Dear Alice,

What does soy have to do with hot flashes?

Answer

Dear Reader,

Hot flashes can certainly bring the heat and make for an uncomfortable experience. This physiological phenomenon most often occurs among individuals assigned female at birth who are around the age of 60. It’s believed that they occur due to changes in estrogen levels. As such, treatment usually involves adding estrogen back into the body, either through hormone replacement therapy or food sources of estrogen such as soy products. As with any change in routine that might impact the body, it’s best to consult with a health care provider to discuss and try to prevent any unwanted side effects.

Similar to other physiological changes, hot flashes feel different for different people. Generally speaking, a person will feel brief periods of heat traveling throughout their body or bouts of sweating. So, why might soy affect hot flashes? Soy foods contain plant-based sources of estrogen termed phytoestrogens. There are three classes of these phytoestrogens, of which isoflavones have been the most researched. The two isoflavones that are most prevalent in soy are genistin and daidzein. Once these substances are eaten, they’re metabolized into a potent material, equol, which resembles estrogen in the human body. The actions of these substances within the body are complex, possibly conferring benefits to health in a number of ways. However, studies provide evidence that soy isoflavones help reduce incidence and severity of hot flashes.

Luckily for those who find themselves feeling a little too hot to handle, there are some hormonal and non-hormonal treatment options. For those who want to avoid synthetic hormones, there are some non-hormonal or plant-based estrogen treatment options. Plant-based estrogens may be offered in pill form, but can also be derived from food. It’s been observed that Japanese women living in Japan seem to undergo fewer and less severe hot flashes than American women, with many crediting their soy-rich eating plan as the reason. Some people may also choose to take isoflavone supplements. Whether someone takes isoflavone supplements to help with hot
flashes, or just eats more soy foods is an individual decision. However, most experts recommend taking no more than 50 to 100 milligrams of isoflavones a day (if any at all), as that is the amount estimated to be in the average Japanese diet. For those who choose to eat more soy-based foods instead, low-fat varieties of tofu, tempeh, soymilk, or roasted soy nuts all contain the sweat-reducing isoflavones. It’s key to note that even natural sources of estrogen such as soy-based foods could be linked to increased rates of breast cancer. That being said, keep in mind that dietary supplements aren't required to be regulated by the Food and Drug Administration (FDA). Low-dose paroxetine is the only FDA approved non-hormonal medication specifically indicated for treating hot flashes. Some other medications that research has found to be helpful include some depression drugs (for those without depression); a drug approved for use in treatment of migraines, epilepsy, and nerve pain; and some sleeping medications (although these are used to aid in sleeping through hot flashes rather than in treating the source).

For those who are interested in synthetic hormones, hormone replacement therapy (HRT) may be an option. HRT, or prescription-strength estrogen, is a scientifically-backed treatment to alleviate these flashes. Some choose not to take this form of estrogen because there’s some evidence to suggest that it’s linked to a higher incidence of breast cancer and cardiovascular disease. However, for healthy people assigned female at birth under the age of 60, the benefits of HRT may outweigh the risks. If that doesn’t seem like a good fit, there’s also estrogen plus bazedoxifene. The addition of the bazedoxifene helps to activate the estrogen in some tissues and block the estrogen’s actions in others.

Deciding to consume more soy as a treatment for hot flashes is like deciding to take any supplement — it’s best to speak with a health care provider before making the switch, especially if there are other concurrent health issues such as a history of breast cancer or heart disease. Also keep in mind that HRT is more effective at treating hot flashes than soy isoflavone, which tends to only have a modest effect. With that being said, if you're dealing with hot flashes, feel free to eat soy in moderation, along with an otherwise balanced diet, to help them pass.