Pancreatic Enzymes

The pancreas is an organ in the body that makes enzymes. Pancreatic enzymes (pan-kree-AT-ik EN-zimes) help the body digest and absorb food. Some medical problems, such as cystic fibrosis and pancreatic insufficiency, keep the enzymes from being made or released the right way. Most people with cystic fibrosis cannot release enzymes because the pancreas is clogged with thick mucus. People with pancreatic insufficiency may not make enough enzymes.

When pancreatic enzymes are not made or released the right way, food does not get digested and absorbed. This means that food cannot be used for growth, energy, fighting infection and healing wounds. People whose bodies do not make or release pancreatic enzymes must take them as a medicine.

Caution: Anyone allergic to pork should not take or handle this medicine.

- There are several brands of enzymes. **Do not use generic substitutes.**
- **Do not change to a different brand** without checking with your doctor first.
- Read the label **every time** before you give this medicine.
- Give the **exact amount** of medicine as ordered by your doctor.
- Stay with your child until they have swallowed the dose of medicine.
- Do not use enzymes after the expiration date on the bottle because they lose their strength over time.

**Enzymes must be taken as directed by your doctor whenever food containing fat, carbohydrates or protein is eaten (meals, snacks, bottles).** It is important to take enzymes **immediately before** eating. Enzymes are **not** needed for foods such as Jell-O®, fruit juice, fruit or regular soda that contain mostly sugar.
• Your child may need to take a different amount of medicine before meals than you give before snacks.

• Enzymes come in capsule form. If your child can take the capsule, have them swallow it whole.

• If your child cannot swallow capsules, open the capsule. Sprinkle the beads over soft, cool food that does not need to be chewed, such as applesauce. It is best not to mix it with bananas. If the powder from inside the capsule is breathed in, it may cause a stuffy nose or trouble breathing.

• Your child should not chew the beads from the capsule. They can irritate the mouth and throat. If the beads are chewed, the enzymes will not digest food properly.

• Make sure your child does not have any beads left in or around the mouth. This can irritate the skin and mouth or cause sores.

If a dose is vomited

If your child gags, chokes, or spits out the dose or vomits the dose before swallowing it, give the same amount one more time.

Possible side effects

• Nausea
• Diarrhea
• Oily stools or stools that float
• Constipation (hard, infrequent stools)
• Upset stomach after meals
• Several bowel movements every day
• Irritation in diaper area

What to do about side effects

• If your child has any of the above side effects, call the doctor. The doctor may need to change the enzyme or dosage of medicine.

• It is important to remember to give the enzymes with every meal or snack that contains fat, carbohydrates or protein.

• You will get special instructions if your child is getting tube feedings.

When to call the doctor

Call your child's doctor if any of the following happens:

• The child is having any of the side effects
• Major change in the child's bowel habits.
• Abdominal pain or prolonged bloating (child has a "puffy" stomach)

Storage of medicine

• **Store all medicine out of children's reach**
• **Do not** keep this medicine in the refrigerator.
• Keep this medicine away from heat or direct sunlight. Do not keep enzymes in the car. Heat can cause them to not work properly.
• Moisture makes this medicine not work as well. Keep the container tightly capped and store in a **dry** location (not in the bathroom or above the kitchen sink) (Picture 2).
• Do not use this medicine after the expiration date printed on the container.
• Always keep medicine in the labeled container it came in.

When you get the prescription filled

• Have your pharmacist give you 2 labeled containers if your child care provider will be giving this medicine.
• Get this prescription refilled at least 1 **week before** the last dose is given. This is very important because it lets your pharmacy have time to order the medicine and take care of any insurance issues.
• Make sure all refills are the same brand. **Do not use the generic form of this medicine.**
• Some pharmacies may not have this medicine. Please ask your nurse to call your pharmacy before you leave the hospital to see if they have this medicine or can order it for you. You may also have the prescription filled at the Nationwide Children’s Hospital Pharmacy.

Safety tips

• Tell your child's doctor and pharmacist if your child has an unusual or allergic reaction to any medicine.
• If you carry medicine in your purse, keep it in its childproof container and keep your purse out of the reach of children.
• Take all your child’s medicines with you **in the original containers** whenever your child sees a doctor, goes to an emergency room or is admitted to the hospital. This helps
doctors who may not know your child.

- Learn the name, spelling and dose of this medicine. Also, teach it to your child if they are old enough. You will need to know this information when you call your doctor or pharmacist.

- **If your child or someone else takes too much of this medicine, first call the Central Ohio Poison Center** at 1-800-222-1222 (TTY 614-228-2272). They will tell you what to do.

- Do not stop giving this medicine or change the amount you give without first talking with your child's doctor. The doctor has ordered the type and amount needed for your child’s body to properly digest and absorb food.

- Tell babysitters, teachers and other caregivers why the medicine is given and how to give the medicine. Ask your child’s nurse for an extra copy of this Helping Hand.

- Do not give this medicine to anyone other than the person for whom it was prescribed.

**Follow-up appointments**

Your child should be checked by their doctor on a regular schedule so any changes in the child’s condition can be found and treated.

You can expect to have regular follow-up appointments with your child’s doctor.

**Important phone numbers**

If you have any questions, be sure to ask the doctor, nurse or pharmacist, or call:

Your child's doctor___________________________ phone ________________

The clinic _________________________________ phone ________________