# Wavelet and Statistical Analysis of Milk Products, Fruits and Vegetables Intake in India

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**Abstract:** *Milk products, fruits and vegetables intake are the main components of a healthy diet and have vitamins, proteins, minerals, fats and many more which help in fulfillment of daily energy need and protection from many diseases and disorders. Milk products, fruits and vegetables intake index decide the true development of any country, because healthy people can live happy and longer life and can play inportant role in the development of society and country. Wavelet transforms is a powerful and efficient tool which captures the localized time frequency information of the signal and suitable for analysing non-stationary and transient signals. The approximation represents average behaviour or trend of the signal, while detail represents differential behaviour of the signal corresponding to each level of decomposition. Milk products, fruits and vegetables data of India from Jan. 2013 to Aug. 2021 are taken as raw data. Wavelet transforms of this data is performed by software dyadwaves using Haar wavelet, decomposition level-5. Approximation is the slowest part of data and corresponds to the maximum scale value describes the trend of the signal. The statistical analysis of given data is also performed through skewness, kurtosis, standard deviation and correlation coefficients. The wavelet analytical results are strongly consistent with statistical analytical results of the milk products, fruits and vegetables intake.*

**Keywords:** Approximation, detail, milk, fruits, vegetables, wavelet transforms

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