

## Asthma and Diet: What You Should Know

There's no special asthma diet. We don't know of any foods that reduce the airway inflammation of asthma. Beverages that contain caffeine provide a slight amount of bronchodilation for an hour or two, but taking a rescue inhaler is much more effective for the temporary relief of asthma symptoms.

However, a good diet is an important part of your overall asthma treatment plan. Just like regular exercise, a healthy diet is good for everyone. That goes for people with asthma, too. Obesity is associated with more severe asthma. What's more, many doctors suspect that the specific foods you eat might have a direct impact on your asthma. But further research needs to be done before we understand the exact connection between asthma and diet. Asthma and Nutrition The incidence of asthma has risen in the United States during the past three decades, and many researchers believe that our changing diets have something to do with it. As Americans eat fewer and fewer fruits and vegetables and more processed foods, could it be that we're bumping up our risk of developing asthma? Several research studies have suggested this, and others are ongoing, but the connection between diet and asthma remains inconclusive. There's evidence that people who eat diets higher in vitamins C and E, beta-carotene, flavonoids, magnesium, selenium, and omega-3 fatty acids have lower rates of asthma. Many of these substances are antioxidants, which protect cells from damage. One recent study of asthma and diet showed that teens with poor nutrition were more likely to have asthma symptoms. Those who didn't get enough fruits and foods with vitamins C and E, and omega-3 fatty acids were the most likely to have poor lung function. A 2007 study showed that children who grew up eating a Mediterranean diet -- high in nuts and fruits like grapes, apples, and tomatoes -- were less likely to have asthma-like symptoms. However, it's not at all clear that deficiencies of these nutrients actually caused the asthma. And studies that have used specific vitamins and minerals to treat asthma have been unsuccessful. Why? Some researchers think that it might be the interaction of different vitamins, minerals, and other antioxidants that naturally occur in foods that have the health benefits. Therefore, it's unlikely that taking vitamins, minerals, or other food supplements will improve your asthma control and prevent symptoms of asthma. Regardless of the specific link between asthma and diet, we do know that good nutrition is important for anyone, and especially people with chronic diseases. If you're not getting the right nutrients, your body may be more susceptible to illness and have a harder time fighting the respiratory viruses that often trigger an asthma attack or severe asthma emergency. Asthma and Diet: What Should I Eat? Given the murky evidence for a link between asthma and nutrition, here's some good advice for what to put on your plate:

- Eat plenty of fruits and vegetables. We still don't know which fruits and vegetables might have an effect on asthma, so the best advice is to increase your intake of a wide variety of them. Frankly, we should all eat more of them anyway.
- Eat foods with omega-3 fatty acids. Omega-3 fatty acids -- found in fish like salmon, tuna, and sardines and some plant sources, like flaxseed -- are believed to have a number of health benefits. Although the evidence that they help with asthma is not clear, it's still a good idea to include them in your diet.
- Avoid trans fats and omega-6 fatty acids. There's some evidence that eating omega-6 fats and trans fats, found in some margarines and processed foods, may worsen asthma. Since they raise your risk of cardiovascular disease anyway, this is just another reason to reduce the amount you eat. Will this dietary advice help your asthma symptoms? We can't be sure. But while we may not know what specific vitamins, minerals, and antioxidants might help with asthma, if any, there's no downside to eating more fruits, vegetables, and (in moderation) healthy fats. Asthma and Diet: What Else Affects Symptoms? Nutrition -- good or bad -- isn't the only way that asthma might be affected by diet. Here are some examples:
  - Diets High in Calories. If you eat more calories than you burn, you'll gain weight. That's bad not only for your general health, but for your asthma specifically. People who are obese are more likely to have more severe symptoms, take more medication, and miss more work than people who maintain a normal weight.
  - Food Allergies. Many people have food intolerances (such as lactose intolerance), but these are not true allergies and rarely worsen asthma. Only about 2% of adults with asthma have true food allergies to milk, eggs, shellfish, peanuts, or other foods. When exposed to even small amounts of the foods to which they have become allergic, these patients can have life-threatening anaphylactic attacks, including bronchospasm, which requires immediate asthma medication. There is no evidence that elimination of all dairy products from the diet improves asthma control, even in a minority of patients. That's simply "an old wives tale" and can lead to osteoporosis, especially in patients who must regularly take corticosteroids to control their severe asthma.
- Preservative Sensitivities. Sulfites, which are used to keep food fresh and stop the growth of mold, can trigger temporary asthma symptoms in a few people with asthma. Sulfites can give off sulfur dioxide that can irritate the lungs. Sulfites are no longer added to fresh fruits and vegetables in the U.S. But they are still used in many processed foods, and may also be in condiments, dried fruits, canned vegetables, wine, and other foods.

- Gastroesophageal Reflux Disorder (GERD). Up to 70% of all people with asthma also have GERD (reflux of stomach acid), which can make asthma more difficult to control. Sometimes GERD doesn't cause typical heartburn symptoms. If you have GERD, you may need to take medicine. Weight loss is often all that is necessary to eliminate GERD. You should also try eating smaller meals and cutting down on alcohol, caffeine, and any foods that you notice trigger GERD symptoms. Avoid eating just before bedtime. Before you make any big changes to your eating habits, it's always a good idea to talk to your doctor or asthma specialist first. Depending on your asthma diagnoses -- and considering your general health and the severity of your asthma symptoms -- your doctor might have specific advice for how to improve your diet.