Effect of Fluoride rich food and Prevalence of Fluorosis in Rathapuram Thaluk, Tirunelveli District

**1 A. Subramanian, 2\* L. Gnana Suhirtha**

*1 Department of Zoology, S.T Hindu College, Nagercoil, Affiliated to Manonmaniam Sundaranar University, Tirunelveli, Tamil Nadu, India.*

*2\* Department of Zoology, Research Scholar and Research, S.T Hindu College, Nagercoil, Affiliated to Manonmaniam Sundaranar University, Tirunelveli - 627 012, Tamil Nadu, India.*

*2\* Corresponding Author Email:* [*suhirthaanbu@gmail.com*](mailto:suhirthaanbu@gmail.com)

**Abstract**

The article discusses the importance of food analysis in characterizing the properties and contents of foods, particularly the evaluation of the chemical substances presents in food products to ensure safety for human consumption. Fluoride is a mineral found in many foods and is known to help prevent dental caries and promote new bone formation. However, excessive intake might contribute in health issues like the skeletal fluorosis and dental fluorosis. A study done in a region having excessive fluoride content in the soil and water found varying levels of fluoride in several food products, including marine fishes, leafy vegetables, fruits, carbonated soft drinks, packed fruit juices, milk, tea, and coffee. The article describes a method for estimating the fluoride content in these food and drink items using an ion selective electrode and Whatman grade filter paper for sample preparation. The estimation of fluoride content in food and drink items is important to monitor fluoride intake and ensure it remains within safe limits.

***Keywords:*** *food analysis, Fluoride* content*, dental fluorosis, ion selective electrode* method*, Whatman grade filter paper method*