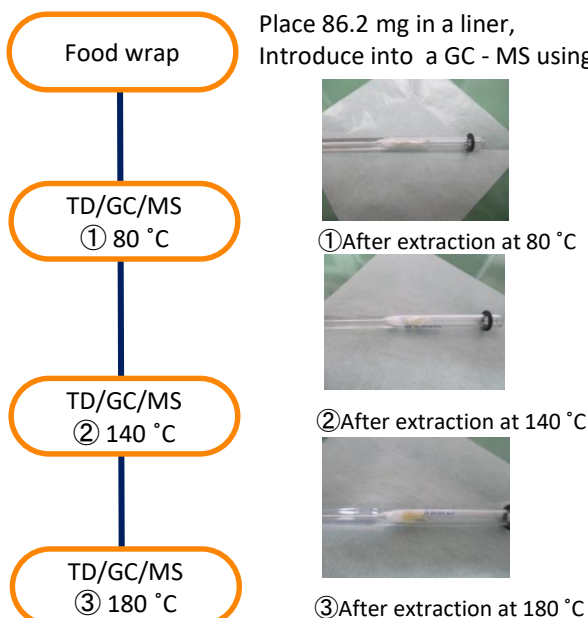


# Direct Heating Analysis of Commercial Food Wraps - Using HandyTD Portable Thermal Desorber

Simple heat-extraction analysis of commercial food wraps (heat-resistant temperatures of 140 °C) was performed using a HandyTD.

The wrap was heated directly using a HandyTD and the resulting volatile components introduced into a GC - MS. The results of the analysis showed a large number of observed peaks when the heating temperature rose above 140 °C, with the detection of esterified compounds of hydrocarbons, fatty acids and larger hydrocarbons.

## Preliminary processing procedure

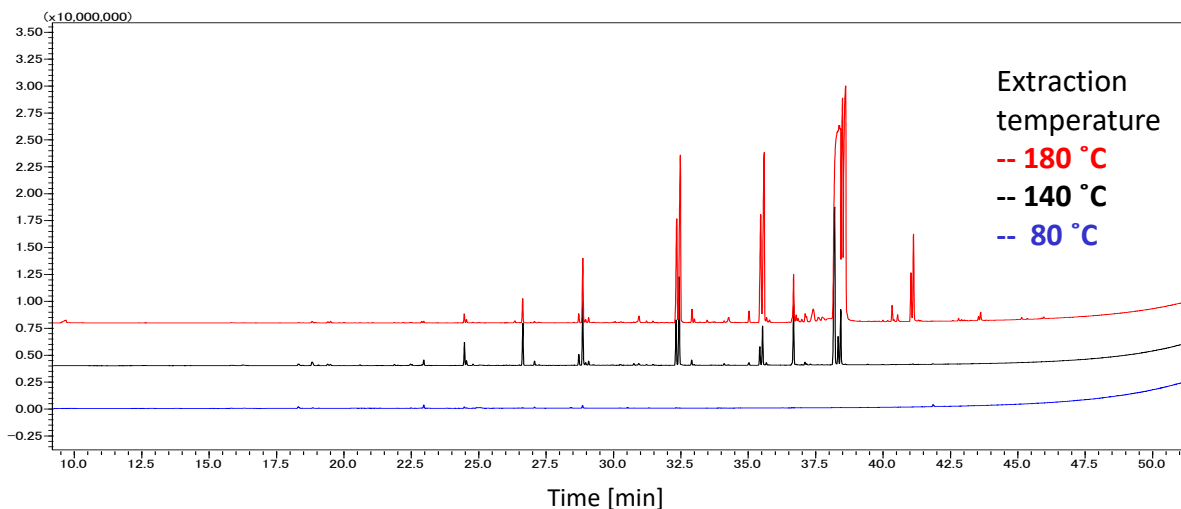


### GC Conditions

<b>System</b>	: GC - MS - HandyTD TD265
<b>Column</b>	: InertCap 5MS/Sil 0.25 mm I.D. x 30 m, df = 0.25 μm
<b>Col.Cat. No.</b>	: 1010-15142
<b>Col.Temp.</b>	: 40 °C (5 min) - 6 °C/min - 320 °C
<b>Carrier Gas</b>	: He, 0.97 mL/min
<b>GC Inlet</b>	: 300 °C, Split 7:1
<b>Detection</b>	: MS Scan ( <i>m/z</i> 29-500)

### HandyTD Conditions

<b>Temp.</b>	: ① 40 °C - 45 °C/sec - 80 °C (3 min) ② 40 °C - 45 °C/sec - 140 °C (3 min) ③ 40 °C - 45 °C/sec - 180 °C (3 min)
<b>Press.</b>	: 75 kPa



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