

EATING BONE MARROW IS HEALTHY FOR YOU

Renewed interest in traditional health foods has bone broth bubbling on the stove once again. A shift toward boneless, skinless meats began in the 1930s, as canned foods, especially canned meats, worked their way into the marketplace. Boiling beef marrow bones to make broth, soup and stews remained popular well into the 1970s, when convenience foods, increased personal income and a desire to appear well-off pushed homemade bone broth into the background.

Fats

Beef cattle are ruminants, meaning they chew their cud to get the most nutritional value from every bite of food they eat. Ruminant bone marrow provides 51 g of fat per 3 1/2-oz. serving, according to Artemis P. Simopoulos and Konstantinos N. Pavlou, authors of "Nutrition and Fitness: Metabolic Studies in Health and Disease." Deficiencies in fatty acids cause scaly skin, dermatitis, impaired wound healing and slow growth. Omega-3 and omega-6 fatty acids regulate blood clotting, immune system response and inflammation.

Protein

Ruminant bone marrow provides 7 g of protein per 3 1/2-oz. serving, according to Simopoulos and Pavlou. Protein prevents osteoporosis when combined with calcium and vitamin D. Low-protein diets decrease intestinal efficiency and lead to a failure to absorb sufficient calcium. Beef bone marrow provides protein and calcium together, as long as you boil the bones with an acidified liquid, such as water mixed with lemon juice, wine or vinegar, to help release the calcium from the bone matrix.

Calcium

Bone consists of 70 percent hydroxyapatite, formed from calcium phosphate, calcium carbonate, calcium fluoride, calcium hydroxide and citrate, according to Fiona Petchey, coordinator of the Radiocarbon Dating Laboratory, University of Waikato in Hamilton, New Zealand. Besides preventing osteoporosis, calcium works together with potassium, sodium and magnesium to control heart function and blood pressure.

Making Beef Marrow Bone Broth

It takes 4 lb. of beef marrow bones, along with 3 to 4 more lb. of rib or neck bones to make about 1 gallon of rich bone broth. Adding 1/2 cup of vinegar or other acidic liquid, such as wine, apple cider, lemon juice or orange juice leaches the calcium and other minerals from the bones faster. It takes eight to 72 hours on a low simmer to extract the maximum amount of minerals and flavor from the beef marrow bones. You may have to add water as the bones boil, to prevent the broth from boiling away.