

Re: Tea And The Immune System

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Research on Tea and Immune System.

TEA CAN DO THAT(tm)

A healthy immune system protects the body from infection and disease. A number of test tube studies have shown that some flavonoids help immune response by acting as anti-allergic (135, 136, 137), anti-inflammatory (138, 139), anti-viral (140) and anti-bacterial agents (80, 141, 142, 143). Furthermore, flavonoids have been shown to modulate the function of blood cells that are relevant for the immune response (81) and in both human and animal studies flavonoids have been shown to fight bacteria (80, 141, 142, 143) and thus improve resistance to infection. In addition, cell studies have shown that flavonoids in black and green tea have anti-inflammatory properties (138, 139).

Studies specifically on tea flavonoids in test tube and animal research found that tea flavonoids may help maintain proper immune response by helping control inflammation (138, 139, 144) and by reducing the production of proteins involved in inflammation (145). These properties suggest that tea flavonoids help improve resistance to infection. Research conducted in test tubes and small pigs suggests that tea flavonoids may also help sustain a healthy gastrointestinal tract by promoting the proper balance of bacteria in the colon (146, 147). Emerging research has also found that tea antioxidants can inhibit the growth of unhealthy bacteria and promote the growth of good bacteria in the gut. In addition, recent test tube-based studies have found that tea flavonoids can kill bacteria known to cause stomach ulcers (148, 80, 149).

Theanine, a unique amino acid found in tea, activates specific cells involved in the "first line of defense" cells of the immune system, which may reduce the risk of viral and bacterial infections (127). This suggests that regular tea consumption may help support the body's

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immune system. Researchers from the Brigham and Women's Hospital and Harvard University recently published new data indicating that theanine can help the body ward off infection and disease and may strengthen the immune system (150). In a follow up human clinical trial, published in the Proceedings of National Academy of Sciences, these researchers showed that after drinking 20 ounces of black tea daily for two to four weeks, participant's immune cells produced two

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four times more interferon. Interferon is a protein that helps strengthen or improve the body's immune response. Coffee had no effect

on increasing the production of interferon (127). While research on effects of tea on the body's immune system and its potential to help protect the body is just emerging, experts are encouraged by these promising results.

*While tea is a naturally rich source of antioxidants, it is not a substitute for fruits or vegetables which provide a wide range of antioxidants and essential vitamins and minerals. Please consult your doctor regarding a diet/nutritional plan that is right for you.

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