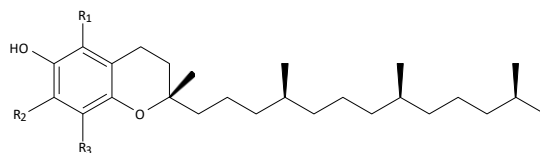


This is an application data of analyzing Vitamin E in food by HPLC. Vitamin E is a fat-soluble vitamin, which exists tocopherol and tocotrienol. Vitamine E were used as antioxidant.

Detection was made by Fluorescence detector and confirmed a good peak shape.

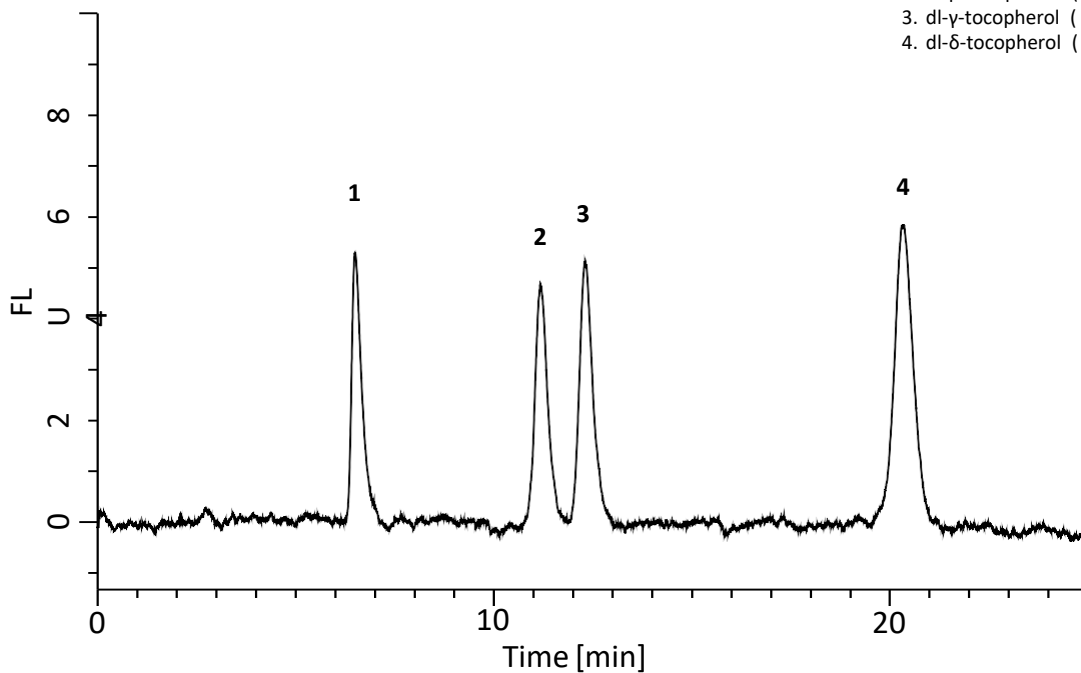
(K. Suzuki)

Chemical Structures



V.E.	R1	R2	R3
α -tocopherol	CH ₃	CH ₃	CH ₃
β -tocopherol	CH ₃	H	CH ₃
γ -tocopherol	H	CH ₃	CH ₃
δ -tocopherol	H	H	CH ₃

Analysis of Standard Solution



1. dl- α -tocopherol (25 μ g/L)
2. dl- β -tocopherol (25 μ g/L)
3. dl- γ -tocopherol (25 μ g/L)
4. dl- δ -tocopherol (25 μ g/L)

HPLC Conditions

Column : Inertsil NH2
(5 μ m, 250 x 4.6 mm I.D.)

