Make sure the jar lid is sealed and has not been broken before opening it. If the seal has not been broken, a “pop” noise should be heard when opening the lid of the jar.
- Do not tap the jar lid or bang it to open it—this could break glass chips into the food.
- Remove enough food from the jar for one feeding. Look closely at the food to make sure there are no abnormal pieces in it. Place the food in a dish for feeding. This way the baby’s saliva on the spoon will not spoil the leftover food in the jar. If additional food is needed, use a clean spoon.
- If needed, warm the baby food on a stove or in a food warmer. Stir the food and test its temperature before feeding. Do not leave baby food in jars to heat in a microwave—the food can get very hot and could burn the baby’s mouth.
- Throw away any leftover food in the dish. Do not put it back in the jar.

#### **When Storing Baby Food in Jars**

- After opening a jar, replace the lid and place it in the refrigerator. Label the jar with the child’s name and the date and time that it was opened. Use the food within 2 days, except for baby food meats and egg yolks which should be used within 24 hours. Throw out foods not used within those times.
- Regularly check to make sure that your refrigerator temperature is cold enough (40° Fahrenheit or lower) to keep the food safe.
- Look at the “use-by” date on the jar when storing unopened jars. If the date has passed, throw out the food and recycle the jar.
- Store unopened jars in a cool dry place like a kitchen cabinet or pantry (not in the refrigerator, car, garage, or outdoors).
- Rotate the stored jars so that you use the food previously purchased prior to newly purchased food.

For more detailed information refer to *Feeding Infants: A Guide for Use in the Child Nutrition Programs (FNS-258)*. This publication will also be available on the Team Nutrition Home Page at: [http://www.fns.usda.gov/cnd/tn/Resources/feeding\\_infants.html](http://www.fns.usda.gov/cnd/tn/Resources/feeding_infants.html).