

Soy linked to lung benefits: Study

By Lorraine Heller, 29-Jun-2009

Related topics: Soy-based ingredients, Respiratory health

The consumption of soy products could decrease the risk of lung disease and breathlessness, according to a new study from Japan.

Published in the open access journal *Respiratory Research*, the study looked at around 300 patients diagnosed with lung disease, and measured their reported soy food intake.

"Soy consumption was found to be positively correlated with lung function and inversely associated with the risk of chronic obstructive pulmonary disease (COPD). The epidemiological evidence also indicated an inverse association between total soy intake and breathlessness," wrote the researchers from Japan and Australia.

Questionnaires

The study was conducted on 278 Japanese patients aged 50-75, who had been diagnosed with COPD within the past four years. Another 340 participants recruited from the general Japanese population were used as a control group.

All participants were tested for respiratory function. Food consumption and lifestyle characteristics were determined based on structured questionnaires.

The researchers identified the self-reporting of dietary intake as a limitation to their study, but said that they also included face-to-face interviews with relatives in order to increase response rate and improve the accuracy of answers. They also said all interviews were conducted by the same investigator to eliminate inter-interviewer bias.

Participants were asked about their soy food consumption for the five years prior to the interview date. For the purposes of the study, **soy foods encompassed tofu (boiled or cold, in miso soup, freeze-dried, deepfried), natto, bean sprouts, and soy milk.**

Other variables measured were age, gender, body mass index, education level, physical activity, smoking status, and dietary intake of fruit, vegetables, fish, red meat and chicken.

Cautious benefits

Overall, the researchers found that those participants diagnosed with COPD had *"significantly lower"* soy intake than controls. Researchers then examined the relationship with lung function, and found that this was positively correlated with total soy consumption.

"A significant reduction in COPD risk was evident for the highest versus lowest quartile of daily total intake of soybean products," wrote the researchers.

The observed benefits, consistent with findings from previous studies, could be a result of the anti-inflammatory benefits of soyfoods, they said, but added that more research is needed to understand the underlying biological mechanism.

"The present case-control study has suggested an inverse association between soy products and COPD risk for Japanese adults," concluded the researchers.

"More research and/or replications are required to ascertain whether the observed findings can be generalized to other populations, before incorporating these foods into dietary guidelines so as to encourage consumption."

"Besides experimental studies, long-term prospective cohort studies collecting detailed dietary exposure information are recommended to provide epidemiological evidence on both morbidity and mortality due to COPD."

Source: *Soy consumption and risk of COPD and respiratory symptoms: a case-control study in Japan*

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To access the study, click [here](#).