# Let's Talk ABOUT...

## **Inhaled corticosteroids (ICS)**

**Inhaled corticosteroids** (core-tick-oh-steeroids), also called ICS, are medicines used to control and prevent asthma symptoms. Inhaled ICS are different than the "anabolic" steroids that body builders use.

Airways are the tubes inside the body the air moves through when you breathe in and out. These airways can get swollen inside and hard for the air to move through. Swelling inside the airways is a major cause of asthma symptoms. Inhaling ICS medicine can decrease the swelling, but this medicine does not relieve an asthma attack. ICS can prevent asthma symptoms if used as your doctor orders. That is why these medicines are called "controllers" or "preventers." If your child has an asthma attack, he should use quick-relief medicine such as albuterol.

## Why does my child need Inhaled Corticosteroids?

ICS is the best medicine for children with moderate to severe asthma. Also, some children with mild asthma may benefit from ICS.

Many studies show that ICS medicine is the best way to control long-lasting asthma. ICS may prevent lung damage from untreated asthma. Children with asthma who use ICS have a better quality of life, less symptoms, better school attendance, and less need for long hospital stays. They also have less need for corticosteroid pills (like prednisone).

Inhaled corticosteroids start to decrease airway swelling 24 hours after they are taken. However, you may not notice a change in your child's asthma for 1 to 2 weeks. Once your child's asthma is under control, she should continue to use ICS every day

even if there are no asthma symptoms. ICS must be used every day to work well.

Your child may be given a plastic tube called a spacer to use with the inhaler. She should take the prescribed number of puffs of the inhaled steroid through the spacer. Some dry-powder inhalers should not be used with a spacer. Ask your doctor if you are unsure about using a spacer.

#### What are the side effects of ICS?

ICS may cause your child's voice to become hoarse, bother her throat, or cause her to cough. ICS may also cause an infection in your child's mouth or throat. This infection looks like small white patches that may be sore. If you notice this infection, call your doctor. You can lessen these side effects by always using a spacer and having your child rinse her mouth with water each time after using the ICS.

The label on all ICS medicines says that it may cause a child to grow slower. However, this is not true for all patients and happens rarely in children who use a low to medium dose of the medicine. Children who use ICS may have catch-up growth later on, even if they grow slower now. Your doctor should follow your child's height on a growth chart to make sure that she grows normally. Ask to see the chart if you are concerned about your child's height. Make sure your child is getting enough calcium and vitamin D every day. See the table on the back of this handout for the recommended and upper level amounts for calcium and vitamin D.

Your doctor is aware of the possible side effects from ICS, but your child's asthma is a good reason to use this very important medicine. If long-lasting asthma

Calcium and Vitamin D Dietary Reference Intake (DRI)				
	Calcium (mg/day)		Vitamin D (IU/day)	
Life Stage Group	adequate	upper level	adequate	upper level
1-3 years old	500	2,500	200	1,000
4-8 years old	800	2,500	200	2,000
9-13 years old	1300	2,500	200	2,000
14-18 years old	1300	2,500	200	2,000

Food and Nutrition Board, Institute of Medicine. Dietary Reference Intakes for Calcium, Phosphorus, Magnesium, Vitamin D and Fluoride, Washington DC: National Academy Press; 1997.

A 4- to 8-year old should drink 2 and a half cups (20 ounces) of milk to get the calcium and vitamin D they need.

- 8 ounces of whole milk = 291 mg calcium
- 8 ounces of 2% milk = 297 mg calcium
- 8 ounces of calcium-fortified orange juice = 350 mg calcium

is not treated, it is worse than the side effects of this medication. Untreated asthma can slow a child's growth, cause lung damage, and make daily living very difficult.

Once your child's asthma is controlled, your doctor will make sure the dose of ICS is the smallest dose that she needs.

### Will my child always have to use ICS?

Many children with asthma need to keep using ICS. Some children do not. Your doctor may prescribe a controller medicine that is not a steroid, especially if your child's asthma gets milder. Some children only need ICS during certain seasons (like the winter cold and flu season or the spring pollen season). Ask your doctor about these options.

