

HEALTH

BAYSIDE

Best treatment differs for kids with asthma

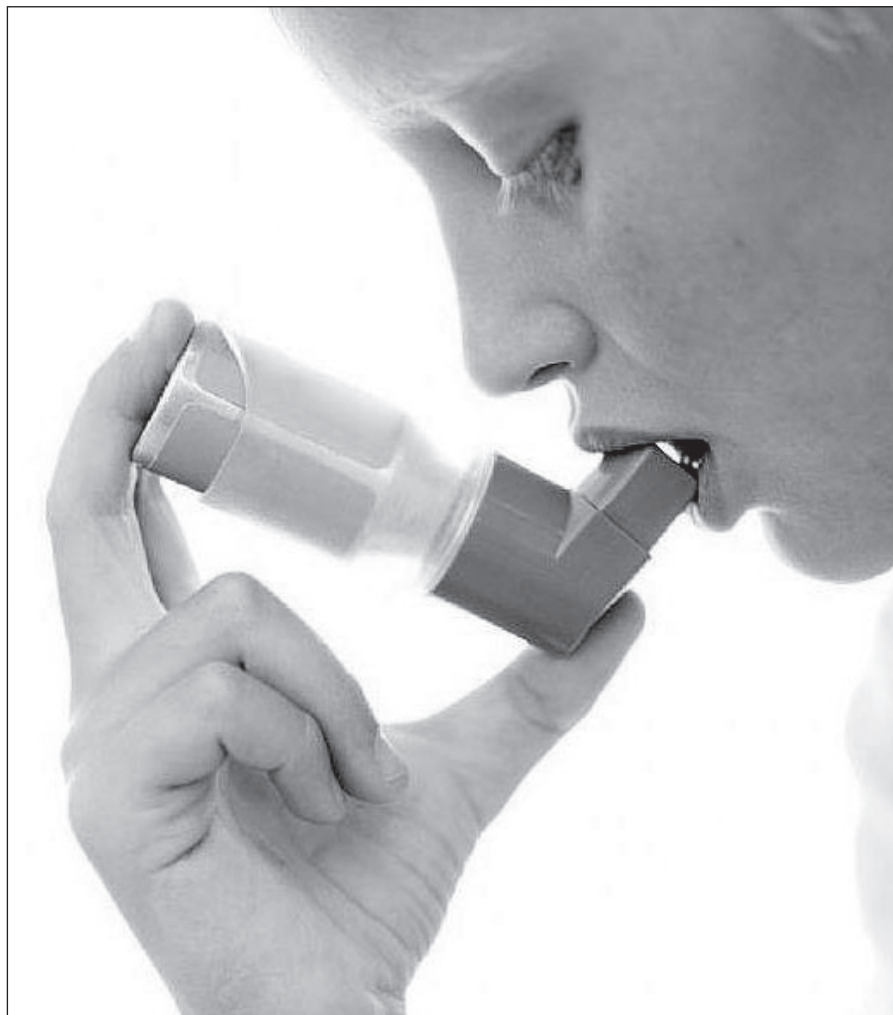
Most children who have trouble controlling their asthma with low-dose inhaled corticosteroids show improvement by increasing the dose or adding another medication, a new study finds. But the best option differs for each child.

Asthma affects nearly seven million children nationwide. It's a leading cause of hospitalization and school absenteeism. Symptoms often include wheezing, shortness of breath, chest tightness and coughing. While there's no cure for asthma, most children can control their symptoms with medications.

For children with mild to moderate asthma, low daily doses of inhaled corticosteroids are often tried first. If these don't work, guidelines from NIH's National Heart, Lung and Blood Institute (NHLBI) suggest that physicians use one of three methods: add a long-acting beta-agonist (LABA), add a leukotriene receptor antagonist or double the dosage of inhaled corticosteroid. However, these recommendations are based on studies of adults.

To get data for children, researchers conducted a multi-site clinical trial to compare the three step-up treatments in youths, ages 6 to 18. All the children had mild to moderate asthma that was not well-controlled by low-dose corticosteroids alone. The research was supported by NHLBI as well as NIH's National Center for Research Resources (NCRR) and National Institute of Allergy and Infectious Diseases (NIAID).

As described in the March 2, 2010, online edition of the New England



Journal of Medicine, the children were assigned to receive each of the three add-on treatments in random order, each for a 16-week interval. All three study intervals were completed by 157 participants, with an additional eight children completing

two intervals. At the end of each interval, researchers assessed lung function and other measures of asthma control.

The scientists found that 98 percent of the children responded differently to the three treatments. Nearly half of the chil-

dren had the best response to the addition of LABA. About a quarter of the children responded best to the addition of leukotriene receptor antagonist, and a similar number responded best to doubling the dosage of inhaled corticosteroids.

The study also identified characteristics that raise the likelihood of one treatment working better than another. For example, African-Americans were equally likely to respond best to adding LABA or boosting inhaled corticosteroids, and least likely to respond best to adding leukotriene receptor antagonist.

For white participants, adding LABA was most likely to give the best response and increasing inhaled corticosteroids the least. Age, gender, allergies and other factors did not seem to predict which drug would work best for a child.

Although LABA seemed to offer the best overall performance, some studies suggest that it may raise the risk of severely worsened asthma symptoms, leading to hospitalization and, in rare cases, death.

The U.S. Food and Drug Administration now recommends that LABAs never be used alone in treating asthma, and that they be used for the shortest time possible to achieve asthma control.

"This study underscores the fact that individuals respond differently to different therapies," said Dr. Robert F. Lemanske, Jr., of the University of Wisconsin Hospital-Madison, the paper's lead author.

"Childhood asthma treatment is not one-size-fits-all."

FITNESS ADVICE

Muscle building burns fat



By David & Lisa Long

Still "on" your diet and exercise plan from January? Going "on" usually means at some point in time you go "off." When someone tells us they lost 12 pounds in two weeks, we ask "12 pounds of what?" On low-calorie diets, about 25 percent of the

weight loss may be muscle. Losing muscle is a bad thing. Muscle tissue is very active – every pound of muscle burns about six pounds a year, while sleeping, eating, and working.

Inactive adults lose around one-half pound of muscle per year. Many people do not change eating habits, as they become less active. If you take in

more calories than you burn, the extra calories get stored as fat.

A pound of fat takes up more room than a pound of muscle. This means that as you lose muscle and gain fat, your weight might remain the same over the years, but your waistline will continue to expand!

Strength training is very important to successful fat loss. The reason lies in your resting metabolic rate (RMR), which is the pace your body burns calories at rest. Your RMR is closely linked to the amount of muscle you have – muscle burns more calories than fat. Your body works harder to maintain muscle.

An average aerobic workout (walking, cycling, jogging) will burn approximately 300 calories per hour, a more strenuous activity may burn up to 500 calories an hour –workout's over, so is the calorie burning.

Compare this to strength training, which elevates the RMR permanently, after strength training your body continues to burn calories. The most effective means of strength training will involve large functional movements, such as squatting, pressing, and pulling.

Properly feeding you body should also be a priority. Stop focusing on caloric restriction and start thinking about the quality of the calories.

Someone asked us, "Why aren't I losing weight when I only eat 1,200 calories a day?" Two slices of pizza, two Twinkies, and a bowl of Fruity Pebbles equals 1,200 calories. You are not going to lose weight with those 1,200 calories. To learn more, hire a trainer.

Lisa and David Long are trainers who own Live Long Fitness in West Ocean City. 410-213-1078, www.livelongfitness.com, livelongfitness@live.com