

6. RiboCeine and Wound Healing

Saltman, A.E. [D-Ribose-L-Cysteine supplementation enhances wound healing in a rodent model](#). *The American Journal of Surgery*, 2015;210:153-158.

Overview: Wound healing and chronic wounds are serious public health issues. While wounds heal, cellular stores of antioxidants are depleted. D-ribose-L-cysteine is a precursor to the antioxidant glutathione. The effect of oral supplementation with D-ribose-L-cysteine on wound healing was studied in rats.

Methods: A rodent model of calibrated wounding was used. Group A rats were given D-ribose-L-cysteine for 1 week before wounding and for 3, 7, or 14 days after wounding. Group B rats were given D-ribose-L-cysteine only after wounding. Control animals were given no supplement. Photographic comparisons were made to study wound edema and inflammation. Wound strength was determined by using a laser vacuum device.

Results: During healing, both Group A and B animals showed less edema and inflammation than Control. Group A animals had the weakest wounds at 3 days after surgery, but the strongest wounds after 14 days. Group B animals had similar wound strength to Control animals at 7 days, but stronger wounds after 14 days.

Conclusion: D-ribose-L-cysteine supplementation appears to reduce wound inflammation early after wounding and enhance wound strength by 14 days. This suggests that increased intracellular glutathione levels may improve and enhance wound healing.