## Oy! Soy! Will it girlify your boy?

Debunking myths about soy, our guest blogger today is esteemed pediatrician Dr. Roy Benaroch. In practice near Atlanta, Georgia, he is an assistant clinical professor of pediatrics at Emory University, a father of three, and the author of *The Guide to Getting the Best Health Care for your Child* and *Solving Health and Behavioral Problems from Birth through Preschool*. We enjoy his blog The Pediatric Insider and we think you will enjoy the except below.

Drs. Lai and Kardos

From LeeAnn: "Are soybeans (edamame) safe for my 11 year old daughter to eat? I have heard that they can 'mess with' her hormones?"

You want to see a freakshow? Try googling this topic. I found one essay, on a "news" site, that blamed soy products for everything from stroke to vision loss to homosexuality. On the other hand, other authors love soy: it will apparently prevent heart attacks, improve the symptoms of menopause, and help flush the toxins out of your body while improving your sex drive (women) and fracture healing (men.) On one site, in two adjacent paragraphs, I found a breathless author worrying that soy could cause breast cancer, followed by a second paragraph extolling its virtues in *preventing* breast cancer.

## Please.

Soybeans contain a group of chemicals called "phytoestrogens" (sometimes called "isoflavones") that are chemically somewhat similar to human estrogen hormones. In the 1970's and 1980's, some research showed that in the laboratory, these compounds could activate human estrogen receptors, presumably causing estrogen-like effects. So that's the germ of truth.

But these phytoestrogens activate human estrogen receptors very, very weakly. They're also easily broken down by cooking and processing, and by enzymes in the human body. It would take a tremendous amount of soy, eaten every day, to have anything close to a genuine hormonal effect. No human study has shown anything close to a measurable effect of consuming soy, at least not in ordinary amounts.

So: enjoy your edamame, tofu, and soy burgers. If you want to be super-careful, just don't do all of this on the same day.

## The Pediatric Insider

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