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Health and Safety Research Division

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

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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 sixth volume of a series in which specific absorbed fractions (Φ'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 Φ-values and describes how the "best" estimates recommended by us are chosen. In this volume Φ-values are tabulated for a newborn or 3.4-kg person. In companion volumes Φ-values are tabulated for ages 1, 5, 10, and 15 years, an adult female and for an adult male. These Φ-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 Φ 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 Φ in the endosteal cells and can better estimate Φ 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 (Φ's) in various organs of the body ("target organs") from sources of monoenergetic photons in various other organs ("source organs") for a newborn or 3.4-kg person. These Φ-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 Φ 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 Φ-values calculated by these methods and the "best" estimates recommended by us are published in this report for the adult male and in other companion reports (Cristy and Eckerman 1987b-g) for ages 1, 5, 10, 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 Φ 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 Φ when active marrow is the target organ. Also, we have made more use of the converse Monte Carlo estimate, Φ(source organ←target organ), as an approximation to the direct Monte Carlo estimate, Φ(target organ←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 ≃ 1 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 Φ-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)[e]	
	Actual	Nominal		Female	Male
Newborn	3.6	3.4	Newborn	3.4	3.4[f]
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[a]	56.8[b]	55-58[d]	15 years	51.6	54.5
Adult male	73.7[c]	70	Adult	56.7 (58)[g]	71.7 (70)[g]

[a]Age- 15-male/adult-female phantom.

[b]56.4 kg without the female breasts.

[c]73.3 kg without the female breasts.

[d]55 kg for age 15 male and 58 kg for adult female.

[e]Data for ages newborn to 15 years are from Watson and Lowrey (1967). Data for adults are from ICRP Publication 23, p.13.

[f]3.5 kg for newborn male is given in ICRP Publication 23.

[g]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 Φ (APPENDIX A) AND TABLES OF RAW DATA AND RECOMMENDED VALUES (APPENDIX B).

The tables of recommended values comprise Appendix A. The Φ-values as calculated by the various methods [direct Monte Carlo estimate, Φ(target←source); converse Monte Carlo estimate, Φ(source←target); and point-source kernel estimate, Φ(target↔source)] comprise Appendix B; and the recommended values are also reprinted for convenience. Note that the units are kg^{-1}. Because Φ-values smaller than 10^{-10} 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. Φ-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 Φ(organ 2←organ 1)
MC(1<-2)	Monte Carlo estimate of Φ(organ l←organ 2)
PK(2<->1)	Point-source kernel estimate of Φ(organ 2↔organ 1)
RECOMD(2<-1)	Recommended value of Φ(organ 2←organ 1)
RECOMD(l <-2)	Recommended value of Φ(organ l←organ 2)
1.2E-03 (for example)	1.2×10^{-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<-l)”, “MC(l<-2)”, “PK(2<->l)”, “RECOM'D(2<-l)”, and “RECOM'D(l<-2)”. The symbols like “<-” should be read as arrows, and the abbreviations have the following meanings, respectively: (1) Monte Carlo estimate of Φ for source = organ 1 and target = organ 2; (2) Monte Carlo estimate of Φ for source = organ 2 and target = organ 1; (3) Point-source kernel estimate of Φ, where either can be designated source or target; (4) Recommended value of Φ for source = organ 1 and target = organ 2; and (5) Recommended value of Φ 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 Φ-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 Φ-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 Φ-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 Φ 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-1: Recommended Values for the Newborn

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	1.36E+02	8.25E+01	4.56E+01	1.64E+01	5.18E+00	3.00E+00	3.37E+00	3.53E+00	3.24E+00	2.99E+00	2.80E+00	2.34E+00
UB_Wall	0.0	2.84E-07	4.18E-04	1.30E-02	1.44E-02	1.47E-02	1.51E-02	1.56E-02	1.40E-02	1.31E-02	1.25E-02	1.06E-02
Bone_Sur	2.50E-02	2.68E-01	6.50E-01	8.37E-01	4.76E-01	1.41E-01	8.04E-02	7.15E-02	6.86E-02	6.22E-02	5.68E-02	4.57E-02
Brain	0.0	0.0	1.20E-06	4.60E-04	1.53E-03	2.18E-03	2.37E-03	3.27E-03	3.80E-03	3.86E-03	3.83E-03	3.75E-03
Breasts	0.0	1.65E-05	3.86E-03	4.22E-02	4.46E-02	2.63E-02	2.72E-02	2.95E-02	2.65E-02	2.38E-02	2.20E-02	1.88E-02
St_Wall	9.23E-07	9.75E-03	7.30E-02	2.11E-01	1.50E-01	9.01E-02	8.72E-02	8.54E-02	7.75E-02	7.36E-02	7.00E-02	5.62E-02
SI_Wall	7.86E-10	7.90E-04	1.70E-02	8.61E-02	9.24E-02	5.50E-02	5.14E-02	4.98E-02	4.94E-02	4.42E-02	3.96E-02	3.11E-02
ULI_Wall	2.15E-10	6.88E-04	1.67E-02	7.65E-02	9.91E-02	5.40E-02	4.70E-02	4.31E-02	4.46E-02	4.37E-02	4.17E-02	3.42E-02
LLI_Wall	0.0	2.76E-05	3.14E-03	2.25E-02	2.52E-02	2.59E-02	2.42E-02	2.15E-02	1.96E-02	1.84E-02	1.75E-02	1.50E-02
Kidneys	3.44E-01	1.29E+00	1.74E+00	1.28E+00	5.56E-01	3.23E-01	3.32E-01	3.41E-01	3.12E-01	2.98E-01	2.80E-01	2.04E-01
Liver	2.31E-02	2.11E-01	3.95E-01	4.19E-01	2.28E-01	1.31E-01	1.30E-01	1.27E-01	1.16E-01	1.09E-01	1.02E-01	7.79E-02
ET1-bas	0.0	9.36E-08	2.57E-04	1.02E-02	1.84E-02	1.72E-02	1.59E-02	1.42E-02	1.27E-02	1.18E-02	1.11E-02	9.65E-03
ET2-bas	0.0	9.36E-08	2.57E-04	1.02E-02	1.84E-02	1.72E-02	1.59E-02	1.42E-02	1.27E-02	1.18E-02	1.11E-02	9.65E-03
LN-ET	0.0	9.36E-08	2.57E-04	1.02E-02	1.84E-02	1.72E-02	1.59E-02	1.42E-02	1.27E-02	1.18E-02	1.11E-02	9.65E-03
BBi-bas	3.24E-02	2.80E-01	4.83E-01	3.95E-01	2.07E-01	1.16E-01	1.16E-01	1.15E-01	1.06E-01	9.38E-02	8.54E-02	7.18E-02
BBi-sec	3.24E-02	2.80E-01	4.83E-01	3.95E-01	2.07E-01	1.16E-01	1.16E-01	1.15E-01	1.06E-01	9.38E-02	8.54E-02	7.18E-02
bbe-sec	3.24E-02	2.80E-01	4.83E-01	3.95E-01	2.07E-01	1.16E-01	1.16E-01	1.15E-01	1.06E-01	9.38E-02	8.54E-02	7.18E-02
AI	3.24E-02	2.80E-01	4.83E-01	3.95E-01	2.07E-01	1.16E-01	1.16E-01	1.15E-01	1.06E-01	9.38E-02	8.54E-02	7.18E-02
LN-Th	3.24E-02	2.80E-01	4.83E-01	3.95E-01	2.07E-01	1.16E-01	1.16E-01	1.15E-01	1.06E-01	9.38E-02	8.54E-02	7.18E-02
Lng_Tiss	3.24E-02	2.80E-01	4.83E-01	3.95E-01	2.07E-01	1.16E-01	1.16E-01	1.15E-01	1.06E-01	9.38E-02	8.54E-02	7.18E-02
Lung_NP	0.0	9.36E-08	2.57E-04	1.02E-02	1.84E-02	1.72E-02	1.59E-02	1.42E-02	1.27E-02	1.18E-02	1.11E-02	9.65E-03
Lung_TB	3.24E-02	2.80E-01	4.83E-01	3.95E-01	2.07E-01	1.16E-01	1.16E-01	1.15E-01	1.06E-01	9.38E-02	8.54E-02	7.18E-02
Lung_P	3.24E-02	2.80E-01	4.83E-01	3.95E-01	2.07E-01	1.16E-01	1.16E-01	1.15E-01	1.06E-01	9.38E-02	8.54E-02	7.18E-02
Muscle	8.01E-02	1.53E-01	1.74E-01	1.36E-01	7.54E-02	4.64E-02	4.72E-02	4.90E-02	4.64E-02	4.32E-02	4.03E-02	3.20E-02
Ovaries	0.0	1.44E-05	3.78E-03	4.39E-02	4.03E-02	3.60E-02	3.20E-02	2.57E-02	2.25E-02	2.01E-02	1.85E-02	1.70E-02
Pancreas	2.03E-02	4.77E-01	1.31E+00	1.16E+00	5.47E-01	2.95E-01	2.93E-01	3.36E-01	3.04E-01	2.70E-01	2.45E-01	1.97E-01
R_Marrow	4.92E-03	4.64E-02	1.01E-01	1.19E-01	7.83E-02	5.15E-02	5.20E-02	5.28E-02	5.01E-02	4.54E-02	4.15E-02	3.30E-02
Skin	4.39E-04	7.67E-03	2.30E-02	4.12E-02	2.94E-02	2.13E-02	2.23E-02	2.49E-02	2.52E-02	2.23E-02	2.02E-02	1.77E-02
Spleen	5.31E-03	3.71E-01	7.85E-01	8.39E-01	4.09E-01	2.18E-01	2.15E-01	2.30E-01	2.22E-01	2.00E-01	1.82E-01	1.47E-01
Testes	0.0	1.34E-09	2.95E-05	3.03E-03	7.74E-03	7.95E-03	8.17E-03	8.33E-03	8.03E-03	7.73E-03	7.50E-03	6.19E-03
Thymus	0.0	4.97E-06	1.85E-03	2.75E-02	3.07E-02	2.71E-02	2.41E-02	2.38E-02	2.31E-02	2.15E-02	2.00E-02	1.67E-02
Thyroid	0.0	9.36E-08	2.57E-04	1.02E-02	1.84E-02	1.72E-02	1.59E-02	1.42E-02	1.27E-02	1.18E-02	1.11E-02	9.65E-03
GB_Wall	1.64E-05	2.49E-02	1.81E-01	3.79E-01	2.47E-01	1.31E-01	1.38E-01	1.30E-01	1.05E-01	1.00E-01	9.69E-02	8.15E-02
Ht_Wall	6.41E-07	8.96E-03	7.17E-02	1.89E-01	1.36E-01	7.63E-02	7.67E-02	7.89E-02	7.51E-02	6.45E-02	5.76E-02	5.13E-02
Uterus	0.0	8.18E-06	2.79E-03	3.18E-02	3.08E-02	2.92E-02	2.73E-02	2.44E-02	2.21E-02	2.07E-02	1.98E-02	1.75E-02

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	2.23E-07	3.92E-04	9.95E-03	1.55E-02	1.80E-02	1.64E-02	1.62E-02	1.58E-02	1.47E-02	1.36E-02	1.06E-02
UB_Wall	2.35E+01	2.59E+01	1.93E+01	8.42E+00	2.84E+00	1.56E+00	1.69E+00	1.77E+00	1.63E+00	1.50E+00	1.39E+00	1.13E+00
Bone_Sur	6.78E-08	2.41E-03	4.53E-02	2.02E-01	1.81E-01	6.26E-02	3.34E-02	2.82E-02	2.54E-02	2.58E-02	2.53E-02	1.86E-02
Brain	0.0	0.0	6.08E-10	1.12E-05	1.70E-04	3.20E-04	4.40E-04	6.70E-04	8.80E-04	9.65E-04	1.03E-03	1.14E-03
Breasts	0.0	1.00E-09	2.55E-05	2.84E-03	4.12E-03	5.82E-03	7.07E-03	7.66E-03	7.39E-03	7.05E-03	6.76E-03	6.02E-03
St_Wall	0.0	3.11E-05	4.27E-03	2.72E-02	4.36E-02	3.07E-02	2.39E-02	2.69E-02	2.89E-02	2.61E-02	2.43E-02	2.00E-02
SI_Wall	5.90E-06	2.23E-02	1.48E-01	3.29E-01	2.14E-01	1.22E-01	1.09E-01	1.12E-01	1.06E-01	9.96E-02	9.21E-02	6.49E-02
ULI_Wall	8.55E-06	7.86E-03	9.28E-02	2.43E-01	1.73E-01	1.03E-01	9.47E-02	9.24E-02	7.50E-02	7.34E-02	7.25E-02	5.93E-02
LLI_Wall	3.06E-03	2.12E-01	6.35E-01	7.87E-01	3.92E-01	2.14E-01	2.10E-01	2.09E-01	1.89E-01	1.74E-01	1.64E-01	1.41E-01
Kidneys	0.0	4.82E-06	1.81E-03	1.83E-02	2.93E-02	2.50E-02	2.13E-02	2.17E-02	1.92E-02	1.79E-02	1.72E-02	1.66E-02
Liver	0.0	2.37E-05	2.08E-03	2.66E-02	3.55E-02	2.42E-02	2.24E-02	2.37E-02	2.19E-02	2.01E-02	1.88E-02	1.62E-02
ET1-bas	0.0	0.0	2.24E-07	2.49E-04	1.97E-03	2.76E-03	3.09E-03	3.10E-03	3.01E-03	2.92E-03	2.85E-03	2.68E-03
ET2-bas	0.0	0.0	2.24E-07	2.49E-04	1.97E-03	2.76E-03	3.09E-03	3.10E-03	3.01E-03	2.92E-03	2.85E-03	2.68E-03
LN-ET	0.0	0.0	2.24E-07	2.49E-04	1.97E-03	2.76E-03	3.09E-03	3.10E-03	3.01E-03	2.92E-03	2.85E-03	2.68E-03
BBi-bas	0.0	1.36E-08	6.66E-05	4.73E-03	6.72E-03	7.22E-03	6.59E-03	6.95E-03	7.67E-03	7.71E-03	7.50E-03	6.54E-03
BBi-sec	0.0	1.36E-08	6.66E-05	4.73E-03	6.72E-03	7.22E-03	6.59E-03	6.95E-03	7.67E-03	7.71E-03	7.50E-03	6.54E-03
bbe-sec	0.0	1.36E-08	6.66E-05	4.73E-03	6.72E-03	7.22E-03	6.59E-03	6.95E-03	7.67E-03	7.71E-03	7.50E-03	6.54E-03
AI	0.0	1.36E-08	6.66E-05	4.73E-03	6.72E-03	7.22E-03	6.59E-03	6.95E-03	7.67E-03	7.71E-03	7.50E-03	6.54E-03
LN-Th	0.0	1.36E-08	6.66E-05	4.73E-03	6.72E-03	7.22E-03	6.59E-03	6.95E-03	7.67E-03	7.71E-03	7.50E-03	6.54E-03
Lng_Tiss	0.0	1.36E-08	6.66E-05	4.73E-03	6.72E-03	7.22E-03	6.59E-03	6.95E-03	7.67E-03	7.71E-03	7.50E-03	6.54E-03
Lung_NP	0.0	0.0	2.24E-07	2.49E-04	1.97E-03	2.76E-03	3.09E-03	3.10E-03	3.01E-03	2.92E-03	2.85E-03	2.68E-03
Lung_TB	0.0	1.36E-08	6.66E-05	4.73E-03	6.72E-03	7.22E-03	6.59E-03	6.95E-03	7.67E-03	7.71E-03	7.50E-03	6.54E-03
Lung_P	0.0	1.36E-08	6.66E-05	4.73E-03	6.72E-03	7.22E-03	6.59E-03	6.95E-03	7.67E-03	7.71E-03	7.50E-03	6.54E-03
Muscle	2.27E-02	1.09E-01	1.82E-01	1.75E-01	9.33E-02	5.48E-02	5.53E-02	5.73E-02	5.38E-02	4.91E-02	4.53E-02	3.68E-02
Ovaries	5.57E-05	9.90E-02	4.63E-01	6.84E-01	3.83E-01	2.04E-01	1.90E-01	1.97E-01	1.87E-01	1.73E-01	1.62E-01	1.34E-01
Pancreas	0.0	2.60E-06	1.44E-03	2.25E-02	2.48E-02	2.45E-02	2.25E-02	2.05E-02	1.94E-02	1.83E-02	1.73E-02	1.45E-02
R_Marrow	1.42E-07	4.32E-04	7.09E-03	2.80E-02	2.72E-02	1.93E-02	1.89E-02	1.95E-02	1.77E-02	1.83E-02	1.82E-02	1.31E-02
Skin	4.12E-05	8.09E-03	2.96E-02	5.39E-02	3.62E-02	2.21E-02	2.31E-02	2.60E-02	2.55E-02	2.39E-02	2.21E-02	1.65E-02
Spleen	0.0	1.10E-06	8.16E-04	1.53E-02	1.94E-02	2.06E-02	1.98E-02	1.92E-02	1.80E-02	1.67E-02	1.55E-02	1.23E-02
Testes	2.47E-04	1.63E-01	6.76E-01	8.96E-01	4.16E-01	2.31E-01	2.38E-01	2.69E-01	2.36E-01	2.11E-01	1.97E-01	1.76E-01
Thymus	0.0	0.0	3.40E-06	9.39E-04	2.24E-03	2.88E-03	3.64E-03	4.60E-03	4.98E-03	4.94E-03	4.77E-03	4.06E-03
Thyroid	0.0	0.0	2.24E-07	2.49E-04	1.97E-03	2.76E-03	3.09E-03	3.10E-03	3.01E-03	2.92E-03	2.85E-03	2.68E-03
GB_Wall	0.0	9.75E-05	9.12E-03	4.75E-02	7.03E-02	4.16E-02	3.96E-02	3.58E-02	3.46E-02	3.53E-02	3.45E-02	2.60E-02
Ht_Wall	0.0	1.62E-08	8.33E-05	3.20E-03	7.79E-03	8.90E-03	8.20E-03	8.65E-03	8.60E-03	8.48E-03	8.36E-03	7.89E-03
Uterus	6.20E-02	1.26E+00	2.48E+00	1.93E+00	8.23E-01	4.43E-01	4.55E-01	4.51E-01	4.33E-01	3.98E-01	3.66E-01	2.87E-01

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	2.84E-07	4.18E-04	1.30E-02	1.44E-02	1.47E-02	1.51E-02	1.56E-02	1.40E-02	1.31E-02	1.25E-02	1.06E-02
UB_Wall	1.51E+02	6.86E+01	3.57E+01	1.27E+01	4.20E+00	2.41E+00	2.54E+00	2.93E+00	2.72E+00	2.48E+00	2.28E+00	1.79E+00
Bone_Sur	6.78E-08	2.41E-03	4.53E-02	2.02E-01	1.81E-01	6.26E-02	3.34E-02	2.82E-02	2.54E-02	2.58E-02	2.53E-02	1.86E-02
Brain	0.0	0.0	6.47E-10	1.13E-05	1.83E-04	2.82E-04	4.17E-04	6.44E-04	8.28E-04	9.27E-04	9.92E-04	1.14E-03
Breasts	0.0	1.25E-09	2.70E-05	2.84E-03	8.61E-03	8.03E-03	7.87E-03	8.18E-03	7.81E-03	7.48E-03	7.25E-03	6.01E-03
St_Wall	0.0	4.05E-05	4.61E-03	2.94E-02	4.66E-02	2.84E-02	2.41E-02	2.95E-02	2.68E-02	2.27E-02	2.04E-02	1.82E-02
SI_Wall	2.34E-05	2.83E-02	1.64E-01	3.28E-01	2.13E-01	1.17E-01	1.15E-01	1.10E-01	1.01E-01	9.48E-02	8.82E-02	6.38E-02
ULI_Wall	2.96E-05	2.45E-02	1.01E-01	2.43E-01	1.83E-01	1.05E-01	8.94E-02	9.61E-02	8.08E-02	7.32E-02	6.92E-02	6.10E-02
LLI_Wall	1.35E-02	3.06E-01	7.25E-01	7.92E-01	3.96E-01	2.21E-01	2.16E-01	2.01E-01	2.09E-01	1.95E-01	1.80E-01	1.45E-01
Kidneys	0.0	6.44E-06	1.96E-03	2.31E-02	2.89E-02	2.48E-02	2.15E-02	2.22E-02	2.29E-02	2.17E-02	2.03E-02	1.66E-02
Liver	0.0	3.05E-05	3.70E-03	2.58E-02	3.79E-02	2.39E-02	2.37E-02	2.47E-02	2.42E-02	2.22E-02	2.06E-02	1.88E-02
ET1-bas	0.0	0.0	2.38E-07	2.52E-04	1.97E-03	2.80E-03	3.08E-03	3.36E-03	3.31E-03	3.22E-03	3.16E-03	2.68E-03
ET2-bas	0.0	0.0	2.38E-07	2.52E-04	1.97E-03	2.80E-03	3.08E-03	3.36E-03	3.31E-03	3.22E-03	3.16E-03	2.68E-03
LN-ET	0.0	0.0	2.38E-07	2.52E-04	1.97E-03	2.80E-03	3.08E-03	3.36E-03	3.31E-03	3.22E-03	3.16E-03	2.68E-03
BBi-bas	0.0	1.74E-08	7.15E-05	3.63E-03	6.28E-03	7.52E-03	7.92E-03	8.29E-03	8.12E-03	7.76E-03	7.42E-03	6.54E-03
BBi-sec	0.0	1.74E-08	7.15E-05	3.63E-03	6.28E-03	7.52E-03	7.92E-03	8.29E-03	8.12E-03	7.76E-03	7.42E-03	6.54E-03
bbe-sec	0.0	1.74E-08	7.15E-05	3.63E-03	6.28E-03	7.52E-03	7.92E-03	8.29E-03	8.12E-03	7.76E-03	7.42E-03	6.54E-03
AI	0.0	1.74E-08	7.15E-05	3.63E-03	6.28E-03	7.52E-03	7.92E-03	8.29E-03	8.12E-03	7.76E-03	7.42E-03	6.54E-03
LN-Th	0.0	1.74E-08	7.15E-05	3.63E-03	6.28E-03	7.52E-03	7.92E-03	8.29E-03	8.12E-03	7.76E-03	7.42E-03	6.54E-03
Lng_Tiss	0.0	1.74E-08	7.15E-05	3.63E-03	6.28E-03	7.52E-03	7.92E-03	8.29E-03	8.12E-03	7.76E-03	7.42E-03	6.54E-03
Lung_NP	0.0	0.0	2.38E-07	2.52E-04	1.97E-03	2.80E-03	3.08E-03	3.36E-03	3.31E-03	3.22E-03	3.16E-03	2.68E-03
Lung_TB	0.0	1.74E-08	7.15E-05	3.63E-03	6.28E-03	7.52E-03	7.92E-03	8.29E-03	8.12E-03	7.76E-03	7.42E-03	6.54E-03
Lung_P	0.0	1.74E-08	7.15E-05	3.63E-03	6.28E-03	7.52E-03	7.92E-03	8.29E-03	8.12E-03	7.76E-03	7.42E-03	6.54E-03
Muscle	1.35E-01	2.07E-01	2.38E-01	1.94E-01	9.83E-02	5.73E-02	5.81E-02	6.09E-02	5.70E-02	5.28E-02	4.91E-02	3.91E-02
Ovaries	2.07E-04	1.46E-01	4.62E-01	7.12E-01	3.86E-01	2.31E-01	1.87E-01	2.26E-01	2.19E-01	1.84E-01	1.60E-01	1.29E-01
Pancreas	0.0	3.25E-06	1.52E-03	2.21E-02	2.96E-02	2.89E-02	2.47E-02	2.10E-02	1.93E-02	1.85E-02	1.77E-02	1.45E-02
R_Marrow	1.42E-07	4.32E-04	7.09E-03	2.80E-02	2.72E-02	1.93E-02	1.89E-02	1.95E-02	1.77E-02	1.83E-02	1.82E-02	1.31E-02
Skin	2.44E-04	1.29E-02	3.52E-02	5.56E-02	3.63E-02	2.42E-02	2.53E-02	2.51E-02	2.51E-02	2.27E-02	2.06E-02	1.72E-02
Spleen	0.0	1.37E-06	8.70E-04	1.26E-02	2.60E-02	2.39E-02	1.75E-02	2.00E-02	1.95E-02	1.80E-02	1.65E-02	1.23E-02
Testes	8.05E-04	2.01E-01	7.66E-01	9.14E-01	3.91E-01	2.55E-01	2.54E-01	2.22E-01	2.36E-01	2.09E-01	1.87E-01	1.59E-01
Thymus	0.0	0.0	3.62E-06	9.51E-04	2.52E-03	4.26E-03	5.49E-03	5.54E-03	5.14E-03	4.98E-03	4.81E-03	4.03E-03
Thyroid	0.0	0.0	2.38E-07	2.52E-04	1.97E-03	2.80E-03	3.08E-03	3.36E-03	3.31E-03	3.22E-03	3.16E-03	2.68E-03
GB_Wall	0.0	1.23E-04	9.78E-03	4.83E-02	7.34E-02	4.73E-02	3.94E-02	4.06E-02	3.71E-02	3.22E-02	2.89E-02	2.37E-02
Ht_Wall	0.0	2.01E-08	8.75E-05	5.88E-03	6.64E-03	7.59E-03	8.32E-03	8.73E-03	8.64E-03	8.47E-03	8.31E-03	7.89E-03
Uterus	2.69E-01	2.00E+00	2.91E+00	2.00E+00	8.46E-01	4.59E-01	4.90E-01	4.48E-01	4.95E-01	4.14E-01	3.55E-01	3.20E-01

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	5.99E-03	5.60E-02	1.20E-01	1.42E-01	8.85E-02	5.46E-02	5.72E-02	5.96E-02	5.71E-02	5.18E-02	4.73E-02	3.81E-02
UB_Wall	8.75E-08	9.90E-04	1.04E-02	3.66E-02	3.40E-02	2.38E-02	2.20E-02	2.26E-02	2.15E-02	2.10E-02	2.02E-02	1.58E-02
Bone_Sur	3.84E+00	3.37E+00	2.79E+00	1.76E+00	6.87E-01	1.91E-01	1.20E-01	1.16E-01	1.12E-01	1.02E-01	9.43E-02	7.71E-02
Brain	3.71E-02	8.77E-02	1.19E-01	1.03E-01	5.37E-02	3.24E-02	3.38E-02	3.66E-02	3.55E-02	3.30E-02	3.07E-02	2.51E-02
Breasts	1.03E-02	5.44E-02	7.43E-02	5.59E-02	3.18E-02	2.03E-02	2.45E-02	2.64E-02	2.64E-02	2.54E-02	2.42E-02	2.07E-02
St_Wall	3.29E-04	6.35E-03	2.31E-02	4.43E-02	3.94E-02	2.67E-02	2.62E-02	2.63E-02	2.43E-02	2.32E-02	2.22E-02	1.85E-02
SI_Wall	6.43E-03	1.81E-02	3.79E-02	6.34E-02	5.18E-02	3.29E-02	3.24E-02	3.39E-02	3.04E-02	2.90E-02	2.77E-02	2.19E-02
ULI_Wall	6.63E-03	2.16E-02	3.87E-02	5.45E-02	4.49E-02	3.10E-02	2.95E-02	3.06E-02	2.83E-02	2.59E-02	2.40E-02	1.96E-02
LLI_Wall	1.77E-02	6.15E-02	9.47E-02	9.54E-02	6.25E-02	3.87E-02	3.73E-02	4.12E-02	3.97E-02	3.67E-02	3.40E-02	2.69E-02
Kidneys	6.89E-03	3.69E-02	8.25E-02	1.08E-01	7.13E-02	4.37E-02	4.49E-02	4.79E-02	4.65E-02	4.37E-02	4.07E-02	3.15E-02
Liver	3.71E-03	1.75E-02	3.87E-02	5.90E-02	4.56E-02	3.01E-02	2.94E-02	3.13E-02	3.03E-02	2.77E-02	2.56E-02	2.13E-02
ET1-bas	5.20E-07	1.46E-03	1.22E-02	3.90E-02	3.76E-02	2.59E-02	2.38E-02	2.44E-02	2.27E-02	2.13E-02	2.02E-02	1.74E-02
ET2-bas	5.20E-07	1.46E-03	1.22E-02	3.90E-02	3.76E-02	2.59E-02	2.38E-02	2.44E-02	2.27E-02	2.13E-02	2.02E-02	1.74E-02
LN-ET	5.20E-07	1.46E-03	1.22E-02	3.90E-02	3.76E-02	2.59E-02	2.38E-02	2.44E-02	2.27E-02	2.13E-02	2.02E-02	1.74E-02
BBi-bas	4.65E-03	4.51E-02	9.98E-02	1.13E-01	6.60E-02	3.92E-02	4.12E-02	4.36E-02	3.95E-02	3.59E-02	3.36E-02	2.95E-02
BBi-sec	4.65E-03	4.51E-02	9.98E-02	1.13E-01	6.60E-02	3.92E-02	4.12E-02	4.36E-02	3.95E-02	3.59E-02	3.36E-02	2.95E-02
bbe-sec	4.65E-03	4.51E-02	9.98E-02	1.13E-01	6.60E-02	3.92E-02	4.12E-02	4.36E-02	3.95E-02	3.59E-02	3.36E-02	2.95E-02
AI	4.65E-03	4.51E-02	9.98E-02	1.13E-01	6.60E-02	3.92E-02	4.12E-02	4.36E-02	3.95E-02	3.59E-02	3.36E-02	2.95E-02
LN-Th	4.65E-03	4.51E-02	9.98E-02	1.13E-01	6.60E-02	3.92E-02	4.12E-02	4.36E-02	3.95E-02	3.59E-02	3.36E-02	2.95E-02
Lng_Tiss	4.65E-03	4.51E-02	9.98E-02	1.13E-01	6.60E-02	3.92E-02	4.12E-02	4.36E-02	3.95E-02	3.59E-02	3.36E-02	2.95E-02
Lung_NP	5.20E-07	1.46E-03	1.22E-02	3.90E-02	3.76E-02	2.59E-02	2.38E-02	2.44E-02	2.27E-02	2.13E-02	2.02E-02	1.74E-02
Lung_TB	4.65E-03	4.51E-02	9.98E-02	1.13E-01	6.60E-02	3.92E-02	4.12E-02	4.36E-02	3.95E-02	3.59E-02	3.36E-02	2.95E-02
Lung_P	4.65E-03	4.51E-02	9.98E-02	1.13E-01	6.60E-02	3.92E-02	4.12E-02	4.36E-02	3.95E-02	3.59E-02	3.36E-02	2.95E-02
Muscle	3.03E-02	6.25E-02	8.68E-02	8.96E-02	5.59E-02	3.59E-02	3.71E-02	4.02E-02	3.81E-02	3.52E-02	3.28E-02	2.67E-02
Ovaries	7.26E-05	1.67E-02	5.53E-02	8.16E-02	5.79E-02	3.71E-02	3.50E-02	3.73E-02	3.37E-02	3.26E-02	3.13E-02	2.41E-02
Pancreas	2.92E-05	4.37E-03	2.58E-02	6.76E-02	5.79E-02	3.74E-02	3.63E-02	3.77E-02	3.43E-02	3.17E-02	2.96E-02	2.45E-02
R_Marrow	7.47E-01	5.81E-01	4.43E-01	2.62E-01	1.30E-01	8.37E-02	8.55E-02	8.94E-02	8.63E-02	7.85E-02	7.21E-02	5.89E-02
Skin	3.81E-02	6.71E-02	7.98E-02	6.82E-02	3.96E-02	2.52E-02	2.83E-02	3.28E-02	3.16E-02	2.91E-02	2.70E-02	2.20E-02
Spleen	1.43E-03	1.67E-02	4.86E-02	7.51E-02	5.67E-02	3.58E-02	3.58E-02	3.87E-02	3.47E-02	3.22E-02	3.05E-02	2.54E-02
Testes	7.00E-08	9.38E-04	1.22E-02	4.08E-02	3.52E-02	2.24E-02	2.45E-02	2.43E-02	2.38E-02	2.22E-02	2.08E-02	1.81E-02
Thymus	2.29E-03	2.67E-02	5.16E-02	5.83E-02	4.05E-02	2.55E-02	2.64E-02	2.89E-02	2.76E-02	2.42E-02	2.19E-02	1.90E-02
Thyroid	5.20E-07	1.46E-03	1.22E-02	3.90E-02	3.76E-02	2.59E-02	2.38E-02	2.44E-02	2.27E-02	2.13E-02	2.02E-02	1.74E-02
GB_Wall	6.68E-08	5.80E-04	1.00E-02	4.08E-02	4.21E-02	2.95E-02	2.91E-02	2.72E-02	2.69E-02	2.35E-02	2.11E-02	1.94E-02
Ht_Wall	1.03E-03	1.14E-02	3.52E-02	6.09E-02	4.84E-02	3.05E-02	3.01E-02	3.19E-02	2.91E-02	2.70E-02	2.54E-02	2.15E-02
Uterus	6.76E-08	1.21E-03	1.63E-02	4.86E-02	4.49E-02	2.99E-02	2.82E-02	2.85E-02	2.77E-02	2.45E-02	2.22E-02	1.90E-02

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	5.99E-03	5.60E-02	1.20E-01	1.42E-01	8.85E-02	5.46E-02	5.72E-02	5.96E-02	5.71E-02	5.18E-02	4.73E-02	3.81E-02
UB_Wall	8.75E-08	9.90E-04	1.04E-02	3.66E-02	3.40E-02	2.38E-02	2.20E-02	2.26E-02	2.15E-02	2.10E-02	2.02E-02	1.58E-02
Bone_Sur	3.84E+00	3.37E+00	2.79E+00	1.76E+00	6.87E-01	1.91E-01	1.20E-01	1.16E-01	1.12E-01	1.02E-01	9.43E-02	7.71E-02
Brain	3.71E-02	8.77E-02	1.19E-01	1.03E-01	5.37E-02	3.24E-02	3.38E-02	3.66E-02	3.55E-02	3.30E-02	3.07E-02	2.51E-02
Breasts	1.03E-02	5.44E-02	7.43E-02	5.59E-02	3.18E-02	2.03E-02	2.45E-02	2.64E-02	2.64E-02	2.54E-02	2.42E-02	2.07E-02
St_Wall	3.29E-04	6.35E-03	2.31E-02	4.43E-02	3.94E-02	2.67E-02	2.62E-02	2.63E-02	2.43E-02	2.32E-02	2.22E-02	1.85E-02
SI_Wall	6.43E-03	1.81E-02	3.79E-02	6.34E-02	5.18E-02	3.29E-02	3.24E-02	3.39E-02	3.04E-02	2.90E-02	2.77E-02	2.19E-02
ULI_Wall	6.63E-03	2.16E-02	3.87E-02	5.45E-02	4.49E-02	3.10E-02	2.95E-02	3.06E-02	2.83E-02	2.59E-02	2.40E-02	1.96E-02
LLI_Wall	1.77E-02	6.15E-02	9.47E-02	9.54E-02	6.25E-02	3.87E-02	3.73E-02	4.12E-02	3.97E-02	3.67E-02	3.40E-02	2.69E-02
Kidneys	6.89E-03	3.69E-02	8.25E-02	1.08E-01	7.13E-02	4.37E-02	4.49E-02	4.79E-02	4.65E-02	4.37E-02	4.07E-02	3.15E-02
Liver	3.71E-03	1.75E-02	3.87E-02	5.90E-02	4.56E-02	3.01E-02	2.94E-02	3.13E-02	3.03E-02	2.77E-02	2.56E-02	2.13E-02
ET1-bas	5.20E-07	1.46E-03	1.22E-02	3.90E-02	3.76E-02	2.59E-02	2.38E-02	2.44E-02	2.27E-02	2.13E-02	2.02E-02	1.74E-02
ET2-bas	5.20E-07	1.46E-03	1.22E-02	3.90E-02	3.76E-02	2.59E-02	2.38E-02	2.44E-02	2.27E-02	2.13E-02	2.02E-02	1.74E-02
LN-ET	5.20E-07	1.46E-03	1.22E-02	3.90E-02	3.76E-02	2.59E-02	2.38E-02	2.44E-02	2.27E-02	2.13E-02	2.02E-02	1.74E-02
BBi-bas	4.65E-03	4.51E-02	9.98E-02	1.13E-01	6.60E-02	3.92E-02	4.12E-02	4.36E-02	3.95E-02	3.59E-02	3.36E-02	2.95E-02
BBi-sec	4.65E-03	4.51E-02	9.98E-02	1.13E-01	6.60E-02	3.92E-02	4.12E-02	4.36E-02	3.95E-02	3.59E-02	3.36E-02	2.95E-02
bbe-sec	4.65E-03	4.51E-02	9.98E-02	1.13E-01	6.60E-02	3.92E-02	4.12E-02	4.36E-02	3.95E-02	3.59E-02	3.36E-02	2.95E-02
AI	4.65E-03	4.51E-02	9.98E-02	1.13E-01	6.60E-02	3.92E-02	4.12E-02	4.36E-02	3.95E-02	3.59E-02	3.36E-02	2.95E-02
LN-Th	4.65E-03	4.51E-02	9.98E-02	1.13E-01	6.60E-02	3.92E-02	4.12E-02	4.36E-02	3.95E-02	3.59E-02	3.36E-02	2.95E-02
Lng_Tiss	4.65E-03	4.51E-02	9.98E-02	1.13E-01	6.60E-02	3.92E-02	4.12E-02	4.36E-02	3.95E-02	3.59E-02	3.36E-02	2.95E-02
Lung_NP	5.20E-07	1.46E-03	1.22E-02	3.90E-02	3.76E-02	2.59E-02	2.38E-02	2.44E-02	2.27E-02	2.13E-02	2.02E-02	1.74E-02
Lung_TB	4.65E-03	4.51E-02	9.98E-02	1.13E-01	6.60E-02	3.92E-02	4.12E-02	4.36E-02	3.95E-02	3.59E-02	3.36E-02	2.95E-02
Lung_P	4.65E-03	4.51E-02	9.98E-02	1.13E-01	6.60E-02	3.92E-02	4.12E-02	4.36E-02	3.95E-02	3.59E-02	3.36E-02	2.95E-02
Muscle	3.03E-02	6.25E-02	8.68E-02	8.96E-02	5.59E-02	3.59E-02	3.71E-02	4.02E-02	3.81E-02	3.52E-02	3.28E-02	2.67E-02
Ovaries	7.26E-05	1.67E-02	5.53E-02	8.16E-02	5.79E-02	3.71E-02	3.50E-02	3.73E-02	3.37E-02	3.26E-02	3.13E-02	2.41E-02
Pancreas	2.92E-05	4.37E-03	2.58E-02	6.76E-02	5.79E-02	3.74E-02	3.63E-02	3.77E-02	3.43E-02	3.17E-02	2.96E-02	2.45E-02
R_Marrow	7.47E-01	5.81E-01	4.43E-01	2.62E-01	1.30E-01	8.37E-02	8.55E-02	8.94E-02	8.63E-02	7.85E-02	7.21E-02	5.89E-02
Skin	3.81E-02	6.71E-02	7.98E-02	6.82E-02	3.96E-02	2.52E-02	2.83E-02	3.28E-02	3.16E-02	2.91E-02	2.70E-02	2.20E-02
Spleen	1.43E-03	1.67E-02	4.86E-02	7.51E-02	5.67E-02	3.58E-02	3.58E-02	3.87E-02	3.47E-02	3.22E-02	3.05E-02	2.54E-02
Testes	7.00E-08	9.38E-04	1.22E-02	4.08E-02	3.52E-02	2.24E-02	2.45E-02	2.43E-02	2.38E-02	2.22E-02	2.08E-02	1.81E-02
Thymus	2.29E-03	2.67E-02	5.16E-02	5.83E-02	4.05E-02	2.55E-02	2.64E-02	2.89E-02	2.76E-02	2.42E-02	2.19E-02	1.90E-02
Thyroid	5.20E-07	1.46E-03	1.22E-02	3.90E-02	3.76E-02	2.59E-02	2.38E-02	2.44E-02	2.27E-02	2.13E-02	2.02E-02	1.74E-02
GB_Wall	6.68E-08	5.80E-04	1.00E-02	4.08E-02	4.21E-02	2.95E-02	2.91E-02	2.72E-02	2.69E-02	2.35E-02	2.11E-02	1.94E-02
Ht_Wall	1.03E-03	1.14E-02	3.52E-02	6.09E-02	4.84E-02	3.05E-02	3.01E-02	3.19E-02	2.91E-02	2.70E-02	2.54E-02	2.15E-02
Uterus	6.76E-08	1.21E-03	1.63E-02	4.86E-02	4.49E-02	2.99E-02	2.82E-02	2.85E-02	2.77E-02	2.45E-02	2.22E-02	1.90E-02

