

Infant Nutrition

During the first year of life, good nutrition is essential to healthy growth and development. For infants to grow appropriately they need adequate calories, protein, and essential nutrients. Your infant's growth is plotted on a growth chart, which helps the doctors and nurses know that your infant is growing at a healthy rate. Newborns lose ~10% of their initial birth weight due to fluid loss, but regain to their birth weight after 7 days. Typically infants double their birth weight by ages 4-6 months and triple it by age one.

Breastfeeding is healthy for you and the baby.

Benefits for your baby:

- Human milk is the perfect food for your baby. It contains more than 200 nutrients plus special factors to improve your child's immune system
- Human milk changes to meet the needs of a growing baby
- Breastfed babies have fewer infections, diarrhea, and constipation
- Breastfeeding lowers the risk of asthma, colic, food allergies
- Breastfeeding helps you connect emotionally with the infant
- Breastfed babies are less likely to be overweight later in life

Benefits to you:

- Have less risk of prolonged or heavy bleeding.
- Helps the uterus return to its normal size
- Helps you lose weight more easily
- Reduces the risk of breast, uterine, and ovarian cancer
- Improves bone health
- Promotes a special relationship with the infant
- Can help you save money (~1,000 dollars in the first year!)

Breast milk or iron-fortified infant formula should be provided until the infant is 12 months old. The American Academy of Pediatrics recommends that infants are breastfed exclusively until 4 months of age (preferably 6 months of age) and continue until 12 months or until the mother/child wish to stop. Formula, when prepared correctly in the adequate amounts will provide sufficient amounts of all nutrients and minerals for healthy growth.

If you are having difficulty breastfeeding, consider working with breastfeeding specialist such as an International Board Certified Lactation Consultant (IBCLC). Call the office to find one in your area!

Do I need to eat a special diet while breastfeeding?

Eating a healthy and balanced diet is important for you and your baby. The more milk you produce, the more calories you may need. This means that someone who exclusively breastfeeds needs more than a mom that is using a combination of formula and breast milk. The energy (calorie) needs for breastfeeding are similar to your last trimester of pregnancy or about 500 calories more per day than pre-pregnancy. Try not to lose weight or cut back on your calories

during the first 4-6 weeks or until your milk supply is established. Many women find that breastfeeding helps them return to their pre-pregnancy weight. You should not lose more than 2 pounds per week, this can affect your milk supply.

Small amounts of caffeine (1-2 small cups of coffee) are considered safe for breastfeeding moms and healthy full-term babies. Small amounts of artificial sweeteners are considered safe as well. Some babies have food allergies and specific foods in the mothers diet should be eliminated. If you suspect a food allergy, discuss with your doctor.

Can I drink alcohol while breastfeeding?

The effects of alcohol on the infant depend on how much the mother ingests. Most professionals agree that 1 alcoholic beverage (5 oz wine, 12 oz of beer, or 1 oz liquor) per day is safe to consume while breastfeeding. Try not to breastfeed for 2 hours after having an alcoholic beverage.

Returning to Work

Lots of moms are nervous to return back to work and fear they cannot continue to breastfeed. Having a good support system will be important in helping you succeed. It is Vermont Law for employers to allow appropriate times and a private area to express breast milk or breastfeed.

Pumping breast milk manually or with an electric pump can be utilized to continue breastfeeding while at work and increase your milk supply. Some moms find it best to build up a milk supply before they go back to work. Breast milk can be stored in a refrigerator for 5 days or in the freezer for up to 5 months. Be sure to store in a clean container and label with the date it was expressed.

For more information on breastfeeding go to:

www.healthvermont.gov/wic/food-feeding/breastfeeding

www.womenshealth.gov/breastfeeding

www.lalecheleague.org

www.kellymom.com

Books:

New Mothers Guide to Breastfeeding, 2nd edition – American Academy of Pediatrics

Balancing Breast and Bottle –Amy Peterson, BS, ILILC

Breastfeeding: A Parent's Guide – Amy Spangler, MN, RN, IBCLC

How do I know my baby is getting enough?

