

## **I-125 Assay**

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The assay of I-125 poses a difficult problem for dose estimation due to the low energy of the radiation. A recent incident prompted an investigation of the uncertainties in dosimetry.

Problems investigated were the suitability and accuracy of dose calibrators for the measurement of I-125 including geometry effects and the use of standard thyroid uptake phantoms for the estimation of thyroid burden.

The results indicate that significant errors can occur if a routine thyroid uptake estimate is performed without considering the physical characteristics of the subject.