

THE EFFECT OF CHILLIE POWDER ON SALIVATION

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The red chillie (*Capsicum sativum*) in the powder form, is a commonly used ingredient in the Sri Lankan diet. It is well known that a high concentration of chillie brings about increased salivation.

The aim of the present study was to measure the flow of whole saliva in response to washing the mouth with water containing increasing amounts of chillie powder suspended in it. The subjects were male and female dental and medical students, of age group 20-25 years. Five subjects participated in each trial. Each subject washed the mouth with 25 ml of the chillie suspension on five consecutive time periods of two minutes each, the whole procedure lasting about 15 minutes. In each time period, the mouth wash was kept in the mouth for 20 seconds and emptied into a weighed beaker. This was followed by spitting into the same beaker twice at one minute intervals. At the end of the sequence of 5 tests, saliva collection was continued for a further five consecutive periods of two minutes each. A control experiment was carried out using water alone as the mouth wash, on a different group of subjects.

The concentration of the chillie suspension varied from 0.18 g/100 ml to 4.8 g/100 ml, the subjects being unable to tolerate higher concentrations. The results showed that there was an increase in salivary flow with the chillie suspension when compared with the control. At lower concentrations of the chillie suspension, salivary flow increased steadily with increase in concentration. Beyond 2.4 g/100 ml, there was only a small rise with increase in concentration. The response was therefore judged to be of exponential type.