Effect of a Soy Isoflavone Supplement on Lung Function and Clinical Outcomes in Patients With Poorly Controlled Asthma

Soy isoflavone supplements are used to treat several chronic diseases, although the data supporting their use are limited. Some data suggest that supplementation with soy isoflavone may be an effective treatment for patients with poor asthma control.

Multicenter, randomized, double-blind, placebo-controlled trial conducted between May 2010 and August 2012 at 19 adult and pediatric pulmonary and allergy centers in the American Lung Association Asthma Clinical Research Centers network. Three hundred eighty-six adults and children aged 12 years or older with symptomatic asthma while taking a controller medicine and low dietary soy intake were randomized, and 345 (89%) completed spirometry at week 24.

Participants were randomly assigned to receive soy isoflavone supplement containing 100 mg of total isoflavones (n=193) or matching placebo (n=193) in 2 divided doses administered daily for 24 weeks.

Mean changes in lung function$_1$ over 24 weeks in the placebo group and in the soy isoflavone group, which were not significantly different . Mean changes in symptom scores on the Asthma Control, did not significantly improve more with the soy isoflavone supplement than with placebo.

Conclusions and Relevance: Among adults and children aged 12 years or older with poorly controlled asthma while taking a controller medication, use of a soy isoflavone supplement, compared with placebo, did not result in improved lung function or clinical outcomes. These findings suggest that this supplement should not be used for patients with poorly controlled asthma.

Editorial: *We are constantly searching for more and better ways to control asthma. The use of dietary supplements is among the list of options that have shown anecdotal success. The current study looks specifically at the use of soy supplements in poorly controlled asthma to see if it is beneficial and comes up with a negative result. Much of science is trial and error. For now we need to continue the search for new and better ways to treat asthma even as we continue to rely on the standard bronchodilators, and controller medications*

Bibliography

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