

Health and Safety Research Division

SPECIFIC ABSORBED FRACTIONS OF ENERGY AT VARIOUS AGES  
FROM INTERNAL PHOTON SOURCES.

IV. TEN-YEAR-OLD.

M. Cristy and K. F. Eckerman  
Metabolism and Dosimetry Research Group

Date Completed: February 1987  
Date Published: April 1987  
PDF Version Completed: February 2002

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Prepared by the  
OAK RIDGE NATIONAL LABORATORY  
Oak Ridge, Tennessee 37831  
operated by  
MARTIN MARIETTA ENERGY SYSTEMS, INC.  
for the  
U.S. DEPARTMENT OF ENERGY  
Contract No. DE-AC05-84OR21400

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## **ACKNOWLEDGMENTS**

We would like to thank Dr. J. C. Ryman for assistance with the computer programming and Drs. R. W. Leggett, G. D. Kerr, and G. G. Killough for useful discussions throughout this investigation. This research was sponsored primarily by the Office of Health and Environmental Research, U.S. Department of Energy, under contract DE-AC05-84OR21400 with Martin Marietta Energy Systems, Inc. Earlier work on the phantoms (see Appendix A of Volume 1 of these reports) was sponsored by the Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission; this and additional support from the U.S. Environmental Protection Agency, the U.S. Food and Drug Administration, the U.S. Department of Transportation, and other offices within the Nuclear Regulatory Commission have been critical to the development of our research program and are also gratefully acknowledged.

## **EDITORIAL NOTE**

This PDF was constructed from the original issuance of ORNL/TM-8381 Vols. 2-7. However, the numerical data tabulated here are given to an additional digit as an aid in interpolation. The data tables shown here are the values in current use (January 2002) at ORNL. Because of the change in the tables the pagination of the PDF no longer corresponds to the original report.

## **ABSTRACT**

This report is the fourth volume of a series in which specific absorbed fractions ( $\Phi$ 's) in various organs of the body ("target organs") from sources of monoenergetic photons in various other organs ("source organs") are tabulated. The first volume (ORNL/TM-8381:Vol. 1) outlines various methods used to compute the  $\Phi$ -values and describes how the "best" estimates recommended by us are chosen. In this volume  $\Phi$ -values are tabulated for a ten-year-old or 32-kg person. In companion volumes  $\Phi$ -values are tabulated for the newborn, for ages 1, 5, and 15 years, for an adult female, and for an adult male. These  $\Phi$ -values can be used in calculating the photon component of the dose-equivalent rate in a given target organ from a given radionuclide that is present in a given source organ. The methods used to calculate  $\Phi$  are similar to those used by Snyder et al. (1974) for an adult. However, an important difference involves the dosimetry for radiosensitive tissues in the skeleton. The International Commission on Radiological Protection recognizes, in the radiation protection system of its Publication 26 (1977), that the endosteal, or "bone surface," cells are the tissue at risk for bone cancer. We have applied the dosimetry methods that Spiers and co-workers developed for beta-emitting radionuclides deposited in bone to follow the transport of secondary electrons (freed by photon interactions) through the microscopic structure of the skeleton. With these methods we can estimate  $\Phi$  in the endosteal cells and can better estimate  $\Phi$  in the active marrow; the latter is overestimated with the methods of Snyder et al. at photon energies below 200 keV.

## INTRODUCTION

This report gives tables of specific absorbed fractions ( $\Phi$ 's) in various organs of the body ("target organs") from sources of monoenergetic photons in various other organs ("source organs") for a ten-year-old or 32-kg person. These  $\Phi$ -values can be used in calculating the photon component of the dose-equivalent rate in a given target organ from a given radionuclide that is present in a given source organ. A companion report (Cristy and Eckerman 1987a) describes the procedures used in choosing the "best" estimate of  $\Phi$  from the estimates generated by several methods for a given source-target pair—that report should be consulted for that and other background information. The  $\Phi$ -values calculated by these methods and the "best" estimates recommended by us are published in this report for the ten-year-old male and in other companion reports (Cristy and Eckerman 1987b-g) for the newborn, for ages 1, 5, and 15 years, for an adult female, and for an adult male. Note that from here forward the text is the same as that given in the reports for the other ages; it is reprinted in each volume for convenience.

The tables of specific absorbed fractions are available on diskettes for personal computers, by request.

The methods used to calculate  $\Phi$  are similar to those used by Snyder, Ford, Warner, and Watson (1974) for an adult. Simple equations describing the geometry of the body and its organs ("mathematical phantoms") are used (1) with a computer program that simulates radiation transport with Monte Carlo methods or (2) with a computer program that integrates the point-source kernel equation (including buildup) over the volumes of the source and target organs. The source of the photons is assumed to be distributed uniformly in a given source organ. One important difference between our methods and that of Snyder et al. is that a better method to calculate the specific absorbed fraction in the active marrow and the endosteal cells of the skeleton has been employed; if the initial photon energy is less than 200 keV, the earlier method substantially overestimates  $\Phi$  when active marrow is the target organ. Also, we have made more use of the converse Monte Carlo estimate,  $\Phi(\text{source organ} \leftarrow \text{target organ})$ , as an approximation to the direct Monte Carlo estimate,  $\Phi(\text{target organ} \leftarrow \text{source organ})$ , sometimes in conjunction with a correction factor; and we have made more extensive use of empirical correction factors for the estimates generated by the point-source kernel method. These methods are discussed in chapters II and III of Cristy and Eckerman (1987a).

The mathematical phantoms used in our work are designed like the adult phantom of Snyder et al. (1974) and have different densities and chemical compositions for lung, skeletal, and soft tissues. (We use the term "soft tissues" to mean near-unit-density tissues, i.e., density  $\sim 1 \text{ g/cm}^3$ .) These phantoms have been described by Cristy (1980), but several changes have been made in our phantoms since the 1980 report: (1) the age 15 phantom of Cristy (1980) has been redesigned so that it now represents both a 15-year-old male and an adult female; (2) the adult phantom of Cristy (1980) has been modified slightly and is now labeled "adult male," although it is hermaphroditic and could also represent a larger than average adult female; (3) the densities and chemical compositions of the tissues have been changed in all of the phantoms; and (4) the densities and compositions of the skeletal and soft tissues of the newborn phantom are now different from those at other ages. The equations describing the phantoms, as amended, and the newer data on densities and compositions are given in Appendix A of Cristy and Eckerman (1987a).

Because of the change in tissue densities in the phantoms, the organ and whole-body masses have also changed slightly. As explained in Appendix B of Cristy and Eckerman (1987a), the

design of the phantom series was viewed as a geometry problem where volume, not mass, values were of prime interest; and furthermore, if the design approach had been to obtain correct (numerical value) masses at the expense of correct (numerical) volumes, the errors in the specific absorbed fraction would have been larger than with this approach. The magnitude of the changes in mass is also trivial. For the purpose of estimating specific absorbed fractions from photons, we view the adult male phantom simply as a model for the 70-kg Reference Man, the fifteen-year-old-male/adult-female phantom as a model for either the 58-kg Reference Woman or a 55-kg fifteen-year-old male, the age 10 phantom as a model for a 32-to-33-kg male or female child, and so on, even though the masses of organs in the phantoms and the masses of the phantoms themselves may be slightly different from values in ICRP Publication 23 (1975). A comparison of whole-body masses between the phantoms and humans is given in Table 1; in the tables of specific absorbed fractions for each age we give the nominal value of mass rather than the actual mass of the phantom in the identifying heading. We recommend use of the organ masses from ICRP Publication 23 (1975), especially for the 70-kg adult male, for all other purposes, e.g., for computing  $\Phi$ -values from non-penetrating radiations. If masses of organs in children are not available, the masses in the phantoms could be used with little error. The masses of the organs of the phantoms are given in Appendix B of Cristy and Eckerman (1987a); the centroids of the organs are given in Appendix C of that report.

**Table 1. Comparison of whole-body masses**

Phantom	Whole-body mass of phantom (kg)		Age	Whole-body mass of human (kg) <sup>e</sup>	
	Actual	Nominal		Female	Male
Newborn	3.6	3.4	Newborn	3.4	3.4 <sup>f</sup>
Age 1	9.7	9.8	1 year	9.5	10.1
Age 5	19.8	19	5 years	18.6	18.8
Age 10	33.2	32	10 years	31.9	32.7
15-AF <sup>a</sup>	56.8 <sup>b</sup>	55-58 <sup>d</sup>	15 years	51.6	54.5
Adult male	73.7 <sup>c</sup>	70	Adult	56.7 (58) <sup>g</sup>	71.7 (70) <sup>g</sup>

<sup>a</sup>Age- 15-male/adult-female phantom.

<sup>b</sup>56.4 kg without the female breasts.

<sup>c</sup>73.3 kg without the female breasts.

<sup>d</sup>55 kg for age 15 male and 58 kg for adult female.

<sup>e</sup>Data for ages newborn to 15 years are from Watson and Lowrey (1967).

Data for adults are from ICRP Publication 23, p.13.

<sup>f</sup>3.5 kg for newborn male is given in ICRP Publication 23.

<sup>g</sup>Reference whole-body masses were rounded to 58 and 70 kg for adult females and males in ICRP Publication 23.

#### **TABLES OF RECOMMENDED VALUES OF $\Phi$ (APPENDIX A) AND TABLES OF RAW DATA AND RECOMMENDED VALUES (APPENDIX B).**

The tables of recommended values comprise Appendix A. The  $\Phi$ -values as calculated by the various methods [direct Monte Carlo estimate,  $\Phi(\text{target} \leftarrow \text{source})$ ; converse Monte Carlo estimate,  $\Phi(\text{source} \leftarrow \text{target})$ ; and point-source kernel estimate,  $\Phi(\text{target} \leftarrow \text{source})$ ] comprise Appendix B; and the recommended values are also reprinted for convenience. Note that the units are  $\text{kg}^{-1}$ . Because  $\Phi$ -values smaller than  $10^{-10} \text{ kg}^{-1}$  are zero for all practical purposes, they are given as 0.0 in Appendix A, but in Appendix B the values are given as calculated by the computer programs.  $\Phi$ -values

with coefficients of variation (C.V.) greater than 50% were never used in deriving recommended values, but these data are given in Appendix B. Blank entries in the tables of Appendix B indicate that no data are available.

The source and target organs are arranged alphabetically in the appendices. The meanings of abbreviations are given in Table 2. The recommended values for the organ "MUSCLE" in Appendix A are taken from the data for the "remaining tissue" compartment of the phantom; these data are listed under "REMAINING TISSUE" in Appendix B.

**Table 2. Abbreviations used in Appendices A and B**

Abbreviation	Meaning
BL	Bladder
CONT	Contents
GI	Gastrointestinal
LLI	Lower large intestine
SI	Small intestine
ULI	Upper large intestine
MC(2<-1)	Monte Carlo estimate of $\Phi$ (organ 2←organ 1)
MC( 1<-2)	Monte Carlo estimate of $\Phi$ (organ 1←organ 2)
PK(2<->1)	Point-source kernel estimate of $\Phi$ (organ 2↔organ 1)
RECOM'D(2<-1)	Recommended value of $\Phi$ (organ 2←organ 1)
RECOM'D(1 <-2)	Recommended value of $\Phi$ (organ 1←organ 2)
1.2E-03 (for example)	$1.2 \times 10^{-3}$

In Appendix B the organs are labeled as "ORGAN 1" and "ORGAN 2" rather than as source and target organs. Which is source and which is target depend upon the context. For example, on the first page of Appendix B under "ORGAN 1 = ADRENALS" and "ORGAN 2 = BRAIN" are listed values for "MC(2<-1)", "MC(1<-2)", "PK(2<->1)", "RECOM'D(2<-1)", and "RECOM'D(1 <-2)". The symbols like "<->" should be read as arrows, and the abbreviations have the following meanings, respectively: (1) Monte Carlo estimate of  $\Phi$  for source = organ 1 and target = organ 2; (2) Monte Carlo estimate of  $\Phi$  for source = organ 2 and target = organ 1; (3) Point-source kernel estimate of  $\Phi$ , where either can be designated source or target; (4) Recommended value of  $\Phi$  for source = organ 1 and target = organ 2; and (5) Recommended value of  $\Phi$  for source = organ 2 and target = organ 1. Note that if one is interested in the raw data for source = brain and target = adrenals, one must look under "ORGAN 1 = ADRENALS" and "ORGAN 2 = BRAIN" in the tables. There is no listing for "ORGAN 1 = BRAIN" and "ORGAN 2 = ADRENALS"; for each "organ 1" there follow only those "organs 2" which follow "organ 1" alphabetically, to avoid redundancy.

The entries in the tables for active marrow can be confusing if not considered carefully, because  $\Phi$ -values for active marrow as a **target** are computed by two different methods. As explained in detail in the companion volume on methods (Cristy and Eckerman 1987a), we have used new methods to calculate  $\Phi$ -values for the active marrow and the endosteal cells of the skeleton as **target organs**; and these values are given as the recommended values in Appendix A, under the heading "TARGET" and labeled "SKELETON: ACTIVE MARROW" and "SKELETON: BONE SURFACES;" these values do not appear in Appendix B. (We use the terms "endosteal cells" and "bone surfaces" synonymously.)

We also compute  $\Phi$ -values for active marrow as a target in the old way, i.e., with the method used by Snyder et al. (1974). These values are given only in Appendix B and labeled as either

“ORGAN 1 = SKELETON: ACTIVE MARROW” (when the context indicates that organ 1 is the target) or “ORGAN 2 = SKELETON: ACTIVE MARROW” (when the context indicates that organ 2 is the target). These values are given because they are useful as converse Monte Carlo estimates in developing the recommended values when active marrow is the source organ (see Cristy and Eckerman 1987a).

If the active marrow or the skeleton as a whole (“SKELETON: WHOLE SKELETON” in the appendices) is the **source organ**, the method used to compute  $\Phi$  is like that used by Snyder et al. (1974). No data are given in either appendix for endosteal cells as a source organ.

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## **APPENDIX A**

### **TABLES OF SPECIFIC ABSORBED FRACTIONS—RECOMMENDED VALUES**

Specific Absorbed Fraction of Photon Energy in kg<sup>-1</sup>: Recommended Values for the Ten-Year-Old

Source = Adrenals	Energy (MeV)											
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	1.06E+02	6.22E+01	3.40E+01	1.21E+01	3.87E+00	2.30E+00	2.53E+00	2.78E+00	2.57E+00	2.40E+00	2.24E+00	1.74E+00
UB_Wall	0.0	0.0	1.17E-08	4.81E-05	8.79E-04	1.30E-03	1.65E-03	1.87E-03	1.91E-03	1.92E-03	1.88E-03	1.64E-03
Bone_Sur	3.57E-04	1.06E-02	3.65E-02	7.35E-02	6.76E-02	2.88E-02	1.60E-02	1.25E-02	1.15E-02	1.07E-02	9.98E-03	8.19E-03
Brain	0.0	0.0	0.0	3.81E-07	3.03E-05	1.16E-04	2.09E-04	3.55E-04	3.93E-04	4.26E-04	4.26E-04	5.42E-04
Breasts	0.0	0.0	5.57E-06	1.18E-03	6.01E-03	7.86E-03	7.9E-03	5.75E-03	5.53E-03	5.36E-03	5.18E-03	4.33E-03
St_Wall	0.0	1.99E-05	1.84E-03	1.82E-02	3.19E-02	2.63E-02	2.28E-02	1.96E-02	2.10E-02	1.90E-02	1.69E-02	1.35E-02
SI_Wall	0.0	2.84E-08	5.74E-05	2.08E-03	8.54E-03	9.26E-03	8.52E-03	8.14E-03	7.55E-03	7.38E-03	7.17E-03	6.05E-03
ULI_Wall	0.0	2.05E-08	6.67E-05	3.61E-03	9.01E-03	1.05E-02	9.82E-03	8.75E-03	8.47E-03	8.31E-03	8.00E-03	6.52E-03
LLI_Wall	0.0	0.0	2.02E-06	3.95E-04	1.46E-03	2.88E-03	3.06E-03	3.21E-03	3.18E-03	3.00E-03	2.83E-03	2.42E-03
Kidneys	4.84E-03	5.22E-02	1.29E-01	1.57E-01	1.06E-01	7.46E-02	6.89E-02	6.69E-02	6.74E-02	6.21E-02	5.67E-02	4.40E-02
Liver	1.26E-04	8.60E-03	3.28E-02	6.11E-02	5.39E-02	3.90E-02	3.03E-02	3.44E-02	3.31E-02	3.15E-02	2.97E-02	2.76E-02
ET1-bas	0.0	0.0	5.50E-09	3.63E-05	6.03E-04	1.19E-03	1.66E-03	1.75E-03	1.79E-03	1.79E-03	1.78E-03	1.55E-03
ET2-bas	0.0	0.0	5.50E-09	3.63E-05	6.03E-04	1.19E-03	1.66E-03	1.75E-03	1.79E-03	1.79E-03	1.78E-03	1.55E-03
LN-ET	0.0	0.0	5.50E-09	3.63E-05	6.03E-04	1.19E-03	1.66E-03	1.75E-03	1.79E-03	1.79E-03	1.78E-03	1.55E-03
BBi-bas	4.93E-06	4.67E-03	2.04E-02	4.22E-02	3.54E-02	2.39E-02	2.12E-02	2.08E-02	1.88E-02	1.70E-02	1.54E-02	1.14E-02
BBi-sec	4.93E-06	4.67E-03	2.04E-02	4.22E-02	3.54E-02	2.39E-02	2.12E-02	2.08E-02	1.88E-02	1.70E-02	1.54E-02	1.14E-02
bbe-sec	4.93E-06	4.67E-03	2.04E-02	4.22E-02	3.54E-02	2.39E-02	2.12E-02	2.08E-02	1.88E-02	1.70E-02	1.54E-02	1.14E-02
AI	4.93E-06	4.67E-03	2.04E-02	4.22E-02	3.54E-02	2.39E-02	2.12E-02	2.08E-02	1.88E-02	1.70E-02	1.54E-02	1.14E-02
LN-Th	4.93E-06	4.67E-03	2.04E-02	4.22E-02	3.54E-02	2.39E-02	2.12E-02	2.08E-02	1.88E-02	1.70E-02	1.54E-02	1.14E-02
Lng_Tiss	4.93E-06	4.67E-03	2.04E-02	4.22E-02	3.54E-02	2.39E-02	2.12E-02	2.08E-02	1.88E-02	1.70E-02	1.54E-02	1.14E-02
Lung_NP	0.0	0.0	5.50E-09	3.63E-05	6.03E-04	1.19E-03	1.66E-03	1.75E-03	1.79E-03	1.79E-03	1.78E-03	1.55E-03
Lung_TB	4.93E-06	4.67E-03	2.04E-02	4.22E-02	3.54E-02	2.39E-02	2.12E-02	2.08E-02	1.88E-02	1.70E-02	1.54E-02	1.14E-02
Lung_P	4.93E-06	4.67E-03	2.04E-02	4.22E-02	3.54E-02	2.39E-02	2.12E-02	2.08E-02	1.88E-02	1.70E-02	1.54E-02	1.14E-02
Muscle	1.02E-02	2.10E-02	2.44E-02	2.02E-02	1.35E-02	9.81E-03	9.57E-03	9.75E-03	9.20E-03	8.52E-03	7.96E-03	6.72E-03
Ovaries	0.0	0.0	6.06E-07	3.86E-04	2.55E-03	4.00E-03	4.33E-03	3.87E-03	3.76E-03	3.67E-03	3.58E-03	3.02E-03
Pancreas	1.34E-07	5.93E-03	6.44E-02	1.73E-01	1.43E-01	9.83E-02	8.53E-02	8.23E-02	6.18E-02	5.33E-02	5.02E-02	4.97E-02
R_Marrow	1.18E-04	3.17E-03	1.01E-02	1.94E-02	1.78E-02	1.77E-02	1.74E-02	1.61E-02	1.49E-02	1.39E-02	1.14E-02	1.14E-02
Skin	6.58E-10	7.05E-05	6.26E-04	2.57E-03	3.17E-03	3.02E-03	3.49E-03	3.78E-03	3.65E-03	3.33E-03	3.07E-03	2.48E-03
Spleen	1.30E-08	2.41E-03	2.54E-02	8.90E-02	7.32E-02	5.01E-02	4.47E-02	4.56E-02	3.72E-02	3.67E-02	3.59E-02	2.55E-02
Testes	0.0	0.0	0.0	2.94E-06	1.33E-04	4.09E-04	6.03E-04	8.00E-04	8.87E-04	9.17E-04	9.40E-04	8.55E-04
Thymus	0.0	0.0	2.86E-06	1.17E-03	4.05E-03	6.48E-03	6.29E-03	6.36E-03	6.12E-03	5.68E-03	5.20E-03	3.71E-03
Thyroid	0.0	0.0	5.50E-09	3.63E-05	6.03E-04	1.19E-03	1.66E-03	1.75E-03	1.79E-03	1.78E-03	1.55E-03	1.55E-03
GB_Wall	0.0	5.98E-05	4.85E-03	2.27E-02	4.87E-02	4.00E-02	2.87E-02	2.44E-02	2.38E-02	2.22E-02	2.06E-02	1.69E-02
Ht_Wall	0.0	1.66E-05	2.64E-03	1.93E-02	3.20E-02	2.36E-02	2.14E-02	1.99E-02	1.82E-02	1.75E-02	1.67E-02	1.31E-02
Uterus	0.0	0.0	3.13E-07	2.88E-04	2.13E-03	2.96E-03	3.23E-03	3.51E-03	3.29E-03	2.98E-03	2.78E-03	2.78E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = UB_Cont	Energy (MeV)											
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	0.0	0.0	9.15E-09	4.52E-05	7.28E-04	1.19E-03	1.36E-03	1.47E-03	1.76E-03	1.91E-03	1.93E-03	1.63E-03
UB_Wall1	2.31E+00	3.33E+00	3.14E+00	1.88E+00	7.91E-01	4.49E-01	4.56E-01	4.61E-01	4.26E-01	3.91E-01	3.62E-01	2.88E-01
Bone_Sur	0.0	8.77E-07	2.95E-04	7.62E-03	1.78E-02	1.18E-02	1.07E-06	6.50E-03	4.31E-03	4.04E-03	3.90E-03	3.74E-03
Brain	0.0	0.0	0.0	0.0	1.85E-06	9.94E-05	3.32E-04	5.00E-04	6.89E-04	7.79E-04	8.18E-04	8.27E-04
Breasts	0.0	0.0	0.0	1.40E-06	3.99E-04	2.03E-03	3.49E-03	3.30E-03	2.96E-03	3.08E-03	3.11E-03	3.06E-03
St_Wall1	0.0	1.56E-05	1.66E-03	1.88E-02	3.06E-02	2.44E-02	2.06E-02	1.96E-02	1.83E-02	1.67E-02	1.55E-02	1.27E-02
SI_Wall1	0.0	1.62E-05	1.62E-03	1.31E-02	2.36E-02	1.88E-02	1.69E-02	1.51E-02	1.52E-02	1.42E-02	1.34E-02	1.27E-02
ULI_Wall1	4.28E-05	1.87E-03	2.72E-02	9.14E-02	8.25E-02	5.66E-02	4.69E-02	4.43E-02	4.03E-02	3.81E-02	3.67E-02	3.39E-02
LLI_Wall1	0.0	4.61E-07	2.81E-04	1.45E-03	3.09E-03	3.09E-03	3.52E-03	3.41E-03	3.28E-03	3.18E-03	3.06E-03	2.90E-03
Kidneys	0.0	0.0	5.78E-07	2.33E-04	1.36E-03	2.34E-03	2.14E-03	2.55E-03	2.55E-03	2.81E-03	2.68E-03	2.52E-03
Liver	0.0	0.0	0.0	1.25E-08	4.75E-06	3.69E-05	8.26E-05	1.55E-04	2.14E-04	2.46E-04	2.72E-04	2.82E-04
ET1-bas	0.0	0.0	0.0	1.25E-08	4.75E-06	3.69E-05	8.26E-05	1.55E-04	2.14E-04	2.46E-04	2.72E-04	2.82E-04
ET2-bas	0.0	0.0	0.0	1.25E-08	4.75E-06	3.69E-05	8.26E-05	1.55E-04	2.14E-04	2.46E-04	2.72E-04	2.82E-04
LN-ET	0.0	0.0	0.0	1.25E-08	4.75E-06	3.69E-05	8.26E-05	1.55E-04	2.14E-04	2.46E-04	2.72E-04	2.82E-04
BBi-bas	0.0	0.0	3.43E-10	7.18E-06	1.67E-04	3.02E-04	4.04E-04	5.17E-04	6.40E-04	7.24E-04	7.77E-04	8.52E-04
BBi-sec	0.0	0.0	3.43E-10	7.18E-06	1.67E-04	3.02E-04	4.04E-04	5.17E-04	6.40E-04	7.24E-04	7.77E-04	8.52E-04
bbe-sec	0.0	0.0	3.43E-10	7.18E-06	1.67E-04	3.02E-04	4.04E-04	5.17E-04	6.40E-04	7.24E-04	7.77E-04	8.52E-04
AI	0.0	0.0	3.43E-10	7.18E-06	1.67E-04	3.02E-04	4.04E-04	5.17E-04	6.40E-04	7.24E-04	7.77E-04	8.52E-04
LN-Th	0.0	0.0	3.43E-10	7.18E-06	1.67E-04	3.02E-04	4.04E-04	5.17E-04	6.40E-04	7.24E-04	7.77E-04	8.52E-04
Lng_Tiss	0.0	0.0	3.43E-10	7.18E-06	1.67E-04	3.02E-04	4.04E-04	5.17E-04	6.40E-04	7.24E-04	7.77E-04	8.52E-04
Lung_NP	0.0	0.0	0.0	1.25E-08	4.75E-06	3.69E-05	8.26E-05	1.55E-04	2.14E-04	2.46E-04	2.72E-04	2.82E-04
Lung_TB	0.0	0.0	3.43E-10	7.18E-06	1.67E-04	3.02E-04	4.04E-04	5.17E-04	6.40E-04	7.24E-04	7.77E-04	8.52E-04
Lung_P	0.0	0.0	3.43E-10	7.18E-06	1.67E-04	3.02E-04	4.04E-04	5.17E-04	6.40E-04	7.24E-04	7.77E-04	8.52E-04
Muscle	6.51E-04	5.50E-03	1.33E-02	2.08E-02	1.71E-02	1.19E-02	1.09E-02	1.02E-02	9.52E-03	8.92E-03	7.41E-03	6.01E-03
Ovaries	0.0	2.78E-04	1.28E-02	7.04E-02	8.04E-02	5.16E-02	4.60E-02	3.98E-02	3.74E-02	3.36E-02	3.06E-02	2.52E-02
Pancreas	0.0	0.0	8.35E-08	1.29E-04	1.11E-03	2.62E-03	2.71E-03	2.56E-03	2.27E-03	2.35E-03	2.44E-03	2.37E-03
R_Marrow	0.0	3.42E-06	1.49E-04	3.38E-03	7.65E-03	7.68E-03	7.28E-03	7.01E-03	6.41E-03	5.98E-03	5.60E-03	4.48E-03
Skin	5.40E-06	1.27E-04	1.20E-03	4.28E-03	4.67E-03	3.98E-03	3.83E-03	3.90E-03	4.16E-03	3.99E-03	3.79E-03	3.39E-03
Spleen	0.0	0.0	5.25E-08	9.13E-05	1.22E-03	1.38E-03	1.55E-03	1.79E-03	1.94E-03	2.00E-03	2.03E-03	2.09E-03
Testes	0.0	3.82E-04	1.42E-02	8.13E-02	7.40E-02	4.79E-02	4.63E-02	4.41E-02	4.27E-02	3.88E-02	3.55E-02	2.89E-02
Thymus	0.0	0.0	4.45E-07	4.02E-05	1.70E-04	2.90E-04	4.28E-04	5.17E-04	5.58E-04	5.74E-04	5.52E-04	5.52E-04
Thyroid	0.0	0.0	0.0	1.25E-08	4.75E-06	3.69E-05	8.26E-05	1.55E-04	2.14E-04	2.46E-04	2.72E-04	2.82E-04
GB_Wall1	0.0	2.00E-10	5.69E-06	9.99E-04	4.65E-03	9.66E-03	8.26E-03	5.08E-03	4.90E-03	4.81E-03	4.61E-03	3.86E-03
Ht_Wall1	0.0	0.0	3.56E-10	7.61E-06	1.49E-04	3.48E-04	5.30E-04	7.46E-04	9.63E-04	1.01E-03	1.02E-03	1.11E-03
Uterus	1.50E-05	1.77E-02	1.40E-01	2.96E-01	2.00E-01	1.21E-01	1.03E-01	9.89E-02	9.25E-02	8.88E-02	8.43E-02	6.62E-02

Specific Absorbed Fraction of Photon Energy in kg<sup>-1</sup>: Recommended Values for the Ten-Year-Old

Source = UB_Wall	Energy (MeV)											
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	0.0	0.0	1.17E-08	4.81E-05	8.79E-04	1.30E-03	1.65E-03	1.87E-03	1.91E-03	1.92E-03	1.88E-03	1.64E-03
UB_Wall1	2.51E+01	1.29E+01	7.28E+00	2.92E+00	1.08E+00	6.23E-01	6.41E-01	7.05E-01	6.61E-01	6.02E-01	5.55E-01	4.40E-01
Bone_Sur	0.0	8.77E-07	2.95E-04	7.62E-03	1.78E-02	1.18E-02	2.02E-07	3.09E-03	4.31E-03	4.04E-03	3.90E-03	3.18E-03
Brain	0.0	0.0	0.0	1.03E-10	2.01E-07	3.34E-04	5.08E-04	6.47E-04	7.78E-04	8.11E-04	8.36E-04	1.03E-04
Breasts	0.0	0.0	0.0	1.96E-06	1.01E-04	3.49E-04	5.34E-04	6.47E-04	7.78E-04	8.11E-04	8.36E-04	7.67E-04
St_Wall1	0.0	0.0	1.79E-06	4.62E-04	3.41E-03	5.27E-03	5.07E-03	4.48E-03	4.06E-03	3.75E-03	3.55E-03	3.01E-03
SI_Wall1	0.0	3.48E-05	2.31E-03	2.13E-02	3.16E-02	2.45E-02	2.20E-02	1.79E-02	1.85E-02	1.70E-02	1.19E-02	1.19E-02
ULI_Wall1	1.56E-07	3.43E-05	1.57E-03	1.45E-02	2.75E-02	2.40E-02	2.03E-02	1.74E-02	1.53E-02	1.29E-02	1.07E-02	1.07E-02
LLI_Wall1	3.31E-06	5.62E-03	4.21E-02	1.07E-01	9.71E-02	6.41E-02	5.49E-02	4.92E-02	4.40E-02	3.98E-02	3.71E-02	3.03E-02
Kidneys	0.0	0.0	5.85E-07	2.95E-04	2.08E-03	2.49E-03	2.91E-03	3.29E-03	3.33E-03	3.23E-03	3.09E-03	2.64E-03
Liver	0.0	0.0	7.18E-07	2.33E-04	1.57E-03	2.12E-03	2.52E-03	2.75E-03	2.75E-03	2.70E-03	2.62E-03	2.26E-03
ET1-bas	0.0	0.0	0.0	1.32E-08	4.84E-06	3.72E-05	8.30E-05	1.55E-04	2.14E-04	2.47E-04	2.73E-04	2.82E-04
ET2-bas	0.0	0.0	0.0	1.32E-08	4.84E-06	3.72E-05	8.30E-05	1.55E-04	2.14E-04	2.47E-04	2.73E-04	2.82E-04
LN-ET	0.0	0.0	0.0	1.32E-08	4.84E-06	3.72E-05	8.30E-05	1.55E-04	2.14E-04	2.47E-04	2.73E-04	2.82E-04
BBi-bas	0.0	0.0	4.35E-10	7.63E-06	1.60E-04	3.68E-04	5.37E-04	7.14E-04	7.95E-04	8.26E-04	8.48E-04	7.76E-04
BBi-sec	0.0	0.0	4.35E-10	7.63E-06	1.60E-04	3.68E-04	5.37E-04	7.14E-04	7.95E-04	8.26E-04	8.48E-04	7.76E-04
bbe-sec	0.0	0.0	4.35E-10	7.63E-06	1.60E-04	3.68E-04	5.37E-04	7.14E-04	7.95E-04	8.26E-04	8.48E-04	7.76E-04
AI	0.0	0.0	4.35E-10	7.63E-06	1.60E-04	3.68E-04	5.37E-04	7.14E-04	7.95E-04	8.26E-04	8.48E-04	7.76E-04
LN-Th	0.0	0.0	4.35E-10	7.63E-06	1.60E-04	3.68E-04	5.37E-04	7.14E-04	7.95E-04	8.26E-04	8.48E-04	7.76E-04
Lng_Tiss	0.0	0.0	4.35E-10	7.63E-06	1.60E-04	3.68E-04	5.37E-04	7.14E-04	7.95E-04	8.26E-04	8.48E-04	7.76E-04
Lung_NP	0.0	0.0	0.0	1.32E-08	4.84E-06	3.72E-05	8.30E-05	1.55E-04	2.14E-04	2.47E-04	2.73E-04	2.82E-04
Lung_TB	0.0	0.0	0.0	4.35E-10	7.63E-06	1.60E-04	3.68E-04	5.37E-04	7.14E-04	7.95E-04	8.26E-04	8.48E-04
Lung_P	0.0	0.0	4.35E-10	7.63E-06	1.60E-04	3.68E-04	5.37E-04	7.14E-04	7.95E-04	8.26E-04	8.48E-04	7.76E-04
Muscle	1.10E-02	1.60E-02	1.75E-02	1.89E-02	1.80E-02	1.44E-02	1.16E-02	9.68E-03	8.47E-03	7.90E-03	7.53E-03	6.69E-03
Ovaries	4.79E-10	5.86E-04	1.66E-02	1.75E-02	8.49E-02	5.47E-02	4.78E-02	4.04E-02	3.81E-02	3.50E-02	3.25E-02	2.73E-02
Pancreas	0.0	0.0	1.09E-07	1.38E-04	1.46E-03	2.05E-03	2.50E-03	2.66E-03	2.61E-03	2.58E-03	2.52E-03	2.16E-03
R_Marrow	0.0	3.42E-06	1.49E-04	3.38E-03	7.65E-03	7.68E-03	7.28E-03	7.01E-03	6.41E-03	5.98E-03	5.60E-03	4.48E-03
Skin	2.06E-05	2.99E-04	2.00E-03	6.03E-03	8.08E-03	7.03E-03	6.22E-03	5.51E-03	4.96E-03	4.55E-03	4.27E-03	3.57E-03
Spleen	0.0	0.0	6.77E-08	9.79E-05	1.03E-03	1.77E-03	2.20E-03	2.26E-03	2.28E-03	2.27E-03	2.21E-03	1.91E-03
Testes	7.15E-10	8.26E-04	1.89E-02	7.51E-02	7.91E-02	4.93E-02	4.98E-02	4.82E-02	4.55E-02	3.93E-02	3.51E-02	3.06E-02
Thymus	0.0	0.0	4.68E-07	4.07E-05	1.71E-04	2.90E-04	4.31E-04	5.13E-04	5.50E-04	5.79E-04	5.49E-04	5.00E-04
Thyroid	0.0	0.0	0.0	1.32E-08	4.84E-06	3.72E-05	8.30E-05	1.55E-04	2.14E-04	2.47E-04	2.73E-04	2.82E-04
GB_Wall1	0.0	4.08E-10	7.16E-06	1.13E-03	6.27E-03	8.32E-03	7.61E-03	6.56E-03	5.86E-03	5.37E-03	5.05E-03	4.23E-03
Ht_Wall1	0.0	0.0	4.46E-10	8.07E-06	2.24E-04	5.71E-04	6.40E-04	1.01E-03	1.09E-03	1.11E-03	1.13E-03	1.01E-03
Uterus	1.09E-04	5.02E-02	1.78E-01	3.10E-01	2.16E-01	1.20E-01	1.10E-01	9.56E-02	1.02E-01	1.01E-01	9.42E-02	6.71E-02

