

K1A 2395 ZINC 65 METABOLISM IN HUMAN SUBJECTS.
Joseph F. Ross (California. Univ., Los Angeles. Lab. of
Nuclear Medicine and Radiation Biology). Contract
7(04-1)-GEN-12.

The importance of Zinc 65 as an environmental contaminant resulting from operation of nuclear reactors is widely recognized. This isotope is incorporated into certain substances which may serve as human food stuffs. We propose to study the metabolism of Zinc 65 contained in such material in human subjects, employing the total body counter. Additionally we will investigate the metabolism of zinc and zinc containing enzymes in human erythrocytes and tissues with the expectation of demonstrating an active metabolic turnover of such substances (e.g. erythrocyte carbonic anhydrase). Modification of turnover rates by disease processes, and by therapeutic measures will be studied.