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	5.92E-03	5.46E-02	1.13E-01	1.28E-01	7.80E-02	4.74E-02	5.00E-02	5.28E-02	5.01E-02	4.54E-02	4.14E-02	3.30E-02
UB_Wall	9.51E-08	9.95E-04	1.00E-02	3.20E-02	2.88E-02	2.01E-02	1.82E-02	1.89E-02	1.81E-02	1.81E-02	1.76E-02	1.32E-02
Bone_Sur	3.80E+00	3.26E+00	2.64E+00	1.62E+00	6.15E-01	1.76E-01	1.11E-01	1.07E-01	1.04E-01	9.43E-02	8.63E-02	7.07E-02
Brain	5.58E-02	1.34E-01	1.81E-01	1.53E-01	7.66E-02	4.58E-02	4.77E-02	5.16E-02	4.92E-02	4.53E-02	4.20E-02	3.45E-02
Breasts	8.00E-03	4.23E-02	5.76E-02	4.31E-02	2.49E-02	1.60E-02	1.93E-02	2.09E-02	2.07E-02	2.00E-02	1.91E-02	1.64E-02
St_Wall	2.56E-04	4.95E-03	1.84E-02	3.62E-02	3.27E-02	2.21E-02	2.15E-02	2.22E-02	2.05E-02	1.96E-02	1.88E-02	1.56E-02
SI_Wall	7.42E-03	1.99E-02	3.97E-02	6.18E-02	4.76E-02	3.03E-02	3.03E-02	3.14E-02	2.84E-02	2.64E-02	2.47E-02	2.03E-02
ULI_Wall	7.71E-03	2.48E-02	4.27E-02	5.53E-02	4.21E-02	2.84E-02	2.70E-02	2.87E-02	2.65E-02	2.40E-02	2.21E-02	1.84E-02
LLI_Wall	2.04E-02	6.94E-02	1.03E-01	9.43E-02	5.72E-02	3.49E-02	3.42E-02	3.76E-02	3.65E-02	3.36E-02	3.10E-02	2.49E-02
Kidneys	4.32E-03	2.47E-02	5.80E-02	8.20E-02	5.62E-02	3.54E-02	3.61E-02	3.84E-02	3.72E-02	3.53E-02	3.30E-02	2.50E-02
Liver	2.78E-03	1.37E-02	3.08E-02	4.75E-02	3.74E-02	2.47E-02	2.40E-02	2.55E-02	2.52E-02	2.34E-02	2.18E-02	1.78E-02
ET1-bas	1.15E-06	1.39E-03	1.20E-02	3.68E-02	3.52E-02	2.44E-02	2.21E-02	2.28E-02	2.15E-02	2.02E-02	1.91E-02	1.64E-02
ET2-bas	1.15E-06	1.39E-03	1.20E-02	3.68E-02	3.52E-02	2.44E-02	2.21E-02	2.28E-02	2.15E-02	2.02E-02	1.91E-02	1.64E-02
LN-ET	1.15E-06	1.39E-03	1.20E-02	3.68E-02	3.52E-02	2.44E-02	2.21E-02	2.28E-02	2.15E-02	2.02E-02	1.91E-02	1.64E-02
BBi-bas	3.67E-03	3.56E-02	7.88E-02	8.90E-02	5.26E-02	3.11E-02	3.33E-02	3.54E-02	3.24E-02	2.94E-02	2.73E-02	2.34E-02
BBi-sec	3.67E-03	3.56E-02	7.88E-02	8.90E-02	5.26E-02	3.11E-02	3.33E-02	3.54E-02	3.24E-02	2.94E-02	2.73E-02	2.34E-02
bbe-sec	3.67E-03	3.56E-02	7.88E-02	8.90E-02	5.26E-02	3.11E-02	3.33E-02	3.54E-02	3.24E-02	2.94E-02	2.73E-02	2.34E-02
AI	3.67E-03	3.56E-02	7.88E-02	8.90E-02	5.26E-02	3.11E-02	3.33E-02	3.54E-02	3.24E-02	2.94E-02	2.73E-02	2.34E-02
LN-Th	3.67E-03	3.56E-02	7.88E-02	8.90E-02	5.26E-02	3.11E-02	3.33E-02	3.54E-02	3.24E-02	2.94E-02	2.73E-02	2.34E-02
Lng_Tiss	3.67E-03	3.56E-02	7.88E-02	8.90E-02	5.26E-02	3.11E-02	3.33E-02	3.54E-02	3.24E-02	2.94E-02	2.73E-02	2.34E-02
Lung_NP	1.15E-06	1.39E-03	1.20E-02	3.68E-02	3.52E-02	2.44E-02	2.21E-02	2.28E-02	2.15E-02	2.02E-02	1.91E-02	1.64E-02
Lung_TB	3.67E-03	3.56E-02	7.88E-02	8.90E-02	5.26E-02	3.11E-02	3.33E-02	3.54E-02	3.24E-02	2.94E-02	2.73E-02	2.34E-02
Lung_P	3.67E-03	3.56E-02	7.88E-02	8.90E-02	5.26E-02	3.11E-02	3.33E-02	3.54E-02	3.24E-02	2.94E-02	2.73E-02	2.34E-02
Muscle	3.17E-02	6.43E-02	8.53E-02	8.31E-02	5.01E-02	3.26E-02	3.36E-02	3.67E-02	3.50E-02	3.25E-02	3.03E-02	2.45E-02
Ovaries	8.89E-05	1.93E-02	6.29E-02	9.05E-02	5.78E-02	3.53E-02	3.39E-02	3.59E-02	3.25E-02	3.18E-02	3.07E-02	2.32E-02
Pancreas	2.34E-05	3.82E-03	2.14E-02	5.53E-02	4.79E-02	3.13E-02	3.00E-02	3.17E-02	2.90E-02	2.66E-02	2.48E-02	2.06E-02
R_Marrow	9.62E-01	7.40E-01	5.59E-01	3.24E-01	1.53E-01	9.92E-02	1.02E-01	1.05E-01	9.99E-02	9.09E-02	8.35E-02	6.77E-02
Skin	3.90E-02	7.39E-02	8.88E-02	7.35E-02	4.10E-02	2.57E-02	2.82E-02	3.32E-02	3.25E-02	3.07E-02	2.87E-02	2.22E-02
Spleen	1.11E-03	1.30E-02	3.80E-02	5.99E-02	4.63E-02	2.94E-02	2.93E-02	3.22E-02	2.90E-02	2.68E-02	2.52E-02	2.07E-02
Testes	1.07E-08	3.84E-04	6.10E-03	2.43E-02	2.35E-02	1.54E-02	1.71E-02	1.72E-02	1.65E-02	1.62E-02	1.56E-02	1.30E-02
Thymus	1.83E-03	2.12E-02	4.09E-02	4.64E-02	3.30E-02	2.09E-02	2.18E-02	2.37E-02	2.32E-02	2.06E-02	1.87E-02	1.62E-02
Thyroid	1.15E-06	1.39E-03	1.20E-02	3.68E-02	3.52E-02	2.44E-02	2.21E-02	2.28E-02	2.15E-02	2.02E-02	1.91E-02	1.64E-02
GB_Wall	5.86E-08	4.50E-04	7.92E-03	3.57E-02	3.52E-02	2.47E-02	2.43E-02	2.25E-02	2.29E-02	2.02E-02	1.82E-02	1.65E-02
Ht_Wall	7.51E-04	8.96E-03	2.79E-02	4.84E-02	3.85E-02	2.47E-02	2.48E-02	2.57E-02	2.39E-02	2.23E-02	2.10E-02	1.82E-02
Uterus	7.97E-08	1.31E-03	1.76E-02	4.87E-02	4.15E-02	2.75E-02	2.60E-02	2.59E-02	2.53E-02	2.24E-02	2.04E-02	1.82E-02

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	5.92E-03	5.46E-02	1.13E-01	1.28E-01	7.80E-02	4.74E-02	5.00E-02	5.28E-02	5.01E-02	4.54E-02	4.14E-02	3.30E-02
UB_Wall	9.51E-08	9.95E-04	1.00E-02	3.20E-02	2.88E-02	2.01E-02	1.82E-02	1.89E-02	1.81E-02	1.81E-02	1.76E-02	1.32E-02
Bone_Sur	3.80E+00	3.26E+00	2.64E+00	1.62E+00	6.15E-01	1.76E-01	1.11E-01	1.07E-01	1.04E-01	9.43E-02	8.63E-02	7.07E-02
Brain	5.58E-02	1.34E-01	1.81E-01	1.53E-01	7.66E-02	4.58E-02	4.77E-02	5.16E-02	4.92E-02	4.53E-02	4.20E-02	3.45E-02
Breasts	8.00E-03	4.23E-02	5.76E-02	4.31E-02	2.49E-02	1.60E-02	1.93E-02	2.09E-02	2.07E-02	2.00E-02	1.91E-02	1.64E-02
St_Wall	2.56E-04	4.95E-03	1.84E-02	3.62E-02	3.27E-02	2.21E-02	2.15E-02	2.22E-02	2.05E-02	1.96E-02	1.88E-02	1.56E-02
SI_Wall	7.42E-03	1.99E-02	3.97E-02	6.18E-02	4.76E-02	3.03E-02	3.03E-02	3.14E-02	2.84E-02	2.64E-02	2.47E-02	2.03E-02
ULI_Wall	7.71E-03	2.48E-02	4.27E-02	5.53E-02	4.21E-02	2.84E-02	2.70E-02	2.87E-02	2.65E-02	2.40E-02	2.21E-02	1.84E-02
LLI_Wall	2.04E-02	6.94E-02	1.03E-01	9.43E-02	5.72E-02	3.49E-02	3.42E-02	3.76E-02	3.65E-02	3.36E-02	3.10E-02	2.49E-02
Kidneys	4.32E-03	2.47E-02	5.80E-02	8.20E-02	5.62E-02	3.54E-02	3.61E-02	3.84E-02	3.72E-02	3.53E-02	3.30E-02	2.50E-02
Liver	2.78E-03	1.37E-02	3.08E-02	4.75E-02	3.74E-02	2.47E-02	2.40E-02	2.55E-02	2.52E-02	2.34E-02	2.18E-02	1.78E-02
ET1-bas	1.15E-06	1.39E-03	1.20E-02	3.68E-02	3.52E-02	2.44E-02	2.21E-02	2.28E-02	2.15E-02	2.02E-02	1.91E-02	1.64E-02
ET2-bas	1.15E-06	1.39E-03	1.20E-02	3.68E-02	3.52E-02	2.44E-02	2.21E-02	2.28E-02	2.15E-02	2.02E-02	1.91E-02	1.64E-02
LN-ET	1.15E-06	1.39E-03	1.20E-02	3.68E-02	3.52E-02	2.44E-02	2.21E-02	2.28E-02	2.15E-02	2.02E-02	1.91E-02	1.64E-02
BBi-bas	3.67E-03	3.56E-02	7.88E-02	8.90E-02	5.26E-02	3.11E-02	3.33E-02	3.54E-02	3.24E-02	2.94E-02	2.73E-02	2.34E-02
BBi-sec	3.67E-03	3.56E-02	7.88E-02	8.90E-02	5.26E-02	3.11E-02	3.33E-02	3.54E-02	3.24E-02	2.94E-02	2.73E-02	2.34E-02
bbe-sec	3.67E-03	3.56E-02	7.88E-02	8.90E-02	5.26E-02	3.11E-02	3.33E-02	3.54E-02	3.24E-02	2.94E-02	2.73E-02	2.34E-02
AI	3.67E-03	3.56E-02	7.88E-02	8.90E-02	5.26E-02	3.11E-02	3.33E-02	3.54E-02	3.24E-02	2.94E-02	2.73E-02	2.34E-02
LN-Th	3.67E-03	3.56E-02	7.88E-02	8.90E-02	5.26E-02	3.11E-02	3.33E-02	3.54E-02	3.24E-02	2.94E-02	2.73E-02	2.34E-02
Lng_Tiss	3.67E-03	3.56E-02	7.88E-02	8.90E-02	5.26E-02	3.11E-02	3.33E-02	3.54E-02	3.24E-02	2.94E-02	2.73E-02	2.34E-02
Lung_NP	1.15E-06	1.39E-03	1.20E-02	3.68E-02	3.52E-02	2.44E-02	2.21E-02	2.28E-02	2.15E-02	2.02E-02	1.91E-02	1.64E-02
Lung_TB	3.67E-03	3.56E-02	7.88E-02	8.90E-02	5.26E-02	3.11E-02	3.33E-02	3.54E-02	3.24E-02	2.94E-02	2.73E-02	2.34E-02
Lung_P	3.67E-03	3.56E-02	7.88E-02	8.90E-02	5.26E-02	3.11E-02	3.33E-02	3.54E-02	3.24E-02	2.94E-02	2.73E-02	2.34E-02
Muscle	3.17E-02	6.43E-02	8.53E-02	8.31E-02	5.01E-02	3.26E-02	3.36E-02	3.67E-02	3.50E-02	3.25E-02	3.03E-02	2.45E-02
Ovaries	8.89E-05	1.93E-02	6.29E-02	9.05E-02	5.78E-02	3.53E-02	3.39E-02	3.59E-02	3.25E-02	3.18E-02	3.07E-02	2.32E-02
Pancreas	2.34E-05	3.82E-03	2.14E-02	5.53E-02	4.79E-02	3.13E-02	3.00E-02	3.17E-02	2.90E-02	2.66E-02	2.48E-02	2.06E-02
R_Marrow	9.62E-01	7.40E-01	5.59E-01	3.24E-01	1.53E-01	9.92E-02	1.02E-01	1.05E-01	9.99E-02	9.09E-02	8.35E-02	6.77E-02
Skin	3.90E-02	7.39E-02	8.88E-02	7.35E-02	4.10E-02	2.57E-02	2.82E-02	3.32E-02	3.25E-02	3.07E-02	2.87E-02	2.22E-02
Spleen	1.11E-03	1.30E-02	3.80E-02	5.99E-02	4.63E-02	2.94E-02	2.93E-02	3.22E-02	2.90E-02	2.68E-02	2.52E-02	2.07E-02
Testes	1.07E-08	3.84E-04	6.10E-03	2.43E-02	2.35E-02	1.54E-02	1.71E-02	1.72E-02	1.65E-02	1.62E-02	1.56E-02	1.30E-02
Thymus	1.83E-03	2.12E-02	4.09E-02	4.64E-02	3.30E-02	2.09E-02	2.18E-02	2.37E-02	2.32E-02	2.06E-02	1.87E-02	1.62E-02
Thyroid	1.15E-06	1.39E-03	1.20E-02	3.68E-02	3.52E-02	2.44E-02	2.21E-02	2.28E-02	2.15E-02	2.02E-02	1.91E-02	1.64E-02
GB_Wall	5.86E-08	4.50E-04	7.92E-03	3.57E-02	3.52E-02	2.47E-02	2.43E-02	2.25E-02	2.29E-02	2.02E-02	1.82E-02	1.65E-02
Ht_Wall	7.51E-04	8.96E-03	2.79E-02	4.84E-02	3.85E-02	2.47E-02	2.48E-02	2.57E-02	2.39E-02	2.23E-02	2.10E-02	1.82E-02
Uterus	7.97E-08	1.31E-03	1.76E-02	4.87E-02	4.15E-02	2.75E-02	2.60E-02	2.59E-02	2.53E-02	2.24E-02	2.04E-02	1.82E-02

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	1.20E-06	4.60E-04	1.53E-03	2.18E-03	2.37E-03	3.27E-03	3.80E-03	3.86E-03	3.83E-03	3.75E-03
UB_Wall	0.0	0.0	6.47E-10	1.13E-05	1.83E-04	2.82E-04	4.17E-04	6.44E-04	8.28E-04	9.27E-04	9.92E-04	1.14E-03
Bone_Sur	1.49E-01	4.18E-01	6.32E-01	6.11E-01	2.89E-01	8.34E-02	4.73E-02	4.38E-02	4.26E-02	3.96E-02	3.69E-02	3.01E-02
Brain	2.74E+00	2.48E+00	2.05E+00	1.18E+00	4.85E-01	2.74E-01	2.82E-01	2.98E-01	2.80E-01	2.57E-01	2.36E-01	1.87E-01
Breasts	0.0	7.76E-10	1.37E-05	7.91E-04	2.38E-03	3.16E-03	3.28E-03	5.22E-03	5.53E-03	5.56E-03	5.54E-03	5.11E-03
St_Wall	0.0	0.0	4.90E-07	3.74E-04	1.08E-03	1.60E-03	1.84E-03	2.38E-03	2.85E-03	3.03E-03	3.04E-03	2.66E-03
SI_Wall	0.0	0.0	1.81E-08	5.77E-05	3.61E-04	4.94E-04	6.99E-04	1.07E-03	1.34E-03	1.47E-03	1.55E-03	1.71E-03
ULI_Wall	0.0	0.0	2.57E-08	6.83E-05	3.54E-04	8.20E-04	9.47E-04	1.45E-03	1.68E-03	1.67E-03	1.66E-03	1.78E-03
LLI_Wall	0.0	0.0	3.59E-09	2.11E-05	1.66E-04	3.75E-04	5.25E-04	7.50E-04	8.93E-04	9.77E-04	1.05E-03	1.26E-03
Kidneys	0.0	0.0	2.09E-07	1.98E-04	9.24E-04	1.38E-03	1.69E-03	2.17E-03	2.91E-03	3.30E-03	3.31E-03	2.41E-03
Liver	0.0	0.0	7.30E-07	3.53E-04	1.38E-03	1.98E-03	2.07E-03	2.87E-03	3.35E-03	3.20E-03	3.07E-03	3.17E-03
ET1-bas	0.0	1.12E-04	3.70E-03	3.14E-02	3.90E-02	2.58E-02	2.65E-02	2.69E-02	2.52E-02	2.41E-02	2.31E-02	2.02E-02
ET2-bas	0.0	1.12E-04	3.70E-03	3.14E-02	3.90E-02	2.58E-02	2.65E-02	2.69E-02	2.52E-02	2.41E-02	2.31E-02	2.02E-02
LN-ET	0.0	1.12E-04	3.70E-03	3.14E-02	3.90E-02	2.58E-02	2.65E-02	2.69E-02	2.52E-02	2.41E-02	2.31E-02	2.02E-02
BBi-bas	0.0	1.81E-07	1.28E-04	3.40E-03	6.90E-03	5.60E-03	5.63E-03	7.33E-03	7.89E-03	7.66E-03	7.34E-03	6.40E-03
BBi-sec	0.0	1.81E-07	1.28E-04	3.40E-03	6.90E-03	5.60E-03	5.63E-03	7.33E-03	7.89E-03	7.66E-03	7.34E-03	6.40E-03
bbe-sec	0.0	1.81E-07	1.28E-04	3.40E-03	6.90E-03	5.60E-03	5.63E-03	7.33E-03	7.89E-03	7.66E-03	7.34E-03	6.40E-03
AI	0.0	1.81E-07	1.28E-04	3.40E-03	6.90E-03	5.60E-03	5.63E-03	7.33E-03	7.89E-03	7.66E-03	7.34E-03	6.40E-03
LN-Th	0.0	1.81E-07	1.28E-04	3.40E-03	6.90E-03	5.60E-03	5.63E-03	7.33E-03	7.89E-03	7.66E-03	7.34E-03	6.40E-03
Lng_Tiss	0.0	1.81E-07	1.28E-04	3.40E-03	6.90E-03	5.60E-03	5.63E-03	7.33E-03	7.89E-03	7.66E-03	7.34E-03	6.40E-03
Lung_NP	0.0	1.12E-04	3.70E-03	3.14E-02	3.90E-02	2.58E-02	2.65E-02	2.69E-02	2.52E-02	2.41E-02	2.31E-02	2.02E-02
Lung_TB	0.0	1.81E-07	1.28E-04	3.40E-03	6.90E-03	5.60E-03	5.63E-03	7.33E-03	7.89E-03	7.66E-03	7.34E-03	6.40E-03
Lung_P	0.0	1.81E-07	1.28E-04	3.40E-03	6.90E-03	5.60E-03	5.63E-03	7.33E-03	7.89E-03	7.66E-03	7.34E-03	6.40E-03
Muscle	1.73E-04	5.29E-03	1.94E-02	3.37E-02	2.39E-02	1.57E-02	1.60E-02	1.74E-02	1.67E-02	1.59E-02	1.50E-02	1.22E-02
Ovaries	0.0	0.0	3.15E-09	2.55E-05	2.55E-04	3.67E-04	5.14E-04	7.53E-04	9.55E-04	1.08E-03	1.17E-03	1.40E-03
Pancreas	0.0	0.0	7.23E-07	3.53E-04	1.34E-03	2.29E-03	2.30E-03	2.90E-03	3.57E-03	3.79E-03	3.80E-03	3.41E-03
R_Marrow	4.55E-02	1.17E-01	1.69E-01	1.63E-01	9.64E-02	5.77E-02	5.14E-02	5.15E-02	4.91E-02	4.53E-02	4.20E-02	3.45E-02
Skin	6.77E-04	1.38E-02	4.26E-02	5.44E-02	3.23E-02	2.10E-02	2.36E-02	2.49E-02	2.36E-02	2.25E-02	2.12E-02	1.64E-02
Spleen	0.0	0.0	6.02E-07	4.26E-04	2.21E-03	2.38E-03	2.83E-03	3.27E-03	3.11E-03	3.18E-03	3.25E-03	3.27E-03
Testes	0.0	0.0	0.0	3.39E-06	1.06E-04	2.17E-04	3.76E-04	6.06E-04	7.34E-04	7.86E-04	8.14E-04	8.65E-04
Thymus	0.0	7.65E-07	3.81E-04	5.07E-03	1.19E-02	8.96E-03	1.01E-02	1.16E-02	1.14E-02	1.14E-02	1.13E-02	9.96E-03
Thyroid	0.0	1.12E-04	3.70E-03	3.14E-02	3.90E-02	2.58E-02	2.65E-02	2.69E-02	2.52E-02	2.41E-02	2.31E-02	2.02E-02
GB_Wall	0.0	0.0	2.63E-07	2.47E-04	1.22E-03	1.42E-03	1.45E-03	2.12E-03	2.42E-03	2.58E-03	2.65E-03	2.48E-03
Ht_Wall	0.0	6.16E-09	2.69E-05	1.65E-03	3.85E-03	4.54E-03	4.92E-03	5.90E-03	6.16E-03	5.82E-03	5.45E-03	4.48E-03
Uterus	0.0	0.0	2.51E-09	2.28E-05	2.28E-04	3.10E-04	4.64E-04	7.99E-04	1.08E-03	1.20E-03	1.25E-03	1.36E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	1.65E-05	3.86E-03	4.22E-02	4.46E-02	2.63E-02	2.72E-02	2.95E-02	2.65E-02	2.38E-02	2.20E-02	1.88E-02
UB_Wall	0.0	1.25E-09	2.70E-05	2.84E-03	8.61E-03	8.03E-03	7.87E-03	8.18E-03	7.81E-03	7.48E-03	7.25E-03	6.01E-03
Bone_Sur	4.57E-02	2.58E-01	3.69E-01	3.27E-01	1.68E-01	5.18E-02	3.42E-02	3.17E-02	3.16E-02	3.04E-02	2.90E-02	2.48E-02
Brain	0.0	7.76E-10	1.37E-05	7.91E-04	2.38E-03	3.16E-03	3.28E-03	5.22E-03	5.53E-03	5.56E-03	5.54E-03	5.11E-03
Breasts	4.47E+03	1.73E+03	7.62E+02	2.29E+02	6.93E+01	3.98E+01	4.51E+01	4.99E+01	4.92E+01	4.59E+01	4.28E+01	3.54E+01
St_Wall	7.93E-09	2.16E-03	2.34E-02	8.18E-02	7.85E-02	4.41E-02	4.73E-02	4.98E-02	4.03E-02	3.50E-02	3.28E-02	3.31E-02
SI_Wall	0.0	5.59E-07	5.46E-04	1.04E-02	1.46E-02	1.41E-02	1.28E-02	1.34E-02	1.32E-02	1.27E-02	1.24E-02	1.22E-02
ULI_Wall	0.0	1.62E-06	9.97E-04	9.28E-03	2.00E-02	1.45E-02	1.32E-02	1.64E-02	1.77E-02	1.61E-02	1.50E-02	1.26E-02
LLI_Wall	0.0	9.65E-08	1.36E-04	4.93E-03	7.00E-03	9.03E-03	9.80E-03	9.52E-03	8.93E-03	8.59E-03	8.24E-03	6.84E-03
Kidneys	0.0	1.19E-06	9.02E-04	8.64E-03	2.48E-02	1.94E-02	1.71E-02	1.67E-02	1.59E-02	1.59E-02	1.58E-02	1.40E-02
Liver	4.52E-08	4.17E-03	3.62E-02	9.93E-02	7.33E-02	4.52E-02	4.63E-02	5.03E-02	4.62E-02	4.37E-02	4.14E-02	3.27E-02
ET1-bas	0.0	6.90E-05	9.11E-03	4.12E-02	3.73E-02	3.34E-02	3.21E-02	3.43E-02	3.33E-02	3.17E-02	3.03E-02	2.48E-02
ET2-bas	0.0	6.90E-05	9.11E-03	4.12E-02	3.73E-02	3.34E-02	3.21E-02	3.43E-02	3.33E-02	3.17E-02	3.03E-02	2.48E-02
LN-ET	0.0	6.90E-05	9.11E-03	4.12E-02	3.73E-02	3.34E-02	3.21E-02	3.43E-02	3.33E-02	3.17E-02	3.03E-02	2.48E-02
BBi-bas	7.10E-03	1.41E-01	3.22E-01	2.91E-01	1.37E-01	8.13E-02	8.45E-02	8.53E-02	8.48E-02	8.41E-02	8.03E-02	5.99E-02
BBi-sec	7.10E-03	1.41E-01	3.22E-01	2.91E-01	1.37E-01	8.13E-02	8.45E-02	8.53E-02	8.48E-02	8.41E-02	8.03E-02	5.99E-02
bbe-sec	7.10E-03	1.41E-01	3.22E-01	2.91E-01	1.37E-01	8.13E-02	8.45E-02	8.53E-02	8.48E-02	8.41E-02	8.03E-02	5.99E-02
AI	7.10E-03	1.41E-01	3.22E-01	2.91E-01	1.37E-01	8.13E-02	8.45E-02	8.53E-02	8.48E-02	8.41E-02	8.03E-02	5.99E-02
LN-Th	7.10E-03	1.41E-01	3.22E-01	2.91E-01	1.37E-01	8.13E-02	8.45E-02	8.53E-02	8.48E-02	8.41E-02	8.03E-02	5.99E-02
Lng_Tiss	7.10E-03	1.41E-01	3.22E-01	2.91E-01	1.37E-01	8.13E-02	8.45E-02	8.53E-02	8.48E-02	8.41E-02	8.03E-02	5.99E-02
Lung_NP	0.0	6.90E-05	9.11E-03	4.12E-02	3.73E-02	3.34E-02	3.21E-02	3.43E-02	3.33E-02	3.17E-02	3.03E-02	2.48E-02
Lung_TB	7.10E-03	1.41E-01	3.22E-01	2.91E-01	1.37E-01	8.13E-02	8.45E-02	8.53E-02	8.48E-02	8.41E-02	8.03E-02	5.99E-02
Lung_P	7.10E-03	1.41E-01	3.22E-01	2.91E-01	1.37E-01	8.13E-02	8.45E-02	8.53E-02	8.48E-02	8.41E-02	8.03E-02	5.99E-02
Muscle	7.10E-02	9.49E-02	9.47E-02	7.24E-02	3.95E-02	2.59E-02	2.76E-02	3.12E-02	3.09E-02	2.87E-02	2.67E-02	2.16E-02
Ovaries	0.0	9.88E-09	8.26E-05	5.16E-03	1.24E-02	1.05E-02	1.01E-02	1.05E-02	9.95E-03	9.50E-03	9.19E-03	7.60E-03
Pancreas	0.0	1.59E-04	1.35E-02	4.27E-02	6.98E-02	6.18E-02	4.83E-02	4.03E-02	3.64E-02	3.50E-02	3.35E-02	2.74E-02
R_Marrow	6.97E-03	3.56E-02	4.75E-02	3.98E-02	2.50E-02	1.75E-02	2.02E-02	2.09E-02	2.07E-02	2.00E-02	1.91E-02	1.64E-02
Skin	1.36E+00	8.94E-01	5.11E-01	1.93E-01	6.84E-02	4.19E-02	4.91E-02	5.71E-02	5.24E-02	4.69E-02	4.34E-02	3.84E-02
Spleen	0.0	4.30E-05	1.44E-02	3.63E-02	4.54E-02	3.43E-02	3.51E-02	3.48E-02	2.66E-02	2.24E-02	2.04E-02	1.90E-02
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	1.23E-06	2.15E-02	9.91E-02	2.54E-01	1.58E-01	1.02E-01	9.72E-02	1.17E-01	1.06E-01	9.11E-02	8.31E-02	7.82E-02
Thyroid	0.0	6.90E-05	9.11E-03	4.12E-02	3.73E-02	3.34E-02	3.21E-02	3.43E-02	3.33E-02	3.17E-02	3.03E-02	2.48E-02
GB_Wall	0.0	7.89E-05	9.34E-03	6.39E-02	4.69E-02	3.43E-02	3.13E-02	3.41E-02	3.29E-02	3.13E-02	3.02E-02	2.47E-02
Ht_Wall	5.23E-03	1.99E-01	5.62E-01	5.75E-01	2.73E-01	1.66E-01	1.71E-01	1.89E-01	1.73E-01	1.67E-01	1.60E-01	1.28E-01
Uterus	0.0	8.58E-09	8.00E-05	5.14E-03	1.25E-02	1.19E-02	1.12E-02	1.05E-02	9.87E-03	9.52E-03	9.28E-03	7.61E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	2.46E-07	6.98E-03	7.91E-02	1.98E-01	1.60E-01	9.08E-02	8.18E-02	8.15E-02	7.68E-02	7.21E-02	6.78E-02	5.59E-02
UB_Wall	0.0	2.56E-05	3.92E-03	2.68E-02	4.34E-02	2.59E-02	2.34E-02	2.88E-02	2.66E-02	2.72E-02	2.66E-02	1.79E-02
Bone_Sur	2.22E-04	1.98E-02	1.02E-01	2.58E-01	2.10E-01	7.03E-02	3.69E-02	3.21E-02	3.16E-02	2.91E-02	2.68E-02	2.10E-02
Brain	0.0	0.0	4.42E-07	3.41E-04	1.22E-03	1.44E-03	1.79E-03	2.47E-03	2.55E-03	2.64E-03	2.70E-03	2.66E-03
Breasts	1.56E-09	1.31E-03	3.41E-02	6.62E-02	6.89E-02	4.69E-02	5.47E-02	5.45E-02	4.67E-02	4.28E-02	4.04E-02	3.54E-02
St_Wall	1.45E+01	1.97E+01	1.59E+01	7.33E+00	2.46E+00	1.38E+00	1.44E+00	1.59E+00	1.50E+00	1.39E+00	1.28E+00	9.90E-01
SI_Wall	2.74E-03	3.66E-02	1.49E-01	2.93E-01	1.81E-01	1.05E-01	1.02E-01	9.94E-02	8.66E-02	8.03E-02	7.60E-02	6.46E-02
ULI_Wall	2.46E-03	1.55E-01	4.39E-01	4.21E-01	2.34E-01	1.27E-01	1.26E-01	1.28E-01	1.20E-01	1.11E-01	1.01E-01	7.37E-02
LLI_Wall	4.73E-05	1.89E-02	6.38E-02	1.34E-01	1.09E-01	6.26E-02	5.62E-02	5.00E-02	4.81E-02	4.50E-02	4.26E-02	3.90E-02
Kidneys	1.91E-08	3.25E-03	3.75E-02	1.64E-01	1.27E-01	7.68E-02	6.85E-02	6.92E-02	6.78E-02	6.16E-02	5.49E-02	3.73E-02
Liver	2.52E-03	7.78E-02	2.70E-01	3.54E-01	2.03E-01	1.18E-01	1.12E-01	1.13E-01	1.04E-01	9.83E-02	9.31E-02	7.48E-02
ET1-bas	0.0	8.79E-08	2.10E-04	8.66E-03	1.12E-02	1.08E-02	1.04E-02	9.91E-03	9.56E-03	9.36E-03	9.22E-03	8.89E-03
ET2-bas	0.0	8.79E-08	2.10E-04	8.66E-03	1.12E-02	1.08E-02	1.04E-02	9.91E-03	9.56E-03	9.36E-03	9.22E-03	8.89E-03
LN-ET	0.0	8.79E-08	2.10E-04	8.66E-03	1.12E-02	1.08E-02	1.04E-02	9.91E-03	9.56E-03	9.36E-03	9.22E-03	8.89E-03
BBi-bas	1.32E-04	2.91E-02	8.15E-02	1.50E-01	9.81E-02	5.51E-02	5.31E-02	5.23E-02	4.94E-02	4.40E-02	4.02E-02	3.49E-02
BBi-sec	1.32E-04	2.91E-02	8.15E-02	1.50E-01	9.81E-02	5.51E-02	5.31E-02	5.23E-02	4.94E-02	4.40E-02	4.02E-02	3.49E-02
bbe-sec	1.32E-04	2.91E-02	8.15E-02	1.50E-01	9.81E-02	5.51E-02	5.31E-02	5.23E-02	4.94E-02	4.40E-02	4.02E-02	3.49E-02
AI	1.32E-04	2.91E-02	8.15E-02	1.50E-01	9.81E-02	5.51E-02	5.31E-02	5.23E-02	4.94E-02	4.40E-02	4.02E-02	3.49E-02
LN-Th	1.32E-04	2.91E-02	8.15E-02	1.50E-01	9.81E-02	5.51E-02	5.31E-02	5.23E-02	4.94E-02	4.40E-02	4.02E-02	3.49E-02
Lng_Tiss	1.32E-04	2.91E-02	8.15E-02	1.50E-01	9.81E-02	5.51E-02	5.31E-02	5.23E-02	4.94E-02	4.40E-02	4.02E-02	3.49E-02
Lung_NP	0.0	8.79E-08	2.10E-04	8.66E-03	1.12E-02	1.08E-02	1.04E-02	9.91E-03	9.56E-03	9.36E-03	9.22E-03	8.89E-03
Lung_TB	1.32E-04	2.91E-02	8.15E-02	1.50E-01	9.81E-02	5.51E-02	5.31E-02	5.23E-02	4.94E-02	4.40E-02	4.02E-02	3.49E-02
Lung_P	1.32E-04	2.91E-02	8.15E-02	1.50E-01	9.81E-02	5.51E-02	5.31E-02	5.23E-02	4.94E-02	4.40E-02	4.02E-02	3.49E-02
Muscle	1.17E-02	8.49E-02	1.49E-01	1.42E-01	7.76E-02	4.65E-02	4.66E-02	4.86E-02	4.57E-02	4.17E-02	3.85E-02	3.16E-02
Ovaries	0.0	4.34E-04	1.90E-02	8.85E-02	8.92E-02	4.66E-02	4.19E-02	4.09E-02	4.13E-02	3.77E-02	3.48E-02	3.12E-02
Pancreas	2.23E-02	7.77E-01	1.82E+00	1.55E+00	6.67E-01	3.72E-01	3.80E-01	3.67E-01	3.50E-01	3.18E-01	2.88E-01	2.24E-01
R_Marrow	5.97E-05	2.64E-03	1.31E-02	3.32E-02	3.14E-02	2.24E-02	2.12E-02	2.25E-02	2.25E-02	2.03E-02	1.84E-02	1.51E-02
Skin	2.65E-05	5.00E-03	2.18E-02	4.46E-02	3.07E-02	1.95E-02	2.22E-02	2.18E-02	2.40E-02	2.37E-02	2.25E-02	1.85E-02
Spleen	1.12E-04	8.71E-02	4.38E-01	6.53E-01	3.36E-01	1.92E-01	1.87E-01	1.87E-01	1.79E-01	1.62E-01	1.46E-01	1.08E-01
Testes	0.0	1.09E-07	2.44E-04	8.30E-03	1.22E-02	1.27E-02	1.32E-02	1.32E-02	1.26E-02	1.18E-02	1.12E-02	9.31E-03
Thymus	0.0	2.48E-05	3.53E-03	3.19E-02	3.08E-02	2.80E-02	2.55E-02	2.32E-02	2.19E-02	2.10E-02	2.04E-02	1.88E-02
Thyroid	0.0	8.79E-08	2.10E-04	8.66E-03	1.12E-02	1.08E-02	1.04E-02	9.91E-03	9.56E-03	9.36E-03	9.22E-03	8.89E-03
GB_Wall	4.56E-03	3.99E-01	1.10E+00	1.19E+00	5.61E-01	3.15E-01	3.15E-01	2.92E-01	2.79E-01	2.56E-01	2.35E-01	1.90E-01
Ht_Wall	5.56E-04	5.61E-02	1.97E-01	3.35E-01	1.96E-01	1.06E-01	1.04E-01	1.07E-01	1.00E-01	9.22E-02	8.61E-02	7.39E-02
Uterus	0.0	2.60E-04	1.45E-02	8.10E-02	8.94E-02	5.14E-02	4.02E-02	4.40E-02	3.77E-02	3.28E-02	3.06E-02	3.07E-02

