Fluoride Level in Drinking Water Resources of Gorgan Rural Regions, 1385

Abstract

Rahimzadeh.H(MSc) Instructor of Enviromental Health, Golestan University of Medical Sciences

Kargar. M (MSc) Instructor of Enviromental Health, Golestan University of Medical Sciences

Dadban.Y(MSc) Instructor of Enviromental Health, Golestan University of Medical Sciencese

> Birami.S (BSc) Enviromental Health

Corresponding Author: Kargar. M

E.mail: mad_kargar@yahoo.com

Background and Objectives: Fluoride is one of the anions existed in water and soil. Its amount is not the same in different kind of water. Since the most of body's need to fluoride should be provided by drinking water, this study was aimed at determining the fluoride level in water supply of Gorgan rural regions.

Materials and Methods: In this Cross-Sectional study, the subjects were all 67 water sources of the region. Every season, a one litter Sample was taken in a plastic Container and tested by SPADS Method. After Collecting and encoding the data, ANOVA was used to analyze.

Results: The Findings shows that there are 4 springs and 63 wells which are Located in the mountainous (N=16) and flat (N= 47) regions. In every season, the average fluoride Level was lower than Standard Level (1.5 mg/L). The difference between fluoride Level of wells (0.39 ± 0.15 mg/L) and springs (0.16 ± 0.13 mg/L) is Significant (p<0.05) the fluoride Level of mountainous wells is higher than wells located in flat regions (0.13mg/L). This deference was Significant (p<0.05).

Conclusion: Based on The results revealing the fluoride Level of drinking water in Gorgan Rural region is less than international Standard, we recommend adding of Supplementary fluoride in foodstuffs of The people Living in This region.

Key words: fluoride, drinking water resources, Gorgan, spring