Introduction

Fluoride is a trace element which is the most patent & effective substance for prevention & treatment of dental caries ***(Davydov et al, 2002)***. Sodium fluoride is used as anti-helminthic against round worms, disinfectant and as anticoagulant ***(Dollery, 1999)***.

Fluoride in amounts exceeding the standard therapeutic dosage, accumulates in hard & soft tissues where it produces significant changes in many organs, including liver, kidney, lung, pancreas, endocrine glands, reproductive and nervous systems ***(Guminska, 1999, Hordyjewska & Pasternak, 2004; Machoy-Mokrzynska, 2004)***.

Recent studies showed that the fluoride can induce the formation of free radicals which produce disturbance in the action of antioxative systems in a cell, even the cell's genome ***(Bartosz, 2004)***. A decreas of antioxidant levels in the cells produce damage of cell membrane, leading to cell death ***(Chlubeck, 2003)***.

Antioxidative vitamins such as A, E, and C have been shown to protect the body against diseases characterized by the disruptive activity of free radicals ***(Guney et al, 2007)***.