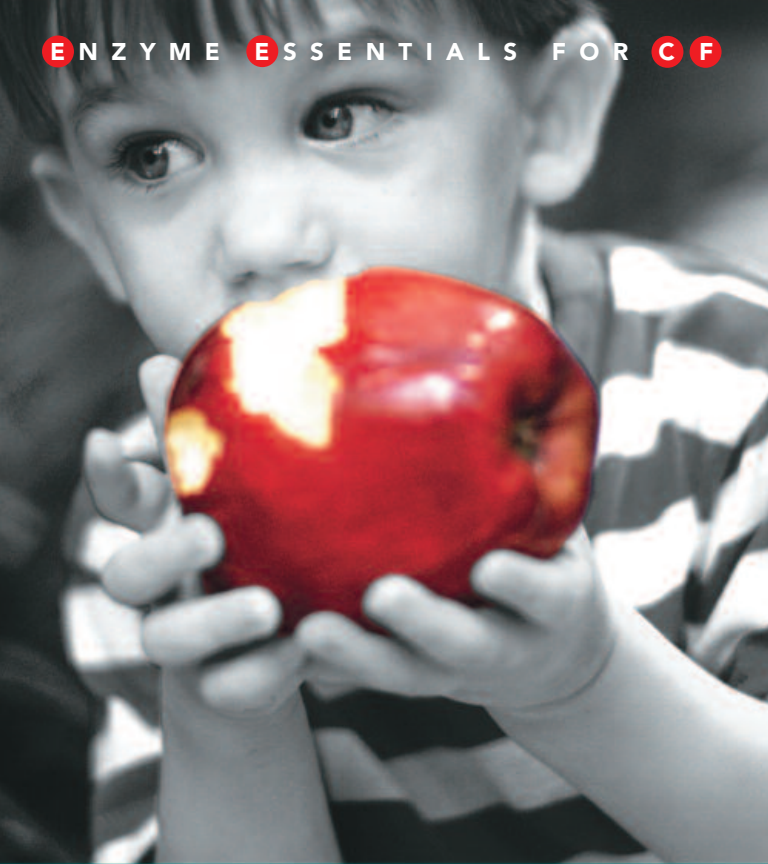


ENZYME ESSENTIALS FOR C F



ESSENTIALS
FOR GIVING
PANCREATIC
ENZYMES TO
CHILDREN





Giving pancreatic enzymes

to a child with cystic fibrosis (CF) does

require extra effort. But soon the

enzymes will become a regular part

of meals and snacks. Most

importantly, pancreatic

enzymes offer significant benefits for

children with CF – better growth,

stronger bones and muscles, and

a healthier future.



WHY DO CHILDREN WITH CF NEED PANCREATIC ENZYMES?

Pancreatic enzymes are necessary to help the body digest and absorb nutrients. Many people, including those with CF, are not able to produce the pancreatic enzymes they need to process food correctly, a condition that is called pancreatic exocrine insufficiency, or PEI.

For adults and children with CF, PEI is a result of thick mucus that blocks the openings, or ducts, of the pancreas. This blockage prevents the digestive enzymes that are made in the pancreas from reaching the small intestine, where they work. Proteins, fats, and starches cannot be digested when there aren't enough pancreatic enzymes in the small intestine, and the body doesn't get the nutrients it needs. This is especially crucial for children, who need those nutrients to grow normally and stay healthy.

There is a way to help the body function when PEI is present. Pancreatic enzyme supplements act like the body's natural enzymes, breaking down food and increasing absorption in the small intestine.

To help your child absorb important nutrients, give enzymes during every feeding, meal, or snack — even a glass of milk. If taking enzymes becomes a consistent, expected part of a daily routine, it will make it easier for your child to continue the habit and stay as healthy as possible.

HOW DO I GIVE PANCREATIC ENZYME SUPPLEMENTS TO A CHILD WHO CANNOT SWALLOW CAPSULES?

There are two simple steps for giving pancreatic enzymes to a baby or small child who is unable to swallow capsules.

Step 1. Immediately before each meal, open the capsule and mix the appropriate amount of enzyme beads with a small spoonful of a soft, acidic food, like applesauce or other mashed fruit. It's important to add the enzymes immediately before the meal is eaten because letting the mixture sit too long can weaken the enzymes.

