$$UIBC=\frac{Fe\times\text{tube counts after}}{\text{tube counts before}}$$

counting before the elimination of unbound iron is not necessary, if standard FeFe-59 solution is counted. No pipetting after the elimination, nor centrifuging is needed. No buffer is added.

Florisil is also available as well as resin beads, but this requires accurate pipetting with one ml syringe after the elimination of unbound iron.

Labeling of Hemoglobin with ^{75}Se-methionine

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In the study of hemoglobin, globin moiety has not in the past been labeled with gamma-emitters in contrast to labeling of heme with Fe. Recent studies all have indicated that ^{75}Se-methionine behaves very much like methionine in vivo. We, therefore, attempted to label the globin moiety with ^{75}Se-methionine and to produce doubly labeled Hb, by combining with it the ^{59}Fe labeling. Rabbits were treated with β-acetyl-phenylhydrazine and blood with reticulocytosis was incubated with ^{59}Fe and ^{75}Se-methionine for 4.5 hours in the Borsook medium under constant agitation. The obtained doubly labeled Hb was analyzed with respect to efficiency of labeling, and it was found that ^{75}Se-mathionine labeling was just as efficient as that with ^{59}Fe. Separate measurement of ^{75}Se and ^{59}Fe has been feasible in a same specimen with correction for ^{59}Fe.

The value of Hb labeled with ^{59}Fe and ^{75}Se in biological systems has been studied in comparison with Hb labeled with either ^{59}Fe or ^{75}Se. The behavior of the two labels in the doubly labeled Hb was identical with that of the corresponding single label.

It is to be emphasized that globin of Hb can now be labeled with ^{75}Se-methionine with good efficiency so that globin labeled with ^{75}Se may be traced by extracorporeal measurement in man. Hb with the indicated double labels may find various applications in the study of Hb catabolism.

Studies on abnormal proteinemia with Radioiodinated-albumin and-γ-globulin tracer methods

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These studies were performed to clear the dynamic metabolism of abnormal proteinemia using radioiodinated-albumin and-γ-globulin.

METHOD

The study was carried out on 78 hospitalized