American Botanical Council HerbClip FILE: Rosem

FILE: Rosemary (Rosmarinus officinalis)

Date: January 31, 1996

HC 10-31-5-1

TO: General Distribution

Re: Rosemary's Effect on Insulin Levels

Al-Hader, A.A., Z.A. Hasan, and M.B. Aqel. Hyperglycemic and insulin release inhibitory effects of *Rosmarinus officinalis*. *Journal of Ethnopharmacology*, Vol. 43, 1994, pp. 217-221.

An aqueous extract prepared from leaves of rosemary (*Rosmarinus*) officinalis) is widely used in Jordan as a folk remedy for abdominal colic. It has been suggested that rosemary's volatile oil causes smooth muscle relaxation by inhibiting the increase in cytosolic free calcium concentrations; in turn, a raised cytosolic free calcium level is known to be a trigger for pancreatic insulin release. With this information in consideration, the present study was conducted, using normal and diabetic rabbits, to determine the potential effects of rosemary oil on insulin release and blood glucose levels. It was found that administration of the oil produced a significant change in plasma glucose and serum insulin levels in the normal rabbits, and a significant hyperglycemic effect in the diabetic rabbits. No effect on the fasting plasma glucose levels in normal rabbits were observed. Based on these results, the authors conclude that the volatile oil of rosemary leaves has significant hyperglycemic and insulin release inhibitory effects.