Step 2. Feed your child the mixture. For babies, begin breast or bottle-feeding as soon as you've given the mixture and continue feeding normally. Make sure there are no beads left in the mouth after eating. Just wipe the beads out with a finger and discard.

MY NEW BABY ISN'T READY FOR SOLID FOODS, LIKE APPLESAUCE. HOW CAN I GIVE THE ENZYMES?

Even babies without teeth can eat a small amount of mashed fruit mixed with enzyme beads. Put the mixture on the middle of the baby's tongue using a rubber-tipped baby spoon. To help your baby swallow it, offer the breast or bottle as soon as the mixture is given.

WHAT SHOULD I DO IF MY BABY SPITS OUT THE APPLESAUCE-ENZYME MIX?

Babies naturally push food out with their tongues. It might take some time to overcome this reflex. Just scoop the mix back in, trying the side of the mouth if the middle of the

tongue doesn't work. If your baby won't take the enzymes by spoon, try dipping a clean finger in the applesauce and then the beads. Put your coated finger directly into baby's mouth to suck. Immediately follow up with the breast or bottle-feeding to wash down the beads.

It may take your child a week or two to get used to taking enzymes, so don't get discouraged. If it takes longer than a few weeks, call your doctor or CF center for advice.

WHAT IF MY CHILD TAKES THE ENZYMES AND THEN REFUSES TO EAT?

If this happens once in a while, there's no need to worry. If it becomes a habit, call your doctor or CF center for advice.

WHAT OTHER FOODS CAN I MIX WITH THE ENZYMES?

Soft, acidic food that doesn't require chewing is fine for mixing with enzymes. Acidic foods prevent the coating on the enzyme beads from breaking down before they get into your child's stomach. So, if your child doesn't like applesauce, you can try mashed apricots, pears, or peaches.

MY BABY OFTEN SPITS UP DURING FEEDINGS. SHOULD I GIVE MORE ENZYMES BEFORE I FINISH THE FEEDING?

If your baby spits up occasionally during meals, additional enzymes are not necessary. However, if your baby spits up often during meals, you should talk to your doctor or CF center to develop a plan for giving your baby additional enzymes during feedings.

MEALTIME WITH MY TODDLER IS DIFFICULT. WHAT CAN I DO TO MAKE GIVING ENZYMES EASIER?

Involve your child in the mealtime process. Offer choices like, "Do you want to sprinkle the beads into your food or do you want Mommy to do it?" or "Do you want your beads in applesauce or peaches today?"

WHAT SHOULD I DO IF MY CHILD IS A SLOW EATER?

Children who are slow (or stubborn) eaters should get half the enzyme dose at the beginning of the meal and the rest halfway through the meal.

HOW WILL I KNOW MY CHILD IS GETTING THE RIGHT AMOUNT OF ENZYMES?

There are several ways to tell if your child is absorbing nutrients correctly (poor or incorrect absorption is called malabsorption). Your child may experience one or more of the following symptoms:

- large bulky stools (bowel movements)
- oil in the stools or diaper
- gas
- increased frequency of stools
- bloated stomach
- a big appetite with poor weight gain
- a change in eating habits

IF MY CHILD HAS SYMPTOMS OF MALABSORPTION, WHAT SHOULD I DO?

Do not change the enzyme dosage or brand. Contact your doctor or CF center to discuss the symptoms.

WILL MY CHILD BE HARMED IF AN ENZYME DOSE IS MISSED?

Missing an occasional dose may cause temporary symptoms of malabsorption, but it won't harm your child. If doses are missed frequently, it can deprive your child of nutrients essential to growth and good health. It is important to get you and your child in the habit of using enzymes with each meal.

TALK WITH A DOCTOR AND NUTRITIONIST

Doctors and nutritionists are valuable sources of information for developing an overall health and nutrition strategy. If you have any questions or concerns about the information discussed in this brochure, please talk with a doctor or nutritionist.

This pamphlet was originally developed with the help of the following advisors:

Melanie Newkirk, RD, CS, LD
Cystic Fibrosis Center
All Children's Hospital
St. Petersburg, Florida

Terri Schindler, MS, RD
Children's Hospital Medical Center
Pulmonary Medicine
Department of Pediatrics
Cincinnati, Ohio

Ellen K. Bowser, MS, RD, CS, RN
Pediatric Pulmonary Center
University of Florida
Gainesville, Florida



Solvay
Pharmaceuticals

