

## *Indian Standard*

# METHODS FOR ESTIMATION OF VITAMIN C IN FOODSTUFFS

### 1. SCOPE

**1.1** This standard specifies methods for estimation of Vitamin C ( ascorbic acid ) in foodstuffs.

### FOREWORD

**0.1** This Indian Standard was adopted by the Indian Standards Institution on 30 November 1970, after the draft finalized by the Food Hygiene, Sampling and Analysis Sectional Committee had been approved by the Agricultural and Food Products Division Council.

**0.2** Vitamins are required to be assessed in a large number of foodstuffs, such as dairy products, animal feeds, processed cereals and other foodstuffs. Moreover, different methods of vitamin assays are used in different laboratories. Therefore, with a view to establishing uniform procedures and also for facilitating a comparative study of results, ISI is bringing out a series of standards on vitamin assays. These would include chemical and microbiological methods, wherever applicable.

**0.3** This standard covers two methods, namely, 2,6-dichlorophenol indophenol method and 2,4-dinitrophenylhydrazine method, commonly used for estimation of vitamin C in foodstuffs. The 2,4-dinitrophenylhydrazine method is particularly suitable when the sample contains a very low amount of ascorbic acid. The method is not very specific in case of processed foods that contain high concentrations of carbohydrates and have been heated.

**0.4** In the preparation of this standard, considerable assistance has been derived from a number of books and publications. However, the methods included in this standard are predominantly those which have been tried in various laboratories in the country. Thus the methods prescribed in this standard are mainly based on practical experience within the country.

**0.5** In reporting the result of a test or analysis made in accordance with this standard, if the final value, observed or calculated, is to be rounded off, it shall be done in accordance with IS: 2- 1960\*.

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\*Rules for rounding off numerical values ( *revised* ).