

## VITAMINS

Nutrition is always a major focus as we discuss your child's health and development during regular check-ups. We will make recommendations about how to optimize nutrition. If you have questions or concerns, please discuss them with us. The following are guidelines for vitamins and minerals.

### **BREAST FED INFANTS**

An important way to insure that a breast fed infant gets the necessary vitamins is to make certain that the mother is well nourished. Although breast milk contains less iron than formula, the infant more easily absorbs the iron in breast milk than the iron in formula. Additional iron in vitamin drops, then, is generally not necessary for healthy full-term babies. Since breast milk may be low in vitamin D, we recommend a supplemental dose of 400 IU a day. Products such as D-Vi-Sol (1 mL daily) or Baby D drops (1 drop daily) are appropriate. Vitamin D should be started in the first few days after birth. Breast-fed infants who receive formula supplements totaling at least 32 ounces daily do not need a vitamin D supplement.

### **FORMULA-FED INFANTS**

Vitamin D supplementation is recommended for formula fed babies taking less than 32 ounces of formula daily. The dose is stated in the prior section. No other vitamin supplementation is recommended.

### **TODDLERS, OLDER CHILDREN AND ADOLESCENTS**

A child consuming a well-balanced diet consisting of fruits, vegetables, meats, grains and dairy products is unlikely to require supplemental vitamins. Depending on your child's diet, additional vitamin D and/or calcium may be needed (see below).

### **VITAMIN D**

Most people think of healthy teeth and bones when thinking about vitamin D. Research shows, however, that vitamin D is involved in many body functions and plays a role in immune defenses and cancer prevention. The recommended daily intake is 400 IU a day for children under one year of age and 600 IU a day for children over 1 year of age. Vitamin D can be gotten from foods supplemented with it, such as milk and other sources such as: salmon, mackerel, sardines, tuna and eggs. Vitamin D is also naturally made by our bodies from sun exposure. Arm and leg exposure for 15-30 minutes a day between the hours of 10 am to 3 pm, without using sunscreen, will produce an adequate amount of vitamin D. However, in New Jersey this is not possible many months of the year and we are also concerned about skin cancer and highly recommend that children use sunscreen, which will of course block the sun's ultraviolet light that helps produce vitamin D. For children to get 600 IU of vitamin D a day, they would need to drink 6 cups of milk (100 IU of vitamin D per cup), eat 1 pound of cheese or eat 14 large eggs every day. We

don't recommend these amounts of the previously mentioned foods. So the best way to get enough vitamin D is from the diet, limited sun exposure without sunscreen and supplements. Supplements include: a chewable multivitamin (most contain 400 IU of vitamin D) or a vitamin D supplement (chewable and liquid products are available). Routine testing of vitamin D levels is not recommended.

## **IRON**

Foods rich in iron include green vegetables, red meat, dried beans, prunes, raisins, eggs, strawberries, sweet potatoes, tomato juice and iron-fortified cereals. Iron deficiency results in anemia (low blood count) as well as behavior and learning difficulties. In general, supplementation is not needed. We routinely test for iron deficiency at the 9 month well visit and when iron deficiency is suspected.

## **CALCIUM**

The most common sources of calcium in children's diets are dairy products and leafy green vegetables. Beans (navy or soy), sunflower seeds, almonds and fish eaten with bones (sardines or canned salmon) are also rich sources. Orange juice, cereal and other products are now available with added calcium as well. Children require at least 800 mg of calcium per day; adolescents require more (1200 mg per day). 8 ounces of milk or 6 ounces of yogurt contain approximately 300 mg of calcium. One ounce of cheese contains 150-250 mg calcium depending on the type. Leafy green vegetables contain 150 mg per cup. If your child does not consume adequate calcium in his diet, calcium supplements may be necessary. Please see our handout about calcium.