The most recent clinical trial looked at osteopenic, postmenopausal women who ate 5-6 prunes per day (one serving of prunes or 50 grams) for six months, and found that one serving of prunes was effective in preventing bone loss.

Previous research also found that eating 10-12 prunes per day (100 grams) for one year was associated with increased bone mineral density and improved indicators of bone turnover in postmenopausal women.

Interesting new animal research suggests that prunes may help prevent bone loss in people exposed to radiation, such as astronauts in space. Researchers compared prune powder to different antioxidant and anti-inflammatory interventions and found that mice on the prune diet did not have bone volume loss after exposure to radiation, and the prune diet was the most effective in reducing the undesired responses to radiation seen in bone cells.

Emerging animal research looked at the effect of prunes on growing mice to determine whether or not prunes may have an effect on peak bone mass (the amount of bone present at the point of maximum strength and density). In growing and young adult mice, those who were given prunes saw an increase in bone volume.

Additional animal research has found that prunes may help to restore bone loss and increase bone volume in aging animals, and also restores bone in animal models that mimic hormone deficiency-related osteoporosis.