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From Bean to Beverage

Winston J. Craig

*Andrews University, wcraig@andrews.edu*

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Plain, chocolate or vanilla? Regular or low-fat? Sweetened or unsweetened, with or without omega-3? Powder or liquid? What’s your choice? It’s available in mainstream grocery stores everywhere. Sales of soy beverages are taking off, as they are being made to look and taste like cow milk.

Interest in milk alternatives is hot for several reasons: lactose intolerance, cow milk allergies, health reasons, a desire to be totally vegetarian and concerns about environmental issues.

But how does soy milk stack up nutritionally? Many of the soy milks commercially available today are nutritionally similar to cow milk, since they are fortified with added vitamins and minerals, and the bioavailability of the calcium in soy milk is similar to that of cow milk. Unlike cow milk, soy milk has little saturated fat and no cholesterol or lactose.

Soy milk was developed in China in the second century B.C. by Liu An. It is believed that John Harvey Kellogg was the first to develop soy milk in the U.S. In 1936, Harry Miller used Kellogg’s technique to develop a process for commercially producing a palatable soy milk in China. In 1967, Cornell University food scientists discovered a new process that eliminated the cooked, beany flavor of soy milk.

Soy milks are commonly fortified with calcium, riboflavin, vitamin B12 and vitamin D. It is important that one select a fortified brand that contains at least 20 to 30 percent of the daily value for each of these four nutrients.

Soy milk can be substituted for dairy milk in some recipes but not all. Soy milk can be used to make smoothies, sauces or soups. However, when making gravies a higher percentage of thickening agent is needed, and most instant puddings do not set firm when a soy beverage is substituted for cow milk.

Soy milks are unacceptable for infant use. One should use a specially designed soy infant formula for the first 12 months of life. Growing children, especially pre-schoolers, should not be given unfortified soy milks such as the home-made soy beverages, unless they have other rich dietary sources of vitamin B12, vitamin D and calcium in the daily diet.

What health benefits are associated with the use of soy milk? Simply replacing cow milk with a soy beverage produces a substantial drop in LDL cholesterol, especially in those with high initial values. Soy is rich in phytochemicals that have a variety of health-promoting properties.

Daily consumption of soy milk is associated with a 20 percent decrease in risk of prostate cancer while two or more cups a day of cow milk increases risk of prostate cancer by 30 percent. Use of soy milk, tofu and other isoflavone-rich soy foods have been shown to protect against bone loss of the spine and hip in the elderly.

Winston Craig, Ph.D., R.D., is a professor of nutrition at Andrews University.