

Healthy diet reduces asthma symptoms

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People who eat a healthy diet experience fewer asthma symptoms and better control of their condition, according to a new study published in the *European Respiratory Journal*.

Diets with better asthma outcomes are characterised by being healthier,

with greater consumption of fruits, vegetables and whole grain cereals. Unhealthy diets, with high consumption of meat, salt and sugar, have the poorest outcomes.

The study strengthens the evidence on the role of a healthy [diet](#) in managing [asthma symptoms](#), and offers new insights on the potential impact of diet in the prevention of asthma in adults.

Lead researcher Dr. Roland Andrianasolo, from the Nutritional Epidemiology Research Team at Inserm, Inra, and Paris 13 University said: "Existing research on the relationship between diet and asthma is inconclusive, and compared to other chronic diseases, the role of diet in asthma is still debated. This has resulted in a lack of clear nutritional recommendations for asthma prevention, and little guidance for people living with asthma on how to reduce their symptoms through diet.

"To address this gap, we wanted to make more detailed and precise assessments of dietary habits and the associations between several dietary scores and asthma symptoms, as well as the level of [asthma control](#)."

The research team analysed data from 34,776 French adults who answered a detailed respiratory questionnaire as part of the 2017 NutriNet-Santé study. This included 28% of women and 25% of men who the researchers identified as having at least one asthma [symptom](#). The number of asthma symptoms experienced by all of the participants was measured using self-report data over a 12-month period.

To assess asthma control in the participants already living with asthma, the researchers used a self-administered questionnaire, which evaluates asthma control over a four-week period. Measures such as occurrence of asthma symptoms, use of emergency medication and limitations on activity indicated the level of asthma control.

Quality of diet was assessed based on three randomly collected 24-hour dietary records and each participant's adherence to three dietary scores. Generally, the dietary scores all considered diets with high fruit, vegetable and whole grain cereal intake as the healthiest, while diets high in meat, salt and sugar were the least healthy.

The researchers adjusted their analysis to consider other factors known to be linked with asthma, such as smoking and exercise.

The data showed that, overall, men who ate a healthier diet had a 30% lower chance of experiencing asthma symptoms. In women with healthier diets, the chance of experiencing symptoms was 20% lower.

The research also showed that for men with asthma the likelihood of poorly controlled symptoms was around 60% lower in those who had healthy diets and among women with asthma, poorly controlled disease was 27% lower in those with healthy diets.

The researchers say that the results suggest a healthy diet may have a role in preventing the onset of asthma as well as controlling asthma in adults. Dr. Andrianasolo explained: "This study was designed to assess the role of an overall healthy diet on asthma symptoms and control, rather than identify particular specific foods or nutrients. Our results strongly encourage the promotion of healthy diets for preventing asthma symptoms and managing the disease.

"A healthy diet, as assessed by the dietary scores we used, is mostly made up of a high intake of fruit, vegetables and fibre. These have antioxidant and anti-inflammatory properties and are elements in a healthy diet that potentially lower symptoms. In contrast, the least healthy diets include high consumption of meat, salt and sugar, and these are elements with pro-inflammatory capacities that may potentially worsen symptoms of asthma."

The researchers note that caution is needed when interpreting the results from this study as it only provides a snap-shot of the possible effects of diet on asthma, and say they plan to conduct longer-term studies in future to confirm their findings.

Dr. Andrianasolo added: "Although further studies are needed to confirm our observations, our findings contribute to evidence on the role of diet in asthma, and extend and justify the need to continually support public health recommendations on promoting a healthy diet."

Professor Mina Gaga, President of the European Respiratory Society, and Medical Director and Head of the Respiratory Department of Athens Chest Hospital, said: "This research adds to the evidence on the importance of a [healthy diet](#) in managing asthma and its possible role in helping prevent the onset of asthma in adults. Healthcare professionals must find the time to discuss diet with their patients, as this research suggests it could play an important role in preventing [asthma](#)."

More information: Andrianasolo RM, Kesse-Guyot E, Adjibade M, et al. Associations between dietary scores with asthma symptoms and asthma control in adults. *Eur Respir J* 2018; 52: 1702572, [DOI: 10.1183/13993003.02572-2017](#)

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