

CONTENTS

Preface	v
1. Introduction	1
2. General formulations	3
3. Declining uptake over an indefinite period following a single exposure	5
A. Introduction	5
B. Retention of non-transportable radionuclides in the lungs	5
C. Deposition in pulmonary lymph nodes from contaminated lungs	6
D. Urinary excretion from contaminated lungs	7
E. Deposition in the skeleton from contaminated lungs	8
F. Deposition in the skeleton and excretion after contamination of wounds	11
4. Several uptakes in a limited period	12
A. Introduction	12
B. Differences between the metabolism of bone-seeking radionuclides and others	16
C. General description of Figures 5–10	16
5. References	24
6. Appendices	26
A. Derivation of basic equations	26
B. Retention and excretion functions for ten radionuclides of ICRP Publication 10	28
C. The fractions of the total excretion by urine (F_u) and faeces (F_f) for elements taken up to extracellular fluid (from ICRP Publication 10)	30
D. Derived investigation levels for excretion following periods of constant uptake	30