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = C_Bone-S		Energy (MeV)										
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	6.96E-05	2.07E-03	6.29E-03	1.15E-02	1.24E-02	9.41E-03	9.30E-03	1.04E-02	9.56E-03	8.86E-03	8.32E-03	6.82E-03
UB_Wall1	6.43E-10	5.96E-07	7.60E-05	1.50E-03	2.93E-03	4.70E-03	4.93E-03	4.10E-03	3.42E-03	3.14E-03	2.49E-03	2.49E-03
Bone_Sur	2.75E-01	2.68E-01	2.55E-01	2.09E-01	1.16E-01	4.08E-02	2.52E-02	2.28E-02	1.10E-02	1.94E-02	1.81E-02	1.50E-02
Brain	1.56E-03	4.85E-03	9.52E-03	1.51E-02	1.34E-02	8.88E-03	8.77E-03	9.94E-03	9.17E-03	8.52E-03	8.03E-03	6.76E-03
Breasts	8.16E-05	1.93E-03	4.61E-03	4.81E-03	3.82E-03	2.91E-03	3.15E-03	3.98E-03	3.90E-03	3.77E-03	3.63E-03	3.05E-03
St_Wall1	9.05E-06	7.53E-05	3.39E-04	1.71E-03	4.12E-03	3.83E-03	3.84E-03	4.65E-03	4.54E-03	3.75E-03	3.21E-03	2.59E-03
SI_Wall1	2.08E-04	6.29E-04	1.45E-03	3.69E-03	5.69E-03	5.25E-03	4.91E-03	5.03E-03	4.62E-03	4.37E-03	4.18E-03	3.57E-03
ULI_Wall1	5.40E-04	1.10E-03	1.82E-03	3.32E-03	4.85E-03	4.78E-03	4.34E-03	4.63E-03	5.11E-03	4.73E-03	4.31E-03	3.49E-03
LLI_Wall1	6.73E-04	2.13E-03	4.81E-03	8.18E-03	7.99E-03	6.86E-03	6.83E-03	7.28E-03	5.92E-03	5.21E-03	4.86E-03	4.38E-03
Kidneys	3.09E-05	6.41E-04	2.40E-03	5.71E-03	7.45E-03	6.12E-03	6.04E-03	6.66E-03	6.06E-03	5.66E-03	5.38E-03	4.52E-03
Liver	5.92E-05	4.78E-04	1.45E-03	3.66E-03	5.08E-03	4.43E-03	4.23E-03	4.60E-03	4.39E-03	4.07E-03	3.83E-03	3.39E-03
ET1-bas	0.0	1.94E-05	4.58E-04	3.46E-03	6.19E-03	5.63E-03	5.23E-03	5.71E-03	5.33E-03	4.93E-03	4.93E-03	4.03E-03
ET2-bas	0.0	1.94E-05	4.58E-04	3.46E-03	6.19E-03	5.63E-03	5.23E-03	5.71E-03	5.33E-03	4.93E-03	4.93E-03	4.03E-03
LN-ET	0.0	1.94E-05	4.58E-04	3.46E-03	6.19E-03	5.63E-03	5.23E-03	5.71E-03	5.33E-03	4.93E-03	4.93E-03	4.03E-03
BBi-bas	5.60E-05	8.43E-04	3.41E-03	7.99E-03	8.55E-03	6.16E-03	5.97E-03	6.36E-03	6.11E-03	5.47E-03	5.03E-03	4.51E-03
BBi-sec	5.60E-05	8.43E-04	3.41E-03	7.99E-03	8.55E-03	6.16E-03	5.97E-03	6.36E-03	6.11E-03	5.47E-03	5.03E-03	4.51E-03
bbe-sec	5.60E-05	8.43E-04	3.41E-03	7.99E-03	8.55E-03	6.16E-03	5.97E-03	6.36E-03	6.11E-03	5.47E-03	5.03E-03	4.51E-03
AI	5.60E-05	8.43E-04	3.41E-03	7.99E-03	8.55E-03	6.16E-03	5.97E-03	6.36E-03	6.11E-03	5.47E-03	5.03E-03	4.51E-03
LN-Th	5.60E-05	8.43E-04	3.41E-03	7.99E-03	8.55E-03	6.16E-03	5.97E-03	6.36E-03	6.11E-03	5.47E-03	5.03E-03	4.51E-03
Ing_Tiss	5.60E-05	8.43E-04	3.41E-03	7.99E-03	8.55E-03	6.16E-03	5.97E-03	6.36E-03	6.11E-03	5.47E-03	5.03E-03	4.51E-03
Lung_NP	0.0	1.94E-05	4.58E-04	3.46E-03	6.19E-03	5.63E-03	5.23E-03	5.71E-03	5.33E-03	4.93E-03	4.93E-03	4.03E-03
Lung_TB	5.60E-05	8.43E-04	3.41E-03	7.99E-03	8.55E-03	6.16E-03	5.97E-03	6.36E-03	6.11E-03	5.47E-03	5.03E-03	4.51E-03
Lung_P	5.60E-05	8.43E-04	3.41E-03	7.99E-03	8.55E-03	6.16E-03	5.97E-03	6.36E-03	6.11E-03	5.47E-03	5.03E-03	4.51E-03
Muscle	9.42E-04	6.61E-03	4.62E-03	7.32E-03	7.69E-03	6.45E-03	6.56E-03	6.85E-03	6.56E-03	6.16E-03	5.80E-03	4.82E-03
Ovaries	5.24E-09	9.29E-05	1.47E-03	5.33E-03	6.95E-03	5.82E-03	5.46E-03	5.54E-03	5.05E-03	4.80E-03	4.57E-03	3.66E-03
Pancreas	1.99E-06	5.86E-05	6.47E-04	3.41E-03	6.17E-03	5.82E-03	5.48E-03	5.69E-03	5.13E-03	4.81E-03	4.57E-03	3.74E-03
R_Marrow	5.38E-02	4.72E-02	4.13E-02	3.16E-02	2.19E-02	1.67E-02	1.72E-02	1.78E-02	1.65E-02	1.52E-02	1.42E-02	1.17E-02
Skin	1.06E-03	2.64E-03	4.09E-03	5.45E-03	5.15E-03	4.31E-03	4.73E-03	5.51E-03	5.51E-03	5.10E-03	4.78E-03	4.26E-03
Spleen	6.53E-06	2.79E-04	1.32E-03	4.05E-03	5.64E-03	4.94E-03	4.71E-03	5.18E-03	4.64E-03	4.56E-03	4.46E-03	3.57E-03
Testes	0.0	1.71E-07	6.40E-05	1.04E-03	3.45E-03	3.33E-03	3.37E-03	3.80E-03	3.55E-03	3.29E-03	3.10E-03	2.70E-03
Thymus	5.00E-06	5.42E-04	2.21E-03	4.16E-03	4.93E-03	4.24E-03	4.06E-03	4.75E-03	4.34E-03	4.00E-03	3.80E-03	3.43E-03
Thyroid	0.0	1.94E-05	4.58E-04	3.46E-03	6.19E-03	5.63E-03	5.23E-03	5.71E-03	5.33E-03	4.93E-03	4.64E-03	4.03E-03
GB_Wall1	0.0	3.50E-06	1.98E-04	2.14E-03	4.13E-03	5.10E-03	4.18E-03	4.31E-03	3.90E-03	3.58E-03	3.37E-03	2.83E-03
Ht_Wall1	2.49E-05	2.24E-04	1.06E-03	3.69E-03	5.69E-03	4.98E-03	4.71E-03	4.68E-03	4.96E-03	4.37E-03	4.12E-03	3.50E-03
Uterus	0.0	3.08E-07	1.09E-04	1.85E-03	4.33E-03	4.52E-03	4.11E-03	4.04E-03	3.62E-03	3.47E-03	3.35E-03	2.81E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = C_Bone-V		Energy (MeV)										
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	6.96E-05	2.07E-03	6.29E-03	1.15E-02	1.24E-02	9.41E-03	9.30E-03	1.04E-02	9.56E-03	8.86E-03	8.32E-03	6.82E-03
UB_Wall1	6.43E-10	5.96E-07	7.60E-05	1.50E-03	2.93E-03	4.70E-03	4.93E-03	4.10E-03	3.42E-03	3.14E-03	2.49E-03	2.49E-03
Bone_Sur	2.75E-01	2.68E-01	2.55E-01	2.09E-01	1.16E-01	4.08E-02	2.52E-02	2.28E-02	1.10E-02	1.94E-02	1.81E-02	1.50E-02
Brain	1.56E-03	4.85E-03	9.52E-03	1.51E-02	1.34E-02	8.88E-03	8.77E-03	9.94E-03	9.17E-03	8.52E-03	8.03E-03	6.76E-03
Breasts	8.16E-05	1.93E-03	4.61E-03	4.81E-03	3.82E-03	2.91E-03	3.15E-03	3.98E-03	3.90E-03	3.77E-03	3.63E-03	3.05E-03
St_Wall1	9.05E-06	7.53E-05	3.39E-04	1.71E-03	4.12E-03	3.83E-03	3.84E-03	4.65E-03	4.54E-03	3.75E-03	3.21E-03	2.59E-03
SI_Wall1	2.08E-04	6.29E-04	1.45E-03	3.69E-03	5.69E-03	5.25E-03	4.91E-03	5.03E-03	4.62E-03	4.37E-03	4.18E-03	3.57E-03
ULI_Wall1	5.40E-04	1.10E-03	1.82E-03	3.32E-03	4.85E-03	4.78E-03	4.34E-03	4.63E-03	5.11E-03	4.73E-03	4.31E-03	3.49E-03
LLI_Wall1	6.73E-04	2.13E-03	4.81E-03	8.18E-03	7.99E-03	6.86E-03	6.83E-03	7.28E-03	5.92E-03	5.21E-03	4.86E-03	4.38E-03
Kidneys	3.09E-05	6.41E-04	2.40E-03	5.71E-03	7.45E-03	6.12E-03	6.04E-03	6.66E-03	6.06E-03	5.66E-03	5.38E-03	4.52E-03
Liver	5.92E-05	4.78E-04	1.45E-03	3.66E-03	5.08E-03	4.43E-03	4.23E-03	4.60E-03	4.39E-03	4.07E-03	3.83E-03	3.39E-03
ET1-bas	0.0	1.94E-05	4.58E-04	3.46E-03	6.19E-03	5.63E-03	5.23E-03	5.71E-03	5.33E-03	4.93E-03	4.64E-03	4.03E-03
ET2-bas	0.0	1.94E-05	4.58E-04	3.46E-03	6.19E-03	5.63E-03	5.23E-03	5.71E-03	5.33E-03	4.93E-03	4.64E-03	4.03E-03
LN-ET	0.0	1.94E-05	4.58E-04	3.46E-03	6.19E-03	5.63E-03	5.23E-03	5.71E-03	5.33E-03	4.93E-03	4.64E-03	4.03E-03
BBi-bas	5.60E-05	8.43E-04	3.41E-03	7.99E-03	8.55E-03	6.16E-03	5.97E-03	6.36E-03	6.11E-03	5.47E-03	5.03E-03	4.51E-03
BBi-sec	5.60E-05	8.43E-04	3.41E-03	7.99E-03	8.55E-03	6.16E-03	5.97E-03	6.36E-03	6.11E-03	5.47E-03	5.03E-03	4.51E-03
bbe-sec	5.60E-05	8.43E-04	3.41E-03	7.99E-03	8.55E-03	6.16E-03	5.97E-03	6.36E-03	6.11E-03	5.47E-03	5.03E-03	4.51E-03
AI	5.60E-05	8.43E-04	3.41E-03	7.99E-03	8.55E-03	6.16E-03	5.97E-03	6.36E-03	6.11E-03	5.47E-03	5.03E-03	4.51E-03
LN-Th	5.60E-05	8.43E-04	3.41E-03	7.99E-03	8.55E-03	6.16E-03	5.97E-03	6.36E-03	6.11E-03	5.47E-03	5.03E-03	4.51E-03
Lng_Tiss	5.60E-05	8.43E-04	3.41E-03	7.99E-03	8.55E-03	6.16E-03	5.97E-03	6.36E-03	6.11E-03	5.47E-03	5.03E-03	4.51E-03
Lung_NP	0.0	1.94E-05	4.58E-04	3.46E-03	6.19E-03	5.63E-03	5.23E-03	5.71E-03	5.33E-03	4.93E-03	4.64E-03	4.03E-03
Lung_TB	5.60E-05	8.43E-04	3.41E-03	7.99E-03	8.55E-03	6.16E-03	5.97E-03	6.36E-03	6.11E-03	5.47E-03	5.03E-03	4.51E-03
Lung_P	5.60E-05	8.43E-04	3.41E-03	7.99E-03	8.55E-03	6.16E-03	5.97E-03	6.36E-03	6.11E-03	5.47E-03	5.03E-03	4.51E-03
Muscle	9.42E-04	6.61E-03	4.62E-03	7.32E-03	7.69E-03	6.45E-03	6.56E-03	6.85E-03	6.56E-03	6.16E-03	5.80E-03	4.82E-03
Ovaries	5.24E-09	9.29E-05	1.47E-03	5.33E-03	6.95E-03	5.82E-03	5.46E-03	5.54E-03	5.05E-03	4.80E-03	4.57E-03	3.66E-03
Pancreas	1.99E-06	5.86E-05	6.47E-04	3.41E-03	6.17E-03	5.82E-03	5.48E-03	5.69E-03	5.13E-03	4.81E-03	4.57E-03	3.74E-03
R_Marrow	5.38E-02	4.72E-02	4.13E-02	3.16E-02	2.19E-02	1.67E-02	1.72E-02	1.78E-02	1.65E-02	1.52E-02	1.42E-02	1.17E-02
Skin	1.06E-03	2.64E-03	4.09E-03	5.45E-03	5.15E-03	4.31E-03	4.73E-03	5.51E-03	5.51E-03	5.10E-03	4.78E-03	4.26E-03
Spleen	6.53E-06	2.79E-04	1.32E-03	4.05E-03	5.64E-03	4.94E-03	4.71E-03	5.18E-03	4.64E-03	4.56E-03	4.46E-03	3.57E-03
Testes	0.0	1.71E-07	6.40E-05	1.04E-03	3.45E-03	3.33E-03	3.37E-03	3.80E-03	3.55E-03	3.29E-03	3.10E-03	2.70E-03
Thymus	5.00E-06	5.42E-04	2.21E-03	4.16E-03	4.93E-03	4.24E-03	4.06E-03	4.75E-03	4.34E-03	4.00E-03	3.80E-03	3.43E-03
Thyroid	0.0	1.94E-05	4.58E-04	3.46E-03	6.19E-03	5.63E-03	5.23E-03	5.71E-03	5.33E-03	4.93E-03	4.64E-03	4.03E-03
GB_Wall1	0.0	3.50E-06	1.98E-04	2.14E-03	4.13E-03	5.10E-03	4.18E-03	4.31E-03	3.90E-03	3.58E-03	3.37E-03	2.83E-03
Ht_Wall1	2.49E-05	2.24E-04	1.06E-03	3.69E-03	5.69E-03	4.98E-03	4.71E-03	4.68E-03	4.96E-03	4.37E-03	4.12E-03	3.50E-03
Uterus	0.0	3.08E-07	1.09E-04	1.85E-03	4.33E-03	4.52E-03	4.11E-03	4.04E-03	3.62E-03	3.47E-03	3.35E-03	2.81E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = T_Bone-S		Energy (MeV)										
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	1.17E-04	3.47E-03	1.05E-02	1.93E-02	2.09E-02	1.60E-02	1.59E-02	1.74E-02	1.61E-02	1.49E-02	1.39E-02	1.14E-02
UB_Wall1	0.0	2.02E-06	2.32E-04	5.52E-03	7.16E-03	8.72E-03	8.67E-03	7.72E-03	6.13E-03	5.67E-03	6.13E-03	4.52E-03
Bone_Sur	2.73E-01	2.64E-01	2.47E-01	1.97E-01	1.08E-01	3.90E-02	2.34E-02	2.12E-02	1.98E-02	1.70E-02	1.40E-02	1.40E-02
Brain	1.09E-03	3.42E-03	6.72E-03	1.07E-02	9.55E-03	6.37E-03	6.31E-03	7.27E-03	6.75E-03	6.27E-03	5.92E-03	5.10E-03
Breasts	1.19E-04	2.81E-03	6.70E-03	6.89E-03	5.26E-03	3.92E-03	4.24E-03	5.23E-03	5.15E-03	4.92E-03	4.69E-03	3.98E-03
St_Wall1	1.18E-04	3.93E-04	9.24E-04	3.08E-03	6.55E-03	6.38E-03	5.23E-03	5.25E-03	5.39E-03	5.15E-03	4.93E-03	4.54E-03
SI_Wall1	7.44E-04	2.27E-03	5.11E-03	1.21E-02	1.69E-02	1.44E-02	1.31E-02	1.31E-02	1.18E-02	1.07E-02	9.95E-03	8.23E-03
ULI_Wall1	7.67E-04	2.45E-03	5.60E-03	1.13E-02	1.43E-02	1.32E-02	1.15E-02	1.07E-02	8.49E-03	7.64E-03	7.36E-03	7.47E-03
LLI_Wall1	5.96E-04	9.42E-03	2.00E-02	2.32E-02	2.20E-02	1.79E-02	1.54E-02	1.67E-02	1.44E-02	1.33E-02	1.27E-02	1.08E-02
Kidneys	7.19E-05	1.39E-03	5.13E-03	1.23E-02	1.58E-02	1.28E-02	1.27E-02	1.35E-02	1.23E-02	1.14E-02	1.08E-02	8.81E-03
Liver	1.10E-04	8.80E-04	2.40E-03	5.04E-03	7.24E-03	6.84E-03	6.44E-03	6.83E-03	6.35E-03	5.87E-03	5.53E-03	4.84E-03
ET1-bas	0.0	1.78E-05	4.06E-04	3.28E-03	5.73E-03	5.32E-03	4.94E-03	5.36E-03	5.02E-03	4.64E-03	4.37E-03	3.83E-03
ET2-bas	0.0	1.78E-05	4.06E-04	3.28E-03	5.73E-03	5.32E-03	4.94E-03	5.36E-03	5.02E-03	4.64E-03	4.37E-03	3.83E-03
LN-ET	0.0	1.78E-05	4.06E-04	3.28E-03	5.73E-03	5.32E-03	4.94E-03	5.36E-03	5.02E-03	4.64E-03	4.37E-03	3.83E-03
BBi-bas	7.50E-05	1.23E-03	4.84E-03	1.07E-02	1.12E-02	8.13E-03	7.83E-03	8.16E-03	7.82E-03	7.03E-03	6.48E-03	5.73E-03
BBi-sec	7.50E-05	1.23E-03	4.84E-03	1.07E-02	1.12E-02	8.13E-03	7.83E-03	8.16E-03	7.82E-03	7.03E-03	6.48E-03	5.73E-03
bbe-sec	7.50E-05	1.23E-03	4.84E-03	1.07E-02	1.12E-02	8.13E-03	7.83E-03	8.16E-03	7.82E-03	7.03E-03	6.48E-03	5.73E-03
AI	7.50E-05	1.23E-03	4.84E-03	1.07E-02	1.12E-02	8.13E-03	7.83E-03	8.16E-03	7.82E-03	7.03E-03	6.48E-03	5.73E-03
LN-Th	7.50E-05	1.23E-03	4.84E-03	1.07E-02	1.12E-02	8.13E-03	7.83E-03	8.16E-03	7.82E-03	7.03E-03	6.48E-03	5.73E-03
Ing_Tiss	7.50E-05	1.23E-03	4.84E-03	1.07E-02	1.12E-02	8.13E-03	7.83E-03	8.16E-03	7.82E-03	7.03E-03	6.48E-03	5.73E-03
Lung_NP	0.0	1.78E-05	4.06E-04	3.28E-03	5.73E-03	5.32E-03	4.94E-03	5.36E-03	5.02E-03	4.64E-03	4.37E-03	3.83E-03
Lung_TB	7.50E-05	1.23E-03	4.84E-03	1.07E-02	1.12E-02	8.13E-03	7.83E-03	8.16E-03	7.82E-03	7.03E-03	6.48E-03	5.73E-03
Lung_P	7.50E-05	1.23E-03	4.84E-03	1.07E-02	1.12E-02	8.13E-03	7.83E-03	8.16E-03	7.82E-03	7.03E-03	6.48E-03	5.73E-03
Muscle	1.19E-03	3.30E-03	5.89E-03	9.26E-03	9.49E-03	7.82E-03	7.72E-03	7.99E-03	7.69E-03	7.19E-03	6.72E-03	5.45E-03
Ovaries	1.39E-08	3.42E-04	5.38E-03	1.90E-02	2.25E-02	1.70E-02	1.55E-02	1.54E-02	1.36E-02	1.28E-02	1.20E-02	9.47E-03
Pancreas	2.10E-08	1.06E-04	1.16E-03	5.81E-03	1.06E-02	1.01E-02	9.43E-03	9.55E-03	8.60E-03	8.05E-03	7.59E-03	6.06E-03
R_Marrow	9.95E-02	8.70E-02	7.49E-02	5.48E-02	3.60E-02	2.75E-02	2.79E-02	2.89E-02	2.70E-02	2.50E-02	2.33E-02	1.92E-02
Skin	7.49E-04	2.48E-03	3.95E-03	4.77E-03	4.49E-03	4.01E-03	4.27E-03	4.69E-03	4.80E-03	4.49E-03	4.25E-03	4.05E-03
Spleen	9.55E-06	4.00E-04	1.85E-03	5.52E-03	8.20E-03	7.60E-03	7.33E-03	7.79E-03	7.03E-03	6.71E-03	6.43E-03	5.25E-03
Testes	0.0	8.78E-08	4.63E-05	1.04E-03	3.88E-03	3.69E-03	3.74E-03	4.16E-03	3.66E-03	3.52E-03	3.40E-03	2.79E-03
Thymus	9.37E-06	7.90E-04	3.22E-03	5.87E-03	6.55E-03	5.44E-03	5.27E-03	6.01E-03	5.49E-03	5.08E-03	4.82E-03	4.20E-03
Thyroid	0.0	1.78E-05	4.06E-04	3.28E-03	5.73E-03	5.32E-03	4.94E-03	5.36E-03	5.02E-03	4.64E-03	4.37E-03	3.83E-03
GB_Wall1	0.0	8.78E-06	4.48E-04	4.60E-03	6.37E-03	7.73E-03	8.75E-03	7.98E-03	7.12E-03	6.52E-03	6.08E-03	5.06E-03
Ht_Wall1	3.68E-05	3.31E-04	1.58E-03	5.25E-03	7.98E-03	7.00E-03	6.63E-03	6.43E-03	6.08E-03	5.78E-03	4.92E-03	
Uterus	0.0	1.10E-06	3.90E-04	6.31E-03	1.33E-02	1.23E-02	1.08E-02	1.02E-02	8.63E-03	8.20E-03	7.86E-03	6.26E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = T_Bone-V		Energy (MeV)										
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	1.17E-04	3.47E-03	1.05E-02	1.93E-02	2.09E-02	1.60E-02	1.59E-02	1.74E-02	1.61E-02	1.49E-02	1.39E-02	1.14E-02
UB_Wall1	0.0	2.02E-06	2.32E-04	5.52E-03	7.16E-03	8.72E-03	8.67E-03	7.72E-03	6.13E-03	5.67E-03	6.13E-03	4.52E-03
Bone_Sur	2.73E-01	2.64E-01	2.47E-01	1.97E-01	1.08E-01	3.90E-02	2.34E-02	2.12E-02	1.98E-02	1.70E-02	1.40E-02	1.40E-02
Brain	1.09E-03	3.42E-03	6.72E-03	1.07E-02	9.55E-03	6.37E-03	6.31E-03	7.27E-03	6.75E-03	6.27E-03	5.92E-03	5.10E-03
Breasts	1.19E-04	2.81E-03	6.70E-03	6.89E-03	5.26E-03	3.92E-03	4.24E-03	5.23E-03	5.15E-03	4.92E-03	4.69E-03	3.98E-03
St_Wall1	1.18E-04	3.93E-04	9.24E-04	3.08E-03	6.55E-03	6.38E-03	5.23E-03	5.25E-03	5.39E-03	5.15E-03	4.93E-03	4.54E-03
SI_Wall1	7.44E-04	2.27E-03	5.11E-03	1.21E-02	1.69E-02	1.44E-02	1.31E-02	1.31E-02	1.18E-02	1.07E-02	9.95E-03	8.23E-03
ULI_Wall1	7.67E-04	2.45E-03	5.60E-03	1.13E-02	1.43E-02	1.32E-02	1.15E-02	1.07E-02	8.49E-03	7.64E-03	7.36E-03	7.47E-03
LLI_Wall1	5.96E-04	9.42E-03	2.00E-02	2.32E-02	2.20E-02	1.79E-02	1.54E-02	1.67E-02	1.44E-02	1.33E-02	1.27E-02	1.08E-02
Kidneys	7.19E-05	1.39E-03	5.13E-03	1.23E-02	1.58E-02	1.28E-02	1.27E-02	1.35E-02	1.23E-02	1.14E-02	1.08E-02	8.81E-03
Liver	1.10E-04	8.80E-04	2.40E-03	5.04E-03	7.24E-03	6.84E-03	6.44E-03	6.83E-03	6.35E-03	5.87E-03	5.53E-03	4.84E-03
ET1-bas	0.0	1.78E-05	4.06E-04	3.28E-03	5.73E-03	5.32E-03	4.94E-03	5.36E-03	5.02E-03	4.64E-03	4.37E-03	3.83E-03
ET2-bas	0.0	1.78E-05	4.06E-04	3.28E-03	5.73E-03	5.32E-03	4.94E-03	5.36E-03	5.02E-03	4.64E-03	4.37E-03	3.83E-03
LN-ET	0.0	1.78E-05	4.06E-04	3.28E-03	5.73E-03	5.32E-03	4.94E-03	5.36E-03	5.02E-03	4.64E-03	4.37E-03	3.83E-03
BBi-bas	7.50E-05	1.23E-03	4.84E-03	1.07E-02	1.12E-02	8.13E-03	7.83E-03	8.16E-03	7.82E-03	7.03E-03	6.48E-03	5.73E-03
BBi-sec	7.50E-05	1.23E-03	4.84E-03	1.07E-02	1.12E-02	8.13E-03	7.83E-03	8.16E-03	7.82E-03	7.03E-03	6.48E-03	5.73E-03
bbe-sec	7.50E-05	1.23E-03	4.84E-03	1.07E-02	1.12E-02	8.13E-03	7.83E-03	8.16E-03	7.82E-03	7.03E-03	6.48E-03	5.73E-03
AI	7.50E-05	1.23E-03	4.84E-03	1.07E-02	1.12E-02	8.13E-03	7.83E-03	8.16E-03	7.82E-03	7.03E-03	6.48E-03	5.73E-03
LN-Th	7.50E-05	1.23E-03	4.84E-03	1.07E-02	1.12E-02	8.13E-03	7.83E-03	8.16E-03	7.82E-03	7.03E-03	6.48E-03	5.73E-03
Ing_Tiss	7.50E-05	1.23E-03	4.84E-03	1.07E-02	1.12E-02	8.13E-03	7.83E-03	8.16E-03	7.82E-03	7.03E-03	6.48E-03	5.73E-03
Lung_NP	0.0	1.78E-05	4.06E-04	3.28E-03	5.73E-03	5.32E-03	4.94E-03	5.36E-03	5.02E-03	4.64E-03	4.37E-03	3.83E-03
Lung_TB	7.50E-05	1.23E-03	4.84E-03	1.07E-02	1.12E-02	8.13E-03	7.83E-03	8.16E-03	7.82E-03	7.03E-03	6.48E-03	5.73E-03
Lung_P	7.50E-05	1.23E-03	4.84E-03	1.07E-02	1.12E-02	8.13E-03	7.83E-03	8.16E-03	7.82E-03	7.03E-03	6.48E-03	5.73E-03
Muscle	1.19E-03	3.30E-03	5.89E-03	9.26E-03	9.49E-03	7.82E-03	7.72E-03	7.99E-03	7.69E-03	7.19E-03	6.72E-03	5.45E-03
Ovaries	1.39E-08	3.42E-04	5.38E-03	1.90E-02	2.25E-02	1.70E-02	1.55E-02	1.54E-02	1.36E-02	1.28E-02	1.20E-02	9.47E-03
Pancreas	2.10E-08	1.06E-04	1.16E-03	5.81E-03	1.06E-02	1.01E-02	9.43E-03	9.55E-03	8.60E-03	8.05E-03	7.59E-03	6.06E-03
R_Marrow	9.95E-02	8.70E-02	7.49E-02	5.48E-02	3.60E-02	2.75E-02	2.79E-02	2.89E-02	2.70E-02	2.50E-02	2.33E-02	1.92E-02
Skin	7.49E-04	2.48E-03	3.95E-03	4.77E-03	4.49E-03	4.01E-03	4.27E-03	4.69E-03	4.80E-03	4.49E-03	4.25E-03	4.05E-03
Spleen	9.55E-06	4.00E-04	1.85E-03	5.52E-03	8.20E-03	7.60E-03	7.33E-03	7.79E-03	7.03E-03	6.71E-03	6.43E-03	5.25E-03
Testes	0.0	8.78E-08	4.63E-05	1.04E-03	3.88E-03	3.69E-03	3.74E-03	4.16E-03	3.66E-03	3.52E-03	3.40E-03	2.79E-03
Thymus	9.37E-06	7.90E-04	3.22E-03	5.87E-03	6.55E-03	5.44E-03	5.27E-03	6.01E-03	5.49E-03	5.08E-03	4.82E-03	4.20E-03
Thyroid	0.0	1.78E-05	4.06E-04	3.28E-03	5.73E-03	5.32E-03	4.94E-03	5.36E-03	5.02E-03	4.64E-03	4.37E-03	3.83E-03
GB_Wall1	0.0	8.78E-06	4.48E-04	4.60E-03	6.37E-03	7.73E-03	8.75E-03	7.98E-03	7.12E-03	6.52E-03	6.08E-03	5.06E-03
Ht_Wall1	3.68E-05	3.31E-04	1.58E-03	5.25E-03	7.98E-03	7.00E-03	6.63E-03	6.43E-03	6.08E-03	5.78E-03	4.92E-03	
Uterus	0.0	1.10E-06	3.90E-04	6.31E-03	1.33E-02	1.23E-02	1.08E-02	1.02E-02	8.63E-03	8.20E-03	7.86E-03	6.26E-03

Specific Absorbed Fraction of Photon Energy in kg<sup>-1</sup>: Recommended Values for the Ten-Year-Old

Source = Brain

Energy (MeV)

Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	0.0	0.0	0.0	3.81E-07	3.03E-05	1.16E-04	2.09E-04	2.96E-04	3.55E-04	3.93E-04	4.26E-04	5.42E-04
UB_Wall	0.0	0.0	0.0	1.03E-10	2.02E-07	2.09E-06	6.38E-06	1.84E-05	3.78E-05	1.84E-05	7.03E-05	5.44E-05
Bone_Sur	7.15E-03	2.53E-02	5.50E-02	9.46E-02	7.24E-02	2.67E-02	1.46E-02	1.20E-02	1.02E-02	1.02E-02	9.64E-03	8.10E-03
Brain	7.15E-01	6.71E-01	5.90E-01	3.98E-01	1.98E-01	1.18E-01	1.17E-01	1.17E-01	1.10E-01	1.01E-01	9.31E-02	7.49E-02
Breasts	0.0	0.0	3.64E-10	5.59E-06	1.13E-04	3.07E-04	3.43E-04	5.65E-04	7.28E-04	8.06E-04	8.52E-04	9.44E-04
St_Wall	0.0	0.0	0.0	1.46E-07	1.53E-05	4.72E-05	8.13E-05	1.39E-04	2.06E-04	2.55E-04	2.96E-04	3.54E-04
SI_Wall	0.0	0.0	0.0	3.77E-09	1.76E-06	1.00E-05	2.65E-05	6.10E-05	1.03E-04	1.32E-04	1.55E-04	2.20E-04
ULI_Wall	0.0	0.0	0.0	5.62E-09	2.23E-06	1.19E-05	2.62E-05	5.62E-05	9.55E-05	1.25E-04	1.51E-04	1.98E-04
LLI_Wall	0.0	0.0	0.0	7.23E-10	5.25E-07	3.83E-06	1.00E-05	2.55E-05	4.89E-05	6.80E-05	8.59E-05	1.21E-04
Kidneys	0.0	0.0	0.0	5.72E-08	9.29E-06	5.32E-05	7.84E-05	1.31E-04	1.91E-04	2.33E-04	2.68E-04	3.65E-04
Liver	0.0	0.0	0.0	2.37E-07	4.23E-05	1.13E-04	2.14E-04	3.31E-04	4.07E-04	4.52E-04	4.83E-04	5.51E-04
ET1-bas	0.0	1.98E-07	1.28E-04	1.90E-03	7.22E-03	8.35E-03	7.90E-03	8.43E-03	8.22E-03	7.81E-03	7.41E-03	6.24E-03
ET2-bas	0.0	1.98E-07	1.28E-04	1.90E-03	7.22E-03	8.35E-03	7.90E-03	8.43E-03	8.22E-03	7.81E-03	7.41E-03	6.24E-03
LN-ET	0.0	1.98E-07	1.28E-04	1.90E-03	7.22E-03	8.35E-03	7.90E-03	8.43E-03	8.22E-03	7.81E-03	7.41E-03	6.24E-03
BBi-bas	0.0	0.0	1.74E-07	8.73E-05	4.93E-04	8.74E-04	9.12E-04	1.16E-03	1.44E-03	1.52E-03	1.52E-03	1.40E-03
BBi-sec	0.0	0.0	1.74E-07	8.73E-05	4.93E-04	8.74E-04	9.12E-04	1.16E-03	1.44E-03	1.52E-03	1.52E-03	1.40E-03
bbe-sec	0.0	0.0	1.74E-07	8.73E-05	4.93E-04	8.74E-04	9.12E-04	1.16E-03	1.44E-03	1.52E-03	1.52E-03	1.40E-03
AI	0.0	0.0	0.0	1.74E-07	8.73E-05	4.93E-04	8.74E-04	9.12E-04	1.16E-03	1.44E-03	1.52E-03	1.52E-03
LN-Th	0.0	0.0	1.74E-07	8.73E-05	4.93E-04	8.74E-04	9.12E-04	1.16E-03	1.44E-03	1.52E-03	1.52E-03	1.40E-03
Ing_Tiss	0.0	0.0	1.74E-07	8.73E-05	4.93E-04	8.74E-04	9.12E-04	1.16E-03	1.44E-03	1.52E-03	1.52E-03	1.40E-03
Lung_NP	0.0	1.98E-07	1.28E-04	1.90E-03	7.22E-03	8.35E-03	7.90E-03	8.43E-03	8.22E-03	7.81E-03	7.41E-03	6.24E-03
Lung_TB	0.0	0.0	1.74E-07	8.73E-05	4.93E-04	8.74E-04	9.12E-04	1.16E-03	1.44E-03	1.52E-03	1.52E-03	1.40E-03
Lung_P	0.0	0.0	1.74E-07	8.73E-05	4.93E-04	8.74E-04	9.12E-04	1.16E-03	1.44E-03	1.52E-03	1.52E-03	1.40E-03
Muscle	9.84E-08	8.52E-06	2.02E-04	1.51E-03	2.44E-03	2.24E-03	2.23E-03	2.33E-03	2.34E-03	2.18E-03	2.04E-03	1.81E-03
Ovaries	0.0	0.0	0.0	5.59E-10	5.82E-07	4.57E-06	1.22E-05	3.04E-05	5.72E-05	7.96E-05	9.93E-05	1.65E-04
Pancreas	0.0	0.0	0.0	0.0	2.07E-07	2.11E-05	8.04E-05	1.77E-04	3.05E-04	3.79E-04	4.14E-04	4.35E-04
R_Marrow	1.02E-03	3.30E-03	6.89E-03	1.21E-02	8.43E-03	7.53E-03	7.30E-03	6.73E-03	6.27E-03	5.93E-03	5.10E-03	5.10E-03
Skin	3.67E-05	1.82E-04	5.69E-04	2.83E-03	4.04E-03	3.53E-03	3.52E-03	4.10E-03	4.35E-03	3.89E-03	3.46E-03	2.68E-03
Spleen	0.0	0.0	0.0	1.74E-07	5.16E-05	1.69E-04	2.62E-04	3.72E-04	4.92E-04	5.73E-04	5.93E-04	4.50E-04
Testes	0.0	0.0	0.0	0.0	0.0	4.47E-08	6.98E-07	2.61E-06	9.16E-06	2.15E-05	3.30E-05	4.39E-05
Thymus	0.0	0.0	9.92E-08	7.45E-05	5.16E-04	1.08E-03	1.20E-03	1.64E-03	1.89E-03	1.98E-03	2.01E-03	1.89E-03
Thyroid	0.0	1.98E-07	1.28E-04	1.90E-03	7.22E-03	8.35E-03	7.90E-03	8.43E-03	8.22E-03	7.81E-03	7.41E-03	6.24E-03
GB_Wall	0.0	0.0	0.0	6.62E-08	9.79E-06	3.46E-05	6.32E-05	1.15E-04	1.75E-04	2.17E-04	2.54E-04	3.11E-04
Ht_Wall	0.0	0.0	7.57E-10	5.89E-06	1.30E-04	2.97E-04	5.02E-04	6.94E-04	8.32E-04	8.97E-04	9.30E-04	9.73E-04
Uterus	0.0	0.0	4.43E-10	5.08E-07	4.14E-06	1.12E-05	2.89E-05	5.42E-05	7.61E-05	9.52E-05	1.59E-04	1.59E-04

Specific Absorbed Fraction of Photon Energy in kg<sup>-1</sup>: Recommended Values for the Ten-Year-Old

Source = Breasts		Energy (MeV)										
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	0.0	0.0	5.57E-06	1.18E-03	6.01E-03	7.86E-03	7.09E-03	5.75E-03	5.53E-03	5.36E-03	5.18E-03	4.33E-03
UB_Wall	0.0	0.0	0.0	1.96E-06	1.01E-04	3.34E-04	5.08E-04	6.47E-04	7.78E-04	8.11E-04	8.36E-04	7.67E-04
Bone_Sur	5.05E-04	1.01E-02	2.41E-02	2.96E-02	2.08E-02	8.68E-03	5.39E-03	4.78E-03	4.67E-03	4.54E-03	4.36E-03	3.65E-03
Brain	0.0	0.0	3.64E-10	5.59E-06	1.13E-04	2.07E-04	3.43E-04	5.65E-04	7.28E-04	8.06E-04	8.52E-04	9.44E-04
Breasts	2.84E+02	1.55E+02	7.98E+01	2.57E+01	7.83E+00	4.76E+00	5.35E+00	6.11E+00	5.96E+00	5.46E+00	5.04E+00	4.12E+00
St_Wall	0.0	5.04E-07	2.24E-04	4.09E-03	7.43E-03	7.65E-03	7.24E-03	8.81E-03	9.07E-03	8.44E-03	7.84E-03	6.45E-03
SI_Wall	0.0	0.0	2.31E-08	5.92E-05	5.19E-04	1.19E-03	1.34E-03	1.47E-03	1.77E-03	1.73E-03	1.68E-03	1.86E-03
ULI_Wall	0.0	0.0	6.61E-08	1.04E-04	8.85E-04	1.30E-03	1.70E-03	2.01E-03	2.09E-03	2.09E-03	2.07E-03	1.92E-03
LLI_Wall	0.0	0.0	3.16E-09	1.32E-05	2.38E-04	5.70E-04	7.33E-04	9.23E-04	1.00E-03	1.03E-03	1.05E-03	9.38E-04
Kidneys	0.0	0.0	3.85E-07	7.36E-04	2.82E-03	2.59E-03	3.19E-03	3.63E-03	3.53E-03	3.36E-03	3.21E-03	2.82E-03
Liver	0.0	4.17E-07	6.28E-04	5.18E-03	9.32E-03	7.62E-03	7.77E-03	8.38E-03	8.35E-03	8.01E-03	7.56E-03	5.98E-03
ET1-bas	0.0	0.0	4.01E-06	1.04E-03	4.77E-03	5.02E-03	5.27E-03	5.49E-03	5.36E-03	5.15E-03	5.00E-03	4.18E-03
ET2-bas	0.0	0.0	4.01E-06	1.04E-03	4.77E-03	5.02E-03	5.27E-03	5.49E-03	5.36E-03	5.15E-03	5.00E-03	4.18E-03
LN-ET	0.0	0.0	4.01E-06	1.04E-03	4.77E-03	5.02E-03	5.27E-03	5.49E-03	5.36E-03	5.15E-03	5.00E-03	4.18E-03
BBi-bas	3.17E-05	5.88E-03	3.22E-02	5.69E-02	3.66E-02	2.32E-02	2.32E-02	2.28E-02	2.35E-02	2.20E-02	2.07E-02	1.96E-02
BBi-sec	3.17E-05	5.88E-03	3.22E-02	5.69E-02	3.66E-02	2.32E-02	2.32E-02	2.28E-02	2.35E-02	2.20E-02	2.07E-02	1.96E-02
bbe-sec	3.17E-05	5.88E-03	3.22E-02	5.69E-02	3.66E-02	2.32E-02	2.32E-02	2.28E-02	2.35E-02	2.20E-02	2.07E-02	1.96E-02
AI	3.17E-05	5.88E-03	3.22E-02	5.69E-02	3.66E-02	2.32E-02	2.32E-02	2.28E-02	2.35E-02	2.20E-02	2.07E-02	1.96E-02
LN-Th	3.17E-05	5.88E-03	3.22E-02	5.69E-02	3.66E-02	2.32E-02	2.32E-02	2.28E-02	2.35E-02	2.20E-02	2.07E-02	1.96E-02
Ing_Tiss	3.17E-05	5.88E-03	3.22E-02	5.69E-02	3.66E-02	2.32E-02	2.32E-02	2.28E-02	2.35E-02	2.20E-02	2.07E-02	1.96E-02
Lung_NP	0.0	0.0	4.01E-06	1.04E-03	4.77E-03	5.02E-03	5.27E-03	5.49E-03	5.36E-03	5.15E-03	5.00E-03	4.18E-03
Lung_TB	3.17E-05	5.88E-03	3.22E-02	5.69E-02	3.66E-02	2.32E-02	2.32E-02	2.28E-02	2.35E-02	2.20E-02	2.07E-02	1.96E-02
Lung_P	3.17E-05	5.88E-03	3.22E-02	5.69E-02	3.66E-02	2.32E-02	2.32E-02	2.28E-02	2.35E-02	2.20E-02	2.07E-02	1.96E-02
Muscle	3.86E-03	7.63E-03	8.94E-03	8.12E-03	5.83E-03	4.35E-03	4.63E-03	5.21E-03	5.21E-03	4.91E-03	4.61E-03	3.92E-03
Ovaries	0.0	0.0	2.71E-10	8.18E-06	2.45E-04	6.30E-04	8.64E-04	1.09E-03	1.17E-03	1.19E-03	1.20E-03	1.07E-03
Pancreas	0.0	2.08E-09	2.55E-05	3.29E-03	6.89E-03	7.94E-03	6.78E-03	6.44E-03	7.00E-03	7.06E-03	6.81E-03	5.43E-03
R_Marrow	1.45E-04	2.61E-03	5.83E-03	6.68E-03	5.28E-03	4.47E-03	4.78E-03	5.23E-03	5.15E-03	4.93E-03	4.69E-03	3.98E-03
Skin	1.08E-01	1.05E-01	7.24E-02	3.07E-02	1.15E-02	7.41E-03	8.27E-03	9.69E-03	8.98E-03	8.42E-03	7.96E-03	6.58E-03
Spleen	0.0	1.01E-09	1.26E-05	3.23E-03	6.04E-03	6.15E-03	5.25E-03	5.23E-03	5.01E-03	4.55E-03	4.29E-03	4.36E-03
Testes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Thymus	0.0	1.94E-05	3.39E-03	1.66E-02	3.16E-02	2.34E-02	2.05E-02	2.19E-02	2.05E-02	2.22E-02	2.32E-02	1.88E-02
Thyroid	0.0	0.0	4.01E-06	1.04E-03	4.77E-03	5.02E-03	5.27E-03	5.49E-03	5.36E-03	5.15E-03	5.00E-03	4.18E-03
GB_Wall	0.0	2.23E-10	6.63E-06	1.11E-03	4.32E-03	5.11E-03	5.48E-03	5.39E-03	5.20E-03	5.01E-03	4.88E-03	4.08E-03
Ht_Wall	1.05E-08	8.82E-04	1.14E-02	5.06E-02	4.58E-02	3.08E-02	3.17E-02	3.34E-02	3.19E-02	3.13E-02	2.99E-02	2.20E-02
Uterus	0.0	0.0	1.79E-10	7.23E-06	2.32E-04	6.10E-04	8.43E-04	1.07E-03	1.15E-03	1.17E-03	1.18E-03	1.06E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = St_Cont		Energy (MeV)										
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	0.0	7.40E-06	1.88E-03	1.83E-02	3.13E-02	2.40E-02	2.24E-02	2.05E-02	1.94E-02	1.81E-02	1.69E-02	1.36E-02
UB_Wall	0.0	0.0	1.06E-06	3.54E-04	2.70E-03	3.50E-03	3.80E-03	3.60E-03	3.32E-03	3.25E-03	3.19E-03	2.70E-03
Bone_Sur	2.57E-05	4.51E-04	3.44E-03	1.38E-02	2.05E-02	1.15E-02	6.24E-03	4.51E-03	4.23E-03	4.07E-03	3.89E-03	3.26E-03
Brain	0.0	0.0	0.0	1.27E-07	1.47E-05	5.45E-05	1.45E-05	1.28E-04	2.42E-04	3.15E-04	3.50E-04	4.16E-04
Breasts	0.0	1.57E-07	1.30E-04	1.72E-03	7.68E-03	6.89E-03	7.02E-03	7.61E-03	7.12E-03	7.70E-03	7.95E-03	6.22E-03
St_Wall	6.50E-01	1.37E+00	1.57E+00	1.09E+00	4.87E-01	2.78E-01	2.81E-01	2.84E-01	2.61E-01	2.35E-01	2.16E-01	1.83E-01
SI_Wall	7.73E-05	7.96E-04	4.17E-03	2.01E-02	2.90E-02	2.18E-02	1.96E-02	1.81E-02	1.67E-02	1.56E-02	1.46E-02	1.18E-02
ULI_Wall	5.67E-05	3.75E-03	1.59E-02	4.22E-02	4.19E-02	2.68E-02	2.48E-02	2.20E-02	2.12E-02	1.92E-02	1.75E-02	1.49E-02
LLI_Wall	6.75E-07	6.04E-05	1.46E-03	7.25E-03	1.29E-02	1.01E-02	8.31E-03	9.59E-03	9.23E-03	8.37E-03	7.74E-03	6.52E-03
Kidneys	0.0	8.37E-06	1.70E-03	1.68E-02	2.78E-02	2.16E-02	1.91E-02	1.81E-02	1.72E-02	1.57E-02	1.42E-02	1.04E-02
Liver	7.56E-06	3.35E-04	4.93E-03	2.19E-02	2.62E-02	1.93E-02	1.77E-02	1.66E-02	1.58E-02	1.51E-02	1.43E-02	1.14E-02
ET1-bas	0.0	0.0	2.59E-09	1.94E-05	4.37E-04	6.14E-04	8.13E-04	1.06E-03	1.20E-03	1.24E-03	1.26E-03	1.25E-03
ET2-bas	0.0	0.0	2.59E-09	1.94E-05	4.37E-04	6.14E-04	8.13E-04	1.06E-03	1.20E-03	1.24E-03	1.26E-03	1.25E-03
LN-ET	0.0	0.0	2.59E-09	1.94E-05	4.37E-04	6.14E-04	8.13E-04	1.06E-03	1.20E-03	1.24E-03	1.26E-03	1.25E-03
BBi-bas	1.69E-05	3.84E-04	3.52E-03	1.26E-02	1.58E-02	1.13E-02	1.01E-02	1.01E-02	1.01E-02	9.57E-03	8.85E-03	6.60E-03
BBi-sec	1.69E-05	3.84E-04	3.52E-03	1.26E-02	1.58E-02	1.13E-02	1.01E-02	1.01E-02	1.01E-02	9.57E-03	8.85E-03	6.60E-03
bbe-sec	1.69E-05	3.84E-04	3.52E-03	1.26E-02	1.58E-02	1.13E-02	1.01E-02	1.01E-02	1.01E-02	9.57E-03	8.85E-03	6.60E-03
AI	1.69E-05	3.84E-04	3.52E-03	1.26E-02	1.58E-02	1.13E-02	1.01E-02	1.01E-02	1.01E-02	9.57E-03	8.85E-03	6.60E-03
LN-Th	1.69E-05	3.84E-04	3.52E-03	1.26E-02	1.58E-02	1.13E-02	1.01E-02	1.01E-02	1.01E-02	9.57E-03	8.85E-03	6.60E-03
Ing_Tiss	1.69E-05	3.84E-04	3.52E-03	1.26E-02	1.58E-02	1.13E-02	1.01E-02	1.01E-02	1.01E-02	9.57E-03	8.85E-03	6.60E-03
Lung_NP	0.0	0.0	2.59E-09	1.94E-05	4.37E-04	6.14E-04	8.13E-04	1.06E-03	1.20E-03	1.24E-03	1.26E-03	1.25E-03
Lung_TB	1.69E-05	3.84E-04	3.52E-03	1.26E-02	1.58E-02	1.13E-02	1.01E-02	1.01E-02	1.01E-02	9.57E-03	8.85E-03	6.60E-03
Lung_P	1.69E-05	3.84E-04	3.52E-03	1.26E-02	1.58E-02	1.13E-02	1.01E-02	1.01E-02	1.01E-02	9.57E-03	8.85E-03	6.60E-03
Muscle	1.12E-04	2.91E-03	8.87E-03	1.50E-02	8.71E-03	8.23E-03	8.18E-03	7.80E-03	7.34E-03	6.91E-03	6.69E-03	5.13E-03
Ovaries	0.0	1.03E-08	2.99E-05	1.52E-03	6.51E-03	7.61E-03	6.49E-03	6.83E-03	6.39E-03	6.21E-03	6.03E-03	5.13E-03
Pancreas	2.43E-04	3.14E-02	1.34E-01	2.54E-01	1.75E-01	1.6E-01	9.55E-02	9.40E-02	8.23E-02	7.43E-02	6.84E-02	5.35E-02
R_Marrow	7.51E-06	1.17E-04	8.22E-04	3.16E-03	5.73E-03	5.86E-03	5.60E-03	6.14E-03	5.60E-03	5.34E-03	5.08E-03	3.99E-03
Skin	3.97E-08	2.35E-04	1.22E-03	3.68E-03	3.91E-03	3.19E-03	3.21E-03	3.89E-03	3.21E-03	3.51E-03	3.27E-03	2.93E-03
Spleen	2.92E-08	9.32E-04	2.43E-02	1.03E-01	9.34E-02	5.84E-02	5.18E-02	4.87E-02	4.48E-02	4.15E-02	3.86E-02	3.07E-02
Testes	0.0	0.0	3.53E-09	2.37E-05	4.87E-04	7.90E-04	1.02E-03	1.23E-03	1.32E-03	1.30E-03	1.29E-03	1.15E-03
Thymus	0.0	3.96E-10	5.15E-06	1.06E-03	3.11E-03	4.10E-03	4.55E-03	4.96E-03	4.01E-03	3.73E-03	3.68E-03	3.77E-03
Thyroid	0.0	0.0	2.59E-09	1.94E-05	4.37E-04	6.14E-04	8.13E-04	1.06E-03	1.20E-03	1.24E-03	1.26E-03	1.25E-03
GB_Wall	4.84E-09	7.39E-04	1.80E-02	6.64E-02	8.71E-02	5.52E-02	4.57E-02	4.52E-02	3.94E-02	3.56E-02	3.32E-02	2.72E-02
Ht_Wall	1.17E-07	8.17E-04	6.97E-03	2.84E-02	3.55E-02	2.49E-02	2.24E-02	2.14E-02	1.90E-02	1.74E-02	1.64E-02	1.39E-02
Uterus	0.0	1.28E-09	1.50E-05	2.05E-03	5.22E-03	7.33E-03	6.65E-03	5.29E-03	5.20E-03	5.05E-03	5.01E-03	5.01E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = St_Wall		Energy (MeV)										
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	0.0	1.99E-05	1.84E-03	1.82E-02	3.19E-02	2.63E-02	1.96E-02	2.28E-02	1.10E-02	1.90E-02	1.69E-02	1.35E-02
UB_Wall	0.0	0.0	1.79E-06	4.62E-04	3.41E-03	5.27E-03	5.07E-03	4.48E-03	4.06E-03	3.75E-03	3.55E-03	3.01E-03
Bone_Sur	2.57E-05	4.51E-04	3.44E-03	1.38E-02	2.05E-02	1.15E-02	6.24E-03	4.51E-03	4.23E-03	4.07E-03	3.89E-03	3.26E-03
Brain	0.0	0.0	0.0	1.46E-07	1.53E-05	4.72E-05	8.13E-05	1.39E-04	2.06E-04	2.55E-04	2.96E-04	3.54E-04
Breasts	0.0	5.04E-07	2.24E-04	4.09E-03	7.43E-03	7.65E-03	7.24E-03	8.81E-03	9.07E-03	8.44E-03	7.84E-03	6.45E-03
St_Wall	9.13E+00	5.79E+00	3.61E+00	1.63E+00	6.41E-01	3.73E-01	3.81E-01	4.01E-01	3.78E-01	3.49E-01	3.23E-01	2.53E-01
SI_Wall	1.60E-03	4.40E-03	9.32E-03	2.19E-02	3.05E-02	2.28E-02	1.91E-02	2.10E-02	2.03E-02	1.88E-02	1.77E-02	1.56E-02
ULI_Wall	5.38E-03	1.72E-02	3.92E-02	5.77E-02	4.95E-02	3.52E-02	3.08E-02	2.77E-02	2.48E-02	2.25E-02	2.10E-02	1.72E-02
LLI_Wall	6.81E-09	1.70E-04	2.43E-03	1.09E-02	1.64E-02	1.43E-02	1.25E-02	1.09E-02	9.74E-03	8.88E-03	8.31E-03	6.89E-03
Kidneys	0.0	2.18E-05	1.78E-03	1.94E-02	2.80E-02	2.27E-02	2.08E-02	2.06E-02	1.92E-02	1.70E-02	1.53E-02	1.25E-02
Liver	1.37E-04	1.47E-03	7.93E-03	2.34E-02	2.68E-02	1.97E-02	1.80E-02	1.61E-02	1.42E-02	1.43E-02	1.42E-02	1.20E-02
ET1-bas	0.0	0.0	4.18E-09	2.25E-05	4.94E-04	7.53E-04	1.02E-03	1.24E-03	1.24E-03	1.31E-03	1.32E-03	1.31E-03
ET2-bas	0.0	0.0	4.18E-09	2.25E-05	4.94E-04	7.53E-04	1.02E-03	1.24E-03	1.24E-03	1.31E-03	1.32E-03	1.31E-03
LN-ET	0.0	0.0	4.18E-09	2.25E-05	4.94E-04	7.53E-04	1.02E-03	1.24E-03	1.24E-03	1.31E-03	1.32E-03	1.31E-03
BBi-bas	9.29E-04	3.10E-03	7.31E-03	1.57E-02	1.86E-02	1.29E-02	1.13E-02	1.10E-02	9.34E-03	8.40E-03	7.88E-03	7.15E-03
BBi-sec	9.29E-04	3.10E-03	7.31E-03	1.57E-02	1.86E-02	1.29E-02	1.13E-02	1.10E-02	9.34E-03	8.40E-03	7.88E-03	7.15E-03
bbe-sec	9.29E-04	3.10E-03	7.31E-03	1.57E-02	1.86E-02	1.29E-02	1.13E-02	1.10E-02	9.34E-03	8.40E-03	7.88E-03	7.15E-03
AI	9.29E-04	3.10E-03	7.31E-03	1.57E-02	1.86E-02	1.29E-02	1.13E-02	1.10E-02	9.34E-03	8.40E-03	7.88E-03	7.15E-03
LN-Th	9.29E-04	3.10E-03	7.31E-03	1.57E-02	1.86E-02	1.29E-02	1.13E-02	1.10E-02	9.34E-03	8.40E-03	7.88E-03	7.15E-03
Lng_Tiss	9.29E-04	3.10E-03	7.31E-03	1.57E-02	1.86E-02	1.29E-02	1.13E-02	1.10E-02	9.34E-03	8.40E-03	7.88E-03	7.15E-03
Lung_NP	0.0	0.0	4.18E-09	2.25E-05	4.94E-04	7.53E-04	1.02E-03	1.24E-03	1.24E-03	1.31E-03	1.32E-03	1.31E-03
Lung_TB	9.29E-04	3.10E-03	7.31E-03	1.57E-02	1.86E-02	1.29E-02	1.13E-02	1.10E-02	9.34E-03	8.40E-03	7.88E-03	7.15E-03
Lung_P	9.29E-04	3.10E-03	7.31E-03	1.57E-02	1.86E-02	1.29E-02	1.13E-02	1.10E-02	9.34E-03	8.40E-03	7.88E-03	7.15E-03
Muscle	6.00E-03	1.10E-02	1.29E-02	1.49E-02	1.49E-02	1.10E-02	9.65E-03	7.57E-03	6.81E-03	6.55E-03	6.34E-03	5.64E-03
Ovaries	0.0	3.46E-08	5.27E-05	2.39E-03	7.18E-03	8.13E-03	6.85E-03	6.46E-03	6.04E-03	5.62E-03	5.39E-03	5.29E-03
Pancreas	8.23E-03	1.02E-01	2.31E-01	2.88E-01	1.81E-01	1.07E-01	9.54E-02	9.34E-02	8.61E-02	8.14E-02	7.66E-02	5.91E-02
R_Marrow	7.51E-06	1.17E-04	8.22E-04	3.16E-03	5.73E-03	5.86E-03	5.60E-03	6.14E-03	5.60E-03	5.34E-03	5.08E-03	3.99E-03
Skin	9.06E-05	6.63E-04	2.72E-03	5.87E-03	6.95E-03	6.02E-03	5.41E-03	4.84E-03	4.38E-03	4.02E-03	3.79E-03	3.17E-03
Spleen	4.58E-07	3.59E-03	3.48E-02	1.07E-01	9.42E-02	5.93E-02	5.44E-02	5.02E-02	4.89E-02	4.44E-02	4.02E-02	3.09E-02
Testes	0.0	0.0	5.92E-09	2.82E-05	2.84E-04	4.65E-04	6.98E-04	1.01E-03	1.20E-03	1.27E-03	1.30E-03	1.35E-03
Thymus	0.0	1.08E-09	8.23E-06	9.54E-04	2.97E-03	4.30E-03	3.91E-03	4.05E-03	4.16E-03	4.20E-03	4.17E-03	3.84E-03
Thyroid	0.0	0.0	4.18E-09	2.25E-05	4.94E-04	7.53E-04	1.02E-03	1.24E-03	1.31E-03	1.32E-03	1.31E-03	1.26E-03
GB_Wall	6.80E-08	2.04E-03	2.57E-02	8.64E-02	8.85E-02	6.00E-02	5.08E-02	4.50E-02	4.01E-02	3.63E-02	3.38E-02	2.77E-02
Ht_Wall	1.60E-04	2.01E-03	1.21E-02	3.90E-02	3.85E-02	2.53E-02	2.33E-02	2.29E-02	2.14E-02	2.02E-02	1.92E-02	1.61E-02
Uterus	0.0	4.08E-09	2.51E-05	2.18E-03	6.53E-03	8.31E-03	6.99E-03	6.57E-03	6.43E-03	5.93E-03	5.57E-03	5.13E-03

