Aims and Objectives
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The World Health Organization (WHO) uses chronological age in the following classification: 60-74 elderly; 75-89 old; 90-97 very old.

Human life span has been increasing continuously since the beginning of the 20th century, particularly after the discovery of antibiotics, advances in medical sciences and health awareness of people. More than 7% of Indian population is now over 60 years and comprising elderly people. Number of elderly people is increasing worldwide.

The Indian population reached 100 crores (1000 million) on May 11, 2000. So we had 7 crores (70 million) of elderly. Within one year (May 11, 2001) the population increased by 15 lakhs (1.5 million) of whose 0.1 million are elderly. At this rate we shall have over 12 crores (120 million) of above 60 years elderly population by 2025. In developed nations the situation is more serious as nearly 12-15% population is over 60 years (Kanungo, 2003).

Human longevity can be further increased by genetic manipulation. But unfortunately the rise in life expectancy cannot always be disability and disease free. One of the challenges of the twenty first century will be to improve the quality of elderly population.

Rapid changes in food habit, gradual changes in world environment, increased level of environmental pollution deteriorate the health of population of all ages particularly of older people. They succumb to old age diseases of blood vessels, heart, kidney and neurological disorders like Alzheimer's and Parkinson's disease.
• It is intended to study the antioxidant enzyme level like peroxidase and catalase for assessing the effect of garlic under normal and stress induced condition.

• Estimation of cholinesterase level of brain and serum may reveal the efficacy of garlic if any on the improvement of nervous system activity, which decreases with ageing and responsible for diminished brain activity and potential nervous jam.

• Serum cholesterol and triglyceride will also be estimated to find out the effect of garlic on these two lipids under normal and stress induced conditions in different age groups of experimental animals.

• Serum and liver MDA level would be estimated to study the capacity of garlic to inhibit lipid peroxidation under normal and stress induced conditions.

• Serum GPT level would also be assayed as marker enzyme to see the effect of the dosages of garlic used in this study in normal and stress induced conditions on liver function.

• Total liver protein will also be assayed to see if there is any beneficial effect of garlic.

• Histological study of liver would be done to study the histomorphological changes in liver after using garlic and carbon tetrachloride, a hepatotoxic compound. The effect of garlic as a hepatoprotective agent in the carbon tetrachloride intoxicated rat liver will also be observed.

• Histochemical study of adrenal medulla would be done by using Hillarp and Hokfelt’s technique for staining epinephrine and norepinephrine in medullary cells which will evaluate the effect of stress (cold and CCl₄), on
these two catecholamines which are of particular importance in conditions of stress situation (Laycock and Wise, 1983) and efficacy of garlic to counteract the same.

- Therefore, the purpose of the present study is to investigate the effect of garlic, the single pod variety on the antioxidative or antiageing effect on rat.

- With this view in mind an attempt would be made to observe most of the parameters on normal, garlic treated, stress induced (cold and carbon tetrachloride) and stress induced garlic treated rats to find out their effects on ageing and age related changes.