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	9.23E-07	9.75E-03	7.30E-02	2.11E-01	1.50E-01	9.01E-02	8.72E-02	8.54E-02	7.75E-02	7.36E-02	7.00E-02	5.62E-02
UB_Wall	0.0	4.05E-05	4.61E-03	2.94E-02	4.66E-02	2.84E-02	2.41E-02	2.95E-02	2.68E-02	2.27E-02	2.04E-02	1.82E-02
Bone_Sur	2.22E-04	1.98E-02	1.02E-01	2.58E-01	2.10E-01	7.03E-02	3.69E-02	3.21E-02	3.16E-02	2.91E-02	2.68E-02	2.10E-02
Brain	0.0	0.0	4.90E-07	3.74E-04	1.08E-03	1.60E-03	1.84E-03	2.38E-03	2.85E-03	3.03E-03	3.04E-03	2.66E-03
Breasts	7.93E-09	2.16E-03	2.34E-02	8.18E-02	7.85E-02	4.41E-02	4.73E-02	4.98E-02	4.03E-02	3.50E-02	3.28E-02	3.31E-02
St_Wall	9.65E+01	5.16E+01	2.84E+01	1.06E+01	3.50E+00	1.96E+00	2.14E+00	2.33E+00	2.15E+00	1.98E+00	1.85E+00	1.52E+00
SI_Wall	1.38E-02	7.00E-02	1.95E-01	3.22E-01	1.96E-01	1.09E-01	1.03E-01	1.03E-01	9.90E-02	8.70E-02	7.83E-02	6.61E-02
ULI_Wall	5.85E-02	2.93E-01	5.13E-01	4.74E-01	2.47E-01	1.49E-01	1.27E-01	1.34E-01	1.36E-01	1.20E-01	1.07E-01	9.09E-02
LLI_Wall	2.53E-04	1.90E-02	9.61E-02	1.69E-01	1.11E-01	7.39E-02	7.04E-02	6.28E-02	5.83E-02	5.41E-02	5.04E-02	4.14E-02
Kidneys	8.79E-08	4.46E-03	4.90E-02	1.59E-01	1.26E-01	7.27E-02	6.89E-02	7.24E-02	6.38E-02	6.14E-02	5.89E-02	4.57E-02
Liver	9.79E-03	1.28E-01	3.03E-01	3.68E-01	2.02E-01	1.15E-01	1.14E-01	1.14E-01	1.09E-01	1.00E-01	9.14E-02	6.73E-02
ET1-bas	0.0	1.35E-07	2.41E-04	1.30E-02	1.53E-02	1.28E-02	1.30E-02	1.30E-02	1.18E-02	1.13E-02	1.08E-02	8.94E-03
ET2-bas	0.0	1.35E-07	2.41E-04	1.30E-02	1.53E-02	1.28E-02	1.30E-02	1.30E-02	1.18E-02	1.13E-02	1.08E-02	8.94E-03
LN-ET	0.0	1.35E-07	2.41E-04	1.30E-02	1.53E-02	1.28E-02	1.30E-02	1.30E-02	1.18E-02	1.13E-02	1.08E-02	8.94E-03
BBi-bas	2.05E-03	3.98E-02	1.15E-01	1.64E-01	1.00E-01	5.99E-02	5.68E-02	5.78E-02	4.67E-02	4.50E-02	4.40E-02	3.62E-02
BBi-sec	2.05E-03	3.98E-02	1.15E-01	1.64E-01	1.00E-01	5.99E-02	5.68E-02	5.78E-02	4.67E-02	4.50E-02	4.40E-02	3.62E-02
bbe-sec	2.05E-03	3.98E-02	1.15E-01	1.64E-01	1.00E-01	5.99E-02	5.68E-02	5.78E-02	4.67E-02	4.50E-02	4.40E-02	3.62E-02
AI	2.05E-03	3.98E-02	1.15E-01	1.64E-01	1.00E-01	5.99E-02	5.68E-02	5.78E-02	4.67E-02	4.50E-02	4.40E-02	3.62E-02
LN-Th	2.05E-03	3.98E-02	1.15E-01	1.64E-01	1.00E-01	5.99E-02	5.68E-02	5.78E-02	4.67E-02	4.50E-02	4.40E-02	3.62E-02
Lng_Tiss	2.05E-03	3.98E-02	1.15E-01	1.64E-01	1.00E-01	5.99E-02	5.68E-02	5.78E-02	4.67E-02	4.50E-02	4.40E-02	3.62E-02
Lung_NP	0.0	1.35E-07	2.41E-04	1.30E-02	1.53E-02	1.28E-02	1.30E-02	1.30E-02	1.18E-02	1.13E-02	1.08E-02	8.94E-03
Lung_TB	2.05E-03	3.98E-02	1.15E-01	1.64E-01	1.00E-01	5.99E-02	5.68E-02	5.78E-02	4.67E-02	4.50E-02	4.40E-02	3.62E-02
Lung_P	2.05E-03	3.98E-02	1.15E-01	1.64E-01	1.00E-01	5.99E-02	5.68E-02	5.78E-02	4.67E-02	4.50E-02	4.40E-02	3.62E-02
Muscle	9.48E-02	1.68E-01	1.95E-01	1.57E-01	8.18E-02	4.90E-02	4.96E-02	5.18E-02	4.86E-02	4.49E-02	4.17E-02	3.32E-02
Ovaries	4.32E-10	6.87E-04	2.06E-02	7.47E-02	8.36E-02	5.05E-02	5.02E-02	5.29E-02	4.18E-02	3.75E-02	3.51E-02	2.89E-02
Pancreas	1.40E-01	1.15E+00	2.17E+00	1.65E+00	7.20E-01	3.93E-01	3.65E-01	3.89E-01	3.59E-01	3.27E-01	3.05E-01	2.65E-01
R_Marrow	5.97E-05	2.64E-03	1.31E-02	3.32E-02	3.14E-02	2.24E-02	2.12E-02	2.25E-02	2.25E-02	2.03E-02	1.84E-02	1.51E-02
Skin	1.53E-04	8.02E-03	2.77E-02	4.56E-02	3.17E-02	2.19E-02	2.31E-02	2.49E-02	2.46E-02	2.34E-02	2.16E-02	1.48E-02
Spleen	6.00E-04	1.26E-01	4.92E-01	6.92E-01	3.30E-01	1.94E-01	1.86E-01	1.88E-01	1.73E-01	1.62E-01	1.51E-01	1.15E-01
Testes	0.0	1.69E-07	2.84E-04	9.99E-03	1.48E-02	1.47E-02	1.30E-02	1.23E-02	1.23E-02	1.19E-02	1.13E-02	9.36E-03
Thymus	0.0	3.81E-05	4.16E-03	2.13E-02	3.64E-02	2.48E-02	2.40E-02	2.98E-02	2.61E-02	2.35E-02	2.17E-02	1.73E-02
Thyroid	0.0	1.35E-07	2.41E-04	1.30E-02	1.53E-02	1.28E-02	1.30E-02	1.30E-02	1.18E-02	1.13E-02	1.08E-02	8.94E-03
GB_Wall	2.19E-02	4.68E-01	1.30E+00	1.24E+00	5.44E-01	3.08E-01	2.92E-01	2.95E-01	2.89E-01	2.77E-01	2.58E-01	1.83E-01
Ht_Wall	2.37E-03	9.18E-02	2.71E-01	3.54E-01	2.06E-01	1.09E-01	1.16E-01	1.20E-01	1.13E-01	9.71E-02	8.70E-02	7.72E-02
Uterus	0.0	4.10E-04	1.50E-02	6.84E-02	8.93E-02	5.37E-02	4.52E-02	4.30E-02	4.80E-02	4.57E-02	4.19E-02	3.14E-02

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	7.86E-10	7.90E-04	1.70E-02	8.61E-02	9.24E-02	5.50E-02	5.14E-02	4.98E-02	4.94E-02	4.42E-02	3.96E-02	3.11E-02
UB_Wall	2.34E-05	2.83E-02	1.64E-01	3.28E-01	2.13E-01	1.17E-01	1.15E-01	1.10E-01	1.01E-01	9.48E-02	8.82E-02	6.38E-02
Bone_Sur	2.74E-02	8.57E-02	2.02E-01	3.76E-01	2.72E-01	8.74E-02	4.75E-02	4.06E-02	3.63E-02	3.49E-02	3.34E-02	2.62E-02
Brain	0.0	0.0	1.81E-08	5.77E-05	3.61E-04	4.94E-04	6.99E-04	1.07E-03	1.34E-03	1.47E-03	1.55E-03	1.71E-03
Breasts	0.0	5.59E-07	5.46E-04	1.04E-02	1.46E-02	1.41E-02	1.28E-02	1.34E-02	1.32E-02	1.27E-02	1.24E-02	1.22E-02
St_Wall	1.38E-02	7.00E-02	1.95E-01	3.22E-01	1.96E-01	1.09E-01	1.03E-01	1.03E-01	9.90E-02	8.70E-02	7.83E-02	6.61E-02
SI_Wall	3.15E+00	4.69E+00	4.10E+00	2.23E+00	8.33E-01	4.44E-01	4.68E-01	5.24E-01	4.66E-01	4.26E-01	3.99E-01	2.98E-01
ULI_Wall	2.67E+00	3.82E+00	3.68E+00	2.19E+00	8.72E-01	4.79E-01	4.88E-01	5.03E-01	4.59E-01	4.20E-01	3.88E-01	3.09E-01
LLI_Wall	9.77E-01	1.42E+00	1.42E+00	9.39E-01	4.22E-01	2.36E-01	2.43E-01	2.47E-01	2.25E-01	2.01E-01	1.84E-01	1.51E-01
Kidneys	1.66E-05	1.59E-02	9.81E-02	2.24E-01	1.60E-01	9.55E-02	9.23E-02	8.90E-02	8.35E-02	7.86E-02	7.37E-02	5.82E-02
Liver	1.38E-02	5.15E-02	1.28E-01	2.22E-01	1.52E-01	8.51E-02	7.93E-02	8.04E-02	7.96E-02	7.21E-02	6.54E-02	5.17E-02
ET1-bas	0.0	0.0	6.11E-06	1.73E-03	3.20E-03	4.28E-03	4.36E-03	5.09E-03	5.14E-03	4.91E-03	4.75E-03	4.49E-03
ET2-bas	0.0	0.0	6.11E-06	1.73E-03	3.20E-03	4.28E-03	4.36E-03	5.09E-03	5.14E-03	4.91E-03	4.75E-03	4.49E-03
LN-ET	0.0	0.0	6.11E-06	1.73E-03	3.20E-03	4.28E-03	4.36E-03	5.09E-03	5.14E-03	4.91E-03	4.75E-03	4.49E-03
BBi-bas	0.0	2.73E-05	2.64E-03	2.56E-02	3.19E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
BBi-sec	0.0	2.73E-05	2.64E-03	2.56E-02	3.19E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
bbe-sec	0.0	2.73E-05	2.64E-03	2.56E-02	3.19E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
AI	0.0	2.73E-05	2.64E-03	2.56E-02	3.19E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
LN-Th	0.0	2.73E-05	2.64E-03	2.56E-02	3.19E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
Lng_Tiss	0.0	2.73E-05	2.64E-03	2.56E-02	3.19E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
Lung_NP	0.0	0.0	6.11E-06	1.73E-03	3.20E-03	4.28E-03	4.36E-03	5.09E-03	5.14E-03	4.91E-03	4.75E-03	4.49E-03
Lung_TB	0.0	2.73E-05	2.64E-03	2.56E-02	3.19E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
Lung_P	0.0	2.73E-05	2.64E-03	2.56E-02	3.19E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
Muscle	3.26E-02	8.51E-02	1.37E-01	1.50E-01	8.90E-02	5.27E-02	5.23E-02	5.27E-02	4.96E-02	4.57E-02	4.25E-02	3.50E-02
Ovaries	2.80E-01	1.45E+00	2.09E+00	1.51E+00	6.71E-01	3.71E-01	3.69E-01	3.85E-01	3.42E-01	3.17E-01	2.98E-01	2.38E-01
Pancreas	5.59E-07	5.56E-03	8.44E-02	2.32E-01	1.62E-01	9.56E-02	8.71E-02	8.28E-02	7.94E-02	7.18E-02	6.53E-02	5.23E-02
R_Marrow	6.22E-03	1.66E-02	3.50E-02	5.80E-02	4.65E-02	3.07E-02	3.02E-02	3.14E-02	2.84E-02	2.64E-02	2.47E-02	2.02E-02
Skin	2.33E-06	1.78E-03	1.06E-02	3.32E-02	2.88E-02	1.90E-02	2.02E-02	2.31E-02	1.96E-02	1.88E-02	1.83E-02	1.58E-02
Spleen	4.86E-06	5.15E-03	5.31E-02	1.47E-01	1.13E-01	6.49E-02	6.69E-02	6.66E-02	6.19E-02	5.73E-02	5.33E-02	4.31E-02
Testes	0.0	7.49E-05	5.26E-03	4.72E-02	5.33E-02	3.60E-02	3.36E-02	3.11E-02	3.39E-02	3.64E-02	3.55E-02	2.26E-02
Thymus	0.0	1.87E-08	8.34E-05	3.57E-03	8.68E-03	9.21E-03	9.29E-03	9.94E-03	8.87E-03	8.61E-03	8.50E-03	7.89E-03
Thyroid	0.0	0.0	6.11E-06	1.73E-03	3.20E-03	4.28E-03	4.36E-03	5.09E-03	5.14E-03	4.91E-03	4.75E-03	4.49E-03
GB_Wall	9.95E-03	1.44E-01	4.86E-01	6.48E-01	3.44E-01	1.87E-01	1.82E-01	1.79E-01	1.66E-01	1.48E-01	1.34E-01	1.09E-01
Ht_Wall	0.0	1.75E-05	2.64E-03	2.58E-02	3.60E-02	2.51E-02	2.26E-02	2.47E-02	2.28E-02	2.14E-02	2.02E-02	1.63E-02
Uterus	2.77E-02	7.36E-01	1.60E+00	1.35E+00	6.22E-01	3.41E-01	3.32E-01	3.41E-01	3.22E-01	2.88E-01	2.62E-01	2.23E-01

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	7.86E-10	7.90E-04	1.70E-02	8.61E-02	9.24E-02	5.50E-02	5.14E-02	4.98E-02	4.94E-02	4.42E-02	3.96E-02	3.11E-02
UB_Wall	2.34E-05	2.83E-02	1.64E-01	3.28E-01	2.13E-01	1.17E-01	1.15E-01	1.10E-01	1.01E-01	9.48E-02	8.82E-02	6.38E-02
Bone_Sur	2.74E-02	8.57E-02	2.02E-01	3.76E-01	2.72E-01	8.74E-02	4.75E-02	4.06E-02	3.63E-02	3.49E-02	3.34E-02	2.62E-02
Brain	0.0	0.0	1.81E-08	5.77E-05	3.61E-04	4.94E-04	6.99E-04	1.07E-03	1.34E-03	1.47E-03	1.55E-03	1.71E-03
Breasts	0.0	5.59E-07	5.46E-04	1.04E-02	1.46E-02	1.41E-02	1.28E-02	1.34E-02	1.32E-02	1.27E-02	1.24E-02	1.22E-02
St_Wall	1.38E-02	7.00E-02	1.95E-01	3.22E-01	1.96E-01	1.09E-01	1.03E-01	1.03E-01	9.90E-02	8.70E-02	7.83E-02	6.61E-02
SI_Wall	3.15E+00	4.69E+00	4.10E+00	2.23E+00	8.33E-01	4.44E-01	4.68E-01	5.24E-01	4.66E-01	4.26E-01	3.99E-01	2.98E-01
ULI_Wall	2.67E+00	3.82E+00	3.68E+00	2.19E+00	8.72E-01	4.79E-01	4.88E-01	5.03E-01	4.59E-01	4.20E-01	3.88E-01	3.09E-01
LLI_Wall	9.77E-01	1.42E+00	1.42E+00	9.39E-01	4.22E-01	2.36E-01	2.43E-01	2.47E-01	2.25E-01	2.01E-01	1.84E-01	1.51E-01
Kidneys	1.66E-05	1.59E-02	9.81E-02	2.24E-01	1.60E-01	9.55E-02	9.23E-02	8.90E-02	8.35E-02	7.86E-02	7.37E-02	5.82E-02
Liver	1.38E-02	5.15E-02	1.28E-01	2.22E-01	1.52E-01	8.51E-02	7.93E-02	8.04E-02	7.96E-02	7.21E-02	6.54E-02	5.17E-02
ET1-bas	0.0	0.0	6.11E-06	1.73E-03	3.20E-03	4.28E-03	4.36E-03	5.09E-03	5.14E-03	4.91E-03	4.75E-03	4.49E-03
ET2-bas	0.0	0.0	6.11E-06	1.73E-03	3.20E-03	4.28E-03	4.36E-03	5.09E-03	5.14E-03	4.91E-03	4.75E-03	4.49E-03
LN-ET	0.0	0.0	6.11E-06	1.73E-03	3.20E-03	4.28E-03	4.36E-03	5.09E-03	5.14E-03	4.91E-03	4.75E-03	4.49E-03
BBi-bas	0.0	2.73E-05	2.64E-03	2.56E-02	3.19E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
BBi-sec	0.0	2.73E-05	2.64E-03	2.56E-02	3.19E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
bbe-sec	0.0	2.73E-05	2.64E-03	2.56E-02	3.19E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
AI	0.0	2.73E-05	2.64E-03	2.56E-02	3.19E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
LN-Th	0.0	2.73E-05	2.64E-03	2.56E-02	3.19E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
Lng_Tiss	0.0	2.73E-05	2.64E-03	2.56E-02	3.19E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
Lung_NP	0.0	0.0	6.11E-06	1.73E-03	3.20E-03	4.28E-03	4.36E-03	5.09E-03	5.14E-03	4.91E-03	4.75E-03	4.49E-03
Lung_TB	0.0	2.73E-05	2.64E-03	2.56E-02	3.19E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
Lung_P	0.0	2.73E-05	2.64E-03	2.56E-02	3.19E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
Muscle	3.26E-02	8.51E-02	1.37E-01	1.50E-01	8.90E-02	5.27E-02	5.23E-02	5.27E-02	4.96E-02	4.57E-02	4.25E-02	3.50E-02
Ovaries	2.80E-01	1.45E+00	2.09E+00	1.51E+00	6.71E-01	3.71E-01	3.69E-01	3.85E-01	3.42E-01	3.17E-01	2.98E-01	2.38E-01
Pancreas	5.59E-07	5.56E-03	8.44E-02	2.32E-01	1.62E-01	9.56E-02	8.71E-02	8.28E-02	7.94E-02	7.18E-02	6.53E-02	5.23E-02
R_Marrow	6.22E-03	1.66E-02	3.50E-02	5.80E-02	4.65E-02	3.07E-02	3.02E-02	3.14E-02	2.84E-02	2.64E-02	2.47E-02	2.02E-02
Skin	2.33E-06	1.78E-03	1.06E-02	3.32E-02	2.88E-02	1.90E-02	2.02E-02	2.31E-02	1.96E-02	1.88E-02	1.83E-02	1.58E-02
Spleen	4.86E-06	5.15E-03	5.31E-02	1.47E-01	1.13E-01	6.49E-02	6.69E-02	6.66E-02	6.19E-02	5.73E-02	5.33E-02	4.31E-02
Testes	0.0	7.49E-05	5.26E-03	4.72E-02	5.33E-02	3.60E-02	3.36E-02	3.11E-02	3.39E-02	3.64E-02	3.55E-02	2.26E-02
Thymus	0.0	1.87E-08	8.34E-05	3.57E-03	8.68E-03	9.21E-03	9.29E-03	9.94E-03	8.87E-03	8.61E-03	8.50E-03	7.89E-03
Thyroid	0.0	0.0	6.11E-06	1.73E-03	3.20E-03	4.28E-03	4.36E-03	5.09E-03	5.14E-03	4.91E-03	4.75E-03	4.49E-03
GB_Wall	9.95E-03	1.44E-01	4.86E-01	6.48E-01	3.44E-01	1.87E-01	1.82E-01	1.79E-01	1.66E-01	1.48E-01	1.34E-01	1.09E-01
Ht_Wall	0.0	1.75E-05	2.64E-03	2.58E-02	3.60E-02	2.51E-02	2.26E-02	2.47E-02	2.28E-02	2.14E-02	2.02E-02	1.63E-02
Uterus	2.77E-02	7.36E-01	1.60E+00	1.35E+00	6.22E-01	3.41E-01	3.32E-01	3.41E-01	3.22E-01	2.88E-01	2.62E-01	2.23E-01

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	1.02E-10	6.05E-04	2.84E-02	8.12E-02	8.76E-02	5.40E-02	5.17E-02	5.46E-02	5.39E-02	5.18E-02	4.83E-02	3.42E-02
UB_Wall	1.10E-05	2.30E-02	1.04E-01	2.43E-01	1.69E-01	1.02E-01	9.32E-02	9.25E-02	9.38E-02	8.85E-02	8.16E-02	6.10E-02
Bone_Sur	4.88E-03	6.38E-02	1.75E-01	3.14E-01	2.32E-01	7.73E-02	4.09E-02	3.49E-02	3.33E-02	3.06E-02	2.86E-02	2.53E-02
Brain	0.0	0.0	2.53E-08	6.81E-05	4.18E-04	7.63E-04	1.02E-03	1.40E-03	1.70E-03	1.89E-03	1.96E-03	1.78E-03
Breasts	0.0	1.51E-06	9.84E-04	1.29E-02	1.46E-02	1.56E-02	1.58E-02	1.59E-02	1.53E-02	1.46E-02	1.40E-02	1.26E-02
St_Wall	1.69E-02	2.64E-01	5.21E-01	5.03E-01	2.51E-01	1.41E-01	1.34E-01	1.50E-01	1.29E-01	1.10E-01	9.93E-02	8.97E-02
SI_Wall	6.80E-01	2.44E+00	3.03E+00	1.95E+00	7.96E-01	4.36E-01	4.44E-01	4.60E-01	4.23E-01	3.86E-01	3.56E-01	2.85E-01
ULI_Wall	1.43E+01	1.67E+01	1.24E+01	5.53E+00	1.85E+00	1.06E+00	1.13E+00	1.22E+00	1.12E+00	1.02E+00	9.42E-01	7.43E-01
LLI_Wall	6.06E-02	2.95E-01	4.34E-01	3.81E-01	2.08E-01	1.26E-01	1.21E-01	1.34E-01	1.18E-01	1.04E-01	9.66E-02	8.70E-02
Kidneys	8.15E-08	4.64E-03	4.52E-02	1.71E-01	1.29E-01	8.12E-02	7.16E-02	7.40E-02	6.68E-02	6.25E-02	5.97E-02	5.27E-02
Liver	1.51E-02	1.48E-01	3.44E-01	4.02E-01	2.24E-01	1.28E-01	1.21E-01	1.24E-01	1.14E-01	1.07E-01	1.00E-01	7.65E-02
ET1-bas	0.0	2.00E-10	9.73E-06	1.62E-03	4.64E-03	8.13E-03	8.50E-03	7.16E-03	6.21E-03	5.93E-03	5.80E-03	4.83E-03
ET2-bas	0.0	2.00E-10	9.73E-06	1.62E-03	4.64E-03	8.13E-03	8.50E-03	7.16E-03	6.21E-03	5.93E-03	5.80E-03	4.83E-03
LN-ET	0.0	2.00E-10	9.73E-06	1.62E-03	4.64E-03	8.13E-03	8.50E-03	7.16E-03	6.21E-03	5.93E-03	5.80E-03	4.83E-03
BBi-bas	0.0	4.70E-05	4.09E-03	3.08E-02	3.60E-02	2.33E-02	2.10E-02	2.39E-02	2.21E-02	1.95E-02	1.78E-02	1.56E-02
BBi-sec	0.0	4.70E-05	4.09E-03	3.08E-02	3.60E-02	2.33E-02	2.10E-02	2.39E-02	2.21E-02	1.95E-02	1.78E-02	1.56E-02
bbe-sec	0.0	4.70E-05	4.09E-03	3.08E-02	3.60E-02	2.33E-02	2.10E-02	2.39E-02	2.21E-02	1.95E-02	1.78E-02	1.56E-02
AI	0.0	4.70E-05	4.09E-03	3.08E-02	3.60E-02	2.33E-02	2.10E-02	2.39E-02	2.21E-02	1.95E-02	1.78E-02	1.56E-02
LN-Th	0.0	4.70E-05	4.09E-03	3.08E-02	3.60E-02	2.33E-02	2.10E-02	2.39E-02	2.21E-02	1.95E-02	1.78E-02	1.56E-02
Lng_Tiss	0.0	4.70E-05	4.09E-03	3.08E-02	3.60E-02	2.33E-02	2.10E-02	2.39E-02	2.21E-02	1.95E-02	1.78E-02	1.56E-02
Lung_NP	0.0	2.00E-10	9.73E-06	1.62E-03	4.64E-03	8.13E-03	8.50E-03	7.16E-03	6.21E-03	5.93E-03	5.80E-03	4.83E-03
Lung_TB	0.0	4.70E-05	4.09E-03	3.08E-02	3.60E-02	2.33E-02	2.10E-02	2.39E-02	2.21E-02	1.95E-02	1.78E-02	1.56E-02
Lung_P	0.0	4.70E-05	4.09E-03	3.08E-02	3.60E-02	2.33E-02	2.10E-02	2.39E-02	2.21E-02	1.95E-02	1.78E-02	1.56E-02
Muscle	9.87E-03	6.19E-02	1.23E-01	1.39E-01	8.27E-02	4.89E-02	4.86E-02	4.99E-02	4.70E-02	4.37E-02	4.08E-02	3.31E-02
Ovaries	1.17E-01	1.03E+00	1.59E+00	1.12E+00	5.09E-01	2.66E-01	2.74E-01	2.83E-01	2.62E-01	2.51E-01	2.37E-01	1.83E-01
Pancreas	4.62E-07	1.11E-02	9.31E-02	2.53E-01	1.78E-01	9.06E-02	9.66E-02	9.31E-02	9.34E-02	7.74E-02	6.70E-02	6.14E-02
R_Marrow	1.11E-03	1.31E-02	3.20E-02	4.98E-02	3.99E-02	2.69E-02	2.63E-02	2.74E-02	2.58E-02	2.36E-02	2.21E-02	1.93E-02
Skin	8.01E-07	1.74E-03	1.54E-02	3.76E-02	3.05E-02	1.97E-02	2.08E-02	2.20E-02	2.03E-02	2.00E-02	1.98E-02	1.74E-02
Spleen	3.02E-07	4.45E-03	5.08E-02	1.24E-01	9.90E-02	5.88E-02	5.59E-02	5.59E-02	5.33E-02	5.07E-02	4.79E-02	3.82E-02
Testes	0.0	7.33E-05	6.86E-03	3.71E-02	5.27E-02	3.06E-02	3.17E-02	3.62E-02	3.20E-02	3.13E-02	3.04E-02	2.32E-02
Thymus	0.0	5.15E-08	1.45E-04	7.20E-03	9.66E-03	9.36E-03	8.80E-03	1.01E-02	1.10E-02	1.10E-02	1.07E-02	8.74E-03
Thyroid	0.0	2.00E-10	9.73E-06	1.62E-03	4.64E-03	8.13E-03	8.50E-03	7.16E-03	6.21E-03	5.93E-03	5.80E-03	4.83E-03
GB_Wall	7.47E-02	7.31E-01	1.31E+00	1.10E+00	5.10E-01	2.80E-01	2.82E-01	2.76E-01	2.58E-01	2.39E-01	2.19E-01	1.54E-01
Ht_Wall	0.0	4.36E-05	4.24E-03	3.36E-02	4.37E-02	2.92E-02	2.84E-02	2.27E-02	2.22E-02	2.37E-02	2.40E-02	1.96E-02
Uterus	1.09E-04	7.92E-02	3.92E-01	6.56E-01	3.55E-01	1.98E-01	1.97E-01	1.87E-01	1.80E-01	1.59E-01	1.45E-01	1.30E-01

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	2.15E-10	6.88E-04	1.67E-02	7.65E-02	9.91E-02	5.40E-02	4.70E-02	4.31E-02	4.46E-02	4.37E-02	4.17E-02	3.42E-02
UB_Wall	2.96E-05	2.45E-02	1.01E-01	2.43E-01	1.83E-01	1.05E-01	8.94E-02	9.61E-02	8.08E-02	7.32E-02	6.92E-02	6.10E-02
Bone_Sur	4.88E-03	6.38E-02	1.75E-01	3.14E-01	2.32E-01	7.73E-02	4.09E-02	3.49E-02	3.33E-02	3.06E-02	2.86E-02	2.53E-02
Brain	0.0	0.0	2.57E-08	6.83E-05	3.54E-04	8.20E-04	9.47E-04	1.45E-03	1.68E-03	1.67E-03	1.66E-03	1.78E-03
Breasts	0.0	1.62E-06	9.97E-04	9.28E-03	2.00E-02	1.45E-02	1.32E-02	1.64E-02	1.77E-02	1.61E-02	1.50E-02	1.26E-02
St_Wall	5.85E-02	2.93E-01	5.13E-01	4.74E-01	2.47E-01	1.49E-01	1.27E-01	1.34E-01	1.36E-01	1.20E-01	1.07E-01	9.09E-02
SI_Wall	2.67E+00	3.82E+00	3.68E+00	2.19E+00	8.72E-01	4.79E-01	4.88E-01	5.03E-01	4.59E-01	4.20E-01	3.88E-01	3.09E-01
ULI_Wall	5.81E+01	3.17E+01	1.80E+01	7.03E+00	2.36E+00	1.33E+00	1.42E+00	1.56E+00	1.47E+00	1.34E+00	1.24E+00	1.02E+00
LLI_Wall	1.88E-01	3.89E-01	4.82E-01	4.06E-01	2.18E-01	1.25E-01	1.13E-01	1.17E-01	1.15E-01	1.07E-01	9.95E-02	8.12E-02
Kidneys	2.24E-07	2.29E-03	5.94E-02	1.80E-01	1.31E-01	7.49E-02	7.13E-02	6.55E-02	6.43E-02	6.25E-02	6.05E-02	5.51E-02
Liver	5.11E-02	1.77E-01	3.33E-01	3.95E-01	2.18E-01	1.25E-01	1.23E-01	1.26E-01	1.16E-01	1.09E-01	1.03E-01	8.28E-02
ET1-bas	0.0	2.17E-10	9.91E-06	1.63E-03	4.14E-03	6.31E-03	6.19E-03	6.10E-03	6.05E-03	5.92E-03	5.80E-03	4.83E-03
ET2-bas	0.0	2.17E-10	9.91E-06	1.63E-03	4.14E-03	6.31E-03	6.19E-03	6.10E-03	6.05E-03	5.92E-03	5.80E-03	4.83E-03
LN-ET	0.0	2.17E-10	9.91E-06	1.63E-03	4.14E-03	6.31E-03	6.19E-03	6.10E-03	6.05E-03	5.92E-03	5.80E-03	4.83E-03
BBi-bas	0.0	5.05E-05	6.38E-03	3.09E-02	3.30E-02	2.17E-02	2.10E-02	2.26E-02	1.93E-02	1.90E-02	1.88E-02	1.55E-02
BBi-sec	0.0	5.05E-05	6.38E-03	3.09E-02	3.30E-02	2.17E-02	2.10E-02	2.26E-02	1.93E-02	1.90E-02	1.88E-02	1.55E-02
bbe-sec	0.0	5.05E-05	6.38E-03	3.09E-02	3.30E-02	2.17E-02	2.10E-02	2.26E-02	1.93E-02	1.90E-02	1.88E-02	1.55E-02
AI	0.0	5.05E-05	6.38E-03	3.09E-02	3.30E-02	2.17E-02	2.10E-02	2.26E-02	1.93E-02	1.90E-02	1.88E-02	1.55E-02
LN-Th	0.0	5.05E-05	6.38E-03	3.09E-02	3.30E-02	2.17E-02	2.10E-02	2.26E-02	1.93E-02	1.90E-02	1.88E-02	1.55E-02
Lng_Tiss	0.0	5.05E-05	6.38E-03	3.09E-02	3.30E-02	2.17E-02	2.10E-02	2.26E-02	1.93E-02	1.90E-02	1.88E-02	1.55E-02
Lung_NP	0.0	2.17E-10	9.91E-06	1.63E-03	4.14E-03	6.31E-03	6.19E-03	6.10E-03	6.05E-03	5.92E-03	5.80E-03	4.83E-03
Lung_TB	0.0	5.05E-05	6.38E-03	3.09E-02	3.30E-02	2.17E-02	2.10E-02	2.26E-02	1.93E-02	1.90E-02	1.88E-02	1.55E-02
Lung_P	0.0	5.05E-05	6.38E-03	3.09E-02	3.30E-02	2.17E-02	2.10E-02	2.26E-02	1.93E-02	1.90E-02	1.88E-02	1.55E-02
Muscle	3.13E-02	8.62E-02	1.36E-01	1.44E-01	8.36E-02	5.01E-02	4.98E-02	5.12E-02	4.84E-02	4.46E-02	4.13E-02	3.30E-02
Ovaries	8.45E-01	1.93E+00	2.06E+00	1.29E+00	5.47E-01	3.19E-01	3.19E-01	3.38E-01	3.09E-01	2.77E-01	2.52E-01	1.97E-01
Pancreas	9.22E-07	1.01E-02	1.08E-01	2.59E-01	1.78E-01	1.03E-01	1.02E-01	8.82E-02	7.77E-02	7.89E-02	7.83E-02	6.09E-02
R_Marrow	1.11E-03	1.31E-02	3.20E-02	4.98E-02	3.99E-02	2.69E-02	2.63E-02	2.74E-02	2.58E-02	2.36E-02	2.21E-02	1.93E-02
Skin	3.16E-06	1.83E-03	1.38E-02	3.61E-02	2.88E-02	1.90E-02	2.07E-02	2.27E-02	1.99E-02	1.99E-02	1.95E-02	1.46E-02
Spleen	7.18E-07	5.04E-03	5.30E-02	1.33E-01	1.02E-01	6.21E-02	5.70E-02	5.53E-02	5.60E-02	5.31E-02	4.94E-02	3.82E-02
Testes	0.0	7.72E-05	7.00E-03	3.34E-02	5.57E-02	3.67E-02	2.98E-02	2.82E-02	2.80E-02	2.55E-02	2.37E-02	2.11E-02
Thymus	0.0	5.49E-08	1.47E-04	4.26E-03	9.44E-03	1.14E-02	9.28E-03	9.24E-03	1.02E-02	1.01E-02	9.62E-03	7.93E-03
Thyroid	0.0	2.17E-10	9.91E-06	1.63E-03	4.14E-03	6.31E-03	6.19E-03	6.10E-03	6.05E-03	5.92E-03	5.80E-03	4.83E-03
GB_Wall	1.92E-01	8.24E-01	1.34E+00	1.11E+00	5.28E-01	2.74E-01	2.67E-01	3.07E-01	2.75E-01	2.44E-01	2.21E-01	1.71E-01
Ht_Wall	0.0	4.61E-05	5.28E-03	3.14E-02	4.17E-02	2.57E-02	2.51E-02	2.77E-02	2.77E-02	2.58E-02	2.39E-02	1.94E-02
Uterus	4.61E-04	9.32E-02	4.29E-01	6.98E-01	3.65E-01	1.98E-01	1.86E-01	1.81E-01	1.76E-01	1.61E-01	1.47E-01	1.09E-01