Specific Absorbed Fraction of Photon Energy in kg<sup>-1</sup>: Recommended Values for the Ten-Year-Old

Source = SI_Cont		Energy (MeV)										
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	0.0	2.84E-08	5.74E-05	2.08E-03	8.54E-03	9.26E-03	8.52E-03	8.14E-03	7.55E-03	7.38E-03	7.17E-03	6.05E-03
UB_Wall	0.0	3.48E-05	2.31E-03	2.13E-02	3.16E-02	2.45E-02	2.20E-02	1.79E-02	1.85E-02	1.82E-02	1.70E-02	1.19E-02
Bone_Sur	9.69E-04	3.21E-03	8.18E-03	2.31E-02	3.06E-02	1.63E-02	8.77E-03	6.07E-03	5.50E-03	5.26E-03	5.03E-03	4.27E-03
Brain	0.0	0.0	0.0	3.77E-09	1.76E-06	1.00E-05	2.65E-05	6.10E-05	1.03E-05	1.32E-04	1.55E-04	2.20E-04
Breasts	0.0	0.0	2.31E-08	5.92E-05	5.19E-03	1.19E-04	1.47E-03	1.47E-03	1.77E-03	1.73E-03	1.68E-03	1.86E-03
St_Wall	1.60E-03	4.40E-03	9.32E-03	2.19E-02	3.05E-02	2.28E-02	1.91E-02	2.10E-02	2.03E-02	1.88E-02	1.77E-02	1.56E-02
SI_Wall	2.19E-01	4.62E-01	5.23E-01	3.97E-01	2.06E-01	1.20E-01	1.13E-01	1.10E-01	9.90E-02	9.14E-02	8.63E-02	6.73E-02
ULI_Wall	2.06E-01	3.71E-01	4.36E-01	3.60E-01	2.07E-01	1.27E-01	1.13E-01	1.15E-01	1.09E-01	9.87E-02	8.98E-02	7.04E-02
LLI_Wall	7.92E-02	1.39E-01	1.66E-01	1.43E-01	8.81E-02	5.70E-02	5.07E-02	4.81E-02	4.48E-02	4.14E-02	3.83E-02	2.96E-02
Kidneys	5.55E-10	1.06E-04	3.50E-03	1.77E-02	2.70E-02	2.20E-02	2.06E-02	1.90E-02	1.73E-02	1.62E-02	1.52E-02	1.25E-02
Liver	5.70E-04	1.63E-03	4.06E-03	1.30E-02	1.88E-02	1.53E-02	1.33E-02	1.24E-02	1.22E-02	1.12E-02	1.05E-02	9.16E-03
ET1-bas	0.0	0.0	4.65E-07	4.13E-05	1.47E-04	3.14E-04	4.99E-04	5.66E-04	5.85E-04	5.85E-04	5.94E-04	6.08E-04
ET2-bas	0.0	0.0	4.65E-07	4.13E-05	1.47E-04	3.14E-04	4.99E-04	5.66E-04	5.85E-04	5.85E-04	5.94E-04	6.08E-04
LN-ET	0.0	0.0	4.65E-07	4.13E-05	1.47E-04	3.14E-04	4.99E-04	5.66E-04	5.85E-04	5.85E-04	5.94E-04	6.08E-04
BBi-bas	0.0	0.0	1.48E-06	3.45E-04	1.64E-03	2.19E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.37E-03	1.98E-03
BBi-sec	0.0	0.0	1.48E-06	3.45E-04	1.64E-03	2.19E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.37E-03	1.98E-03
bbe-sec	0.0	0.0	1.48E-06	3.45E-04	1.64E-03	2.19E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.37E-03	1.98E-03
AI	0.0	0.0	1.48E-06	3.45E-04	1.64E-03	2.19E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.37E-03	1.98E-03
LN-Th	0.0	0.0	1.48E-06	3.45E-04	1.64E-03	2.19E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.37E-03	1.98E-03
Lng_Tiss	0.0	0.0	1.48E-06	3.45E-04	1.64E-03	2.19E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.37E-03	1.98E-03
Lung_NP	0.0	0.0	0.0	4.65E-07	4.13E-05	1.47E-04	3.14E-04	4.99E-04	5.66E-04	5.85E-04	5.94E-04	6.08E-04
Lung_TB	0.0	0.0	1.48E-06	3.45E-04	1.64E-03	2.19E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.37E-03	1.98E-03
Lung_P	0.0	0.0	1.48E-06	3.45E-04	1.64E-03	2.19E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.37E-03	1.98E-03
Muscle	2.01E-03	5.57E-03	1.00E-02	1.57E-02	1.46E-02	1.06E-02	9.88E-03	9.59E-03	9.13E-03	8.55E-03	8.02E-03	6.62E-03
Ovaries	6.73E-03	6.56E-02	1.62E-01	2.09E-01	1.42E-01	8.85E-02	7.87E-02	7.36E-02	6.84E-02	6.28E-02	5.81E-02	4.66E-02
Pancreas	0.0	2.59E-06	3.80E-04	8.94E-03	2.00E-02	1.70E-02	1.47E-02	1.37E-02	1.26E-02	1.22E-02	1.15E-02	8.57E-03
R_Marrow	7.00E-04	2.06E-03	4.75E-03	1.18E-02	1.63E-02	1.44E-02	1.34E-02	1.31E-02	1.18E-02	1.07E-02	9.95E-03	8.23E-03
Skin	1.56E-07	1.10E-05	2.26E-04	1.95E-03	3.05E-03	2.82E-03	2.70E-03	3.31E-03	3.90E-03	3.59E-03	3.24E-03	2.66E-03
Spleen	2.01E-08	8.07E-06	5.67E-04	7.35E-03	1.50E-02	1.19E-02	1.07E-02	1.10E-02	1.01E-02	9.30E-03	8.62E-03	6.86E-03
Testes	0.0	0.0	3.86E-06	8.55E-04	3.78E-03	4.57E-03	4.52E-03	4.90E-03	4.93E-03	4.60E-03	4.36E-03	4.16E-03
Thymus	0.0	0.0	1.87E-09	1.58E-05	3.05E-04	5.50E-04	7.84E-04	1.04E-03	1.21E-03	1.29E-03	1.32E-03	1.31E-03
Thyroid	0.0	0.0	0.0	4.65E-07	4.13E-05	1.47E-04	3.14E-04	4.99E-04	5.66E-04	5.85E-04	5.94E-04	6.08E-04
GB_Wall	4.52E-03	1.49E-02	3.45E-02	6.79E-02	7.24E-02	4.92E-02	4.19E-02	3.85E-02	3.32E-02	2.85E-02	2.56E-02	2.19E-02
Ht_Wall	0.0	0.0	1.01E-06	2.60E-04	2.14E-03	3.29E-03	3.01E-03	3.14E-03	3.13E-03	3.15E-03	3.14E-03	2.90E-03
Uterus	8.16E-06	1.17E-02	8.13E-02	1.74E-01	1.34E-01	8.33E-02	7.45E-02	6.95E-02	6.21E-02	5.68E-02	5.30E-02	4.44E-02

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = SI_Wall		Energy (MeV)										
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	0.0	2.84E-08	5.74E-05	2.08E-03	8.54E-03	9.26E-03	8.52E-03	8.14E-03	7.55E-03	7.38E-03	7.17E-03	6.05E-03
UB_Wall	0.0	3.48E-05	2.31E-03	2.13E-02	3.16E-02	2.45E-02	2.20E-02	1.79E-02	1.85E-02	1.82E-02	1.70E-02	1.19E-02
Bone_Sur	9.69E-04	3.21E-03	8.18E-03	2.31E-02	3.06E-02	1.63E-02	8.77E-03	6.07E-03	5.50E-03	5.03E-03	4.27E-03	
Brain	0.0	0.0	0.0	3.77E-09	1.76E-06	1.00E-05	2.65E-05	6.10E-05	1.03E-05	1.32E-04	1.55E-04	2.20E-04
Breasts	0.0	0.0	2.31E-08	5.92E-05	5.19E-03	1.19E-04	1.47E-03	1.47E-03	1.77E-03	1.73E-03	1.68E-03	1.86E-03
St_Wall	1.60E-03	4.40E-03	9.32E-03	2.19E-02	3.05E-02	2.28E-02	1.91E-02	2.10E-02	2.03E-02	1.88E-02	1.77E-02	1.56E-02
SI_Wall	2.19E-01	4.62E-01	5.23E-01	3.97E-01	2.06E-01	1.20E-01	1.13E-01	1.10E-01	9.90E-02	9.14E-02	8.63E-02	6.73E-02
ULI_Wall	2.06E-01	3.71E-01	4.36E-01	3.60E-01	2.07E-01	1.27E-01	1.13E-01	1.15E-01	1.09E-01	9.87E-02	8.98E-02	7.04E-02
LLI_Wall	7.92E-02	1.39E-01	1.66E-01	1.43E-01	8.81E-02	5.70E-02	5.07E-02	4.81E-02	4.48E-02	4.14E-02	3.83E-02	2.96E-02
Kidneys	5.55E-10	1.06E-04	3.50E-03	1.77E-02	2.70E-02	2.20E-02	2.06E-02	1.90E-02	1.73E-02	1.62E-02	1.52E-02	1.25E-02
Liver	5.70E-04	1.63E-03	4.06E-03	1.30E-02	1.88E-02	1.53E-02	1.33E-02	1.24E-02	1.22E-02	1.12E-02	1.05E-02	9.16E-03
ET1-bas	0.0	0.0	0.0	4.65E-07	4.13E-05	1.47E-04	3.14E-04	4.99E-04	5.66E-04	5.85E-04	5.94E-04	6.08E-04
ET2-bas	0.0	0.0	0.0	4.65E-07	4.13E-05	1.47E-04	3.14E-04	4.99E-04	5.66E-04	5.85E-04	5.94E-04	6.08E-04
LN-ET	0.0	0.0	0.0	4.65E-07	4.13E-05	1.47E-04	3.14E-04	4.99E-04	5.66E-04	5.85E-04	5.94E-04	6.08E-04
BBi-bas	0.0	0.0	0.0	1.48E-06	3.45E-04	1.64E-03	2.19E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.37E-03
BBi-sec	0.0	0.0	0.0	1.48E-06	3.45E-04	1.64E-03	2.19E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.37E-03
bbe-sec	0.0	0.0	0.0	1.48E-06	3.45E-04	1.64E-03	2.19E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.37E-03
AI	0.0	0.0	0.0	1.48E-06	3.45E-04	1.64E-03	2.19E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.37E-03
LN-Th	0.0	0.0	0.0	1.48E-06	3.45E-04	1.64E-03	2.19E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.37E-03
Lng_Tiss	0.0	0.0	0.0	1.48E-06	3.45E-04	1.64E-03	2.19E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.37E-03
Lung_NP	0.0	0.0	0.0	0.0	4.65E-07	4.13E-05	1.47E-04	3.14E-04	4.99E-04	5.66E-04	5.85E-04	5.94E-04
Lung_TB	0.0	0.0	0.0	1.48E-06	3.45E-04	1.64E-03	2.19E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.37E-03
Lung_P	0.0	0.0	0.0	1.48E-06	3.45E-04	1.64E-03	2.19E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.37E-03
Muscle	2.01E-03	5.57E-03	1.00E-02	1.57E-02	1.46E-02	1.06E-02	9.88E-03	9.59E-03	9.13E-03	8.55E-03	8.02E-03	6.62E-03
Ovaries	6.73E-03	6.56E-02	1.62E-01	2.09E-01	1.42E-01	8.85E-02	7.87E-02	7.36E-02	6.84E-02	6.28E-02	5.81E-02	4.66E-02
Pancreas	0.0	2.59E-06	3.80E-04	8.94E-03	2.00E-02	1.70E-02	1.47E-02	1.37E-02	1.26E-02	1.22E-02	1.15E-02	8.57E-03
R_Marrow	7.00E-04	2.06E-03	4.75E-03	1.18E-02	1.63E-02	1.44E-02	1.34E-02	1.31E-02	1.18E-02	1.07E-02	9.95E-03	8.23E-03
Skin	1.56E-07	1.10E-05	2.26E-04	1.95E-03	3.05E-03	2.82E-03	2.70E-03	3.31E-03	3.90E-03	3.59E-03	3.24E-03	2.66E-03
Spleen	2.01E-08	8.07E-06	5.67E-04	7.35E-03	1.50E-02	1.19E-02	1.07E-02	1.10E-02	1.01E-02	9.30E-03	8.62E-03	6.86E-03
Testes	0.0	0.0	3.86E-06	8.55E-04	3.78E-03	4.57E-03	4.52E-03	4.90E-03	4.93E-03	4.60E-03	4.36E-03	4.16E-03
Thymus	0.0	0.0	1.87E-09	1.58E-05	3.05E-04	5.50E-04	7.84E-04	1.04E-03	1.21E-03	1.29E-03	1.32E-03	1.31E-03
Thyroid	0.0	0.0	0.0	4.65E-07	4.13E-05	1.47E-04	3.14E-04	4.99E-04	5.66E-04	5.85E-04	5.94E-04	6.08E-04
GB_Wall	4.52E-03	1.49E-02	3.45E-02	6.79E-02	7.24E-02	4.92E-02	4.19E-02	3.85E-02	3.32E-02	2.85E-02	2.56E-02	2.19E-02
Ht_Wall	0.0	0.0	1.01E-06	2.60E-04	2.14E-03	3.29E-03	3.01E-03	3.14E-03	3.13E-03	3.15E-03	3.14E-03	2.90E-03
Uterus	8.16E-06	1.17E-02	8.13E-02	1.74E-01	1.34E-01	8.33E-02	7.45E-02	6.95E-02	6.21E-02	5.68E-02	5.30E-02	4.44E-02

Specific Absorbed Fraction of Photon Energy in kg<sup>-1</sup>: Recommended Values for the Ten-Year-Old

Source = ULI\_Cont

		Energy (MeV)										
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	0.0	1.36E-08	5.90E-08	2.86E-05	8.62E-03	1.07E-02	9.61E-03	8.01E-03	7.07E-03	6.62E-03	6.43E-03	6.49E-03
UB_Wall1	0.0	2.64E-05	1.55E-03	1.38E-02	2.44E-02	2.03E-02	1.89E-02	1.67E-02	1.53E-02	1.37E-02	1.24E-02	9.77E-03
Bone_Sur	5.04E-06	1.44E-03	6.92E-03	1.89E-02	2.61E-02	1.40E-02	7.63E-03	5.19E-03	4.86E-03	4.33E-03	3.81E-03	3.81E-03
Brain	0.0	0.0	0.0	5.59E-09	2.23E-06	1.20E-05	3.42E-05	8.74E-05	1.37E-04	1.66E-04	1.86E-04	2.34E-04
Breasts	0.0	0.0	5.87E-08	1.00E-04	8.07E-04	1.29E-03	1.79E-03	2.24E-03	2.32E-03	2.26E-03	2.18E-03	1.91E-03
St_Wall1	8.80E-05	1.01E-02	3.07E-02	5.22E-02	4.27E-02	2.89E-02	2.59E-02	2.45E-02	2.45E-02	2.35E-02	2.18E-02	1.94E-02
SI_Wall1	2.15E-02	1.52E-01	3.04E-01	3.27E-01	1.91E-01	1.14E-01	1.06E-01	1.03E-01	9.26E-02	8.47E-02	7.87E-02	6.38E-02
ULI_Wall1	1.03E+00	1.88E+00	1.85E+00	1.08E+00	4.61E-01	2.62E-01	2.64E-01	2.72E-01	2.53E-01	2.33E-01	2.15E-01	1.66E-01
LLI_Wall1	9.45E-04	1.40E-02	3.48E-02	4.13E-02	3.43E-02	2.48E-02	2.12E-02	2.30E-02	1.89E-02	1.75E-02	1.68E-02	1.42E-02
Kidneys	0.0	9.00E-06	1.18E-03	1.44E-02	2.37E-02	1.91E-02	1.72E-02	1.67E-02	1.54E-02	1.53E-02	1.48E-02	1.07E-02
Liver	2.42E-04	2.25E-03	1.10E-02	2.97E-02	3.23E-02	2.36E-02	2.13E-02	1.98E-02	1.81E-02	1.77E-02	1.70E-02	1.29E-02
ET1-bas	0.0	0.0	0.0	7.24E-07	5.32E-05	2.04E-04	4.07E-04	4.07E-04	5.73E-04	6.20E-04	6.20E-04	5.99E-04
ET2-bas	0.0	0.0	0.0	7.24E-07	5.32E-05	2.04E-04	4.07E-04	4.07E-04	5.73E-04	6.20E-04	6.20E-04	5.99E-04
LN-ET	0.0	0.0	0.0	7.24E-07	5.32E-05	2.04E-04	4.07E-04	4.07E-04	5.73E-04	6.20E-04	6.20E-04	5.99E-04
BBi-bas	0.0	0.0	2.67E-06	5.03E-04	2.04E-03	2.66E-03	2.84E-03	2.78E-03	2.77E-03	2.68E-03	2.68E-03	2.05E-03
BBi-sec	0.0	0.0	2.67E-06	5.03E-04	2.04E-03	2.66E-03	2.84E-03	2.78E-03	2.77E-03	2.68E-03	2.68E-03	2.05E-03
bbe-sec	0.0	0.0	2.67E-06	5.03E-04	2.04E-03	2.66E-03	2.84E-03	2.78E-03	2.77E-03	2.68E-03	2.68E-03	2.05E-03
AI	0.0	0.0	2.67E-06	5.03E-04	2.04E-03	2.66E-03	2.84E-03	2.78E-03	2.77E-03	2.68E-03	2.54E-03	2.05E-03
LN-Th	0.0	0.0	2.67E-06	5.03E-04	2.04E-03	2.66E-03	2.84E-03	2.78E-03	2.77E-03	2.68E-03	2.54E-03	2.05E-03
Ing_Tiss	0.0	0.0	2.67E-06	5.03E-04	2.04E-03	2.66E-03	2.84E-03	2.78E-03	2.77E-03	2.68E-03	2.54E-03	2.05E-03
Lung_NP	0.0	0.0	0.0	7.24E-07	5.32E-05	2.04E-04	4.07E-04	4.07E-04	5.73E-04	6.20E-04	6.20E-04	5.99E-04
Lung_TB	0.0	0.0	2.67E-06	5.03E-04	2.04E-03	2.66E-03	2.84E-03	2.78E-03	2.77E-03	2.68E-03	2.54E-03	2.05E-03
Lung_P	0.0	0.0	2.67E-06	5.03E-04	2.04E-03	2.66E-03	2.84E-03	2.78E-03	2.77E-03	2.68E-03	2.54E-03	2.05E-03
Muscle	2.21E-04	2.72E-03	8.07E-03	1.49E-02	1.37E-02	9.92E-03	9.19E-03	8.54E-03	7.93E-03	7.44E-03	6.30E-03	6.30E-03
Ovaries	9.44E-04	5.68E-02	1.62E-01	1.73E-01	1.11E-01	7.00E-02	6.19E-02	5.98E-02	5.41E-02	4.86E-02	4.51E-02	4.06E-02
Pancreas	0.0	3.66E-06	7.55E-04	1.28E-02	2.57E-02	1.98E-02	1.61E-02	1.50E-02	1.47E-02	1.28E-02	1.15E-02	1.05E-02
R_Marrow	1.44E-04	9.91E-04	3.90E-03	9.70E-03	1.32E-02	1.16E-02	1.09E-02	1.05E-02	9.65E-03	8.97E-03	8.42E-03	6.97E-03
Skin	6.57E-08	1.13E-05	4.34E-04	2.22E-03	3.28E-03	2.79E-03	2.87E-03	3.24E-03	3.64E-03	3.52E-03	3.29E-03	2.61E-03
Spleen	0.0	3.89E-06	5.48E-04	6.44E-03	1.50E-02	1.17E-02	1.02E-02	1.06E-02	9.78E-03	8.13E-03	7.23E-03	7.07E-03
Testes	0.0	1.40E-10	4.04E-06	7.25E-04	2.41E-03	3.81E-03	3.87E-03	4.04E-03	3.50E-03	3.57E-03	3.71E-03	3.74E-03
Thymus	0.0	0.0	4.81E-09	2.62E-05	5.03E-04	6.39E-04	7.86E-04	9.73E-04	1.10E-03	1.17E-03	1.22E-03	1.32E-03
Thyroid	0.0	0.0	0.0	7.24E-07	5.32E-05	2.04E-04	4.07E-04	4.07E-04	5.73E-04	6.20E-04	6.36E-04	5.99E-04
GB_Wall1	4.56E-04	3.54E-02	9.91E-02	1.55E-01	1.19E-01	7.91E-02	6.85E-02	6.03E-02	5.15E-02	4.80E-02	3.92E-02	3.92E-02
Ht_Wall1	0.0	0.0	2.37E-06	6.39E-04	2.84E-03	3.92E-03	3.31E-03	3.58E-03	3.50E-03	3.53E-03	3.54E-03	3.27E-03
Uterus	0.0	1.64E-04	7.79E-03	5.14E-02	6.48E-02	4.34E-02	3.83E-02	3.70E-02	3.28E-02	2.96E-02	2.76E-02	2.39E-02

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = ULI_Wall	Energy (MeV)											
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	0.0	2.05E-08	6.67E-05	3.61E-03	9.01E-03	1.05E-02	9.82E-02	8.75E-03	8.47E-03	8.31E-03	8.00E-03	6.52E-03
UB_Wall1	1.56E-07	3.43E-05	1.57E-03	1.45E-02	2.75E-02	2.40E-02	2.03E-02	1.74E-02	1.53E-02	1.39E-02	1.29E-02	1.07E-02
Bone_Sur	5.04E-06	1.44E-03	6.92E-03	1.89E-02	2.61E-02	1.40E-02	7.63E-03	5.19E-03	4.86E-03	4.33E-03	3.81E-03	3.81E-03
Brain	0.0	0.0	0.0	5.62E-09	2.23E-06	1.19E-05	2.62E-05	5.62E-05	9.55E-05	1.25E-04	1.51E-04	1.98E-04
Breasts	0.0	0.0	6.61E-08	1.04E-04	8.85E-04	1.30E-03	1.70E-03	2.01E-03	2.09E-03	2.09E-03	2.07E-03	1.92E-03
St_Wall1	5.38E-03	1.72E-02	3.92E-02	5.77E-02	4.95E-02	3.52E-02	3.08E-02	2.77E-02	2.48E-02	2.25E-02	2.10E-02	1.72E-02
SI_Wall1	2.06E-01	3.71E-01	4.36E-01	3.60E-01	2.07E-01	1.27E-01	1.13E-01	1.15E-01	1.09E-01	9.87E-02	8.98E-02	7.04E-02
ULI_Wall1	8.04E+00	5.04E+00	3.13E+00	1.42E+00	5.63E-01	3.30E-01	3.37E-01	3.57E-01	3.34E-01	3.03E-01	2.78E-01	2.22E-01
LLI_Wall1	1.31E-02	2.65E-02	4.37E-02	4.80E-02	3.91E-02	2.91E-02	2.58E-02	2.33E-02	2.09E-02	1.90E-02	1.77E-02	1.45E-02
Kidneys	0.0	1.70E-05	1.61E-03	1.43E-02	2.70E-02	2.13E-02	1.76E-02	1.79E-02	1.79E-02	1.64E-02	1.54E-02	1.17E-02
Liver	2.10E-04	3.33E-03	1.24E-02	2.90E-02	3.14E-02	2.30E-02	2.03E-02	1.95E-02	1.82E-02	1.76E-02	1.68E-02	1.30E-02
ET1-bas	0.0	0.0	0.0	7.39E-07	5.35E-05	2.05E-04	3.41E-04	4.90E-04	5.74E-04	6.19E-04	6.36E-04	5.99E-04
ET2-bas	0.0	0.0	0.0	7.39E-07	5.35E-05	2.05E-04	3.41E-04	4.90E-04	5.74E-04	6.19E-04	6.36E-04	5.99E-04
LN-ET	0.0	0.0	0.0	7.39E-07	5.35E-05	2.05E-04	3.41E-04	4.90E-04	5.74E-04	6.19E-04	6.36E-04	5.99E-04
BBi-bas	0.0	1.22E-10	3.01E-06	5.43E-04	2.00E-03	3.05E-03	2.99E-03	2.93E-03	2.61E-03	2.41E-03	2.32E-03	2.36E-03
BBi-sec	0.0	1.22E-10	3.01E-06	5.43E-04	2.00E-03	3.05E-03	2.99E-03	2.93E-03	2.61E-03	2.41E-03	2.32E-03	2.36E-03
bbe-sec	0.0	1.22E-10	3.01E-06	5.43E-04	2.00E-03	3.05E-03	2.99E-03	2.93E-03	2.61E-03	2.41E-03	2.32E-03	2.36E-03
AI	0.0	1.22E-10	3.01E-06	5.43E-04	2.00E-03	3.05E-03	2.99E-03	2.93E-03	2.61E-03	2.41E-03	2.32E-03	2.36E-03
LN-Th	0.0	1.22E-10	3.01E-06	5.43E-04	2.00E-03	3.05E-03	2.99E-03	2.93E-03	2.61E-03	2.41E-03	2.32E-03	2.36E-03
Lng_Tiss	0.0	1.22E-10	3.01E-06	5.43E-04	2.00E-03	3.05E-03	2.99E-03	2.93E-03	2.61E-03	2.41E-03	2.32E-03	2.36E-03
Lung_NP	0.0	0.0	0.0	7.39E-07	5.35E-05	2.05E-04	3.41E-04	4.90E-04	5.74E-04	6.19E-04	6.36E-04	5.99E-04
Lung_TB	0.0	1.22E-10	3.01E-06	5.43E-04	2.00E-03	3.05E-03	2.99E-03	2.93E-03	2.61E-03	2.41E-03	2.32E-03	2.36E-03
Lung_P	0.0	1.22E-10	3.01E-06	5.43E-04	2.00E-03	3.05E-03	2.99E-03	2.93E-03	2.61E-03	2.41E-03	2.32E-03	2.36E-03
Muscle	2.19E-03	6.28E-03	1.04E-02	1.52E-02	1.41E-02	1.04E-02	8.31E-03	7.72E-03	7.47E-03	7.68E-03	7.71E-03	6.83E-03
Ovaries	3.21E-02	1.74E-01	2.59E-01	2.12E-01	1.17E-01	7.56E-02	7.07E-02	6.94E-02	6.48E-02	6.06E-02	5.67E-02	4.50E-02
Pancreas	0.0	5.41E-06	1.15E-03	1.43E-02	2.51E-02	1.81E-02	1.69E-02	1.71E-02	1.45E-02	1.43E-02	1.40E-02	1.05E-02
R_Marrow	1.44E-04	9.91E-04	3.90E-03	9.70E-03	1.32E-02	1.16E-02	1.09E-02	1.05E-02	9.65E-03	8.97E-03	8.42E-03	6.97E-03
Skin	0.0	2.61E-05	5.91E-04	3.52E-03	6.11E-03	5.75E-03	5.11E-03	4.51E-03	4.06E-03	3.74E-03	3.52E-03	2.96E-03
Spleen	0.0	5.71E-06	5.93E-04	7.33E-03	1.54E-02	1.25E-02	1.03E-02	9.82E-03	1.01E-02	1.06E-02	1.04E-02	7.21E-03
Testes	0.0	1.57E-10	4.06E-06	5.68E-04	2.78E-03	4.26E-03	4.32E-03	4.72E-03	5.05E-03	5.07E-03	4.88E-03	3.73E-03
Thymus	0.0	0.0	5.31E-09	2.68E-05	4.80E-04	7.00E-04	8.40E-04	9.70E-04	1.08E-03	1.13E-03	1.17E-03	1.23E-03
Thyroid	0.0	0.0	0.0	7.39E-07	5.35E-05	2.05E-04	3.41E-04	4.90E-04	5.74E-04	6.19E-04	6.36E-04	5.99E-04
GB_Wall1	2.46E-03	6.000E-02	1.36E-01	1.80E-01	1.27E-01	7.97E-02	7.03E-02	6.49E-02	5.85E-02	5.30E-02	4.94E-02	4.04E-02
Ht_Wall1	0.0	0.0	2.55E-06	5.59E-04	2.27E-03	3.67E-03	3.41E-03	3.01E-03	3.43E-03	3.42E-03	3.26E-03	2.90E-02
Uterus	4.95E-10	3.41E-04	9.41E-03	5.51E-02	6.52E-02	4.39E-02	3.92E-02	3.68E-02	3.27E-02	2.78E-02	2.48E-02	2.09E-02

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = LLI\_Cont

		Energy (MeV)										
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	0.0	0.0	2.55E-06	5.04E-04	1.78E-03	3.37E-03	3.71E-03	3.84E-03	3.54E-03	3.28E-03	3.10E-03	2.76E-03
UB_Wall1	5.50E-07	2.59E-03	2.47E-02	8.57E-02	7.89E-02	4.50E-02	3.89E-02	4.47E-02	3.72E-02	3.14E-02	2.85E-02	2.57E-02
Bone_Sur	1.48E-04	6.52E-03	2.42E-02	4.63E-02	4.14E-02	1.89E-02	1.03E-02	7.39E-03	6.88E-03	6.38E-03	5.96E-03	5.00E-03
Brain	0.0	0.0	0.0	9.57E-10	6.65E-07	4.67E-06	4.67E-04	8.72E-04	1.09E-03	1.16E-03	1.19E-03	1.06E-03
Breasts	0.0	0.0	4.16E-09	1.73E-05	2.99E-04	6.67E-04	6.67E-04	8.72E-04	1.09E-03	1.16E-03	1.19E-03	1.06E-03
St_Wall1	1.33E-08	2.69E-04	2.48E-03	1.32E-02	1.81E-02	1.37E-02	1.25E-02	1.24E-02	1.16E-02	1.03E-02	9.45E-03	8.55E-03
SI_Wall1	7.82E-03	7.75E-02	1.56E-01	1.64E-01	1.03E-01	6.61E-02	5.95E-02	5.82E-02	5.36E-02	4.90E-02	4.55E-02	3.80E-02
ULI_Wall1	2.03E-02	5.24E-02	6.92E-02	6.52E-02	4.45E-02	3.16E-02	2.84E-02	2.89E-02	2.57E-02	2.29E-02	2.09E-02	1.67E-02
LLI_Wall1	1.54E+00	2.68E+00	2.45E+00	1.31E+00	5.35E-01	3.06E-01	3.13E-01	3.18E-01	2.94E-01	2.72E-01	2.52E-01	1.94E-01
Kidneys	0.0	3.10E-07	1.35E-04	3.69E-03	6.50E-03	7.75E-03	7.46E-03	7.32E-03	6.79E-03	6.47E-03	6.29E-03	6.03E-03
Liver	0.0	3.93E-10	3.51E-06	5.60E-04	2.33E-03	3.43E-03	2.99E-03	3.37E-03	3.24E-03	3.17E-03	3.09E-03	2.58E-03
ET1-bas	0.0	0.0	0.0	1.17E-07	1.52E-05	7.93E-05	1.50E-04	2.46E-04	3.14E-04	3.50E-04	3.71E-04	3.73E-04
ET2-bas	0.0	0.0	0.0	1.17E-07	1.52E-05	7.93E-05	1.50E-04	2.46E-04	3.14E-04	3.50E-04	3.71E-04	3.73E-04
LN-ET	0.0	0.0	0.0	1.17E-07	1.52E-05	7.93E-05	1.50E-04	2.46E-04	3.14E-04	3.50E-04	3.71E-04	3.73E-04
BBi-bas	0.0	0.0	0.0	1.36E-07	7.90E-05	4.49E-04	1.01E-03	1.00E-03	1.24E-03	1.42E-03	1.45E-03	1.25E-03
BBi-sec	0.0	0.0	0.0	1.36E-07	7.90E-05	4.49E-04	1.01E-03	1.00E-03	1.24E-03	1.42E-03	1.45E-03	1.25E-03
bbe-sec	0.0	0.0	0.0	1.36E-07	7.90E-05	4.49E-04	1.01E-03	1.00E-03	1.24E-03	1.42E-03	1.45E-03	1.25E-03
AI	0.0	0.0	0.0	1.36E-07	7.90E-05	4.49E-04	1.01E-03	1.00E-03	1.24E-03	1.42E-03	1.45E-03	1.25E-03
LN-Th	0.0	0.0	0.0	1.36E-07	7.90E-05	4.49E-04	1.01E-03	1.00E-03	1.24E-03	1.42E-03	1.45E-03	1.25E-03
Lng_Tiss	0.0	0.0	0.0	1.36E-07	7.90E-05	4.49E-04	1.01E-03	1.00E-03	1.24E-03	1.42E-03	1.45E-03	1.25E-03
Lung_NP	0.0	0.0	0.0	0.0	1.17E-07	1.52E-05	7.93E-05	1.00E-03	1.24E-03	1.42E-03	1.45E-03	1.25E-03
Lung_TB	0.0	0.0	0.0	1.36E-07	7.90E-05	4.49E-04	1.01E-03	1.00E-03	1.24E-03	1.42E-03	1.45E-03	1.25E-03
Lung_P	0.0	0.0	0.0	1.36E-07	7.90E-05	4.49E-04	1.01E-03	1.00E-03	1.24E-03	1.42E-03	1.45E-03	1.25E-03
Muscle	3.14E-04	4.35E-03	1.10E-02	1.80E-02	1.59E-02	1.15E-02	1.07E-02	1.07E-02	1.07E-02	9.97E-03	9.20E-03	8.57E-03
Ovaries	5.58E-03	2.03E-01	4.30E-01	3.91E-01	3.91E-01	1.99E-01	1.21E-01	1.19E-01	1.19E-01	9.93E-03	9.04E-03	8.48E-03
Pancreas	0.0	1.41E-08	3.91E-05	1.75E-03	5.92E-03	7.88E-03	6.41E-03	5.86E-03	5.49E-03	5.34E-03	5.22E-03	4.71E-03
R_Marrow	1.07E-04	4.26E-03	1.45E-02	2.47E-02	2.23E-02	1.73E-02	1.65E-02	1.57E-02	1.45E-02	1.32E-02	1.21E-02	9.96E-03
Skin	4.31E-04	7.11E-04	1.20E-03	2.59E-03	3.90E-03	3.48E-03	3.51E-03	3.82E-03	3.49E-03	3.27E-03	3.19E-03	3.33E-03
Spleen	0.0	2.56E-07	1.23E-04	2.99E-03	9.23E-03	7.63E-03	6.89E-03	6.27E-03	6.07E-03	5.68E-03	5.42E-03	5.27E-03
Testes	0.0	3.31E-05	2.85E-03	1.45E-02	2.33E-02	1.68E-02	1.68E-02	1.64E-02	1.38E-02	1.36E-02	1.34E-02	1.09E-02
Thymus	0.0	0.0	2.10E-10	3.94E-06	1.24E-04	3.48E-04	5.17E-04	6.86E-04	7.67E-04	7.99E-04	8.20E-04	7.51E-04
Thyroid	0.0	0.0	0.0	1.17E-07	1.52E-05	7.93E-05	1.50E-04	2.46E-04	3.14E-04	3.50E-04	3.71E-04	3.73E-04
GB_Wall1	0.0	4.61E-07	2.18E-04	4.93E-03	8.76E-03	1.23E-02	1.28E-02	1.10E-02	9.46E-03	8.22E-03	7.32E-03	6.07E-03
Ht_Wall1	0.0	0.0	1.31E-07	8.96E-05	7.72E-04	1.20E-03	1.47E-03	1.60E-03	1.64E-03	1.67E-03	1.71E-03	1.69E-03
Uterus	0.0	2.43E-04	1.41E-02	7.44E-02	8.56E-02	5.59E-02	5.03E-02	4.26E-02	4.06E-02	3.79E-02	3.49E-02	2.64E-02

Specific Absorbed Fraction of Photon Energy in kg<sup>-1</sup>: Recommended Values for the Ten-Year-Old

Source = LLI_Wall	Energy (MeV)											
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	0.0	0.0	2.02E-06	3.95E-04	1.46E-04	2.88E-03	3.21E-03	3.18E-03	3.00E-03	2.83E-03	2.42E-03	2.42E-03
UB_Wall	3.31E-06	5.62E-03	4.21E-02	1.07E-01	9.71E-02	6.41E-02	5.49E-02	4.92E-02	4.92E-02	3.98E-02	3.71E-02	3.03E-02
Bone_Sur	1.48E-04	6.52E-03	2.42E-02	4.63E-02	4.14E-02	1.89E-02	1.03E-02	7.39E-03	6.88E-03	5.96E-03	5.00E-03	5.00E-03
Brain	0.0	0.0	0.0	7.23E-10	5.25E-07	3.83E-06	1.00E-05	2.55E-05	4.89E-05	6.80E-05	8.59E-05	1.21E-04
Breasts	0.0	0.0	3.16E-09	1.32E-05	2.38E-04	5.70E-04	7.33E-04	9.23E-04	1.00E-03	1.03E-03	1.05E-03	9.38E-04
St_Wall	6.81E-09	1.70E-04	2.43E-03	1.09E-02	1.64E-02	1.43E-02	1.25E-02	1.09E-02	9.74E-03	8.88E-03	8.31E-03	6.89E-03
SI_Wall	7.92E-02	1.39E-01	1.66E-01	1.43E-01	8.81E-02	5.70E-02	5.07E-02	4.81E-02	4.48E-02	4.14E-02	3.83E-02	2.96E-02
ULI_Wall	1.31E-02	2.65E-02	4.37E-02	4.80E-02	3.91E-02	2.91E-02	2.58E-02	2.33E-02	2.09E-02	1.90E-02	1.77E-02	1.45E-02
LLI_Wall	1.08E+01	6.71E+00	4.17E+00	1.81E+00	6.77E-01	3.98E-01	4.10E-01	4.48E-01	4.20E-01	3.80E-01	3.47E-01	2.72E-01
Kidneys	0.0	4.04E-07	1.18E-04	2.68E-03	5.43E-03	6.63E-03	6.04E-03	5.70E-03	5.63E-03	5.34E-03	5.05E-03	4.27E-03
Liver	0.0	4.34E-10	2.85E-06	3.90E-04	1.60E-03	2.81E-03	2.72E-03	2.57E-03	2.57E-03	2.66E-03	2.61E-03	2.38E-03
ET1-bas	0.0	0.0	0.0	8.87E-08	1.20E-05	6.50E-05	1.26E-04	2.12E-04	2.75E-04	3.09E-04	3.35E-04	3.36E-04
ET2-bas	0.0	0.0	0.0	8.87E-08	1.20E-05	6.50E-05	1.26E-04	2.12E-04	2.75E-04	3.09E-04	3.35E-04	3.36E-04
LN-ET	0.0	0.0	0.0	8.87E-08	1.20E-05	6.50E-05	1.26E-04	2.12E-04	2.75E-04	3.09E-04	3.35E-04	3.36E-04
BBi-bas	0.0	0.0	1.06E-07	5.97E-05	5.65E-04	6.64E-04	7.91E-04	9.86E-04	1.10E-03	1.13E-03	1.01E-03	1.01E-03
BBi-sec	0.0	0.0	1.06E-07	5.97E-05	5.65E-04	6.64E-04	7.91E-04	9.86E-04	1.10E-03	1.13E-03	1.01E-03	1.01E-03
bbe-sec	0.0	0.0	1.06E-07	5.97E-05	5.65E-04	6.64E-04	7.91E-04	9.86E-04	1.10E-03	1.13E-03	1.01E-03	1.01E-03
AI	0.0	0.0	1.06E-07	5.97E-05	5.65E-04	6.64E-04	7.91E-04	9.86E-04	1.10E-03	1.13E-03	1.01E-03	1.01E-03
LN-Th	0.0	0.0	1.06E-07	5.97E-05	5.65E-04	6.64E-04	7.91E-04	9.86E-04	1.10E-03	1.13E-03	1.01E-03	1.01E-03
Lng_Tiss	0.0	0.0	1.06E-07	5.97E-05	5.65E-04	6.64E-04	7.91E-04	9.86E-04	1.10E-03	1.13E-03	1.01E-03	1.01E-03
Lung_NP	0.0	0.0	0.0	8.87E-08	1.20E-05	6.50E-05	1.26E-04	2.12E-04	2.75E-04	3.09E-04	3.35E-04	3.36E-04
Lung_TB	0.0	0.0	1.06E-07	5.97E-05	5.65E-04	6.64E-04	7.91E-04	9.86E-04	1.10E-03	1.13E-03	1.01E-03	1.01E-03
Lung_P	0.0	0.0	1.06E-07	5.97E-05	5.65E-04	6.64E-04	7.91E-04	9.86E-04	1.10E-03	1.13E-03	1.01E-03	1.01E-03
Muscle	5.00E-03	8.13E-03	1.10E-02	5.53E-02	1.67E-02	1.43E-02	1.17E-02	9.60E-03	8.90E-03	8.57E-03	8.34E-03	7.76E-03
Ovaries	6.52E-02	2.90E-01	4.31E-01	3.28E-01	1.72E-01	1.06E-01	1.01E-01	8.95E-02	8.41E-02	7.90E-02	6.04E-02	6.04E-02
Pancreas	0.0	1.06E-08	2.91E-05	1.86E-03	4.94E-03	6.09E-03	5.37E-03	4.48E-03	4.54E-03	4.57E-03	4.44E-03	3.63E-03
R_Marrow	1.07E-04	4.26E-03	1.45E-02	2.47E-02	2.23E-02	1.73E-02	1.65E-02	1.57E-02	1.45E-02	1.32E-02	1.21E-02	9.96E-03
Skin	8.65E-05	4.87E-04	1.66E-03	4.88E-03	7.30E-03	6.55E-03	5.80E-03	5.11E-03	4.61E-03	4.23E-03	3.98E-03	3.33E-03
Spleen	0.0	2.37E-07	9.33E-05	2.55E-03	5.75E-03	6.80E-03	5.91E-03	5.95E-03	5.88E-03	5.47E-03	5.06E-03	3.98E-03
Testes	0.0	9.31E-05	5.98E-03	2.74E-02	3.28E-02	2.39E-02	2.21E-02	1.98E-02	1.94E-02	1.82E-02	1.70E-02	1.43E-02
Thymus	0.0	1.55E-10	2.96E-06	9.72E-05	2.90E-04	4.27E-04	5.88E-04	6.71E-04	7.06E-04	7.16E-04	6.73E-04	6.73E-04
Thyroid	0.0	0.0	0.0	8.87E-08	1.20E-05	6.50E-05	1.26E-04	2.12E-04	2.75E-04	3.09E-04	3.35E-04	3.36E-04
GB_Wall	0.0	4.16E-07	1.69E-04	4.11E-03	1.14E-02	1.19E-02	1.05E-02	1.05E-02	8.98E-03	7.28E-03	6.82E-03	5.67E-03
Ht_Wall	0.0	0.0	9.86E-08	6.80E-05	6.64E-04	9.01E-04	1.09E-03	1.23E-03	1.30E-03	1.33E-03	1.37E-03	1.37E-03
Uterus	0.0	2.85E-04	1.32E-02	7.12E-02	8.22E-02	5.29E-02	4.54E-02	4.12E-02	3.85E-02	3.75E-02	3.55E-02	2.60E-02

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = Kidneys

Energy (MeV)

Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	4.84E-03	5.22E-02	1.29E-01	1.57E-01	1.06E-01	7.46E-02	6.89E-02	6.69E-02	6.74E-02	6.21E-02	5.67E-02	4.40E-02
UB_Wall1	0.0	5.85E-07	2.95E-04	2.08E-03	2.49E-03	2.91E-03	3.29E-03	3.32E-03	3.23E-03	3.09E-03	2.64E-03	2.64E-03
Bone_Sur	1.39E-04	3.49E-03	1.40E-02	3.67E-02	3.90E-02	1.90E-02	1.06E-02	8.00E-03	7.26E-03	6.82E-03	6.45E-03	5.42E-03
Brain	0.0	0.0	0.0	5.72E-08	9.29E-06	5.32E-05	7.84E-05	1.31E-04	1.91E-04	2.33E-04	2.68E-04	3.65E-04
Breasts	0.0	0.0	0.0	3.85E-07	7.36E-04	2.82E-03	2.59E-03	3.19E-03	3.63E-03	3.53E-03	3.36E-03	3.21E-03
St_Wall1	0.0	2.18E-05	1.78E-03	1.94E-02	2.80E-02	2.27E-02	2.08E-02	2.06E-02	1.92E-02	1.70E-02	1.53E-02	1.25E-02
SI_Wall1	5.55E-10	1.06E-04	3.50E-03	1.77E-02	2.70E-02	2.20E-02	2.06E-02	1.90E-02	1.73E-02	1.62E-02	1.52E-02	1.25E-02
ULI_Wall1	0.0	1.70E-05	1.61E-03	1.43E-02	2.70E-02	2.13E-02	1.76E-02	1.79E-02	1.64E-02	1.54E-02	1.45E-02	1.17E-02
LLI_Wall1	0.0	4.04E-07	1.18E-04	2.68E-03	5.43E-03	6.63E-03	6.04E-03	5.70E-03	5.63E-03	5.34E-03	5.05E-03	4.27E-03
Kidneys	5.37E+00	4.43E+00	3.21E+00	1.54E+00	5.95E-01	3.46E-01	3.56E-01	3.74E-01	3.54E-01	3.29E-01	3.06E-01	2.39E-01
Liver	8.35E-05	3.55E-03	1.58E-02	3.85E-02	3.75E-02	2.74E-02	2.49E-02	2.35E-02	2.19E-02	2.04E-02	1.91E-02	1.62E-02
ET1-bas	0.0	0.0	1.36E-10	5.08E-06	2.18E-04	6.20E-04	7.04E-04	7.71E-04	8.36E-04	9.36E-04	9.48E-04	1.01E-03
ET2-bas	0.0	0.0	1.36E-10	5.08E-06	2.18E-04	6.20E-04	7.04E-04	7.71E-04	8.36E-04	9.48E-04	1.01E-03	9.37E-04
LN-ET	0.0	0.0	1.36E-10	5.08E-06	2.18E-04	6.20E-04	7.04E-04	7.71E-04	8.36E-04	9.48E-04	1.01E-03	9.37E-04
BBi-bas	0.0	5.05E-06	5.96E-04	5.35E-03	9.10E-03	7.87E-03	7.35E-03	6.81E-03	7.09E-03	6.34E-03	5.74E-03	5.15E-03
BBi-sec	0.0	5.05E-06	5.96E-04	5.35E-03	9.10E-03	7.87E-03	7.35E-03	6.81E-03	7.09E-03	6.34E-03	5.74E-03	5.15E-03
bbe-sec	0.0	5.05E-06	5.96E-04	5.35E-03	9.10E-03	7.87E-03	7.35E-03	6.81E-03	7.09E-03	6.34E-03	5.74E-03	5.15E-03
AI	0.0	5.05E-06	5.96E-04	5.35E-03	9.10E-03	7.87E-03	7.35E-03	6.81E-03	7.09E-03	6.34E-03	5.74E-03	5.15E-03
LN-Th	0.0	5.05E-06	5.96E-04	5.35E-03	9.10E-03	7.87E-03	7.35E-03	6.81E-03	7.09E-03	6.34E-03	5.74E-03	5.15E-03
Ing_Tiss	0.0	5.05E-06	5.96E-04	5.35E-03	9.10E-03	7.87E-03	7.35E-03	6.81E-03	7.09E-03	6.34E-03	5.74E-03	5.15E-03
Lung_NP	0.0	0.0	1.36E-10	5.08E-06	2.18E-04	6.20E-04	7.04E-04	7.71E-04	8.36E-04	9.48E-04	1.01E-03	9.37E-04
Lung_TB	0.0	5.05E-06	5.96E-04	5.35E-03	9.10E-03	7.87E-03	7.35E-03	6.81E-03	7.09E-03	6.34E-03	5.74E-03	5.15E-03
Lung_P	0.0	5.05E-06	5.96E-04	5.35E-03	9.10E-03	7.87E-03	7.35E-03	6.81E-03	7.09E-03	6.34E-03	5.74E-03	5.15E-03
Muscle	3.13E-03	8.91E-03	1.43E-02	1.59E-02	1.16E-02	8.53E-03	8.27E-03	8.39E-03	8.04E-03	7.58E-03	7.14E-03	5.88E-03
Ovaries	0.0	1.55E-08	4.97E-05	2.30E-03	7.47E-03	8.85E-03	8.20E-03	8.49E-03	7.53E-03	6.96E-03	6.66E-03	6.24E-03
Pancreas	5.22E-10	3.99E-04	1.26E-02	6.20E-02	6.58E-02	4.69E-02	3.98E-02	4.04E-02	3.44E-02	3.02E-02	2.77E-02	2.36E-02
R_Marrow	6.38E-05	1.33E-03	4.91E-03	1.23E-02	1.51E-02	1.38E-02	1.37E-02	1.35E-02	1.23E-02	1.14E-02	1.08E-02	8.81E-03
Skin	1.14E-04	7.68E-04	2.97E-03	5.28E-03	4.27E-03	3.41E-03	3.68E-03	4.08E-03	3.89E-03	3.94E-03	3.93E-03	3.31E-03
Spleen	2.92E-03	3.80E-02	1.13E-01	1.51E-01	9.95E-02	6.31E-02	5.57E-02	5.76E-02	5.31E-02	4.89E-02	4.55E-02	3.69E-02
Testes	0.0	0.0	1.53E-09	1.76E-05	3.60E-04	6.40E-04	8.50E-04	1.05E-03	1.16E-03	1.18E-03	1.20E-03	1.12E-03
Thymus	0.0	0.0	7.94E-08	1.13E-04	7.80E-04	1.89E-03	2.30E-03	2.50E-03	2.60E-03	2.64E-03	2.57E-03	2.21E-03
Thyroid	0.0	0.0	1.36E-10	5.08E-06	2.18E-04	6.20E-04	7.04E-04	7.71E-04	8.36E-04	9.48E-04	1.01E-03	9.37E-04
GB_Wall1	0.0	3.31E-05	3.69E-03	2.55E-02	5.26E-02	3.56E-02	2.48E-02	2.40E-02	2.00E-02	1.86E-02	1.80E-02	1.66E-02
Ht_Wall1	0.0	2.51E-08	4.81E-05	2.89E-03	7.30E-03	8.58E-03	7.65E-03	7.51E-03	7.66E-03	6.95E-03	6.32E-03	5.20E-03
Uterus	0.0	1.26E-09	1.72E-05	1.78E-03	6.39E-03	8.05E-03	6.87E-03	6.99E-03	7.56E-03	7.10E-03	6.57E-03	5.48E-03

Specific Absorbed Fraction of Photon Energy in kg<sup>-1</sup>: Recommended Values for the Ten-Year-Old

Source = Liver	Energy (MeV)											
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	1.26E-04	8.60E-03	3.28E-02	6.11E-02	5.39E-02	3.90E-02	3.44E-02	3.31E-02	3.15E-02	2.97E-02	2.76E-02	2.07E-02
UB_Wall1	0.0	7.18E-07	2.33E-04	1.57E-03	2.12E-03	2.52E-03	2.75E-03	2.75E-03	2.70E-03	2.62E-03	2.26E-03	
Bone_Sur	2.79E-04	2.51E-03	8.53E-03	2.31E-02	2.74E-02	1.36E-02	7.48E-03	5.54E-03	5.24E-03	4.89E-03	4.60E-03	4.07E-03
Brain	0.0	0.0	0.0	2.37E-07	4.23E-05	1.13E-04	2.14E-04	3.31E-04	4.07E-04	4.52E-04	4.83E-04	5.51E-04
Breasts	0.0	4.17E-07	6.28E-04	5.18E-03	9.32E-03	7.62E-03	7.77E-03	8.38E-03	8.35E-03	8.01E-03	7.56E-03	5.98E-03
St_Wall1	1.37E-04	1.47E-03	7.93E-03	2.34E-02	6.8E-02	1.97E-02	1.80E-02	1.61E-02	1.42E-02	1.43E-02	1.42E-02	1.20E-02
SI_Wall1	5.70E-04	1.63E-03	4.06E-03	1.30E-02	1.88E-02	1.53E-02	1.33E-02	1.24E-02	1.22E-02	1.12E-02	1.05E-02	9.16E-03
ULI_Wall1	2.10E-04	3.33E-03	1.24E-02	2.90E-02	3.14E-02	2.30E-02	2.03E-02	1.95E-02	1.82E-02	1.76E-02	1.68E-02	1.30E-02
LLI_Wall1	0.0	4.34E-10	2.85E-06	3.90E-04	1.60E-03	2.81E-03	2.72E-03	2.57E-03	2.66E-03	2.61E-03	2.55E-03	2.38E-03
Kidneys	8.35E-05	3.55E-03	1.58E-02	3.85E-02	3.75E-02	2.74E-02	2.49E-02	2.35E-02	2.19E-02	2.04E-02	1.91E-02	1.62E-02
Liver	1.08E+00	9.87E-01	8.35E-01	5.27E-01	2.55E-01	1.50E-01	1.46E-01	1.48E-01	1.37E-01	1.26E-01	1.16E-01	9.35E-02
ET1-bas	0.0	0.0	8.00E-09	1.92E-04	9.55E-04	1.52E-03	1.42E-03	1.47E-03	1.42E-03	1.66E-03	1.79E-03	1.55E-03
ET2-bas	0.0	0.0	8.00E-09	1.92E-04	9.55E-04	1.52E-03	1.42E-03	1.47E-03	1.42E-03	1.66E-03	1.79E-03	1.55E-03
LN-ET	0.0	0.0	8.00E-09	1.92E-04	9.55E-04	1.52E-03	1.42E-03	1.47E-03	1.42E-03	1.66E-03	1.79E-03	1.55E-03
BBi-bas	8.66E-04	1.18E-02	2.93E-02	3.95E-02	2.95E-02	1.83E-02	1.69E-02	1.62E-02	1.51E-02	1.36E-02	1.26E-02	1.09E-02
BBi-sec	8.66E-04	1.18E-02	2.93E-02	3.95E-02	2.95E-02	1.83E-02	1.69E-02	1.62E-02	1.51E-02	1.36E-02	1.26E-02	1.09E-02
bbe-sec	8.66E-04	1.18E-02	2.93E-02	3.95E-02	2.95E-02	1.83E-02	1.69E-02	1.62E-02	1.51E-02	1.36E-02	1.26E-02	1.09E-02
AI	8.66E-04	1.18E-02	2.93E-02	3.95E-02	2.95E-02	1.83E-02	1.69E-02	1.62E-02	1.51E-02	1.36E-02	1.26E-02	1.09E-02
LN-Th	8.66E-04	1.18E-02	2.93E-02	3.95E-02	2.95E-02	1.83E-02	1.69E-02	1.62E-02	1.51E-02	1.36E-02	1.26E-02	1.09E-02
Lng_Tiss	8.66E-04	1.18E-02	2.93E-02	3.95E-02	2.95E-02	1.83E-02	1.69E-02	1.62E-02	1.51E-02	1.36E-02	1.26E-02	1.09E-02
Lung_NP	0.0	0.0	8.00E-09	1.92E-04	9.55E-04	1.52E-03	1.42E-03	1.47E-03	1.42E-03	1.66E-03	1.79E-03	1.55E-03
Lung_TB	8.66E-04	1.18E-02	2.93E-02	3.95E-02	2.95E-02	1.83E-02	1.69E-02	1.62E-02	1.51E-02	1.36E-02	1.26E-02	1.09E-02
Lung_P	8.66E-04	1.18E-02	2.93E-02	3.95E-02	2.95E-02	1.83E-02	1.69E-02	1.62E-02	1.51E-02	1.36E-02	1.26E-02	1.09E-02
Muscle	1.57E-03	4.48E-03	7.80E-03	1.10E-02	9.42E-03	6.96E-03	6.63E-03	6.70E-03	6.39E-03	6.05E-03	5.73E-03	4.79E-03
Ovaries	0.0	1.31E-08	2.63E-05	1.36E-03	5.22E-03	5.88E-03	5.31E-03	5.50E-03	5.46E-03	5.23E-03	4.97E-03	4.23E-03
Pancreas	1.21E-05	2.73E-03	2.10E-02	6.16E-02	5.90E-02	3.96E-02	3.53E-02	3.26E-02	2.99E-02	2.79E-02	2.60E-02	2.03E-02
R_Marrow	8.02E-05	6.06E-04	1.84E-03	4.74E-03	6.96E-03	6.62E-03	6.53E-03	6.83E-03	6.34E-03	5.87E-03	5.54E-03	4.84E-03
Skin	1.21E-07	2.87E-04	1.40E-03	4.08E-03	3.98E-03	3.17E-03	3.56E-03	3.98E-03	3.45E-03	3.46E-03	3.45E-03	2.84E-03
Spleen	0.0	1.66E-07	2.29E-04	3.96E-03	1.07E-02	1.01E-02	9.41E-03	8.51E-03	8.53E-03	8.03E-03	7.45E-03	5.91E-03
Testes	0.0	0.0	2.61E-09	1.61E-05	2.20E-04	4.00E-04	6.20E-04	8.60E-04	1.03E-03	1.09E-03	1.13E-03	1.11E-03
Thymus	0.0	9.39E-09	1.99E-05	1.80E-03	5.75E-03	5.32E-03	5.13E-03	5.21E-03	5.46E-03	5.51E-03	5.33E-03	4.11E-03
Thyroid	0.0	0.0	8.00E-09	1.92E-04	9.55E-04	1.52E-03	1.42E-03	1.47E-03	1.42E-03	1.66E-03	1.79E-03	1.81E-03
GB_Wall1	1.99E-03	3.60E-02	1.13E-01	1.72E-01	1.16E-01	6.80E-02	5.39E-02	5.20E-02	5.07E-02	4.69E-02	4.37E-02	3.65E-02
Ht_Wall1	1.20E-04	3.37E-03	1.43E-02	3.35E-02	3.31E-02	2.30E-02	2.15E-02	2.06E-02	1.91E-02	1.76E-02	1.64E-02	1.31E-02
Uterus	0.0	8.13E-10	8.60E-06	1.10E-03	4.34E-03	5.44E-03	4.75E-03	5.02E-03	4.99E-03	4.89E-03	4.73E-03	3.98E-03

Specific Absorbed Fraction of Photon Energy in kg<sup>-1</sup>: Recommended Values for the Ten-Year-Old

Source = ET1-sur	Energy (MeV)											
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	0.0	5.50E-09	3.63E-05	6.03E-04	1.19E-03	1.66E-03	1.75E-03	1.79E-03	1.79E-03	1.78E-03	1.55E-03	1.55E-03
UB_Wall1	0.0	0.0	1.32E-08	4.84E-06	3.72E-05	8.30E-05	1.55E-04	2.14E-04	2.47E-04	2.73E-04	2.82E-04	2.82E-04
Bone_Sur	1.24E-10	8.73E-05	2.72E-03	2.16E-02	3.33E-02	1.75E-02	9.30E-03	6.85E-03	5.40E-03	5.94E-03	5.57E-03	4.84E-03
Brain	0.0	1.98E-07	1.28E-04	1.90E-03	7.22E-03	8.35E-03	7.90E-03	8.43E-03	8.22E-03	7.81E-03	7.41E-03	6.24E-03
Breasts	0.0	0.0	4.01E-06	1.04E-03	4.77E-03	5.02E-03	5.27E-03	5.49E-03	5.36E-03	5.15E-03	5.00E-03	4.18E-03
St_Wall1	0.0	0.0	4.18E-09	2.25E-05	4.94E-04	7.53E-04	1.24E-03	1.24E-03	1.31E-03	1.32E-03	1.31E-03	1.26E-03
SI_Wall1	0.0	0.0	0.0	4.65E-07	4.13E-05	1.47E-04	3.14E-04	4.99E-04	4.99E-04	5.66E-04	5.85E-04	5.94E-04
ULI_Wall1	0.0	0.0	0.0	7.39E-07	5.35E-05	2.05E-04	3.41E-04	4.90E-04	5.74E-04	6.19E-04	6.36E-04	5.99E-04
LLI_Wall1	0.0	0.0	0.0	8.87E-08	1.20E-05	6.50E-05	1.26E-04	2.12E-04	2.75E-04	3.09E-04	3.35E-04	3.36E-04
Kidneys	0.0	0.0	1.36E-10	5.08E-06	2.18E-04	6.20E-04	7.04E-04	7.71E-04	8.36E-04	9.48E-04	1.01E-03	9.37E-04
Liver	0.0	0.0	8.00E-09	1.92E-04	9.55E-04	1.52E-04	1.52E-03	1.42E-03	1.47E-03	1.66E-03	1.79E-03	1.81E-03
ET1-bas	1.00E+02	6.27E+01	3.64E+01	1.37E+01	4.45E+00	2.62E+00	2.88E+00	3.22E+00	3.02E+00	2.77E+00	2.56E+00	2.04E+00
ET2-bas	1.00E+02	6.27E+01	3.64E+01	1.37E+01	4.45E+00	2.62E+00	2.88E+00	3.22E+00	3.02E+00	2.77E+00	2.56E+00	2.04E+00
LN-ET	1.00E+02	6.27E+01	3.64E+01	1.37E+01	4.45E+00	2.62E+00	2.88E+00	3.22E+00	3.02E+00	2.77E+00	2.56E+00	2.04E+00
BBi-bas	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
BBi-sec	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
bbe-sec	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
AI	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
LN-Th	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
Lng_Tiss	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
Lung_NP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_TB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_P	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Muscle	8.86E-03	2.14E-02	2.98E-02	3.01E-02	1.91E-02	1.22E-02	1.15E-02	1.08E-02	1.00E-02	9.37E-03	7.55E-03	7.55E-03
Ovaries	0.0	0.0	0.0	6.49E-08	1.31E-05	7.72E-05	1.52E-04	2.54E-04	3.25E-04	3.62E-04	3.90E-04	3.87E-04
Pancreas	0.0	0.0	3.25E-09	2.77E-05	5.16E-04	1.09E-03	1.49E-03	1.60E-03	1.65E-03	1.67E-03	1.65E-03	1.45E-03
R_Marrow	2.91E-10	1.49E-05	4.11E-04	3.30E-03	6.05E-03	5.68E-03	5.28E-03	5.36E-03	5.02E-03	4.64E-03	4.37E-03	3.83E-03
Skin	0.0	3.79E-05	8.27E-04	3.57E-03	3.98E-03	3.56E-03	3.72E-03	4.06E-03	3.97E-03	3.89E-03	3.73E-03	2.88E-03
Spleen	0.0	0.0	1.60E-09	1.69E-05	8.16E-04	1.18E-03	1.54E-03	1.75E-03	1.68E-03	1.57E-03	1.47E-03	1.24E-03
Testes	0.0	0.0	0.0	1.07E-09	1.08E-06	1.26E-05	3.44E-05	7.69E-05	1.19E-04	1.45E-04	1.66E-04	1.84E-04
Thymus	0.0	5.44E-05	3.89E-03	2.63E-02	4.10E-02	2.87E-02	2.47E-02	2.50E-02	2.52E-02	2.51E-02	2.40E-02	1.76E-02
Thyroid	0.0	1.98E-07	1.28E-04	1.90E-03	7.22E-03	8.35E-03	7.90E-03	8.43E-03	8.22E-03	7.81E-03	7.41E-03	6.24E-03
GB_Wall1	0.0	0.0	7.19E-10	9.94E-06	2.55E-04	6.33E-04	8.62E-04	1.08E-03	1.16E-03	1.18E-03	1.19E-03	1.07E-03
Ht_Wall1	0.0	1.18E-09	1.12E-05	1.28E-03	4.79E-03	5.71E-03	5.54E-03	6.52E-03	5.98E-03	5.10E-03	4.53E-03	4.53E-03
Uterus	0.0	0.0	0.0	5.51E-08	1.19E-05	7.21E-05	1.44E-04	2.43E-04	3.13E-04	3.50E-04	3.78E-04	3.76E-04

Specific Absorbed Fraction of Photon Energy in kg<sup>-1</sup>: Recommended Values for the Ten-Year-Old

Source = ET2-sur	Energy (MeV)											
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	0.0	5.50E-09	3.63E-05	6.03E-04	1.19E-03	1.66E-03	1.75E-03	1.79E-03	1.79E-03	1.78E-03	1.55E-03	
UB_Wall1	0.0	0.0	1.32E-08	4.84E-06	3.72E-05	8.30E-05	1.55E-04	2.14E-04	2.47E-04	2.73E-04	2.82E-04	
Bone_Sur	1.24E-10	8.73E-05	2.72E-03	2.16E-02	3.33E-02	1.75E-02	9.30E-03	6.85E-03	5.40E-03	5.94E-03	5.57E-03	4.84E-03
Brain	0.0	1.98E-07	1.28E-04	1.90E-03	7.22E-03	8.35E-03	7.90E-03	8.43E-03	8.22E-03	7.81E-03	7.41E-03	6.24E-03
Breasts	0.0	0.0	4.01E-06	1.04E-03	4.77E-03	5.02E-03	5.27E-03	5.49E-03	5.36E-03	5.15E-03	5.00E-03	4.18E-03
St_Wall1	0.0	0.0	4.18E-09	2.25E-05	4.94E-04	7.53E-04	1.24E-03	1.24E-03	1.31E-03	1.32E-03	1.31E-03	1.26E-03
SI_Wall1	0.0	0.0	0.0	4.65E-07	4.13E-05	1.47E-04	3.14E-04	4.99E-04	5.66E-04	5.85E-04	5.94E-04	6.08E-04
ULI_Wall1	0.0	0.0	0.0	7.39E-07	5.35E-05	2.05E-04	3.41E-04	4.90E-04	5.74E-04	6.19E-04	6.36E-04	5.99E-04
LLI_Wall1	0.0	0.0	0.0	8.87E-08	1.20E-05	6.50E-05	1.26E-04	2.12E-04	2.75E-04	3.09E-04	3.35E-04	3.36E-04
Kidneys	0.0	0.0	1.36E-10	5.08E-06	2.18E-04	6.20E-04	7.04E-04	7.71E-04	8.36E-04	9.48E-04	1.01E-03	9.37E-04
Liver	0.0	0.0	8.00E-09	1.92E-04	9.55E-04	1.52E-04	1.42E-03	1.42E-03	1.47E-03	1.66E-03	1.79E-03	1.81E-03
ET1-bas	1.00E+02	6.27E+01	3.64E+01	1.37E+01	4.45E+00	2.62E+00	2.88E+00	3.22E+00	3.02E+00	2.77E+00	2.56E+00	2.04E+00
ET2-bas	1.00E+02	6.27E+01	3.64E+01	1.37E+01	4.45E+00	2.62E+00	2.88E+00	3.22E+00	3.02E+00	2.77E+00	2.56E+00	2.04E+00
LN-ET	1.00E+02	6.27E+01	3.64E+01	1.37E+01	4.45E+00	2.62E+00	2.88E+00	3.22E+00	3.02E+00	2.77E+00	2.56E+00	2.04E+00
BBi-bas	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
BBi-sec	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
bbe-sec	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
AI	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
LN-Th	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
Lng_Tiss	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
Lung_NP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_TB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_P	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Muscle	8.86E-03	2.14E-02	2.98E-02	3.01E-02	1.91E-02	1.22E-02	1.15E-02	1.08E-02	1.00E-02	9.37E-03	7.55E-03	
Ovaries	0.0	0.0	0.0	6.49E-08	1.31E-05	7.72E-05	1.52E-04	2.54E-04	3.25E-04	3.62E-04	3.90E-04	3.87E-04
Pancreas	0.0	0.0	3.25E-09	2.77E-05	5.16E-04	1.09E-03	1.49E-03	1.60E-03	1.65E-03	1.67E-03	1.65E-03	1.45E-03
R_Marrow	2.91E-10	1.49E-05	4.11E-04	3.30E-03	6.05E-03	5.68E-03	5.28E-03	5.36E-03	5.02E-03	4.64E-03	4.37E-03	3.83E-03
Skin	0.0	3.79E-05	8.27E-04	3.57E-03	3.98E-03	3.56E-03	3.72E-03	4.06E-03	3.97E-03	3.89E-03	3.73E-03	2.88E-03
Spleen	0.0	0.0	1.60E-09	1.69E-05	8.16E-04	1.18E-03	1.54E-03	1.75E-03	1.68E-03	1.57E-03	1.47E-03	1.24E-03
Testes	0.0	0.0	0.0	1.07E-09	1.08E-06	1.26E-05	3.44E-05	7.69E-05	1.19E-04	1.45E-04	1.66E-04	1.84E-04
Thymus	0.0	5.44E-05	3.89E-03	2.63E-02	4.10E-02	2.87E-02	2.47E-02	2.50E-02	2.52E-02	2.51E-02	2.40E-02	1.76E-02
Thyroid	0.0	1.98E-07	1.28E-04	1.90E-03	7.22E-03	8.35E-03	7.90E-03	8.43E-03	8.22E-03	7.81E-03	7.41E-03	6.24E-03
GB_Wall1	0.0	0.0	7.19E-10	9.94E-06	2.55E-04	6.33E-04	8.62E-04	1.08E-03	1.16E-03	1.18E-03	1.19E-03	1.07E-03
Ht_Wall1	0.0	1.18E-09	1.12E-05	1.28E-03	4.79E-03	5.71E-03	5.54E-03	6.52E-03	5.98E-03	5.10E-03	4.53E-03	
Uterus	0.0	0.0	0.0	5.51E-08	1.19E-05	7.21E-05	1.44E-04	2.43E-04	3.13E-04	3.50E-04	3.78E-04	3.76E-04

Specific Absorbed Fraction of Photon Energy in kg<sup>-1</sup>: Recommended Values for the Ten-Year-Old

Source = ET2-lnd

Energy (MeV)

Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	0.0	5.50E-09	3.63E-05	6.03E-04	1.19E-03	1.66E-03	1.75E-03	1.79E-03	1.79E-03	1.78E-03	1.55E-03	
UB_Wall1	0.0	0.0	1.32E-08	4.84E-06	3.72E-05	8.30E-05	1.55E-04	2.14E-04	2.47E-04	2.73E-04	2.82E-04	
Bone_Sur	1.24E-10	8.73E-05	2.72E-03	2.16E-02	3.33E-02	1.75E-02	9.30E-03	6.85E-03	5.40E-03	5.94E-03	5.57E-03	4.84E-03
Brain	0.0	1.98E-07	1.28E-04	1.90E-03	7.22E-03	8.35E-03	7.90E-03	8.43E-03	8.22E-03	7.81E-03	7.41E-03	6.24E-03
Breasts	0.0	0.0	4.01E-06	1.04E-03	4.77E-03	5.02E-03	5.27E-03	5.49E-03	5.36E-03	5.15E-03	5.00E-03	4.18E-03
St_Wall1	0.0	0.0	4.18E-09	2.25E-05	4.94E-04	7.53E-04	1.24E-03	1.24E-03	1.31E-03	1.32E-03	1.31E-03	1.26E-03
SI_Wall1	0.0	0.0	0.0	4.65E-07	4.13E-05	1.47E-04	3.14E-04	4.99E-04	4.99E-04	5.66E-04	5.85E-04	5.94E-04
ULI_Wall1	0.0	0.0	0.0	7.39E-07	5.35E-05	2.05E-04	3.41E-04	4.90E-04	5.74E-04	6.19E-04	6.36E-04	5.99E-04
LLI_Wall1	0.0	0.0	0.0	8.87E-08	1.20E-05	6.50E-05	1.26E-04	2.12E-04	2.75E-04	3.09E-04	3.35E-04	3.36E-04
Kidneys	0.0	0.0	1.36E-10	5.08E-06	2.18E-04	6.20E-04	7.04E-04	7.71E-04	8.36E-04	9.48E-04	1.01E-03	9.37E-04
Liver	0.0	0.0	8.00E-09	1.92E-04	9.55E-04	1.52E-04	1.42E-03	1.42E-03	1.47E-03	1.66E-03	1.79E-03	1.81E-03
ET1-bas	1.00E+02	6.27E+01	3.64E+01	1.37E+01	4.45E+00	2.62E+00	2.88E+00	3.22E+00	3.02E+00	2.77E+00	2.56E+00	2.04E+00
ET2-bas	1.00E+02	6.27E+01	3.64E+01	1.37E+01	4.45E+00	2.62E+00	2.88E+00	3.22E+00	3.02E+00	2.77E+00	2.56E+00	2.04E+00
LN-ET	1.00E+02	6.27E+01	3.64E+01	1.37E+01	4.45E+00	2.62E+00	2.88E+00	3.22E+00	3.02E+00	2.77E+00	2.56E+00	2.04E+00
BBi-bas	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
BBi-sec	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
bbe-sec	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
AI	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
LN-Th	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
Lng_Tiss	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
Lung_NP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_TB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_P	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Muscle	8.86E-03	2.14E-02	2.98E-02	3.01E-02	1.91E-02	1.22E-02	1.15E-02	1.08E-02	1.00E-02	9.37E-03	7.55E-03	
Ovaries	0.0	0.0	0.0	6.49E-08	1.31E-05	7.72E-05	1.52E-04	2.54E-04	3.25E-04	3.62E-04	3.90E-04	3.87E-04
Pancreas	0.0	0.0	3.25E-09	2.77E-05	5.16E-04	1.09E-03	1.49E-03	1.60E-03	1.65E-03	1.67E-03	1.65E-03	1.45E-03
R_Marrow	2.91E-10	1.49E-05	4.11E-04	3.30E-03	6.05E-03	5.68E-03	5.28E-03	5.36E-03	5.02E-03	4.64E-03	4.37E-03	3.83E-03
Skin	0.0	3.79E-05	8.27E-04	3.57E-03	3.98E-03	3.56E-03	3.72E-03	4.06E-03	3.97E-03	3.89E-03	3.73E-03	2.88E-03
Spleen	0.0	0.0	1.60E-09	1.69E-05	8.16E-04	1.18E-03	1.54E-03	1.75E-03	1.68E-03	1.57E-03	1.47E-03	1.24E-03
Testes	0.0	0.0	0.0	1.07E-09	1.08E-06	1.26E-05	3.44E-05	7.69E-05	1.19E-04	1.45E-04	1.66E-04	1.84E-04
Thymus	0.0	5.44E-05	3.89E-03	2.63E-02	4.10E-02	2.87E-02	2.47E-02	2.50E-02	2.52E-02	2.51E-02	2.40E-02	1.76E-02
Thyroid	0.0	1.98E-07	1.28E-04	1.90E-03	7.22E-03	8.35E-03	7.90E-03	8.43E-03	8.22E-03	7.81E-03	7.41E-03	6.24E-03
GB_Wall1	0.0	0.0	7.19E-10	9.94E-06	2.55E-04	6.33E-04	8.62E-04	1.08E-03	1.16E-03	1.18E-03	1.19E-03	1.07E-03
Ht_Wall1	0.0	1.18E-09	1.12E-05	1.28E-03	4.79E-03	5.71E-03	5.54E-03	6.52E-03	5.98E-03	5.10E-03	4.53E-03	
Uterus	0.0	0.0	0.0	5.51E-08	1.19E-05	7.21E-05	1.44E-04	2.43E-04	3.13E-04	3.50E-04	3.78E-04	3.76E-04

Specific Absorbed Fraction of Photon Energy in kg<sup>-1</sup>: Recommended Values for the Ten-Year-Old

Source = ET2-seq	Energy (MeV)											
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	0.0	5.50E-09	3.63E-05	6.03E-04	1.19E-03	1.66E-03	1.75E-03	1.79E-03	1.79E-03	1.78E-03	1.55E-03	
UB_Wall1	0.0	0.0	1.32E-08	4.84E-06	3.72E-05	8.30E-05	1.55E-04	2.14E-04	2.47E-04	2.73E-04	2.82E-04	
Bone_Sur	1.24E-10	8.73E-05	2.72E-03	2.16E-02	3.33E-02	1.75E-02	9.30E-03	6.85E-03	5.94E-03	5.57E-03	4.84E-03	
Brain	0.0	1.98E-07	1.28E-04	1.90E-03	7.22E-03	8.35E-03	7.90E-03	8.43E-03	8.22E-03	7.81E-03	7.41E-03	6.24E-03
Breasts	0.0	0.0	4.01E-06	1.04E-03	4.77E-03	5.02E-03	5.27E-03	5.49E-03	5.36E-03	5.15E-03	5.00E-03	4.18E-03
St_Wall1	0.0	0.0	4.18E-09	2.25E-05	4.94E-04	7.53E-04	1.24E-03	1.24E-03	1.31E-03	1.32E-03	1.31E-03	1.26E-03
SI_Wall1	0.0	0.0	0.0	4.65E-07	4.13E-05	1.47E-04	3.14E-04	4.99E-04	5.66E-04	5.85E-04	5.94E-04	6.08E-04
ULI_Wall1	0.0	0.0	0.0	7.39E-07	5.35E-05	2.05E-04	3.41E-04	4.90E-04	5.74E-04	6.19E-04	6.36E-04	5.99E-04
LLI_Wall1	0.0	0.0	0.0	8.87E-08	1.20E-05	6.50E-05	1.26E-04	2.12E-04	2.75E-04	3.09E-04	3.35E-04	3.36E-04
Kidneys	0.0	0.0	1.36E-10	5.08E-06	2.18E-04	6.20E-04	7.04E-04	7.71E-04	8.36E-04	9.48E-04	1.01E-03	9.37E-04
Liver	0.0	0.0	8.00E-09	1.92E-04	9.55E-04	1.52E-04	1.42E-03	1.42E-03	1.66E-03	1.79E-03	1.81E-03	1.55E-03
ET1-bas	1.00E+02	6.27E+01	3.64E+01	1.37E+01	4.45E+00	2.62E+00	2.88E+00	3.22E+00	3.02E+00	2.77E+00	2.56E+00	2.04E+00
ET2-bas	1.00E+02	6.27E+01	3.64E+01	1.37E+01	4.45E+00	2.62E+00	2.88E+00	3.22E+00	3.02E+00	2.77E+00	2.56E+00	2.04E+00
LN-ET	1.00E+02	6.27E+01	3.64E+01	1.37E+01	4.45E+00	2.62E+00	2.88E+00	3.22E+00	3.02E+00	2.77E+00	2.56E+00	2.04E+00
BBi-bas	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
BBi-sec	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
bbe-sec	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
AI	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
LN-Th	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
Lng_Tiss	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
Lung_NP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_TB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_P	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Muscle	8.86E-03	2.14E-02	2.98E-02	3.01E-02	1.91E-02	1.22E-02	1.15E-02	1.08E-02	1.00E-02	9.37E-03	7.55E-03	
Ovaries	0.0	0.0	0.0	6.49E-08	1.31E-05	7.72E-05	1.52E-04	2.54E-04	3.25E-04	3.62E-04	3.90E-04	3.87E-04
Pancreas	0.0	0.0	3.25E-09	2.77E-05	5.16E-04	1.09E-03	1.49E-03	1.60E-03	1.65E-03	1.67E-03	1.65E-03	1.45E-03
R_Marrow	2.91E-10	1.49E-05	4.11E-04	3.30E-03	6.05E-03	5.68E-03	5.28E-03	5.36E-03	5.02E-03	4.64E-03	4.37E-03	3.83E-03
Skin	0.0	3.79E-05	8.27E-04	3.57E-03	3.98E-03	3.56E-03	3.72E-03	4.06E-03	3.97E-03	3.89E-03	3.73E-03	2.88E-03
Spleen	0.0	0.0	1.60E-09	1.69E-05	8.16E-04	1.18E-03	1.54E-03	1.75E-03	1.68E-03	1.57E-03	1.47E-03	1.24E-03
Testes	0.0	0.0	0.0	1.07E-09	1.08E-06	1.26E-05	3.44E-05	7.69E-05	1.19E-04	1.45E-04	1.66E-04	1.84E-04
Thymus	0.0	5.44E-05	3.89E-03	2.63E-02	4.10E-02	2.87E-02	2.47E-02	2.50E-02	2.52E-02	2.51E-02	2.40E-02	1.76E-02
Thyroid	0.0	1.98E-07	1.28E-04	1.90E-03	7.22E-03	8.35E-03	7.90E-03	8.43E-03	8.22E-03	7.81E-03	7.41E-03	6.24E-03
GB_Wall1	0.0	0.0	7.19E-10	9.94E-06	2.55E-04	6.33E-04	8.62E-04	1.08E-03	1.16E-03	1.18E-03	1.19E-03	1.07E-03
Ht_Wall1	0.0	1.18E-09	1.12E-05	1.28E-03	4.79E-03	5.71E-03	5.54E-03	6.52E-03	5.98E-03	5.10E-03	4.53E-03	
Uterus	0.0	0.0	0.0	5.51E-08	1.19E-05	7.21E-05	1.44E-04	2.43E-04	3.13E-04	3.50E-04	3.78E-04	3.76E-04

Specific Absorbed Fraction of Photon Energy in kg<sup>-1</sup>: Recommended Values for the Ten-Year-Old

Source = LN-ET

Energy (MeV)

Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	0.0	5.50E-09	3.63E-05	6.03E-04	1.19E-03	1.66E-03	1.75E-03	1.79E-03	1.79E-03	1.78E-03	1.55E-03	
UB_Wall1	0.0	0.0	1.32E-08	4.84E-06	3.72E-05	8.30E-05	1.55E-04	2.14E-04	2.47E-04	2.73E-04	2.82E-04	
Bone_Sur	1.24E-10	8.73E-05	2.72E-03	2.16E-02	3.33E-02	1.75E-02	9.30E-03	6.85E-03	5.94E-03	5.57E-03	4.84E-03	
Brain	0.0	1.98E-07	1.28E-04	1.90E-03	7.22E-03	8.35E-03	7.90E-03	8.43E-03	8.22E-03	7.81E-03	7.41E-03	6.24E-03
Breasts	0.0	0.0	4.01E-06	1.04E-03	4.77E-03	5.02E-03	5.27E-03	5.49E-03	5.36E-03	5.15E-03	5.00E-03	4.18E-03
St_Wall1	0.0	0.0	4.18E-09	2.25E-05	4.94E-04	7.53E-04	1.24E-03	1.24E-03	1.31E-03	1.32E-03	1.31E-03	1.26E-03
SI_Wall1	0.0	0.0	0.0	4.65E-07	4.13E-05	1.47E-04	3.14E-04	4.99E-04	5.66E-04	5.85E-04	5.94E-04	6.08E-04
ULI_Wall1	0.0	0.0	0.0	7.39E-07	5.35E-05	2.05E-04	3.41E-04	4.90E-04	5.74E-04	6.19E-04	6.36E-04	5.99E-04
LLI_Wall1	0.0	0.0	0.0	8.87E-08	1.20E-05	6.50E-05	1.26E-04	2.12E-04	2.75E-04	3.09E-04	3.35E-04	3.36E-04
Kidneys	0.0	0.0	1.36E-10	5.08E-06	2.18E-04	6.20E-04	7.04E-04	7.71E-04	8.36E-04	9.48E-04	1.01E-03	9.37E-04
Liver	0.0	0.0	8.00E-09	1.92E-04	9.55E-04	1.52E-04	1.42E-03	1.42E-03	1.47E-03	1.66E-03	1.79E-03	1.81E-03
ET1-bas	1.00E+02	6.27E+01	3.64E+01	1.37E+01	4.45E+00	2.62E+00	2.88E+00	3.22E+00	3.02E+00	2.77E+00	2.56E+00	2.04E+00
ET2-bas	1.00E+02	6.27E+01	3.64E+01	1.37E+01	4.45E+00	2.62E+00	2.88E+00	3.22E+00	3.02E+00	2.77E+00	2.56E+00	2.04E+00
LN-ET	1.00E+02	6.27E+01	3.64E+01	1.37E+01	4.45E+00	2.62E+00	2.88E+00	3.22E+00	3.02E+00	2.77E+00	2.56E+00	2.04E+00
BBi-bas	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
BBi-sec	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
bbe-sec	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
AI	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
LN-Th	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
Lng_Tiss	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
Lung_NP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_TB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_P	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Muscle	8.86E-03	2.14E-02	2.98E-02	3.01E-02	1.91E-02	1.22E-02	1.15E-02	1.08E-02	1.00E-02	9.37E-03	7.55E-03	
Ovaries	0.0	0.0	0.0	6.49E-08	1.31E-05	7.72E-05	1.52E-04	2.54E-04	3.25E-04	3.62E-04	3.90E-04	3.87E-04
Pancreas	0.0	0.0	3.25E-09	2.77E-05	5.16E-04	1.09E-03	1.49E-03	1.60E-03	1.65E-03	1.67E-03	1.65E-03	1.45E-03
R_Marrow	2.91E-10	1.49E-05	4.11E-04	3.30E-03	6.05E-03	5.68E-03	5.28E-03	5.36E-03	5.02E-03	4.64E-03	4.37E-03	3.83E-03
Skin	0.0	3.79E-05	8.27E-04	3.57E-03	3.98E-03	3.56E-03	3.72E-03	4.06E-03	3.97E-03	3.89E-03	3.73E-03	2.88E-03
Spleen	0.0	0.0	1.60E-09	1.69E-05	8.16E-04	1.18E-03	1.54E-03	1.75E-03	1.68E-03	1.57E-03	1.47E-03	1.24E-03
Testes	0.0	0.0	0.0	1.07E-09	1.08E-06	1.26E-05	3.44E-05	7.69E-05	1.19E-04	1.45E-04	1.66E-04	1.84E-04
Thymus	0.0	5.44E-05	3.89E-03	2.63E-02	4.10E-02	2.87E-02	2.47E-02	2.50E-02	2.52E-02	2.51E-02	2.40E-02	1.76E-02
Thyroid	0.0	1.98E-07	1.28E-04	1.90E-03	7.22E-03	8.35E-03	7.90E-03	8.43E-03	8.22E-03	7.81E-03	7.41E-03	6.24E-03
GB_Wall1	0.0	0.0	7.19E-10	9.94E-06	2.55E-04	6.33E-04	8.62E-04	1.08E-03	1.16E-03	1.18E-03	1.19E-03	1.07E-03
Ht_Wall1	0.0	1.18E-09	1.12E-05	1.28E-03	4.79E-03	5.71E-03	5.54E-03	6.52E-03	5.98E-03	5.10E-03	4.53E-03	
Uterus	0.0	0.0	0.0	5.51E-08	1.19E-05	7.21E-05	1.44E-04	2.43E-04	3.13E-04	3.50E-04	3.78E-04	3.76E-04

Specific Absorbed Fraction of Photon Energy in kg<sup>-1</sup>: Recommended Values for the Ten-Year-Old

Source = BBi-gel	Energy (MeV)											
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	4.28E-06	4.17E-03	1.83E-02	3.77E-02	3.28E-02	2.36E-02	2.12E-02	2.08E-02	1.70E-02	1.54E-02	1.14E-02	
UB_Wall1	0.0	0.0	3.86E-10	6.78E-06	1.48E-04	3.68E-04	5.37E-04	7.14E-04	7.95E-04	8.26E-04	8.48E-04	7.76E-04
Bone_Sur	1.71E-04	3.91E-03	1.76E-02	4.50E-02	4.27E-02	1.83E-02	1.02E-02	7.64E-03	7.33E-03	6.57E-03	6.02E-03	5.41E-03
Brain	0.0	0.0	1.55E-07	7.80E-05	4.56E-04	8.64E-04	9.14E-04	1.16E-03	1.44E-03	1.52E-03	1.52E-03	1.40E-03
Breasts	2.75E-05	5.25E-03	2.87E-02	5.08E-02	3.39E-02	2.29E-02	2.28E-02	2.35E-02	2.20E-02	2.07E-02	1.96E-02	1.65E-02
St_Wall1	8.35E-04	2.77E-03	6.50E-03	1.40E-02	1.73E-02	1.13E-02	1.10E-02	9.34E-03	8.40E-03	8.40E-03	7.88E-03	7.15E-03
SI_Wall1	0.0	0.0	1.31E-06	3.08E-04	1.52E-03	2.17E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.40E-03	1.98E-03
ULI_Wall1	0.0	1.08E-10	2.68E-06	4.84E-04	1.84E-03	3.02E-03	2.93E-03	2.61E-03	2.61E-03	2.42E-03	2.34E-03	2.36E-03
LLI_Wall1	0.0	0.0	9.43E-08	5.31E-05	5.33E-04	6.48E-04	7.88E-04	9.89E-04	1.10E-03	1.13E-03	1.12E-03	1.02E-03
Kidneys	0.0	4.48E-06	5.32E-04	4.77E-03	8.43E-03	7.78E-03	7.35E-03	6.81E-03	7.09E-03	6.34E-03	5.74E-03	5.15E-03
Liver	7.74E-04	1.05E-02	2.62E-02	3.53E-02	2.73E-02	1.81E-02	1.69E-02	1.62E-02	1.51E-02	1.36E-02	1.26E-02	1.09E-02
ET1-bas	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
ET2-bas	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
LN-ET	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
BBi-bas	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
BBi-sec	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
bbe-sec	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
AI	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
LN-Th	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lng_Tiss	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lung_NP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_TB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_P	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Muscle	5.02E-03	1.33E-02	1.93E-02	1.88E-02	1.22E-02	8.23E-03	8.06E-03	7.96E-03	7.49E-03	6.97E-03	6.53E-03	5.42E-03
Ovaries	0.0	0.0	1.38E-08	4.23E-05	3.81E-04	9.35E-04	1.07E-03	1.17E-03	1.45E-03	1.50E-03	1.48E-03	1.32E-03
Pancreas	1.55E-06	1.73E-04	4.89E-03	2.16E-02	2.45E-02	1.84E-02	1.63E-02	1.48E-02	1.41E-02	1.31E-02	1.22E-02	1.01E-02
R_Marrow	4.93E-05	9.83E-04	4.06E-03	9.45E-03	1.02E-02	8.50E-03	8.44E-03	8.17E-03	7.83E-03	7.04E-03	6.47E-03	5.74E-03
Skin	3.61E-05	3.36E-04	1.64E-03	4.30E-03	4.29E-03	3.59E-03	3.74E-03	3.91E-03	4.24E-03	4.15E-03	3.95E-03	3.30E-03
Spleen	7.00E-04	4.23E-03	1.52E-02	2.81E-02	2.43E-02	1.64E-02	1.54E-02	1.47E-02	1.33E-02	1.26E-02	1.19E-02	9.44E-03
Testes	0.0	0.0	0.0	0.0	0.0	4.78E-07	3.07E-05	1.20E-04	3.30E-04	4.19E-04	4.67E-04	4.84E-04
Thymus	1.78E-09	3.55E-04	8.68E-03	3.95E-02	3.68E-02	2.60E-02	2.45E-02	2.31E-02	2.05E-02	1.91E-02	1.78E-02	1.39E-02
Thyroid	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
GB_Wall1	8.81E-09	4.91E-06	4.36E-04	6.08E-03	8.60E-03	9.26E-03	8.02E-03	6.69E-03	6.43E-03	6.20E-03	6.00E-03	4.99E-03
Ht_Wall1	1.25E-03	2.00E-02	5.86E-02	8.56E-02	6.35E-02	4.09E-02	3.67E-02	3.53E-02	3.36E-02	3.00E-02	2.73E-02	2.24E-02
Uterus	0.0	0.0	6.77E-09	3.22E-05	4.57E-04	7.44E-04	9.28E-04	1.05E-03	1.10E-03	1.13E-03	1.15E-03	1.26E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = BBi-sol

