



Green chilli : A memory booster from nature

MILIND PARLE AND SUSHILA KAURA

ABSTRACT

Green chilli forms an excellent combination of healthy ingredients and essential nutrients. Apart from its traditional and culinary uses, its therapeutic and pharmacological actions are noteworthy. This study was designed to investigate the memory enhancing potential of green chilli in mice. A total of 125 Swiss Albino mice divided in 25 groups were employed for the study. *Capsicum frutescens* (CF) paste was administered daily for 10 successive days in 3 different concentrations (2 %, 4% and 8% w/w) along with diet. CF paste significantly ($p < 0.01$) reduced the transfer latency of mice in Elevated Plus maze model. CF paste significantly ($p < 0.01$) enhanced the discrimination index in Object Recognition Task. Amnesia induced by scopolamine (0.4mg/kg, i.p) and diazepam (0.1mg/kg, i.p) was reversed by green chilli in the present study. Memory enhancing effect of green chilli was comparable to that of standard drugs viz., piracetam (nootropic agent) and donepezil (acetylcholinesterase inhibitor). Brain AChE activity was reduced significantly by green chilli, thereby indicating enhanced cholinergic transmission. Brain GSH levels were markedly increased, thereby suggesting enhancement in scavenging of free radicals. Thus, the net effect of green chilli appears to be resulting in improvement of memory reversal of memory, deficits and enhanced scavenging of free radicals.

Key words : *Capsicum frutescens*, Memory, Green chilli

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MEMBERS OF THE RESEARCH FORUM

Address for correspondence :

MILIND PARLE, Department of Pharmaceutical Sciences, Guru Jambheshwar
University of Science and Technology, HISAR (HARYANA) INDIA
Email : mparle@rediffmail.com

Coopted authors :

SUSHILA KAURA, Department of Pharmaceutical Sciences, Guru Jambheshwar
University of Science and Technology, HISAR (HARYANA) INDIA