



## Theophylline

Theophylline opens the airways by relaxing the smooth muscles surrounding the air tubes.

A certain level of theophylline must be maintained in the bloodstream at all times for effectiveness. Blood tests should be performed 1 or 2 times a year to determine the theophylline level. The medication should be taken as prescribed as closely as possible to the same time each day. Do not attempt to make up for a missed dose by doubling up on the dose.

There are many brands of theophylline ranging from rapid absorption to long-acting preparation. Tablets must be swallowed whole, not crushed or chewed. Capsules may be swallowed or the contents of the capsule sprinkled on a teaspoon of soft food to disguise the bitter taste. Children should not chew the sprinkles because the medication will be released too rapidly into the body. Theophylline should not be taken with hot food for the same reason.

The elimination of theophylline from the body is affected by some medications. The antibiotics, erythromycin, Biaxin, Cipro, Tequin, Levaquin, Floxin and TAO, and ulcer medication, Tagamet, will cause the theophylline level to rise. If it is necessary to take these medications, be sure to let your Asthma & Allergy Center doctor know so the amount of theophylline can be adjusted.

Theophylline is closely related to caffeine, therefore substances such as coffee, tea, cola drinks, cocoa, and chocolate should be limited.

Theophylline may cause nausea, vomiting, stomach cramps, diarrhea, increase in heart rate, shakiness, restlessness, headaches, and occasionally an increase in urination. Teachers may note changes in behavior when children are on theophylline; therefore, the school should be advised. These changes usually occur during the first few weeks of therapy. If side effects continue, please notify your Asthma & Allergy Center doctor.

### **Long-Acting Beta Agonists-Serevent & Atrovent**

This type of bronchodilator is for those who suffer from frequent episodes of acute asthma. Long-acting inhaled beta agonists are intended to help prevent asthma symptoms from occurring. They relax the muscles surrounding your airways, allowing them to open more fully so you can breathe more freely. When used regularly, a long-acting bronchodilator can help to reduce the risk of sudden symptoms.

This type of medication is usually administered once in the morning and once in the evening, about 12 hours apart. Some common side effects are tremors, cough, and headache.

Long-acting bronchodilators are available as pills and inhalants and should never be used to treat sudden symptoms. They cannot act fast enough to provide rapid relief.