		Energy (MeV)										
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	4.28E-06	4.17E-03	1.83E-02	3.77E-02	3.28E-02	2.36E-02	2.12E-02	2.08E-02	1.70E-02	1.54E-02	1.14E-02	
UB_Wall1	0.0	0.0	3.86E-10	6.78E-06	1.48E-04	3.68E-04	5.37E-04	7.14E-04	7.95E-04	8.26E-04	8.48E-04	7.76E-04
Bone_Sur	1.71E-04	3.91E-03	1.76E-02	4.50E-02	4.27E-02	1.83E-02	1.02E-02	7.64E-03	7.33E-03	6.57E-03	6.02E-03	5.41E-03
Brain	0.0	0.0	1.55E-07	7.80E-05	4.56E-04	8.64E-04	9.14E-04	1.16E-03	1.44E-03	1.52E-03	1.52E-03	1.40E-03
Breasts	2.75E-05	5.25E-03	2.87E-02	5.08E-02	3.39E-02	2.29E-02	2.28E-02	2.35E-02	2.20E-02	2.07E-02	1.96E-02	1.65E-02
St_Wall1	8.35E-04	2.77E-03	6.50E-03	1.40E-02	1.73E-02	1.13E-02	1.10E-02	9.34E-03	8.40E-03	8.40E-03	7.88E-03	7.15E-03
SI_Wall1	0.0	0.0	1.31E-06	3.08E-04	1.52E-03	2.17E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.37E-03	1.98E-03
ULI_Wall1	0.0	1.08E-10	2.68E-06	4.84E-04	1.84E-03	3.02E-03	2.93E-03	2.93E-03	2.61E-03	2.42E-03	2.34E-03	2.36E-03
LLI_Wall1	0.0	0.0	9.43E-08	5.31E-05	5.33E-04	6.48E-04	7.88E-04	9.89E-04	1.10E-03	1.13E-03	1.12E-03	1.02E-03
Kidneys	0.0	4.48E-06	5.32E-04	4.77E-03	8.43E-03	7.78E-03	7.35E-03	6.81E-03	7.09E-03	6.34E-03	5.74E-03	5.15E-03
Liver	7.74E-04	1.05E-02	2.62E-02	3.53E-02	2.73E-02	1.81E-02	1.69E-02	1.62E-02	1.51E-02	1.36E-02	1.26E-02	1.09E-02
ET1-bas	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
ET2-bas	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
LN-ET	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
BBi-bas	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
BBi-sec	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
bbe-sec	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
AI	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
LN-Th	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lng_Tiss	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lung_NP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_TB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_P	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Muscle	5.02E-03	1.33E-02	1.93E-02	1.88E-02	1.22E-02	8.23E-03	8.06E-03	7.96E-03	7.49E-03	6.97E-03	6.53E-03	5.42E-03
Ovaries	0.0	0.0	1.38E-08	4.23E-05	3.81E-04	9.35E-04	1.07E-03	1.17E-03	1.07E-03	1.45E-03	1.50E-03	1.32E-03
Pancreas	1.55E-06	1.73E-04	4.89E-03	2.16E-02	2.45E-02	1.84E-02	1.63E-02	1.48E-02	1.41E-02	1.31E-02	1.22E-02	1.01E-02
R_Marrow	4.93E-05	9.83E-04	4.06E-03	9.45E-03	1.02E-02	8.50E-03	8.44E-03	8.17E-03	7.83E-03	7.04E-03	6.47E-03	5.74E-03
Skin	3.61E-05	3.36E-04	1.64E-03	4.30E-03	4.29E-03	3.59E-03	3.74E-03	3.91E-03	4.24E-03	4.15E-03	3.95E-03	3.30E-03
Spleen	7.00E-04	4.23E-03	1.52E-02	2.81E-02	2.43E-02	1.64E-02	1.54E-02	1.47E-02	1.33E-02	1.26E-02	1.19E-02	9.44E-03
Testes	0.0	0.0	0.0	0.0	0.0	4.78E-07	3.07E-05	1.20E-04	3.30E-04	4.19E-04	4.67E-04	4.84E-04
Thymus	1.78E-09	3.55E-04	8.68E-03	3.95E-02	3.68E-02	2.60E-02	2.45E-02	2.31E-02	2.05E-02	1.91E-02	1.78E-02	1.39E-02
Thyroid	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
GB_Wall1	8.81E-09	4.91E-06	4.36E-04	6.08E-03	8.60E-03	9.26E-03	8.02E-03	6.69E-03	6.43E-03	6.20E-03	6.00E-03	4.99E-03
Ht_Wall1	1.25E-03	2.00E-02	5.86E-02	8.56E-02	6.35E-02	4.09E-02	3.67E-02	3.53E-02	3.36E-02	3.00E-02	2.73E-02	2.24E-02
Uterus	0.0	0.0	6.77E-09	3.22E-05	4.57E-04	7.44E-04	9.28E-04	1.05E-03	1.10E-03	1.13E-03	1.15E-03	1.26E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = BBi-bnd

Energy (MeV)

Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	4.28E-06	4.17E-03	1.83E-02	3.77E-02	3.28E-02	2.36E-02	2.12E-02	2.08E-02	1.70E-02	1.54E-02	1.14E-02	
UB_Wall1	0.0	0.0	3.86E-10	6.78E-06	1.48E-04	3.68E-04	5.37E-04	7.14E-04	7.95E-04	8.26E-04	8.48E-04	7.76E-04
Bone_Sur	1.71E-04	3.91E-03	1.76E-02	4.50E-02	4.27E-02	1.83E-02	1.02E-02	7.64E-03	7.33E-03	6.57E-03	6.02E-03	5.41E-03
Brain	0.0	0.0	1.55E-07	7.80E-05	4.56E-04	8.64E-04	9.14E-04	1.16E-03	1.44E-03	1.52E-03	1.52E-03	1.40E-03
Breasts	2.75E-05	5.25E-03	2.87E-02	5.08E-02	3.39E-02	2.29E-02	2.28E-02	2.35E-02	2.20E-02	2.07E-02	1.96E-02	1.65E-02
St_Wall1	8.35E-04	2.77E-03	6.50E-03	1.40E-02	1.73E-02	1.13E-02	1.10E-02	9.34E-03	8.40E-03	8.40E-03	7.88E-03	7.15E-03
SI_Wall1	0.0	0.0	1.31E-06	3.08E-04	1.52E-03	2.17E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.40E-03	1.98E-03
ULI_Wall1	0.0	1.08E-10	2.68E-06	4.84E-04	1.84E-03	3.02E-03	2.93E-03	2.93E-03	2.61E-03	2.42E-03	2.34E-03	2.36E-03
LLI_Wall1	0.0	0.0	9.43E-08	5.31E-05	5.33E-04	6.48E-04	7.88E-04	9.89E-04	1.10E-03	1.13E-03	1.12E-03	1.02E-03
Kidneys	0.0	4.48E-06	5.32E-04	4.77E-03	8.43E-03	7.78E-03	7.35E-03	6.81E-03	7.09E-03	6.34E-03	5.74E-03	5.15E-03
Liver	7.74E-04	1.05E-02	2.62E-02	3.53E-02	2.73E-02	1.81E-02	1.69E-02	1.62E-02	1.51E-02	1.36E-02	1.26E-02	1.09E-02
ET1-bas	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
ET2-bas	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
LN-ET	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
BBi-bas	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
BBi-sec	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
bbe-sec	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
AI	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
LN-Th	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lng_Tiss	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lung_NP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_TB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_P	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Muscle	5.02E-03	1.33E-02	1.93E-02	1.88E-02	1.22E-02	8.23E-03	8.06E-03	7.96E-03	7.49E-03	6.97E-03	6.53E-03	5.42E-03
Ovaries	0.0	0.0	1.38E-08	4.23E-05	3.81E-04	9.35E-04	1.07E-03	1.17E-03	1.45E-03	1.50E-03	1.48E-03	1.32E-03
Pancreas	1.55E-06	1.73E-04	4.89E-03	2.16E-02	2.45E-02	1.84E-02	1.63E-02	1.48E-02	1.41E-02	1.31E-02	1.22E-02	1.01E-02
R_Marrow	4.93E-05	9.83E-04	4.06E-03	9.45E-03	1.02E-02	8.50E-03	8.44E-03	8.17E-03	7.83E-03	7.04E-03	6.47E-03	5.74E-03
Skin	3.61E-05	3.36E-04	1.64E-03	4.30E-03	4.29E-03	3.59E-03	3.74E-03	3.91E-03	4.24E-03	4.15E-03	3.95E-03	3.30E-03
Spleen	7.00E-04	4.23E-03	1.52E-02	2.81E-02	2.43E-02	1.64E-02	1.54E-02	1.47E-02	1.33E-02	1.26E-02	1.19E-02	9.44E-03
Testes	0.0	0.0	0.0	0.0	0.0	4.78E-07	3.07E-05	1.20E-04	3.30E-04	4.19E-04	4.67E-04	4.84E-04
Thymus	1.78E-09	3.55E-04	8.68E-03	3.95E-02	3.68E-02	2.60E-02	2.45E-02	2.31E-02	2.05E-02	1.91E-02	1.78E-02	1.39E-02
Thyroid	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-02	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
GB_Wall1	8.81E-09	4.91E-06	4.36E-04	6.08E-03	8.60E-03	9.26E-03	8.02E-03	6.69E-03	6.43E-03	6.20E-03	6.00E-03	4.99E-03
Ht_Wall1	1.25E-03	2.00E-02	5.86E-02	8.56E-02	6.35E-02	4.09E-02	3.67E-02	3.53E-02	3.36E-02	3.00E-02	2.73E-02	2.24E-02
Uterus	0.0	0.0	6.77E-09	3.22E-05	4.57E-04	7.44E-04	9.28E-04	1.05E-03	1.10E-03	1.13E-03	1.15E-03	1.26E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = BBi-seq		Energy (MeV)										
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	4.28E-06	4.17E-03	1.83E-02	3.77E-02	3.28E-02	2.36E-02	2.12E-02	2.08E-02	1.70E-02	1.54E-02	1.14E-02	
UB_Wall1	0.0	0.0	3.86E-10	6.78E-06	1.48E-04	3.68E-04	5.37E-04	7.14E-04	7.95E-04	8.26E-04	8.48E-04	7.76E-04
Bone_Sur	1.71E-04	3.91E-03	1.76E-02	4.50E-02	4.27E-02	1.83E-02	1.02E-02	7.64E-03	7.33E-03	6.57E-03	6.02E-03	5.41E-03
Brain	0.0	0.0	1.55E-07	7.80E-05	4.56E-04	8.64E-04	9.14E-04	1.16E-03	1.44E-03	1.52E-03	1.52E-03	1.40E-03
Breasts	2.75E-05	5.25E-03	2.87E-02	5.08E-02	3.39E-02	2.29E-02	2.28E-02	2.35E-02	2.20E-02	2.07E-02	1.96E-02	1.65E-02
St_Wall1	8.35E-04	2.77E-03	6.50E-03	1.40E-02	1.73E-02	1.13E-02	1.10E-02	9.34E-03	8.40E-03	8.40E-03	7.88E-03	7.15E-03
SI_Wall1	0.0	0.0	1.31E-06	3.08E-04	1.52E-03	2.17E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.37E-03	1.98E-03
ULI_Wall1	0.0	1.08E-10	2.68E-06	4.84E-04	1.84E-03	3.02E-03	2.93E-03	2.93E-03	2.61E-03	2.42E-03	2.34E-03	2.36E-03
LLI_Wall1	0.0	0.0	9.43E-08	5.31E-05	5.33E-04	6.48E-04	7.88E-04	9.89E-04	1.10E-03	1.13E-03	1.12E-03	1.02E-03
Kidneys	0.0	4.48E-06	5.32E-04	4.77E-03	8.43E-03	7.78E-03	7.35E-03	6.81E-03	7.09E-03	6.34E-03	5.74E-03	5.15E-03
Liver	7.74E-04	1.05E-02	2.62E-02	3.53E-02	2.73E-02	1.81E-02	1.69E-02	1.62E-02	1.51E-02	1.36E-02	1.26E-02	1.09E-02
ET1-bas	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
ET2-bas	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
LN-ET	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
BBi-bas	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
BBi-sec	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
bbe-sec	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
AI	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
LN-Th	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lng_Tiss	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lung_NP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_TB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_P	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Muscle	5.02E-03	1.33E-02	1.93E-02	1.88E-02	1.22E-02	8.23E-03	8.06E-03	7.96E-03	7.49E-03	6.97E-03	6.53E-03	5.42E-03
Ovaries	0.0	0.0	1.38E-08	4.23E-05	3.81E-04	9.35E-04	1.07E-03	1.17E-03	1.07E-03	1.45E-03	1.50E-03	1.32E-03
Pancreas	1.55E-06	1.73E-04	4.89E-03	2.16E-02	2.45E-02	1.84E-02	1.63E-02	1.48E-02	1.41E-02	1.31E-02	1.22E-02	1.01E-02
R_Marrow	4.93E-05	9.83E-04	4.06E-03	9.45E-03	1.02E-02	8.50E-03	8.44E-03	8.17E-03	7.83E-03	7.04E-03	6.47E-03	5.74E-03
Skin	3.61E-05	3.36E-04	1.64E-03	4.30E-03	4.29E-03	3.59E-03	3.74E-03	3.91E-03	4.24E-03	4.15E-03	3.95E-03	3.30E-03
Spleen	7.00E-04	4.23E-03	1.52E-02	2.81E-02	2.43E-02	1.64E-02	1.54E-02	1.47E-02	1.33E-02	1.26E-02	1.19E-02	9.44E-03
Testes	0.0	0.0	0.0	0.0	4.78E-07	3.07E-05	1.20E-04	2.40E-04	3.30E-04	4.19E-04	4.67E-04	4.84E-04
Thymus	1.78E-09	3.55E-04	8.68E-03	3.95E-02	3.68E-02	2.60E-02	2.45E-02	2.31E-02	2.05E-02	1.91E-02	1.78E-02	1.39E-02
Thyroid	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
GB_Wall1	8.81E-09	4.91E-06	4.36E-04	6.08E-03	8.60E-03	9.26E-03	8.02E-03	6.69E-03	6.43E-03	6.20E-03	6.00E-03	4.99E-03
Ht_Wall1	1.25E-03	2.00E-02	5.86E-02	8.56E-02	6.35E-02	4.09E-02	3.67E-02	3.53E-02	3.36E-02	3.00E-02	2.73E-02	2.24E-02
Uterus	0.0	0.0	6.77E-09	3.22E-05	4.57E-04	7.44E-04	9.28E-04	1.05E-03	1.10E-03	1.13E-03	1.15E-03	1.26E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = bbe-gel		Energy (MeV)										
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	4.28E-06	4.17E-03	1.83E-02	3.77E-02	3.28E-02	2.36E-02	2.12E-02	2.08E-02	1.70E-02	1.54E-02	1.14E-02	
UB_Wall1	0.0	0.0	3.86E-10	6.78E-06	1.48E-04	3.68E-04	5.37E-04	7.14E-04	7.95E-04	8.26E-04	8.48E-04	7.76E-04
Bone_Sur	1.71E-04	3.91E-03	1.76E-02	4.50E-02	4.27E-02	1.83E-02	1.02E-02	7.64E-03	7.33E-03	6.57E-03	6.02E-03	5.41E-03
Brain	0.0	0.0	1.55E-07	7.80E-05	4.56E-04	8.64E-04	9.14E-04	1.16E-03	1.44E-03	1.52E-03	1.52E-03	1.40E-03
Breasts	2.75E-05	5.25E-03	2.87E-02	5.08E-02	3.39E-02	2.29E-02	2.28E-02	2.35E-02	2.20E-02	2.07E-02	1.96E-02	1.65E-02
St_Wall1	8.35E-04	2.77E-03	6.50E-03	1.40E-02	1.73E-02	1.13E-02	1.10E-02	9.34E-03	8.40E-03	8.40E-03	7.88E-03	7.15E-03
SI_Wall1	0.0	0.0	1.31E-06	3.08E-04	1.52E-03	2.17E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.40E-03	1.98E-03
ULI_Wall1	0.0	1.08E-10	2.68E-06	4.84E-04	1.84E-03	3.02E-03	2.93E-03	2.93E-03	2.61E-03	2.42E-03	2.34E-03	2.36E-03
LLI_Wall1	0.0	0.0	9.43E-08	5.31E-05	5.33E-04	6.48E-04	7.88E-04	9.89E-04	1.10E-03	1.13E-03	1.12E-03	1.02E-03
Kidneys	0.0	4.48E-06	5.32E-04	4.77E-03	8.43E-03	7.78E-03	7.35E-03	6.81E-03	7.09E-03	6.34E-03	5.74E-03	5.15E-03
Liver	7.74E-04	1.05E-02	2.62E-02	3.53E-02	2.73E-02	1.81E-02	1.69E-02	1.62E-02	1.51E-02	1.36E-02	1.26E-02	1.09E-02
ET1-bas	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
ET2-bas	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
LN-ET	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
BBi-bas	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
BBi-sec	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
bbe-sec	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
AI	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
LN-Th	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lng_Tiss	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lung_NP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_TB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_P	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Muscle	5.02E-03	1.33E-02	1.93E-02	1.88E-02	1.22E-02	8.23E-03	8.06E-03	7.96E-03	7.49E-03	6.97E-03	6.53E-03	5.42E-03
Ovaries	0.0	0.0	1.38E-08	4.23E-05	3.81E-04	9.35E-04	1.07E-03	1.17E-03	1.07E-03	1.45E-03	1.50E-03	1.32E-03
Pancreas	1.55E-06	1.73E-04	4.89E-03	2.16E-02	2.45E-02	1.84E-02	1.63E-02	1.48E-02	1.41E-02	1.31E-02	1.22E-02	1.01E-02
R_Marrow	4.93E-05	9.83E-04	4.06E-03	9.45E-03	1.02E-02	8.50E-03	8.44E-03	8.17E-03	7.83E-03	7.04E-03	6.47E-03	5.74E-03
Skin	3.61E-05	3.36E-04	1.64E-03	4.30E-03	4.29E-03	3.59E-03	3.74E-03	3.91E-03	4.24E-03	4.15E-03	3.95E-03	3.30E-03
Spleen	7.00E-04	4.23E-03	1.52E-02	2.81E-02	2.43E-02	1.64E-02	1.54E-02	1.47E-02	1.33E-02	1.26E-02	1.19E-02	9.44E-03
Testes	0.0	0.0	0.0	0.0	4.78E-07	3.07E-05	1.20E-04	2.40E-04	3.30E-04	4.19E-04	4.67E-04	4.84E-04
Thymus	1.78E-09	3.55E-04	8.68E-03	3.95E-02	3.68E-02	2.60E-02	2.45E-02	2.31E-02	2.05E-02	1.91E-02	1.78E-02	1.39E-02
Thyroid	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
GB_Wall1	8.81E-09	4.91E-06	4.36E-04	6.08E-03	8.60E-03	9.26E-03	8.02E-03	6.69E-03	6.43E-03	6.20E-03	6.00E-03	4.99E-03
Ht_Wall1	1.25E-03	2.00E-02	5.86E-02	8.56E-02	6.35E-02	4.09E-02	3.67E-02	3.53E-02	3.36E-02	3.00E-02	2.73E-02	2.24E-02
Uterus	0.0	0.0	6.77E-09	3.22E-05	4.57E-04	7.44E-04	9.28E-04	1.05E-03	1.10E-03	1.13E-03	1.15E-03	1.26E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = bbe-sol		Energy (MeV)										
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	4.28E-06	4.17E-03	1.83E-02	3.77E-02	3.28E-02	2.36E-02	2.12E-02	2.08E-02	1.70E-02	1.54E-02	1.14E-02	
UB_Wall1	0.0	0.0	3.86E-10	6.78E-06	1.48E-04	3.68E-04	5.37E-04	7.14E-04	7.95E-04	8.26E-04	8.48E-04	7.76E-04
Bone_Sur	1.71E-04	3.91E-03	1.76E-02	4.50E-02	4.27E-02	1.83E-02	1.02E-02	7.64E-03	7.33E-03	6.57E-03	6.02E-03	5.41E-03
Brain	0.0	0.0	1.55E-07	7.80E-05	4.56E-04	8.64E-04	9.14E-04	1.16E-03	1.44E-03	1.52E-03	1.52E-03	1.40E-03
Breasts	2.75E-05	5.25E-03	2.87E-02	5.08E-02	3.39E-02	2.29E-02	2.28E-02	2.35E-02	2.20E-02	2.07E-02	1.96E-02	1.65E-02
St_Wall1	8.35E-04	2.77E-03	6.50E-03	1.40E-02	1.73E-02	1.13E-02	1.10E-02	9.34E-03	8.40E-03	8.40E-03	7.88E-03	7.15E-03
SI_Wall1	0.0	0.0	1.31E-06	3.08E-04	1.52E-03	2.17E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.37E-03	1.98E-03
ULI_Wall1	0.0	1.08E-10	2.68E-06	4.84E-04	1.84E-03	3.02E-03	2.93E-03	2.93E-03	2.61E-03	2.42E-03	2.34E-03	2.36E-03
LLI_Wall1	0.0	0.0	9.43E-08	5.31E-05	5.33E-04	6.48E-04	7.88E-04	9.89E-04	1.10E-03	1.13E-03	1.12E-03	1.02E-03
Kidneys	0.0	4.48E-06	5.32E-04	4.77E-03	8.43E-03	7.78E-03	7.35E-03	6.81E-03	7.09E-03	6.34E-03	5.74E-03	5.15E-03
Liver	7.74E-04	1.05E-02	2.62E-02	3.53E-02	2.73E-02	1.81E-02	1.69E-02	1.62E-02	1.51E-02	1.36E-02	1.26E-02	1.09E-02
ET1-bas	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
ET2-bas	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
LN-ET	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
BBi-bas	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
BBi-sec	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
bbe-sec	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
AI	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
LN-Th	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lng_Tiss	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lung_NP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_TB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_P	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Muscle	5.02E-03	1.33E-02	1.93E-02	1.88E-02	1.22E-02	8.23E-03	8.06E-03	7.96E-03	7.49E-03	6.97E-03	6.53E-03	5.42E-03
Ovaries	0.0	0.0	1.38E-08	4.23E-05	3.81E-04	9.35E-04	1.07E-03	1.17E-03	1.07E-03	1.45E-03	1.50E-03	1.32E-03
Pancreas	1.55E-06	1.73E-04	4.89E-03	2.16E-02	2.45E-02	1.84E-02	1.63E-02	1.48E-02	1.41E-02	1.31E-02	1.22E-02	1.01E-02
R_Marrow	4.93E-05	9.83E-04	4.06E-03	9.45E-03	1.02E-02	8.50E-03	8.44E-03	8.17E-03	7.83E-03	7.04E-03	6.47E-03	5.74E-03
Skin	3.61E-05	3.36E-04	1.64E-03	4.30E-03	4.29E-03	3.59E-03	3.74E-03	3.91E-03	4.24E-03	4.15E-03	3.95E-03	3.30E-03
Spleen	7.00E-04	4.23E-03	1.52E-02	2.81E-02	2.43E-02	1.64E-02	1.54E-02	1.47E-02	1.33E-02	1.26E-02	1.19E-02	9.44E-03
Testes	0.0	0.0	0.0	0.0	0.0	4.78E-07	3.07E-05	1.20E-04	2.40E-04	3.30E-04	4.19E-04	4.67E-04
Thymus	1.78E-09	3.55E-04	8.68E-03	3.95E-02	3.68E-02	2.60E-02	2.45E-02	2.31E-02	2.05E-02	1.91E-02	1.78E-02	1.39E-02
Thyroid	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-02	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
GB_Wall1	8.81E-09	4.91E-06	4.36E-04	6.08E-03	8.60E-03	9.26E-03	8.02E-03	6.69E-03	6.43E-03	6.20E-03	6.00E-03	4.99E-03
Ht_Wall1	1.25E-03	2.00E-02	5.86E-02	8.56E-02	6.35E-02	4.09E-02	3.67E-02	3.53E-02	3.36E-02	3.00E-02	2.73E-02	2.24E-02
Uterus	0.0	0.0	6.77E-09	3.22E-05	4.57E-04	7.44E-04	9.28E-04	1.05E-03	1.10E-03	1.13E-03	1.15E-03	1.26E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = bbe-lnd

Energy (MeV)

Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	4.28E-06	4.17E-03	1.83E-02	3.77E-02	3.28E-02	2.36E-02	2.12E-02	2.08E-02	1.70E-02	1.54E-02	1.14E-02	
UB_Wall1	0.0	0.0	3.86E-10	6.78E-06	1.48E-04	3.68E-04	5.37E-04	7.14E-04	7.95E-04	8.26E-04	8.48E-04	7.76E-04
Bone_Sur	1.71E-04	3.91E-03	1.76E-02	4.50E-02	4.27E-02	1.83E-02	1.02E-02	7.64E-03	7.33E-03	6.57E-03	6.02E-03	5.41E-03
Brain	0.0	0.0	1.55E-07	7.80E-05	4.56E-04	8.64E-04	9.14E-04	1.16E-03	1.44E-03	1.52E-03	1.52E-03	1.40E-03
Breasts	2.75E-05	5.25E-03	2.87E-02	5.08E-02	3.39E-02	2.29E-02	2.28E-02	2.35E-02	2.20E-02	2.07E-02	1.96E-02	1.65E-02
St_Wall1	8.35E-04	2.77E-03	6.50E-03	1.40E-02	1.73E-02	1.13E-02	1.10E-02	9.34E-03	8.40E-03	8.40E-03	7.88E-03	7.15E-03
SI_Wall1	0.0	0.0	1.31E-06	3.08E-04	1.52E-03	2.17E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.40E-03	1.98E-03
ULI_Wall1	0.0	1.08E-10	2.68E-06	4.84E-04	1.84E-03	3.02E-03	2.93E-03	2.93E-03	2.61E-03	2.42E-03	2.34E-03	2.36E-03
LLI_Wall1	0.0	0.0	9.43E-08	5.31E-05	5.33E-04	6.48E-04	7.88E-04	9.89E-04	1.10E-03	1.13E-03	1.12E-03	1.02E-03
Kidneys	0.0	4.48E-06	5.32E-04	4.77E-03	8.43E-03	7.78E-03	7.35E-03	6.81E-03	7.09E-03	6.34E-03	5.74E-03	5.15E-03
Liver	7.74E-04	1.05E-02	2.62E-02	3.53E-02	2.73E-02	1.81E-02	1.69E-02	1.62E-02	1.51E-02	1.36E-02	1.26E-02	1.09E-02
ET1-bas	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
ET2-bas	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
LN-ET	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
BBi-bas	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
BBi-sec	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
bbe-sec	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
AI	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
LN-Th	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lng_Tiss	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lung_NP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_TB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_P	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Muscle	5.02E-03	1.33E-02	1.93E-02	1.88E-02	1.22E-02	8.23E-03	8.06E-03	7.96E-03	7.49E-03	6.97E-03	6.53E-03	5.42E-03
Ovaries	0.0	0.0	1.38E-08	4.23E-05	3.81E-04	9.35E-04	1.07E-03	1.17E-03	1.45E-03	1.50E-03	1.48E-03	1.32E-03
Pancreas	1.55E-06	1.73E-04	4.89E-03	2.16E-02	2.45E-02	1.84E-02	1.63E-02	1.48E-02	1.41E-02	1.31E-02	1.22E-02	1.01E-02
R_Marrow	4.93E-05	9.83E-04	4.06E-03	9.45E-03	1.02E-02	8.50E-03	8.44E-03	8.17E-03	7.83E-03	7.04E-03	6.47E-03	5.74E-03
Skin	3.61E-05	3.36E-04	1.64E-03	4.30E-03	4.29E-03	3.59E-03	3.74E-03	3.91E-03	4.24E-03	4.15E-03	3.95E-03	3.30E-03
Spleen	7.00E-04	4.23E-03	1.52E-02	2.81E-02	2.43E-02	1.64E-02	1.54E-02	1.47E-02	1.33E-02	1.26E-02	1.19E-02	9.44E-03
Testes	0.0	0.0	0.0	0.0	0.0	4.78E-07	3.07E-05	1.20E-04	3.30E-04	4.19E-04	4.67E-04	4.84E-04
Thymus	1.78E-09	3.55E-04	8.68E-03	3.95E-02	3.68E-02	2.60E-02	2.45E-02	2.31E-02	2.05E-02	1.91E-02	1.78E-02	1.39E-02
Thyroid	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
GB_Wall1	8.81E-09	4.91E-06	4.36E-04	6.08E-03	8.60E-03	9.26E-03	8.02E-03	6.69E-03	6.43E-03	6.20E-03	6.00E-03	4.99E-03
Ht_Wall1	1.25E-03	2.00E-02	5.86E-02	8.56E-02	6.35E-02	4.09E-02	3.67E-02	3.53E-02	3.36E-02	3.00E-02	2.73E-02	2.24E-02
Uterus	0.0	0.0	6.77E-09	3.22E-05	4.57E-04	7.44E-04	9.28E-04	1.05E-03	1.10E-03	1.13E-03	1.15E-03	1.26E-03

Specific Absorbed Fraction of Photon Energy in kg<sup>-1</sup>: Recommended Values for the Ten-Year-Old

Source = bb $\epsilon$ -seq		Energy (MeV)										
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	4.28E-06	4.17E-03	1.83E-02	3.77E-02	3.28E-02	2.36E-02	2.12E-02	2.08E-02	1.70E-02	1.54E-02	1.14E-02	
UB_Wall1	0.0	0.0	3.86E-10	6.78E-06	1.48E-04	3.68E-04	5.37E-04	7.14E-04	7.95E-04	8.26E-04	8.48E-04	7.76E-04
Bone_Sur	1.71E-04	3.91E-03	1.76E-02	4.50E-02	4.27E-02	1.83E-02	1.02E-02	7.64E-03	7.33E-03	6.57E-03	6.02E-03	5.41E-03
Brain	0.0	0.0	1.55E-07	7.80E-05	4.56E-04	8.64E-04	9.14E-04	1.16E-03	1.44E-03	1.52E-03	1.52E-03	1.40E-03
Breasts	2.75E-05	5.25E-03	2.87E-02	5.08E-02	3.39E-02	2.29E-02	2.28E-02	2.35E-02	2.20E-02	2.07E-02	1.96E-02	1.65E-02
St_Wall1	8.35E-04	2.77E-03	6.50E-03	1.40E-02	1.73E-02	1.13E-02	1.10E-02	9.34E-03	8.40E-03	8.78E-03	7.88E-03	7.15E-03
SI_Wall1	0.0	0.0	1.31E-06	3.08E-04	1.52E-03	2.17E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.37E-03	1.98E-03
ULI_Wall1	0.0	1.08E-10	2.68E-06	4.84E-04	1.84E-03	3.02E-03	2.93E-03	2.93E-03	2.61E-03	2.42E-03	2.34E-03	2.36E-03
LLI_Wall1	0.0	0.0	9.43E-08	5.31E-05	5.33E-04	6.48E-04	7.88E-04	9.89E-04	1.10E-03	1.13E-03	1.12E-03	1.02E-03
Kidneys	0.0	4.48E-06	5.32E-04	4.77E-03	8.43E-03	7.78E-03	7.35E-03	6.81E-03	7.09E-03	6.34E-03	5.74E-03	5.15E-03
Liver	7.74E-04	1.05E-02	2.62E-02	3.53E-02	2.73E-02	1.81E-02	1.69E-02	1.62E-02	1.51E-02	1.36E-02	1.26E-02	1.09E-02
ET1-bas	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
ET2-bas	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
LN-ET	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
BBi-bas	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
BBi-sec	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
bbe-sec	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
AI	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
LN-Th	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lng_Tiss	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lung_NP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_TB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_P	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Muscle	5.02E-03	1.33E-02	1.93E-02	1.88E-02	1.22E-02	8.23E-03	8.06E-03	7.96E-03	7.49E-03	6.97E-03	6.53E-03	5.42E-03
Ovaries	0.0	0.0	1.38E-08	4.23E-05	3.81E-04	9.35E-04	1.07E-03	1.17E-03	1.07E-03	1.45E-03	1.50E-03	1.32E-03
Pancreas	1.55E-06	1.73E-04	4.89E-03	2.16E-02	2.45E-02	1.84E-02	1.63E-02	1.48E-02	1.41E-02	1.31E-02	1.22E-02	1.01E-02
R_Marrow	4.93E-05	9.83E-04	4.06E-03	9.45E-03	1.02E-02	8.50E-03	8.44E-03	8.17E-03	7.83E-03	7.04E-03	6.47E-03	5.74E-03
Skin	3.61E-05	3.36E-04	1.64E-03	4.30E-03	4.29E-03	3.59E-03	3.74E-03	3.91E-03	4.24E-03	4.15E-03	3.95E-03	3.30E-03
Spleen	7.00E-04	4.23E-03	1.52E-02	2.81E-02	2.43E-02	1.64E-02	1.54E-02	1.47E-02	1.33E-02	1.26E-02	1.19E-02	9.44E-03
Testes	0.0	0.0	0.0	0.0	0.0	4.78E-07	3.07E-05	1.20E-04	3.30E-04	4.19E-04	4.67E-04	4.84E-04
Thymus	1.78E-09	3.55E-04	8.68E-03	3.95E-02	3.68E-02	2.60E-02	2.45E-02	2.31E-02	2.05E-02	1.91E-02	1.78E-02	1.39E-02
Thyroid	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-02	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
GB_Wall1	8.81E-09	4.91E-06	4.36E-04	6.08E-03	8.60E-03	9.26E-03	8.02E-03	6.69E-03	6.43E-03	6.20E-03	6.00E-03	4.99E-03
Ht_Wall1	1.25E-03	2.00E-02	5.86E-02	8.56E-02	6.35E-02	4.09E-02	3.67E-02	3.53E-02	3.36E-02	3.00E-02	2.73E-02	2.24E-02
Uterus	0.0	0.0	6.77E-09	3.22E-05	4.57E-04	7.44E-04	9.28E-04	1.05E-03	1.10E-03	1.13E-03	1.15E-03	1.26E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = AI

Energy (MeV)

Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	4.28E-06	4.17E-03	1.83E-02	3.77E-02	3.28E-02	2.36E-02	2.12E-02	2.08E-02	1.70E-02	1.54E-02	1.14E-02	
UB_Wall1	0.0	0.0	3.86E-10	6.78E-06	1.48E-04	3.68E-04	5.37E-04	7.14E-04	7.95E-04	8.26E-04	8.48E-04	7.76E-04
Bone_Sur	1.71E-04	3.91E-03	1.76E-02	4.50E-02	4.27E-02	1.83E-02	1.02E-02	7.64E-03	7.33E-03	6.57E-03	6.02E-03	5.41E-03
Brain	0.0	0.0	1.55E-07	7.80E-05	4.56E-04	8.64E-04	9.14E-04	1.16E-03	1.44E-03	1.52E-03	1.52E-03	1.40E-03
Breasts	2.75E-05	5.25E-03	2.87E-02	5.08E-02	3.39E-02	2.29E-02	2.28E-02	2.35E-02	2.20E-02	2.07E-02	1.96E-02	1.65E-02
St_Wall1	8.35E-04	2.77E-03	6.50E-03	1.40E-02	1.73E-02	1.13E-02	1.10E-02	9.34E-03	8.40E-03	8.40E-03	7.88E-03	7.15E-03
SI_Wall1	0.0	0.0	1.31E-06	3.08E-04	1.52E-03	2.17E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.37E-03	1.98E-03
ULI_Wall1	0.0	1.08E-10	2.68E-06	4.84E-04	1.84E-03	3.02E-03	2.93E-03	2.93E-03	2.61E-03	2.42E-03	2.34E-03	2.36E-03
LLI_Wall1	0.0	0.0	9.43E-08	5.31E-05	5.33E-04	6.48E-04	7.88E-04	9.89E-04	1.10E-03	1.13E-03	1.12E-03	1.02E-03
Kidneys	0.0	4.48E-06	5.32E-04	4.77E-03	8.43E-03	7.78E-03	7.35E-03	6.81E-03	7.09E-03	6.34E-03	5.74E-03	5.15E-03
Liver	7.74E-04	1.05E-02	2.62E-02	3.53E-02	2.73E-02	1.81E-02	1.69E-02	1.62E-02	1.51E-02	1.36E-02	1.26E-02	1.09E-02
ET1-bas	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
ET2-bas	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
LN-ET	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
BBi-bas	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
BBi-sec	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
bbe-sec	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
AI	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
LN-Th	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lng_Tiss	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lung_NP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_TB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_P	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Muscle	5.02E-03	1.33E-02	1.93E-02	1.88E-02	1.22E-02	8.23E-03	8.06E-03	7.96E-03	7.49E-03	6.97E-03	6.53E-03	5.42E-03
Ovaries	0.0	0.0	1.38E-08	4.23E-05	3.81E-04	9.35E-04	1.07E-03	1.17E-03	1.45E-03	1.50E-03	1.48E-03	1.32E-03
Pancreas	1.55E-06	1.73E-04	4.89E-03	2.16E-02	2.45E-02	1.84E-02	1.63E-02	1.48E-02	1.41E-02	1.31E-02	1.22E-02	1.01E-02
R_Marrow	4.93E-05	9.83E-04	4.06E-03	9.45E-03	1.02E-02	8.50E-03	8.44E-03	8.17E-03	7.83E-03	7.04E-03	6.47E-03	5.74E-03
Skin	3.61E-05	3.36E-04	1.64E-03	4.30E-03	4.29E-03	3.59E-03	3.74E-03	3.91E-03	4.24E-03	4.15E-03	3.95E-03	3.30E-03
Spleen	7.00E-04	4.23E-03	1.52E-02	2.81E-02	2.43E-02	1.64E-02	1.54E-02	1.47E-02	1.33E-02	1.26E-02	1.19E-02	9.44E-03
Testes	0.0	0.0	0.0	0.0	0.0	4.78E-07	3.07E-05	1.20E-04	3.30E-04	4.19E-04	4.67E-04	4.84E-04
Thymus	1.78E-09	3.55E-04	8.68E-03	3.95E-02	3.68E-02	2.60E-02	2.45E-02	2.31E-02	2.05E-02	1.91E-02	1.78E-02	1.39E-02
Thyroid	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-02	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
GB_Wall1	8.81E-09	4.91E-06	4.36E-04	6.08E-03	8.60E-03	9.26E-03	8.02E-03	6.69E-03	6.43E-03	6.20E-03	6.00E-03	4.99E-03
Ht_Wall1	1.25E-03	2.00E-02	5.86E-02	8.56E-02	6.35E-02	4.09E-02	3.67E-02	3.53E-02	3.36E-02	3.00E-02	2.73E-02	2.24E-02
Uterus	0.0	0.0	6.77E-09	3.22E-05	4.57E-04	7.44E-04	9.28E-04	1.05E-03	1.10E-03	1.13E-03	1.15E-03	1.26E-03

Specific Absorbed Fraction of Photon Energy in kg<sup>-1</sup>: Recommended Values for the Ten-Year-Old

Source = LN-Th

Energy (MeV)

Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	4.28E-06	4.17E-03	1.83E-02	3.77E-02	3.28E-02	2.36E-02	2.12E-02	2.08E-02	1.70E-02	1.54E-02	1.14E-02	
UB_Wall1	0.0	0.0	3.86E-10	6.78E-06	1.48E-04	3.68E-04	5.37E-04	7.14E-04	7.95E-04	8.26E-04	8.48E-04	7.76E-04
Bone_Sur	1.71E-04	3.91E-03	1.76E-02	4.50E-02	4.27E-02	1.83E-02	1.02E-02	7.64E-03	7.33E-03	6.57E-03	6.02E-03	5.41E-03
Brain	0.0	0.0	1.55E-07	7.80E-05	4.56E-04	8.64E-04	9.14E-04	1.16E-03	1.44E-03	1.52E-03	1.52E-03	1.40E-03
Breasts	2.75E-05	5.25E-03	2.87E-02	5.08E-02	3.39E-02	2.29E-02	2.28E-02	2.35E-02	2.20E-02	2.07E-02	1.96E-02	1.65E-02
St_Wall1	8.35E-04	2.77E-03	6.50E-03	1.40E-02	1.73E-02	1.13E-02	1.10E-02	9.34E-03	8.40E-03	7.88E-03	7.15E-03	
SI_Wall1	0.0	0.0	1.31E-06	3.08E-04	1.52E-03	2.17E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.37E-03	1.98E-03
ULI_Wall1	0.0	1.08E-10	2.68E-06	4.84E-04	1.84E-03	3.02E-03	2.93E-03	2.93E-03	2.61E-03	2.42E-03	2.34E-03	2.36E-03
LLI_Wall1	0.0	0.0	9.43E-08	5.31E-05	5.33E-04	6.48E-04	7.88E-04	9.89E-04	1.10E-03	1.13E-03	1.12E-03	1.02E-03
Kidneys	0.0	4.48E-06	5.32E-04	4.77E-03	8.43E-03	7.78E-03	7.35E-03	6.81E-03	7.09E-03	6.34E-03	5.74E-03	5.15E-03
Liver	7.74E-04	1.05E-02	2.62E-02	3.53E-02	2.73E-02	1.81E-02	1.69E-02	1.62E-02	1.51E-02	1.36E-02	1.26E-02	1.09E-02
ET1-bas	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
ET2-bas	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
LN-ET	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
BBi-bas	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
BBi-sec	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
bbe-sec	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
AI	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
LN-Th	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lng_Tiss	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-01	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lung_NP	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_TB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lung_P	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Muscle	5.02E-03	1.33E-02	1.93E-02	1.88E-02	1.22E-02	8.23E-03	8.06E-03	7.96E-03	7.49E-03	6.97E-03	6.53E-03	5.42E-03
Ovaries	0.0	0.0	1.38E-08	4.23E-05	3.81E-04	9.35E-04	1.07E-03	1.17E-03	1.45E-03	1.50E-03	1.48E-03	1.32E-03
Pancreas	1.55E-06	1.73E-04	4.89E-03	2.16E-02	2.45E-02	1.84E-02	1.63E-02	1.48E-02	1.41E-02	1.31E-02	1.22E-02	1.01E-02
R_Marrow	4.93E-05	9.83E-04	4.06E-03	9.45E-03	1.02E-02	8.50E-03	8.44E-03	8.17E-03	7.83E-03	7.04E-03	6.47E-03	5.74E-03
Skin	3.61E-05	3.36E-04	1.64E-03	4.30E-03	4.29E-03	3.59E-03	3.74E-03	3.91E-03	4.24E-03	4.15E-03	3.95E-03	3.30E-03
Spleen	7.00E-04	4.23E-03	1.52E-02	2.81E-02	2.43E-02	1.64E-02	1.54E-02	1.47E-02	1.33E-02	1.26E-02	1.19E-02	9.44E-03
Testes	0.0	0.0	0.0	0.0	0.0	4.78E-07	3.07E-05	1.20E-04	3.30E-04	4.19E-04	4.67E-04	4.84E-04
Thymus	1.78E-09	3.55E-04	8.68E-03	3.95E-02	3.68E-02	2.60E-02	2.45E-02	2.31E-02	2.05E-02	1.91E-02	1.78E-02	1.39E-02
Thyroid	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
GB_Wall1	8.81E-09	4.91E-06	4.36E-04	6.08E-03	8.60E-03	9.26E-03	8.02E-03	6.69E-03	6.43E-03	6.20E-03	6.00E-03	4.99E-03
Ht_Wall1	1.25E-03	2.00E-02	5.86E-02	8.56E-02	6.35E-02	4.09E-02	3.67E-02	3.53E-02	3.36E-02	3.00E-02	2.73E-02	2.24E-02
Uterus	0.0	0.0	6.77E-09	3.22E-05	4.57E-04	7.44E-04	9.28E-04	1.05E-03	1.10E-03	1.13E-03	1.15E-03	1.26E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = Ing_Cont		Energy (MeV)										
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	4.28E-06	4.17E-03	1.83E-02	3.77E-02	3.28E-02	2.36E-02	2.12E-02	2.08E-02	1.70E-02	1.54E-02	1.14E-02	
UB_Wall1	0.0	0.0	3.86E-10	6.78E-06	1.48E-04	3.68E-04	5.37E-04	7.14E-04	7.95E-04	8.26E-04	8.48E-04	7.76E-04
Bone_Sur	1.71E-04	3.91E-03	1.76E-02	4.50E-02	4.27E-02	1.83E-02	1.02E-02	7.64E-03	7.33E-03	6.57E-03	6.02E-03	5.41E-03
Brain	0.0	0.0	1.55E-07	7.80E-05	4.56E-04	8.64E-04	9.14E-04	1.16E-03	1.44E-03	1.52E-03	1.52E-03	1.40E-03
Breasts	2.75E-05	5.25E-03	2.87E-02	5.08E-02	3.39E-02	2.29E-02	2.28E-02	2.35E-02	2.20E-02	2.07E-02	1.96E-02	1.65E-02
St_Wall1	8.35E-04	2.77E-03	6.50E-03	1.40E-02	1.73E-02	1.13E-02	1.10E-02	9.34E-03	8.40E-03	8.40E-03	7.88E-03	7.15E-03
SI_Wall1	0.0	0.0	1.31E-06	3.08E-04	1.52E-03	2.17E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.37E-03	1.98E-03
ULI_Wall1	0.0	1.08E-10	2.68E-06	4.84E-04	1.84E-03	3.02E-03	2.93E-03	2.93E-03	2.61E-03	2.42E-03	2.34E-03	2.36E-03
LLI_Wall1	0.0	0.0	9.43E-08	5.31E-05	5.33E-04	6.48E-04	7.88E-04	9.89E-04	1.10E-03	1.13E-03	1.12E-03	1.02E-03
Kidneys	0.0	4.48E-06	5.32E-04	4.77E-03	8.43E-03	7.78E-03	7.35E-03	6.81E-03	7.09E-03	6.34E-03	5.74E-03	5.15E-03
Liver	7.74E-04	1.05E-02	2.62E-02	3.53E-02	2.73E-02	1.81E-02	1.69E-02	1.62E-02	1.51E-02	1.36E-02	1.26E-02	1.09E-02
ET1-bas	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
ET2-bas	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
LN-ET	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
BBi-bas	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
BBi-sec	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
bbe-sec	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
AI	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
LN-Th	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Ing_Tiss	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lung_NP	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
Lung_TB	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lung_P	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Muscle	5.02E-03	1.33E-02	1.93E-02	1.88E-02	1.22E-02	8.70E-03	8.06E-03	7.49E-03	6.97E-03	6.53E-03	5.42E-03	
Ovaries	0.0	0.0	1.38E-08	4.23E-05	3.81E-04	9.35E-04	1.07E-03	1.17E-03	1.45E-03	1.50E-03	1.48E-03	1.32E-03
Pancreas	1.55E-06	1.73E-04	4.89E-03	2.16E-02	2.45E-02	1.84E-02	1.63E-02	1.48E-02	1.41E-02	1.31E-02	1.22E-02	1.01E-02
R_Marrow	4.93E-05	9.83E-04	4.06E-03	9.45E-03	1.02E-02	8.50E-03	8.44E-03	8.17E-03	7.83E-03	7.04E-03	6.47E-03	5.74E-03
Skin	3.61E-05	3.36E-04	1.64E-03	4.30E-03	4.29E-03	3.59E-03	3.74E-03	3.91E-03	4.24E-03	4.15E-03	3.95E-03	3.30E-03
Spleen	7.00E-04	4.23E-03	1.52E-02	2.81E-02	2.43E-02	1.64E-02	1.54E-02	1.47E-02	1.33E-02	1.26E-02	1.19E-02	9.44E-03
Testes	0.0	0.0	0.0	0.0	4.78E-07	3.07E-05	1.20E-04	2.40E-04	3.30E-04	4.19E-04	4.67E-04	4.84E-04
Thymus	1.78E-09	3.55E-04	8.68E-03	3.95E-02	3.68E-02	2.60E-02	2.45E-02	2.31E-02	2.05E-02	1.91E-02	1.78E-02	1.39E-02
Thyroid	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-02	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
GB_Wall1	8.81E-09	4.91E-06	4.36E-04	6.08E-03	8.60E-03	9.26E-03	8.02E-03	6.69E-03	6.43E-03	6.20E-03	6.00E-03	4.99E-03
Ht_Wall1	1.25E-03	2.00E-02	5.86E-02	8.56E-02	6.35E-02	4.09E-02	3.67E-02	3.53E-02	3.36E-02	3.00E-02	2.73E-02	2.24E-02
Uterus	0.0	0.0	6.77E-09	3.22E-05	4.57E-04	7.44E-04	9.28E-04	1.05E-03	1.10E-03	1.13E-03	1.15E-03	1.26E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = Lung_Tiss		Energy (MeV)										
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	4.28E-06	4.17E-03	1.83E-02	3.77E-02	3.28E-02	2.36E-02	2.12E-02	2.08E-02	1.70E-02	1.54E-02	1.14E-02	
UB_Wall1	0.0	0.0	3.86E-10	6.78E-06	1.48E-04	3.68E-04	5.37E-04	7.14E-04	7.95E-04	8.26E-04	8.48E-04	7.76E-04
Bone_Sur	1.71E-04	3.91E-03	1.76E-02	4.50E-02	4.27E-02	1.83E-02	1.02E-02	7.64E-03	7.33E-03	6.57E-03	6.02E-03	5.41E-03
Brain	0.0	0.0	1.55E-07	7.80E-05	4.56E-04	8.64E-04	9.14E-04	1.16E-03	1.44E-03	1.52E-03	1.52E-03	1.40E-03
Breasts	2.75E-05	5.25E-03	2.87E-02	5.08E-02	3.39E-02	2.29E-02	2.28E-02	2.35E-02	2.20E-02	2.07E-02	1.96E-02	1.65E-02
St_Wall1	8.35E-04	2.77E-03	6.50E-03	1.40E-02	1.73E-02	1.13E-02	1.10E-02	9.34E-03	8.40E-03	8.40E-03	7.88E-03	7.15E-03
SI_Wall1	0.0	0.0	1.31E-06	3.08E-04	1.52E-03	2.17E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.37E-03	1.98E-03
ULI_Wall1	0.0	1.08E-10	2.68E-06	4.84E-04	1.84E-03	3.02E-03	2.93E-03	2.93E-03	2.61E-03	2.42E-03	2.34E-03	2.36E-03
LLI_Wall1	0.0	0.0	9.43E-08	5.31E-05	5.33E-04	6.48E-04	7.88E-04	9.89E-04	1.10E-03	1.13E-03	1.12E-03	1.02E-03
Kidneys	0.0	4.48E-06	5.32E-04	4.77E-03	8.43E-03	7.78E-03	7.35E-03	6.81E-03	7.09E-03	6.34E-03	5.74E-03	5.15E-03
Liver	7.74E-04	1.05E-02	2.62E-02	3.53E-02	2.73E-02	1.81E-02	1.69E-02	1.62E-02	1.51E-02	1.36E-02	1.26E-02	1.09E-02
ET1-bas	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
ET2-bas	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
LN-ET	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
BBi-bas	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
BBi-sec	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
bbe-sec	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
AI	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
LN-Th	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lng_Tiss	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lung_NP	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
Lung_TB	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lung_P	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Muscle	5.02E-03	1.33E-02	1.93E-02	1.88E-02	1.22E-02	8.70E-03	8.06E-03	7.96E-03	7.49E-03	6.97E-03	6.53E-03	5.42E-03
Ovaries	0.0	0.0	1.38E-08	4.23E-05	3.81E-04	9.35E-04	1.07E-03	1.17E-03	1.45E-03	1.50E-03	1.48E-03	1.32E-03
Pancreas	1.55E-06	1.73E-04	4.89E-03	2.16E-02	2.45E-02	1.84E-02	1.63E-02	1.48E-02	1.41E-02	1.31E-02	1.22E-02	1.01E-02
R_Marrow	4.93E-05	9.83E-04	4.06E-03	9.45E-03	1.02E-02	8.50E-03	8.44E-03	8.17E-03	7.83E-03	7.04E-03	6.47E-03	5.74E-03
Skin	3.61E-05	3.36E-04	1.64E-03	4.30E-03	4.29E-03	3.59E-03	3.74E-03	3.91E-03	4.24E-03	4.15E-03	3.95E-03	3.30E-03
Spleen	7.00E-04	4.23E-03	1.52E-02	2.81E-02	2.43E-02	1.64E-02	1.54E-02	1.47E-02	1.33E-02	1.26E-02	1.19E-02	9.44E-03
Testes	0.0	0.0	0.0	0.0	4.78E-07	3.07E-05	1.20E-04	2.40E-04	3.30E-04	4.19E-04	4.67E-04	4.84E-04
Thymus	1.78E-09	3.55E-04	8.68E-03	3.95E-02	3.68E-02	2.60E-02	2.45E-02	2.31E-02	2.05E-02	1.91E-02	1.78E-02	1.39E-02
Thyroid	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-02	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
GB_Wall1	8.81E-09	4.91E-06	4.36E-04	6.08E-03	8.60E-03	9.26E-03	8.02E-03	6.69E-03	6.43E-03	6.20E-03	6.00E-03	4.99E-03
Ht_Wall1	1.25E-03	2.00E-02	5.86E-02	8.56E-02	6.35E-02	4.09E-02	3.67E-02	3.53E-02	3.36E-02	3.00E-02	2.73E-02	2.24E-02
Uterus	0.0	0.0	6.77E-09	3.22E-05	4.57E-04	7.44E-04	9.28E-04	1.05E-03	1.10E-03	1.13E-03	1.15E-03	1.26E-03