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	3.57E-05	4.08E-03	2.49E-02	3.29E-02	2.97E-02	2.44E-02	2.18E-02	2.10E-02	2.05E-02	1.98E-02	1.69E-02
UB_Wall	2.92E-03	1.92E-01	5.48E-01	6.90E-01	3.54E-01	1.76E-01	1.85E-01	2.08E-01	1.76E-01	1.59E-01	1.48E-01	1.22E-01
Bone_Sur	2.21E-02	2.46E-01	4.88E-01	5.57E-01	3.19E-01	9.75E-02	5.38E-02	4.71E-02	4.37E-02	4.21E-02	4.05E-02	3.38E-02
Brain	0.0	0.0	4.95E-09	2.62E-05	3.52E-04	4.35E-04	5.38E-04	7.12E-04	8.80E-04	9.96E-04	1.09E-03	1.34E-03
Breasts	0.0	1.27E-07	1.80E-04	6.06E-03	6.96E-03	8.29E-03	9.51E-03	1.03E-02	9.93E-03	9.51E-03	9.19E-03	7.57E-03
St_Wall	3.15E-04	2.92E-02	1.11E-01	2.21E-01	1.45E-01	8.00E-02	7.43E-02	8.29E-02	7.47E-02	6.81E-02	6.31E-02	5.00E-02
SI_Wall	2.74E-01	1.19E+00	1.55E+00	1.09E+00	4.91E-01	2.64E-01	2.71E-01	2.79E-01	2.55E-01	2.38E-01	2.22E-01	1.73E-01
ULI_Wall	4.16E-01	6.27E-01	6.74E-01	5.15E-01	2.70E-01	1.51E-01	1.42E-01	1.50E-01	1.43E-01	1.29E-01	1.17E-01	8.86E-02
LLI_Wall	2.01E+01	2.26E+01	1.59E+01	6.66E+00	2.21E+00	1.26E+00	1.34E+00	1.45E+00	1.39E+00	1.28E+00	1.18E+00	9.13E-01
Kidneys	1.13E-09	6.49E-04	1.50E-02	6.56E-02	6.45E-02	4.00E-02	4.18E-02	4.04E-02	3.72E-02	3.44E-02	3.24E-02	2.87E-02
Liver	0.0	1.39E-04	5.61E-03	3.82E-02	4.31E-02	2.94E-02	2.61E-02	2.92E-02	2.54E-02	2.41E-02	2.34E-02	2.03E-02
ET1-bas	0.0	0.0	1.69E-06	5.70E-04	3.07E-03	3.70E-03	4.10E-03	4.25E-03	4.13E-03	3.99E-03	3.90E-03	3.29E-03
ET2-bas	0.0	0.0	1.69E-06	5.70E-04	3.07E-03	3.70E-03	4.10E-03	4.25E-03	4.13E-03	3.99E-03	3.90E-03	3.29E-03
LN-ET	0.0	0.0	1.69E-06	5.70E-04	3.07E-03	3.70E-03	4.10E-03	4.25E-03	4.13E-03	3.99E-03	3.90E-03	3.29E-03
BBi-bas	0.0	2.78E-06	6.39E-04	9.47E-03	1.30E-02	1.20E-02	1.04E-02	1.07E-02	1.12E-02	1.11E-02	1.08E-02	9.02E-03
BBi-sec	0.0	2.78E-06	6.39E-04	9.47E-03	1.30E-02	1.20E-02	1.04E-02	1.07E-02	1.12E-02	1.11E-02	1.08E-02	9.02E-03
bbe-sec	0.0	2.78E-06	6.39E-04	9.47E-03	1.30E-02	1.20E-02	1.04E-02	1.07E-02	1.12E-02	1.11E-02	1.08E-02	9.02E-03
AI	0.0	2.78E-06	6.39E-04	9.47E-03	1.30E-02	1.20E-02	1.04E-02	1.07E-02	1.12E-02	1.11E-02	1.08E-02	9.02E-03
LN-Th	0.0	2.78E-06	6.39E-04	9.47E-03	1.30E-02	1.20E-02	1.04E-02	1.07E-02	1.12E-02	1.11E-02	1.08E-02	9.02E-03
Lng_Tiss	0.0	2.78E-06	6.39E-04	9.47E-03	1.30E-02	1.20E-02	1.04E-02	1.07E-02	1.12E-02	1.11E-02	1.08E-02	9.02E-03
Lung_NP	0.0	0.0	1.69E-06	5.70E-04	3.07E-03	3.70E-03	4.10E-03	4.25E-03	4.13E-03	3.99E-03	3.90E-03	3.29E-03
Lung_TB	0.0	2.78E-06	6.39E-04	9.47E-03	1.30E-02	1.20E-02	1.04E-02	1.07E-02	1.12E-02	1.11E-02	1.08E-02	9.02E-03
Lung_P	0.0	2.78E-06	6.39E-04	9.47E-03	1.30E-02	1.20E-02	1.04E-02	1.07E-02	1.12E-02	1.11E-02	1.08E-02	9.02E-03
Muscle	1.47E-02	8.81E-02	1.58E-01	1.65E-01	9.22E-02	5.51E-02	5.51E-02	5.67E-02	5.30E-02	4.94E-02	4.62E-02	3.73E-02
Ovaries	6.27E-01	3.55E+00	4.19E+00	2.44E+00	8.82E-01	5.05E-01	5.47E-01	5.20E-01	5.00E-01	4.42E-01	3.95E-01	3.12E-01
Pancreas	2.28E-10	7.14E-04	1.85E-02	7.88E-02	8.24E-02	4.63E-02	4.30E-02	4.63E-02	3.54E-02	3.17E-02	3.03E-02	2.75E-02
R_Marrow	5.03E-03	5.02E-02	8.98E-02	8.97E-02	5.66E-02	3.70E-02	3.65E-02	3.67E-02	3.46E-02	3.31E-02	3.16E-02	2.70E-02
Skin	6.96E-03	1.20E-02	2.22E-02	4.16E-02	3.26E-02	2.18E-02	2.24E-02	2.76E-02	2.48E-02	2.16E-02	1.96E-02	1.57E-02
Spleen	8.27E-09	1.33E-03	3.18E-02	8.53E-02	7.81E-02	4.27E-02	3.94E-02	5.07E-02	5.21E-02	4.51E-02	3.97E-02	3.13E-02
Testes	2.03E-05	2.72E-02	1.84E-01	2.83E-01	1.64E-01	9.93E-02	9.93E-02	9.77E-02	9.00E-02	7.37E-02	6.46E-02	6.19E-02
Thymus	0.0	2.64E-09	2.27E-05	2.05E-03	3.83E-03	4.57E-03	5.09E-03	6.78E-03	7.28E-03	6.87E-03	6.36E-03	4.99E-03
Thyroid	0.0	0.0	1.69E-06	5.70E-04	3.07E-03	3.70E-03	4.10E-03	4.25E-03	4.13E-03	3.99E-03	3.90E-03	3.29E-03
GB_Wall	2.42E-08	3.31E-03	4.03E-02	1.22E-01	1.17E-01	6.98E-02	5.53E-02	6.42E-02	5.39E-02	5.44E-02	5.38E-02	3.75E-02
Ht_Wall	0.0	2.89E-06	8.24E-04	1.22E-02	1.86E-02	1.49E-02	1.33E-02	1.50E-02	1.39E-02	1.30E-02	1.23E-02	1.01E-02
Uterus	1.30E-04	1.26E-01	5.71E-01	8.17E-01	4.69E-01	2.45E-01	2.35E-01	2.03E-01	2.03E-01	1.78E-01	1.56E-01	1.23E-01

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	2.76E-05	3.14E-03	2.25E-02	2.52E-02	2.59E-02	2.42E-02	2.15E-02	1.96E-02	1.84E-02	1.75E-02	1.50E-02
UB_Wall	1.35E-02	3.06E-01	7.25E-01	7.92E-01	3.96E-01	2.21E-01	2.16E-01	2.01E-01	2.09E-01	1.95E-01	1.80E-01	1.45E-01
Bone_Sur	2.21E-02	2.46E-01	4.88E-01	5.57E-01	3.19E-01	9.75E-02	5.38E-02	4.71E-02	4.37E-02	4.21E-02	4.05E-02	3.38E-02
Brain	0.0	0.0	3.59E-09	2.11E-05	1.66E-04	3.75E-04	5.25E-04	7.50E-04	8.93E-04	9.77E-04	1.05E-03	1.26E-03
Breasts	0.0	9.65E-08	1.36E-04	4.93E-03	7.00E-03	9.03E-03	9.80E-03	9.52E-03	8.93E-03	8.59E-03	8.24E-03	6.84E-03
St_Wall	2.53E-04	1.90E-02	9.61E-02	1.69E-01	1.11E-01	7.39E-02	7.04E-02	6.28E-02	5.83E-02	5.41E-02	5.04E-02	4.14E-02
SI_Wall	9.77E-01	1.42E+00	1.42E+00	9.39E-01	4.22E-01	2.36E-01	2.43E-01	2.47E-01	2.25E-01	2.01E-01	1.84E-01	1.51E-01
ULI_Wall	1.88E-01	3.89E-01	4.82E-01	4.06E-01	2.18E-01	1.25E-01	1.13E-01	1.17E-01	1.15E-01	1.07E-01	9.95E-02	8.12E-02
LLI_Wall	7.80E+01	4.17E+01	2.34E+01	8.75E+00	2.85E+00	1.64E+00	1.76E+00	1.93E+00	1.82E+00	1.68E+00	1.55E+00	1.20E+00
Kidneys	2.69E-09	5.65E-04	1.09E-02	5.29E-02	6.05E-02	3.73E-02	3.45E-02	3.47E-02	3.46E-02	3.32E-02	3.14E-02	2.54E-02
Liver	1.04E-10	1.12E-04	4.74E-03	2.94E-02	3.78E-02	2.55E-02	2.43E-02	2.49E-02	2.40E-02	2.37E-02	2.28E-02	1.74E-02
ET1-bas	0.0	0.0	1.26E-06	4.59E-04	2.63E-03	3.31E-03	3.59E-03	3.86E-03	3.77E-03	3.66E-03	3.58E-03	3.02E-03
ET2-bas	0.0	0.0	1.26E-06	4.59E-04	2.63E-03	3.31E-03	3.59E-03	3.86E-03	3.77E-03	3.66E-03	3.58E-03	3.02E-03
LN-ET	0.0	0.0	1.26E-06	4.59E-04	2.63E-03	3.31E-03	3.59E-03	3.86E-03	3.77E-03	3.66E-03	3.58E-03	3.02E-03
BBi-bas	0.0	2.15E-06	5.01E-04	8.26E-03	1.09E-02	9.26E-03	8.74E-03	1.10E-02	1.19E-02	1.16E-02	1.09E-02	8.18E-03
BBi-sec	0.0	2.15E-06	5.01E-04	8.26E-03	1.09E-02	9.26E-03	8.74E-03	1.10E-02	1.19E-02	1.16E-02	1.09E-02	8.18E-03
bbe-sec	0.0	2.15E-06	5.01E-04	8.26E-03	1.09E-02	9.26E-03	8.74E-03	1.10E-02	1.19E-02	1.16E-02	1.09E-02	8.18E-03
AI	0.0	2.15E-06	5.01E-04	8.26E-03	1.09E-02	9.26E-03	8.74E-03	1.10E-02	1.19E-02	1.16E-02	1.09E-02	8.18E-03
LN-Th	0.0	2.15E-06	5.01E-04	8.26E-03	1.09E-02	9.26E-03	8.74E-03	1.10E-02	1.19E-02	1.16E-02	1.09E-02	8.18E-03
Lng_Tiss	0.0	2.15E-06	5.01E-04	8.26E-03	1.09E-02	9.26E-03	8.74E-03	1.10E-02	1.19E-02	1.16E-02	1.09E-02	8.18E-03
Lung_NP	0.0	0.0	1.26E-06	4.59E-04	2.63E-03	3.31E-03	3.59E-03	3.86E-03	3.77E-03	3.66E-03	3.58E-03	3.02E-03
Lung_TB	0.0	2.15E-06	5.01E-04	8.26E-03	1.09E-02	9.26E-03	8.74E-03	1.10E-02	1.19E-02	1.16E-02	1.09E-02	8.18E-03
Lung_P	0.0	2.15E-06	5.01E-04	8.26E-03	1.09E-02	9.26E-03	8.74E-03	1.10E-02	1.19E-02	1.16E-02	1.09E-02	8.18E-03
Muscle	7.09E-02	1.44E-01	1.92E-01	1.80E-01	9.68E-02	5.73E-02	5.75E-02	5.99E-02	5.59E-02	5.12E-02	4.75E-02	3.89E-02
Ovaries	1.81E+00	3.79E+00	3.82E+00	2.09E+00	7.80E-01	4.36E-01	4.32E-01	4.76E-01	4.18E-01	4.06E-01	3.96E-01	3.30E-01
Pancreas	2.42E-10	5.42E-04	1.57E-02	6.73E-02	6.55E-02	3.88E-02	4.26E-02	3.78E-02	3.39E-02	3.27E-02	3.10E-02	2.35E-02
R_Marrow	5.03E-03	5.02E-02	8.98E-02	8.97E-02	5.66E-02	3.70E-02	3.65E-02	3.67E-02	3.46E-02	3.31E-02	3.16E-02	2.70E-02
Skin	7.12E-03	1.49E-02	2.73E-02	4.53E-02	3.52E-02	2.38E-02	2.33E-02	2.50E-02	2.50E-02	2.37E-02	2.23E-02	1.86E-02
Spleen	1.34E-08	1.06E-03	1.69E-02	6.42E-02	5.90E-02	3.61E-02	4.00E-02	4.13E-02	3.59E-02	3.03E-02	2.74E-02	2.65E-02
Testes	7.83E-05	5.73E-02	2.51E-01	4.14E-01	2.27E-01	1.23E-01	1.13E-01	1.35E-01	1.20E-01	1.03E-01	9.35E-02	8.05E-02
Thymus	0.0	2.06E-09	1.75E-05	1.67E-03	3.30E-03	5.09E-03	5.55E-03	5.87E-03	6.02E-03	5.78E-03	5.47E-03	4.56E-03
Thyroid	0.0	0.0	1.26E-06	4.59E-04	2.63E-03	3.31E-03	3.59E-03	3.86E-03	3.77E-03	3.66E-03	3.58E-03	3.02E-03
GB_Wall	3.48E-08	2.64E-03	3.34E-02	9.94E-02	1.03E-01	6.06E-02	6.21E-02	5.48E-02	4.39E-02	4.00E-02	3.77E-02	3.21E-02
Ht_Wall	0.0	2.14E-06	6.23E-04	1.11E-02	1.27E-02	1.26E-02	1.26E-02	1.34E-02	1.31E-02	1.23E-02	1.14E-02	9.06E-03
Uterus	2.82E-04	1.08E-01	5.36E-01	8.00E-01	4.28E-01	2.25E-01	2.13E-01	2.38E-01	2.17E-01	1.94E-01	1.78E-01	1.43E-01

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	3.44E-01	1.29E+00	1.74E+00	1.28E+00	5.56E-01	3.23E-01	3.32E-01	3.41E-01	3.12E-01	2.98E-01	2.80E-01	2.04E-01
UB_Wall	0.0	6.44E-06	1.96E-03	2.31E-02	2.89E-02	2.48E-02	2.15E-02	2.22E-02	2.29E-02	2.17E-02	2.03E-02	1.66E-02
Bone_Sur	2.67E-02	1.90E-01	4.51E-01	6.32E-01	3.77E-01	1.13E-01	6.44E-02	5.73E-02	5.58E-02	5.26E-02	4.90E-02	3.77E-02
Brain	0.0	0.0	2.09E-07	1.98E-04	9.24E-04	1.38E-03	1.69E-03	2.17E-03	2.91E-03	3.30E-03	3.31E-03	2.41E-03
Breasts	0.0	1.19E-06	9.02E-04	8.64E-03	2.48E-02	1.94E-02	1.71E-02	1.67E-02	1.59E-02	1.59E-02	1.58E-02	1.40E-02
St_Wall	8.79E-08	4.46E-03	4.90E-02	1.59E-01	1.26E-01	7.27E-02	6.89E-02	7.24E-02	6.38E-02	6.14E-02	5.89E-02	4.57E-02
SI_Wall	1.66E-05	1.59E-02	9.81E-02	2.24E-01	1.60E-01	9.55E-02	9.23E-02	8.90E-02	8.35E-02	7.86E-02	7.37E-02	5.82E-02
ULI_Wall	2.24E-07	2.29E-03	5.94E-02	1.80E-01	1.31E-01	7.49E-02	7.13E-02	6.55E-02	6.43E-02	6.25E-02	6.05E-02	5.51E-02
LLI_Wall	2.69E-09	5.65E-04	1.09E-02	5.29E-02	6.05E-02	3.73E-02	3.45E-02	3.47E-02	3.46E-02	3.32E-02	3.14E-02	2.54E-02
Kidneys	3.84E+01	2.80E+01	1.74E+01	7.00E+00	2.33E+00	1.34E+00	1.45E+00	1.57E+00	1.43E+00	1.32E+00	1.23E+00	9.95E-01
Liver	5.65E-03	7.95E-02	2.03E-01	2.65E-01	1.66E-01	9.85E-02	9.75E-02	9.83E-02	8.88E-02	7.95E-02	7.31E-02	6.22E-02
ET1-bas	0.0	3.00E-09	3.95E-05	3.74E-03	8.20E-03	8.49E-03	7.56E-03	8.37E-03	9.00E-03	8.40E-03	8.00E-03	6.41E-03
ET2-bas	0.0	3.00E-09	3.95E-05	3.74E-03	8.20E-03	8.49E-03	7.56E-03	8.37E-03	9.00E-03	8.40E-03	8.00E-03	6.41E-03
LN-ET	0.0	3.00E-09	3.95E-05	3.74E-03	8.20E-03	8.49E-03	7.56E-03	8.37E-03	9.00E-03	8.40E-03	8.00E-03	6.41E-03
BBi-bas	2.15E-06	6.21E-03	4.40E-02	1.03E-01	7.37E-02	4.65E-02	4.62E-02	5.00E-02	4.14E-02	4.02E-02	3.94E-02	3.13E-02
BBi-sec	2.15E-06	6.21E-03	4.40E-02	1.03E-01	7.37E-02	4.65E-02	4.62E-02	5.00E-02	4.14E-02	4.02E-02	3.94E-02	3.13E-02
bbe-sec	2.15E-06	6.21E-03	4.40E-02	1.03E-01	7.37E-02	4.65E-02	4.62E-02	5.00E-02	4.14E-02	4.02E-02	3.94E-02	3.13E-02
AI	2.15E-06	6.21E-03	4.40E-02	1.03E-01	7.37E-02	4.65E-02	4.62E-02	5.00E-02	4.14E-02	4.02E-02	3.94E-02	3.13E-02
LN-Th	2.15E-06	6.21E-03	4.40E-02	1.03E-01	7.37E-02	4.65E-02	4.62E-02	5.00E-02	4.14E-02	4.02E-02	3.94E-02	3.13E-02
Lng_Tiss	2.15E-06	6.21E-03	4.40E-02	1.03E-01	7.37E-02	4.65E-02	4.62E-02	5.00E-02	4.14E-02	4.02E-02	3.94E-02	3.13E-02
Lung_NP	0.0	3.00E-09	3.95E-05	3.74E-03	8.20E-03	8.49E-03	7.56E-03	8.37E-03	9.00E-03	8.40E-03	8.00E-03	6.41E-03
Lung_TB	2.15E-06	6.21E-03	4.40E-02	1.03E-01	7.37E-02	4.65E-02	4.62E-02	5.00E-02	4.14E-02	4.02E-02	3.94E-02	3.13E-02
Lung_P	2.15E-06	6.21E-03	4.40E-02	1.03E-01	7.37E-02	4.65E-02	4.62E-02	5.00E-02	4.14E-02	4.02E-02	3.94E-02	3.13E-02
Muscle	4.75E-02	1.12E-01	1.45E-01	1.24E-01	7.11E-02	4.38E-02	4.43E-02	4.66E-02	4.43E-02	4.12E-02	3.84E-02	3.14E-02
Ovaries	0.0	5.49E-04	1.34E-02	7.55E-02	9.04E-02	6.00E-02	5.22E-02	5.49E-02	5.72E-02	5.16E-02	4.62E-02	3.50E-02
Pancreas	1.74E-05	4.33E-02	2.87E-01	4.95E-01	2.80E-01	1.61E-01	1.62E-01	1.56E-01	1.39E-01	1.26E-01	1.18E-01	1.12E-01
R_Marrow	3.32E-03	2.26E-02	5.25E-02	7.50E-02	5.55E-02	3.74E-02	3.76E-02	3.85E-02	3.71E-02	3.54E-02	3.31E-02	2.49E-02
Skin	2.89E-03	2.55E-02	4.55E-02	5.12E-02	3.29E-02	2.26E-02	2.44E-02	2.60E-02	2.62E-02	2.56E-02	2.43E-02	1.86E-02
Spleen	8.56E-02	6.66E-01	1.19E+00	9.27E-01	4.24E-01	2.33E-01	2.38E-01	2.34E-01	2.26E-01	2.13E-01	1.99E-01	1.57E-01
Testes	0.0	3.50E-08	1.46E-04	5.83E-03	7.94E-03	1.02E-02	1.11E-02	1.09E-02	1.02E-02	9.72E-03	9.34E-03	8.44E-03
Thymus	0.0	1.72E-07	2.96E-04	8.57E-03	1.42E-02	1.47E-02	1.28E-02	1.23E-02	1.17E-02	1.13E-02	1.10E-02	1.06E-02
Thyroid	0.0	3.00E-09	3.95E-05	3.74E-03	8.20E-03	8.49E-03	7.56E-03	8.37E-03	9.00E-03	8.40E-03	8.00E-03	6.41E-03
GB_Wall	1.05E-07	9.28E-03	1.09E-01	2.79E-01	1.90E-01	1.11E-01	1.16E-01	1.05E-01	1.02E-01	8.83E-02	7.80E-02	6.46E-02
Ht_Wall	0.0	1.84E-04	1.22E-02	5.22E-02	5.56E-02	3.69E-02	3.33E-02	3.59E-02	3.89E-02	3.45E-02	3.11E-02	2.84E-02
Uterus	0.0	2.54E-04	9.50E-03	6.53E-02	7.31E-02	4.67E-02	4.72E-02	4.36E-02	3.96E-02	3.67E-02	3.47E-02	3.08E-02

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	2.31E-02	2.11E-01	3.95E-01	4.19E-01	2.28E-01	1.31E-01	1.30E-01	1.27E-01	1.16E-01	1.09E-01	1.02E-01	7.79E-02
UB_Wall	0.0	3.05E-05	3.70E-03	2.58E-02	3.79E-02	2.39E-02	2.37E-02	2.47E-02	2.42E-02	2.22E-02	2.06E-02	1.88E-02
Bone_Sur	1.54E-02	8.80E-02	2.11E-01	3.47E-01	2.41E-01	7.88E-02	4.18E-02	3.73E-02	3.64E-02	3.33E-02	3.07E-02	2.55E-02
Brain	0.0	0.0	7.30E-07	3.53E-04	1.38E-03	1.98E-03	2.07E-03	2.87E-03	3.35E-03	3.20E-03	3.07E-03	3.17E-03
Breasts	4.52E-08	4.17E-03	3.62E-02	9.93E-02	7.33E-02	4.52E-02	4.63E-02	5.03E-02	4.62E-02	4.37E-02	4.14E-02	3.27E-02
St_Wall	9.79E-03	1.28E-01	3.03E-01	3.68E-01	2.02E-01	1.15E-01	1.14E-01	1.14E-01	1.09E-01	1.00E-01	9.14E-02	6.73E-02
SI_Wall	1.38E-02	5.15E-02	1.28E-01	2.22E-01	1.52E-01	8.51E-02	7.93E-02	8.04E-02	7.96E-02	7.21E-02	6.54E-02	5.17E-02
ULI_Wall	5.11E-02	1.77E-01	3.33E-01	3.95E-01	2.18E-01	1.25E-01	1.23E-01	1.26E-01	1.16E-01	1.09E-01	1.03E-01	8.28E-02
LLI_Wall	1.04E-10	1.12E-04	4.74E-03	2.94E-02	3.78E-02	2.55E-02	2.43E-02	2.49E-02	2.40E-02	2.37E-02	2.28E-02	1.74E-02
Kidneys	5.65E-03	7.95E-02	2.03E-01	2.65E-01	1.66E-01	9.85E-02	9.75E-02	9.83E-02	8.88E-02	7.95E-02	7.31E-02	6.22E-02
Liver	7.69E+00	6.51E+00	4.89E+00	2.46E+00	9.18E-01	5.21E-01	5.43E-01	5.77E-01	5.30E-01	4.89E-01	4.55E-01	3.64E-01
ET1-bas	0.0	2.44E-07	3.17E-04	1.12E-02	1.81E-02	1.37E-02	1.26E-02	1.30E-02	1.31E-02	1.27E-02	1.22E-02	1.02E-02
ET2-bas	0.0	2.44E-07	3.17E-04	1.12E-02	1.81E-02	1.37E-02	1.26E-02	1.30E-02	1.31E-02	1.27E-02	1.22E-02	1.02E-02
LN-ET	0.0	2.44E-07	3.17E-04	1.12E-02	1.81E-02	1.37E-02	1.26E-02	1.30E-02	1.31E-02	1.27E-02	1.22E-02	1.02E-02
BBi-bas	4.31E-02	2.07E-01	3.25E-01	2.75E-01	1.39E-01	7.77E-02	7.73E-02	8.10E-02	7.43E-02	6.55E-02	5.98E-02	5.25E-02
BBi-sec	4.31E-02	2.07E-01	3.25E-01	2.75E-01	1.39E-01	7.77E-02	7.73E-02	8.10E-02	7.43E-02	6.55E-02	5.98E-02	5.25E-02
bbe-sec	4.31E-02	2.07E-01	3.25E-01	2.75E-01	1.39E-01	7.77E-02	7.73E-02	8.10E-02	7.43E-02	6.55E-02	5.98E-02	5.25E-02
AI	4.31E-02	2.07E-01	3.25E-01	2.75E-01	1.39E-01	7.77E-02	7.73E-02	8.10E-02	7.43E-02	6.55E-02	5.98E-02	5.25E-02
LN-Th	4.31E-02	2.07E-01	3.25E-01	2.75E-01	1.39E-01	7.77E-02	7.73E-02	8.10E-02	7.43E-02	6.55E-02	5.98E-02	5.25E-02
Lng_Tiss	4.31E-02	2.07E-01	3.25E-01	2.75E-01	1.39E-01	7.77E-02	7.73E-02	8.10E-02	7.43E-02	6.55E-02	5.98E-02	5.25E-02
Lung_NP	0.0	2.44E-07	3.17E-04	1.12E-02	1.81E-02	1.37E-02	1.26E-02	1.30E-02	1.31E-02	1.27E-02	1.22E-02	1.02E-02
Lung_TB	4.31E-02	2.07E-01	3.25E-01	2.75E-01	1.39E-01	7.77E-02	7.73E-02	8.10E-02	7.43E-02	6.55E-02	5.98E-02	5.25E-02
Lung_P	4.31E-02	2.07E-01	3.25E-01	2.75E-01	1.39E-01	7.77E-02	7.73E-02	8.10E-02	7.43E-02	6.55E-02	5.98E-02	5.25E-02
Muscle	2.57E-02	6.19E-02	9.25E-02	9.82E-02	6.00E-02	3.67E-02	3.70E-02	3.88E-02	3.67E-02	3.40E-02	3.16E-02	2.59E-02
Ovaries	7.25E-10	5.46E-04	1.34E-02	7.53E-02	6.90E-02	4.42E-02	4.05E-02	3.92E-02	3.54E-02	3.48E-02	3.38E-02	2.69E-02
Pancreas	2.38E-03	1.59E-01	4.69E-01	5.50E-01	2.90E-01	1.64E-01	1.57E-01	1.61E-01	1.44E-01	1.33E-01	1.25E-01	1.03E-01
R_Marrow	2.37E-03	1.24E-02	2.80E-02	4.44E-02	3.67E-02	2.52E-02	2.41E-02	2.55E-02	2.52E-02	2.34E-02	2.18E-02	1.78E-02
Skin	1.24E-03	1.21E-02	3.44E-02	4.97E-02	3.16E-02	2.10E-02	2.36E-02	2.57E-02	2.46E-02	2.31E-02	2.17E-02	1.78E-02
Spleen	2.51E-09	8.94E-04	2.31E-02	9.79E-02	8.49E-02	5.25E-02	4.93E-02	5.16E-02	4.71E-02	4.24E-02	3.94E-02	3.45E-02
Testes	0.0	1.39E-07	2.18E-04	5.77E-03	1.02E-02	9.12E-03	9.01E-03	1.12E-02	1.19E-02	1.19E-02	1.16E-02	9.36E-03
Thymus	0.0	8.82E-05	6.28E-03	4.02E-02	3.98E-02	2.61E-02	2.71E-02	2.89E-02	2.53E-02	2.28E-02	2.13E-02	1.94E-02
Thyroid	0.0	2.44E-07	3.17E-04	1.12E-02	1.81E-02	1.37E-02	1.26E-02	1.30E-02	1.31E-02	1.27E-02	1.22E-02	1.02E-02
GB_Wall	2.14E-01	9.22E-01	1.47E+00	1.18E+00	5.23E-01	2.88E-01	2.80E-01	2.97E-01	2.77E-01	2.53E-01	2.35E-01	1.90E-01
Ht_Wall	8.28E-03	1.07E-01	2.55E-01	2.94E-01	1.68E-01	9.72E-02	9.95E-02	9.98E-02	9.31E-02	8.57E-02	7.91E-02	6.20E-02
Uterus	0.0	2.80E-04	8.88E-03	6.41E-02	6.37E-02	4.03E-02	3.78E-02	3.99E-02	3.54E-02	3.46E-02	3.35E-02	2.57E-02

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	9.36E-08	2.57E-04	1.02E-02	1.84E-02	1.72E-02	1.59E-02	1.42E-02	1.27E-02	1.18E-02	1.11E-02	9.65E-03
UB_Wall	0.0	0.0	2.38E-07	2.52E-04	1.97E-03	2.80E-03	3.08E-03	3.36E-03	3.31E-03	3.22E-03	3.16E-03	2.68E-03
Bone_Sur	1.44E-06	5.93E-03	6.50E-02	2.34E-01	1.98E-01	6.84E-02	3.47E-02	2.93E-02	2.73E-02	2.55E-02	2.42E-02	2.09E-02
Brain	0.0	1.12E-04	3.70E-03	3.14E-02	3.90E-02	2.58E-02	2.65E-02	2.69E-02	2.52E-02	2.41E-02	2.31E-02	2.02E-02
Breasts	0.0	6.90E-05	9.11E-03	4.12E-02	3.73E-02	3.34E-02	3.21E-02	3.43E-02	3.33E-02	3.17E-02	3.03E-02	2.48E-02
St_Wall	0.0	1.35E-07	2.41E-04	1.30E-02	1.53E-02	1.28E-02	1.30E-02	1.30E-02	1.18E-02	1.13E-02	1.08E-02	8.94E-03
SI_Wall	0.0	0.0	6.11E-06	1.73E-03	3.20E-03	4.28E-03	4.36E-03	5.09E-03	5.14E-03	4.91E-03	4.75E-03	4.49E-03
ULI_Wall	0.0	2.17E-10	9.91E-06	1.63E-03	4.14E-03	6.31E-03	6.19E-03	6.10E-03	6.05E-03	5.92E-03	5.80E-03	4.83E-03
LLI_Wall	0.0	0.0	1.26E-06	4.59E-04	2.63E-03	3.31E-03	3.59E-03	3.86E-03	3.77E-03	3.66E-03	3.58E-03	3.02E-03
Kidneys	0.0	3.00E-09	3.95E-05	3.74E-03	8.20E-03	8.49E-03	7.56E-03	8.37E-03	9.00E-03	8.40E-03	8.00E-03	6.41E-03
Liver	0.0	2.44E-07	3.17E-04	1.12E-02	1.81E-02	1.37E-02	1.26E-02	1.30E-02	1.31E-02	1.27E-02	1.22E-02	1.02E-02
ET1-bas	5.33E+02	2.80E+02	1.45E+02	4.90E+01	1.54E+01	8.73E+00	9.42E+00	1.02E+01	9.89E+00	9.00E+00	8.26E+00	6.83E+00
ET2-bas	5.33E+02	2.80E+02	1.45E+02	4.90E+01	1.54E+01	8.73E+00	9.42E+00	1.02E+01	9.89E+00	9.00E+00	8.26E+00	6.83E+00
LN-ET	5.33E+02	2.80E+02	1.45E+02	4.90E+01	1.54E+01	8.73E+00	9.42E+00	1.02E+01	9.89E+00	9.00E+00	8.26E+00	6.83E+00
BBi-bas	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
BBi-sec	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
bbe-sec	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
AI	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
LN-Th	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
Lng_Tiss	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-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	1.33E-01	2.64E-01	3.11E-01	2.38E-01	1.13E-01	6.48E-02	6.57E-02	6.81E-02	6.39E-02	5.94E-02	5.54E-02	4.44E-02
Ovaries	0.0	0.0	9.80E-07	5.30E-04	3.12E-03	3.89E-03	4.10E-03	4.39E-03	4.26E-03	4.13E-03	4.03E-03	3.39E-03
Pancreas	0.0	1.06E-07	2.79E-04	9.80E-03	1.18E-02	1.35E-02	1.41E-02	1.37E-02	1.30E-02	1.24E-02	1.20E-02	9.87E-03
R_Marrow	3.20E-06	1.05E-03	1.09E-02	3.75E-02	3.73E-02	2.61E-02	2.30E-02	2.28E-02	2.15E-02	2.02E-02	1.91E-02	1.64E-02
Skin	7.12E-07	1.98E-03	1.84E-02	4.47E-02	3.16E-02	1.99E-02	2.10E-02	2.23E-02	2.25E-02	2.05E-02	1.92E-02	1.94E-02
Spleen	0.0	3.72E-08	1.43E-04	1.00E-02	1.64E-02	1.50E-02	1.36E-02	1.26E-02	1.15E-02	1.07E-02	1.00E-02	8.32E-03
Testes	0.0	0.0	1.90E-08	7.27E-05	9.37E-04	1.65E-03	1.95E-03	2.23E-03	2.25E-03	2.22E-03	2.20E-03	1.89E-03
Thymus	1.09E-02	4.45E-01	9.61E-01	1.02E+00	4.72E-01	2.60E-01	2.58E-01	2.76E-01	2.47E-01	2.42E-01	2.38E-01	2.00E-01
Thyroid	0.0	1.12E-04	3.70E-03	3.14E-02	3.90E-02	2.58E-02	2.65E-02	2.69E-02	2.52E-02	2.41E-02	2.31E-02	2.02E-02
GB_Wall	0.0	2.82E-08	1.24E-04	6.10E-03	1.35E-02	1.13E-02	1.06E-02	1.11E-02	1.05E-02	1.01E-02	9.74E-03	8.04E-03
Ht_Wall	8.02E-10	7.46E-04	1.66E-02	8.60E-02	8.00E-02	5.01E-02	4.52E-02	4.56E-02	4.90E-02	4.36E-02	3.89E-02	3.22E-02
Uterus	0.0	0.0	8.68E-07	4.98E-04	3.01E-03	3.78E-03	4.01E-03	4.29E-03	4.18E-03	4.04E-03	3.95E-03	3.32E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	9.36E-08	2.57E-04	1.02E-02	1.84E-02	1.72E-02	1.59E-02	1.42E-02	1.27E-02	1.18E-02	1.11E-02	9.65E-03
UB_Wall	0.0	0.0	2.38E-07	2.52E-04	1.97E-03	2.80E-03	3.08E-03	3.36E-03	3.31E-03	3.22E-03	3.16E-03	2.68E-03
Bone_Sur	1.44E-06	5.93E-03	6.50E-02	2.34E-01	1.98E-01	6.84E-02	3.47E-02	2.93E-02	2.73E-02	2.55E-02	2.42E-02	2.09E-02
Brain	0.0	1.12E-04	3.70E-03	3.14E-02	3.90E-02	2.58E-02	2.65E-02	2.69E-02	2.52E-02	2.41E-02	2.31E-02	2.02E-02
Breasts	0.0	6.90E-05	9.11E-03	4.12E-02	3.73E-02	3.34E-02	3.21E-02	3.43E-02	3.33E-02	3.17E-02	3.03E-02	2.48E-02
St_Wall	0.0	1.35E-07	2.41E-04	1.30E-02	1.53E-02	1.28E-02	1.30E-02	1.30E-02	1.18E-02	1.13E-02	1.08E-02	8.94E-03
SI_Wall	0.0	0.0	6.11E-06	1.73E-03	3.20E-03	4.28E-03	4.36E-03	5.09E-03	5.14E-03	4.91E-03	4.75E-03	4.49E-03
ULI_Wall	0.0	2.17E-10	9.91E-06	1.63E-03	4.14E-03	6.31E-03	6.19E-03	6.10E-03	6.05E-03	5.92E-03	5.80E-03	4.83E-03
LLI_Wall	0.0	0.0	1.26E-06	4.59E-04	2.63E-03	3.31E-03	3.59E-03	3.86E-03	3.77E-03	3.66E-03	3.58E-03	3.02E-03
Kidneys	0.0	3.00E-09	3.95E-05	3.74E-03	8.20E-03	8.49E-03	7.56E-03	8.37E-03	9.00E-03	8.40E-03	8.00E-03	6.41E-03
Liver	0.0	2.44E-07	3.17E-04	1.12E-02	1.81E-02	1.37E-02	1.26E-02	1.30E-02	1.31E-02	1.27E-02	1.22E-02	1.02E-02
ET1-bas	5.33E+02	2.80E+02	1.45E+02	4.90E+01	1.54E+01	8.73E+00	9.42E+00	1.02E+01	9.89E+00	9.00E+00	8.26E+00	6.83E+00
ET2-bas	5.33E+02	2.80E+02	1.45E+02	4.90E+01	1.54E+01	8.73E+00	9.42E+00	1.02E+01	9.89E+00	9.00E+00	8.26E+00	6.83E+00
LN-ET	5.33E+02	2.80E+02	1.45E+02	4.90E+01	1.54E+01	8.73E+00	9.42E+00	1.02E+01	9.89E+00	9.00E+00	8.26E+00	6.83E+00
BBi-bas	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
BBi-sec	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
bbe-sec	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
AI	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
LN-Th	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
Lng_Tiss	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-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	1.33E-01	2.64E-01	3.11E-01	2.38E-01	1.13E-01	6.48E-02	6.57E-02	6.81E-02	6.39E-02	5.94E-02	5.54E-02	4.44E-02
Ovaries	0.0	0.0	9.80E-07	5.30E-04	3.12E-03	3.89E-03	4.10E-03	4.39E-03	4.26E-03	4.13E-03	4.03E-03	3.39E-03
Pancreas	0.0	1.06E-07	2.79E-04	9.80E-03	1.18E-02	1.35E-02	1.41E-02	1.37E-02	1.30E-02	1.24E-02	1.20E-02	9.87E-03
R_Marrow	3.20E-06	1.05E-03	1.09E-02	3.75E-02	3.73E-02	2.61E-02	2.30E-02	2.28E-02	2.15E-02	2.02E-02	1.91E-02	1.64E-02
Skin	7.12E-07	1.98E-03	1.84E-02	4.47E-02	3.16E-02	1.99E-02	2.10E-02	2.23E-02	2.25E-02	2.05E-02	1.92E-02	1.94E-02
Spleen	0.0	3.72E-08	1.43E-04	1.00E-02	1.64E-02	1.50E-02	1.36E-02	1.26E-02	1.15E-02	1.07E-02	1.00E-02	8.32E-03
Testes	0.0	0.0	1.90E-08	7.27E-05	9.37E-04	1.65E-03	1.95E-03	2.23E-03	2.25E-03	2.22E-03	2.20E-03	1.89E-03
Thymus	1.09E-02	4.45E-01	9.61E-01	1.02E+00	4.72E-01	2.60E-01	2.58E-01	2.76E-01	2.47E-01	2.42E-01	2.38E-01	2.00E-01
Thyroid	0.0	1.12E-04	3.70E-03	3.14E-02	3.90E-02	2.58E-02	2.65E-02	2.69E-02	2.52E-02	2.41E-02	2.31E-02	2.02E-02
GB_Wall	0.0	2.82E-08	1.24E-04	6.10E-03	1.35E-02	1.13E-02	1.06E-02	1.11E-02	1.05E-02	1.01E-02	9.74E-03	8.04E-03
Ht_Wall	8.02E-10	7.46E-04	1.66E-02	8.60E-02	8.00E-02	5.01E-02	4.52E-02	4.56E-02	4.90E-02	4.36E-02	3.89E-02	3.22E-02
Uterus	0.0	0.0	8.68E-07	4.98E-04	3.01E-03	3.78E-03	4.01E-03	4.29E-03	4.18E-03	4.04E-03	3.95E-03	3.32E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

