

Robert Wood Johnson Medical School - Bristol Myers squibb Children's Hospital  
Cystic Fibrosis Center

## **CYSTIC FIBROSIS (CF) AND NUTRITION INFORMATION SHEET**

### **WHAT ARE THE NURTITIONAL NEEDS OF SOMEONE WITH CF?**

Many people with CF have pancreatic insufficiency. This means that the enzymes released by the pancreas that normally help the digestion of fat, protein and starch in the small intestine are not available. This creates problems with normal absorption of many nutrients.

Adequate intake, digestion and absorption of nutrients are essential for normal growth and development. People with CF need many more calories and nutrients than others in their age group. In fact, people with CF can need up to 50% more calories to support adequate nutrition necessary for growth and development as well as helping to preserve lung function. For example, a toddler with CF may need up to 2000 calories, a school aged child may need 2500-3000 calories, and a teenager with CF may need 3000-4500 calories a day. Keep in mind that calorie needs are even higher when the body is stressed (like during an infection).

### **WHAT ARE SOME IMPORTANT NUTRIENTS AND HOW CAN YOU GET THEM?**

**FAT SOLUBLE VITAMINS: A, D, E, K.** These fat soluble vitamins are found and absorbed in many fat containing foods. These nutrients are necessary for growth and healing. Since most people with CF have trouble digesting fat, they normally have low levels of fat soluble vitamins in their body. Therefore, it is necessary to take vitamin supplements that are high in vitamin A, D, E and K.

**CALCIUM:** People with CF have difficulty absorbing calcium because of pancreatic insufficiency. The lack of adequate calcium increases the risk for developing osteoporosis (brittle and weak bones). Dairy products and calcium fortified drinks are good sources of calcium.

**SALT:** People with CF lose a lot of salt in their sweat. This is particularly a concern in the hot weather and with increased exercise. Salty snacks and sports drinks are a good way to get the extra salt your body needs during these times.

**ZINC:** This mineral is important for growth, healing and fighting infection. Meats, seafood and eggs are good sources of zinc.

**IRON:** Lack of adequate iron in the diet can lead to iron-deficiency anemia which causes fatigue and lowers your resistance to infection. Good sources of iron include iron fortified cereals and breads, meats, and green leafy vegetables.

