

Infants & Children

Plant-Based Nutrition



The American Academy of Pediatrics recommends a plant-based diet for infancy and childhood, provided that it is well planned. Nutrition requirements change throughout the life cycle. The following are more specific nutritional considerations for infants and children.

INFANCY

Infants' nutritional needs are best met by their mothers' breast milk, which helps to build immunity. When breastfeeding is not possible, commercial plant-based formulas for infants are available (not to be confused with regular plant milks).

For the first 6 months of life, infants' nourishment should be exclusively breast milk or formula. They should continue to receive breast milk or formula at least through their first 12 months. The longer a child consumes breast milk, the better. There is no need for infants to consume another species' milk (cow's milk) and in fact, it is a leading cause of childhood constipation.

At around 6 months, it's time to introduce solid foods to an infant's diet. Recommended first foods are:

- Whole grains like brown rice and oatmeal, cooked down as congee or porridge.
- Vegetables, including sweet potatoes, green beans, and carrots (thoroughly cooked and mashed).
- Fruits, such as mashed bananas, berries, avocados, peaches, or applesauce.

By 8 months, babies can eat crackers, whole grain bread, and mashed tofu and beans.

Caloric Needs

While most adults require 25 to 30 calories per kilogram (cals/kg), infants require a higher calorie intake per kilogram of body weight. For instance, an infant weighing 4 kilograms requires more than 100 cals/kg, while infants 4 to 6 months who weigh 6 kilograms

require roughly 82 cal/kg. Requirements for fatty acids on a per-kilogram basis are higher in infants than adults. These caloric needs can be naturally provided by breast milk when infants are allowed to nurse on demand.

Taste Preferences

What an infant consumes creates taste preferences that are likely to remain stable for life. There is a “taste window” between about 4 and 7 months where infants are primed to learn and accept new flavors and textures. Be sure to offer a wide variety of whole plant foods during this time; the more the better!

Exposure to Common Food Allergens

Early exposure to allergenic foods, like peanuts, can help reduce the risk of food allergies later on. It is recommended to include peanuts and other nuts as some of the infant’s first foods. Whole nuts are a choking hazard and shouldn’t be offered until about 3-4 years old, but infants can have small amounts of nut butter mixed in with puréed food.

Vitamin B12

Plant foods are not a reliable source of B12. Young infants will get enough B12 from formula or breast milk, assuming that Mom is adequately supplementing. If there is any doubt regarding Mom’s B12 status, then it is recommended to supplement the infant. All plant-based infants should start a B12 supplement once they are no longer getting a large portion of calories from breast milk or formula.

Vitamin D

The American Academy of Pediatrics recommends all breastfed infants receive 400 IU per day of supplemental vitamin D starting shortly after birth. Humans are meant to get vitamin D from the sun; however, infants should avoid direct sun exposure because of their more sensitive skin.

CHILDHOOD

It's important that children's meals incorporate a variety of vegetables, fruits, whole grains, legumes, nuts, and seeds, to ensure they are getting all the nutrients they need. Early childhood is a critical period for the formation of eating habits. Opting for a plant-based diet presents an excellent opportunity for your child, as well as your family, to develop a taste for a diverse range of nourishing foods.

Caloric Needs

Whole plant-based foods tend to have fewer calories than animal-based and highly processed foods. This is not a bad thing, given the current overconsumption of high-calorie, low-nutrient foods among children, but it's important to be sure that children get enough high-quality, nutrient-dense calories to grow and support daily activity. Children 1 to 3 years of age require approximately 83 cal/kg. Energy requirements decline thereafter and are based on weight, height, and physical activity. Nuts, nut butters, avocados, whole soy products, and whole grains can help add nutrient-dense calories.

Vitamin B12

As mentioned, plant foods are not a reliable source of B12. Thus, it is important for plant-based children to supplement their diet with B12-fortified foods, such as fortified plant-based milk and cereals. B12 supplements are also a great option.

Vitamin D

If the child is not getting adequate sunshine, consider a vitamin D supplement. The American Academy of Pediatrics recommends children receive 400 IU per day of supplemental vitamin D.

Iron

On average plant-based children get more iron from food than meat-eating children. They also eat more foods rich in vitamin C, which aids in iron absorption. Another advantage for plant-based children is a diet free from dairy. Dairy is one of the biggest factors contributing to iron deficiency for several reasons:

1. Dairy is low in iron.
2. Dairy often replaces calories from healthier foods.
3. Dairy interferes with iron absorption from other foods.

Children 1-4 Years Old

Introduce the child to new foods and flavors, but be careful not to overcomplicate things or overwhelm them at a single meal. Some meal ideas for this age group include:

Breakfast:

- Smoothies made with leafy greens, fruit, and nut butter
- Oatmeal sweetened with applesauce or raisins

Lunch:

- Whole grain sandwiches with hummus, sliced avocado, and vegetables
- Corn tortillas filled with mashed beans, vegetables, and salsa

Dinner:

- Black bean burgers and mashed potato or sweet potato
- Brown rice and beans with roasted veggies

Snacks:

- Carrot and celery sticks with hummus or nut butter
- “Nice” cream made with frozen fruit and plant-based milk

Children 5-11 Years Old

All the foods listed above are also great for children in this age bracket, but you should aim to incorporate a greater variety of foods by this age. A varied plant-based diet will help to ensure that they are meeting their nutritional needs and encourage them to keep an open mind about trying new things.

Children 12 and Up

By this age, the child will probably be eating pretty much the same foods that adults are but may require more frequent meals as they are growing. American children frequently develop fatty streaks in their arteries even before completing high school. However, children/teens who follow a plant-based diet limit foods rich in saturated fat and cholesterol, thereby reducing the risk factors associated with heart disease.

References

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