1. Your infant will show you when they are hungry. Infants have an innate sense of hunger and fullness. Parents provide a safe and nurturing feeding environment and healthy foods and the infant decides whether to eat and how much. Feeding your child when hungry will lead them to know their needs will be met. Careful observation of hunger signals is important so they eat well. If initial hunger signals are not tended to the infant will become fussy or start crying. Crying infants do not eat well and should be consoled or calmed before feeding.

2. Your baby will have 5-8 wet diapers and 3-4 stools per day by the time they are 7 days old.

3. Your baby will be gaining weight. They should gain 4-7 oz per week and double their birth weight by 4-6 months old. If your baby is growing along their growth curve then they are getting enough to eat.

Breastfed Babies:

Feed the breastfed baby when hungry (typically 10-12 times during first weeks of life, 8-12 times per day for the next 6 months, and 6-12 times thereafter). Feedings may last from 20-45 minutes. Feeding on demand is the best way to encourage a healthy milk supply. Using a pump or manually pumping when the mother is away from infant can help maintain or increase milk supply.

Supplements:

Breast milk does not provide adequate amounts of Vitamin D and supplementation is needed within the first few days of life. At 4 months the maternal iron stores run out and an iron supplement should be given until adequate oral iron is introduced (fortified infant cereal or meats).

Formula-fed Babies:

Be sure to make the formula as directed on packaging or by your doctor. Diluting formula can make your baby full without getting all the nutrients they need for healthy growth!

Feed the formula-fed baby 6-8 times per day (every 3-4 hours) until complimentary foods are added. As the infant gets older they will drink a larger volume of formula at one time and can go for longer periods without eating. Newborns typically drink 2 oz per feeding (about 20-30 oz per day). Do not prop the bottle, this puts them at a higher risk for choking and dental caries. It is important to hold your baby close, in a semi-upright position. This gives an opportunity for a warm and loving interaction with the infant. You should be able to make contact and monitor for signals of hunger/fullness.

Hunger Signals:

- Young infants will make eye contact, open their mouth, put hands to mouth, sucking or rooting motions, be fussy.
- 4-6 month infants will move their head towards the food, grab the spoon.

It is important to feed the infant until full so your child grows in a healthy way. Overfeeding the infant could encourage excess weight gain and underfeeding could leave them hungry and affect their growth.

Signs of Fullness/Satiety:

- Young infants will turn their head away from the nipple, close their mouth, become distracted/interested in other things, or fall asleep.
- 4-6 month infants will lean back, turn away from the food.

When can I introduce solid foods?

At 4-6 months solid food may be introduced if the infant is developmentally ready. During this period, the tongue thrust reflex (pushing food out of mouth) is fading and the sucking reflex is

allowing for coordinated swallowing. Solid food should not replace breastfeeding or formula, but used to provide additional nutrients and to introduce new foods and feeding techniques. As the infant grows older they will eat more solid foods and drink less breast milk or formula. They will also learn to chew and swallow, pick up finger foods, drink from a cup, and finally, feed themselves.

Signs that infant is ready for solids...

- The infant should be able to sit up and have good head control
- Does the infant open its mouth when food comes its way?
- Can the infant move the food from the spoon to its mouth?

Introduce one single ingredient food at a time. Offer a small amount (1-2 teaspoons) when the infant is well rested and not too hungry. Give them half a serving of formula and switch to the solid foods. Let the infant set the pace. Do not introduce other new foods for 3-5 days. Observe the infant for possible food allergies. Iron fortified infant cereal is a great place to start because it is iron fortified! Baby oatmeal or barley are other good options.

Gradually introduce other pureed foods (meats, fruits, and vegetables). If a baby does not like the new food, do not force it. It may take 10-15 attempts for the infant to accept a particular food.

You can offer store bought baby food or make your own. Making homemade baby food is easier than you may think. (We broke it into 3 easy steps). You can use many of the foods that the rest of the family eats. Most foods can be cooked and pureed for young infants and later mashed or chopped when your baby is ready for more difficult textures.

How do I make homemade baby food?

