

# Reduction of Alkalinity in Drinking Water by Using Organic Acids †

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**Abstract:** Water is an essential form of life. The normal pH level of water is 7, and the alkaline in water refers to the pH level. The pH level is a number that measures how acidic or alkaline a substance is on a scale of 0 to 14. Alkaline water has a higher pH level than regular drinking water. Alkaline water must also have alkaline minerals and negative oxidation-reduction potential (ORP). The study was conducted to reduce the pH of drinking water by using Tannic acid and Gallic acid is encapsulated with sodium alginate and calcium chloride to reduce the level of pH and compared with other physiochemical parameters. A filter made of tannic acid and gallic acid to reduce the pH to a normal level. The observed pH level was reduced from 9.5 to 8.3 with Tannic acid, and with gallic acid, the pH was reduced from 9.5 to 6.3. By using this method, the alkaline water was made to edible form for consumption.

**Keywords:** potable water; alkalinity; encapsulation; organic acids; tannic acid; gallic acid.

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## Conflicts of Interest

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