Specific Absorbed Fraction of Photon Energy in kg<sup>-1</sup>: Recommended Values for the Ten-Year-Old

Source = NP_Cont	Energy (MeV)											
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	0.0	5.50E-09	3.63E-05	6.03E-04	1.19E-03	1.66E-03	1.75E-03	1.79E-03	1.79E-03	1.78E-03	1.55E-03	
UB_Wall1	0.0	0.0	1.32E-08	4.84E-06	3.72E-05	8.30E-05	1.55E-04	2.14E-04	2.47E-04	2.73E-04	2.82E-04	
Bone_Sur	1.24E-10	8.73E-05	2.72E-03	2.16E-02	3.33E-02	1.75E-02	9.30E-03	6.85E-03	5.40E-03	5.57E-03	4.84E-03	
Brain	0.0	1.98E-07	1.28E-04	1.90E-03	7.22E-03	8.35E-03	7.90E-03	8.43E-03	8.22E-03	7.81E-03	7.41E-03	6.24E-03
Breasts	0.0	0.0	4.01E-06	1.04E-03	4.77E-03	5.02E-03	5.27E-03	5.49E-03	5.36E-03	5.15E-03	5.00E-03	4.18E-03
St_Wall1	0.0	0.0	4.18E-09	2.25E-05	4.94E-04	7.53E-04	1.24E-03	1.02E-03	1.24E-03	1.31E-03	1.32E-03	1.26E-03
SI_Wall1	0.0	0.0	4.65E-07	4.13E-05	1.47E-04	3.14E-04	4.99E-04	3.14E-04	4.99E-04	5.85E-04	5.94E-04	6.08E-04
ULI_Wall1	0.0	0.0	7.39E-07	5.35E-05	2.05E-04	3.41E-04	4.90E-04	5.74E-04	6.19E-04	6.36E-04	5.99E-04	
LLI_Wall1	0.0	0.0	8.87E-08	1.20E-05	6.50E-05	1.26E-04	2.12E-04	2.75E-04	3.09E-04	3.35E-04	3.36E-04	
Kidneys	0.0	0.0	1.36E-10	5.08E-06	2.18E-04	6.20E-04	7.04E-04	7.71E-04	8.36E-04	9.48E-04	1.01E-03	9.37E-04
Liver	0.0	0.0	8.00E-09	1.92E-04	9.55E-04	1.52E-03	1.42E-03	1.47E-03	1.66E-03	1.79E-03	1.81E-03	1.55E-03
ET1-bas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ET2-bas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LN-ET	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BBi-bas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BBi-sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
bbe-sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LN-Th	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lng_Tiss	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
Lung_NP	1.00E+02	6.27E+01	3.64E+01	1.37E+01	4.45E+00	2.62E+00	2.88E+00	3.02E+00	3.02E+00	2.77E+00	2.56E+00	2.04E+00
Lung_TB	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
Lung_P	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
Muscle	8.86E-03	2.14E-02	2.98E-02	3.01E-02	1.91E-02	1.22E-02	1.15E-02	1.08E-02	1.08E-02	1.08E-02	9.37E-03	7.55E-03
Ovaries	0.0	0.0	0.0	6.49E-08	1.31E-08	7.72E-05	1.52E-04	2.54E-04	3.25E-04	3.62E-04	3.90E-04	3.87E-04
Pancreas	0.0	0.0	3.25E-09	2.77E-05	5.16E-04	1.09E-03	1.49E-03	1.60E-03	1.65E-03	1.67E-03	1.65E-03	1.45E-03
R_Marrow	2.91E-10	1.49E-05	4.11E-04	3.30E-03	6.05E-03	5.68E-03	5.28E-03	5.36E-03	5.02E-03	4.64E-03	4.37E-03	3.83E-03
Skin	0.0	3.79E-05	8.27E-04	3.57E-03	3.98E-03	3.56E-03	3.72E-03	4.06E-03	3.97E-03	3.89E-03	3.73E-03	2.88E-03
Spleen	0.0	0.0	1.60E-09	1.69E-05	8.16E-04	1.18E-03	1.54E-03	1.75E-03	1.68E-03	1.68E-03	1.57E-03	1.47E-03
Testes	0.0	0.0	0.0	1.07E-09	1.08E-06	1.26E-05	3.44E-05	7.69E-05	1.19E-04	1.45E-04	1.66E-04	1.84E-04
Thymus	0.0	5.44E-05	3.89E-03	2.63E-02	4.10E-02	2.87E-02	2.47E-02	2.50E-02	2.52E-02	2.51E-02	2.40E-02	1.76E-02
Thyroid	0.0	1.98E-07	1.28E-04	1.90E-03	7.22E-03	8.35E-03	7.90E-03	8.43E-03	8.22E-03	7.81E-03	7.41E-03	6.24E-03
GB_Wall1	0.0	0.0	7.19E-10	9.94E-06	2.55E-04	6.33E-04	8.62E-04	1.08E-03	1.16E-03	1.18E-03	1.19E-03	1.07E-03
Ht_Wall1	0.0	1.18E-09	1.12E-05	1.28E-03	4.79E-03	5.71E-03	5.54E-03	6.52E-03	5.98E-03	5.44E-03	5.10E-03	4.53E-03
Uterus	0.0	0.0	0.0	5.51E-08	1.19E-05	7.21E-05	1.44E-04	2.43E-04	3.13E-04	3.50E-04	3.78E-04	3.76E-04

Specific Absorbed Fraction of Photon Energy in kg<sup>-1</sup>: Recommended Values for the Ten-Year-Old

Source = TB_Cont	Energy (MeV)											
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	4.28E-06	4.17E-03	1.83E-02	3.77E-02	3.28E-02	2.36E-02	2.12E-02	2.08E-02	1.70E-02	1.54E-02	1.14E-02	
UB_Wall1	0.0	0.0	3.86E-10	6.78E-06	1.48E-04	3.68E-04	5.37E-04	7.14E-04	7.95E-04	8.26E-04	8.48E-04	7.76E-04
Bone_Sur	1.71E-04	3.91E-03	1.76E-02	4.50E-02	4.27E-02	1.83E-02	1.02E-02	7.64E-03	7.33E-03	6.57E-03	6.02E-03	5.41E-03
Brain	0.0	0.0	1.55E-07	7.80E-05	4.56E-04	8.64E-04	9.14E-04	1.16E-03	1.44E-03	1.52E-03	1.52E-03	1.40E-03
Breasts	2.75E-05	5.25E-03	2.87E-02	5.08E-02	3.39E-02	2.29E-02	2.28E-02	2.35E-02	2.20E-02	2.07E-02	1.96E-02	1.65E-02
St_Wall1	8.35E-04	2.77E-03	6.50E-03	1.40E-02	1.73E-02	1.13E-02	1.10E-02	9.34E-03	8.40E-03	7.88E-03	7.15E-03	
SI_Wall1	0.0	0.0	1.31E-06	3.08E-04	1.52E-03	2.17E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.40E-03	1.98E-03
ULI_Wall1	0.0	1.08E-10	2.68E-06	4.84E-04	1.84E-03	3.02E-03	2.93E-03	2.61E-03	2.61E-03	2.42E-03	2.34E-03	2.36E-03
LLI_Wall1	0.0	0.0	9.43E-08	5.31E-05	5.33E-04	6.48E-04	7.88E-04	9.89E-04	1.10E-03	1.13E-03	1.12E-03	1.02E-03
Kidneys	0.0	4.48E-06	5.32E-04	4.77E-03	8.43E-03	7.78E-03	7.35E-03	6.81E-03	7.09E-03	6.34E-03	5.74E-03	5.15E-03
Liver	7.74E-04	1.05E-02	2.62E-02	3.53E-02	2.73E-02	1.81E-02	1.69E-02	1.62E-02	1.51E-02	1.36E-02	1.26E-02	1.09E-02
ET1-bas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ET2-bas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LN-ET	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BBi-bas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BBi-sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
bbe-sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LN-Th	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lng_Tiss	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lung_NP	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
Lung_TB	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lung_P	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Muscle	5.02E-03	1.33E-02	1.93E-02	1.88E-02	1.22E-02	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Ovaries	0.0	0.0	1.38E-08	4.23E-05	3.81E-04	9.35E-04	1.07E-03	1.17E-03	1.45E-03	1.50E-03	1.48E-03	1.32E-03
Pancreas	1.55E-06	1.73E-04	4.89E-03	2.16E-02	2.45E-02	1.84E-02	1.63E-02	1.48E-02	1.41E-02	1.31E-02	1.22E-02	1.01E-02
R_Marrow	4.93E-05	9.83E-04	4.06E-03	9.45E-03	1.02E-02	8.50E-03	8.44E-03	8.17E-03	7.83E-03	7.04E-03	6.47E-03	5.74E-03
Skin	3.61E-05	3.36E-04	1.64E-03	4.30E-03	4.29E-03	3.59E-03	3.74E-03	3.91E-03	4.24E-03	4.15E-03	3.95E-03	3.30E-03
Spleen	7.00E-04	4.23E-03	1.52E-02	2.81E-02	2.43E-02	1.64E-02	1.54E-02	1.47E-02	1.33E-02	1.26E-02	1.19E-02	9.44E-03
Testes	0.0	0.0	0.0	0.0	4.78E-07	3.07E-05	1.20E-04	2.40E-04	3.30E-04	4.19E-04	4.67E-04	4.84E-04
Thymus	1.78E-09	3.55E-04	8.68E-03	3.95E-02	3.68E-02	2.60E-02	2.45E-02	2.31E-02	2.05E-02	1.91E-02	1.78E-02	1.39E-02
Thyroid	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
GB_Wall1	8.81E-09	4.91E-06	4.36E-04	6.08E-03	8.60E-03	9.26E-03	8.02E-03	6.69E-03	6.43E-03	6.20E-03	6.00E-03	4.99E-03
Ht_Wall1	1.25E-03	2.00E-02	5.86E-02	8.56E-02	6.35E-02	4.09E-02	3.67E-02	3.53E-02	3.36E-02	2.73E-02	2.24E-02	
Uterus	0.0	0.0	6.77E-09	3.22E-05	4.57E-04	7.44E-04	9.28E-04	1.05E-03	1.10E-03	1.13E-03	1.15E-03	1.26E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = P_Cont		Energy (MeV)										
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	4.28E-06	4.17E-03	1.83E-02	3.77E-02	3.28E-02	2.36E-02	2.12E-02	2.08E-02	1.70E-02	1.54E-02	1.14E-02	
UB_Wall1	0.0	0.0	3.86E-10	6.78E-06	1.48E-04	3.68E-04	5.37E-04	7.14E-04	7.95E-04	8.26E-04	8.48E-04	7.76E-04
Bone_Sur	1.71E-04	3.91E-03	1.76E-02	4.50E-02	4.27E-02	1.83E-02	1.02E-02	7.64E-03	7.33E-03	6.57E-03	6.02E-03	5.41E-03
Brain	0.0	0.0	1.55E-07	7.80E-05	4.56E-04	8.64E-04	9.14E-04	1.16E-03	1.44E-03	1.52E-03	1.52E-03	1.40E-03
Breasts	2.75E-05	5.25E-03	2.87E-02	5.08E-02	3.39E-02	2.29E-02	2.28E-02	2.35E-02	2.20E-02	2.07E-02	1.96E-02	1.65E-02
St_Wall1	8.35E-04	2.77E-03	6.50E-03	1.40E-02	1.73E-02	1.13E-02	1.10E-02	9.34E-03	8.40E-03	7.88E-03	7.15E-03	
SI_Wall1	0.0	0.0	1.31E-06	3.08E-04	1.52E-03	2.17E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.40E-03	1.98E-03
ULI_Wall1	0.0	1.08E-10	2.68E-06	4.84E-04	1.84E-03	3.02E-03	2.93E-03	2.93E-03	2.61E-03	2.42E-03	2.34E-03	2.36E-03
LLI_Wall1	0.0	0.0	9.43E-08	5.31E-05	5.33E-04	6.48E-04	7.88E-04	9.89E-04	1.10E-03	1.13E-03	1.12E-03	1.02E-03
Kidneys	0.0	4.48E-06	5.32E-04	4.77E-03	8.43E-03	7.78E-03	7.35E-03	6.81E-03	7.09E-03	6.34E-03	5.74E-03	5.15E-03
Liver	7.74E-04	1.05E-02	2.62E-02	3.53E-02	2.73E-02	1.81E-02	1.69E-02	1.62E-02	1.51E-02	1.36E-02	1.26E-02	1.09E-02
ET1-bas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ET2-bas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LN-ET	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BBi-bas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BBi-sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
bbe-sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LN-Th	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lng_Tiss	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lung_NP	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
Lung_TB	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lung_P	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Muscle	5.02E-03	1.33E-02	1.93E-02	1.88E-02	1.22E-02	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Ovaries	0.0	0.0	1.38E-08	4.23E-05	3.81E-04	9.35E-04	1.07E-03	1.17E-03	1.45E-03	1.50E-03	1.48E-03	1.32E-03
Pancreas	1.55E-06	1.73E-04	4.89E-03	2.16E-02	2.45E-02	1.84E-02	1.63E-02	1.48E-02	1.41E-02	1.31E-02	1.22E-02	1.01E-02
R_Marrow	4.93E-05	9.83E-04	4.06E-03	9.45E-03	1.02E-02	8.50E-03	8.44E-03	8.17E-03	7.83E-03	7.04E-03	6.47E-03	5.74E-03
Skin	3.61E-05	3.36E-04	1.64E-03	4.30E-03	4.29E-03	3.59E-03	3.74E-03	3.91E-03	4.24E-03	4.15E-03	3.95E-03	3.30E-03
Spleen	7.00E-04	4.23E-03	1.52E-02	2.81E-02	2.43E-02	1.64E-02	1.54E-02	1.47E-02	1.33E-02	1.26E-02	1.19E-02	9.44E-03
Testes	0.0	0.0	0.0	0.0	4.78E-07	3.07E-05	1.20E-04	2.40E-04	3.30E-04	4.19E-04	4.67E-04	4.84E-04
Thymus	1.78E-09	3.55E-04	8.68E-03	3.95E-02	3.68E-02	2.60E-02	2.45E-02	2.31E-02	2.05E-02	1.91E-02	1.78E-02	1.39E-02
Thyroid	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
GB_Wall1	8.81E-09	4.91E-06	4.36E-04	6.08E-03	8.60E-03	9.26E-03	8.02E-03	6.69E-03	6.43E-03	6.20E-03	6.00E-03	4.99E-03
Ht_Wall1	1.25E-03	2.00E-02	5.86E-02	8.56E-02	6.35E-02	4.09E-02	3.67E-02	3.53E-02	3.36E-02	2.73E-02	2.24E-02	
Uterus	0.0	0.0	6.77E-09	3.22E-05	4.57E-04	7.44E-04	9.28E-04	1.05E-03	1.10E-03	1.13E-03	1.15E-03	1.26E-03

Specific Absorbed Fraction of Photon Energy in kg<sup>-1</sup>: Recommended Values for the Ten-Year-Old

Source = LN_Lung	Energy (MeV)											
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	4.28E-06	4.17E-03	1.83E-02	3.77E-02	3.28E-02	2.36E-02	2.12E-02	2.08E-02	1.70E-02	1.54E-02	1.14E-02	
UB_Wall1	0.0	0.0	3.86E-10	6.78E-06	1.48E-04	3.68E-04	5.37E-04	7.14E-04	7.95E-04	8.26E-04	8.48E-04	7.76E-04
Bone_Sur	1.71E-04	3.91E-03	1.76E-02	4.50E-02	4.27E-02	1.83E-02	1.02E-02	7.64E-03	7.33E-03	6.57E-03	6.02E-03	5.41E-03
Brain	0.0	0.0	1.55E-07	7.80E-05	4.56E-04	8.64E-04	9.14E-04	1.16E-03	1.44E-03	1.52E-03	1.52E-03	1.40E-03
Breasts	2.75E-05	5.25E-03	2.87E-02	5.08E-02	3.39E-02	2.29E-02	2.28E-02	2.35E-02	2.20E-02	2.07E-02	1.96E-02	1.65E-02
St_Wall1	8.35E-04	2.77E-03	6.50E-03	1.40E-02	1.73E-02	1.13E-02	1.10E-02	9.34E-03	8.40E-03	7.88E-03	7.15E-03	
SI_Wall1	0.0	0.0	1.31E-06	3.08E-04	1.52E-03	2.17E-03	2.22E-03	2.54E-03	2.41E-03	2.40E-03	2.40E-03	1.98E-03
ULI_Wall1	0.0	1.08E-10	2.68E-06	4.84E-04	1.84E-03	3.02E-03	2.93E-03	2.61E-03	2.61E-03	2.42E-03	2.34E-03	2.36E-03
LLI_Wall1	0.0	0.0	9.43E-08	5.31E-05	5.33E-04	6.48E-04	7.88E-04	9.89E-04	1.10E-03	1.13E-03	1.12E-03	1.02E-03
Kidneys	0.0	4.48E-06	5.32E-04	4.77E-03	8.43E-03	7.78E-03	7.35E-03	6.81E-03	7.09E-03	6.34E-03	5.74E-03	5.15E-03
Liver	7.74E-04	1.05E-02	2.62E-02	3.53E-02	2.73E-02	1.81E-02	1.69E-02	1.62E-02	1.51E-02	1.36E-02	1.26E-02	1.09E-02
ET1-bas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
ET2-bas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LN-ET	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BBi-bas	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BBi-sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
bbe-sec	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
AI	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LN-Th	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lng_Tiss	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lung_NP	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
Lung_TB	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Lung_P	1.95E+00	1.44E+00	9.38E-01	4.16E-01	1.58E-01	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Muscle	5.02E-03	1.33E-02	1.93E-02	1.88E-02	1.22E-02	8.70E-02	8.49E-02	8.89E-02	8.22E-02	7.44E-02	6.83E-02	5.48E-02
Ovaries	0.0	0.0	1.38E-08	4.23E-05	3.81E-04	9.35E-04	1.07E-03	1.17E-03	1.45E-03	1.50E-03	1.48E-03	1.32E-03
Pancreas	1.55E-06	1.73E-04	4.89E-03	2.16E-02	2.45E-02	1.84E-02	1.63E-02	1.48E-02	1.41E-02	1.31E-02	1.22E-02	1.01E-02
R_Marrow	4.93E-05	9.83E-04	4.06E-03	9.45E-03	1.02E-02	8.50E-03	8.44E-03	8.17E-03	7.83E-03	7.04E-03	6.47E-03	5.74E-03
Skin	3.61E-05	3.36E-04	1.64E-03	4.30E-03	4.29E-03	3.59E-03	3.74E-03	3.91E-03	4.24E-03	4.15E-03	3.95E-03	3.30E-03
Spleen	7.00E-04	4.23E-03	1.52E-02	2.81E-02	2.43E-02	1.64E-02	1.54E-02	1.47E-02	1.33E-02	1.26E-02	1.19E-02	9.44E-03
Testes	0.0	0.0	0.0	0.0	4.78E-07	3.07E-05	1.20E-04	2.40E-04	3.30E-04	4.19E-04	4.67E-04	4.84E-04
Thymus	1.78E-09	3.55E-04	8.68E-03	3.95E-02	3.68E-02	2.60E-02	2.45E-02	2.31E-02	2.05E-02	1.91E-02	1.78E-02	1.39E-02
Thyroid	0.0	2.51E-06	4.63E-04	7.10E-03	1.31E-02	1.06E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
GB_Wall1	8.81E-09	4.91E-06	4.36E-04	6.08E-03	8.60E-03	9.26E-03	8.02E-03	6.69E-03	6.43E-03	6.20E-03	6.00E-03	4.99E-03
Ht_Wall1	1.25E-03	2.00E-02	5.86E-02	8.56E-02	6.35E-02	4.09E-02	3.67E-02	3.53E-02	3.36E-02	2.73E-02	2.24E-02	
Uterus	0.0	0.0	6.77E-09	3.22E-05	4.57E-04	7.44E-04	9.28E-04	1.05E-03	1.10E-03	1.13E-03	1.15E-03	1.26E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = Muscle

		Energy (MeV)										
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	1.02E-02	2.10E-02	2.44E-02	2.02E-02	1.35E-02	9.81E-03	9.57E-03	9.75E-03	9.20E-03	8.52E-03	7.96E-03	6.72E-03
UB_Wall1	1.10E-02	1.60E-02	1.75E-02	1.89E-02	1.80E-02	1.44E-02	1.16E-02	9.68E-03	8.47E-03	7.90E-03	7.53E-03	6.69E-03
Bone_Sur	4.33E-03	1.38E-02	2.65E-02	4.55E-02	4.06E-02	1.87E-02	1.12E-02	8.22E-03	7.86E-03	7.42E-03	6.96E-03	5.78E-03
Brain	9.84E-08	8.52E-06	2.02E-04	1.51E-03	2.44E-03	2.24E-03	2.23E-03	2.33E-03	2.34E-03	2.18E-03	2.04E-03	1.81E-03
Breasts	3.86E-03	7.63E-03	8.94E-03	8.12E-03	5.83E-03	4.35E-03	4.63E-03	5.12E-03	5.21E-03	4.91E-03	4.61E-03	3.92E-03
St_Wall1	6.00E-03	1.10E-02	1.29E-02	1.49E-02	1.49E-02	1.10E-02	9.65E-03	7.57E-03	6.81E-03	6.55E-03	6.34E-03	5.64E-03
SI_Wall1	2.01E-03	5.57E-03	1.00E-02	1.57E-02	1.46E-02	1.06E-02	9.88E-03	9.59E-03	9.13E-03	8.55E-03	8.02E-03	6.62E-03
ULI_Wall1	2.19E-03	6.28E-03	1.04E-02	1.52E-02	1.41E-02	1.04E-02	8.31E-03	7.72E-03	7.47E-03	7.68E-03	7.71E-03	6.83E-03
LLI_Wall1	5.00E-03	8.13E-03	1.10E-02	1.53E-02	1.67E-02	1.43E-02	1.17E-02	9.60E-03	8.90E-03	8.57E-03	8.34E-03	7.76E-03
Kidneys	3.13E-03	8.91E-03	1.43E-02	1.59E-02	1.66E-02	8.53E-03	8.27E-03	8.39E-03	8.04E-03	7.58E-03	7.14E-03	5.88E-03
Liver	1.57E-03	4.48E-03	7.80E-03	1.10E-02	9.42E-03	6.96E-03	6.63E-03	6.70E-03	6.39E-03	6.05E-03	5.73E-03	4.79E-03
ET1-bas	8.86E-03	2.14E-02	2.98E-02	3.01E-02	1.91E-02	1.22E-02	1.15E-02	1.15E-02	1.08E-02	1.00E-02	9.37E-03	7.55E-03
ET2-bas	8.86E-03	2.14E-02	2.98E-02	3.01E-02	1.91E-02	1.22E-02	1.15E-02	1.15E-02	1.08E-02	1.00E-02	9.37E-03	7.55E-03
LN-ET	8.86E-03	2.14E-02	2.98E-02	3.01E-02	1.91E-02	1.22E-02	1.15E-02	1.15E-02	1.08E-02	1.00E-02	9.37E-03	7.55E-03
BBi-bas	5.62E-03	1.49E-02	2.17E-02	2.11E-02	1.32E-02	8.32E-03	8.06E-03	7.96E-03	7.49E-03	6.97E-03	6.53E-03	5.42E-03
BBi-sec	5.62E-03	1.49E-02	2.17E-02	2.11E-02	1.32E-02	8.32E-03	8.06E-03	7.96E-03	7.49E-03	6.97E-03	6.53E-03	5.42E-03
bbe-sec	5.62E-03	1.49E-02	2.17E-02	2.11E-02	1.32E-02	8.32E-03	8.06E-03	7.96E-03	7.49E-03	6.97E-03	6.53E-03	5.42E-03
AI	5.62E-03	1.49E-02	2.17E-02	2.11E-02	1.32E-02	8.32E-03	8.06E-03	7.96E-03	7.49E-03	6.97E-03	6.53E-03	5.42E-03
LN-Th	5.62E-03	1.49E-02	2.17E-02	2.11E-02	1.32E-02	8.32E-03	8.06E-03	7.96E-03	7.49E-03	6.97E-03	6.53E-03	5.42E-03
Lng_Tiss	5.62E-03	1.49E-02	2.17E-02	2.11E-02	1.32E-02	8.32E-03	8.06E-03	7.96E-03	7.49E-03	6.97E-03	6.53E-03	5.42E-03
Lung_NP	8.86E-03	2.14E-02	2.98E-02	3.01E-02	1.91E-02	1.22E-02	1.15E-02	1.15E-02	1.08E-02	1.00E-02	9.37E-03	7.55E-03
Lung_TB	5.62E-03	1.49E-02	2.17E-02	2.11E-02	1.32E-02	8.32E-03	8.06E-03	7.96E-03	7.49E-03	6.97E-03	6.53E-03	5.42E-03
Lung_P	5.62E-03	1.49E-02	2.17E-02	2.11E-02	1.32E-02	8.32E-03	8.06E-03	7.96E-03	7.49E-03	6.97E-03	6.53E-03	5.42E-03
Muscle	4.00E-02	3.66E-02	3.18E-02	2.23E-02	1.30E-02	8.91E-03	8.93E-03	9.33E-03	8.91E-03	8.33E-03	7.81E-03	6.42E-03
Ovaries	1.06E-02	2.12E-02	2.54E-02	2.50E-02	1.89E-02	1.33E-02	1.24E-02	1.23E-02	1.15E-02	1.07E-02	9.98E-03	8.15E-03
Pancreas	5.61E-03	1.45E-02	2.13E-02	2.27E-02	1.63E-02	1.12E-02	1.06E-02	1.04E-02	9.75E-03	9.13E-03	8.57E-03	7.01E-03
R_Marrow	1.19E-03	3.30E-03	5.89E-03	9.26E-03	9.49E-03	7.82E-03	7.72E-03	7.99E-03	7.69E-03	7.19E-03	6.72E-03	5.45E-03
Skin	1.05E-02	1.37E-02	1.34E-02	1.04E-02	6.89E-03	4.96E-03	4.87E-03	5.30E-03	5.04E-03	4.96E-03	4.89E-03	4.46E-03
Spleen	3.03E-03	9.05E-03	1.54E-02	1.89E-02	1.37E-02	9.30E-03	8.98E-03	9.00E-03	8.49E-03	7.94E-03	7.47E-03	6.23E-03
Testes	9.71E-03	1.85E-02	2.25E-02	2.04E-02	1.31E-02	8.88E-03	9.04E-03	9.54E-03	9.09E-03	8.59E-03	8.12E-03	6.72E-03
Thymus	4.53E-03	1.29E-02	1.95E-02	2.05E-02	1.37E-02	9.12E-03	8.87E-03	8.97E-03	8.61E-03	7.96E-03	7.40E-03	6.08E-03
Thyroid	8.86E-03	2.14E-02	2.98E-02	3.01E-02	1.91E-02	1.22E-02	1.15E-02	1.15E-02	1.08E-02	1.00E-02	9.37E-03	7.55E-03
GB_Wall1	1.10E-02	1.50E-02	1.70E-02	1.70E-02	1.60E-02	1.38E-02	1.22E-02	1.30E-02	9.72E-03	7.11E-03	6.76E-03	6.04E-03
Ht_Wall1	3.78E-03	8.45E-03	1.23E-02	1.48E-02	1.16E-02	8.08E-03	7.78E-03	7.84E-03	7.44E-03	6.91E-03	6.44E-03	5.33E-03
Uterus	8.17E-03	2.07E-02	2.82E-02	2.86E-02	2.06E-02	1.42E-02	1.32E-02	1.31E-02	1.22E-02	1.13E-02	1.06E-02	8.65E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = Ovaries

	Energy (MeV)					
Target	0.010	0.015	0.020	0.030	0.050	0.100
Adrenals	0.0	0.0	6.06E-07	3.86E-07	2.55E-04	4.00E-03
UB_Wall1	4.79E-10	5.86E-04	1.66E-02	7.50E-02	8.49E-02	4.47E-02
Bone_Sur	1.75E-08	5.90E-04	8.38E-03	3.36E-02	3.80E-02	1.82E-02
Brain	0.0	0.0	0.0	5.59E-10	5.82E-06	4.57E-06
Breasts	0.0	0.0	0.0	2.71E-10	8.18E-06	2.45E-04
St_Wall1	0.0	3.46E-08	5.27E-05	2.39E-03	7.18E-03	8.13E-03
SI_Wall1	6.73E-03	6.56E-02	1.62E-01	1.09E-01	1.42E-01	8.85E-02
ULI_Wall1	3.21E-02	1.74E-01	2.59E-01	2.12E-01	1.17E-01	7.56E-02
LLI_Wall1	6.52E-02	2.90E-01	4.31E-01	3.28E-01	1.72E-01	1.06E-01
Kidneys	0.0	1.55E-08	4.97E-05	2.30E-03	7.47E-03	8.85E-03
Liver	0.0	1.31E-08	2.63E-05	1.36E-03	5.22E-03	5.88E-03
ET1-bas	0.0	0.0	0.0	6.49E-08	1.31E-05	7.72E-05
ET2-bas	0.0	0.0	0.0	6.49E-08	1.31E-05	7.72E-05
LN-ET	0.0	0.0	0.0	6.49E-08	1.31E-05	7.72E-05
BBi-bas	0.0	0.0	0.0	1.55E-08	4.75E-05	4.18E-04
BBi-sec	0.0	0.0	0.0	1.55E-08	4.75E-05	4.18E-04
bbe-sec	0.0	0.0	0.0	1.55E-08	4.75E-05	4.18E-04
AI	0.0	0.0	0.0	1.55E-08	4.75E-05	4.18E-04
LN-Th	0.0	0.0	0.0	1.55E-08	4.75E-05	4.18E-04
Ing_Tiss	0.0	0.0	0.0	1.55E-08	4.75E-05	4.18E-04
Lung_NP	0.0	0.0	0.0	1.55E-08	4.75E-05	4.18E-04
Lung_TB	0.0	0.0	0.0	1.55E-08	4.75E-05	4.18E-04
Lung_P	0.0	0.0	0.0	1.55E-08	4.75E-05	4.18E-04
Muscle	1.06E-02	2.12E-02	2.54E-02	2.50E-02	1.89E-02	1.33E-02
Ovaries	2.38E+02	1.32E+02	6.83E+01	2.29E+01	7.23E+00	4.25E+00
Pancreas	0.0	0.0	3.74E-06	1.51E-03	4.51E-03	6.52E-03
R_Marrow	4.63E-08	3.87E-04	5.09E-03	1.88E-02	2.22E-02	1.75E-02
Skin	0.0	2.82E-07	9.08E-05	1.24E-03	3.12E-03	3.07E-03
Spleen	0.0	2.77E-10	5.32E-06	8.45E-04	3.32E-03	5.04E-03
Testes	0.0	0.0	0.0	0.0	0.0	0.0
Thymus	0.0	0.0	0.0	2.11E-06	1.05E-04	3.40E-04
Thyroid	0.0	0.0	0.0	6.49E-08	1.31E-05	7.72E-05
GB_Wall1	0.0	9.24E-08	1.52E-04	5.66E-03	1.40E-02	1.73E-02
Ht_Wall1	0.0	0.0	9.83E-09	4.15E-05	5.80E-04	9.70E-04
Uterus	1.44E-07	9.62E-03	1.39E-01	3.97E-01	2.49E-01	1.42E-01

Specific Absorbed Fraction of Photon Energy in kg<sup>-1</sup>: Recommended Values for the Ten-Year-Old

Source = Pancreas	Energy (MeV)											
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	1.34E-07	5.93E-03	6.44E-02	1.73E-01	1.43E-01	9.83E-02	8.53E-02	8.23E-02	6.18E-02	5.33E-02	5.02E-02	4.97E-02
UB_Wall1	0.0	1.09E-07	1.38E-04	1.46E-03	2.05E-03	2.50E-03	2.66E-03	2.61E-03	2.58E-03	2.52E-03	2.16E-03	
Bone_Sur	7.07E-06	2.72E-04	3.62E-03	2.13E-02	3.43E-02	1.84E-02	9.66E-03	6.83E-03	6.15E-03	5.80E-03	5.48E-03	4.49E-03
Brain	0.0	0.0	0.0	2.07E-07	2.11E-05	8.04E-05	1.77E-04	3.05E-04	3.79E-04	4.14E-04	4.35E-04	4.80E-04
Breasts	0.0	2.08E-09	2.55E-05	3.29E-03	6.89E-03	7.94E-03	6.78E-03	6.44E-03	7.00E-03	7.06E-03	6.81E-03	5.43E-03
St_Wall1	8.23E-03	1.02E-01	2.31E-01	2.88E-01	1.81E-01	1.07E-01	9.54E-02	9.34E-02	8.61E-02	8.14E-02	7.66E-02	5.91E-02
SI_Wall1	0.0	2.59E-06	3.80E-04	8.94E-03	2.00E-02	1.70E-02	1.47E-02	1.37E-02	1.26E-02	1.15E-02	8.57E-03	
ULI_Wall1	0.0	5.41E-06	1.15E-03	1.43E-02	2.51E-02	1.81E-02	1.69E-02	1.71E-02	1.45E-02	1.40E-02	1.05E-02	
LLI_Wall1	0.0	1.06E-08	2.91E-05	1.86E-03	4.94E-03	6.09E-03	5.37E-03	4.48E-03	4.54E-03	4.57E-03	4.44E-03	3.63E-03
Kidneys	5.22E-10	3.29E-04	1.26E-02	6.20E-02	6.58E-02	4.69E-02	3.98E-02	4.04E-02	3.44E-02	3.02E-02	2.77E-02	2.36E-02
Liver	1.21E-05	2.73E-03	2.10E-02	6.16E-02	5.90E-02	3.96E-02	3.53E-02	3.26E-02	2.99E-02	2.79E-02	2.60E-02	2.03E-02
ET1-bas	0.0	0.0	3.25E-09	2.77E-05	5.16E-04	1.09E-03	1.49E-03	1.60E-03	1.65E-03	1.67E-03	1.65E-03	1.45E-03
ET2-bas	0.0	0.0	3.25E-09	2.77E-05	5.16E-04	1.09E-03	1.49E-03	1.60E-03	1.65E-03	1.67E-03	1.65E-03	1.45E-03
LN-ET	0.0	0.0	3.25E-09	2.77E-05	5.16E-04	1.09E-03	1.49E-03	1.60E-03	1.65E-03	1.67E-03	1.65E-03	1.45E-03
BBi-bas	1.77E-06	1.95E-04	5.47E-03	2.42E-02	2.64E-02	1.86E-02	1.63E-02	1.48E-02	1.41E-02	1.31E-02	1.22E-02	1.01E-02
BBi-sec	1.77E-06	1.95E-04	5.47E-03	2.42E-02	2.64E-02	1.86E-02	1.63E-02	1.48E-02	1.41E-02	1.31E-02	1.22E-02	1.01E-02
bbe-sec	1.77E-06	1.95E-04	5.47E-03	2.42E-02	2.64E-02	1.86E-02	1.63E-02	1.48E-02	1.41E-02	1.31E-02	1.22E-02	1.01E-02
AI	1.77E-06	1.95E-04	5.47E-03	2.42E-02	2.64E-02	1.86E-02	1.63E-02	1.48E-02	1.41E-02	1.31E-02	1.22E-02	1.01E-02
LN-Th	1.77E-06	1.95E-04	5.47E-03	2.42E-02	2.64E-02	1.86E-02	1.63E-02	1.48E-02	1.41E-02	1.31E-02	1.22E-02	1.01E-02
Lng_Tiss	1.77E-06	1.95E-04	5.47E-03	2.42E-02	2.64E-02	1.86E-02	1.63E-02	1.48E-02	1.41E-02	1.31E-02	1.22E-02	1.01E-02
Lung_NP	0.0	0.0	3.25E-09	2.77E-05	5.16E-04	1.09E-03	1.49E-03	1.60E-03	1.65E-03	1.67E-03	1.65E-03	1.45E-03
Lung_TB	1.77E-06	1.95E-04	5.47E-03	2.42E-02	2.64E-02	1.86E-02	1.63E-02	1.48E-02	1.41E-02	1.31E-02	1.22E-02	1.01E-02
Lung_P	1.77E-06	1.95E-04	5.47E-03	2.42E-02	2.64E-02	1.86E-02	1.63E-02	1.48E-02	1.41E-02	1.31E-02	1.22E-02	1.01E-02
Muscle	5.61E-03	1.45E-02	2.13E-02	2.27E-02	1.63E-02	1.12E-02	1.06E-02	1.04E-02	9.75E-03	9.13E-03	8.57E-03	7.01E-03
Ovaries	0.0	0.0	3.74E-06	1.51E-03	4.51E-03	6.52E-03	5.55E-03	5.53E-03	5.90E-03	5.70E-03	5.31E-03	3.94E-03
Pancreas	2.90E+01	2.09E+01	1.33E+01	5.52E+00	1.94E+00	1.11E+00	1.20E+00	1.30E+00	1.19E+00	1.09E+00	1.01E+00	8.02E-01
R_Marrow	6.99E-08	8.67E-05	1.06E-03	5.74E-03	1.04E-02	1.02E-02	9.41E-03	9.55E-03	8.60E-03	8.05E-03	7.59E-03	6.06E-03
Skin	0.0	7.18E-07	1.08E-04	1.51E-03	2.85E-03	2.86E-03	2.94E-03	3.20E-03	3.22E-03	3.31E-03	3.32E-03	2.89E-03
Spleen	4.49E-03	9.19E-02	2.53E-01	3.11E-01	1.86E-01	1.13E-01	1.05E-01	1.01E-01	9.49E-02	8.52E-02	7.73E-02	6.10E-02
Testes	0.0	0.0	2.90E-10	8.42E-06	2.49E-04	6.43E-04	8.65E-04	1.10E-03	1.18E-03	1.20E-03	1.22E-03	1.08E-03
Thymus	0.0	1.28E-10	4.76E-06	1.63E-03	3.83E-03	5.52E-03	4.96E-03	4.20E-03	5.04E-03	5.06E-03	4.85E-03	4.30E-03
Thyroid	0.0	0.0	3.25E-09	2.77E-05	5.16E-04	1.09E-03	1.49E-03	1.60E-03	1.65E-03	1.67E-03	1.65E-03	1.45E-03
GB_Wall1	1.50E-02	1.56E-01	3.50E-01	3.72E-01	1.95E-01	1.26E-01	1.18E-01	1.10E-01	1.00E-01	9.45E-02	8.89E-02	6.83E-02
Ht_Wall1	0.0	1.05E-04	7.15E-03	3.68E-02	4.79E-02	3.20E-02	2.79E-02	2.51E-02	2.23E-02	2.08E-02	1.96E-02	
Uterus	0.0	0.0	2.53E-06	7.80E-04	3.05E-03	6.80E-03	7.21E-03	5.60E-03	4.66E-03	4.32E-03	4.14E-03	3.76E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = R\_Marrow

