

Table I. Optical Density of Selenium Metal Colloids in Treated Food Extracts

Commodity	Reaction time before dilution, min	Sample no.	Optical density	Time from reagent addition to optical scan, min
Orange drink	5	OD-2	0.162	30
	5	OD-3	0.158	30
	5	OD-4	0.164	30
	10	OD-5	0.160	30
	10	OD-6	0.162	30
	10	OD-7	0.160	30
	15	OD-8	0.158	30
	15	OD-9	0.164	30
	15	OD-10	0.162	30
	15	OD-2	0.160	45
Tomato juice	5	OD-2	0.162	180
	15	TJ-1	0.100	30
	15	TJ-2	0.102	35
Cran-apple drink	15	TJ-3	0.099	40
	15	CA-1	0.152	30
	15	CA-2	0.158	35
Fruit punch	15	CA-3	0.164	40
	15	FP-1	0.128	30
	15	FP-2	0.133	35
	15	FP-3	0.130	40

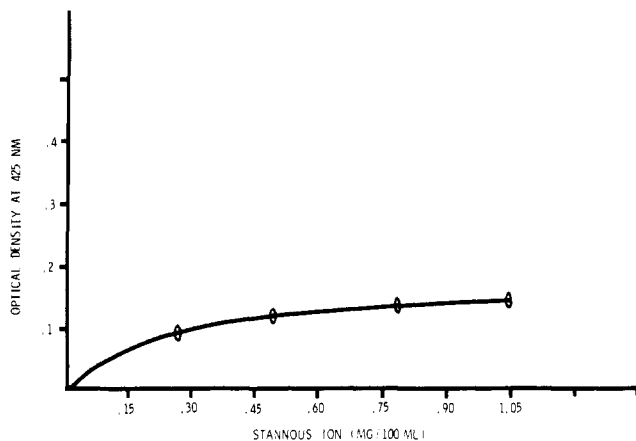


Figure 2. Optical density of selenium colloids prepared from the reaction of stannous chloride and excess selenious acid.

act as colloid stabilizers. Due to the lack of reduction of selenious acid by many food components which reduce the reagents used in current direct titration methods, the turbidimetric determination of ascorbic acid will give results closer to the actual content. Highly pigmented extracts (such as those from beets or berries) can be measured directly by turbidimetric determination. The only disadvantage of the turbidimetric determination is the reduction of selenious acid by stannous ion.

A comparison of the ascorbic acid content of several nutritionally significant sources of vitamin C (Table II) shows a generally lower result by the turbidimetric method as compared to the 2,6-dichlorophenolindophenol (titration) method.

Table II. Content of Ascorbic Acid in Certain Foods

Product ^a	Ascorbic acid, mg/100 g	
	Titration	Turbidimetric
Tomato paste	28	25
Green peas	6	4
Tomato juice	17	11
Pineapple-grapefruit juice	24	18
Orange drink	65	68
Green asparagus	19	18
Fruit punch	27	28
Vegetable juice cocktail	19	15
Cran-apple drink	42	34
Grapefruit juice	28	16

^a Packed in glass or fully enameled cans; no stannous ion present.

LITERATURE CITED

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Jack W. Ralls

National Canners Association
 Berkeley, California 94710

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Correction

DETERMINATION OF TRACE METALS IN FOODS USING CHELATING ION EXCHANGE CONCENTRATION

In this article by Richard A. Baetz and Charles T. Kenner [*J. Agric. Food Chem.* 23(1), 41 (1975)], on page 41, column 2, paragraph 2 under Experimental Section, line 10, the sentence beginning "The ammonium sulfate solution

..." should be changed to read: "Ammonium sulfate solution (5% w/v). HNO₃ (J. T. Baker No. 5-9603; suitable for mercury determination) and H₂SO₄ (J. T. Baker No. 5-9685; suitable for mercury determination)."