Source = ET2-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	0.0	9.36E-08	2.57E-04	1.02E-02	1.84E-02	1.72E-02	1.59E-02	1.42E-02	1.27E-02	1.18E-02	1.11E-02	9.65E-03
UB_Wall	0.0	0.0	2.38E-07	2.52E-04	1.97E-03	2.80E-03	3.08E-03	3.36E-03	3.31E-03	3.22E-03	3.16E-03	2.68E-03
Bone_Sur	1.44E-06	5.93E-03	6.50E-02	2.34E-01	1.98E-01	6.84E-02	3.47E-02	2.93E-02	2.73E-02	2.55E-02	2.42E-02	2.09E-02
Brain	0.0	1.12E-04	3.70E-03	3.14E-02	3.90E-02	2.58E-02	2.65E-02	2.69E-02	2.52E-02	2.41E-02	2.31E-02	2.02E-02
Breasts	0.0	6.90E-05	9.11E-03	4.12E-02	3.73E-02	3.34E-02	3.21E-02	3.43E-02	3.33E-02	3.17E-02	3.03E-02	2.48E-02
St_Wall	0.0	1.35E-07	2.41E-04	1.30E-02	1.53E-02	1.28E-02	1.30E-02	1.30E-02	1.18E-02	1.13E-02	1.08E-02	8.94E-03
SI_Wall	0.0	0.0	6.11E-06	1.73E-03	3.20E-03	4.28E-03	4.36E-03	5.09E-03	5.14E-03	4.91E-03	4.75E-03	4.49E-03
ULI_Wall	0.0	2.17E-10	9.91E-06	1.63E-03	4.14E-03	6.31E-03	6.19E-03	6.10E-03	6.05E-03	5.92E-03	5.80E-03	4.83E-03
LLI_Wall	0.0	0.0	1.26E-06	4.59E-04	2.63E-03	3.31E-03	3.59E-03	3.86E-03	3.77E-03	3.66E-03	3.58E-03	3.02E-03
Kidneys	0.0	3.00E-09	3.95E-05	3.74E-03	8.20E-03	8.49E-03	7.56E-03	8.37E-03	9.00E-03	8.40E-03	8.00E-03	6.41E-03
Liver	0.0	2.44E-07	3.17E-04	1.12E-02	1.81E-02	1.37E-02	1.26E-02	1.30E-02	1.31E-02	1.27E-02	1.22E-02	1.02E-02
ET1-bas	5.33E+02	2.80E+02	1.45E+02	4.90E+01	1.54E+01	8.73E+00	9.42E+00	1.02E+01	9.89E+00	9.00E+00	8.26E+00	6.83E+00
ET2-bas	5.33E+02	2.80E+02	1.45E+02	4.90E+01	1.54E+01	8.73E+00	9.42E+00	1.02E+01	9.89E+00	9.00E+00	8.26E+00	6.83E+00
LN-ET	5.33E+02	2.80E+02	1.45E+02	4.90E+01	1.54E+01	8.73E+00	9.42E+00	1.02E+01	9.89E+00	9.00E+00	8.26E+00	6.83E+00
BBi-bas	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
BBi-sec	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
bbe-sec	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
AI	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
LN-Th	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
Lng_Tiss	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-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	1.33E-01	2.64E-01	3.11E-01	2.38E-01	1.13E-01	6.48E-02	6.57E-02	6.81E-02	6.39E-02	5.94E-02	5.54E-02	4.44E-02
Ovaries	0.0	0.0	9.80E-07	5.30E-04	3.12E-03	3.89E-03	4.10E-03	4.39E-03	4.26E-03	4.13E-03	4.03E-03	3.39E-03
Pancreas	0.0	1.06E-07	2.79E-04	9.80E-03	1.18E-02	1.35E-02	1.41E-02	1.37E-02	1.30E-02	1.24E-02	1.20E-02	9.87E-03
R_Marrow	3.20E-06	1.05E-03	1.09E-02	3.75E-02	3.73E-02	2.61E-02	2.30E-02	2.28E-02	2.15E-02	2.02E-02	1.91E-02	1.64E-02
Skin	7.12E-07	1.98E-03	1.84E-02	4.47E-02	3.16E-02	1.99E-02	2.10E-02	2.23E-02	2.25E-02	2.05E-02	1.92E-02	1.94E-02
Spleen	0.0	3.72E-08	1.43E-04	1.00E-02	1.64E-02	1.50E-02	1.36E-02	1.26E-02	1.15E-02	1.07E-02	1.00E-02	8.32E-03
Testes	0.0	0.0	1.90E-08	7.27E-05	9.37E-04	1.65E-03	1.95E-03	2.23E-03	2.25E-03	2.22E-03	2.20E-03	1.89E-03
Thymus	1.09E-02	4.45E-01	9.61E-01	1.02E+00	4.72E-01	2.60E-01	2.58E-01	2.76E-01	2.47E-01	2.42E-01	2.38E-01	2.00E-01
Thyroid	0.0	1.12E-04	3.70E-03	3.14E-02	3.90E-02	2.58E-02	2.65E-02	2.69E-02	2.52E-02	2.41E-02	2.31E-02	2.02E-02
GB_Wall	0.0	2.82E-08	1.24E-04	6.10E-03	1.35E-02	1.13E-02	1.06E-02	1.11E-02	1.05E-02	1.01E-02	9.74E-03	8.04E-03
Ht_Wall	8.02E-10	7.46E-04	1.66E-02	8.60E-02	8.00E-02	5.01E-02	4.52E-02	4.56E-02	4.90E-02	4.36E-02	3.89E-02	3.22E-02
Uterus	0.0	0.0	8.68E-07	4.98E-04	3.01E-03	3.78E-03	4.01E-03	4.29E-03	4.18E-03	4.04E-03	3.95E-03	3.32E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	9.36E-08	2.57E-04	1.02E-02	1.84E-02	1.72E-02	1.59E-02	1.42E-02	1.27E-02	1.18E-02	1.11E-02	9.65E-03
UB_Wall	0.0	0.0	2.38E-07	2.52E-04	1.97E-03	2.80E-03	3.08E-03	3.36E-03	3.31E-03	3.22E-03	3.16E-03	2.68E-03
Bone_Sur	1.44E-06	5.93E-03	6.50E-02	2.34E-01	1.98E-01	6.84E-02	3.47E-02	2.93E-02	2.73E-02	2.55E-02	2.42E-02	2.09E-02
Brain	0.0	1.12E-04	3.70E-03	3.14E-02	3.90E-02	2.58E-02	2.65E-02	2.69E-02	2.52E-02	2.41E-02	2.31E-02	2.02E-02
Breasts	0.0	6.90E-05	9.11E-03	4.12E-02	3.73E-02	3.34E-02	3.21E-02	3.43E-02	3.33E-02	3.17E-02	3.03E-02	2.48E-02
St_Wall	0.0	1.35E-07	2.41E-04	1.30E-02	1.53E-02	1.28E-02	1.30E-02	1.30E-02	1.18E-02	1.13E-02	1.08E-02	8.94E-03
SI_Wall	0.0	0.0	6.11E-06	1.73E-03	3.20E-03	4.28E-03	4.36E-03	5.09E-03	5.14E-03	4.91E-03	4.75E-03	4.49E-03
ULI_Wall	0.0	2.17E-10	9.91E-06	1.63E-03	4.14E-03	6.31E-03	6.19E-03	6.10E-03	6.05E-03	5.92E-03	5.80E-03	4.83E-03
LLI_Wall	0.0	0.0	1.26E-06	4.59E-04	2.63E-03	3.31E-03	3.59E-03	3.86E-03	3.77E-03	3.66E-03	3.58E-03	3.02E-03
Kidneys	0.0	3.00E-09	3.95E-05	3.74E-03	8.20E-03	8.49E-03	7.56E-03	8.37E-03	9.00E-03	8.40E-03	8.00E-03	6.41E-03
Liver	0.0	2.44E-07	3.17E-04	1.12E-02	1.81E-02	1.37E-02	1.26E-02	1.30E-02	1.31E-02	1.27E-02	1.22E-02	1.02E-02
ET1-bas	5.33E+02	2.80E+02	1.45E+02	4.90E+01	1.54E+01	8.73E+00	9.42E+00	1.02E+01	9.89E+00	9.00E+00	8.26E+00	6.83E+00
ET2-bas	5.33E+02	2.80E+02	1.45E+02	4.90E+01	1.54E+01	8.73E+00	9.42E+00	1.02E+01	9.89E+00	9.00E+00	8.26E+00	6.83E+00
LN-ET	5.33E+02	2.80E+02	1.45E+02	4.90E+01	1.54E+01	8.73E+00	9.42E+00	1.02E+01	9.89E+00	9.00E+00	8.26E+00	6.83E+00
BBi-bas	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
BBi-sec	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
bbe-sec	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
AI	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
LN-Th	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
Lng_Tiss	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-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	1.33E-01	2.64E-01	3.11E-01	2.38E-01	1.13E-01	6.48E-02	6.57E-02	6.81E-02	6.39E-02	5.94E-02	5.54E-02	4.44E-02
Ovaries	0.0	0.0	9.80E-07	5.30E-04	3.12E-03	3.89E-03	4.10E-03	4.39E-03	4.26E-03	4.13E-03	4.03E-03	3.39E-03
Pancreas	0.0	1.06E-07	2.79E-04	9.80E-03	1.18E-02	1.35E-02	1.41E-02	1.37E-02	1.30E-02	1.24E-02	1.20E-02	9.87E-03
R_Marrow	3.20E-06	1.05E-03	1.09E-02	3.75E-02	3.73E-02	2.61E-02	2.30E-02	2.28E-02	2.15E-02	2.02E-02	1.91E-02	1.64E-02
Skin	7.12E-07	1.98E-03	1.84E-02	4.47E-02	3.16E-02	1.99E-02	2.10E-02	2.23E-02	2.25E-02	2.05E-02	1.92E-02	1.94E-02
Spleen	0.0	3.72E-08	1.43E-04	1.00E-02	1.64E-02	1.50E-02	1.36E-02	1.26E-02	1.15E-02	1.07E-02	1.00E-02	8.32E-03
Testes	0.0	0.0	1.90E-08	7.27E-05	9.37E-04	1.65E-03	1.95E-03	2.23E-03	2.25E-03	2.22E-03	2.20E-03	1.89E-03
Thymus	1.09E-02	4.45E-01	9.61E-01	1.02E+00	4.72E-01	2.60E-01	2.58E-01	2.76E-01	2.47E-01	2.42E-01	2.38E-01	2.00E-01
Thyroid	0.0	1.12E-04	3.70E-03	3.14E-02	3.90E-02	2.58E-02	2.65E-02	2.69E-02	2.52E-02	2.41E-02	2.31E-02	2.02E-02
GB_Wall	0.0	2.82E-08	1.24E-04	6.10E-03	1.35E-02	1.13E-02	1.06E-02	1.11E-02	1.05E-02	1.01E-02	9.74E-03	8.04E-03
Ht_Wall	8.02E-10	7.46E-04	1.66E-02	8.60E-02	8.00E-02	5.01E-02	4.52E-02	4.56E-02	4.90E-02	4.36E-02	3.89E-02	3.22E-02
Uterus	0.0	0.0	8.68E-07	4.98E-04	3.01E-03	3.78E-03	4.01E-03	4.29E-03	4.18E-03	4.04E-03	3.95E-03	3.32E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	9.36E-08	2.57E-04	1.02E-02	1.84E-02	1.72E-02	1.59E-02	1.42E-02	1.27E-02	1.18E-02	1.11E-02	9.65E-03
UB_Wall	0.0	0.0	2.38E-07	2.52E-04	1.97E-03	2.80E-03	3.08E-03	3.36E-03	3.31E-03	3.22E-03	3.16E-03	2.68E-03
Bone_Sur	1.44E-06	5.93E-03	6.50E-02	2.34E-01	1.98E-01	6.84E-02	3.47E-02	2.93E-02	2.73E-02	2.55E-02	2.42E-02	2.09E-02
Brain	0.0	1.12E-04	3.70E-03	3.14E-02	3.90E-02	2.58E-02	2.65E-02	2.69E-02	2.52E-02	2.41E-02	2.31E-02	2.02E-02
Breasts	0.0	6.90E-05	9.11E-03	4.12E-02	3.73E-02	3.34E-02	3.21E-02	3.43E-02	3.33E-02	3.17E-02	3.03E-02	2.48E-02
St_Wall	0.0	1.35E-07	2.41E-04	1.30E-02	1.53E-02	1.28E-02	1.30E-02	1.30E-02	1.18E-02	1.13E-02	1.08E-02	8.94E-03
SI_Wall	0.0	0.0	6.11E-06	1.73E-03	3.20E-03	4.28E-03	4.36E-03	5.09E-03	5.14E-03	4.91E-03	4.75E-03	4.49E-03
ULI_Wall	0.0	2.17E-10	9.91E-06	1.63E-03	4.14E-03	6.31E-03	6.19E-03	6.10E-03	6.05E-03	5.92E-03	5.80E-03	4.83E-03
LLI_Wall	0.0	0.0	1.26E-06	4.59E-04	2.63E-03	3.31E-03	3.59E-03	3.86E-03	3.77E-03	3.66E-03	3.58E-03	3.02E-03
Kidneys	0.0	3.00E-09	3.95E-05	3.74E-03	8.20E-03	8.49E-03	7.56E-03	8.37E-03	9.00E-03	8.40E-03	8.00E-03	6.41E-03
Liver	0.0	2.44E-07	3.17E-04	1.12E-02	1.81E-02	1.37E-02	1.26E-02	1.30E-02	1.31E-02	1.27E-02	1.22E-02	1.02E-02
ET1-bas	5.33E+02	2.80E+02	1.45E+02	4.90E+01	1.54E+01	8.73E+00	9.42E+00	1.02E+01	9.89E+00	9.00E+00	8.26E+00	6.83E+00
ET2-bas	5.33E+02	2.80E+02	1.45E+02	4.90E+01	1.54E+01	8.73E+00	9.42E+00	1.02E+01	9.89E+00	9.00E+00	8.26E+00	6.83E+00
LN-ET	5.33E+02	2.80E+02	1.45E+02	4.90E+01	1.54E+01	8.73E+00	9.42E+00	1.02E+01	9.89E+00	9.00E+00	8.26E+00	6.83E+00
BBi-bas	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
BBi-sec	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
bbe-sec	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
AI	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
LN-Th	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
Lng_Tiss	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-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	1.33E-01	2.64E-01	3.11E-01	2.38E-01	1.13E-01	6.48E-02	6.57E-02	6.81E-02	6.39E-02	5.94E-02	5.54E-02	4.44E-02
Ovaries	0.0	0.0	9.80E-07	5.30E-04	3.12E-03	3.89E-03	4.10E-03	4.39E-03	4.26E-03	4.13E-03	4.03E-03	3.39E-03
Pancreas	0.0	1.06E-07	2.79E-04	9.80E-03	1.18E-02	1.35E-02	1.41E-02	1.37E-02	1.30E-02	1.24E-02	1.20E-02	9.87E-03
R_Marrow	3.20E-06	1.05E-03	1.09E-02	3.75E-02	3.73E-02	2.61E-02	2.30E-02	2.28E-02	2.15E-02	2.02E-02	1.91E-02	1.64E-02
Skin	7.12E-07	1.98E-03	1.84E-02	4.47E-02	3.16E-02	1.99E-02	2.10E-02	2.23E-02	2.25E-02	2.05E-02	1.92E-02	1.94E-02
Spleen	0.0	3.72E-08	1.43E-04	1.00E-02	1.64E-02	1.50E-02	1.36E-02	1.26E-02	1.15E-02	1.07E-02	1.00E-02	8.32E-03
Testes	0.0	0.0	1.90E-08	7.27E-05	9.37E-04	1.65E-03	1.95E-03	2.23E-03	2.25E-03	2.22E-03	2.20E-03	1.89E-03
Thymus	1.09E-02	4.45E-01	9.61E-01	1.02E+00	4.72E-01	2.60E-01	2.58E-01	2.76E-01	2.47E-01	2.42E-01	2.38E-01	2.00E-01
Thyroid	0.0	1.12E-04	3.70E-03	3.14E-02	3.90E-02	2.58E-02	2.65E-02	2.69E-02	2.52E-02	2.41E-02	2.31E-02	2.02E-02
GB_Wall	0.0	2.82E-08	1.24E-04	6.10E-03	1.35E-02	1.13E-02	1.06E-02	1.11E-02	1.05E-02	1.01E-02	9.74E-03	8.04E-03
Ht_Wall	8.02E-10	7.46E-04	1.66E-02	8.60E-02	8.00E-02	5.01E-02	4.52E-02	4.56E-02	4.90E-02	4.36E-02	3.89E-02	3.22E-02
Uterus	0.0	0.0	8.68E-07	4.98E-04	3.01E-03	3.78E-03	4.01E-03	4.29E-03	4.18E-03	4.04E-03	3.95E-03	3.32E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	3.08E-02	2.67E-01	4.60E-01	3.76E-01	2.01E-01	1.16E-01	1.16E-01	1.15E-01	1.06E-01	9.38E-02	8.54E-02	7.18E-02
UB_Wall	0.0	1.67E-08	6.84E-05	3.47E-03	6.09E-03	7.49E-03	7.94E-03	8.30E-03	8.12E-03	7.76E-03	7.42E-03	6.54E-03
Bone_Sur	1.88E-02	2.07E-01	5.10E-01	6.45E-01	3.44E-01	9.95E-02	5.81E-02	5.23E-02	4.74E-02	4.31E-02	4.03E-02	3.54E-02
Brain	0.0	1.74E-07	1.23E-04	3.23E-03	6.70E-03	5.60E-03	5.64E-03	7.33E-03	7.89E-03	7.66E-03	7.34E-03	6.40E-03
Breasts	6.81E-03	1.34E-01	3.07E-01	2.77E-01	1.33E-01	8.13E-02	8.45E-02	8.53E-02	8.49E-02	8.41E-02	8.03E-02	5.99E-02
St_Wall	1.95E-03	3.79E-02	1.10E-01	1.57E-01	9.74E-02	5.99E-02	5.68E-02	5.78E-02	4.67E-02	4.50E-02	4.40E-02	3.62E-02
SI_Wall	0.0	2.62E-05	2.52E-03	2.43E-02	3.10E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
ULI_Wall	0.0	4.86E-05	6.08E-03	2.94E-02	3.21E-02	2.17E-02	2.10E-02	2.26E-02	1.93E-02	1.90E-02	1.88E-02	1.55E-02
LLI_Wall	0.0	2.07E-06	4.79E-04	7.87E-03	1.06E-02	9.24E-03	8.78E-03	1.10E-02	1.19E-02	1.16E-02	1.09E-02	8.18E-03
Kidneys	2.06E-06	5.92E-03	4.19E-02	9.83E-02	7.15E-02	4.65E-02	4.62E-02	5.00E-02	4.14E-02	4.02E-02	3.94E-02	3.13E-02
Liver	4.11E-02	1.98E-01	3.09E-01	2.62E-01	1.34E-01	7.77E-02	7.73E-02	8.10E-02	7.43E-02	6.55E-02	5.98E-02	5.25E-02
ET1-bas	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
ET2-bas	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
LN-ET	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
BBi-bas	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
BBi-sec	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
bbe-sec	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
AI	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
LN-Th	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
Lng_Tiss	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
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	9.68E-02	1.85E-01	1.97E-01	1.42E-01	7.06E-02	4.20E-02	4.34E-02	4.49E-02	4.25E-02	3.98E-02	3.71E-02	2.95E-02
Ovaries	0.0	4.87E-07	4.26E-04	5.98E-03	1.61E-02	1.19E-02	1.28E-02	1.55E-02	1.51E-02	1.33E-02	1.20E-02	9.64E-03
Pancreas	1.14E-04	4.78E-02	1.85E-01	2.68E-01	1.54E-01	9.11E-02	8.97E-02	8.67E-02	8.25E-02	7.82E-02	7.42E-02	6.35E-02
R_Marrow	2.89E-03	2.92E-02	6.68E-02	8.02E-02	5.20E-02	3.37E-02	3.46E-02	3.54E-02	3.24E-02	2.95E-02	2.73E-02	2.34E-02
Skin	3.69E-03	1.41E-02	3.66E-02	5.03E-02	3.27E-02	2.14E-02	2.31E-02	2.39E-02	2.30E-02	2.21E-02	2.13E-02	1.88E-02
Spleen	1.96E-02	1.62E-01	3.19E-01	2.80E-01	1.45E-01	7.87E-02	7.67E-02	7.94E-02	7.32E-02	6.47E-02	5.85E-02	4.72E-02
Testes	0.0	0.0	5.03E-06	9.91E-04	2.37E-03	3.26E-03	3.74E-03	4.04E-03	4.18E-03	4.27E-03	4.30E-03	4.17E-03
Thymus	1.26E-04	3.84E-02	1.63E-01	2.45E-01	1.37E-01	8.11E-02	7.83E-02	7.85E-02	7.84E-02	6.88E-02	6.11E-02	4.88E-02
Thyroid	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
GB_Wall	4.26E-07	3.15E-03	4.33E-02	1.26E-01	8.70E-02	5.53E-02	5.09E-02	5.02E-02	5.04E-02	4.36E-02	3.87E-02	3.43E-02
Ht_Wall	8.51E-02	4.14E-01	6.76E-01	5.64E-01	2.63E-01	1.47E-01	1.47E-01	1.47E-01	1.45E-01	1.35E-01	1.23E-01	9.09E-02
Uterus	0.0	2.59E-07	3.24E-04	6.57E-03	1.55E-02	1.00E-02	1.10E-02	1.30E-02	1.21E-02	1.08E-02	1.01E-02	9.20E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	3.08E-02	2.67E-01	4.60E-01	3.76E-01	2.01E-01	1.16E-01	1.16E-01	1.15E-01	1.06E-01	9.38E-02	8.54E-02	7.18E-02
UB_Wall	0.0	1.67E-08	6.84E-05	3.47E-03	6.09E-03	7.49E-03	7.94E-03	8.30E-03	8.12E-03	7.76E-03	7.42E-03	6.54E-03
Bone_Sur	1.88E-02	2.07E-01	5.10E-01	6.45E-01	3.44E-01	9.95E-02	5.81E-02	5.23E-02	4.74E-02	4.31E-02	4.03E-02	3.54E-02
Brain	0.0	1.74E-07	1.23E-04	3.23E-03	6.70E-03	5.60E-03	5.64E-03	7.33E-03	7.89E-03	7.66E-03	7.34E-03	6.40E-03
Breasts	6.81E-03	1.34E-01	3.07E-01	2.77E-01	1.33E-01	8.13E-02	8.45E-02	8.53E-02	8.49E-02	8.41E-02	8.03E-02	5.99E-02
St_Wall	1.95E-03	3.79E-02	1.10E-01	1.57E-01	9.74E-02	5.99E-02	5.68E-02	5.78E-02	4.67E-02	4.50E-02	4.40E-02	3.62E-02
SI_Wall	0.0	2.62E-05	2.52E-03	2.43E-02	3.10E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
ULI_Wall	0.0	4.86E-05	6.08E-03	2.94E-02	3.21E-02	2.17E-02	2.10E-02	2.26E-02	1.93E-02	1.90E-02	1.88E-02	1.55E-02
LLI_Wall	0.0	2.07E-06	4.79E-04	7.87E-03	1.06E-02	9.24E-03	8.78E-03	1.10E-02	1.19E-02	1.16E-02	1.09E-02	8.18E-03
Kidneys	2.06E-06	5.92E-03	4.19E-02	9.83E-02	7.15E-02	4.65E-02	4.62E-02	5.00E-02	4.14E-02	4.02E-02	3.94E-02	3.13E-02
Liver	4.11E-02	1.98E-01	3.09E-01	2.62E-01	1.34E-01	7.77E-02	7.73E-02	8.10E-02	7.43E-02	6.55E-02	5.98E-02	5.25E-02
ET1-bas	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
ET2-bas	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
LN-ET	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
BBi-bas	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
BBi-sec	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
bbe-sec	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
AI	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
LN-Th	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
Lng_Tiss	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
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	9.68E-02	1.85E-01	1.97E-01	1.42E-01	7.06E-02	4.20E-02	4.34E-02	4.49E-02	4.25E-02	3.98E-02	3.71E-02	2.95E-02
Ovaries	0.0	4.87E-07	4.26E-04	5.98E-03	1.61E-02	1.19E-02	1.28E-02	1.55E-02	1.51E-02	1.33E-02	1.20E-02	9.64E-03
Pancreas	1.14E-04	4.78E-02	1.85E-01	2.68E-01	1.54E-01	9.11E-02	8.97E-02	8.67E-02	8.25E-02	7.82E-02	7.42E-02	6.35E-02
R_Marrow	2.89E-03	2.92E-02	6.68E-02	8.02E-02	5.20E-02	3.37E-02	3.46E-02	3.54E-02	3.24E-02	2.95E-02	2.73E-02	2.34E-02
Skin	3.69E-03	1.41E-02	3.66E-02	5.03E-02	3.27E-02	2.14E-02	2.31E-02	2.39E-02	2.30E-02	2.21E-02	2.13E-02	1.88E-02
Spleen	1.96E-02	1.62E-01	3.19E-01	2.80E-01	1.45E-01	7.87E-02	7.67E-02	7.94E-02	7.32E-02	6.47E-02	5.85E-02	4.72E-02
Testes	0.0	0.0	5.03E-06	9.91E-04	2.37E-03	3.26E-03	3.74E-03	4.04E-03	4.18E-03	4.27E-03	4.30E-03	4.17E-03
Thymus	1.26E-04	3.84E-02	1.63E-01	2.45E-01	1.37E-01	8.11E-02	7.83E-02	7.85E-02	7.84E-02	6.88E-02	6.11E-02	4.88E-02
Thyroid	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
GB_Wall	4.26E-07	3.15E-03	4.33E-02	1.26E-01	8.70E-02	5.53E-02	5.09E-02	5.02E-02	5.04E-02	4.36E-02	3.87E-02	3.43E-02
Ht_Wall	8.51E-02	4.14E-01	6.76E-01	5.64E-01	2.63E-01	1.47E-01	1.47E-01	1.47E-01	1.45E-01	1.35E-01	1.23E-01	9.09E-02
Uterus	0.0	2.59E-07	3.24E-04	6.57E-03	1.55E-02	1.00E-02	1.10E-02	1.30E-02	1.21E-02	1.08E-02	1.01E-02	9.20E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	3.08E-02	2.67E-01	4.60E-01	3.76E-01	2.01E-01	1.16E-01	1.16E-01	1.15E-01	1.06E-01	9.38E-02	8.54E-02	7.18E-02
UB_Wall	0.0	1.67E-08	6.84E-05	3.47E-03	6.09E-03	7.49E-03	7.94E-03	8.30E-03	8.12E-03	7.76E-03	7.42E-03	6.54E-03
Bone_Sur	1.88E-02	2.07E-01	5.10E-01	6.45E-01	3.44E-01	9.95E-02	5.81E-02	5.23E-02	4.74E-02	4.31E-02	4.03E-02	3.54E-02
Brain	0.0	1.74E-07	1.23E-04	3.23E-03	6.70E-03	5.60E-03	5.64E-03	7.33E-03	7.89E-03	7.66E-03	7.34E-03	6.40E-03
Breasts	6.81E-03	1.34E-01	3.07E-01	2.77E-01	1.33E-01	8.13E-02	8.45E-02	8.53E-02	8.49E-02	8.41E-02	8.03E-02	5.99E-02
St_Wall	1.95E-03	3.79E-02	1.10E-01	1.57E-01	9.74E-02	5.99E-02	5.68E-02	5.78E-02	4.67E-02	4.50E-02	4.40E-02	3.62E-02
SI_Wall	0.0	2.62E-05	2.52E-03	2.43E-02	3.10E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
ULI_Wall	0.0	4.86E-05	6.08E-03	2.94E-02	3.21E-02	2.17E-02	2.10E-02	2.26E-02	1.93E-02	1.90E-02	1.88E-02	1.55E-02
LLI_Wall	0.0	2.07E-06	4.79E-04	7.87E-03	1.06E-02	9.24E-03	8.78E-03	1.10E-02	1.19E-02	1.16E-02	1.09E-02	8.18E-03
Kidneys	2.06E-06	5.92E-03	4.19E-02	9.83E-02	7.15E-02	4.65E-02	4.62E-02	5.00E-02	4.14E-02	4.02E-02	3.94E-02	3.13E-02
Liver	4.11E-02	1.98E-01	3.09E-01	2.62E-01	1.34E-01	7.77E-02	7.73E-02	8.10E-02	7.43E-02	6.55E-02	5.98E-02	5.25E-02
ET1-bas	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
ET2-bas	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
LN-ET	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
BBi-bas	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
BBi-sec	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
bbe-sec	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
AI	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
LN-Th	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
Lng_Tiss	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
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	9.68E-02	1.85E-01	1.97E-01	1.42E-01	7.06E-02	4.20E-02	4.34E-02	4.49E-02	4.25E-02	3.98E-02	3.71E-02	2.95E-02
Ovaries	0.0	4.87E-07	4.26E-04	5.98E-03	1.61E-02	1.19E-02	1.28E-02	1.55E-02	1.51E-02	1.33E-02	1.20E-02	9.64E-03
Pancreas	1.14E-04	4.78E-02	1.85E-01	2.68E-01	1.54E-01	9.11E-02	8.97E-02	8.67E-02	8.25E-02	7.82E-02	7.42E-02	6.35E-02
R_Marrow	2.89E-03	2.92E-02	6.68E-02	8.02E-02	5.20E-02	3.37E-02	3.46E-02	3.54E-02	3.24E-02	2.95E-02	2.73E-02	2.34E-02
Skin	3.69E-03	1.41E-02	3.66E-02	5.03E-02	3.27E-02	2.14E-02	2.31E-02	2.39E-02	2.30E-02	2.21E-02	2.13E-02	1.88E-02
Spleen	1.96E-02	1.62E-01	3.19E-01	2.80E-01	1.45E-01	7.87E-02	7.67E-02	7.94E-02	7.32E-02	6.47E-02	5.85E-02	4.72E-02
Testes	0.0	0.0	5.03E-06	9.91E-04	2.37E-03	3.26E-03	3.74E-03	4.04E-03	4.18E-03	4.27E-03	4.30E-03	4.17E-03
Thymus	1.26E-04	3.84E-02	1.63E-01	2.45E-01	1.37E-01	8.11E-02	7.83E-02	7.85E-02	7.84E-02	6.88E-02	6.11E-02	4.88E-02
Thyroid	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
GB_Wall	4.26E-07	3.15E-03	4.33E-02	1.26E-01	8.70E-02	5.53E-02	5.09E-02	5.02E-02	5.04E-02	4.36E-02	3.87E-02	3.43E-02
Ht_Wall	8.51E-02	4.14E-01	6.76E-01	5.64E-01	2.63E-01	1.47E-01	1.47E-01	1.47E-01	1.45E-01	1.35E-01	1.23E-01	9.09E-02
Uterus	0.0	2.59E-07	3.24E-04	6.57E-03	1.55E-02	1.00E-02	1.10E-02	1.30E-02	1.21E-02	1.08E-02	1.01E-02	9.20E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	3.08E-02	2.67E-01	4.60E-01	3.76E-01	2.01E-01	1.16E-01	1.16E-01	1.15E-01	1.06E-01	9.38E-02	8.54E-02	7.18E-02
UB_Wall	0.0	1.67E-08	6.84E-05	3.47E-03	6.09E-03	7.49E-03	7.94E-03	8.30E-03	8.12E-03	7.76E-03	7.42E-03	6.54E-03
Bone_Sur	1.88E-02	2.07E-01	5.10E-01	6.45E-01	3.44E-01	9.95E-02	5.81E-02	5.23E-02	4.74E-02	4.31E-02	4.03E-02	3.54E-02
Brain	0.0	1.74E-07	1.23E-04	3.23E-03	6.70E-03	5.60E-03	5.64E-03	7.33E-03	7.89E-03	7.66E-03	7.34E-03	6.40E-03
Breasts	6.81E-03	1.34E-01	3.07E-01	2.77E-01	1.33E-01	8.13E-02	8.45E-02	8.53E-02	8.49E-02	8.41E-02	8.03E-02	5.99E-02
St_Wall	1.95E-03	3.79E-02	1.10E-01	1.57E-01	9.74E-02	5.99E-02	5.68E-02	5.78E-02	4.67E-02	4.50E-02	4.40E-02	3.62E-02
SI_Wall	0.0	2.62E-05	2.52E-03	2.43E-02	3.10E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
ULI_Wall	0.0	4.86E-05	6.08E-03	2.94E-02	3.21E-02	2.17E-02	2.10E-02	2.26E-02	1.93E-02	1.90E-02	1.88E-02	1.55E-02
LLI_Wall	0.0	2.07E-06	4.79E-04	7.87E-03	1.06E-02	9.24E-03	8.78E-03	1.10E-02	1.19E-02	1.16E-02	1.09E-02	8.18E-03
Kidneys	2.06E-06	5.92E-03	4.19E-02	9.83E-02	7.15E-02	4.65E-02	4.62E-02	5.00E-02	4.14E-02	4.02E-02	3.94E-02	3.13E-02
Liver	4.11E-02	1.98E-01	3.09E-01	2.62E-01	1.34E-01	7.77E-02	7.73E-02	8.10E-02	7.43E-02	6.55E-02	5.98E-02	5.25E-02
ET1-bas	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
ET2-bas	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
LN-ET	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
BBi-bas	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
BBi-sec	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
bbe-sec	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
AI	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
LN-Th	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
Lng_Tiss	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
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	9.68E-02	1.85E-01	1.97E-01	1.42E-01	7.06E-02	4.20E-02	4.34E-02	4.49E-02	4.25E-02	3.98E-02	3.71E-02	2.95E-02
Ovaries	0.0	4.87E-07	4.26E-04	5.98E-03	1.61E-02	1.19E-02	1.28E-02	1.55E-02	1.51E-02	1.33E-02	1.20E-02	9.64E-03
Pancreas	1.14E-04	4.78E-02	1.85E-01	2.68E-01	1.54E-01	9.11E-02	8.97E-02	8.67E-02	8.25E-02	7.82E-02	7.42E-02	6.35E-02
R_Marrow	2.89E-03	2.92E-02	6.68E-02	8.02E-02	5.20E-02	3.37E-02	3.46E-02	3.54E-02	3.24E-02	2.95E-02	2.73E-02	2.34E-02
Skin	3.69E-03	1.41E-02	3.66E-02	5.03E-02	3.27E-02	2.14E-02	2.31E-02	2.39E-02	2.30E-02	2.21E-02	2.13E-02	1.88E-02
Spleen	1.96E-02	1.62E-01	3.19E-01	2.80E-01	1.45E-01	7.87E-02	7.67E-02	7.94E-02	7.32E-02	6.47E-02	5.85E-02	4.72E-02
Testes	0.0	0.0	5.03E-06	9.91E-04	2.37E-03	3.26E-03	3.74E-03	4.04E-03	4.18E-03	4.27E-03	4.30E-03	4.17E-03
Thymus	1.26E-04	3.84E-02	1.63E-01	2.45E-01	1.37E-01	8.11E-02	7.83E-02	7.85E-02	7.84E-02	6.88E-02	6.11E-02	4.88E-02
Thyroid	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
GB_Wall	4.26E-07	3.15E-03	4.33E-02	1.26E-01	8.70E-02	5.53E-02	5.09E-02	5.02E-02	5.04E-02	4.36E-02	3.87E-02	3.43E-02
Ht_Wall	8.51E-02	4.14E-01	6.76E-01	5.64E-01	2.63E-01	1.47E-01	1.47E-01	1.47E-01	1.45E-01	1.35E-01	1.23E-01	9.09E-02
Uterus	0.0	2.59E-07	3.24E-04	6.57E-03	1.55E-02	1.00E-02	1.10E-02	1.30E-02	1.21E-02	1.08E-02	1.01E-02	9.20E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	3.08E-02	2.67E-01	4.60E-01	3.76E-01	2.01E-01	1.16E-01	1.16E-01	1.15E-01	1.06E-01	9.38E-02	8.54E-02	7.18E-02
UB_Wall	0.0	1.67E-08	6.84E-05	3.47E-03	6.09E-03	7.49E-03	7.94E-03	8.30E-03	8.12E-03	7.76E-03	7.42E-03	6.54E-03
Bone_Sur	1.88E-02	2.07E-01	5.10E-01	6.45E-01	3.44E-01	9.95E-02	5.81E-02	5.23E-02	4.74E-02	4.31E-02	4.03E-02	3.54E-02
Brain	0.0	1.74E-07	1.23E-04	3.23E-03	6.70E-03	5.60E-03	5.64E-03	7.33E-03	7.89E-03	7.66E-03	7.34E-03	6.40E-03
Breasts	6.81E-03	1.34E-01	3.07E-01	2.77E-01	1.33E-01	8.13E-02	8.45E-02	8.53E-02	8.49E-02	8.41E-02	8.03E-02	5.99E-02
St_Wall	1.95E-03	3.79E-02	1.10E-01	1.57E-01	9.74E-02	5.99E-02	5.68E-02	5.78E-02	4.67E-02	4.50E-02	4.40E-02	3.62E-02
SI_Wall	0.0	2.62E-05	2.52E-03	2.43E-02	3.10E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
ULI_Wall	0.0	4.86E-05	6.08E-03	2.94E-02	3.21E-02	2.17E-02	2.10E-02	2.26E-02	1.93E-02	1.90E-02	1.88E-02	1.55E-02
LLI_Wall	0.0	2.07E-06	4.79E-04	7.87E-03	1.06E-02	9.24E-03	8.78E-03	1.10E-02	1.19E-02	1.16E-02	1.09E-02	8.18E-03
Kidneys	2.06E-06	5.92E-03	4.19E-02	9.83E-02	7.15E-02	4.65E-02	4.62E-02	5.00E-02	4.14E-02	4.02E-02	3.94E-02	3.13E-02
Liver	4.11E-02	1.98E-01	3.09E-01	2.62E-01	1.34E-01	7.77E-02	7.73E-02	8.10E-02	7.43E-02	6.55E-02	5.98E-02	5.25E-02
ET1-bas	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
ET2-bas	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
LN-ET	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
BBi-bas	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
BBi-sec	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
bbe-sec	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
AI	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
LN-Th	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
Lng_Tiss	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
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	9.68E-02	1.85E-01	1.97E-01	1.42E-01	7.06E-02	4.20E-02	4.34E-02	4.49E-02	4.25E-02	3.98E-02	3.71E-02	2.95E-02
Ovaries	0.0	4.87E-07	4.26E-04	5.98E-03	1.61E-02	1.19E-02	1.28E-02	1.55E-02	1.51E-02	1.33E-02	1.20E-02	9.64E-03
Pancreas	1.14E-04	4.78E-02	1.85E-01	2.68E-01	1.54E-01	9.11E-02	8.97E-02	8.67E-02	8.25E-02	7.82E-02	7.42E-02	6.35E-02
R_Marrow	2.89E-03	2.92E-02	6.68E-02	8.02E-02	5.20E-02	3.37E-02	3.46E-02	3.54E-02	3.24E-02	2.95E-02	2.73E-02	2.34E-02
Skin	3.69E-03	1.41E-02	3.66E-02	5.03E-02	3.27E-02	2.14E-02	2.31E-02	2.39E-02	2.30E-02	2.21E-02	2.13E-02	1.88E-02
Spleen	1.96E-02	1.62E-01	3.19E-01	2.80E-01	1.45E-01	7.87E-02	7.67E-02	7.94E-02	7.32E-02	6.47E-02	5.85E-02	4.72E-02
Testes	0.0	0.0	5.03E-06	9.91E-04	2.37E-03	3.26E-03	3.74E-03	4.04E-03	4.18E-03	4.27E-03	4.30E-03	4.17E-03
Thymus	1.26E-04	3.84E-02	1.63E-01	2.45E-01	1.37E-01	8.11E-02	7.83E-02	7.85E-02	7.84E-02	6.88E-02	6.11E-02	4.88E-02
Thyroid	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
GB_Wall	4.26E-07	3.15E-03	4.33E-02	1.26E-01	8.70E-02	5.53E-02	5.09E-02	5.02E-02	5.04E-02	4.36E-02	3.87E-02	3.43E-02
Ht_Wall	8.51E-02	4.14E-01	6.76E-01	5.64E-01	2.63E-01	1.47E-01	1.47E-01	1.47E-01	1.45E-01	1.35E-01	1.23E-01	9.09E-02
Uterus	0.0	2.59E-07	3.24E-04	6.57E-03	1.55E-02	1.00E-02	1.10E-02	1.30E-02	1.21E-02	1.08E-02	1.01E-02	9.20E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	3.08E-02	2.67E-01	4.60E-01	3.76E-01	2.01E-01	1.16E-01	1.16E-01	1.15E-01	1.06E-01	9.38E-02	8.54E-02	7.18E-02
UB_Wall	0.0	1.67E-08	6.84E-05	3.47E-03	6.09E-03	7.49E-03	7.94E-03	8.30E-03	8.12E-03	7.76E-03	7.42E-03	6.54E-03
Bone_Sur	1.88E-02	2.07E-01	5.10E-01	6.45E-01	3.44E-01	9.95E-02	5.81E-02	5.23E-02	4.74E-02	4.31E-02	4.03E-02	3.54E-02
Brain	0.0	1.74E-07	1.23E-04	3.23E-03	6.70E-03	5.60E-03	5.64E-03	7.33E-03	7.89E-03	7.66E-03	7.34E-03	6.40E-03
Breasts	6.81E-03	1.34E-01	3.07E-01	2.77E-01	1.33E-01	8.13E-02	8.45E-02	8.53E-02	8.49E-02	8.41E-02	8.03E-02	5.99E-02
St_Wall	1.95E-03	3.79E-02	1.10E-01	1.57E-01	9.74E-02	5.99E-02	5.68E-02	5.78E-02	4.67E-02	4.50E-02	4.40E-02	3.62E-02
SI_Wall	0.0	2.62E-05	2.52E-03	2.43E-02	3.10E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
ULI_Wall	0.0	4.86E-05	6.08E-03	2.94E-02	3.21E-02	2.17E-02	2.10E-02	2.26E-02	1.93E-02	1.90E-02	1.88E-02	1.55E-02
LLI_Wall	0.0	2.07E-06	4.79E-04	7.87E-03	1.06E-02	9.24E-03	8.78E-03	1.10E-02	1.19E-02	1.16E-02	1.09E-02	8.18E-03
Kidneys	2.06E-06	5.92E-03	4.19E-02	9.83E-02	7.15E-02	4.65E-02	4.62E-02	5.00E-02	4.14E-02	4.02E-02	3.94E-02	3.13E-02
Liver	4.11E-02	1.98E-01	3.09E-01	2.62E-01	1.34E-01	7.77E-02	7.73E-02	8.10E-02	7.43E-02	6.55E-02	5.98E-02	5.25E-02
ET1-bas	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
ET2-bas	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
LN-ET	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
BBi-bas	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
BBi-sec	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
bbe-sec	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
AI	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
LN-Th	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
Lng_Tiss	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
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	9.68E-02	1.85E-01	1.97E-01	1.42E-01	7.06E-02	4.20E-02	4.34E-02	4.49E-02	4.25E-02	3.98E-02	3.71E-02	2.95E-02
Ovaries	0.0	4.87E-07	4.26E-04	5.98E-03	1.61E-02	1.19E-02	1.28E-02	1.55E-02	1.51E-02	1.33E-02	1.20E-02	9.64E-03
Pancreas	1.14E-04	4.78E-02	1.85E-01	2.68E-01	1.54E-01	9.11E-02	8.97E-02	8.67E-02	8.25E-02	7.82E-02	7.42E-02	6.35E-02
R_Marrow	2.89E-03	2.92E-02	6.68E-02	8.02E-02	5.20E-02	3.37E-02	3.46E-02	3.54E-02	3.24E-02	2.95E-02	2.73E-02	2.34E-02
Skin	3.69E-03	1.41E-02	3.66E-02	5.03E-02	3.27E-02	2.14E-02	2.31E-02	2.39E-02	2.30E-02	2.21E-02	2.13E-02	1.88E-02
Spleen	1.96E-02	1.62E-01	3.19E-01	2.80E-01	1.45E-01	7.87E-02	7.67E-02	7.94E-02	7.32E-02	6.47E-02	5.85E-02	4.72E-02
Testes	0.0	0.0	5.03E-06	9.91E-04	2.37E-03	3.26E-03	3.74E-03	4.04E-03	4.18E-03	4.27E-03	4.30E-03	4.17E-03
Thymus	1.26E-04	3.84E-02	1.63E-01	2.45E-01	1.37E-01	8.11E-02	7.83E-02	7.85E-02	7.84E-02	6.88E-02	6.11E-02	4.88E-02
Thyroid	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
GB_Wall	4.26E-07	3.15E-03	4.33E-02	1.26E-01	8.70E-02	5.53E-02	5.09E-02	5.02E-02	5.04E-02	4.36E-02	3.87E-02	3.43E-02
Ht_Wall	8.51E-02	4.14E-01	6.76E-01	5.64E-01	2.63E-01	1.47E-01	1.47E-01	1.47E-01	1.45E-01	1.35E-01	1.23E-01	9.09E-02
Uterus	0.0	2.59E-07	3.24E-04	6.57E-03	1.55E-02	1.00E-02	1.10E-02	1.30E-02	1.21E-02	1.08E-02	1.01E-02	9.20E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

