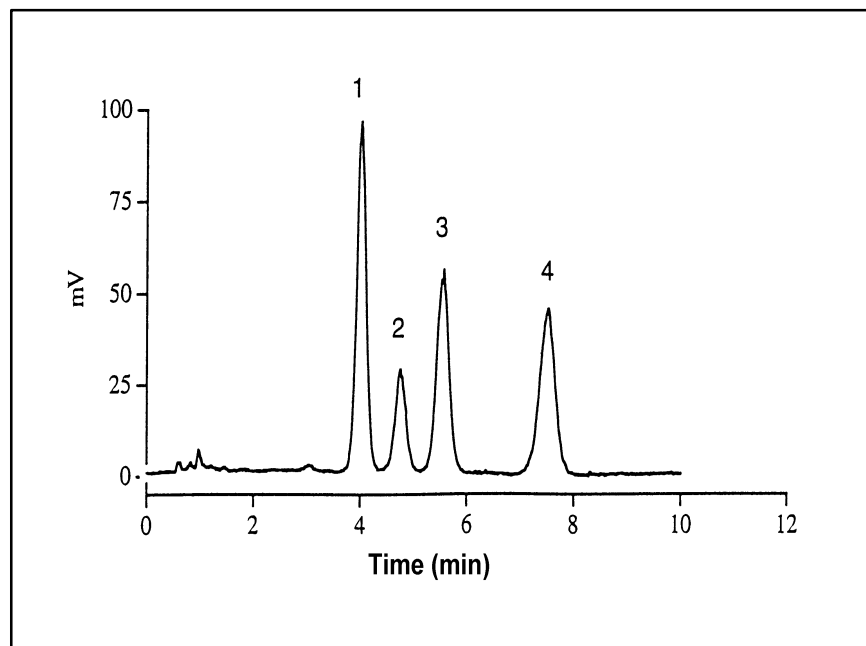


## SEPARATION OF TOCOPHEROLS



Separation and Quantification of Lipids by HPLC with Special reference to Light-Scattering Detector C. LERAY

Vitamine E (tocopherols) is known to be involved in the protection of the unsaturated fatty acids in cellular membranes against peroxydation. Tocopherols deficiency is frequently associated with hematological problems and vascular lesions and its quantification is desirable to use the oxydation status of cellular membranes or to determine the circulating levels.

The quantification by HPCL is easily managed and the response from ELSD is linear in the range .04-.5 µg, detection limit is 10-20 ng. Cholesterol acetate can be used as an internal standard if the extract is not saponified, but d-tocopherol is preferred if absent in the sample.

### Chromatographic conditions :

Column : LiChrosorb RP 18(120x4.6 mm, 5 µm, Merk).

Mobile Phase : methanol/water (98/2)

Flow Rate : 1.5 ml/min

ELSD Temperature : 35°C

### Compounds:

1: δ-tocopherol

2: γ-tocopherol

3: α-tocopherol

4: tocopherol acetate

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