Analysis of Anthocyanin Colors in Food

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Summary

Anthocyanin colors in food were analyzed by using LC-ESI-MS and 3D-HPLC methods. Calibration curves of each color (red cabbage color, elderberry color, purple corn color, purple sweet potato color, boysenberry color, grape juice color, grape skin color, perilla color, strawberry color, and mixed colors of red cabbage color, elderberry color, and strawberry color) using LC-ESI-MS and 3D-HPLC were obtained by the total ion strength of quasi-fragment ion peaks of aglycon and the total peak area, respectively. Recoveries of anthocyanin colors from beverage, candy, and jelly were 60.3 ~ 104.6% except for grape skin color (40.9 ~ 45.0% in LC-ESI-MS). Constituents and contents of anthocyanin in commercial foods were also elucidated.

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