Source = bbe-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	3.08E-02	2.67E-01	4.60E-01	3.76E-01	2.01E-01	1.16E-01	1.16E-01	1.15E-01	1.06E-01	9.38E-02	8.54E-02	7.18E-02
UB_Wall	0.0	1.67E-08	6.84E-05	3.47E-03	6.09E-03	7.49E-03	7.94E-03	8.30E-03	8.12E-03	7.76E-03	7.42E-03	6.54E-03
Bone_Sur	1.88E-02	2.07E-01	5.10E-01	6.45E-01	3.44E-01	9.95E-02	5.81E-02	5.23E-02	4.74E-02	4.31E-02	4.03E-02	3.54E-02
Brain	0.0	1.74E-07	1.23E-04	3.23E-03	6.70E-03	5.60E-03	5.64E-03	7.33E-03	7.89E-03	7.66E-03	7.34E-03	6.40E-03
Breasts	6.81E-03	1.34E-01	3.07E-01	2.77E-01	1.33E-01	8.13E-02	8.45E-02	8.53E-02	8.49E-02	8.41E-02	8.03E-02	5.99E-02
St_Wall	1.95E-03	3.79E-02	1.10E-01	1.57E-01	9.74E-02	5.99E-02	5.68E-02	5.78E-02	4.67E-02	4.50E-02	4.40E-02	3.62E-02
SI_Wall	0.0	2.62E-05	2.52E-03	2.43E-02	3.10E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
ULI_Wall	0.0	4.86E-05	6.08E-03	2.94E-02	3.21E-02	2.17E-02	2.10E-02	2.26E-02	1.93E-02	1.90E-02	1.88E-02	1.55E-02
LLI_Wall	0.0	2.07E-06	4.79E-04	7.87E-03	1.06E-02	9.24E-03	8.78E-03	1.10E-02	1.19E-02	1.16E-02	1.09E-02	8.18E-03
Kidneys	2.06E-06	5.92E-03	4.19E-02	9.83E-02	7.15E-02	4.65E-02	4.62E-02	5.00E-02	4.14E-02	4.02E-02	3.94E-02	3.13E-02
Liver	4.11E-02	1.98E-01	3.09E-01	2.62E-01	1.34E-01	7.77E-02	7.73E-02	8.10E-02	7.43E-02	6.55E-02	5.98E-02	5.25E-02
ET1-bas	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
ET2-bas	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
LN-ET	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
BBi-bas	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
BBi-sec	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
bbe-sec	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
AI	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
LN-Th	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
Lng_Tiss	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
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	9.68E-02	1.85E-01	1.97E-01	1.42E-01	7.06E-02	4.20E-02	4.34E-02	4.49E-02	4.25E-02	3.98E-02	3.71E-02	2.95E-02
Ovaries	0.0	4.87E-07	4.26E-04	5.98E-03	1.61E-02	1.19E-02	1.28E-02	1.55E-02	1.51E-02	1.33E-02	1.20E-02	9.64E-03
Pancreas	1.14E-04	4.78E-02	1.85E-01	2.68E-01	1.54E-01	9.11E-02	8.97E-02	8.67E-02	8.25E-02	7.82E-02	7.42E-02	6.35E-02
R_Marrow	2.89E-03	2.92E-02	6.68E-02	8.02E-02	5.20E-02	3.37E-02	3.46E-02	3.54E-02	3.24E-02	2.95E-02	2.73E-02	2.34E-02
Skin	3.69E-03	1.41E-02	3.66E-02	5.03E-02	3.27E-02	2.14E-02	2.31E-02	2.39E-02	2.30E-02	2.21E-02	2.13E-02	1.88E-02
Spleen	1.96E-02	1.62E-01	3.19E-01	2.80E-01	1.45E-01	7.87E-02	7.67E-02	7.94E-02	7.32E-02	6.47E-02	5.85E-02	4.72E-02
Testes	0.0	0.0	5.03E-06	9.91E-04	2.37E-03	3.26E-03	3.74E-03	4.04E-03	4.18E-03	4.27E-03	4.30E-03	4.17E-03
Thymus	1.26E-04	3.84E-02	1.63E-01	2.45E-01	1.37E-01	8.11E-02	7.83E-02	7.85E-02	7.84E-02	6.88E-02	6.11E-02	4.88E-02
Thyroid	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
GB_Wall	4.26E-07	3.15E-03	4.33E-02	1.26E-01	8.70E-02	5.53E-02	5.09E-02	5.02E-02	5.04E-02	4.36E-02	3.87E-02	3.43E-02
Ht_Wall	8.51E-02	4.14E-01	6.76E-01	5.64E-01	2.63E-01	1.47E-01	1.47E-01	1.47E-01	1.45E-01	1.35E-01	1.23E-01	9.09E-02
Uterus	0.0	2.59E-07	3.24E-04	6.57E-03	1.55E-02	1.00E-02	1.10E-02	1.30E-02	1.21E-02	1.08E-02	1.01E-02	9.20E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

Source = bbe-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	3.08E-02	2.67E-01	4.60E-01	3.76E-01	2.01E-01	1.16E-01	1.16E-01	1.15E-01	1.06E-01	9.38E-02	8.54E-02	7.18E-02
UB_Wall	0.0	1.67E-08	6.84E-05	3.47E-03	6.09E-03	7.49E-03	7.94E-03	8.30E-03	8.12E-03	7.76E-03	7.42E-03	6.54E-03
Bone_Sur	1.88E-02	2.07E-01	5.10E-01	6.45E-01	3.44E-01	9.95E-02	5.81E-02	5.23E-02	4.74E-02	4.31E-02	4.03E-02	3.54E-02
Brain	0.0	1.74E-07	1.23E-04	3.23E-03	6.70E-03	5.60E-03	5.64E-03	7.33E-03	7.89E-03	7.66E-03	7.34E-03	6.40E-03
Breasts	6.81E-03	1.34E-01	3.07E-01	2.77E-01	1.33E-01	8.13E-02	8.45E-02	8.53E-02	8.49E-02	8.41E-02	8.03E-02	5.99E-02
St_Wall	1.95E-03	3.79E-02	1.10E-01	1.57E-01	9.74E-02	5.99E-02	5.68E-02	5.78E-02	4.67E-02	4.50E-02	4.40E-02	3.62E-02
SI_Wall	0.0	2.62E-05	2.52E-03	2.43E-02	3.10E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
ULI_Wall	0.0	4.86E-05	6.08E-03	2.94E-02	3.21E-02	2.17E-02	2.10E-02	2.26E-02	1.93E-02	1.90E-02	1.88E-02	1.55E-02
LLI_Wall	0.0	2.07E-06	4.79E-04	7.87E-03	1.06E-02	9.24E-03	8.78E-03	1.10E-02	1.19E-02	1.16E-02	1.09E-02	8.18E-03
Kidneys	2.06E-06	5.92E-03	4.19E-02	9.83E-02	7.15E-02	4.65E-02	4.62E-02	5.00E-02	4.14E-02	4.02E-02	3.94E-02	3.13E-02
Liver	4.11E-02	1.98E-01	3.09E-01	2.62E-01	1.34E-01	7.77E-02	7.73E-02	8.10E-02	7.43E-02	6.55E-02	5.98E-02	5.25E-02
ET1-bas	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
ET2-bas	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
LN-ET	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
BBi-bas	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
BBi-sec	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
bbe-sec	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
AI	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
LN-Th	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
Lng_Tiss	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
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	9.68E-02	1.85E-01	1.97E-01	1.42E-01	7.06E-02	4.20E-02	4.34E-02	4.49E-02	4.25E-02	3.98E-02	3.71E-02	2.95E-02
Ovaries	0.0	4.87E-07	4.26E-04	5.98E-03	1.61E-02	1.19E-02	1.28E-02	1.55E-02	1.51E-02	1.33E-02	1.20E-02	9.64E-03
Pancreas	1.14E-04	4.78E-02	1.85E-01	2.68E-01	1.54E-01	9.11E-02	8.97E-02	8.67E-02	8.25E-02	7.82E-02	7.42E-02	6.35E-02
R_Marrow	2.89E-03	2.92E-02	6.68E-02	8.02E-02	5.20E-02	3.37E-02	3.46E-02	3.54E-02	3.24E-02	2.95E-02	2.73E-02	2.34E-02
Skin	3.69E-03	1.41E-02	3.66E-02	5.03E-02	3.27E-02	2.14E-02	2.31E-02	2.39E-02	2.30E-02	2.21E-02	2.13E-02	1.88E-02
Spleen	1.96E-02	1.62E-01	3.19E-01	2.80E-01	1.45E-01	7.87E-02	7.67E-02	7.94E-02	7.32E-02	6.47E-02	5.85E-02	4.72E-02
Testes	0.0	0.0	5.03E-06	9.91E-04	2.37E-03	3.26E-03	3.74E-03	4.04E-03	4.18E-03	4.27E-03	4.30E-03	4.17E-03
Thymus	1.26E-04	3.84E-02	1.63E-01	2.45E-01	1.37E-01	8.11E-02	7.83E-02	7.85E-02	7.84E-02	6.88E-02	6.11E-02	4.88E-02
Thyroid	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
GB_Wall	4.26E-07	3.15E-03	4.33E-02	1.26E-01	8.70E-02	5.53E-02	5.09E-02	5.02E-02	5.04E-02	4.36E-02	3.87E-02	3.43E-02
Ht_Wall	8.51E-02	4.14E-01	6.76E-01	5.64E-01	2.63E-01	1.47E-01	1.47E-01	1.47E-01	1.45E-01	1.35E-01	1.23E-01	9.09E-02
Uterus	0.0	2.59E-07	3.24E-04	6.57E-03	1.55E-02	1.00E-02	1.10E-02	1.30E-02	1.21E-02	1.08E-02	1.01E-02	9.20E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	3.08E-02	2.67E-01	4.60E-01	3.76E-01	2.01E-01	1.16E-01	1.16E-01	1.15E-01	1.06E-01	9.38E-02	8.54E-02	7.18E-02
UB_Wall	0.0	1.67E-08	6.84E-05	3.47E-03	6.09E-03	7.49E-03	7.94E-03	8.30E-03	8.12E-03	7.76E-03	7.42E-03	6.54E-03
Bone_Sur	1.88E-02	2.07E-01	5.10E-01	6.45E-01	3.44E-01	9.95E-02	5.81E-02	5.23E-02	4.74E-02	4.31E-02	4.03E-02	3.54E-02
Brain	0.0	1.74E-07	1.23E-04	3.23E-03	6.70E-03	5.60E-03	5.64E-03	7.33E-03	7.89E-03	7.66E-03	7.34E-03	6.40E-03
Breasts	6.81E-03	1.34E-01	3.07E-01	2.77E-01	1.33E-01	8.13E-02	8.45E-02	8.53E-02	8.49E-02	8.41E-02	8.03E-02	5.99E-02
St_Wall	1.95E-03	3.79E-02	1.10E-01	1.57E-01	9.74E-02	5.99E-02	5.68E-02	5.78E-02	4.67E-02	4.50E-02	4.40E-02	3.62E-02
SI_Wall	0.0	2.62E-05	2.52E-03	2.43E-02	3.10E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
ULI_Wall	0.0	4.86E-05	6.08E-03	2.94E-02	3.21E-02	2.17E-02	2.10E-02	2.26E-02	1.93E-02	1.90E-02	1.88E-02	1.55E-02
LLI_Wall	0.0	2.07E-06	4.79E-04	7.87E-03	1.06E-02	9.24E-03	8.78E-03	1.10E-02	1.19E-02	1.16E-02	1.09E-02	8.18E-03
Kidneys	2.06E-06	5.92E-03	4.19E-02	9.83E-02	7.15E-02	4.65E-02	4.62E-02	5.00E-02	4.14E-02	4.02E-02	3.94E-02	3.13E-02
Liver	4.11E-02	1.98E-01	3.09E-01	2.62E-01	1.34E-01	7.77E-02	7.73E-02	8.10E-02	7.43E-02	6.55E-02	5.98E-02	5.25E-02
ET1-bas	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
ET2-bas	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
LN-ET	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
BBi-bas	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
BBi-sec	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
bbe-sec	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
AI	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
LN-Th	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
Lng_Tiss	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
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	9.68E-02	1.85E-01	1.97E-01	1.42E-01	7.06E-02	4.20E-02	4.34E-02	4.49E-02	4.25E-02	3.98E-02	3.71E-02	2.95E-02
Ovaries	0.0	4.87E-07	4.26E-04	5.98E-03	1.61E-02	1.19E-02	1.28E-02	1.55E-02	1.51E-02	1.33E-02	1.20E-02	9.64E-03
Pancreas	1.14E-04	4.78E-02	1.85E-01	2.68E-01	1.54E-01	9.11E-02	8.97E-02	8.67E-02	8.25E-02	7.82E-02	7.42E-02	6.35E-02
R_Marrow	2.89E-03	2.92E-02	6.68E-02	8.02E-02	5.20E-02	3.37E-02	3.46E-02	3.54E-02	3.24E-02	2.95E-02	2.73E-02	2.34E-02
Skin	3.69E-03	1.41E-02	3.66E-02	5.03E-02	3.27E-02	2.14E-02	2.31E-02	2.39E-02	2.30E-02	2.21E-02	2.13E-02	1.88E-02
Spleen	1.96E-02	1.62E-01	3.19E-01	2.80E-01	1.45E-01	7.87E-02	7.67E-02	7.94E-02	7.32E-02	6.47E-02	5.85E-02	4.72E-02
Testes	0.0	0.0	5.03E-06	9.91E-04	2.37E-03	3.26E-03	3.74E-03	4.04E-03	4.18E-03	4.27E-03	4.30E-03	4.17E-03
Thymus	1.26E-04	3.84E-02	1.63E-01	2.45E-01	1.37E-01	8.11E-02	7.83E-02	7.85E-02	7.84E-02	6.88E-02	6.11E-02	4.88E-02
Thyroid	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
GB_Wall	4.26E-07	3.15E-03	4.33E-02	1.26E-01	8.70E-02	5.53E-02	5.09E-02	5.02E-02	5.04E-02	4.36E-02	3.87E-02	3.43E-02
Ht_Wall	8.51E-02	4.14E-01	6.76E-01	5.64E-01	2.63E-01	1.47E-01	1.47E-01	1.47E-01	1.45E-01	1.35E-01	1.23E-01	9.09E-02
Uterus	0.0	2.59E-07	3.24E-04	6.57E-03	1.55E-02	1.00E-02	1.10E-02	1.30E-02	1.21E-02	1.08E-02	1.01E-02	9.20E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	3.08E-02	2.67E-01	4.60E-01	3.76E-01	2.01E-01	1.16E-01	1.16E-01	1.15E-01	1.06E-01	9.38E-02	8.54E-02	7.18E-02
UB_Wall	0.0	1.67E-08	6.84E-05	3.47E-03	6.09E-03	7.49E-03	7.94E-03	8.30E-03	8.12E-03	7.76E-03	7.42E-03	6.54E-03
Bone_Sur	1.88E-02	2.07E-01	5.10E-01	6.45E-01	3.44E-01	9.95E-02	5.81E-02	5.23E-02	4.74E-02	4.31E-02	4.03E-02	3.54E-02
Brain	0.0	1.74E-07	1.23E-04	3.23E-03	6.70E-03	5.60E-03	5.64E-03	7.33E-03	7.89E-03	7.66E-03	7.34E-03	6.40E-03
Breasts	6.81E-03	1.34E-01	3.07E-01	2.77E-01	1.33E-01	8.13E-02	8.45E-02	8.53E-02	8.49E-02	8.41E-02	8.03E-02	5.99E-02
St_Wall	1.95E-03	3.79E-02	1.10E-01	1.57E-01	9.74E-02	5.99E-02	5.68E-02	5.78E-02	4.67E-02	4.50E-02	4.40E-02	3.62E-02
SI_Wall	0.0	2.62E-05	2.52E-03	2.43E-02	3.10E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
ULI_Wall	0.0	4.86E-05	6.08E-03	2.94E-02	3.21E-02	2.17E-02	2.10E-02	2.26E-02	1.93E-02	1.90E-02	1.88E-02	1.55E-02
LLI_Wall	0.0	2.07E-06	4.79E-04	7.87E-03	1.06E-02	9.24E-03	8.78E-03	1.10E-02	1.19E-02	1.16E-02	1.09E-02	8.18E-03
Kidneys	2.06E-06	5.92E-03	4.19E-02	9.83E-02	7.15E-02	4.65E-02	4.62E-02	5.00E-02	4.14E-02	4.02E-02	3.94E-02	3.13E-02
Liver	4.11E-02	1.98E-01	3.09E-01	2.62E-01	1.34E-01	7.77E-02	7.73E-02	8.10E-02	7.43E-02	6.55E-02	5.98E-02	5.25E-02
ET1-bas	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
ET2-bas	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
LN-ET	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
BBi-bas	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
BBi-sec	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
bbe-sec	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
AI	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
LN-Th	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
Lng_Tiss	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
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	9.68E-02	1.85E-01	1.97E-01	1.42E-01	7.06E-02	4.20E-02	4.34E-02	4.49E-02	4.25E-02	3.98E-02	3.71E-02	2.95E-02
Ovaries	0.0	4.87E-07	4.26E-04	5.98E-03	1.61E-02	1.19E-02	1.28E-02	1.55E-02	1.51E-02	1.33E-02	1.20E-02	9.64E-03
Pancreas	1.14E-04	4.78E-02	1.85E-01	2.68E-01	1.54E-01	9.11E-02	8.97E-02	8.67E-02	8.25E-02	7.82E-02	7.42E-02	6.35E-02
R_Marrow	2.89E-03	2.92E-02	6.68E-02	8.02E-02	5.20E-02	3.37E-02	3.46E-02	3.54E-02	3.24E-02	2.95E-02	2.73E-02	2.34E-02
Skin	3.69E-03	1.41E-02	3.66E-02	5.03E-02	3.27E-02	2.14E-02	2.31E-02	2.39E-02	2.30E-02	2.21E-02	2.13E-02	1.88E-02
Spleen	1.96E-02	1.62E-01	3.19E-01	2.80E-01	1.45E-01	7.87E-02	7.67E-02	7.94E-02	7.32E-02	6.47E-02	5.85E-02	4.72E-02
Testes	0.0	0.0	5.03E-06	9.91E-04	2.37E-03	3.26E-03	3.74E-03	4.04E-03	4.18E-03	4.27E-03	4.30E-03	4.17E-03
Thymus	1.26E-04	3.84E-02	1.63E-01	2.45E-01	1.37E-01	8.11E-02	7.83E-02	7.85E-02	7.84E-02	6.88E-02	6.11E-02	4.88E-02
Thyroid	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
GB_Wall	4.26E-07	3.15E-03	4.33E-02	1.26E-01	8.70E-02	5.53E-02	5.09E-02	5.02E-02	5.04E-02	4.36E-02	3.87E-02	3.43E-02
Ht_Wall	8.51E-02	4.14E-01	6.76E-01	5.64E-01	2.63E-01	1.47E-01	1.47E-01	1.47E-01	1.45E-01	1.35E-01	1.23E-01	9.09E-02
Uterus	0.0	2.59E-07	3.24E-04	6.57E-03	1.55E-02	1.00E-02	1.10E-02	1.30E-02	1.21E-02	1.08E-02	1.01E-02	9.20E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

Source = Lng_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	3.08E-02	2.67E-01	4.60E-01	3.76E-01	2.01E-01	1.16E-01	1.16E-01	1.15E-01	1.06E-01	9.38E-02	8.54E-02	7.18E-02
UB_Wall	0.0	1.67E-08	6.84E-05	3.47E-03	6.09E-03	7.49E-03	7.94E-03	8.30E-03	8.12E-03	7.76E-03	7.42E-03	6.54E-03
Bone_Sur	1.88E-02	2.07E-01	5.10E-01	6.45E-01	3.44E-01	9.95E-02	5.81E-02	5.23E-02	4.74E-02	4.31E-02	4.03E-02	3.54E-02
Brain	0.0	1.74E-07	1.23E-04	3.23E-03	6.70E-03	5.60E-03	5.64E-03	7.33E-03	7.89E-03	7.66E-03	7.34E-03	6.40E-03
Breasts	6.81E-03	1.34E-01	3.07E-01	2.77E-01	1.33E-01	8.13E-02	8.45E-02	8.53E-02	8.49E-02	8.41E-02	8.03E-02	5.99E-02
St_Wall	1.95E-03	3.79E-02	1.10E-01	1.57E-01	9.74E-02	5.99E-02	5.68E-02	5.78E-02	4.67E-02	4.50E-02	4.40E-02	3.62E-02
SI_Wall	0.0	2.62E-05	2.52E-03	2.43E-02	3.10E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
ULI_Wall	0.0	4.86E-05	6.08E-03	2.94E-02	3.21E-02	2.17E-02	2.10E-02	2.26E-02	1.93E-02	1.90E-02	1.88E-02	1.55E-02
LLI_Wall	0.0	2.07E-06	4.79E-04	7.87E-03	1.06E-02	9.24E-03	8.78E-03	1.10E-02	1.19E-02	1.16E-02	1.09E-02	8.18E-03
Kidneys	2.06E-06	5.92E-03	4.19E-02	9.83E-02	7.15E-02	4.65E-02	4.62E-02	5.00E-02	4.14E-02	4.02E-02	3.94E-02	3.13E-02
Liver	4.11E-02	1.98E-01	3.09E-01	2.62E-01	1.34E-01	7.77E-02	7.73E-02	8.10E-02	7.43E-02	6.55E-02	5.98E-02	5.25E-02
ET1-bas	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
ET2-bas	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
LN-ET	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
BBi-bas	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
BBi-sec	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
bbe-sec	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
AI	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
LN-Th	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
Lng_Tiss	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
Lung_NP	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
Lung_TB	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
Lung_P	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
Muscle	9.68E-02	1.85E-01	1.97E-01	1.42E-01	7.06E-02	4.20E-02	4.34E-02	4.49E-02	4.25E-02	3.98E-02	3.71E-02	2.95E-02
Ovaries	0.0	4.87E-07	4.26E-04	5.98E-03	1.61E-02	1.19E-02	1.28E-02	1.55E-02	1.51E-02	1.33E-02	1.20E-02	9.64E-03
Pancreas	1.14E-04	4.78E-02	1.85E-01	2.68E-01	1.54E-01	9.11E-02	8.97E-02	8.67E-02	8.25E-02	7.82E-02	7.42E-02	6.35E-02
R_Marrow	2.89E-03	2.92E-02	6.68E-02	8.02E-02	5.20E-02	3.37E-02	3.46E-02	3.54E-02	3.24E-02	2.95E-02	2.73E-02	2.34E-02
Skin	3.69E-03	1.41E-02	3.66E-02	5.03E-02	3.27E-02	2.14E-02	2.31E-02	2.39E-02	2.30E-02	2.21E-02	2.13E-02	1.88E-02
Spleen	1.96E-02	1.62E-01	3.19E-01	2.80E-01	1.45E-01	7.87E-02	7.67E-02	7.94E-02	7.32E-02	6.47E-02	5.85E-02	4.72E-02
Testes	0.0	0.0	5.03E-06	9.91E-04	2.37E-03	3.26E-03	3.74E-03	4.04E-03	4.18E-03	4.27E-03	4.30E-03	4.17E-03
Thymus	1.26E-04	3.84E-02	1.63E-01	2.45E-01	1.37E-01	8.11E-02	7.83E-02	7.85E-02	7.84E-02	6.88E-02	6.11E-02	4.88E-02
Thyroid	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
GB_Wall	4.26E-07	3.15E-03	4.33E-02	1.26E-01	8.70E-02	5.53E-02	5.09E-02	5.02E-02	5.04E-02	4.36E-02	3.87E-02	3.43E-02
Ht_Wall	8.51E-02	4.14E-01	6.76E-01	5.64E-01	2.63E-01	1.47E-01	1.47E-01	1.47E-01	1.45E-01	1.35E-01	1.23E-01	9.09E-02
Uterus	0.0	2.59E-07	3.24E-04	6.57E-03	1.55E-02	1.00E-02	1.10E-02	1.30E-02	1.21E-02	1.08E-02	1.01E-02	9.20E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

