

## **BENZOIC ACID AS A NATURAL COMPOUND IN MILK AND MILK PRODUCTS**

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Benzoic acid and its salt, sodium benzoate, are used as food preservatives for many years in order to inhibit various the growths of food spoilage and food pathogens bacteria, yeasts and molds. The most suitable foods for benzoates are fruit juices and soft drinks that are naturally in an acidic pH range. Their use as preservatives in food, beverages, toothpastes, mouthwashes, dentifrices, cosmetics, and pharmaceuticals is regulated. Also, benzoic acid occurs naturally in free and bound form in many plants and in animals. Therefore, it is a natural constituent of many foods, including milk and milk products. Concentrations of naturally occurring benzoic acid in foods change between traces-1300 mg/kg of food. It has been reported that benzoic acid content of milk ranges from 2-5 mg/kg. Benzoic acid content of fermented milk products is higher than that of raw milk. Hippuric acid naturally present in milk and its concentration may be up to 50 mg/kg. It is well known that lactic acid bacteria in milk convert hippuric acid into benzoic acid. The concentration of benzoic acid in fermented milk products can be up to 50 mg/kg. Although the acute toxicity of benzoic acid and sodium benzoate is low in humans, adverse effects such as asthma, pseudoallergy, urticaria, metabolic acidosis and convulsions were observed at low doses in sensitive person. This paper covers information on factors that affect the formation and level of benzoic acid in milk and milk products and its effects on human health.

Keywords: Benzoic acid, milk, milk product

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