

Sep-Pak C₁₈ cartridges before analyzing with ELISA using polyclonal antibody raised against AFB₁. Creatinine concentrations were determined to correct for interindividual variations in volumes voided. Urinary AF levels were detected in the range of 0.69-6.90 ng AFB₁ equivalent/mg creatinine with the average level of 2.23 ng AFB₁ equivalent/mg creatinine.

In order to determine the existence of urinary aflatoxin-like substances (UALS) when using ELISA method, 101 single voided urine samples of healthy infants, who were fed on AF-free diet (only powder milk) and lived in the same area as the neonates, were collected. All urine samples were quantified for urinary AF levels by the same procedures as those employed in the neonates. Some of these urine samples were also verified by HPLC technique. The levels ranging from 0.48 to 19.00 ng AFB₁ equivalent/mg creatinine, with the mean of 5.44 ng AFB₁ equivalent/mg creatinine were found by ELISA method. However, the levels of AF were not detected by HPLC technique.

These findings indicated that the detectable values shown by ELISA in this study were due to the presence of the interference substances known as UALS. However, the data obtained from HPLC analysis did not suggest significantly high AF exposure in the neonates and infants living in Bangkok and neighboring provinces.