

THE EXAMINATION OF PASTEURIZED MILK FOR D.D.T. CONTENT BY GASCHROMATOGRAPHY

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Summary

20 samples of milk taken during May 1973 – March 1974 from Tehran and Pak pasteurized milk were examined for D.D.T. content by gaschromatography. No serious contamination were found; all samples contained less than 0.005 micro gram D.D.T./D.D.E.

Procedure

Richardson et al. 1967 (2) reported a method where by D.D.T / D.D.E can be measured in milk by alkaline treatment and gaschromatography .

Since D.D.T on alkaline treatment changes to D.D.E this method measures both compounds as D.D.E

Standard solution containing 10, 20, 40, 60, 80, 100, 120 micro gram of pure D.D.T were treated by the above method and recoveries of 85 – 95 % were obtained using a calibration curve based on pure D.D.E.

Samples of Tehran and Pak Pasteurized milk were taken biweekly from 14th May 1973 until 20th March 1974 and analyzed.

The smallest contamination detected by this method was 0.005 micro gram D.D.T/D.D.E. No residue of D.D.T/D.D.E were found in any of the 20 samples examined i.e. all D.D.T/D.D.E contents were less than 0.005 micro gram.

Specification of Gaschromatograph

Aerograph Model 600-D gaschromatograph.

Hy-FI with E.C. Detector.

Recorder: Honey well.

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2) Analytical Methods for Pesticides and Plant Growth Regulators. Volume VI, Gaschromatographic Analysis. Edited by: G. ZWEIG (1972)

Column: 5' \times 1.8" Dow 11-5%

Test condition

Temperature of G.L.C: 170°C – 175°C

Flow of Nitrogen: 30 ml/min