Source = Lng_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	3.08E-02	2.67E-01	4.60E-01	3.76E-01	2.01E-01	1.16E-01	1.16E-01	1.15E-01	1.06E-01	9.38E-02	8.54E-02	7.18E-02
UB_Wall	0.0	1.67E-08	6.84E-05	3.47E-03	6.09E-03	7.49E-03	7.94E-03	8.30E-03	8.12E-03	7.76E-03	7.42E-03	6.54E-03
Bone_Sur	1.88E-02	2.07E-01	5.10E-01	6.45E-01	3.44E-01	9.95E-02	5.81E-02	5.23E-02	4.74E-02	4.31E-02	4.03E-02	3.54E-02
Brain	0.0	1.74E-07	1.23E-04	3.23E-03	6.70E-03	5.60E-03	5.64E-03	7.33E-03	7.89E-03	7.66E-03	7.34E-03	6.40E-03
Breasts	6.81E-03	1.34E-01	3.07E-01	2.77E-01	1.33E-01	8.13E-02	8.45E-02	8.53E-02	8.49E-02	8.41E-02	8.03E-02	5.99E-02
St_Wall	1.95E-03	3.79E-02	1.10E-01	1.57E-01	9.74E-02	5.99E-02	5.68E-02	5.78E-02	4.67E-02	4.50E-02	4.40E-02	3.62E-02
SI_Wall	0.0	2.62E-05	2.52E-03	2.43E-02	3.10E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
ULI_Wall	0.0	4.86E-05	6.08E-03	2.94E-02	3.21E-02	2.17E-02	2.10E-02	2.26E-02	1.93E-02	1.90E-02	1.88E-02	1.55E-02
LLI_Wall	0.0	2.07E-06	4.79E-04	7.87E-03	1.06E-02	9.24E-03	8.78E-03	1.10E-02	1.19E-02	1.16E-02	1.09E-02	8.18E-03
Kidneys	2.06E-06	5.92E-03	4.19E-02	9.83E-02	7.15E-02	4.65E-02	4.62E-02	5.00E-02	4.14E-02	4.02E-02	3.94E-02	3.13E-02
Liver	4.11E-02	1.98E-01	3.09E-01	2.62E-01	1.34E-01	7.77E-02	7.73E-02	8.10E-02	7.43E-02	6.55E-02	5.98E-02	5.25E-02
ET1-bas	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
ET2-bas	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
LN-ET	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
BBi-bas	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
BBi-sec	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
bbe-sec	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
AI	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
LN-Th	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
Lng_Tiss	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
Lung_NP	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
Lung_TB	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
Lung_P	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
Muscle	9.68E-02	1.85E-01	1.97E-01	1.42E-01	7.06E-02	4.20E-02	4.34E-02	4.49E-02	4.25E-02	3.98E-02	3.71E-02	2.95E-02
Ovaries	0.0	4.87E-07	4.26E-04	5.98E-03	1.61E-02	1.19E-02	1.28E-02	1.55E-02	1.51E-02	1.33E-02	1.20E-02	9.64E-03
Pancreas	1.14E-04	4.78E-02	1.85E-01	2.68E-01	1.54E-01	9.11E-02	8.97E-02	8.67E-02	8.25E-02	7.82E-02	7.42E-02	6.35E-02
R_Marrow	2.89E-03	2.92E-02	6.68E-02	8.02E-02	5.20E-02	3.37E-02	3.46E-02	3.54E-02	3.24E-02	2.95E-02	2.73E-02	2.34E-02
Skin	3.69E-03	1.41E-02	3.66E-02	5.03E-02	3.27E-02	2.14E-02	2.31E-02	2.39E-02	2.30E-02	2.21E-02	2.13E-02	1.88E-02
Spleen	1.96E-02	1.62E-01	3.19E-01	2.80E-01	1.45E-01	7.87E-02	7.67E-02	7.94E-02	7.32E-02	6.47E-02	5.85E-02	4.72E-02
Testes	0.0	0.0	5.03E-06	9.91E-04	2.37E-03	3.26E-03	3.74E-03	4.04E-03	4.18E-03	4.27E-03	4.30E-03	4.17E-03
Thymus	1.26E-04	3.84E-02	1.63E-01	2.45E-01	1.37E-01	8.11E-02	7.83E-02	7.85E-02	7.84E-02	6.88E-02	6.11E-02	4.88E-02
Thyroid	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
GB_Wall	4.26E-07	3.15E-03	4.33E-02	1.26E-01	8.70E-02	5.53E-02	5.09E-02	5.02E-02	5.04E-02	4.36E-02	3.87E-02	3.43E-02
Ht_Wall	8.51E-02	4.14E-01	6.76E-01	5.64E-01	2.63E-01	1.47E-01	1.47E-01	1.47E-01	1.45E-01	1.35E-01	1.23E-01	9.09E-02
Uterus	0.0	2.59E-07	3.24E-04	6.57E-03	1.55E-02	1.00E-02	1.10E-02	1.30E-02	1.21E-02	1.08E-02	1.01E-02	9.20E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	9.36E-08	2.57E-04	1.02E-02	1.84E-02	1.72E-02	1.59E-02	1.42E-02	1.27E-02	1.18E-02	1.11E-02	9.65E-03
UB_Wall	0.0	0.0	2.38E-07	2.52E-04	1.97E-03	2.80E-03	3.08E-03	3.36E-03	3.31E-03	3.22E-03	3.16E-03	2.68E-03
Bone_Sur	1.44E-06	5.93E-03	6.50E-02	2.34E-01	1.98E-01	6.84E-02	3.47E-02	2.93E-02	2.73E-02	2.55E-02	2.42E-02	2.09E-02
Brain	0.0	1.12E-04	3.70E-03	3.14E-02	3.90E-02	2.58E-02	2.65E-02	2.69E-02	2.52E-02	2.41E-02	2.31E-02	2.02E-02
Breasts	0.0	6.90E-05	9.11E-03	4.12E-02	3.73E-02	3.34E-02	3.21E-02	3.43E-02	3.33E-02	3.17E-02	3.03E-02	2.48E-02
St_Wall	0.0	1.35E-07	2.41E-04	1.30E-02	1.53E-02	1.28E-02	1.30E-02	1.30E-02	1.18E-02	1.13E-02	1.08E-02	8.94E-03
SI_Wall	0.0	0.0	6.11E-06	1.73E-03	3.20E-03	4.28E-03	4.36E-03	5.09E-03	5.14E-03	4.91E-03	4.75E-03	4.49E-03
ULI_Wall	0.0	2.17E-10	9.91E-06	1.63E-03	4.14E-03	6.31E-03	6.19E-03	6.10E-03	6.05E-03	5.92E-03	5.80E-03	4.83E-03
LLI_Wall	0.0	0.0	1.26E-06	4.59E-04	2.63E-03	3.31E-03	3.59E-03	3.86E-03	3.77E-03	3.66E-03	3.58E-03	3.02E-03
Kidneys	0.0	3.00E-09	3.95E-05	3.74E-03	8.20E-03	8.49E-03	7.56E-03	8.37E-03	9.00E-03	8.40E-03	8.00E-03	6.41E-03
Liver	0.0	2.44E-07	3.17E-04	1.12E-02	1.81E-02	1.37E-02	1.26E-02	1.30E-02	1.31E-02	1.27E-02	1.22E-02	1.02E-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	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
Lung_NP	5.33E+02	2.80E+02	1.45E+02	4.90E+01	1.54E+01	8.73E+00	9.42E+00	1.02E+01	9.89E+00	9.00E+00	8.26E+00	6.83E+00
Lung_TB	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
Lung_P	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
Muscle	1.33E-01	2.64E-01	3.11E-01	2.38E-01	1.13E-01	6.48E-02	6.57E-02	6.81E-02	6.39E-02	5.94E-02	5.54E-02	4.44E-02
Ovaries	0.0	0.0	9.80E-07	5.30E-04	3.12E-03	3.89E-03	4.10E-03	4.39E-03	4.26E-03	4.13E-03	4.03E-03	3.39E-03
Pancreas	0.0	1.06E-07	2.79E-04	9.80E-03	1.18E-02	1.35E-02	1.41E-02	1.37E-02	1.30E-02	1.24E-02	1.20E-02	9.87E-03
R_Marrow	3.20E-06	1.05E-03	1.09E-02	3.75E-02	3.73E-02	2.61E-02	2.30E-02	2.28E-02	2.15E-02	2.02E-02	1.91E-02	1.64E-02
Skin	7.12E-07	1.98E-03	1.84E-02	4.47E-02	3.16E-02	1.99E-02	2.10E-02	2.23E-02	2.25E-02	2.05E-02	1.92E-02	1.94E-02
Spleen	0.0	3.72E-08	1.43E-04	1.00E-02	1.64E-02	1.50E-02	1.36E-02	1.26E-02	1.15E-02	1.07E-02	1.00E-02	8.32E-03
Testes	0.0	0.0	1.90E-08	7.27E-05	9.37E-04	1.65E-03	1.95E-03	2.23E-03	2.25E-03	2.22E-03	2.20E-03	1.89E-03
Thymus	1.09E-02	4.45E-01	9.61E-01	1.02E+00	4.72E-01	2.60E-01	2.58E-01	2.76E-01	2.47E-01	2.42E-01	2.38E-01	2.00E-01
Thyroid	0.0	1.12E-04	3.70E-03	3.14E-02	3.90E-02	2.58E-02	2.65E-02	2.69E-02	2.52E-02	2.41E-02	2.31E-02	2.02E-02
GB_Wall	0.0	2.82E-08	1.24E-04	6.10E-03	1.35E-02	1.13E-02	1.06E-02	1.11E-02	1.05E-02	1.01E-02	9.74E-03	8.04E-03
Ht_Wall	8.02E-10	7.46E-04	1.66E-02	8.60E-02	8.00E-02	5.01E-02	4.52E-02	4.56E-02	4.90E-02	4.36E-02	3.89E-02	3.22E-02
Uterus	0.0	0.0	8.68E-07	4.98E-04	3.01E-03	3.78E-03	4.01E-03	4.29E-03	4.18E-03	4.04E-03	3.95E-03	3.32E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	3.08E-02	2.67E-01	4.60E-01	3.76E-01	2.01E-01	1.16E-01	1.16E-01	1.15E-01	1.06E-01	9.38E-02	8.54E-02	7.18E-02
UB_Wall	0.0	1.67E-08	6.84E-05	3.47E-03	6.09E-03	7.49E-03	7.94E-03	8.30E-03	8.12E-03	7.76E-03	7.42E-03	6.54E-03
Bone_Sur	1.88E-02	2.07E-01	5.10E-01	6.45E-01	3.44E-01	9.95E-02	5.81E-02	5.23E-02	4.74E-02	4.31E-02	4.03E-02	3.54E-02
Brain	0.0	1.74E-07	1.23E-04	3.23E-03	6.70E-03	5.60E-03	5.64E-03	7.33E-03	7.89E-03	7.66E-03	7.34E-03	6.40E-03
Breasts	6.81E-03	1.34E-01	3.07E-01	2.77E-01	1.33E-01	8.13E-02	8.45E-02	8.53E-02	8.49E-02	8.41E-02	8.03E-02	5.99E-02
St_Wall	1.95E-03	3.79E-02	1.10E-01	1.57E-01	9.74E-02	5.99E-02	5.68E-02	5.78E-02	4.67E-02	4.50E-02	4.40E-02	3.62E-02
SI_Wall	0.0	2.62E-05	2.52E-03	2.43E-02	3.10E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
ULI_Wall	0.0	4.86E-05	6.08E-03	2.94E-02	3.21E-02	2.17E-02	2.10E-02	2.26E-02	1.93E-02	1.90E-02	1.88E-02	1.55E-02
LLI_Wall	0.0	2.07E-06	4.79E-04	7.87E-03	1.06E-02	9.24E-03	8.78E-03	1.10E-02	1.19E-02	1.16E-02	1.09E-02	8.18E-03
Kidneys	2.06E-06	5.92E-03	4.19E-02	9.83E-02	7.15E-02	4.65E-02	4.62E-02	5.00E-02	4.14E-02	4.02E-02	3.94E-02	3.13E-02
Liver	4.11E-02	1.98E-01	3.09E-01	2.62E-01	1.34E-01	7.77E-02	7.73E-02	8.10E-02	7.43E-02	6.55E-02	5.98E-02	5.25E-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	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
Lung_NP	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
Lung_TB	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
Lung_P	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
Muscle	9.68E-02	1.85E-01	1.97E-01	1.42E-01	7.06E-02	4.20E-02	4.34E-02	4.49E-02	4.25E-02	3.98E-02	3.71E-02	2.95E-02
Ovaries	0.0	4.87E-07	4.26E-04	5.98E-03	1.61E-02	1.19E-02	1.28E-02	1.55E-02	1.51E-02	1.33E-02	1.20E-02	9.64E-03
Pancreas	1.14E-04	4.78E-02	1.85E-01	2.68E-01	1.54E-01	9.11E-02	8.97E-02	8.67E-02	8.25E-02	7.82E-02	7.42E-02	6.35E-02
R_Marrow	2.89E-03	2.92E-02	6.68E-02	8.02E-02	5.20E-02	3.37E-02	3.46E-02	3.54E-02	3.24E-02	2.95E-02	2.73E-02	2.34E-02
Skin	3.69E-03	1.41E-02	3.66E-02	5.03E-02	3.27E-02	2.14E-02	2.31E-02	2.39E-02	2.30E-02	2.21E-02	2.13E-02	1.88E-02
Spleen	1.96E-02	1.62E-01	3.19E-01	2.80E-01	1.45E-01	7.87E-02	7.67E-02	7.94E-02	7.32E-02	6.47E-02	5.85E-02	4.72E-02
Testes	0.0	0.0	5.03E-06	9.91E-04	2.37E-03	3.26E-03	3.74E-03	4.04E-03	4.18E-03	4.27E-03	4.30E-03	4.17E-03
Thymus	1.26E-04	3.84E-02	1.63E-01	2.45E-01	1.37E-01	8.11E-02	7.83E-02	7.85E-02	7.84E-02	6.88E-02	6.11E-02	4.88E-02
Thyroid	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
GB_Wall	4.26E-07	3.15E-03	4.33E-02	1.26E-01	8.70E-02	5.53E-02	5.09E-02	5.02E-02	5.04E-02	4.36E-02	3.87E-02	3.43E-02
Ht_Wall	8.51E-02	4.14E-01	6.76E-01	5.64E-01	2.63E-01	1.47E-01	1.47E-01	1.47E-01	1.45E-01	1.35E-01	1.23E-01	9.09E-02
Uterus	0.0	2.59E-07	3.24E-04	6.57E-03	1.55E-02	1.00E-02	1.10E-02	1.30E-02	1.21E-02	1.08E-02	1.01E-02	9.20E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	3.08E-02	2.67E-01	4.60E-01	3.76E-01	2.01E-01	1.16E-01	1.16E-01	1.15E-01	1.06E-01	9.38E-02	8.54E-02	7.18E-02
UB_Wall	0.0	1.67E-08	6.84E-05	3.47E-03	6.09E-03	7.49E-03	7.94E-03	8.30E-03	8.12E-03	7.76E-03	7.42E-03	6.54E-03
Bone_Sur	1.88E-02	2.07E-01	5.10E-01	6.45E-01	3.44E-01	9.95E-02	5.81E-02	5.23E-02	4.74E-02	4.31E-02	4.03E-02	3.54E-02
Brain	0.0	1.74E-07	1.23E-04	3.23E-03	6.70E-03	5.60E-03	5.64E-03	7.33E-03	7.89E-03	7.66E-03	7.34E-03	6.40E-03
Breasts	6.81E-03	1.34E-01	3.07E-01	2.77E-01	1.33E-01	8.13E-02	8.45E-02	8.53E-02	8.49E-02	8.41E-02	8.03E-02	5.99E-02
St_Wall	1.95E-03	3.79E-02	1.10E-01	1.57E-01	9.74E-02	5.99E-02	5.68E-02	5.78E-02	4.67E-02	4.50E-02	4.40E-02	3.62E-02
SI_Wall	0.0	2.62E-05	2.52E-03	2.43E-02	3.10E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
ULI_Wall	0.0	4.86E-05	6.08E-03	2.94E-02	3.21E-02	2.17E-02	2.10E-02	2.26E-02	1.93E-02	1.90E-02	1.88E-02	1.55E-02
LLI_Wall	0.0	2.07E-06	4.79E-04	7.87E-03	1.06E-02	9.24E-03	8.78E-03	1.10E-02	1.19E-02	1.16E-02	1.09E-02	8.18E-03
Kidneys	2.06E-06	5.92E-03	4.19E-02	9.83E-02	7.15E-02	4.65E-02	4.62E-02	5.00E-02	4.14E-02	4.02E-02	3.94E-02	3.13E-02
Liver	4.11E-02	1.98E-01	3.09E-01	2.62E-01	1.34E-01	7.77E-02	7.73E-02	8.10E-02	7.43E-02	6.55E-02	5.98E-02	5.25E-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	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
Lung_NP	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
Lung_TB	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
Lung_P	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
Muscle	9.68E-02	1.85E-01	1.97E-01	1.42E-01	7.06E-02	4.20E-02	4.34E-02	4.49E-02	4.25E-02	3.98E-02	3.71E-02	2.95E-02
Ovaries	0.0	4.87E-07	4.26E-04	5.98E-03	1.61E-02	1.19E-02	1.28E-02	1.55E-02	1.51E-02	1.33E-02	1.20E-02	9.64E-03
Pancreas	1.14E-04	4.78E-02	1.85E-01	2.68E-01	1.54E-01	9.11E-02	8.97E-02	8.67E-02	8.25E-02	7.82E-02	7.42E-02	6.35E-02
R_Marrow	2.89E-03	2.92E-02	6.68E-02	8.02E-02	5.20E-02	3.37E-02	3.46E-02	3.54E-02	3.24E-02	2.95E-02	2.73E-02	2.34E-02
Skin	3.69E-03	1.41E-02	3.66E-02	5.03E-02	3.27E-02	2.14E-02	2.31E-02	2.39E-02	2.30E-02	2.21E-02	2.13E-02	1.88E-02
Spleen	1.96E-02	1.62E-01	3.19E-01	2.80E-01	1.45E-01	7.87E-02	7.67E-02	7.94E-02	7.32E-02	6.47E-02	5.85E-02	4.72E-02
Testes	0.0	0.0	5.03E-06	9.91E-04	2.37E-03	3.26E-03	3.74E-03	4.04E-03	4.18E-03	4.27E-03	4.30E-03	4.17E-03
Thymus	1.26E-04	3.84E-02	1.63E-01	2.45E-01	1.37E-01	8.11E-02	7.83E-02	7.85E-02	7.84E-02	6.88E-02	6.11E-02	4.88E-02
Thyroid	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
GB_Wall	4.26E-07	3.15E-03	4.33E-02	1.26E-01	8.70E-02	5.53E-02	5.09E-02	5.02E-02	5.04E-02	4.36E-02	3.87E-02	3.43E-02
Ht_Wall	8.51E-02	4.14E-01	6.76E-01	5.64E-01	2.63E-01	1.47E-01	1.47E-01	1.47E-01	1.45E-01	1.35E-01	1.23E-01	9.09E-02
Uterus	0.0	2.59E-07	3.24E-04	6.57E-03	1.55E-02	1.00E-02	1.10E-02	1.30E-02	1.21E-02	1.08E-02	1.01E-02	9.20E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	3.08E-02	2.67E-01	4.60E-01	3.76E-01	2.01E-01	1.16E-01	1.16E-01	1.15E-01	1.06E-01	9.38E-02	8.54E-02	7.18E-02
UB_Wall	0.0	1.67E-08	6.84E-05	3.47E-03	6.09E-03	7.49E-03	7.94E-03	8.30E-03	8.12E-03	7.76E-03	7.42E-03	6.54E-03
Bone_Sur	1.88E-02	2.07E-01	5.10E-01	6.45E-01	3.44E-01	9.95E-02	5.81E-02	5.23E-02	4.74E-02	4.31E-02	4.03E-02	3.54E-02
Brain	0.0	1.74E-07	1.23E-04	3.23E-03	6.70E-03	5.60E-03	5.64E-03	7.33E-03	7.89E-03	7.66E-03	7.34E-03	6.40E-03
Breasts	6.81E-03	1.34E-01	3.07E-01	2.77E-01	1.33E-01	8.13E-02	8.45E-02	8.53E-02	8.49E-02	8.41E-02	8.03E-02	5.99E-02
St_Wall	1.95E-03	3.79E-02	1.10E-01	1.57E-01	9.74E-02	5.99E-02	5.68E-02	5.78E-02	4.67E-02	4.50E-02	4.40E-02	3.62E-02
SI_Wall	0.0	2.62E-05	2.52E-03	2.43E-02	3.10E-02	1.92E-02	1.89E-02	2.03E-02	1.93E-02	1.91E-02	1.86E-02	1.50E-02
ULI_Wall	0.0	4.86E-05	6.08E-03	2.94E-02	3.21E-02	2.17E-02	2.10E-02	2.26E-02	1.93E-02	1.90E-02	1.88E-02	1.55E-02
LLI_Wall	0.0	2.07E-06	4.79E-04	7.87E-03	1.06E-02	9.24E-03	8.78E-03	1.10E-02	1.19E-02	1.16E-02	1.09E-02	8.18E-03
Kidneys	2.06E-06	5.92E-03	4.19E-02	9.83E-02	7.15E-02	4.65E-02	4.62E-02	5.00E-02	4.14E-02	4.02E-02	3.94E-02	3.13E-02
Liver	4.11E-02	1.98E-01	3.09E-01	2.62E-01	1.34E-01	7.77E-02	7.73E-02	8.10E-02	7.43E-02	6.55E-02	5.98E-02	5.25E-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	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
Lung_NP	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
Lung_TB	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
Lung_P	1.50E+01	8.73E+00	4.86E+00	1.83E+00	6.08E-01	3.37E-01	3.55E-01	3.93E-01	3.65E-01	3.32E-01	3.05E-01	2.33E-01
Muscle	9.68E-02	1.85E-01	1.97E-01	1.42E-01	7.06E-02	4.20E-02	4.34E-02	4.49E-02	4.25E-02	3.98E-02	3.71E-02	2.95E-02
Ovaries	0.0	4.87E-07	4.26E-04	5.98E-03	1.61E-02	1.19E-02	1.28E-02	1.55E-02	1.51E-02	1.33E-02	1.20E-02	9.64E-03
Pancreas	1.14E-04	4.78E-02	1.85E-01	2.68E-01	1.54E-01	9.11E-02	8.97E-02	8.67E-02	8.25E-02	7.82E-02	7.42E-02	6.35E-02
R_Marrow	2.89E-03	2.92E-02	6.68E-02	8.02E-02	5.20E-02	3.37E-02	3.46E-02	3.54E-02	3.24E-02	2.95E-02	2.73E-02	2.34E-02
Skin	3.69E-03	1.41E-02	3.66E-02	5.03E-02	3.27E-02	2.14E-02	2.31E-02	2.39E-02	2.30E-02	2.21E-02	2.13E-02	1.88E-02
Spleen	1.96E-02	1.62E-01	3.19E-01	2.80E-01	1.45E-01	7.87E-02	7.67E-02	7.94E-02	7.32E-02	6.47E-02	5.85E-02	4.72E-02
Testes	0.0	0.0	5.03E-06	9.91E-04	2.37E-03	3.26E-03	3.74E-03	4.04E-03	4.18E-03	4.27E-03	4.30E-03	4.17E-03
Thymus	1.26E-04	3.84E-02	1.63E-01	2.45E-01	1.37E-01	8.11E-02	7.83E-02	7.85E-02	7.84E-02	6.88E-02	6.11E-02	4.88E-02
Thyroid	1.12E-07	2.91E-03	5.09E-02	1.26E-01	9.23E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
GB_Wall	4.26E-07	3.15E-03	4.33E-02	1.26E-01	8.70E-02	5.53E-02	5.09E-02	5.02E-02	5.04E-02	4.36E-02	3.87E-02	3.43E-02
Ht_Wall	8.51E-02	4.14E-01	6.76E-01	5.64E-01	2.63E-01	1.47E-01	1.47E-01	1.47E-01	1.45E-01	1.35E-01	1.23E-01	9.09E-02
Uterus	0.0	2.59E-07	3.24E-04	6.57E-03	1.55E-02	1.00E-02	1.10E-02	1.30E-02	1.21E-02	1.08E-02	1.01E-02	9.20E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	8.01E-02	1.53E-01	1.74E-01	1.36E-01	7.54E-02	4.64E-02	4.72E-02	4.90E-02	4.64E-02	4.32E-02	4.03E-02	3.20E-02
UB_Wall	1.35E-01	2.07E-01	2.38E-01	1.94E-01	9.83E-02	5.73E-02	5.81E-02	6.09E-02	5.70E-02	5.28E-02	4.91E-02	3.91E-02
Bone_Sur	1.39E-01	3.29E-01	4.92E-01	5.54E-01	2.95E-01	1.04E-01	6.31E-02	4.83E-02	4.56E-02	4.24E-02	3.94E-02	3.20E-02
Brain	1.73E-04	5.29E-03	1.94E-02	3.37E-02	2.39E-02	1.57E-02	1.60E-02	1.74E-02	1.67E-02	1.59E-02	1.50E-02	1.22E-02
Breasts	7.10E-02	9.49E-02	9.47E-02	7.24E-02	3.95E-02	2.59E-02	2.76E-02	3.12E-02	3.09E-02	2.87E-02	2.67E-02	2.16E-02
St_Wall	9.48E-02	1.68E-01	1.95E-01	1.57E-01	8.18E-02	4.90E-02	4.96E-02	5.18E-02	4.86E-02	4.49E-02	4.17E-02	3.32E-02
SI_Wall	3.26E-02	8.51E-02	1.37E-01	1.50E-01	8.90E-02	5.27E-02	5.23E-02	5.27E-02	4.96E-02	4.57E-02	4.25E-02	3.50E-02
ULI_Wall	3.13E-02	8.62E-02	1.36E-01	1.44E-01	8.36E-02	5.01E-02	4.98E-02	5.12E-02	4.84E-02	4.46E-02	4.13E-02	3.30E-02
LLI_Wall	7.09E-02	1.44E-01	1.92E-01	1.80E-01	9.68E-02	5.73E-02	5.75E-02	5.99E-02	5.59E-02	5.12E-02	4.75E-02	3.89E-02
Kidneys	4.75E-02	1.12E-01	1.45E-01	1.24E-01	7.11E-02	4.38E-02	4.43E-02	4.66E-02	4.43E-02	4.12E-02	3.84E-02	3.14E-02
Liver	2.57E-02	6.19E-02	9.25E-02	9.82E-02	6.00E-02	3.67E-02	3.70E-02	3.88E-02	3.67E-02	3.40E-02	3.16E-02	2.59E-02
ET1-bas	1.33E-01	2.64E-01	3.11E-01	2.38E-01	1.13E-01	6.48E-02	6.57E-02	6.81E-02	6.39E-02	5.94E-02	5.54E-02	4.44E-02
ET2-bas	1.33E-01	2.64E-01	3.11E-01	2.38E-01	1.13E-01	6.48E-02	6.57E-02	6.81E-02	6.39E-02	5.94E-02	5.54E-02	4.44E-02
LN-ET	1.33E-01	2.64E-01	3.11E-01	2.38E-01	1.13E-01	6.48E-02	6.57E-02	6.81E-02	6.39E-02	5.94E-02	5.54E-02	4.44E-02
BBi-bas	1.02E-01	1.94E-01	2.07E-01	1.49E-01	7.27E-02	4.20E-02	4.34E-02	4.49E-02	4.25E-02	3.98E-02	3.71E-02	2.95E-02
BBi-sec	1.02E-01	1.94E-01	2.07E-01	1.49E-01	7.27E-02	4.20E-02	4.34E-02	4.49E-02	4.25E-02	3.98E-02	3.71E-02	2.95E-02
bbe-sec	1.02E-01	1.94E-01	2.07E-01	1.49E-01	7.27E-02	4.20E-02	4.34E-02	4.49E-02	4.25E-02	3.98E-02	3.71E-02	2.95E-02
AI	1.02E-01	1.94E-01	2.07E-01	1.49E-01	7.27E-02	4.20E-02	4.34E-02	4.49E-02	4.25E-02	3.98E-02	3.71E-02	2.95E-02
LN-Th	1.02E-01	1.94E-01	2.07E-01	1.49E-01	7.27E-02	4.20E-02	4.34E-02	4.49E-02	4.25E-02	3.98E-02	3.71E-02	2.95E-02
Lng_Tiss	1.02E-01	1.94E-01	2.07E-01	1.49E-01	7.27E-02	4.20E-02	4.34E-02	4.49E-02	4.25E-02	3.98E-02	3.71E-02	2.95E-02
Lung_NP	1.33E-01	2.64E-01	3.11E-01	2.38E-01	1.13E-01	6.48E-02	6.57E-02	6.81E-02	6.39E-02	5.94E-02	5.54E-02	4.44E-02
Lung_TB	1.02E-01	1.94E-01	2.07E-01	1.49E-01	7.27E-02	4.20E-02	4.34E-02	4.49E-02	4.25E-02	3.98E-02	3.71E-02	2.95E-02
Lung_P	1.02E-01	1.94E-01	2.07E-01	1.49E-01	7.27E-02	4.20E-02	4.34E-02	4.49E-02	4.25E-02	3.98E-02	3.71E-02	2.95E-02
Muscle	3.88E-01	3.35E-01	2.74E-01	1.71E-01	8.03E-02	4.87E-02	5.07E-02	5.30E-02	5.05E-02	4.68E-02	4.35E-02	3.56E-02
Ovaries	1.56E-01	2.28E-01	2.41E-01	2.00E-01	1.06E-01	6.25E-02	6.24E-02	6.41E-02	6.08E-02	5.58E-02	5.16E-02	4.15E-02
Pancreas	9.78E-02	2.02E-01	2.31E-01	1.82E-01	9.40E-02	5.57E-02	5.62E-02	5.84E-02	5.49E-02	5.01E-02	4.62E-02	3.74E-02
R_Marrow	3.17E-02	6.43E-02	8.53E-02	8.31E-02	5.01E-02	3.26E-02	3.36E-02	3.67E-02	3.50E-02	3.25E-02	3.03E-02	2.45E-02
Skin	1.24E-01	1.37E-01	1.23E-01	8.22E-02	4.18E-02	2.71E-02	2.91E-02	3.22E-02	3.16E-02	2.94E-02	2.74E-02	2.26E-02
Spleen	5.12E-02	1.31E-01	1.78E-01	1.52E-01	7.93E-02	4.77E-02	4.87E-02	4.98E-02	4.73E-02	4.43E-02	4.15E-02	3.34E-02
Testes	1.05E-01	1.87E-01	2.10E-01	1.58E-01	7.62E-02	4.57E-02	4.81E-02	5.18E-02	4.95E-02	4.53E-02	4.18E-02	3.41E-02
Thymus	5.54E-02	1.31E-01	1.71E-01	1.47E-01	7.57E-02	4.47E-02	4.63E-02	4.86E-02	4.58E-02	4.25E-02	3.95E-02	3.15E-02
Thyroid	1.33E-01	2.64E-01	3.11E-01	2.38E-01	1.13E-01	6.48E-02	6.57E-02	6.81E-02	6.39E-02	5.94E-02	5.54E-02	4.44E-02
GB_Wall	1.67E-01	2.03E-01	2.08E-01	1.64E-01	8.93E-02	5.31E-02	5.25E-02	5.46E-02	5.17E-02	4.83E-02	4.51E-02	3.63E-02
Ht_Wall	5.36E-02	1.02E-01	1.31E-01	1.23E-01	6.91E-02	4.13E-02	4.16E-02	4.31E-02	4.11E-02	3.83E-02	3.57E-02	2.90E-02
Uterus	8.26E-02	1.80E-01	2.29E-01	2.01E-01	1.06E-01	6.24E-02	6.19E-02	6.38E-02	5.97E-02	5.52E-02	5.12E-02	4.04E-02

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

Source = Ovaries	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	1.44E-05	3.78E-03	4.39E-02	4.03E-02	3.60E-02	3.20E-02	2.57E-02	2.25E-02	2.01E-02	1.85E-02	1.70E-02
UB_Wall	2.07E-04	1.46E-01	4.62E-01	7.12E-01	3.86E-01	2.31E-01	1.87E-01	2.26E-01	2.19E-01	1.84E-01	1.60E-01	1.29E-01
Bone_Sur	1.99E-04	7.51E-02	3.03E-01	4.83E-01	3.11E-01	9.69E-02	5.08E-02	4.48E-02	4.03E-02	3.92E-02	3.77E-02	2.89E-02
Brain	0.0	0.0	3.15E-09	2.55E-05	2.55E-04	3.67E-04	5.14E-04	7.53E-04	9.55E-04	1.08E-03	1.17E-03	1.40E-03
Breasts	0.0	9.88E-09	8.26E-05	5.16E-03	1.24E-02	1.05E-02	1.01E-02	1.05E-02	9.95E-03	9.50E-03	9.19E-03	7.60E-03
St_Wall	4.32E-10	6.87E-04	2.06E-02	7.47E-02	8.36E-02	5.05E-02	5.02E-02	5.29E-02	4.18E-02	3.75E-02	3.51E-02	2.89E-02
SI_Wall	2.80E-01	1.45E+00	2.09E+00	1.51E+00	6.71E-01	3.71E-01	3.69E-01	3.85E-01	3.42E-01	3.17E-01	2.98E-01	2.38E-01
ULI_Wall	8.45E-01	1.93E+00	2.06E+00	1.29E+00	5.47E-01	3.19E-01	3.19E-01	3.38E-01	3.09E-01	2.77E-01	2.52E-01	1.97E-01
LLI_Wall	1.81E+00	3.79E+00	3.82E+00	2.09E+00	7.80E-01	4.36E-01	4.32E-01	4.76E-01	4.18E-01	4.06E-01	3.96E-01	3.30E-01
Kidneys	0.0	5.49E-04	1.34E-02	7.55E-02	9.04E-02	6.00E-02	5.22E-02	5.49E-02	5.72E-02	5.16E-02	4.62E-02	3.50E-02
Liver	7.25E-10	5.46E-04	1.34E-02	7.53E-02	6.90E-02	4.42E-02	4.05E-02	3.92E-02	3.54E-02	3.48E-02	3.38E-02	2.69E-02
ET1-bas	0.0	0.0	9.80E-07	5.30E-04	3.12E-03	3.89E-03	4.10E-03	4.39E-03	4.26E-03	4.13E-03	4.03E-03	3.39E-03
ET2-bas	0.0	0.0	9.80E-07	5.30E-04	3.12E-03	3.89E-03	4.10E-03	4.39E-03	4.26E-03	4.13E-03	4.03E-03	3.39E-03
LN-ET	0.0	0.0	9.80E-07	5.30E-04	3.12E-03	3.89E-03	4.10E-03	4.39E-03	4.26E-03	4.13E-03	4.03E-03	3.39E-03
BBi-bas	0.0	5.06E-07	4.45E-04	6.36E-03	1.66E-02	1.18E-02	1.28E-02	1.55E-02	1.52E-02	1.33E-02	1.20E-02	9.64E-03
BBi-sec	0.0	5.06E-07	4.45E-04	6.36E-03	1.66E-02	1.18E-02	1.28E-02	1.55E-02	1.52E-02	1.33E-02	1.20E-02	9.64E-03
bbe-sec	0.0	5.06E-07	4.45E-04	6.36E-03	1.66E-02	1.18E-02	1.28E-02	1.55E-02	1.52E-02	1.33E-02	1.20E-02	9.64E-03
AI	0.0	5.06E-07	4.45E-04	6.36E-03	1.66E-02	1.18E-02	1.28E-02	1.55E-02	1.52E-02	1.33E-02	1.20E-02	9.64E-03
LN-Th	0.0	5.06E-07	4.45E-04	6.36E-03	1.66E-02	1.18E-02	1.28E-02	1.55E-02	1.52E-02	1.33E-02	1.20E-02	9.64E-03
Lng_Tiss	0.0	5.06E-07	4.45E-04	6.36E-03	1.66E-02	1.18E-02	1.28E-02	1.55E-02	1.52E-02	1.33E-02	1.20E-02	9.64E-03
Lung_NP	0.0	0.0	9.80E-07	5.30E-04	3.12E-03	3.89E-03	4.10E-03	4.39E-03	4.26E-03	4.13E-03	4.03E-03	3.39E-03
Lung_TB	0.0	5.06E-07	4.45E-04	6.36E-03	1.66E-02	1.18E-02	1.28E-02	1.55E-02	1.52E-02	1.33E-02	1.20E-02	9.64E-03
Lung_P	0.0	5.06E-07	4.45E-04	6.36E-03	1.66E-02	1.18E-02	1.28E-02	1.55E-02	1.52E-02	1.33E-02	1.20E-02	9.64E-03
Muscle	1.56E-01	2.28E-01	2.41E-01	2.00E-01	1.06E-01	6.25E-02	6.24E-02	6.41E-02	6.08E-02	5.58E-02	5.16E-02	4.15E-02
Ovaries	1.79E+03	7.83E+02	3.63E+02	1.12E+02	3.32E+01	1.90E+01	2.11E+01	2.31E+01	2.21E+01	2.03E+01	1.89E+01	1.61E+01
Pancreas	0.0	9.79E-05	1.06E-02	7.31E-02	6.69E-02	5.54E-02	4.56E-02	3.77E-02	3.42E-02	3.28E-02	3.13E-02	2.57E-02
R_Marrow	2.37E-04	1.59E-02	5.73E-02	8.11E-02	5.64E-02	3.65E-02	3.50E-02	3.60E-02	3.24E-02	3.18E-02	3.08E-02	2.32E-02
Skin	3.56E-10	5.16E-04	7.05E-03	3.14E-02	2.81E-02	2.09E-02	1.89E-02	2.35E-02	2.16E-02	1.99E-02	1.89E-02	1.75E-02
Spleen	0.0	1.11E-04	8.77E-03	4.00E-02	6.16E-02	4.37E-02	3.56E-02	3.03E-02	2.98E-02	2.89E-02	2.75E-02	2.25E-02
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	3.53E-10	1.27E-05	1.89E-03	3.64E-03	5.96E-03	7.04E-03	6.91E-03	6.61E-03	6.36E-03	6.16E-03	5.13E-03
Thyroid	0.0	0.0	9.80E-07	5.30E-04	3.12E-03	3.89E-03	4.10E-03	4.39E-03	4.26E-03	4.13E-03	4.03E-03	3.39E-03
GB_Wall	6.30E-10	1.58E-03	4.60E-02	1.71E-01	1.32E-01	9.47E-02	7.14E-02	5.69E-02	5.48E-02	5.23E-02	5.06E-02	4.13E-02
Ht_Wall	0.0	2.76E-07	3.78E-04	1.19E-02	1.51E-02	1.42E-02	1.29E-02	1.23E-02	1.18E-02	1.14E-02	1.10E-02	1.00E-02
Uterus	3.70E-02	1.55E+00	3.45E+00	2.53E+00	1.05E+00	5.63E-01	5.61E-01	5.98E-01	5.67E-01	5.14E-01	4.63E-01	3.28E-01