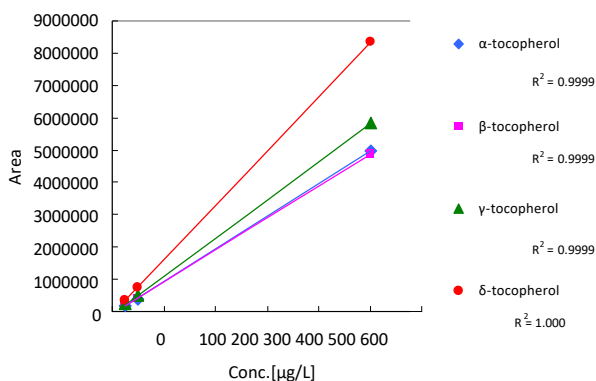
Col. Temp. : 40°C

Detection : FL Ex 298 nm Em 330 nm

Eluent : A) CH₃COOH
B) 2-Propanol
C) Hexane
A/B/C = 5/6/1000, v/v

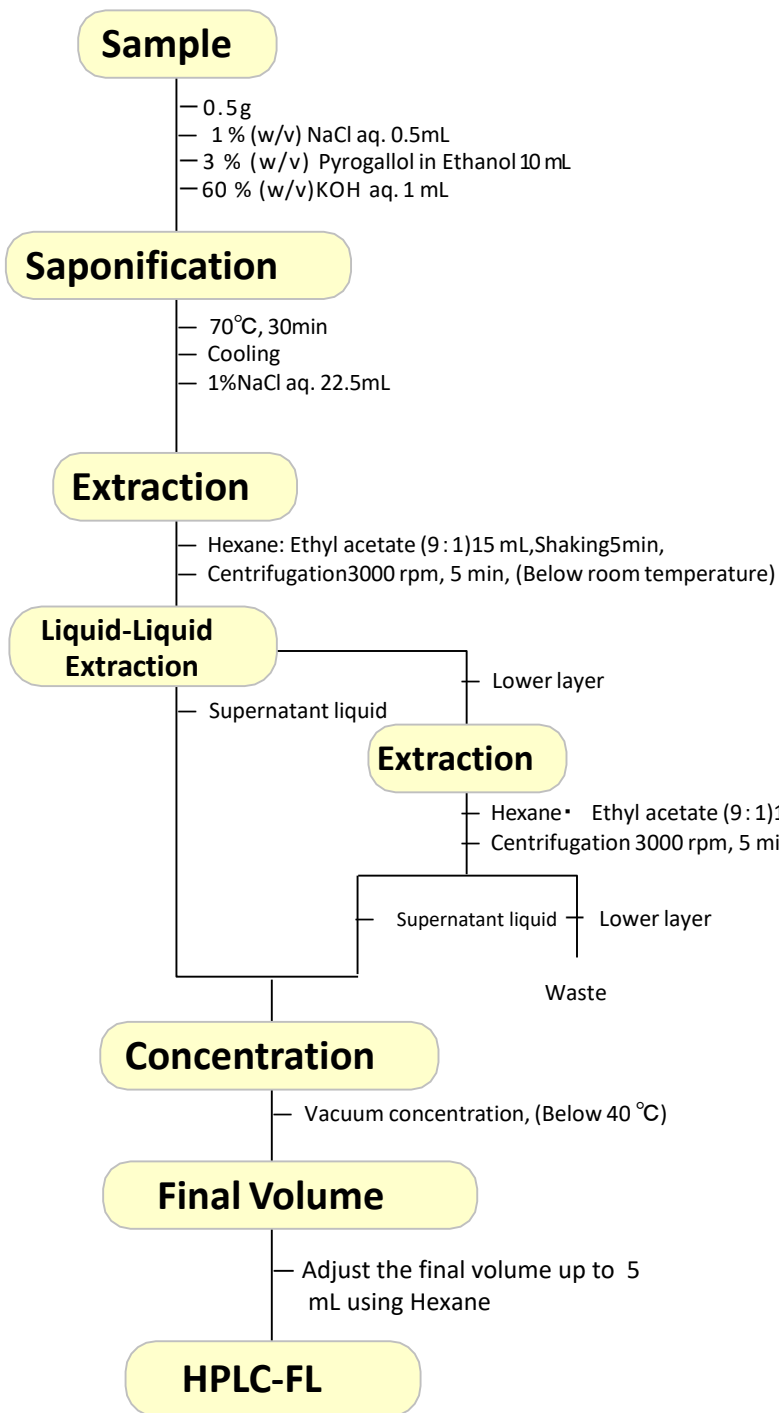
Flow Rate : 1.2 mL/min

Injection Vol. : 20 μ L

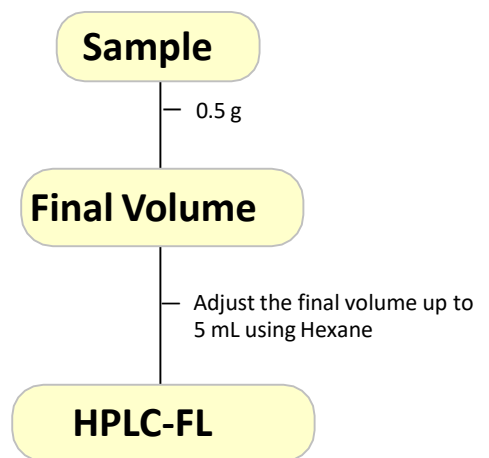


Calibration Curve

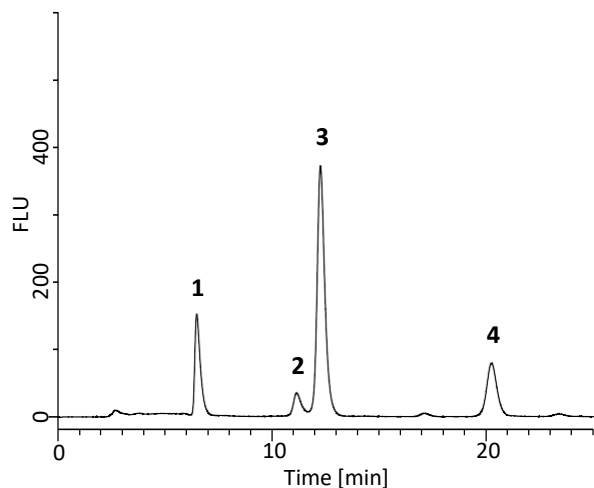
General Foods



