

# Selenium in Ocean Fish Protects Against Mercury

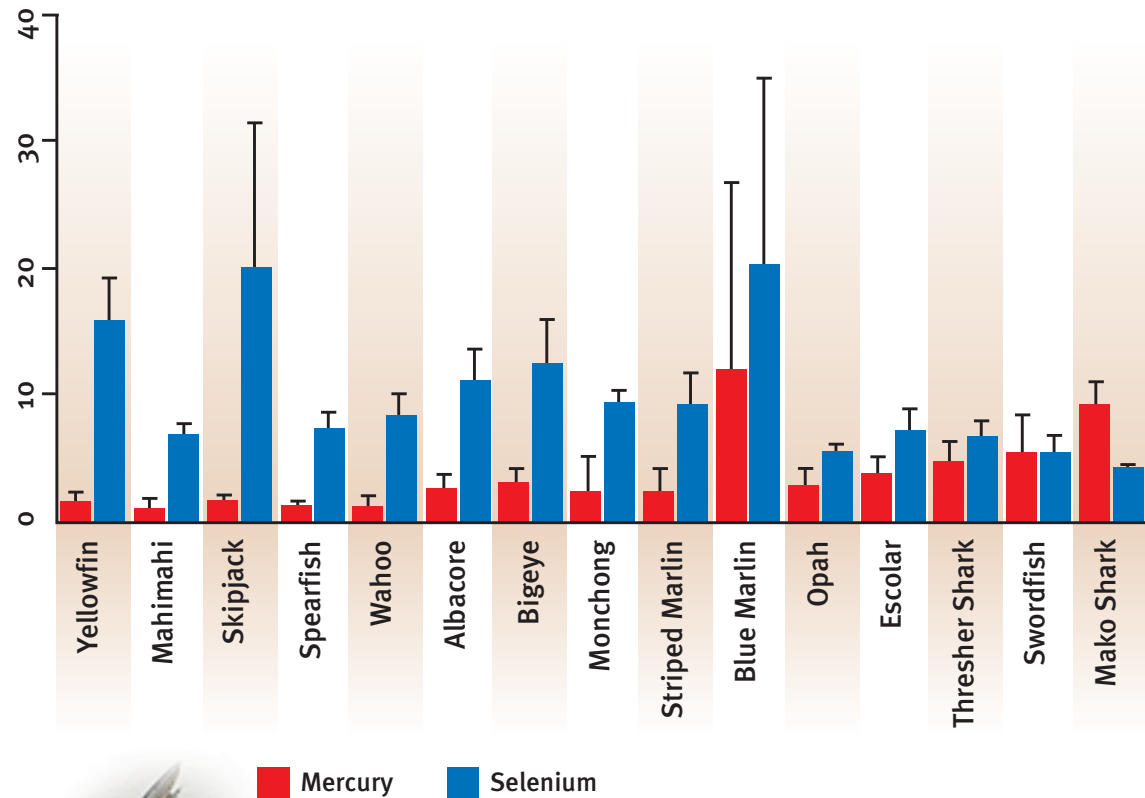
*Selenium, an essential element in our diet, is vital to the body's antioxidant system and proper immune system function. It has anti-cancer effects and is known to detoxify metals including mercury.<sup>1</sup>*

*Regardless of the amount of mercury in fish, if the selenium level is higher, the fish is safe to eat. On the graph, molar concentrations of mercury and selenium in 15 Hawaii fish species are expressed as means  $\pm$  standard deviations. The graph lists the species from lowest to highest mercury-to-selenium ratios.<sup>2</sup>*

*All of our popular ocean fish are an excellent source of health promoting selenium as well as high quality protein and omega-3 fatty acids. (Mako shark is not popular or commonly eaten in Hawaii.) Our favorite fish are more likely to protect against mercury toxicity, than cause it.*



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<sup>1</sup> Ralston NVC, JL Blackwell III and LJ Raymond. 2007. Importance of Molar Ratios in selenium-dependent protection against methylmercury toxicity. *Biol Trace Elem Res* 119: 255-268

<sup>2</sup> Kaneko JJ and NVC Ralston. 2007. Selenium and Mercury in Pelagic Fish in the Central North Pacific near Hawaii. *Biol Trace Elem Res* 119:242-254