# GOVERNMENT OF INDIA
# HEALTH AND FAMILY WELFARE
# LOK SABHA

STARRED QUESTION NO:320
ANSWERED ON:22.12.2004
USE OF ETHYLENE GLYCOL IN SOFT DRINKS
Gandhi Smt. Maneka

**Will the Minister of HEALTH AND FAMILY WELFARE be pleased to state:**

(a) whether soft drink manufacturers use ethylene glycol as an anti-freeze compound to lower the freezing point of soft drinks;

(b) if so, whether ethylene glycol is a food additive, which is not allowed under the prevention of Food Adulteration (PFA) rules;

(c) if so, the details thereof;

(d) whether pH of soft drinks in India has been found to be 2.3, and that it is potentially harmful for consumption;

(e) if so, whether there are no regulations in the Prevention of Food Adulteration (PFA) rules for the pH of soft drinks; and

(f) if so, the steps the Government has taken to regulate the pH of soft drinks in India?

## Answer

THE MINISTER OF HEALTH AND FAMILY WELFARE (DR. ANBUMANI RAMADOSS)

(a)to(f): A statement is laid on the Table of the House.

STATEMENT REFERRED TO IN REPLY TO LOK SABHA STARRED QUESTION NO. 320 FOR 22ND DECEMBER, 2004

No specific case of use of Ethylene glycol in carbonated water has been brought to the notice of Ministry of Health & Family Welfare.

Ethylene glycol is not a food additive. Its use has not been permitted in any food including carbonated water under PFA Rule, 1955 and Fruit Products Order, 1955 in India. Its use in food products is violation of the provisions of PFA Act, 1954 and Fruit Product Order, 1955 which is a punishable offence.

The requirement of pH have not been prescribed in carbonated water under PFA Rules, 1955 and Fruit Product Order, 1955 and hence the limit of pH is not being regulated in these products.

In 6 samples of different brands of carbonated water analyzed for the Ministry of Health, the pH has been reported in the range of 3.0 − 3.2.

Exposure to extreme pH value results in irritation to the eyes, skin and mucous membranes. Eye irritation and exacerbration of skin disorders have been associated with pH value greater than 11. In addition, solutions of pH 10-12.5 have been reported to cause hair fibers to swell. In sensitive individuals, gastro-intestinal irritation may also occur. Exposure to low pH values can also result in similar effects. Below pH 4, redness and irritation of the eyes have been reported, the severity of which increases with decreasing pH. Below pH 2.5, damage to the epithelium is irresversible and extensive.

The Bureau of Indian Standards has proposed draft standards for carbonated water wherein a specific range for pH has been proposed.