APPENDIX D

Urinary Pharmacokinetics of Queen Garnet Plum Anthocyanins in Healthy Human Subjects (Chapter 21)

M. Netzel,[*,1,2] K. Fanning,[2] G. Netzel,[1] T. Frank,[3] D. Zabaras,[4] D. Russell,[5] and R. Stanley[6]

[1]CSIRO Food and Nutritional Sciences, 39 Kessels Road, Coopers Plains, QLD 4108, Australia
[2]Innovative Food Technologies, Agri-Science Queensland, Department of Employment, Economic Development and Innovation, 39 Kessels Road, Coopers Plains, QLD 4108, Australia
[3]Private Consultant, Enggasse 7, 65812 Bad Soden, Germany
[4]CSIRO Food and Nutritional Sciences, 11 Julius Avenue, North Ryde, NSW 2113, Australia
[5]Horticulture and Forestry Sciences, Agri-Science Queensland, Department of Employment, Economic Development and Innovation, Applethorpe Research Station, QLD 4380, Australia
[6]Centre for Nutrition and Food Sciences, Queensland Alliance for Agriculture and Food Innovation (QAAFI), University of Queensland, 39 Kessels Road, Coopers Plains, QLD 4108, Australia
[*]E-mail: michael.netzel@csiro.au

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Publication Date (Web): May 25, 2012 | doi: 10.1021/bk-2012-1093.ot005

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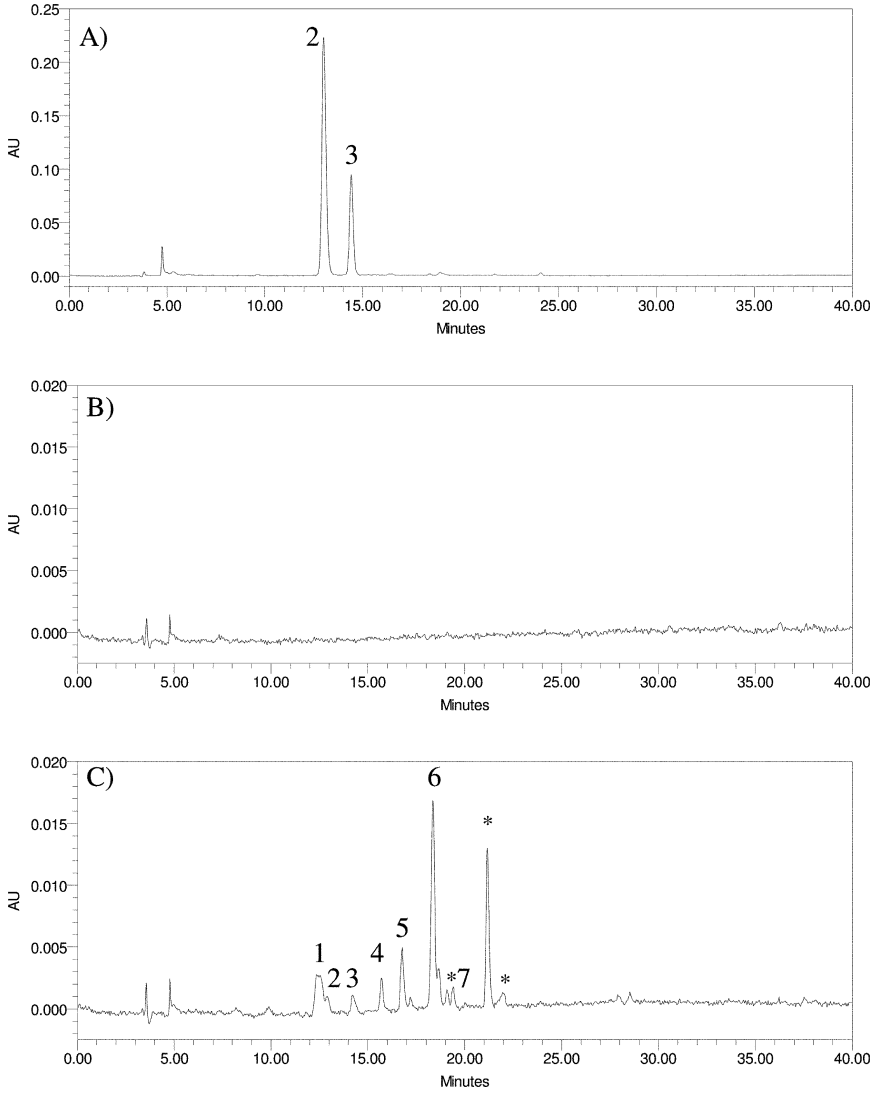
In Emerging Trends in Dietary Components for Preventing and Combating Disease; Patil, Bhimanagouda S., et al.; ACS Symposium Series; American Chemical Society: Washington, DC, 2012.



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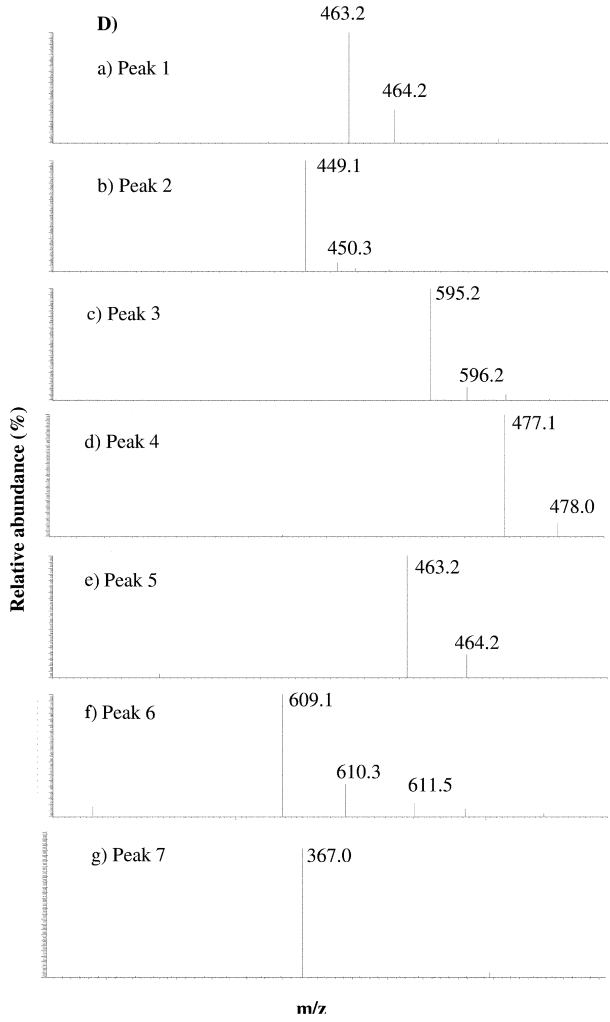

Figure 3. Representative HPLC chromatograms (A-C) and fragmentation patterns (D) of QGPJ (A) and of human urine (one subject) before (B) and 4 h after (C) the consumption of 400 mL QGPJ. Detection was performed at 520 nm. Urine was treated by solid phase extraction. Peaks: (1) cyanidin monoglucuronide, (2) cyanidin-3-glucoside, (3) cyanidin-3-rutinoside, (4) peonidin monoglucuronide, (5) peonidin-3-glucoside, (6) peonidin-3-rutinoside, (7) cyanidin monosulfate, and (*) unknown anthocyanin metabolites. (D) HPLC-ESI-MS precursor scans for product m/z 287 (a-c, g) and m/z 301 (d-f) showing native QGP anthocyanins and metabolites with intact flavylium skeleton. Components are numbered according to (C).

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