

## A plant-based diet helps to prevent and manage asthma, according to new review

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A plant-based diet can help prevent and manage asthma, while dairy products and high-fat foods raise the risk, according to a new review published in *Nutrition Reviews*.



Asthma is a common chronic condition in which the airways become narrow and inflamed—sometimes leading to difficulty with breathing, coughing, wheezing, and shortness of breath.

"Asthma is a condition that affects more than 25 million Americans, and unfortunately it can make people more vulnerable in the COVID-19 outbreak," says study author Hana Kahleova, MD, Ph.D., director of clinical research for the Physicians Committee. "This research offers hope that dietary changes could be helpful."

Researchers with the Physicians Committee for Responsible Medicine examined the evidence related to diet and <u>asthma</u> and found that certain foods—including fruits, vegetables, whole grains, and other <u>high-fiber</u> <u>foods</u>—can be beneficial, while others—such as dairy products and foods high in saturated fat—can be harmful.

The review authors highlight a study finding that when compared to a <u>control group</u>, asthma patients who consumed a plant-based diet for eight weeks experienced a greater reduction in use of asthma medication and less severe, less frequent symptoms. In another study, asthma patients adopted a plant-based diet for a year and saw improvements in vital capacity—a measure of the volume of air patients can expel—and other measures.

The authors suggest that a plant-based diet is beneficial because it has been shown to reduce systemic inflammation, which can exacerbate asthma. Plant-based diets are also high in fiber, which has been positively associated with improvements in lung function. The researchers also highlight the antioxidants and flavonoids found in plant foods, which may have a protective effect.

The review also finds that dairy consumption can raise the risk for asthma and worsen symptoms. One 2015 study found that children who



consumed the most dairy had higher odds of developing asthma, compared with the children consuming the least. In another study, children with asthma were placed in either a control group, where they made no <u>dietary changes</u>, or in an experimental group where they eliminated dairy and eggs for eight weeks. After eliminating <u>dairy</u>, the experimental group experienced a 22% improvement in peak expiratory flow rate—a measure of how fast the children were able to exhale—while children in the control group experienced a 0.6% decrease.

High fat intake, consumption of saturated fat, and low fiber intake were also associated with airway inflammation and worsened lung function in <u>asthma patients</u>.

"This groundbreaking research shows that filling our plates with plantbased foods—and avoiding <u>dairy products</u> and other high-fat foods—can be a powerful tool for preventing and managing asthma," says Dr. Kahleova.

During the COVID-19 pandemic, the Centers for Disease Control and Prevention urges those with asthma to have a plan in place—including stocking up on supplies, taking asthma medication as needed, avoiding crowds, and practicing good hygiene.

**More information:** Jihad Alwarith et al, The role of nutrition in asthma prevention and treatment, *Nutrition Reviews* (2020). <u>DOI:</u> <u>10.1093/nutrit/nuaa005</u>

Provided by Physicians Committee for Responsible Medicine

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