Food safety:

Harmful germs can make your baby sick when food isn't prepared and handled properly.

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| <ul style="list-style-type: none">• Equipment you will need...• Knife• Vegetable Peeler• Ice Cube Trays• Plastic Bags or Containers• Fork or Blender, Food Mill, Baby Food Grinder |
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How to Make:

1. Wash, Prepare, and Cook

Wash all equipment and your hands with hot and soapy water. Rinse well and dry.

Fruits and Vegetables:

Wash and peel fruit or vegetables. Remove seeds, stems, and pits. You may also use frozen fruits or vegetables without any added salt, sugars, spices, or fats. Soft, ripe fruits like bananas or canned fruits, like peaches don't need to be cooked before mashing.

Protein:

Remove all bones, skin, and visible fat. Boil, bake, or poach meat, poultry, or fish until tender.

Egg yolks: Wash shells before boiling. Boil for 15 minutes. Remove egg whites.

Dried Beans: Cook until soft or used rinsed, canned beans

Tofu: Slice, boil, cool and dice.

2. Cool and Mash

Allow food to cool to room temperature. Mash, pureed, or grind food. Add small amounts of water, breastmilk, formula, or 100% juice until mixture is smooth or at desired texture.

3. Storing and Freezing

- Fill clean container, cover, date the container, and refrigerate completely. Use within 2 days.
- To freeze baby food, pour into ice cube trays and freeze overnight. Pop out the ice cube trays into a plastic bag or container. Label and date the container. Frozen baby food will keep for 1 month. Reheat only the amount of food your baby will eat at one feeding. Thaw and warm in a small dish in a pan of water over the stove. Use extreme caution if using a microwave as they can heat foods unevenly and be hot. Stir well and check the temperature before feeding. Throw away any leftovers.

Infants 6 months to 9 months show more interest in food and may not display as much interest in breastfeeding or formula. They can take part of family meals in a high chair.

6-7 months:

Unsalted Pureed Vegetables (carrots, squash, green beans, peas, avocado)

Unsweetened Pureed Fruits (applesauce, pears, peaches, banana)

100% fruit juice (limit to 4-6 oz/day)

7-9 months:

Mashed vegetables, soft cheese, cottage cheese.

Plain pureed meats (chicken, beef, pork, turkey, fish)

Plain pureed beans, peas, or lentils

Egg yolk

By 9 months infants should be on the same feeding schedule as the family (breakfast, lunch, dinner) and snacks in between. They can start learning to eat on their own with their fingers. Some signs that your baby is ready to self-feed include: grasps with palm, grasps with thumb and

forefinger, brings hand to mouth, and able to swallow foods other than liquids. Provide foods from each of the 5 food groups (fruits, vegetables, grains, proteins, and dairy). They may be ready to begin to use a cup with assistance. They should still receive breast milk or formula between meals.

10-12 months

Finger Foods: Cheerios/dry cereal, small crackers, cooked noodles

Cooked soft vegetables (strips or slices)

Soft fruits (wedges or slices)

Small tender pieces of meats

Foods to Avoid: large chunks of food, sliced hot dogs, raw carrots/celery/green beans, raisins, nuts, seeds, popcorn, peanut butter, chips, gum, hard candy, jelly beans. Wait until 1 year to offer egg whites and honey.

By 12 months of age the infant should transition to whole cows milk. If your infant has a milk allergy or intolerance your doctor may recommend using soy milk instead.

When should I wean my baby from the bottle?

As your baby starting to eat more table food and drink from a cup (around 9 months) you can gradually wean from the bottle. Most infants ages 12-14 months can drink from a cup.

For more information or resources go to:

www.healthychildren.org

www.eatright.org/kids

<http://www.nutrition.gov/life-stages/infants>

Books:

Nutrition: What Every Parent Needs to Know – American Academy of Pediatrics

Child of Mine: Feeding with Love and Good Sense –Ellyn Satter, MS, RD, CICSW

The Best Homemade Baby Food on the Planet- Karen Wright RN and Tina Ruggiero MS, RD, LD