

Start Soyfoods Soon

New Research Highlights the Importance of Consuming Soy Early in Life

Commentary by Dr. Mark Messina

For nearly 20 years scientists have rigorously studied the potential role that soyfoods may have in preventing breast cancer. In part this is because of the very low breast cancer rates in countries such as Japan, where soyfoods are a dietary staple. If in fact soyfood intake is protective against breast cancer; most evidence suggests that it is because the soybean is essentially a unique dietary source of isoflavones.

Isoflavones are referred to as phytoestrogens or plant estrogens because they have some estrogen-like properties, although they are very different from the hormone estrogen. Despite the enormous amount of research conducted there has been conflicting evidence so no clear conclusions about the breast cancer-protective effects of soy can be made. However, recently published studies may be making the issue a lot more clear.

A statistical analysis of eight studies recently published by researchers from the University of California at Los Angeles (UCLA) reported that soyfood intake among Asians is associated with about a one-third reduction in the risk of both pre- and postmenopausal breast cancer.¹ Although similar-type analyses have been published, the UCLA-analysis is clearly the best of the bunch, for two reasons. One is that only studies that comprehensively assessed soy intake were included in this analysis. In other analyses, studies that assessed the intake of only one or two soyfoods were included. The other reason is that only studies that controlled for potentially confounding variables were included in the UCLA analysis. These types of studies are considered most credible by scientists.

However, in contrast to the UCLA analysis, a very well-designed British study failed to find that soy or isoflavone intake was associated with protection against breast cancer.² Ordinarily, because soy intake is so low among non-Asians, a Western study such as this really wouldn't carry much weight. But this particular study, called the European Prospective Investigation into Cancer and Nutrition (EPIC), is credible because it includes large numbers of vegetarians, so soy intake is quite high, as high as is typically seen among Asians. So how does one reconcile the two contrasting results?

A particularly attractive explanation for the discrepancies between the analysis by the UCLA, which found among Asians that soy protects against breast cancer, and the EPIC study, which involved Westerners and found that soy wasn't protective, is that soy is protective only when consumed early in life. It is likely that Asians who consume higher amounts of soy as adults also consumed higher amounts when young. In contrast, in the EPIC study, it is likely soy wasn't consumed when young

because most of the vegetarians in that study probably adopted this way of eating only when they were older.

Thus, the results of these two studies, although conflicting, actually support the hypothesis that was first proposed in 1995, that soy intake during childhood and/or adolescence reduces breast cancer risk later in life. Studies suggest as little as one serving per day during childhood and/or adolescence is protective.

1. Wu AH, Yu MC, Tseng CC, Pike MC. Epidemiology of soy exposures and breast cancer risk. *Br J Cancer* 2008;98:9-14.
2. Travis RC, Allen NE, Appleby PN, Spencer EA, Roddam AW, Key TJ. A prospective study of vegetarianism and isoflavone intake in relation to breast cancer risk in British women. *Int J Cancer* 2008;122:705-10.