SECTION E

E-14 **THE RAPID MEASUREMENT OF THE CAFFEINE CONTENT OF BEVERAGES USING HPLC**

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Caffeine, an important constituent of a variety of stimulant beverages, has recently become the focal point of research regarding its possible effects on the human system. There is thus an increasing need for rapid and accurate methods of measurement. A method has been developed for this purpose using HPLC for the quantitative assessment of caffeine. The preparation of extracts for HPLC will be described, and the quantitative results obtained will be compared to those from earlier techniques. It was found that tea and coffee brews contain 26–28 mg caffeine per 100 ml. The instant beverages contain less caffeine (e.g., Instant-tea 16–18 mg per 100 ml and instant-coffee 10–12 mg per 100 ml). Cola beverages were found to contain a wide range varying from 5–12 mg caffeine per 100 ml depending on brand names. Detailed results will be presented and the importance of ingested caffeine will be briefly discussed.