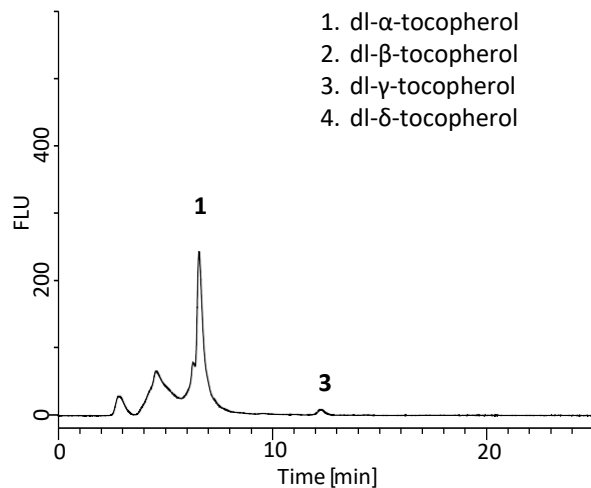
Fat



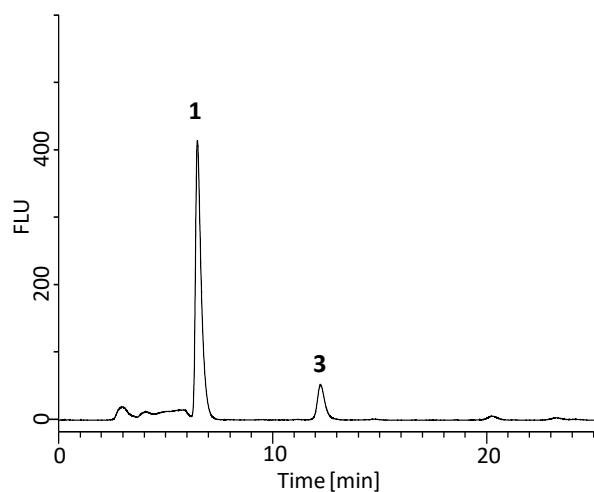
Analysis of Foods



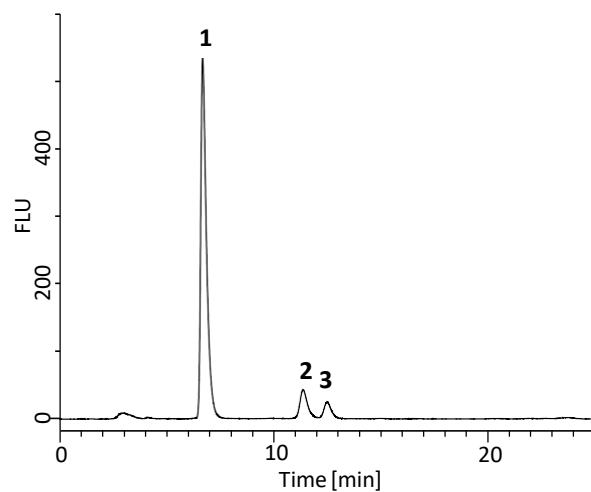
Cooking oil (a 10 times dilution)



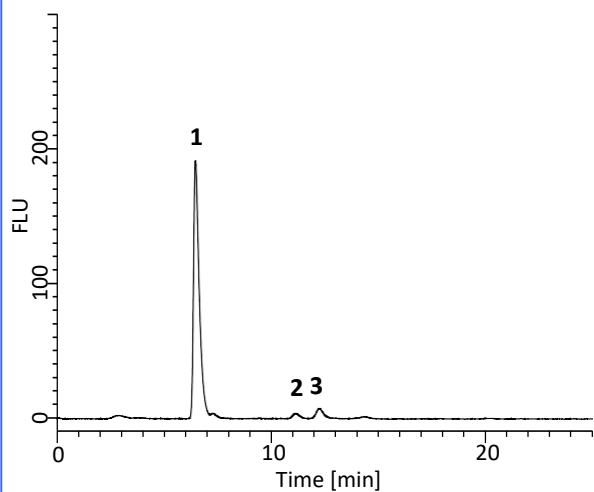
Butter



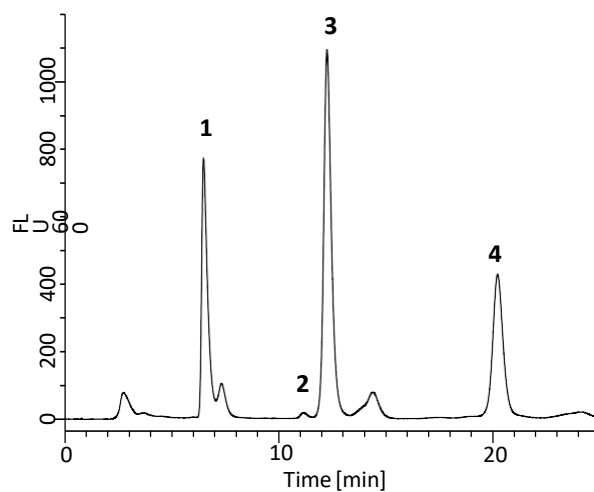
Broiled eel



Mulukhiya



Almond (a 10 times dilution)



Baby formula

1. dl- α -tocopherol
2. dl- β -tocopherol
3. dl- γ -tocopherol
4. dl- δ -tocopherol

GL Sciences disclaims any and all responsibility for any injury or damage which may be caused by this data directly or indirectly. We reserve the right to amend this information or data at any time and without any prior announcement.

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