

## Enzymes in Primary School

Most children with CF are pancreatic insufficient, meaning their pancreas does not produce the enzymes that are needed to break down food for digestion. This can make it very difficult to absorb nutrients from food and maintain a healthy weight.

As a result of this, pancreatic enzyme replacement therapy is needed to help digest food.

### Pancreatic Enzymes

Pancreatic enzymes are taken with all meals and snacks containing carbohydrates, fat and protein. They don't need to be taken with simple sugars such as fruit, lollies, juice, cordial, and water.

The enzymes travel down to the stomach where they work to help break down food.

**Like vitamins, they are not harmful to other children.**

Enzymes are available in two forms; microspheres for babies and young children and capsules for older children and adults. If you have a student still using microspheres, these need to be mixed with apple puree and taken via spoon. Capsules are swallowed with water.

### Dosage

Enzyme dosage is different for everyone but is generally based on the amount of fat in the food. Parents will calculate dosage for younger children and supply this information to the school. Older students will calculate their dosage independently.



### Enzymes at School

By primary school, most children will be able to swallow capsules, but some may need assistance in the early years if they are still using the microspheres.

Once they can swallow capsules, most children should have enzymes in their lunchbox with dosage calculated by the parents and child at home. Children will still need supervision to ensure enzymes are taken.

If enzymes are skipped, the child may have tummy aches and diarrhoea. so teachers should be aware of the importance of allowing the student to go to the bathroom as needed. If given too many enzymes there are no immediate side effects, but over a few weeks they may become constipated. If you think a child has had the wrong dosage of enzymes, it is important to let the family know so they can monitor for symptoms.

Enzymes need to be taken immediately before eating. They are only effective for about thirty minutes, so food needs to be consumed within this time. If the student takes longer than 30 minutes to eat, they will require more enzymes.

Extra enzymes should be kept at school for class parties, cooking, canteen snacks or birthday cakes. In the early school years, teachers will often store extra enzymes in the classroom and parents will communicate dosage. Older children will manage their enzymes independently and carry extra enzymes in their school bag to take when they need them.

## **More Information**

Discuss with the parents the level of support the child in your care requires at school with taking enzymes. Some children may need more assistance than others, particularly in their younger years. This should be detailed in their Student Medical Plan.

For more information about CF, we have free eLearning modules, including one specific to enzymes, as well as other resources for educators, available on our [CFSmart website](#).