

Griffiths JC, JF Borzelleca, J St. Cyr. Sub-chronic (13-week) oral toxicity study with D-ribose in Wistar rats. *Food Chem Toxicol* 2007;45(1):1440152.

The present study evaluated the toxicity from sub-chronic administration of D-ribose (DR) to male and female albino Wistar rats. Groups of 20 male and 20 female rats were exposed via the diet to 0%, 5%, 10%, or 20% DR, seven days per week (mean daily intake of 0.0, 3.6, 7.6, and 15.0 g/kg body weight/day in males and 0.0, 4.4, 8.5, and 15.7 g/kg body weight/day in females), for 13 consecutive weeks. Mean feed consumption and feed conversion efficiency values were comparable across all study groups; however, and mean body weights of all treated animals were decreased relative to those of controls. Absolute cecal weights were increased in the mid- and high-dose animals, and the relative weights were increased in all treated animals. Analysis of microscopic histopathology revealed no evidence of changes that could be attributed to the DR treatment. It is scientifically reasonable to conclude that the present study supports a concentration of 5% DR in the diet, corresponding to an average daily intake of DR of 3.6 and 4.4 g/kg body weight/day in male and female rats, respectively, as being the absolute no observed adverse effect level (NOAEL) for this substance.