		Energy (MeV)										
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	1.17E-04	3.47E-03	1.05E-02	1.93E-02	2.09E-02	1.60E-02	1.59E-02	1.74E-02	1.61E-02	1.49E-02	1.39E-02	1.14E-02
UB_Wall	0.0	2.02E-06	2.32E-04	5.52E-03	7.16E-03	8.72E-03	8.67E-03	7.72E-03	6.13E-03	5.67E-03	6.13E-03	4.52E-03
Bone_Sur	2.73E-01	2.64E-01	2.47E-01	1.97E-01	1.08E-01	3.90E-02	2.34E-02	2.12E-02	1.98E-02	1.70E-02	1.40E-02	1.40E-02
Brain	1.09E-03	3.42E-03	6.72E-03	3.07E-02	9.55E-03	6.37E-03	6.31E-03	7.27E-03	6.75E-03	6.27E-03	5.92E-03	5.10E-03
Breasts	1.19E-04	2.81E-03	6.70E-03	6.89E-03	5.26E-03	3.92E-03	4.24E-03	5.23E-03	5.15E-03	4.92E-03	4.69E-03	3.98E-03
St_Wall	1.18E-04	3.93E-04	9.24E-04	3.08E-03	6.55E-03	6.38E-03	5.23E-03	5.25E-03	5.39E-03	5.15E-03	4.93E-03	4.54E-03
SI_Wall	7.44E-04	2.27E-03	5.11E-03	1.21E-02	1.69E-02	1.44E-02	1.31E-02	1.31E-02	1.18E-02	1.07E-02	9.95E-03	8.23E-03
ULI_Wall	7.67E-04	2.45E-03	5.60E-03	1.13E-02	1.43E-02	1.32E-02	1.15E-02	1.07E-02	8.49E-03	7.64E-03	7.36E-03	7.47E-03
LLI_Wall	5.96E-04	9.42E-03	2.00E-02	2.32E-02	2.20E-02	1.79E-02	1.54E-02	1.67E-02	1.44E-02	1.33E-02	1.27E-02	1.08E-02
Kidneys	7.19E-05	1.39E-03	5.13E-03	1.23E-02	1.58E-02	1.28E-02	1.27E-02	1.35E-02	1.23E-02	1.14E-02	1.08E-02	8.81E-03
Liver	1.10E-04	8.80E-04	2.40E-03	5.04E-03	7.24E-03	6.84E-03	6.44E-03	6.83E-03	6.35E-03	5.87E-03	5.53E-03	4.84E-03
ET1-bas	0.0	1.78E-05	4.06E-04	3.28E-03	5.73E-03	5.32E-03	4.94E-03	5.36E-03	5.02E-03	4.64E-03	4.37E-03	3.83E-03
ET2-bas	0.0	1.78E-05	4.06E-04	3.28E-03	5.73E-03	5.32E-03	4.94E-03	5.36E-03	5.02E-03	4.64E-03	4.37E-03	3.83E-03
LN-ET	0.0	1.78E-05	4.06E-04	3.28E-03	5.73E-03	5.32E-03	4.94E-03	5.36E-03	5.02E-03	4.64E-03	4.37E-03	3.83E-03
BBi-bas	7.50E-05	1.23E-03	4.84E-03	1.07E-02	1.12E-02	8.13E-03	7.83E-03	8.16E-03	7.82E-03	7.03E-03	6.48E-03	5.73E-03
BBi-sec	7.50E-05	1.23E-03	4.84E-03	1.07E-02	1.12E-02	8.13E-03	7.83E-03	8.16E-03	7.82E-03	7.03E-03	6.48E-03	5.73E-03
bbe-sec	7.50E-05	1.23E-03	4.84E-03	1.07E-02	1.12E-02	8.13E-03	7.83E-03	8.16E-03	7.82E-03	7.03E-03	6.48E-03	5.73E-03
AI	7.50E-05	1.23E-03	4.84E-03	1.07E-02	1.12E-02	8.13E-03	7.83E-03	8.16E-03	7.82E-03	7.03E-03	6.48E-03	5.73E-03
LN-Th	7.50E-05	1.23E-03	4.84E-03	1.07E-02	1.12E-02	8.13E-03	7.83E-03	8.16E-03	7.82E-03	7.03E-03	6.48E-03	5.73E-03
Ing_Tiss	7.50E-05	1.23E-03	4.84E-03	1.07E-02	1.12E-02	8.13E-03	7.83E-03	8.16E-03	7.82E-03	7.03E-03	6.48E-03	5.73E-03
Lung_NP	0.0	1.78E-05	4.06E-04	3.28E-03	5.73E-03	5.32E-03	4.94E-03	5.36E-03	5.02E-03	4.64E-03	4.37E-03	3.83E-03
Lung_TB	7.50E-05	1.23E-03	4.84E-03	1.07E-02	1.12E-02	8.13E-03	7.83E-03	8.16E-03	7.82E-03	7.03E-03	6.48E-03	5.73E-03
Lung_P	7.50E-05	1.23E-03	4.84E-03	1.07E-02	1.12E-02	8.13E-03	7.83E-03	8.16E-03	7.82E-03	7.03E-03	6.48E-03	5.73E-03
Muscle	1.19E-03	3.30E-03	5.89E-03	9.26E-03	9.49E-03	7.82E-03	7.72E-03	7.99E-03	7.69E-03	7.19E-03	6.72E-03	5.45E-03
Ovaries	1.39E-08	3.42E-04	5.38E-03	1.90E-02	2.25E-02	1.70E-02	1.55E-02	1.54E-02	1.36E-02	1.28E-02	1.20E-02	9.47E-03
Pancreas	2.10E-08	1.06E-04	1.16E-03	5.81E-03	1.06E-02	1.01E-02	9.43E-03	9.55E-03	8.60E-03	8.05E-03	7.59E-03	6.06E-03
R_Marrow	9.95E-02	8.70E-02	7.49E-02	5.48E-02	3.60E-02	2.75E-02	2.79E-02	2.89E-02	2.70E-02	2.50E-02	2.33E-02	1.92E-02
Skin	7.49E-04	2.48E-03	3.95E-03	4.77E-03	4.49E-03	4.01E-03	4.27E-03	4.69E-03	4.80E-03	4.49E-03	4.25E-03	4.05E-03
Spleen	9.55E-06	4.00E-04	1.85E-03	5.52E-03	8.20E-03	7.60E-03	7.33E-03	7.79E-03	7.03E-03	6.71E-03	6.43E-03	5.25E-03
Testes	0.0	8.78E-08	4.63E-05	1.04E-03	3.88E-03	3.69E-03	3.74E-03	4.16E-03	3.66E-03	3.52E-03	3.40E-03	2.79E-03
Thymus	9.37E-06	7.90E-04	3.22E-03	5.87E-03	6.55E-03	5.44E-03	5.27E-03	6.01E-03	5.49E-03	5.08E-03	4.82E-03	4.20E-03
Thyroid	0.0	1.78E-05	4.06E-04	3.28E-03	5.73E-03	5.32E-03	4.94E-03	5.36E-03	5.02E-03	4.64E-03	4.37E-03	3.83E-03
GB_Wall	0.0	8.78E-06	4.48E-04	4.60E-03	6.37E-03	7.73E-03	8.75E-03	7.98E-03	7.12E-03	6.52E-03	6.08E-03	5.06E-03
Ht_Wall	3.68E-05	3.31E-04	1.58E-03	5.25E-03	7.98E-03	7.00E-03	6.63E-03	6.43E-03	6.08E-03	5.78E-03	4.92E-03	
Uterus	0.0	1.10E-06	3.90E-04	6.31E-03	1.33E-02	1.23E-02	1.08E-02	1.02E-02	8.63E-03	8.20E-03	7.86E-03	6.26E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = Skin	Energy (MeV)											
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	6.58E-10	7.05E-05	6.26E-04	2.57E-03	3.17E-03	3.02E-03	3.49E-03	3.78E-03	3.65E-03	3.33E-03	3.07E-03	2.48E-03
UB_Wall1	2.06E-05	2.99E-04	2.00E-03	6.03E-03	8.08E-03	7.03E-03	6.22E-03	5.51E-03	4.96E-03	4.55E-03	4.27E-03	3.57E-03
Bone_Sur	4.86E-03	1.41E-02	2.38E-02	3.36E-02	2.69E-02	1.26E-02	8.09E-03	6.66E-03	6.0E-03	5.68E-03	5.12E-03	
Brain	3.67E-05	1.82E-04	5.69E-04	2.83E-03	4.04E-03	3.53E-03	3.52E-03	4.10E-03	4.35E-03	3.89E-03	3.46E-03	2.68E-03
Breasts	1.08E-01	1.05E-01	7.24E-02	3.07E-02	1.15E-02	7.41E-03	8.27E-03	9.69E-03	8.98E-03	8.42E-03	7.96E-03	6.58E-03
St_Wall1	9.06E-05	6.63E-04	2.72E-03	5.87E-03	6.95E-03	6.02E-03	5.41E-03	4.84E-03	4.38E-03	4.02E-03	3.79E-03	3.17E-03
SI_Wall1	1.56E-07	1.10E-05	2.26E-04	1.95E-03	3.05E-03	2.82E-03	2.70E-03	3.31E-03	3.90E-03	3.59E-03	3.24E-03	2.66E-03
ULI_Wall1	0.0	2.61E-05	5.91E-04	3.52E-03	6.11E-03	5.75E-03	5.11E-03	4.51E-03	4.06E-03	3.74E-03	3.52E-03	2.96E-03
LLI_Wall1	8.65E-05	4.87E-04	1.66E-03	4.88E-03	7.30E-03	6.55E-03	5.80E-03	5.11E-03	4.61E-03	4.23E-03	3.98E-03	3.33E-03
Kidneys	1.14E-04	7.68E-04	2.97E-03	5.28E-03	4.27E-03	3.41E-03	3.68E-03	4.08E-03	3.89E-03	3.94E-03	3.93E-03	3.31E-03
Liver	1.21E-07	2.87E-04	1.40E-03	4.08E-03	3.98E-03	3.17E-03	3.56E-03	3.98E-03	3.45E-03	3.46E-03	3.45E-03	2.84E-03
ET1-bas	0.0	3.79E-05	8.27E-04	3.57E-03	3.98E-03	3.56E-03	3.72E-03	4.06E-03	3.97E-03	3.89E-03	3.73E-03	2.88E-03
ET2-bas	0.0	3.79E-05	8.27E-04	3.57E-03	3.98E-03	3.56E-03	3.72E-03	4.06E-03	3.97E-03	3.89E-03	3.73E-03	2.88E-03
LN-ET	0.0	3.79E-05	8.27E-04	3.57E-03	3.98E-03	3.56E-03	3.72E-03	4.06E-03	3.97E-03	3.89E-03	3.73E-03	2.88E-03
BBi-bas	4.05E-05	3.77E-04	1.83E-03	4.80E-03	4.62E-03	3.63E-03	3.74E-03	3.91E-03	4.24E-03	4.15E-03	4.15E-03	3.30E-03
BBi-sec	4.05E-05	3.77E-04	1.83E-03	4.80E-03	4.62E-03	3.63E-03	3.74E-03	3.91E-03	4.24E-03	4.15E-03	4.15E-03	3.30E-03
bbe-sec	4.05E-05	3.77E-04	1.83E-03	4.80E-03	4.62E-03	3.63E-03	3.74E-03	3.91E-03	4.24E-03	4.15E-03	4.15E-03	3.30E-03
AI	4.05E-05	3.77E-04	1.83E-03	4.80E-03	4.62E-03	3.63E-03	3.74E-03	3.91E-03	4.24E-03	4.15E-03	4.15E-03	3.30E-03
LN-Th	4.05E-05	3.77E-04	1.83E-03	4.80E-03	4.62E-03	3.63E-03	3.74E-03	3.91E-03	4.24E-03	4.15E-03	4.15E-03	3.30E-03
Ing_Tiss	4.05E-05	3.77E-04	1.83E-03	4.80E-03	4.62E-03	3.63E-03	3.74E-03	3.91E-03	4.24E-03	4.15E-03	4.15E-03	3.30E-03
Lung_NP	0.0	3.79E-05	8.27E-04	3.57E-03	3.98E-03	3.56E-03	3.72E-03	4.06E-03	3.97E-03	3.89E-03	3.73E-03	2.88E-03
Lung_TB	4.05E-05	3.77E-04	1.83E-03	4.80E-03	4.62E-03	3.63E-03	3.74E-03	3.91E-03	4.24E-03	4.15E-03	4.15E-03	3.30E-03
Lung_P	4.05E-05	3.77E-04	1.83E-03	4.80E-03	4.62E-03	3.63E-03	3.74E-03	3.91E-03	4.24E-03	4.15E-03	4.15E-03	3.30E-03
Muscle	1.05E-02	1.37E-02	1.34E-02	1.04E-02	6.89E-03	4.96E-03	4.87E-03	5.30E-03	5.04E-03	4.96E-03	4.89E-03	4.46E-03
Ovaries	0.0	2.82E-07	9.08E-05	1.24E-03	3.12E-03	3.07E-03	3.10E-03	3.39E-03	3.10E-03	3.05E-03	3.01E-03	2.65E-03
Pancreas	0.0	7.18E-07	1.08E-04	1.51E-03	2.85E-03	2.86E-03	2.94E-03	3.20E-03	3.22E-03	3.31E-03	3.32E-03	2.89E-03
R_Marrow	7.49E-04	2.48E-03	3.95E-03	4.77E-03	4.49E-03	4.01E-03	4.27E-03	4.69E-03	4.80E-03	4.49E-03	4.25E-03	4.05E-03
Skin	5.52E-01	2.71E-01	1.44E-01	5.51E-02	2.03E-02	1.29E-02	1.45E-02	1.63E-02	1.61E-02	1.51E-02	1.41E-02	1.16E-02
Spleen	6.13E-06	1.20E-04	9.91E-04	3.45E-03	4.01E-03	3.18E-03	3.29E-03	3.79E-03	3.71E-03	3.46E-03	3.27E-03	2.92E-03
Testes	1.75E-02	4.68E-02	4.95E-02	2.91E-02	1.32E-02	8.47E-03	8.97E-03	9.62E-03	1.02E-02	9.23E-03	8.26E-03	6.32E-03
Thymus	1.53E-06	5.79E-04	3.00E-03	5.91E-03	4.96E-03	3.79E-03	3.84E-03	4.40E-03	4.18E-03	4.05E-03	3.89E-03	3.16E-03
Thyroid	0.0	3.79E-05	8.27E-04	3.57E-03	3.98E-03	3.56E-03	3.72E-03	4.06E-03	3.97E-03	3.89E-03	3.73E-03	2.88E-03
GB_Wall1	6.01E-08	9.95E-06	3.73E-04	2.91E-03	5.75E-03	5.62E-03	5.01E-03	4.39E-03	3.96E-03	3.64E-03	3.43E-03	2.88E-03
Ht_Wall1	1.44E-06	2.17E-04	1.12E-03	3.40E-03	3.93E-03	3.32E-03	3.70E-03	3.47E-03	3.66E-03	3.71E-03	2.99E-03	
Uterus	0.0	1.01E-06	1.26E-04	1.69E-03	3.30E-03	3.11E-03	2.89E-03	3.20E-03	3.23E-03	3.31E-03	3.28E-03	2.76E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = Spleen

Energy (MeV)

Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	1.30E-08	2.41E-03	2.54E-02	8.90E-02	7.32E-02	5.01E-02	4.47E-02	4.56E-02	3.72E-02	3.67E-02	3.59E-02	2.55E-02
UB_Wall1	0.0	6.77E-08	9.79E-05	1.03E-03	1.77E-03	2.20E-03	2.26E-03	2.28E-03	2.21E-03	2.21E-03	2.21E-03	1.91E-03
Bone_Sur	1.54E-04	1.50E-03	7.58E-03	2.50E-02	3.09E-02	1.53E-02	8.29E-03	6.21E-03	5.57E-03	5.49E-03	5.34E-03	4.28E-03
Brain	0.0	0.0	0.0	1.74E-07	5.16E-05	1.69E-04	2.62E-04	3.72E-04	4.92E-04	5.73E-04	5.93E-04	4.50E-04
Breasts	0.0	1.01E-09	1.26E-05	3.23E-03	6.04E-03	6.15E-03	5.25E-03	5.23E-03	5.01E-03	4.55E-03	4.29E-03	4.36E-03
St_Wall1	4.58E-07	3.59E-03	3.48E-02	1.07E-01	9.42E-02	5.93E-02	5.44E-02	5.02E-02	4.89E-02	4.44E-02	4.02E-02	3.09E-02
SI_Wall1	2.01E-08	8.07E-06	5.67E-04	7.35E-03	1.50E-02	1.19E-02	1.07E-02	1.10E-02	1.01E-02	9.30E-03	8.62E-03	6.86E-03
ULI_Wall1	0.0	5.71E-06	5.93E-04	7.33E-03	1.54E-02	1.25E-02	1.03E-02	9.82E-03	1.01E-02	1.06E-02	1.04E-02	7.21E-03
LLI_Wall1	0.0	2.37E-07	9.33E-05	2.55E-03	5.75E-03	6.80E-03	5.91E-03	5.95E-03	5.88E-03	5.47E-03	5.06E-03	3.98E-03
Kidneys	2.92E-03	3.80E-02	1.13E-01	1.51E-01	9.95E-02	6.31E-02	5.57E-02	5.76E-02	5.31E-02	4.89E-02	4.55E-02	3.69E-02
Liver	0.0	1.66E-07	2.29E-04	3.96E-03	1.07E-02	1.01E-02	9.41E-03	8.51E-03	8.53E-03	8.03E-03	7.45E-03	5.91E-03
ET1-bas	0.0	0.0	1.60E-09	1.69E-05	8.16E-04	1.18E-03	1.54E-03	1.75E-03	1.68E-03	1.57E-03	1.47E-03	1.24E-03
ET2-bas	0.0	0.0	1.60E-09	1.69E-05	8.16E-04	1.18E-03	1.54E-03	1.75E-03	1.68E-03	1.57E-03	1.47E-03	1.24E-03
LN-ET	0.0	0.0	1.60E-09	1.69E-05	8.16E-04	1.18E-03	1.54E-03	1.75E-03	1.68E-03	1.57E-03	1.47E-03	1.24E-03
BBi-bas	7.84E-04	4.74E-03	1.70E-02	3.14E-02	2.62E-02	1.66E-02	1.54E-02	1.47E-02	1.33E-02	1.26E-02	1.19E-02	9.44E-03
BBi-sec	7.84E-04	4.74E-03	1.70E-02	3.14E-02	2.62E-02	1.66E-02	1.54E-02	1.47E-02	1.33E-02	1.26E-02	1.19E-02	9.44E-03
bbe-sec	7.84E-04	4.74E-03	1.70E-02	3.14E-02	2.62E-02	1.66E-02	1.54E-02	1.47E-02	1.33E-02	1.26E-02	1.19E-02	9.44E-03
AI	7.84E-04	4.74E-03	1.70E-02	3.14E-02	2.62E-02	1.66E-02	1.54E-02	1.47E-02	1.33E-02	1.26E-02	1.19E-02	9.44E-03
LN-Th	7.84E-04	4.74E-03	1.70E-02	3.14E-02	2.62E-02	1.66E-02	1.54E-02	1.47E-02	1.33E-02	1.26E-02	1.19E-02	9.44E-03
Ing_Tiss	7.84E-04	4.74E-03	1.70E-02	3.14E-02	2.62E-02	1.66E-02	1.54E-02	1.47E-02	1.33E-02	1.26E-02	1.19E-02	9.44E-03
Lung_NP	0.0	0.0	1.60E-09	1.69E-05	8.16E-04	1.18E-03	1.54E-03	1.75E-03	1.68E-03	1.57E-03	1.47E-03	1.24E-03
Lung_TB	7.84E-04	4.74E-03	1.70E-02	3.14E-02	2.62E-02	1.66E-02	1.54E-02	1.47E-02	1.33E-02	1.26E-02	1.19E-02	9.44E-03
Lung_P	7.84E-04	4.74E-03	1.70E-02	3.14E-02	2.62E-02	1.66E-02	1.54E-02	1.47E-02	1.33E-02	1.26E-02	1.19E-02	9.44E-03
Muscle	3.03E-03	9.05E-03	1.54E-02	1.89E-02	1.37E-02	9.30E-03	8.98E-03	9.00E-03	8.49E-03	7.94E-03	7.47E-03	6.23E-03
Ovaries	0.0	2.77E-10	5.32E-06	8.45E-04	3.32E-03	5.04E-03	4.95E-03	4.88E-03	5.06E-03	4.82E-03	4.50E-03	3.57E-03
Pancreas	4.49E-03	9.19E-02	2.53E-01	3.11E-01	1.86E-01	1.13E-01	1.05E-01	1.01E-01	9.49E-02	8.52E-02	7.73E-02	6.10E-02
R_Marrow	4.72E-05	3.89E-04	1.73E-03	5.30E-03	8.06E-03	7.66E-03	7.48E-03	7.78E-03	7.05E-03	6.71E-03	6.41E-03	5.25E-03
Skin	6.13E-06	1.20E-04	9.91E-04	3.45E-03	4.01E-03	3.18E-03	3.29E-03	3.79E-03	3.71E-03	3.46E-03	3.27E-03	2.92E-03
Spleen	1.20E+01	9.95E+00	7.21E+00	3.42E+00	1.28E+00	7.32E-01	7.62E-01	7.98E-01	7.40E-01	6.69E-01	6.15E-01	5.08E-01
Testes	0.0	0.0	2.08E-10	6.42E-06	2.05E-04	5.43E-04	8.83E-04	9.83E-04	1.06E-03	1.10E-03	1.10E-03	9.93E-04
Thymus	0.0	0.0	8.36E-07	9.05E-04	2.54E-03	3.70E-03	3.35E-03	3.24E-03	3.10E-03	2.95E-03	2.91E-03	3.11E-03
Thyroid	0.0	0.0	1.60E-09	1.69E-05	8.16E-04	1.18E-03	1.54E-03	1.75E-03	1.68E-03	1.57E-03	1.47E-03	1.24E-03
GB_Wall1	0.0	2.19E-06	8.03E-04	1.59E-02	2.35E-02	2.52E-02	2.28E-02	1.96E-02	1.62E-02	1.43E-02	1.32E-02	1.09E-02
Ht_Wall1	0.0	2.36E-06	1.12E-03	1.16E-02	2.10E-02	1.62E-02	1.31E-02	1.33E-02	1.28E-02	8.09E-03	8.09E-03	8.09E-03
Uterus	0.0	0.0	1.30E-06	7.00E-04	2.62E-03	4.57E-03	4.26E-03	4.32E-03	4.09E-03	3.82E-03	3.66E-03	3.51E-03

Specific Absorbed Fraction of Photon Energy in kg<sup>-1</sup>: Recommended Values for the Ten-Year-Old

Source = Testes	Energy (MeV)											
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	0.0	0.0	0.0	2.94E-06	1.33E-04	4.09E-04	6.03E-04	8.00E-04	8.87E-04	9.17E-04	9.40E-04	8.55E-04
UB_Wall1	7.15E-10	8.26E-04	1.89E-02	7.51E-02	7.91E-02	4.93E-02	4.98E-02	4.82E-02	4.55E-02	3.93E-02	3.51E-02	3.06E-02
Bone_Sur	0.0	6.47E-07	3.07E-04	7.02E-03	1.69E-02	1.04E-02	5.97E-03	4.56E-03	4.26E-03	3.95E-03	3.72E-03	3.24E-03
Brain	0.0	0.0	0.0	0.0	0.0	4.47E-08	6.98E-07	2.61E-06	9.16E-06	2.15E-05	3.30E-05	4.39E-05
Breasts	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
St_Wall1	0.0	0.0	5.92E-09	2.82E-05	2.84E-04	4.65E-04	6.98E-04	1.01E-03	1.20E-03	1.27E-03	1.30E-03	1.35E-03
SI_Wall1	0.0	0.0	3.86E-06	8.55E-04	3.78E-03	4.57E-03	4.52E-03	4.90E-03	4.93E-03	4.60E-03	4.36E-03	4.16E-03
ULI_Wall1	0.0	1.57E-10	4.06E-06	5.68E-04	2.78E-03	4.26E-03	4.32E-03	4.72E-03	5.05E-03	5.07E-03	4.88E-03	3.73E-03
LLI_Wall1	0.0	9.31E-05	5.98E-03	2.74E-02	3.28E-02	2.39E-02	2.21E-02	1.98E-02	1.94E-02	1.82E-02	1.70E-02	1.43E-02
Kidneys	0.0	0.0	1.53E-09	1.76E-05	3.60E-04	6.40E-04	8.50E-04	1.05E-03	1.16E-03	1.18E-03	1.20E-03	1.12E-03
Liver	0.0	0.0	2.61E-09	1.61E-05	2.20E-04	4.00E-04	6.20E-04	8.60E-04	1.03E-03	1.09E-03	1.13E-03	1.11E-03
ET1-bas	0.0	0.0	0.0	1.07E-09	1.08E-06	1.26E-05	3.44E-05	7.69E-05	1.19E-04	1.45E-04	1.66E-04	1.84E-04
ET2-bas	0.0	0.0	0.0	1.07E-09	1.08E-06	1.26E-05	3.44E-05	7.69E-05	1.19E-04	1.45E-04	1.66E-04	1.84E-04
LN-ET	0.0	0.0	0.0	1.07E-09	1.08E-06	1.26E-05	3.44E-05	7.69E-05	1.19E-04	1.45E-04	1.66E-04	1.84E-04
BBi-bas	0.0	0.0	0.0	5.47E-07	3.32E-05	1.20E-04	2.40E-04	3.30E-04	4.19E-04	4.67E-04	4.84E-04	4.55E-04
BBi-sec	0.0	0.0	0.0	5.47E-07	3.32E-05	1.20E-04	2.40E-04	3.30E-04	4.19E-04	4.67E-04	4.84E-04	4.55E-04
bbe-sec	0.0	0.0	0.0	5.47E-07	3.32E-05	1.20E-04	2.40E-04	3.30E-04	4.19E-04	4.67E-04	4.84E-04	4.55E-04
AI	0.0	0.0	0.0	5.47E-07	3.32E-05	1.20E-04	2.40E-04	3.30E-04	4.19E-04	4.67E-04	4.84E-04	4.55E-04
LN-Th	0.0	0.0	0.0	5.47E-07	3.32E-05	1.20E-04	2.40E-04	3.30E-04	4.19E-04	4.67E-04	4.84E-04	4.55E-04
Ing_Tiss	0.0	0.0	0.0	5.47E-07	3.32E-05	1.20E-04	2.40E-04	3.30E-04	4.19E-04	4.67E-04	4.84E-04	4.55E-04
Lung_NP	0.0	0.0	0.0	1.07E-09	1.08E-06	1.26E-05	3.44E-05	7.69E-05	1.19E-04	1.45E-04	1.66E-04	1.84E-04
Lung_TB	0.0	0.0	0.0	5.47E-07	3.32E-05	1.20E-04	2.40E-04	3.30E-04	4.19E-04	4.67E-04	4.84E-04	4.55E-04
Lung_P	0.0	0.0	0.0	5.47E-07	3.32E-05	1.20E-04	2.40E-04	3.30E-04	4.19E-04	4.67E-04	4.84E-04	4.55E-04
Muscle	9.71E-03	1.85E-02	2.25E-02	2.04E-02	1.31E-02	8.88E-03	9.04E-03	9.54E-03	9.09E-03	8.59E-03	8.12E-03	6.72E-03
Ovaries	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pancreas	0.0	0.0	2.90E-10	8.42E-06	2.49E-04	6.43E-04	8.65E-04	1.10E-03	1.18E-03	1.20E-03	1.22E-03	1.08E-03
R_Marrow	0.0	3.32E-07	4.32E-05	1.08E-03	3.33E-03	3.65E-03	3.70E-03	4.16E-03	3.66E-03	3.51E-03	3.40E-03	2.79E-03
Skin	1.75E-02	4.68E-02	4.95E-02	2.91E-02	1.32E-02	8.47E-03	8.97E-03	9.62E-03	1.02E-02	9.23E-03	8.26E-03	6.32E-03
Spleen	0.0	0.0	2.08E-10	6.42E-06	2.05E-04	5.43E-04	8.83E-04	9.83E-04	1.06E-03	1.10E-03	9.93E-04	9.93E-04
Testes	3.97E+02	2.25E+02	1.19E+02	3.99E+01	1.23E+01	7.44E+00	8.27E+00	9.31E+00	8.81E+00	8.06E+00	7.43E+00	5.84E+00
Thymus	0.0	0.0	0.0	3.75E-08	9.10E-06	5.87E-05	1.21E-04	2.10E-04	2.77E-04	3.12E-04	3.39E-04	3.42E-04
Thyroid	0.0	0.0	1.07E-09	1.08E-06	1.26E-05	3.44E-05	7.69E-05	1.19E-04	1.45E-04	1.66E-04	1.84E-04	1.84E-04
GB_Wall1	0.0	1.84E-08	5.96E-05	7.82E-04	1.41E-03	1.71E-03	1.97E-03	2.01E-03	1.99E-03	1.98E-03	1.71E-03	1.71E-03
Ht_Wall1	0.0	0.0	5.82E-07	4.73E-05	1.91E-04	3.20E-04	4.70E-04	5.50E-04	5.73E-04	5.81E-04	5.80E-04	5.80E-04
Uterus	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = Thymus	Energy (MeV)											
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	0.0	2.86E-06	1.17E-03	4.05E-03	6.48E-03	6.29E-03	6.36E-03	6.12E-03	5.68E-03	5.20E-03	3.71E-03	3.71E-03
UB_Wall	0.0	0.0	4.68E-07	4.07E-05	1.71E-04	2.90E-04	4.31E-04	5.13E-04	5.02E-04	5.79E-04	5.49E-04	5.49E-04
Bone_Sur	1.44E-05	2.79E-03	1.33E-02	2.62E-02	2.72E-02	1.32E-02	7.18E-03	5.70E-03	5.21E-03	4.82E-03	4.56E-03	4.12E-03
Brain	0.0	0.0	9.92E-08	7.45E-05	5.16E-04	1.08E-03	1.20E-03	1.64E-03	1.89E-03	1.98E-03	2.01E-03	1.89E-03
Breasts	0.0	1.94E-05	3.39E-03	1.66E-02	3.16E-02	2.34E-02	2.05E-02	2.19E-02	2.05E-02	2.22E-02	2.32E-02	1.88E-02
St_Wall	0.0	1.08E-09	8.23E-06	9.54E-04	2.97E-03	4.30E-03	3.91E-03	4.16E-03	4.20E-03	4.17E-03	3.84E-03	3.84E-03
SI_Wall	0.0	0.0	1.87E-09	1.58E-05	3.05E-04	5.50E-04	7.84E-04	1.04E-03	1.21E-03	1.29E-03	1.32E-03	1.31E-03
ULI_Wall	0.0	0.0	5.31E-09	2.68E-05	4.80E-04	7.00E-04	8.40E-04	9.70E-04	1.08E-03	1.13E-03	1.17E-03	1.23E-03
LLI_Wall	0.0	0.0	1.55E-10	2.96E-06	9.72E-05	2.90E-04	4.27E-04	5.88E-04	6.71E-04	7.06E-04	7.16E-04	6.73E-04
Kidneys	0.0	0.0	7.94E-08	1.13E-04	7.80E-04	1.89E-03	2.30E-03	2.50E-03	2.60E-03	2.64E-03	2.57E-03	2.21E-03
Liver	0.0	9.39E-09	1.99E-05	1.80E-03	5.75E-03	5.32E-03	5.13E-03	5.21E-03	5.46E-03	5.51E-03	5.33E-03	4.11E-03
ET1-bas	0.0	5.44E-05	3.89E-03	2.63E-02	4.10E-02	2.87E-02	2.47E-02	2.50E-02	2.52E-02	2.51E-02	2.40E-02	1.76E-02
ET2-bas	0.0	5.44E-05	3.89E-03	2.63E-02	4.10E-02	2.87E-02	2.47E-02	2.50E-02	2.52E-02	2.51E-02	2.40E-02	1.76E-02
LN-ET	0.0	5.44E-05	3.89E-03	2.63E-02	4.10E-02	2.87E-02	2.47E-02	2.50E-02	2.52E-02	2.51E-02	2.40E-02	1.76E-02
BBi-bas	2.05E-09	3.98E-04	9.72E-03	4.42E-02	3.98E-02	2.62E-02	2.45E-02	2.31E-02	2.05E-02	1.91E-02	1.78E-02	1.39E-02
BBi-sec	2.05E-09	3.98E-04	9.72E-03	4.42E-02	3.98E-02	2.62E-02	2.45E-02	2.31E-02	2.05E-02	1.91E-02	1.78E-02	1.39E-02
bbe-sec	2.05E-09	3.98E-04	9.72E-03	4.42E-02	3.98E-02	2.62E-02	2.45E-02	2.31E-02	2.05E-02	1.91E-02	1.78E-02	1.39E-02
AI	2.05E-09	3.98E-04	9.72E-03	4.42E-02	3.98E-02	2.62E-02	2.45E-02	2.31E-02	2.05E-02	1.91E-02	1.78E-02	1.39E-02
LN-Th	2.05E-09	3.98E-04	9.72E-03	4.42E-02	3.98E-02	2.62E-02	2.45E-02	2.31E-02	2.05E-02	1.91E-02	1.78E-02	1.39E-02
Ing_Tiss	2.05E-09	3.98E-04	9.72E-03	4.42E-02	3.98E-02	2.62E-02	2.45E-02	2.31E-02	2.05E-02	1.91E-02	1.78E-02	1.39E-02
Lung_NP	0.0	5.44E-05	3.89E-03	2.63E-02	4.10E-02	2.87E-02	2.47E-02	2.50E-02	2.52E-02	2.51E-02	2.40E-02	1.76E-02
Lung_TB	2.05E-09	3.98E-04	9.72E-03	4.42E-02	3.98E-02	2.62E-02	2.45E-02	2.31E-02	2.05E-02	1.91E-02	1.78E-02	1.39E-02
Lung_P	2.05E-09	3.98E-04	9.72E-03	4.42E-02	3.98E-02	2.62E-02	2.45E-02	2.31E-02	2.05E-02	1.91E-02	1.78E-02	1.39E-02
Muscle	4.53E-03	1.29E-02	1.95E-02	2.05E-02	1.37E-02	9.12E-03	8.87E-03	8.97E-03	8.61E-03	7.96E-03	7.40E-03	6.08E-03
Ovaries	0.0	0.0	2.11E-06	2.11E-06	1.05E-04	3.40E-04	5.16E-04	6.99E-04	7.86E-04	8.19E-04	8.43E-04	7.73E-04
Pancreas	0.0	1.28E-10	4.76E-06	1.63E-03	3.83E-03	5.52E-03	4.96E-03	4.20E-03	5.04E-03	5.06E-03	4.85E-03	4.30E-03
R_Marrow	8.81E-05	7.23E-04	3.22E-03	5.85E-03	6.55E-03	5.71E-03	5.57E-03	6.01E-03	5.49E-03	5.09E-03	4.82E-03	4.20E-03
Skin	1.53E-06	5.79E-04	3.00E-03	5.91E-03	4.96E-03	3.79E-03	3.84E-03	4.40E-03	4.18E-03	4.05E-03	3.89E-03	3.16E-03
Spleen	0.0	0.0	8.36E-07	9.05E-04	2.54E-03	3.70E-03	3.35E-03	3.24E-03	3.10E-03	2.95E-03	2.91E-03	3.11E-03
Testes	0.0	0.0	0.0	3.75E-08	9.10E-06	5.87E-05	1.21E-04	2.10E-04	2.77E-04	3.12E-04	3.39E-04	3.42E-04
Thymus	2.85E+01	2.15E+01	1.42E+01	6.01E+00	2.06E+00	1.20E+00	1.30E+00	1.40E+00	1.29E+00	1.17E+00	1.08E+00	8.97E-01
Thyroid	0.0	5.44E-05	3.89E-03	2.63E-02	4.10E-02	2.87E-02	2.47E-02	2.50E-02	2.52E-02	2.51E-02	2.40E-02	1.76E-02
GB_Wall	0.0	0.0	1.58E-06	4.12E-04	2.33E-03	2.74E-03	3.15E-03	3.50E-03	3.50E-03	3.39E-03	3.31E-03	2.80E-03
Ht_Wall	4.26E-04	1.43E-02	4.96E-02	8.97E-02	7.43E-02	4.63E-02	4.39E-02	4.44E-02	3.83E-02	3.51E-02	3.28E-02	2.68E-02
Uterus	0.0	0.0	0.0	1.91E-06	9.88E-05	3.27E-04	4.98E-04	6.80E-04	7.66E-04	8.00E-04	8.24E-04	7.57E-04

Specific Absorbed Fraction of Photon Energy in kg<sup>-1</sup>: Recommended Values for the Ten-Year-Old

Source = Thyroid

Energy (MeV)

Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	0.0	5.50E-09	3.63E-05	6.03E-04	1.19E-03	1.66E-03	1.75E-03	1.79E-03	1.79E-03	1.78E-03	1.55E-03	
UB_Wall1	0.0	0.0	1.32E-08	4.84E-06	3.72E-05	8.30E-05	1.55E-04	2.14E-04	2.47E-04	2.73E-04	2.82E-04	
Bone_Sur	1.24E-10	8.73E-05	2.72E-03	2.16E-02	3.33E-02	1.75E-02	9.30E-03	6.85E-03	6.40E-03	5.94E-03	5.57E-03	4.84E-03
Brain	0.0	1.98E-07	1.28E-04	1.90E-03	7.22E-03	8.35E-03	7.90E-03	8.43E-03	8.22E-03	7.81E-03	7.41E-03	6.24E-03
Breasts	0.0	0.0	4.01E-06	1.04E-03	4.77E-03	5.02E-03	5.27E-03	5.49E-03	5.36E-03	5.15E-03	5.00E-03	4.18E-03
St_Wall1	0.0	0.0	4.18E-09	2.25E-05	4.94E-04	7.53E-04	1.24E-03	1.24E-03	1.31E-03	1.32E-03	1.31E-03	1.26E-03
SI_Wall1	0.0	0.0	0.0	4.65E-07	4.13E-05	1.47E-04	3.14E-04	4.99E-04	4.99E-04	5.66E-04	5.85E-04	5.94E-04
ULI_Wall1	0.0	0.0	0.0	7.39E-07	5.35E-05	2.05E-04	3.41E-04	4.90E-04	5.74E-04	6.19E-04	6.36E-04	5.99E-04
LLI_Wall1	0.0	0.0	0.0	8.87E-08	1.20E-05	6.50E-05	1.26E-04	2.12E-04	2.75E-04	3.09E-04	3.35E-04	3.36E-04
Kidneys	0.0	0.0	1.36E-10	5.08E-06	2.18E-04	6.20E-04	7.04E-04	7.71E-04	8.36E-04	9.48E-04	1.01E-03	9.37E-04
Liver	0.0	0.0	8.00E-09	1.92E-04	9.55E-04	1.52E-04	1.42E-03	1.42E-03	1.42E-03	1.42E-03	1.42E-03	1.55E-03
ET1-bas	0.0	1.98E-07	1.28E-04	1.90E-03	7.22E-03	8.35E-03	7.90E-03	8.43E-03	8.22E-03	7.81E-03	7.41E-03	6.24E-03
ET2-bas	0.0	1.98E-07	1.28E-04	1.90E-03	7.22E-03	8.35E-03	7.90E-03	8.43E-03	8.22E-03	7.81E-03	7.41E-03	6.24E-03
LN-ET	0.0	1.98E-07	1.28E-04	1.90E-03	7.22E-03	8.35E-03	7.90E-03	8.43E-03	8.22E-03	7.81E-03	7.41E-03	6.24E-03
BBi-bas	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
BBi-sec	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
bbe-sec	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
AI	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
LN-Th	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
Ing_Tiss	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
Lung_NP	0.0	1.98E-07	1.28E-04	1.90E-03	7.22E-03	8.35E-03	7.90E-03	8.43E-03	8.22E-03	7.81E-03	7.41E-03	6.24E-03
Lung_TB	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
Lung_P	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
Muscle	0.0	2.84E-06	5.19E-04	7.96E-03	1.42E-02	1.07E-02	9.36E-03	8.83E-03	8.23E-03	8.05E-03	7.85E-03	6.78E-03
Ovaries	0.0	0.0	0.0	6.49E-08	1.31E-02	1.72E-05	1.52E-05	2.54E-04	2.54E-04	3.25E-04	3.62E-04	3.90E-04
Pancreas	0.0	0.0	0.0	3.25E-09	5.16E-04	1.09E-03	1.49E-03	1.60E-03	1.65E-03	1.67E-03	1.65E-03	1.45E-03
R_Marrow	2.91E-10	1.49E-05	4.11E-04	3.30E-03	6.05E-03	5.68E-03	5.28E-03	5.36E-03	5.02E-03	4.64E-03	4.37E-03	3.83E-03
Skin	0.0	3.79E-05	8.27E-04	3.57E-03	3.98E-03	3.56E-03	3.72E-03	4.06E-03	3.97E-03	3.89E-03	3.73E-03	2.88E-03
Spleen	0.0	0.0	1.60E-09	1.69E-05	8.16E-04	1.18E-03	1.54E-03	1.75E-03	1.68E-03	1.68E-03	1.57E-03	1.47E-03
Testes	0.0	0.0	0.0	1.07E-09	1.08E-06	1.26E-05	3.44E-05	7.69E-05	1.19E-04	1.45E-04	1.66E-04	1.84E-04
Thymus	0.0	5.44E-05	3.89E-03	2.63E-02	4.10E-02	2.87E-02	2.47E-02	2.50E-02	2.52E-02	2.51E-02	2.40E-02	1.76E-02
Thyroid	1.00E+02	6.27E+01	3.64E+01	1.37E+01	4.45E+00	2.62E+00	2.88E+00	3.22E+00	3.02E+00	2.77E+00	2.56E+00	2.04E+00
GB_Wall1	0.0	0.0	7.19E-10	9.94E-06	2.55E-04	6.33E-04	8.62E-04	1.08E-03	1.16E-03	1.18E-03	1.19E-03	1.07E-03
Ht_Wall1	0.0	1.18E-09	1.12E-05	1.28E-03	4.79E-03	5.71E-03	5.54E-03	6.52E-03	5.98E-03	5.44E-03	5.10E-03	4.53E-03
Uterus	0.0	0.0	0.0	5.51E-08	1.19E-05	7.21E-05	1.44E-04	2.43E-04	3.13E-04	3.50E-04	3.78E-04	3.76E-04

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = GB_Cont		Energy (MeV)										
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	0.0	2.67E-05	2.68E-03	2.70E-02	4.41E-02	3.51E-02	2.79E-02	2.42E-02	2.25E-02	2.26E-02	2.22E-02	1.71E-02
UB_Wall1	0.0	2.61E-10	6.52E-06	1.07E-03	3.88E-03	7.35E-03	6.95E-03	5.45E-03	4.92E-03	4.75E-03	4.59E-03	3.98E-03
Bone_Sur	2.28E-08	9.33E-06	6.66E-04	9.40E-03	2.12E-02	1.34E-02	7.19E-03	4.87E-03	4.40E-03	4.19E-03	4.01E-03	3.40E-03
Brain	0.0	0.0	0.0	5.16E-08	8.65E-06	4.70E-05	8.10E-05	1.50E-04	2.00E-04	2.40E-04	2.70E-04	3.60E-04
Breasts	0.0	0.0	4.10E-06	9.15E-04	3.44E-03	5.40E-03	5.28E-03	5.10E-03	5.28E-03	5.08E-03	4.78E-03	3.89E-03
St_Wall1	2.83E-08	1.30E-03	2.00E-02	8.28E-02	8.18E-02	5.07E-02	4.48E-02	4.25E-02	3.85E-02	3.08E-02	2.70E-02	2.76E-02
SI_Wall1	4.02E-04	4.35E-03	2.36E-02	7.08E-02	7.21E-02	4.73E-02	4.18E-02	3.91E-02	3.53E-02	3.21E-02	2.97E-02	2.37E-02
ULI_Wall1	8.64E-04	3.46E-02	1.12E-01	1.63E-01	1.24E-01	7.41E-02	6.70E-02	6.40E-02	5.74E-02	5.54E-02	5.28E-02	3.97E-02
LLI_Wall1	0.0	3.24E-07	1.65E-04	4.83E-03	8.02E-03	9.69E-03	8.52E-03	7.73E-03	7.45E-03	7.13E-03	6.81E-03	5.87E-03
Kidneys	0.0	2.22E-05	3.47E-03	3.12E-02	4.59E-02	3.34E-02	2.81E-02	2.79E-02	2.41E-02	2.34E-02	2.25E-02	1.63E-02
Liver	1.54E-03	2.78E-02	8.84E-02	1.48E-01	1.09E-01	6.82E-02	6.11E-02	5.92E-02	5.56E-02	5.12E-02	4.69E-02	3.51E-02
ET1-bas	0.0	0.0	3.63E-10	7.62E-06	2.24E-04	5.76E-04	8.10E-04	1.02E-03	1.14E-03	1.16E-03	1.14E-03	1.02E-03
ET2-bas	0.0	0.0	3.63E-10	7.62E-06	2.24E-04	5.76E-04	8.10E-04	1.02E-03	1.14E-03	1.16E-03	1.14E-03	1.02E-03
LN-ET	0.0	0.0	3.63E-10	7.62E-06	2.24E-04	5.76E-04	8.10E-04	1.02E-03	1.14E-03	1.16E-03	1.14E-03	1.02E-03
BBi-bas	1.31E-09	2.00E-06	3.64E-04	4.73E-03	1.03E-02	8.39E-03	7.56E-03	7.81E-03	7.41E-03	6.58E-03	6.07E-03	5.66E-03
BBi-sec	1.31E-09	2.00E-06	3.64E-04	4.73E-03	1.03E-02	8.39E-03	7.56E-03	7.81E-03	7.41E-03	6.58E-03	6.07E-03	5.66E-03
bbe-sec	1.31E-09	2.00E-06	3.64E-04	4.73E-03	1.03E-02	8.39E-03	7.56E-03	7.81E-03	7.41E-03	6.58E-03	6.07E-03	5.66E-03
AI	1.31E-09	2.00E-06	3.64E-04	4.73E-03	1.03E-02	8.39E-03	7.56E-03	7.81E-03	7.41E-03	6.58E-03	6.07E-03	5.66E-03
LN-Th	1.31E-09	2.00E-06	3.64E-04	4.73E-03	1.03E-02	8.39E-03	7.56E-03	7.81E-03	7.41E-03	6.58E-03	6.07E-03	5.66E-03
Lng_Tiss	1.31E-09	2.00E-06	3.64E-04	4.73E-03	1.03E-02	8.39E-03	7.56E-03	7.81E-03	7.41E-03	6.58E-03	6.07E-03	5.66E-03
Lung_NP	0.0	0.0	3.63E-10	7.62E-06	2.24E-04	5.76E-04	8.10E-04	1.02E-03	1.14E-03	1.16E-03	1.14E-03	1.02E-03
Lung_TB	1.31E-09	2.00E-06	3.64E-04	4.73E-03	1.03E-02	8.39E-03	7.56E-03	7.81E-03	7.41E-03	6.58E-03	6.07E-03	5.66E-03
Lung_P	1.31E-09	2.00E-06	3.64E-04	4.73E-03	1.03E-02	8.39E-03	7.56E-03	7.81E-03	7.41E-03	6.58E-03	6.07E-03	5.66E-03
Muscle	1.92E-03	8.62E-03	1.51E-02	1.86E-02	1.45E-02	1.03E-02	9.59E-03	9.47E-03	8.92E-03	8.30E-03	7.78E-03	6.50E-03
Ovaries	0.0	6.22E-08	1.38E-04	4.25E-03	1.46E-02	1.63E-02	1.27E-02	1.22E-02	1.16E-02	1.10E-02	1.04E-02	8.37E-03
Pancreas	2.44E-03	7.83E-02	2.01E-01	2.39E-01	1.64E-01	9.99E-02	9.08E-02	8.54E-02	7.66E-02	7.35E-02	6.93E-02	5.01E-02
R_Marrow	6.45E-07	2.06E-05	2.41E-04	2.95E-03	7.74E-03	8.21E-03	7.68E-03	7.76E-03	6.86E-03	6.58E-03	6.35E-03	5.22E-03
Skin	0.0	5.96E-06	3.18E-04	2.06E-03	3.24E-03	2.84E-03	2.97E-03	3.56E-03	3.46E-03	3.00E-03	2.70E-03	2.46E-03
Spleen	0.0	1.20E-06	6.18E-04	1.38E-02	2.53E-02	2.07E-02	1.92E-02	1.65E-02	1.59E-02	1.43E-02	1.31E-02	1.13E-02
Testes	0.0	0.0	1.67E-08	6.06E-05	8.17E-04	1.16E-03	1.53E-03	1.93E-03	2.05E-03	2.02E-03	1.96E-03	1.76E-03
Thymus	0.0	0.0	8.35E-07	3.17E-04	1.65E-03	3.25E-03	3.14E-03	2.89E-03	2.91E-03	2.86E-03	2.81E-03	2.65E-03
Thyroid	0.0	0.0	3.63E-10	7.62E-06	2.24E-04	5.76E-04	8.10E-04	1.02E-03	1.14E-03	1.16E-03	1.14E-03	1.02E-03
GB_Wall1	6.59E+00	7.48E+00	6.33E+00	3.30E+00	1.24E+00	6.82E-01	7.13E-01	7.42E-01	6.93E-01	6.43E-01	6.02E-01	4.98E-01
Ht_Wall1	0.0	7.04E-06	8.41E-04	8.56E-03	1.77E-02	1.44E-02	1.28E-02	1.30E-02	1.14E-02	1.00E-02	9.39E-03	9.91E-03
Uterus	0.0	4.43E-08	1.36E-04	6.48E-03	1.40E-02	1.70E-02	1.64E-02	1.38E-02	1.15E-02	1.05E-02	9.88E-03	8.56E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = GB\_Wall

Energy (MeV)

Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	0.0	5.98E-05	4.85E-03	2.27E-02	4.87E-02	4.00E-02	2.87E-02	2.44E-02	2.38E-02	2.22E-02	2.06E-02	1.69E-02
UB_Wall	0.0	4.08E-10	7.16E-06	1.13E-03	6.27E-03	8.32E-03	7.61E-03	6.56E-03	5.86E-03	5.37E-03	5.05E-03	4.23E-03
Bone_Sur	2.28E-08	9.33E-06	6.66E-04	9.40E-03	2.12E-02	1.34E-02	7.19E-03	4.87E-03	4.40E-03	4.01E-03	3.40E-03	
Brain	0.0	0.0	0.0	6.62E-08	9.79E-06	3.46E-05	6.32E-05	1.15E-04	1.75E-04	2.17E-04	2.54E-04	3.11E-04
Breasts	0.0	2.23E-10	6.63E-06	1.11E-03	4.32E-03	5.11E-03	5.48E-03	5.39E-03	5.20E-03	5.01E-03	4.88E-03	4.08E-03
St_Wall	6.80E-08	2.04E-03	2.57E-02	8.64E-02	8.85E-02	6.00E-02	5.08E-02	4.50E-02	4.01E-02	3.63E-02	3.38E-02	2.77E-02
SI_Wall	4.52E-03	1.49E-02	3.45E-02	6.79E-02	7.24E-02	4.92E-02	4.19E-02	3.85E-02	3.32E-02	2.85E-02	2.56E-02	2.19E-02
ULI_Wall	2.46E-03	6.00E-02	1.36E-01	1.80E-01	1.27E-01	7.97E-02	7.03E-02	6.49E-02	5.85E-02	5.30E-02	4.94E-02	4.04E-02
LLI_Wall	0.0	4.16E-07	1.69E-04	4.11E-03	1.14E-02	1.19E-02	1.05E-02	8.98E-03	7.98E-03	7.28E-03	6.82E-03	5.67E-03
Kidneys	0.0	3.31E-05	3.69E-03	2.55E-02	5.26E-02	3.56E-02	2.48E-02	2.40E-02	2.00E-02	1.86E-02	1.80E-02	1.66E-02
Liver	1.99E-03	3.60E-02	1.13E-01	1.72E-01	1.16E-01	6.80E-02	5.39E-02	5.20E-02	5.07E-02	4.69E-02	4.37E-02	3.65E-02
ET1-bas	0.0	0.0	7.19E-10	9.94E-06	2.55E-04	6.33E-04	8.62E-04	1.08E-03	1.16E-03	1.18E-03	1.19E-03	1.07E-03
ET2-bas	0.0	0.0	7.19E-10	9.94E-06	2.55E-04	6.33E-04	8.62E-04	1.08E-03	1.16E-03	1.18E-03	1.19E-03	1.07E-03
LN-ET	0.0	0.0	7.19E-10	9.94E-06	2.55E-04	6.33E-04	8.62E-04	1.08E-03	1.16E-03	1.18E-03	1.19E-03	1.07E-03
BBi-bas	1.00E-08	5.55E-06	4.91E-04	6.83E-03	9.33E-03	9.59E-03	8.09E-03	6.69E-03	6.43E-03	6.20E-03	6.00E-03	4.99E-03
BBi-sec	1.00E-08	5.55E-06	4.91E-04	6.83E-03	9.33E-03	9.59E-03	8.09E-03	6.69E-03	6.43E-03	6.20E-03	6.00E-03	4.99E-03
bbe-sec	1.00E-08	5.55E-06	4.91E-04	6.83E-03	9.33E-03	9.59E-03	8.09E-03	6.69E-03	6.43E-03	6.20E-03	6.00E-03	4.99E-03
AI	1.00E-08	5.55E-06	4.91E-04	6.83E-03	9.33E-03	9.59E-03	8.09E-03	6.69E-03	6.43E-03	6.20E-03	6.00E-03	4.99E-03
LN-Th	1.00E-08	5.55E-06	4.91E-04	6.83E-03	9.33E-03	9.59E-03	8.09E-03	6.69E-03	6.43E-03	6.20E-03	6.00E-03	4.99E-03
Ing_Tiss	1.00E-08	5.55E-06	4.91E-04	6.83E-03	9.33E-03	9.59E-03	8.09E-03	6.69E-03	6.43E-03	6.20E-03	6.00E-03	4.99E-03
Lung_NP	0.0	0.0	7.19E-10	9.94E-06	2.55E-04	6.33E-04	8.62E-04	1.08E-03	1.16E-03	1.18E-03	1.19E-03	1.07E-03
Lung_TB	1.00E-08	5.55E-06	4.91E-04	6.83E-03	9.33E-03	9.59E-03	8.09E-03	6.69E-03	6.43E-03	6.20E-03	6.00E-03	4.99E-03
Lung_P	1.00E-08	5.55E-06	4.91E-04	6.83E-03	9.33E-03	9.59E-03	8.09E-03	6.69E-03	6.43E-03	6.20E-03	6.00E-03	4.99E-03
Muscle	1.10E-02	1.50E-02	1.70E-02	1.70E-02	1.60E-02	1.38E-02	1.22E-02	9.30E-03	7.72E-03	7.11E-03	6.76E-03	6.04E-03
Ovaries	0.0	9.24E-08	1.52E-04	5.66E-03	1.40E-02	1.73E-02	1.44E-02	1.13E-02	9.67E-03	9.27E-03	8.94E-03	7.39E-03
Pancreas	1.50E-02	1.56E-01	3.50E-01	3.72E-01	1.95E-01	1.26E-01	1.18E-01	1.10E-01	1.00E-01	9.45E-02	8.89E-02	6.83E-02
R_Marrow	6.45E-07	2.06E-05	2.41E-04	2.95E-03	7.74E-03	8.21E-03	7.68E-03	7.76E-03	6.86E-03	6.58E-03	6.35E-03	5.22E-03
Skin	6.01E-08	9.95E-06	3.73E-04	2.91E-03	5.75E-03	5.62E-03	5.01E-03	4.39E-03	3.96E-03	3.64E-03	3.43E-03	2.88E-03
Spleen	0.0	2.19E-06	8.03E-04	1.59E-02	2.35E-02	2.52E-02	2.28E-02	1.96E-02	1.62E-02	1.43E-02	1.32E-02	1.09E-02
Testes	0.0	0.0	1.84E-08	5.96E-05	7.82E-04	1.41E-03	1.71E-03	1.97E-03	2.01E-03	1.99E-03	1.98E-03	1.71E-03
Thymus	0.0	1.58E-06	4.12E-04	2.33E-03	2.74E-03	3.15E-03	3.50E-03	3.50E-03	3.39E-03	3.31E-03	3.20E-03	
Thyroid	0.0	0.0	7.19E-10	9.94E-06	2.55E-04	6.33E-04	8.62E-04	1.08E-03	1.16E-03	1.18E-03	1.19E-03	1.07E-03
GB_Wall	5.90E+01	2.70E+01	1.43E+01	5.48E+00	1.93E+00	1.09E+00	1.17E+00	1.22E+00	1.11E+00	1.01E+00	1.01E+00	7.53E-01
Ht_Wall	0.0	2.50E-05	1.29E-03	1.41E-02	2.02E-02	1.69E-02	1.29E-02	1.24E-02	1.15E-02	1.08E-02	8.88E-03	
Uterus	0.0	6.59E-08	1.49E-04	3.58E-03	1.59E-02	1.86E-02	1.50E-02	1.33E-02	1.44E-02	1.37E-02	1.23E-02	7.53E-03

Specific Absorbed Fraction of Photon Energy in kg<sup>-1</sup>: Recommended Values for the Ten-Year-Old

Source = Ht_Cont		Energy (MeV)										
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	0.0	5.57E-06	1.55E-03	1.59E-02	2.81E-02	2.27E-02	1.93E-02	1.89E-02	1.79E-02	1.67E-02	1.57E-02	1.35E-02
UB_Wall	0.0	0.0	1.85E-10	5.38E-06	1.78E-04	4.87E-04	7.01E-04	8.74E-04	9.86E-04	1.02E-04	1.02E-03	1.03E-03
Bone_Sur	2.00E-05	4.61E-04	4.27E-03	2.17E-02	3.16E-02	1.64E-02	1.64E-02	8.89E-03	6.29E-03	5.68E-03	5.26E-03	4.25E-03
Brain	0.0	0.0	9.71E-10	7.56E-06	1.66E-04	3.52E-04	5.23E-04	7.43E-04	8.80E-04	9.30E-04	9.58E-04	1.02E-03
Breasts	0.0	1.72E-04	7.00E-03	3.66E-02	4.10E-02	2.79E-02	2.83E-02	2.87E-02	2.87E-02	2.62E-02	2.53E-02	2.08E-02
St_Wall	7.08E-09	1.58E-04	3.23E-03	1.65E-02	2.54E-02	1.82E-02	1.47E-02	1.54E-02	1.37E-02	1.22E-02	1.15E-02	1.10E-02
SI_Wall	0.0	0.0	3.89E-07	1.60E-04	2.00E-03	2.90E-03	3.00E-03	3.00E-03	2.80E-03	2.75E-03	2.70E-03	2.50E-03
ULI_Wall	0.0	0.0	1.00E-06	5.70E-04	2.40E-03	3.30E-03	3.50E-03	3.50E-03	3.40E-03	3.20E-03	3.10E-03	2.80E-03
LLI_Wall	0.0	0.0	3.09E-08	3.88E-05	3.30E-04	5.60E-04	7.80E-04	1.00E-03	1.30E-03	1.35E-03	1.40E-03	1.20E-03
Kidneys	0.0	5.55E-09	2.40E-05	2.24E-03	6.14E-03	7.50E-03	6.96E-03	7.27E-03	6.76E-03	6.11E-03	5.76E-03	5.61E-03
Liver	2.49E-05	6.49E-04	6.57E-03	2.71E-02	3.10E-02	2.19E-02	1.90E-02	1.78E-02	1.68E-02	1.61E-02	1.53E-02	1.23E-02
ET1-bas	0.0	9.43E-10	1.28E-05	1.98E-03	6.25E-03	6.63E-03	6.63E-03	6.09E-03	7.01E-03	6.24E-03	5.97E-03	5.80E-03
ET2-bas	0.0	9.43E-10	1.28E-05	1.98E-03	6.25E-03	6.63E-03	6.63E-03	6.09E-03	7.01E-03	6.24E-03	5.97E-03	5.80E-03
LN-ET	0.0	9.43E-10	1.28E-05	1.98E-03	6.25E-03	6.63E-03	6.63E-03	6.09E-03	7.01E-03	6.24E-03	5.97E-03	5.80E-03
BBi-bas	1.99E-04	1.26E-02	5.71E-02	1.02E-01	7.52E-02	4.42E-02	3.93E-02	3.76E-02	3.46E-02	3.16E-02	2.93E-02	2.47E-02
BBi-sec	1.99E-04	1.26E-02	5.71E-02	1.02E-01	7.52E-02	4.42E-02	3.93E-02	3.76E-02	3.46E-02	3.16E-02	2.93E-02	2.47E-02
bbe-sec	1.99E-04	1.26E-02	5.71E-02	1.02E-01	7.52E-02	4.42E-02	3.93E-02	3.76E-02	3.46E-02	3.16E-02	2.93E-02	2.47E-02
AI	1.99E-04	1.26E-02	5.71E-02	1.02E-01	7.52E-02	4.42E-02	3.93E-02	3.76E-02	3.46E-02	3.16E-02	2.93E-02	2.47E-02
LN-Th	1.99E-04	1.26E-02	5.71E-02	1.02E-01	7.52E-02	4.42E-02	3.93E-02	3.76E-02	3.46E-02	3.16E-02	2.93E-02	2.47E-02
Ing_Tiss	1.99E-04	1.26E-02	5.71E-02	1.02E-01	7.52E-02	4.42E-02	3.93E-02	3.76E-02	3.46E-02	3.16E-02	2.93E-02	2.47E-02
Lung_NP	0.0	9.43E-10	1.28E-05	1.98E-03	6.25E-03	6.63E-03	6.63E-03	6.09E-03	7.01E-03	6.24E-03	5.97E-03	5.80E-03
Lung_TB	1.99E-04	1.26E-02	5.71E-02	1.02E-01	7.52E-02	4.42E-02	3.93E-02	3.76E-02	3.46E-02	3.16E-02	2.93E-02	2.47E-02
Lung_P	1.99E-04	1.26E-02	5.71E-02	1.02E-01	7.52E-02	4.42E-02	3.93E-02	3.76E-02	3.46E-02	3.16E-02	2.93E-02	2.47E-02
Muscle	2.47E-04	6.62E-03	7.34E-03	1.27E-02	1.11E-02	7.83E-03	7.42E-03	7.35E-03	7.01E-03	6.59E-03	6.19E-03	5.04E-03
Ovaries	0.0	0.0	3.87E-09	2.75E-05	6.21E-04	7.99E-04	1.01E-03	1.29E-03	1.44E-03	1.49E-03	1.52E-03	1.56E-03
Pancreas	0.0	1.31E-05	2.20E-03	2.12E-02	3.51E-02	2.53E-02	2.20E-02	2.14E-02	1.88E-02	1.77E-02	1.68E-02	1.34E-02
R_Marrow	5.97E-06	1.24E-04	1.07E-03	4.93E-03	7.95E-03	7.42E-03	7.29E-03	7.22E-03	6.59E-03	6.37E-03	6.12E-03	4.89E-03
Skin	8.05E-09	9.80E-05	9.02E-04	2.72E-03	3.63E-03	3.06E-03	3.24E-03	3.42E-03	3.47E-03	3.44E-03	3.35E-03	2.95E-03
Spleen	0.0	2.86E-07	3.20E-04	7.69E-03	1.61E-02	1.26E-02	1.15E-02	1.03E-02	1.05E-02	1.04E-02	9.93E-03	7.91E-03
Testes	0.0	0.0	0.0	3.89E-07	3.75E-05	1.73E-04	2.53E-04	3.97E-04	5.01E-04	5.34E-04	5.44E-04	5.40E-04
Thymus	6.17E-05	8.73E-03	4.43E-02	1.06E-01	8.85E-02	5.52E-02	5.10E-02	4.82E-02	4.57E-02	4.21E-02	3.90E-02	3.17E-02
Thyroid	0.0	9.43E-10	1.28E-05	1.98E-03	6.25E-03	6.63E-03	6.63E-03	6.09E-03	7.01E-03	6.24E-03	5.97E-03	5.80E-03
GB_Wall	0.0	3.64E-06	4.88E-04	7.56E-03	1.38E-02	1.85E-02	1.70E-02	1.23E-02	1.00E-02	9.54E-03	9.21E-03	7.64E-03
Ht_Wall	4.52E-01	9.21E-01	1.09E+00	8.05E-01	3.71E-01	2.18E-01	2.15E-01	2.15E-01	1.98E-01	1.80E-01	1.66E-01	1.33E-01
Uterus	0.0	0.0	2.96E-09	2.45E-05	5.67E-04	8.43E-04	1.10E-03	1.32E-03	1.42E-03	1.46E-03	1.48E-03	1.52E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = Ht_Wall	Energy (MeV)											
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	0.0	1.66E-05	2.64E-05	4.46E-10	8.07E-06	2.20E-02	2.36E-02	2.14E-02	1.99E-02	1.82E-02	1.75E-02	1.67E-02
UB_Wall	0.0	0.0	4.27E-04	4.61E-04	4.27E-03	2.17E-02	3.16E-02	5.71E-04	6.40E-04	1.01E-03	1.11E-03	1.13E-03
Bone_Sur	2.00E-05	4.61E-04	4.27E-04	7.57E-10	5.89E-06	1.30E-04	1.64E-02	8.89E-03	6.29E-03	5.68E-03	5.49E-03	4.25E-03
Brain	0.0	0.0	1.05E-08	8.82E-04	1.14E-02	5.06E-02	4.58E-02	3.08E-02	2.97E-04	9.30E-04	8.97E-04	9.73E-04
Breasts	1.05E-08	8.82E-04	1.14E-02	1.21E-03	1.21E-02	3.90E-02	3.85E-02	2.53E-02	2.33E-02	3.17E-02	3.34E-02	2.20E-02
St_Wall	1.60E-04	2.01E-03	1.21E-02	3.90E-02	3.85E-02	2.53E-02	2.33E-02	2.29E-02	2.14E-02	2.02E-02	1.92E-02	1.61E-02
SI_Wall	0.0	0.0	1.01E-06	2.60E-04	2.14E-03	3.29E-03	3.01E-03	3.14E-03	3.13E-03	3.15E-03	3.14E-03	2.90E-03
ULI_Wall	0.0	0.0	2.55E-06	5.59E-04	2.27E-03	3.67E-03	3.41E-03	3.01E-03	3.34E-03	3.43E-03	3.42E-03	3.26E-03
LLI_Wall	0.0	0.0	9.86E-08	6.80E-05	6.64E-04	9.01E-04	1.09E-03	1.23E-03	1.30E-03	1.33E-03	1.35E-03	1.37E-03
Kidneys	0.0	2.51E-08	4.81E-05	2.89E-03	7.30E-03	8.58E-03	7.65E-03	7.51E-03	7.66E-03	6.95E-03	6.32E-03	5.20E-03
Liver	1.20E-04	3.37E-03	1.43E-02	3.35E-02	3.31E-02	2.30E-02	2.15E-02	2.06E-02	1.91E-02	1.76E-02	1.64E-02	1.31E-02
ET1-bas	0.0	1.18E-09	1.12E-05	1.28E-03	4.79E-03	5.71E-03	5.54E-03	6.52E-03	5.98E-03	5.44E-03	5.10E-03	4.53E-03
ET2-bas	0.0	1.18E-09	1.12E-05	1.28E-03	4.79E-03	5.71E-03	5.54E-03	6.52E-03	5.98E-03	5.44E-03	5.10E-03	4.53E-03
LN-ET	0.0	1.18E-09	1.12E-05	1.28E-03	4.79E-03	5.71E-03	5.54E-03	6.52E-03	5.98E-03	5.44E-03	5.10E-03	4.53E-03
BBi-bas	1.39E-03	2.24E-02	6.57E-02	9.58E-02	6.86E-02	4.14E-02	3.67E-02	3.53E-02	3.36E-02	3.00E-02	2.73E-02	2.24E-02
BBi-sec	1.39E-03	2.24E-02	6.57E-02	9.58E-02	6.86E-02	4.14E-02	3.67E-02	3.53E-02	3.36E-02	3.00E-02	2.73E-02	2.24E-02
bbe-sec	1.39E-03	2.24E-02	6.57E-02	9.58E-02	6.86E-02	4.14E-02	3.67E-02	3.53E-02	3.36E-02	3.00E-02	2.73E-02	2.24E-02
AI	1.39E-03	2.24E-02	6.57E-02	9.58E-02	6.86E-02	4.14E-02	3.67E-02	3.53E-02	3.36E-02	3.00E-02	2.73E-02	2.24E-02
LN-Th	1.39E-03	2.24E-02	6.57E-02	9.58E-02	6.86E-02	4.14E-02	3.67E-02	3.53E-02	3.36E-02	3.00E-02	2.73E-02	2.24E-02
Ing_Tiss	1.39E-03	2.24E-02	6.57E-02	9.58E-02	6.86E-02	4.14E-02	3.67E-02	3.53E-02	3.36E-02	3.00E-02	2.73E-02	2.24E-02
Lung_NP	0.0	1.18E-09	1.12E-05	1.28E-03	4.79E-03	5.71E-03	5.54E-03	6.52E-03	5.98E-03	5.44E-03	5.10E-03	4.53E-03
Lung_TB	1.39E-03	2.24E-02	6.57E-02	9.58E-02	6.86E-02	4.14E-02	3.67E-02	3.53E-02	3.36E-02	3.00E-02	2.73E-02	2.24E-02
Lung_P	1.39E-03	2.24E-02	6.57E-02	9.58E-02	6.86E-02	4.14E-02	3.67E-02	3.53E-02	3.36E-02	3.00E-02	2.73E-02	2.24E-02
Muscle	3.78E-03	8.45E-03	1.23E-02	1.48E-02	1.66E-02	8.08E-03	7.78E-03	7.84E-03	7.44E-03	6.91E-03	6.44E-03	5.33E-03
Ovaries	0.0	0.0	9.83E-09	4.15E-05	5.80E-04	9.70E-04	1.40E-03	1.43E-03	1.50E-03	1.60E-03	1.65E-03	1.70E-03
Pancreas	0.0	1.05E-04	7.15E-03	3.68E-02	4.79E-02	3.20E-02	2.79E-02	2.84E-02	2.51E-02	2.23E-02	2.08E-02	1.96E-02
R_Marrow	5.97E-06	1.24E-04	1.07E-03	4.93E-03	7.95E-03	7.42E-03	7.29E-03	7.22E-03	6.59E-03	6.37E-03	6.12E-03	4.89E-03
Skin	1.44E-06	2.17E-04	1.12E-03	3.40E-03	3.93E-03	3.32E-03	3.64E-03	3.70E-03	3.47E-03	3.66E-03	3.71E-03	2.99E-03
Spleen	0.0	2.36E-06	1.12E-03	1.16E-02	2.10E-02	1.62E-02	1.43E-02	1.43E-02	1.36E-02	1.31E-02	1.33E-02	1.28E-02
Testes	0.0	0.0	0.0	5.82E-07	4.73E-05	1.91E-04	3.20E-04	4.70E-04	5.50E-04	5.73E-04	5.81E-04	5.80E-04
Thymus	4.26E-04	1.43E-02	4.96E-02	8.97E-02	7.43E-02	4.63E-02	4.39E-02	4.44E-02	3.83E-02	3.51E-02	3.28E-02	2.68E-02
Thyroid	0.0	1.18E-09	1.12E-05	1.28E-03	4.79E-03	5.71E-03	5.54E-03	6.52E-03	5.98E-03	5.44E-03	5.10E-03	4.53E-03
GB_Wall	0.0	2.50E-05	1.29E-03	1.41E-02	2.02E-02	1.69E-02	1.29E-02	1.28E-02	1.24E-02	1.15E-02	1.08E-02	8.88E-03
Ht_Wall	5.38E+00	3.81E+00	2.62E+00	1.31E+00	5.29E-01	3.13E-01	3.15E-01	3.37E-01	3.10E-01	2.85E-01	2.64E-01	2.09E-01
Uterus	0.0	0.0	7.22E-09	3.65E-05	4.22E-04	8.36E-04	1.23E-03	1.49E-03	1.54E-03	1.55E-03	1.54E-03	1.50E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = Uterus

Energy (MeV)

Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	0.0	0.0	3.13E-07	2.88E-04	2.13E-03	2.96E-03	3.23E-03	3.51E-03	3.45E-03	3.29E-03	2.98E-03	2.78E-03
UB_Wall1	1.09E-04	5.02E-02	1.78E-01	3.10E-01	2.16E-01	1.20E-01	1.10E-01	9.56E-02	1.02E-01	1.01E-01	9.42E-02	6.71E-02
Bone_Sur	0.0	1.19E-06	5.25E-04	1.14E-02	2.41E-02	1.43E-02	7.49E-03	4.84E-03	4.34E-03	4.18E-03	4.02E-03	3.37E-03
Brain	0.0	0.0	0.0	4.43E-10	5.08E-07	4.14E-06	1.12E-05	2.89E-05	5.42E-05	7.61E-05	9.52E-05	1.59E-04
Breasts	0.0	0.0	1.79E-10	7.23E-06	6.32E-04	6.10E-04	8.43E-04	1.07E-03	1.15E-03	1.17E-03	1.18E-03	1.06E-03
St_Wall1	0.0	4.08E-09	2.51E-05	2.18E-03	6.53E-03	8.31E-03	6.99E-03	6.57E-03	6.43E-03	5.93E-03	5.57E-03	5.13E-03
SI_Wall1	8.16E-06	1.17E-02	8.13E-02	1.74E-01	1.34E-01	8.33E-02	7.45E-02	6.95E-02	6.21E-02	5.68E-02	5.30E-02	4.44E-02
ULI_Wall1	4.95E-10	3.41E-04	9.41E-03	5.51E-02	6.52E-02	4.39E-02	3.92E-02	3.68E-02	3.27E-02	2.78E-02	2.48E-02	2.09E-02
LLI_Wall1	0.0	2.85E-04	1.32E-02	7.12E-02	8.22E-02	5.29E-02	4.54E-02	4.12E-02	3.85E-02	3.75E-02	3.55E-02	2.60E-02
Kidneys	0.0	1.26E-09	1.72E-05	1.78E-03	6.39E-03	8.05E-03	6.87E-03	6.99E-03	7.56E-03	7.10E-03	6.57E-03	5.48E-03
Liver	0.0	8.13E-10	8.60E-06	1.10E-03	4.34E-03	5.44E-03	4.75E-03	5.02E-03	4.99E-03	4.89E-03	4.73E-03	3.98E-03
ET1-bas	0.0	0.0	0.0	5.51E-08	1.19E-05	7.21E-05	1.44E-04	2.43E-04	3.13E-04	3.50E-04	3.78E-04	3.76E-04
ET2-bas	0.0	0.0	0.0	5.51E-08	1.19E-05	7.21E-05	1.44E-04	2.43E-04	3.13E-04	3.50E-04	3.78E-04	3.76E-04
LN-ET	0.0	0.0	0.0	5.51E-08	1.19E-05	7.21E-05	1.44E-04	2.43E-04	3.13E-04	3.50E-04	3.78E-04	3.76E-04
BBi-bas	0.0	0.0	0.0	7.62E-09	3.62E-05	4.95E-04	7.51E-04	9.24E-04	1.05E-03	1.11E-03	1.14E-03	1.26E-03
BBi-sec	0.0	0.0	0.0	7.62E-09	3.62E-05	4.95E-04	7.51E-04	9.24E-04	1.05E-03	1.11E-03	1.14E-03	1.26E-03
bbe-sec	0.0	0.0	0.0	7.62E-09	3.62E-05	4.95E-04	7.51E-04	9.24E-04	1.05E-03	1.11E-03	1.14E-03	1.26E-03
AI	0.0	0.0	0.0	7.62E-09	3.62E-05	4.95E-04	7.51E-04	9.24E-04	1.05E-03	1.11E-03	1.14E-03	1.26E-03
LN-Th	0.0	0.0	0.0	7.62E-09	3.62E-05	4.95E-04	7.51E-04	9.24E-04	1.05E-03	1.11E-03	1.14E-03	1.26E-03
Ing_Tiss	0.0	0.0	0.0	7.62E-09	3.62E-05	4.95E-04	7.51E-04	9.24E-04	1.05E-03	1.11E-03	1.14E-03	1.26E-03
Lung_NP	0.0	0.0	0.0	7.62E-09	3.62E-05	4.95E-04	7.51E-04	9.24E-04	1.05E-03	1.11E-03	1.14E-03	1.26E-03
Lung_TB	0.0	0.0	0.0	7.62E-09	3.62E-05	4.95E-04	7.51E-04	9.24E-04	1.05E-03	1.11E-03	1.14E-03	1.26E-03
Lung_P	0.0	0.0	0.0	7.62E-09	3.62E-05	4.95E-04	7.51E-04	9.24E-04	1.05E-03	1.11E-03	1.14E-03	1.26E-03
Muscle	8.17E-03	2.07E-02	2.82E-02	2.86E-02	2.06E-02	1.42E-02	1.32E-02	1.31E-02	1.22E-02	1.13E-02	1.06E-02	8.65E-03
Ovaries	1.44E-07	9.62E-03	1.39E-01	3.97E-01	2.49E-01	1.42E-01	1.31E-01	1.18E-01	1.28E-01	1.09E-01	9.45E-02	7.82E-02
Pancreas	0.0	0.0	0.0	2.53E-06	7.80E-04	3.05E-03	6.80E-03	7.21E-03	5.60E-03	4.66E-03	4.32E-03	3.76E-03
R_Marrow	0.0	4.17E-06	3.16E-04	6.14E-03	1.30E-02	1.17E-02	1.05E-02	1.02E-02	8.65E-03	8.19E-03	7.84E-03	6.27E-03
Skin	0.0	1.01E-06	1.26E-04	1.69E-03	3.30E-03	2.89E-03	3.11E-03	3.20E-03	3.23E-03	3.31E-03	3.28E-03	2.76E-03
Spleen	0.0	0.0	1.30E-06	7.00E-04	2.62E-03	4.57E-03	4.26E-03	4.32E-03	4.09E-03	3.82E-03	3.66E-03	3.51E-03
Testes	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Thymus	0.0	0.0	0.0	1.91E-06	9.88E-05	3.27E-04	4.98E-04	6.80E-04	7.66E-04	8.00E-04	8.24E-04	7.57E-04
Thyroid	0.0	0.0	0.0	5.51E-08	1.19E-05	7.21E-05	1.44E-04	2.43E-04	3.13E-04	3.50E-04	3.78E-04	3.76E-04
GB_Wall1	0.0	6.59E-08	1.49E-04	3.58E-03	1.59E-02	1.86E-02	1.50E-02	1.33E-02	1.44E-02	1.37E-02	1.23E-02	7.53E-03
Ht_Wall1	0.0	0.0	7.22E-09	3.65E-05	4.22E-04	8.36E-04	1.23E-03	1.49E-03	1.54E-03	1.55E-03	1.50E-03	1.50E-03
Uterus	1.95E+02	1.21E+02	6.77E+01	2.44E+01	7.89E+00	4.56E+00	5.05E+00	5.55E+00	5.25E+00	4.77E+00	4.35E+00	3.40E+00

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Ten-Year-Old

Source = Body_Tis		Energy (MeV)										
Target	0.010	0.015	0.020	0.030	0.050	0.100	0.200	0.500	1.000	1.500	2.000	4.000
Adrenals	3.07E-02	3.07E-02	2.92E-02	2.45E-02	1.76E-02	1.20E-02	1.13E-02	1.12E-02	1.05E-02	9.79E-03	9.15E-03	7.53E-03
UB_Wall1	2.49E-02	2.19E-02	1.82E-02	1.66E-02	1.50E-02	1.21E-02	1.01E-02	8.57E-03	7.56E-03	6.71E-03	6.71E-03	5.87E-03
Bone_Sur	4.18E-02	5.03E-02	5.87E-02	6.74E-02	5.18E-02	2.20E-02	1.26E-02	1.02E-02	9.58E-03	8.95E-03	8.44E-03	7.31E-03
Brain	3.07E-02	3.07E-02	2.92E-02	2.37E-02	1.46E-02	8.65E-03	8.14E-03	8.20E-03	7.73E-03	7.14E-03	6.65E-03	5.50E-03
Breasts	2.84E-02	2.20E-02	1.69E-02	1.14E-02	7.29E-03	5.19E-03	5.45E-03	5.98E-03	5.94E-03	5.64E-03	5.32E-03	4.48E-03
St_Wall1	2.80E-02	2.39E-02	1.98E-02	1.75E-02	1.55E-02	1.23E-02	1.01E-02	8.64E-03	7.88E-03	7.44E-03	7.09E-03	6.14E-03
SI_Wall1	2.94E-02	2.75E-02	2.52E-02	2.17E-02	1.64E-02	1.20E-02	1.14E-02	1.11E-02	1.04E-02	9.70E-03	9.11E-03	7.54E-03
ULI_Wall1	2.64E-02	2.25E-02	2.11E-02	1.99E-02	1.57E-02	1.13E-02	9.51E-03	9.19E-03	8.89E-03	8.82E-03	8.57E-03	7.34E-03
LLI_Wall1	2.73E-02	2.19E-02	1.92E-02	1.78E-02	1.59E-02	1.31E-02	1.12E-02	9.68E-03	8.91E-03	8.45E-03	8.12E-03	7.37E-03
Kidneys	3.07E-02	3.06E-02	2.84E-02	2.22E-02	1.51E-02	1.07E-02	1.02E-02	1.03E-02	9.76E-03	9.14E-03	8.60E-03	7.07E-03
Liver	3.07E-02	3.06E-02	2.88E-02	2.31E-02	1.56E-02	1.08E-02	1.04E-02	1.04E-02	9.81E-03	9.17E-03	8.60E-03	7.11E-03
ET1-bas	3.07E-02	3.07E-02	2.92E-02	2.40E-02	1.63E-02	1.10E-02	1.05E-02	1.05E-02	9.86E-03	9.18E-03	8.59E-03	7.00E-03
ET2-bas	3.07E-02	3.07E-02	2.92E-02	2.40E-02	1.63E-02	1.10E-02	1.05E-02	1.05E-02	9.86E-03	9.18E-03	8.59E-03	7.00E-03
LN-ET	3.07E-02	3.07E-02	2.92E-02	2.40E-02	1.63E-02	1.10E-02	1.05E-02	1.05E-02	9.86E-03	9.18E-03	8.59E-03	7.00E-03
BBi-bas	3.07E-02	3.06E-02	3.00E-02	2.55E-02	1.64E-02	1.01E-02	9.14E-03	8.97E-03	8.45E-03	7.80E-03	7.28E-03	6.08E-03
BBi-sec	3.07E-02	3.06E-02	3.00E-02	2.55E-02	1.64E-02	1.01E-02	9.14E-03	8.97E-03	8.45E-03	7.80E-03	7.28E-03	6.08E-03
bbe-sec	3.07E-02	3.06E-02	3.00E-02	2.55E-02	1.64E-02	1.01E-02	9.14E-03	8.97E-03	8.45E-03	7.80E-03	7.28E-03	6.08E-03
AI	3.07E-02	3.06E-02	3.00E-02	2.55E-02	1.64E-02	1.01E-02	9.14E-03	8.97E-03	8.45E-03	7.80E-03	7.28E-03	6.08E-03
LN-Th	3.07E-02	3.06E-02	3.00E-02	2.55E-02	1.64E-02	1.01E-02	9.14E-03	8.97E-03	8.45E-03	7.80E-03	7.28E-03	6.08E-03
Ing_Tiss	3.07E-02	3.06E-02	3.00E-02	2.55E-02	1.64E-02	1.01E-02	9.14E-03	8.97E-03	8.45E-03	7.80E-03	7.28E-03	6.08E-03
Lung_NP	3.07E-02	3.07E-02	2.92E-02	2.40E-02	1.63E-02	1.10E-02	1.05E-02	1.05E-02	9.86E-03	9.18E-03	8.59E-03	7.00E-03
Lung_TB	3.07E-02	3.06E-02	3.00E-02	2.55E-02	1.64E-02	1.01E-02	9.14E-03	8.97E-03	8.45E-03	7.80E-03	7.28E-03	6.08E-03
Lung_P	3.07E-02	3.06E-02	3.00E-02	2.55E-02	1.64E-02	1.01E-02	9.14E-03	8.97E-03	8.45E-03	7.80E-03	7.28E-03	6.08E-03
Muscle	3.01E-02	2.81E-02	2.52E-02	1.87E-02	1.66E-02	8.22E-03	8.23E-03	8.57E-03	8.20E-03	7.67E-03	7.19E-03	5.93E-03
Ovaries	3.06E-02	2.98E-02	2.72E-02	2.32E-02	1.74E-02	1.23E-02	1.17E-02	1.15E-02	1.06E-02	9.89E-03	9.29E-03	7.59E-03
Pancreas	3.07E-02	3.04E-02	2.87E-02	2.45E-02	1.79E-02	1.27E-02	1.20E-02	1.18E-02	1.10E-02	1.02E-02	9.52E-03	7.78E-03
R_Marrow	8.11E-03	9.39E-03	1.06E-02	1.19E-02	1.12E-02	9.43E-03	9.17E-03	9.30E-03	8.76E-03	8.10E-03	7.60E-03	6.62E-03
Skin	2.34E-02	1.77E-02	1.42E-02	1.01E-02	6.68E-03	4.90E-03	4.95E-03	5.47E-03	5.29E-03	5.12E-03	4.97E-03	4.44E-03
Spleen	3.07E-02	3.07E-02	2.90E-02	2.32E-02	1.55E-02	1.07E-02	1.04E-02	1.04E-02	9.76E-03	9.10E-03	8.53E-03	7.05E-03
Testes	3.04E-02	2.77E-02	2.34E-02	1.64E-02	1.07E-02	7.66E-03	7.86E-03	8.28E-03	7.92E-03	7.46E-03	7.02E-03	5.82E-03
Thymus	3.07E-02	3.06E-02	2.84E-02	2.21E-02	1.41E-02	9.62E-03	9.43E-03	9.62E-03	9.12E-03	8.45E-03	7.88E-03	6.52E-03
Thyroid	3.07E-02	3.07E-02	2.92E-02	2.40E-02	1.63E-02	1.10E-02	1.05E-02	1.05E-02	9.86E-03	9.18E-03	8.59E-03	7.00E-03
GB_Wall1	1.62E-02	1.34E-02	1.33E-02	1.48E-02	1.54E-02	1.42E-02	1.23E-02	1.01E-02	8.71E-03	8.03E-03	7.57E-03	6.59E-03
Ht_Wall1	3.07E-02	3.07E-02	2.90E-02	2.38E-02	1.61E-02	1.11E-02	1.07E-02	1.08E-02	9.30E-03	8.67E-03	7.12E-03	6.00E-03
Uterus	3.07E-02	3.05E-02	2.85E-02	2.36E-02	1.74E-02	1.25E-02	1.20E-02	1.17E-02	1.10E-02	1.01E-02	9.45E-03	7.81E-03

**APPENDIX B**

**TABLES OF SPECIFIC ABSORBED FRACTIONS-**  
**RAW DATA AND RECOMMENDED VALUES**

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48. J. A. Bianco, The Commonwealth of Massachusetts, University of Massachusetts Medical Center, Department of Nuclear Medicine, Worcester, MA 01605
49. R. E. Bigler, Sloan-Kettering Institute for Cancer Research, 1275 York Avenue, New York, NY 10021
50. J. L. Blair, Director, Human Health and Assessment Division, ER-73, Office of Health and Environmental Research, U.S. Department of Energy (GTN), Washington, DC 20454
51. B. B. Boecker, Inhalation Toxicology Research Inst., Lovelace Biomedical and Environmental Research Institute, P. O. Box 5890, Albuquerque, NM 87185
52. V. P. Bond, Assoc. Director for Life Sciences and Safety, Brookhaven National Laboratory, Upton, NY 11973
53. A. B. Brill, Medical Department, Brookhaven National Laboratory, Upton, NY 11973
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55. T. F. Budinger, Donner Laboratory, Rm. 230, University of California, Berkeley, CA 94720
56. Georg Burger, Institut fuer Strahlenschutz, Gesellschaft fuer Strahlen- und Umweltforschung, Ingolstaedter Landstrasse 1, D-8042 Neuherberg/Munich, Federal Republic of Germany
57. W. W. Burr, Jr., Oak Ridge Associated Universities, Medical Division, P. O. Box 117, Oak Ridge, TN 37831
58. Xing-an Chen, Laboratory of Industrial Hygiene, National Center for Preventive Medicine, 2 Xinkang Street, Deshengmeniwai, Beijing 100011, People's Republic of China

59. R. H. Clarke, National Radiological Protection Board, Chilton, Didcot, Oxon OX11 ORQ, UK
60. R. J. Cloutier, Radiopharmaceutical Internal Dose Center, Oak Ridge Associated Universities, MERT, P. O. Box 117, Oak Ridge, TN 37831
61. D. J. Crawford-Brown, School of Public Health, Dept. of Environmental Sciences, University of North Carolina, Chapel Hill, NC 27514
62. R. G. Cuddihy, Inhalation Toxicology Research Inst., Lovelace Biomedical and Environmental Research Institute, P. O. Box 5890, Albuquerque, NM 87185
63. R. F. Dannals, Div. of Nuclear Medicine, Johns Hopkins Medical Institute, Baltimore, MD 21205
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65. L. T. Dillman, 184 W. Lincoln Ave., Delaware, OH 43015
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68. P. W. Durbin, 101-74B, Lawrence Berkeley Laboratory, University of California, Berkeley, CA 94720
69. V. Elsasser, Institut fuer Strahlenhygiene des Bundesgesundheitssamtes, Ingoldstadter Landstrasse 1, D-8042 Neuherberg, Federal Republic of Germany
70. Thomas Fearon, Dept. of Radiology, Children's Hospital, National Medical Center, 111 Michigan Ave., N.W., Washington, DC 20010
71. L. E. Feinendegen, Institute of Medicine, Nuclear Research Center Julich GmbH, P. O. Box 1913, D-5170 Julich, Federal Republic of Germany
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79. K. Hubner, Department of Radiology, University of Tennessee Memorial Hospital, 1924 Alcoa Highway, Knoxville, TN 37920
80. V. Husak, Department of Nuclear Medicine, University Hospital, 775 02 Olomouc, Czechoslovakia
81. C. E. Iranzo, Paseo de la Castellana 201, Madrid 28046, Spain
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83. Wolfgang Jacobi, Institut fuer Strahlenschutz der Gesellschaft fuer Strahlen- und Umweltforschung mbH, Ingolstaedter Landstr. 1, D-8042 Neuherberg, Federal Republic of Germany
84. P. H. Jensen, Applied Health Physics Section, Dept. of Health Physics, Riso National Laboratory, Postbox 49, DK-4000 Roskilde, Denmark
85. L. Johansson, Dept. of Radiation Physics and Nuclear Medicine, University of Goteborg Sahlgren Hospital, S-413 45 Goteborg, Sweden
86. J. R. Johnson, Atomic Energy of Canada, Ltd., Chalk River, Canada
87. J. Kalef-Ezra, Department of Medical Physics, Medical School, University of Ioannina, Ioannina, Greece
88. A. Kaul, Institut fuer Strahlenhygiene des Bundesgesundheitsamtes, Ingolstaedter Landstrasse 1, D-8042 Neuherberg, Federal Republic of Germany
89. H. Kawamura, Division of Radioecology, National Institute of Radiological Sciences, Isezaki, Nakaminato, Ibaraki 311-12, Japan
90. J. G. Kereiakes, E555 Medical Sciences Building, University of Cincinnati, Cincinnati, OH 45267
91. Rene Kirchmann, CEN/SCK Laboratories, Department of Radiobiology, Boeretang 200, B-2400, Mol, Belgium
92. L. Koblinger, Magyar Tudomanyos Adademia, Kozponti Fizikai Kutato Intezete, Budapest XII., Konkoly Thege ut 29-33, H-1525 Budapest P.O.B. 49, Hungary
93. J. Kruger, Nuclear Development Corporation, Private Bag X256, Pretoria 0001, South Africa
94. Emil Kunz, Institute of Hygiene & Epidemiology, Radiation Hygiene Department, Srobarova 48, 100 42 Parah lo-Vinohrady, Czechoslovakia
95. K. A. Lathrop, Hospital BOX 433, University of Chicago Medical Center, 5841 S. Maryland Avenue, Chicago, IL 60637

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102. C. M. Luccioni, IPSN/DPS/SEAPS/LBA, Commissariat a' e' Energie Atomique, BP 6, 92260 Fontenay aux Roses, France
103. Matsuoka, National Institute of Radiological Sciences, 9-1 Anagawa-4-chome, Chiba-shi, Japan 260
104. S. Mattsson, Dept. of Radiation Physics and Nuclear Medicine, University of Goteborg Sahlgren Hospital, S-413 45 Goteborg, Sweden
105. H. R. Maxon, E. L. Saenger Radioisotope Lab., University of Cincinnati, Box 577, College of Medicine, Cincinnati, OH 45267
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115. J. C. Nenot, Institut de Protection et de Surete Nucleaire, Departement de Protection, Services de Pathologie et de Protection Sanitaire, Service de Protection Sanitaire, Centre d'Etudes Nucleaires, B.P. NO. 6, 92260 Fontenay-aux-Roses, France

116. Y. C. Ng, Environmental Science Division, Lawrence Livermore National Laboratory, P. O. Box 808, Livermore, CA 94550
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134. G. Silini, Secretary of UNSCEAR, Vienna International Center, P. O. Box 500, A-1400 Vienna, Austria
135. K. W. Skrable, University of Lowell, Lowell, MA 01854

136. J-O. Snihs, Statens Stralskyddsinstitut, Box 60204, S-10301 Stockholm, Sweden
137. M. G. Stabin, Radiopharmaceutical Internal Dose Center, Oak Ridge Associated Universities, MERT, P. O. Box 117, Oak Ridge, TN 37831
138. J. N. Stannard, 17441 Plaza Animado, Apt. 132, San Diego, CA 92128
139. H. W. Strauss, Director, Nuclear Medicine Division, Massashusettts General Hospital, Fruit Street, Boston, MA 02114
140. R. E. Sullivan, U.S. Environmental Protection Agency, 401 M Street, S.W., (ANR-461), Washington, DC 20460
141. Eizo Tajima, Vice Chairman, Atomic Energy Safety Commission, 2-2-1 Kasumigaseki, Chiyoda-ku, Tokyo 100, Japan
142. G. Tanaka, Division of Radioecology, National Institute of Radiological Sciences, Isezaki, Nakaminato, Ibaraki 311-12, Japan
143. A. C. Taner, Ankara Nuclear Research and Training Center, Fen Fakultesi Arkasi, Besevler-Ankara, Turkey
144. D. M. Taylor, Institute for Genetics & Toxicology, Kernforschungszentrum Karlsruhe, Postfach 3640, D-7500 Karlsruhe 1, Federal Republic of Germany
145. G. N. Taylor, Division of Radiobiology, Building 522, University of Utah, Salt Lake City, UT 84112
146. J. W. Thiessen, Office of Health and Environmental Research ER-71, U.S. Department of Energy (GTN), Washington, DC 20545
147. R. H. Thomas, Director's Office, Building 50A-4112, Lawrence Berkeley Laboratory, University of California, Berkeley, CA 94720
148. S. R. Thomas, Dept. of Radiology Physics, Medical Sciences Building, E-465, Cincinnati, OH 45267
149. R. C. Thompson, Battelle Pacific Northwest Laboratories, 331 Bldg./300 Area, Richland, WA 99352
150. M. C. Thorne, Associated Nuclear Services, 123, High Street, Epsom, Surrey KT19 BEB, England
151. J. E. Till, Route 2, Box 122, Neeses, SC 29107
152. S. Treves, Head, Nuclear Medicine, Children's Hospital Medical Center, 300 Long Wood Avenue, Boston, MA 02115
153. M. Uchiyama, National Institute of Radiological Sciences, Division of Physics, 9-1, Anagawa-4-chome, Chiba-shi 260, Japan
154. D. Van As, Nuclear Development Corporation, Private Bag X256, Pretoria 0001, South Africa
155. B. W. Wachholz, Low Level Radiation Effects Branch, National Cancer Institute, Landow Building BC-09, 9000 Rockville Pike, Bethesda, MD 20205
156. D. Van As, Nuclear Development Corporation, Private Bag X256, Pretoria 0001, South Africa
157. B. W. Wachholz, Low Level Radiation Effects Branch, National Cancer Institute, Landow Building 8C-009, 9000 Rockville Pike, Bethesda, MD 20205

158. H. N. Wagner, Jr., Division of Nuclear Medicine, Johns Hopkins Medical Institute, Baltimore, MD 21205
159. J. T. Walker, U.S. Environmental Protection Agency, 401 M Street, S.W., (ANR-461), Washington, DC 20460
160. E. E. Watson, Radiopharmaceutical Internal Dose Center, Oak Ridge Associated Universities, MERT, P. O. Box 117, Oak Ridge, TN 37831
161. D. A. Weber, University of Rochester, Medical Center, 601 Elmwood Avenue, Rochester, NY 14642
162. L. R. Williams, Indiana University, Mathematics Department, 1700 Mishawaka Avenue, South Bend, IN 46615
163. B. C. Winkler, Private Bag X256, Pretoria, 0001, South Africa
164. Walter Wolf, School of Pharmacy, University of Southern California, Los Angeles, CA 90033
165. R. W. Wood, Physical and Technology Research Div., ER-74, Office of Health and Environmental Research, U.S. Department of Energy (GTN), Washington, DC 20545
166. M. E. Wrenn, Director, Radiobiology Division, Department of Pharmacology, School of Medicine, University of Utah Medical Center, Salt Lake City, UT 84112
167. H. O. Wycoff, Chairman, International Commission on Radiation Units and Measurements, 7910 Woodmont Avenue, Suite 1016, Bethesda, MD 20814
168. S. Wynchank, Research Institute for Medical Biophysics (RIMB), P. O. Box 70, Tygerberg 7505, Republic of South Africa
169. Hiroshi Yamaguchi, National Institute of Radiological Sciences, Division of Physics, 9-1, Anagawa-4-chome, Chiba-shi 260, JAPAN
170. Shlomo Yaniv, Health Effects Branch - MS 1130-SS, Division of Health, Siting and Waste Management, RES, U.S. Nuclear Regulatory Commission, Washington, DC 20555
171. R. W. Young, Armed Forces Radiobiology Research Institute, Naval Medical Center, Bethesda, MD 20814-5145
172. P. B. Zanzonico, Sloan-Kettering Institute for Cancer Research, 1275 York Avenue, New York, NY 10021