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The Development of an Improved Extraction Method for the Determination of Cocaine Metabolite in Human Urine

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THE DEVELOPMENT OF AN IMPROVED EXTRACTION METHOD FOR THE DETERMINATION OF COCAINE METABOLITE IN HUMAN URINE

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Benzoyl ecgonine (BE) is the primary metabolite of cocaine. Detection of BE in urine is therefore an indication of cocaine usage. The goal of this research is to improve the extraction efficiency in order to increase the sensitivity of the method of determining cocaine usage through urine analysis.

A standard extraction technique was developed to efficiently extract BE from aqueous solution. Ultraviolet/visible spectroscopy was used to determine the extraction conditions for which optimum extraction of BE into organic solvent occurred.