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	2.03E-02	4.77E-01	1.31E+00	1.16E+00	5.47E-01	2.95E-01	2.93E-01	3.36E-01	3.04E-01	2.70E-01	2.45E-01	1.97E-01
UB_Wall	0.0	3.25E-06	1.52E-03	2.21E-02	2.96E-02	2.89E-02	2.47E-02	2.10E-02	1.93E-02	1.85E-02	1.77E-02	1.45E-02
Bone_Sur	8.10E-05	2.19E-02	1.44E-01	4.03E-01	3.05E-01	9.91E-02	5.32E-02	4.52E-02	4.12E-02	3.80E-02	3.55E-02	2.93E-02
Brain	0.0	0.0	7.23E-07	3.53E-04	1.34E-03	2.29E-03	2.30E-03	2.90E-03	3.57E-03	3.79E-03	3.80E-03	3.41E-03
Breasts	0.0	1.59E-04	1.35E-02	4.27E-02	6.98E-02	6.18E-02	4.83E-02	4.03E-02	3.64E-02	3.50E-02	3.35E-02	2.74E-02
St_Wall	1.40E-01	1.15E+00	2.17E+00	1.65E+00	7.20E-01	3.93E-01	3.65E-01	3.89E-01	3.59E-01	3.27E-01	3.05E-01	2.65E-01
SI_Wall	5.59E-07	5.56E-03	8.44E-02	2.32E-01	1.62E-01	9.56E-02	8.71E-02	8.28E-02	7.94E-02	7.18E-02	6.53E-02	5.23E-02
ULI_Wall	9.22E-07	1.01E-02	1.08E-01	2.59E-01	1.78E-01	1.03E-01	1.02E-01	8.82E-02	7.77E-02	7.89E-02	7.83E-02	6.09E-02
LLI_Wall	2.42E-10	5.42E-04	1.57E-02	6.73E-02	6.55E-02	3.88E-02	4.26E-02	3.78E-02	3.39E-02	3.27E-02	3.10E-02	2.35E-02
Kidneys	1.74E-05	4.33E-02	2.87E-01	4.95E-01	2.80E-01	1.61E-01	1.62E-01	1.56E-01	1.39E-01	1.26E-01	1.18E-01	1.12E-01
Liver	2.38E-03	1.59E-01	4.69E-01	5.50E-01	2.90E-01	1.64E-01	1.57E-01	1.61E-01	1.44E-01	1.33E-01	1.25E-01	1.03E-01
ET1-bas	0.0	1.06E-07	2.79E-04	9.80E-03	1.18E-02	1.35E-02	1.41E-02	1.37E-02	1.30E-02	1.24E-02	1.20E-02	9.87E-03
ET2-bas	0.0	1.06E-07	2.79E-04	9.80E-03	1.18E-02	1.35E-02	1.41E-02	1.37E-02	1.30E-02	1.24E-02	1.20E-02	9.87E-03
LN-ET	0.0	1.06E-07	2.79E-04	9.80E-03	1.18E-02	1.35E-02	1.41E-02	1.37E-02	1.30E-02	1.24E-02	1.20E-02	9.87E-03
BBi-bas	1.18E-04	5.02E-02	1.94E-01	2.82E-01	1.59E-01	9.11E-02	8.97E-02	8.67E-02	8.25E-02	7.82E-02	7.42E-02	6.35E-02
BBi-sec	1.18E-04	5.02E-02	1.94E-01	2.82E-01	1.59E-01	9.11E-02	8.97E-02	8.67E-02	8.25E-02	7.82E-02	7.42E-02	6.35E-02
bbe-sec	1.18E-04	5.02E-02	1.94E-01	2.82E-01	1.59E-01	9.11E-02	8.97E-02	8.67E-02	8.25E-02	7.82E-02	7.42E-02	6.35E-02
AI	1.18E-04	5.02E-02	1.94E-01	2.82E-01	1.59E-01	9.11E-02	8.97E-02	8.67E-02	8.25E-02	7.82E-02	7.42E-02	6.35E-02
LN-Th	1.18E-04	5.02E-02	1.94E-01	2.82E-01	1.59E-01	9.11E-02	8.97E-02	8.67E-02	8.25E-02	7.82E-02	7.42E-02	6.35E-02
Lng_Tiss	1.18E-04	5.02E-02	1.94E-01	2.82E-01	1.59E-01	9.11E-02	8.97E-02	8.67E-02	8.25E-02	7.82E-02	7.42E-02	6.35E-02
Lung_NP	0.0	1.06E-07	2.79E-04	9.80E-03	1.18E-02	1.35E-02	1.41E-02	1.37E-02	1.30E-02	1.24E-02	1.20E-02	9.87E-03
Lung_TB	1.18E-04	5.02E-02	1.94E-01	2.82E-01	1.59E-01	9.11E-02	8.97E-02	8.67E-02	8.25E-02	7.82E-02	7.42E-02	6.35E-02
Lung_P	1.18E-04	5.02E-02	1.94E-01	2.82E-01	1.59E-01	9.11E-02	8.97E-02	8.67E-02	8.25E-02	7.82E-02	7.42E-02	6.35E-02
Muscle	9.78E-02	2.02E-01	2.31E-01	1.82E-01	9.40E-02	5.57E-02	5.62E-02	5.84E-02	5.49E-02	5.01E-02	4.62E-02	3.74E-02
Ovaries	0.0	9.79E-05	1.06E-02	7.31E-02	6.69E-02	5.54E-02	4.56E-02	3.77E-02	3.42E-02	3.28E-02	3.13E-02	2.57E-02
Pancreas	2.72E+02	1.57E+02	8.49E+01	2.96E+01	9.33E+00	5.32E+00	5.81E+00	6.26E+00	5.97E+00	5.53E+00	5.13E+00	4.16E+00
R_Marrow	6.49E-05	3.36E-03	1.97E-02	5.23E-02	4.65E-02	3.17E-02	3.10E-02	3.17E-02	2.90E-02	2.66E-02	2.48E-02	2.06E-02
Skin	3.03E-08	6.37E-04	8.68E-03	2.92E-02	2.76E-02	1.87E-02	2.06E-02	2.07E-02	1.95E-02	1.91E-02	1.81E-02	1.31E-02
Spleen	2.08E-01	1.50E+00	2.37E+00	1.72E+00	7.25E-01	4.23E-01	3.98E-01	4.17E-01	3.93E-01	3.51E-01	3.21E-01	2.76E-01
Testes	0.0	1.33E-08	9.59E-05	5.59E-03	1.29E-02	1.53E-02	1.05E-02	1.08E-02	1.03E-02	9.82E-03	9.50E-03	7.85E-03
Thymus	0.0	1.68E-05	3.56E-03	2.49E-02	4.68E-02	3.05E-02	2.51E-02	2.32E-02	2.49E-02	2.52E-02	2.45E-02	1.98E-02
Thyroid	0.0	1.06E-07	2.79E-04	9.80E-03	1.18E-02	1.35E-02	1.41E-02	1.37E-02	1.30E-02	1.24E-02	1.20E-02	9.87E-03
GB_Wall	3.86E+00	6.01E+00	5.89E+00	3.34E+00	1.29E+00	6.85E-01	6.89E-01	7.50E-01	6.66E-01	6.06E-01	5.72E-01	5.17E-01
Ht_Wall	1.89E-05	3.24E-02	2.01E-01	3.90E-01	2.07E-01	1.16E-01	1.18E-01	1.28E-01	1.13E-01	1.03E-01	9.55E-02	7.48E-02
Uterus	0.0	6.87E-05	8.79E-03	4.98E-02	7.38E-02	4.39E-02	3.51E-02	3.26E-02	3.09E-02	3.08E-02	3.01E-02	2.44E-02

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	5.92E-03	5.46E-02	1.13E-01	1.28E-01	7.80E-02	4.74E-02	5.00E-02	5.28E-02	5.01E-02	4.54E-02	4.14E-02	3.30E-02
UB_Wall	9.51E-08	9.95E-04	1.00E-02	3.20E-02	2.88E-02	2.01E-02	1.82E-02	1.89E-02	1.81E-02	1.81E-02	1.76E-02	1.32E-02
Bone_Sur	3.80E+00	3.26E+00	2.64E+00	1.62E+00	6.15E-01	1.76E-01	1.11E-01	1.07E-01	1.04E-01	9.43E-02	8.63E-02	7.07E-02
Brain	5.58E-02	1.34E-01	1.81E-01	1.53E-01	7.66E-02	4.58E-02	4.77E-02	5.16E-02	4.92E-02	4.53E-02	4.20E-02	3.45E-02
Breasts	8.00E-03	4.23E-02	5.76E-02	4.31E-02	2.49E-02	1.60E-02	1.93E-02	2.09E-02	2.07E-02	2.00E-02	1.91E-02	1.64E-02
St_Wall	2.56E-04	4.95E-03	1.84E-02	3.62E-02	3.27E-02	2.21E-02	2.15E-02	2.22E-02	2.05E-02	1.96E-02	1.88E-02	1.56E-02
SI_Wall	7.42E-03	1.99E-02	3.97E-02	6.18E-02	4.76E-02	3.03E-02	3.03E-02	3.14E-02	2.84E-02	2.64E-02	2.47E-02	2.03E-02
ULI_Wall	7.71E-03	2.48E-02	4.27E-02	5.53E-02	4.21E-02	2.84E-02	2.70E-02	2.87E-02	2.65E-02	2.40E-02	2.21E-02	1.84E-02
LLI_Wall	2.04E-02	6.94E-02	1.03E-01	9.43E-02	5.72E-02	3.49E-02	3.42E-02	3.76E-02	3.65E-02	3.36E-02	3.10E-02	2.49E-02
Kidneys	4.32E-03	2.47E-02	5.80E-02	8.20E-02	5.62E-02	3.54E-02	3.61E-02	3.84E-02	3.72E-02	3.53E-02	3.30E-02	2.50E-02
Liver	2.78E-03	1.37E-02	3.08E-02	4.75E-02	3.74E-02	2.47E-02	2.40E-02	2.55E-02	2.52E-02	2.34E-02	2.18E-02	1.78E-02
ET1-bas	1.15E-06	1.39E-03	1.20E-02	3.68E-02	3.52E-02	2.44E-02	2.21E-02	2.28E-02	2.15E-02	2.02E-02	1.91E-02	1.64E-02
ET2-bas	1.15E-06	1.39E-03	1.20E-02	3.68E-02	3.52E-02	2.44E-02	2.21E-02	2.28E-02	2.15E-02	2.02E-02	1.91E-02	1.64E-02
LN-ET	1.15E-06	1.39E-03	1.20E-02	3.68E-02	3.52E-02	2.44E-02	2.21E-02	2.28E-02	2.15E-02	2.02E-02	1.91E-02	1.64E-02
BBi-bas	3.67E-03	3.56E-02	7.88E-02	8.90E-02	5.26E-02	3.11E-02	3.33E-02	3.54E-02	3.24E-02	2.94E-02	2.73E-02	2.34E-02
BBi-sec	3.67E-03	3.56E-02	7.88E-02	8.90E-02	5.26E-02	3.11E-02	3.33E-02	3.54E-02	3.24E-02	2.94E-02	2.73E-02	2.34E-02
bbe-sec	3.67E-03	3.56E-02	7.88E-02	8.90E-02	5.26E-02	3.11E-02	3.33E-02	3.54E-02	3.24E-02	2.94E-02	2.73E-02	2.34E-02
AI	3.67E-03	3.56E-02	7.88E-02	8.90E-02	5.26E-02	3.11E-02	3.33E-02	3.54E-02	3.24E-02	2.94E-02	2.73E-02	2.34E-02
LN-Th	3.67E-03	3.56E-02	7.88E-02	8.90E-02	5.26E-02	3.11E-02	3.33E-02	3.54E-02	3.24E-02	2.94E-02	2.73E-02	2.34E-02
Lng_Tiss	3.67E-03	3.56E-02	7.88E-02	8.90E-02	5.26E-02	3.11E-02	3.33E-02	3.54E-02	3.24E-02	2.94E-02	2.73E-02	2.34E-02
Lung_NP	1.15E-06	1.39E-03	1.20E-02	3.68E-02	3.52E-02	2.44E-02	2.21E-02	2.28E-02	2.15E-02	2.02E-02	1.91E-02	1.64E-02
Lung_TB	3.67E-03	3.56E-02	7.88E-02	8.90E-02	5.26E-02	3.11E-02	3.33E-02	3.54E-02	3.24E-02	2.94E-02	2.73E-02	2.34E-02
Lung_P	3.67E-03	3.56E-02	7.88E-02	8.90E-02	5.26E-02	3.11E-02	3.33E-02	3.54E-02	3.24E-02	2.94E-02	2.73E-02	2.34E-02
Muscle	3.17E-02	6.43E-02	8.53E-02	8.31E-02	5.01E-02	3.26E-02	3.36E-02	3.67E-02	3.50E-02	3.25E-02	3.03E-02	2.45E-02
Ovaries	8.89E-05	1.93E-02	6.29E-02	9.05E-02	5.78E-02	3.53E-02	3.39E-02	3.59E-02	3.25E-02	3.18E-02	3.07E-02	2.32E-02
Pancreas	2.34E-05	3.82E-03	2.14E-02	5.53E-02	4.79E-02	3.13E-02	3.00E-02	3.17E-02	2.90E-02	2.66E-02	2.48E-02	2.06E-02
R_Marrow	9.62E-01	7.40E-01	5.59E-01	3.24E-01	1.53E-01	9.92E-02	1.02E-01	1.05E-01	9.99E-02	9.09E-02	8.35E-02	6.77E-02
Skin	3.90E-02	7.39E-02	8.88E-02	7.35E-02	4.10E-02	2.57E-02	2.82E-02	3.32E-02	3.25E-02	3.07E-02	2.87E-02	2.22E-02
Spleen	1.11E-03	1.30E-02	3.80E-02	5.99E-02	4.63E-02	2.94E-02	2.93E-02	3.22E-02	2.90E-02	2.68E-02	2.52E-02	2.07E-02
Testes	1.07E-08	3.84E-04	6.10E-03	2.43E-02	2.35E-02	1.54E-02	1.71E-02	1.72E-02	1.65E-02	1.62E-02	1.56E-02	1.30E-02
Thymus	1.83E-03	2.12E-02	4.09E-02	4.64E-02	3.30E-02	2.09E-02	2.18E-02	2.37E-02	2.32E-02	2.06E-02	1.87E-02	1.62E-02
Thyroid	1.15E-06	1.39E-03	1.20E-02	3.68E-02	3.52E-02	2.44E-02	2.21E-02	2.28E-02	2.15E-02	2.02E-02	1.91E-02	1.64E-02
GB_Wall	5.86E-08	4.50E-04	7.92E-03	3.57E-02	3.52E-02	2.47E-02	2.43E-02	2.25E-02	2.29E-02	2.02E-02	1.82E-02	1.65E-02
Ht_Wall	7.51E-04	8.96E-03	2.79E-02	4.84E-02	3.85E-02	2.47E-02	2.48E-02	2.57E-02	2.39E-02	2.23E-02	2.10E-02	1.82E-02
Uterus	7.97E-08	1.31E-03	1.76E-02	4.87E-02	4.15E-02	2.75E-02	2.60E-02	2.59E-02	2.53E-02	2.24E-02	2.04E-02	1.82E-02

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	4.39E-04	7.67E-03	2.30E-02	4.12E-02	2.94E-02	2.13E-02	2.23E-02	2.49E-02	2.52E-02	2.23E-02	2.02E-02	1.77E-02
UB_Wall	2.44E-04	1.29E-02	3.52E-02	5.56E-02	3.63E-02	2.42E-02	2.53E-02	2.51E-02	2.51E-02	2.27E-02	2.06E-02	1.72E-02
Bone_Sur	1.63E-01	3.57E-01	4.58E-01	4.09E-01	2.12E-01	7.80E-02	4.92E-02	3.90E-02	3.57E-02	3.34E-02	3.16E-02	2.76E-02
Brain	6.77E-04	1.38E-02	4.26E-02	5.44E-02	3.23E-02	2.10E-02	2.36E-02	2.49E-02	2.36E-02	2.25E-02	2.12E-02	1.64E-02
Breasts	1.36E+00	8.94E-01	5.11E-01	1.93E-01	6.84E-02	4.19E-02	4.91E-02	5.71E-02	5.24E-02	4.69E-02	4.34E-02	3.84E-02
St_Wall	1.53E-04	8.02E-03	2.77E-02	4.56E-02	3.17E-02	2.19E-02	2.31E-02	2.49E-02	2.46E-02	2.34E-02	2.16E-02	1.48E-02
SI_Wall	2.33E-06	1.78E-03	1.06E-02	3.32E-02	2.88E-02	1.90E-02	2.02E-02	2.31E-02	1.96E-02	1.88E-02	1.83E-02	1.58E-02
ULI_Wall	3.16E-06	1.83E-03	1.38E-02	3.61E-02	2.88E-02	1.90E-02	2.07E-02	2.27E-02	1.99E-02	1.99E-02	1.95E-02	1.46E-02
LLI_Wall	7.12E-03	1.49E-02	2.73E-02	4.53E-02	3.52E-02	2.38E-02	2.33E-02	2.50E-02	2.50E-02	2.37E-02	2.23E-02	1.86E-02
Kidneys	2.89E-03	2.55E-02	4.55E-02	5.12E-02	3.29E-02	2.26E-02	2.44E-02	2.60E-02	2.62E-02	2.56E-02	2.43E-02	1.86E-02
Liver	1.24E-03	1.21E-02	3.44E-02	4.97E-02	3.16E-02	2.10E-02	2.36E-02	2.57E-02	2.46E-02	2.31E-02	2.17E-02	1.78E-02
ET1-bas	7.12E-07	1.98E-03	1.84E-02	4.47E-02	3.16E-02	1.99E-02	2.10E-02	2.23E-02	2.25E-02	2.05E-02	1.92E-02	1.94E-02
ET2-bas	7.12E-07	1.98E-03	1.84E-02	4.47E-02	3.16E-02	1.99E-02	2.10E-02	2.23E-02	2.25E-02	2.05E-02	1.92E-02	1.94E-02
LN-ET	7.12E-07	1.98E-03	1.84E-02	4.47E-02	3.16E-02	1.99E-02	2.10E-02	2.23E-02	2.25E-02	2.05E-02	1.92E-02	1.94E-02
BBi-bas	3.87E-03	1.48E-02	3.85E-02	5.28E-02	3.37E-02	2.14E-02	2.31E-02	2.39E-02	2.30E-02	2.21E-02	2.13E-02	1.88E-02
BBi-sec	3.87E-03	1.48E-02	3.85E-02	5.28E-02	3.37E-02	2.14E-02	2.31E-02	2.39E-02	2.30E-02	2.21E-02	2.13E-02	1.88E-02
bbe-sec	3.87E-03	1.48E-02	3.85E-02	5.28E-02	3.37E-02	2.14E-02	2.31E-02	2.39E-02	2.30E-02	2.21E-02	2.13E-02	1.88E-02
AI	3.87E-03	1.48E-02	3.85E-02	5.28E-02	3.37E-02	2.14E-02	2.31E-02	2.39E-02	2.30E-02	2.21E-02	2.13E-02	1.88E-02
LN-Th	3.87E-03	1.48E-02	3.85E-02	5.28E-02	3.37E-02	2.14E-02	2.31E-02	2.39E-02	2.30E-02	2.21E-02	2.13E-02	1.88E-02
Lng_Tiss	3.87E-03	1.48E-02	3.85E-02	5.28E-02	3.37E-02	2.14E-02	2.31E-02	2.39E-02	2.30E-02	2.21E-02	2.13E-02	1.88E-02
Lung_NP	7.12E-07	1.98E-03	1.84E-02	4.47E-02	3.16E-02	1.99E-02	2.10E-02	2.23E-02	2.25E-02	2.05E-02	1.92E-02	1.94E-02
Lung_TB	3.87E-03	1.48E-02	3.85E-02	5.28E-02	3.37E-02	2.14E-02	2.31E-02	2.39E-02	2.30E-02	2.21E-02	2.13E-02	1.88E-02
Lung_P	3.87E-03	1.48E-02	3.85E-02	5.28E-02	3.37E-02	2.14E-02	2.31E-02	2.39E-02	2.30E-02	2.21E-02	2.13E-02	1.88E-02
Muscle	1.24E-01	1.37E-01	1.23E-01	8.22E-02	4.18E-02	2.71E-02	2.91E-02	3.22E-02	3.16E-02	2.94E-02	2.74E-02	2.26E-02
Ovaries	3.56E-10	5.16E-04	7.05E-03	3.14E-02	2.81E-02	2.09E-02	1.89E-02	2.35E-02	2.16E-02	1.99E-02	1.89E-02	1.75E-02
Pancreas	3.03E-08	6.37E-04	8.68E-03	2.92E-02	2.76E-02	1.87E-02	2.06E-02	2.07E-02	1.95E-02	1.91E-02	1.81E-02	1.31E-02
R_Marrow	4.07E-02	7.43E-02	8.81E-02	7.49E-02	4.32E-02	2.73E-02	2.76E-02	3.23E-02	3.24E-02	3.17E-02	3.05E-02	2.50E-02
Skin	3.03E+00	1.34E+00	6.81E-01	2.46E-01	8.70E-02	5.36E-02	5.89E-02	6.85E-02	6.86E-02	6.40E-02	5.95E-02	4.81E-02
Spleen	8.55E-05	6.50E-03	2.60E-02	4.54E-02	3.19E-02	2.09E-02	2.32E-02	2.61E-02	2.54E-02	2.34E-02	2.16E-02	1.75E-02
Testes	2.22E-01	4.01E-01	3.58E-01	1.90E-01	7.46E-02	4.59E-02	4.79E-02	5.53E-02	5.36E-02	4.74E-02	4.29E-02	3.56E-02
Thymus	1.82E-03	2.31E-02	5.95E-02	6.63E-02	3.60E-02	2.32E-02	2.55E-02	2.86E-02	2.85E-02	2.55E-02	2.31E-02	1.93E-02
Thyroid	7.12E-07	1.98E-03	1.84E-02	4.47E-02	3.16E-02	1.99E-02	2.10E-02	2.23E-02	2.25E-02	2.05E-02	1.92E-02	1.94E-02
GB_Wall	3.34E-08	9.73E-04	8.19E-03	3.16E-02	2.78E-02	1.90E-02	1.84E-02	2.15E-02	2.00E-02	1.84E-02	1.73E-02	1.49E-02
Ht_Wall	1.15E-03	9.77E-03	2.51E-02	4.45E-02	3.18E-02	2.04E-02	2.30E-02	2.47E-02	2.32E-02	2.27E-02	2.17E-02	1.66E-02
Uterus	4.54E-08	8.19E-04	9.56E-03	3.46E-02	3.00E-02	1.93E-02	1.98E-02	2.34E-02	2.33E-02	2.21E-02	2.06E-02	1.57E-02

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	5.31E-03	3.71E-01	7.85E-01	8.39E-01	4.09E-01	2.18E-01	2.15E-01	2.30E-01	2.22E-01	2.00E-01	1.82E-01	1.47E-01
UB_Wall	0.0	1.37E-06	8.70E-04	1.26E-02	2.60E-02	2.39E-02	1.75E-02	2.00E-02	1.95E-02	1.80E-02	1.65E-02	1.23E-02
Bone_Sur	5.43E-03	7.95E-02	2.56E-01	4.51E-01	3.03E-01	9.30E-02	5.22E-02	4.64E-02	4.15E-02	3.87E-02	3.66E-02	3.04E-02
Brain	0.0	0.0	6.02E-07	4.26E-04	2.21E-03	2.38E-03	2.83E-03	3.27E-03	3.11E-03	3.18E-03	3.25E-03	3.27E-03
Breasts	0.0	4.30E-05	1.44E-02	3.63E-02	4.54E-02	3.43E-02	3.51E-02	3.48E-02	2.66E-02	2.24E-02	2.04E-02	1.90E-02
St_Wall	6.00E-04	1.26E-01	4.92E-01	6.92E-01	3.30E-01	1.94E-01	1.86E-01	1.88E-01	1.73E-01	1.62E-01	1.51E-01	1.15E-01
SI_Wall	4.86E-06	5.15E-03	5.31E-02	1.47E-01	1.13E-01	6.49E-02	6.69E-02	6.66E-02	6.19E-02	5.73E-02	5.33E-02	4.31E-02
ULI_Wall	7.18E-07	5.04E-03	5.30E-02	1.33E-01	1.02E-01	6.21E-02	5.70E-02	5.53E-02	5.60E-02	5.31E-02	4.94E-02	3.82E-02
LLI_Wall	1.34E-08	1.06E-03	1.69E-02	6.42E-02	5.90E-02	3.61E-02	4.00E-02	4.13E-02	3.59E-02	3.03E-02	2.74E-02	2.65E-02
Kidneys	8.56E-02	6.66E-01	1.19E+00	9.27E-01	4.24E-01	2.33E-01	2.38E-01	2.34E-01	2.26E-01	2.13E-01	1.99E-01	1.57E-01
Liver	2.51E-09	8.94E-04	2.31E-02	9.79E-02	8.49E-02	5.25E-02	4.93E-02	5.16E-02	4.71E-02	4.24E-02	3.94E-02	3.45E-02
ET1-bas	0.0	3.72E-08	1.43E-04	1.00E-02	1.64E-02	1.50E-02	1.36E-02	1.26E-02	1.15E-02	1.07E-02	1.00E-02	8.32E-03
ET2-bas	0.0	3.72E-08	1.43E-04	1.00E-02	1.64E-02	1.50E-02	1.36E-02	1.26E-02	1.15E-02	1.07E-02	1.00E-02	8.32E-03
LN-ET	0.0	3.72E-08	1.43E-04	1.00E-02	1.64E-02	1.50E-02	1.36E-02	1.26E-02	1.15E-02	1.07E-02	1.00E-02	8.32E-03
BBi-bas	2.06E-02	1.71E-01	3.35E-01	2.94E-01	1.50E-01	7.87E-02	7.67E-02	7.94E-02	7.32E-02	6.47E-02	5.85E-02	4.72E-02
BBi-sec	2.06E-02	1.71E-01	3.35E-01	2.94E-01	1.50E-01	7.87E-02	7.67E-02	7.94E-02	7.32E-02	6.47E-02	5.85E-02	4.72E-02
bbe-sec	2.06E-02	1.71E-01	3.35E-01	2.94E-01	1.50E-01	7.87E-02	7.67E-02	7.94E-02	7.32E-02	6.47E-02	5.85E-02	4.72E-02
AI	2.06E-02	1.71E-01	3.35E-01	2.94E-01	1.50E-01	7.87E-02	7.67E-02	7.94E-02	7.32E-02	6.47E-02	5.85E-02	4.72E-02
LN-Th	2.06E-02	1.71E-01	3.35E-01	2.94E-01	1.50E-01	7.87E-02	7.67E-02	7.94E-02	7.32E-02	6.47E-02	5.85E-02	4.72E-02
Lng_Tiss	2.06E-02	1.71E-01	3.35E-01	2.94E-01	1.50E-01	7.87E-02	7.67E-02	7.94E-02	7.32E-02	6.47E-02	5.85E-02	4.72E-02
Lung_NP	0.0	3.72E-08	1.43E-04	1.00E-02	1.64E-02	1.50E-02	1.36E-02	1.26E-02	1.15E-02	1.07E-02	1.00E-02	8.32E-03
Lung_TB	2.06E-02	1.71E-01	3.35E-01	2.94E-01	1.50E-01	7.87E-02	7.67E-02	7.94E-02	7.32E-02	6.47E-02	5.85E-02	4.72E-02
Lung_P	2.06E-02	1.71E-01	3.35E-01	2.94E-01	1.50E-01	7.87E-02	7.67E-02	7.94E-02	7.32E-02	6.47E-02	5.85E-02	4.72E-02
Muscle	5.12E-02	1.31E-01	1.78E-01	1.52E-01	7.93E-02	4.77E-02	4.87E-02	4.98E-02	4.73E-02	4.43E-02	4.15E-02	3.34E-02
Ovaries	0.0	1.11E-04	8.77E-03	4.00E-02	6.16E-02	4.37E-02	3.56E-02	3.03E-02	2.98E-02	2.89E-02	2.75E-02	2.25E-02
Pancreas	2.08E-01	1.50E+00	2.37E+00	1.72E+00	7.25E-01	4.23E-01	3.98E-01	4.17E-01	3.93E-01	3.51E-01	3.21E-01	2.76E-01
R_Marrow	8.30E-04	1.10E-02	3.33E-02	5.67E-02	4.58E-02	3.08E-02	3.07E-02	3.23E-02	2.89E-02	2.68E-02	2.52E-02	2.07E-02
Skin	8.55E-05	6.50E-03	2.60E-02	4.54E-02	3.19E-02	2.09E-02	2.32E-02	2.61E-02	2.54E-02	2.34E-02	2.16E-02	1.75E-02
Spleen	9.61E+01	6.84E+01	4.18E+01	1.61E+01	5.09E+00	2.87E+00	3.17E+00	3.46E+00	3.26E+00	2.98E+00	2.75E+00	2.21E+00
Testes	0.0	7.72E-09	6.52E-05	4.42E-03	8.33E-03	9.44E-03	9.59E-03	8.90E-03	9.27E-03	9.31E-03	8.97E-03	7.09E-03
Thymus	0.0	2.45E-06	1.18E-03	1.98E-02	2.79E-02	1.82E-02	1.89E-02	1.68E-02	1.97E-02	1.87E-02	1.77E-02	1.46E-02
Thyroid	0.0	3.72E-08	1.43E-04	1.00E-02	1.64E-02	1.50E-02	1.36E-02	1.26E-02	1.15E-02	1.07E-02	1.00E-02	8.32E-03
GB_Wall	6.45E-07	1.39E-02	9.99E-02	3.00E-01	2.03E-01	1.21E-01	1.07E-01	1.12E-01	9.66E-02	9.10E-02	8.70E-02	7.07E-02
Ht_Wall	2.76E-08	2.77E-03	4.26E-02	1.50E-01	1.15E-01	6.22E-02	6.14E-02	6.23E-02	5.13E-02	4.96E-02	4.91E-02	4.35E-02
Uterus	0.0	2.94E-05	4.99E-03	4.76E-02	4.45E-02	4.05E-02	3.67E-02	3.20E-02	2.85E-02	2.65E-02	2.52E-02	2.21E-02

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	1.34E-09	2.95E-05	3.03E-03	7.74E-03	7.95E-03	8.17E-03	8.33E-03	8.03E-03	7.73E-03	7.50E-03	6.19E-03
UB_Wall	8.05E-04	2.01E-01	7.66E-01	9.14E-01	3.91E-01	2.55E-01	2.54E-01	2.22E-01	2.36E-01	2.09E-01	1.87E-01	1.59E-01
Bone_Sur	1.94E-07	5.44E-03	6.53E-02	2.43E-01	1.88E-01	5.86E-02	3.48E-02	2.91E-02	2.85E-02	2.67E-02	2.50E-02	2.17E-02
Brain	0.0	0.0	0.0	3.39E-06	1.06E-04	2.17E-04	3.76E-04	6.06E-04	7.34E-04	7.86E-04	8.14E-04	8.65E-04
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_Wall	0.0	1.69E-07	2.84E-04	9.99E-03	1.48E-02	1.47E-02	1.30E-02	1.23E-02	1.23E-02	1.19E-02	1.13E-02	9.36E-03
SI_Wall	0.0	7.49E-05	5.26E-03	4.72E-02	5.33E-02	3.60E-02	3.36E-02	3.11E-02	3.39E-02	3.64E-02	3.55E-02	2.26E-02
ULI_Wall	0.0	7.72E-05	7.00E-03	3.34E-02	5.57E-02	3.67E-02	2.98E-02	2.82E-02	2.80E-02	2.55E-02	2.37E-02	2.11E-02
LLI_Wall	7.83E-05	5.73E-02	2.51E-01	4.14E-01	2.27E-01	1.23E-01	1.13E-01	1.35E-01	1.20E-01	1.03E-01	9.35E-02	8.05E-02
Kidneys	0.0	3.50E-08	1.46E-04	5.83E-03	7.94E-03	1.02E-02	1.11E-02	1.09E-02	1.02E-02	9.72E-03	9.34E-03	8.44E-03
Liver	0.0	1.39E-07	2.18E-04	5.77E-03	1.02E-02	9.12E-03	9.01E-03	1.12E-02	1.19E-02	1.19E-02	1.16E-02	9.36E-03
ET1-bas	0.0	0.0	1.90E-08	7.27E-05	9.37E-04	1.65E-03	1.95E-03	2.23E-03	2.25E-03	2.22E-03	2.20E-03	1.89E-03
ET2-bas	0.0	0.0	1.90E-08	7.27E-05	9.37E-04	1.65E-03	1.95E-03	2.23E-03	2.25E-03	2.22E-03	2.20E-03	1.89E-03
LN-ET	0.0	0.0	1.90E-08	7.27E-05	9.37E-04	1.65E-03	1.95E-03	2.23E-03	2.25E-03	2.22E-03	2.20E-03	1.89E-03
BBi-bas	0.0	0.0	5.26E-06	1.05E-03	2.44E-03	3.25E-03	3.72E-03	4.03E-03	4.18E-03	4.28E-03	4.30E-03	4.17E-03
BBi-sec	0.0	0.0	5.26E-06	1.05E-03	2.44E-03	3.25E-03	3.72E-03	4.03E-03	4.18E-03	4.28E-03	4.30E-03	4.17E-03
bbe-sec	0.0	0.0	5.26E-06	1.05E-03	2.44E-03	3.25E-03	3.72E-03	4.03E-03	4.18E-03	4.28E-03	4.30E-03	4.17E-03
AI	0.0	0.0	5.26E-06	1.05E-03	2.44E-03	3.25E-03	3.72E-03	4.03E-03	4.18E-03	4.28E-03	4.30E-03	4.17E-03
LN-Th	0.0	0.0	5.26E-06	1.05E-03	2.44E-03	3.25E-03	3.72E-03	4.03E-03	4.18E-03	4.28E-03	4.30E-03	4.17E-03
Lng_Tiss	0.0	0.0	5.26E-06	1.05E-03	2.44E-03	3.25E-03	3.72E-03	4.03E-03	4.18E-03	4.28E-03	4.30E-03	4.17E-03
Lung_NP	0.0	0.0	1.90E-08	7.27E-05	9.37E-04	1.65E-03	1.95E-03	2.23E-03	2.25E-03	2.22E-03	2.20E-03	1.89E-03
Lung_TB	0.0	0.0	5.26E-06	1.05E-03	2.44E-03	3.25E-03	3.72E-03	4.03E-03	4.18E-03	4.28E-03	4.30E-03	4.17E-03
Lung_P	0.0	0.0	5.26E-06	1.05E-03	2.44E-03	3.25E-03	3.72E-03	4.03E-03	4.18E-03	4.28E-03	4.30E-03	4.17E-03
Muscle	1.05E-01	1.87E-01	2.10E-01	1.58E-01	7.62E-02	4.57E-02	4.81E-02	5.18E-02	4.95E-02	4.53E-02	4.18E-02	3.41E-02
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	1.33E-08	9.59E-05	5.59E-03	1.29E-02	1.53E-02	1.05E-02	1.08E-02	1.03E-02	9.82E-03	9.50E-03	7.85E-03
R_Marrow	2.96E-08	3.77E-04	5.28E-03	2.31E-02	2.32E-02	1.58E-02	1.73E-02	1.72E-02	1.65E-02	1.62E-02	1.56E-02	1.30E-02
Skin	2.22E-01	4.01E-01	3.58E-01	1.90E-01	7.46E-02	4.59E-02	4.79E-02	5.53E-02	5.36E-02	4.74E-02	4.29E-02	3.56E-02
Spleen	0.0	7.72E-09	6.52E-05	4.42E-03	8.33E-03	9.44E-03	9.59E-03	8.90E-03	9.27E-03	9.31E-03	8.97E-03	7.09E-03
Testes	8.36E+02	4.40E+02	2.21E+02	7.26E+01	2.21E+01	1.26E+01	1.34E+01	1.56E+01	1.48E+01	1.36E+01	1.26E+01	1.00E+01
Thymus	0.0	0.0	2.78E-07	2.67E-04	2.03E-03	2.85E-03	3.00E-03	3.24E-03	3.32E-03	3.23E-03	3.10E-03	2.73E-03
Thyroid	0.0	0.0	1.90E-08	7.27E-05	9.37E-04	1.65E-03	1.95E-03	2.23E-03	2.25E-03	2.22E-03	2.20E-03	1.89E-03
GB_Wall	0.0	4.38E-07	5.34E-04	1.32E-02	2.18E-02	1.61E-02	1.49E-02	1.55E-02	1.48E-02	1.41E-02	1.36E-02	1.12E-02
Ht_Wall	0.0	0.0	6.23E-06	1.26E-03	1.94E-03	2.42E-03	2.96E-03	4.62E-03	5.46E-03	5.49E-03	5.31E-03	4.43E-03
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 Newborn

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	4.97E-06	1.85E-03	2.75E-02	3.07E-02	2.71E-02	2.41E-02	2.38E-02	2.31E-02	2.15E-02	2.00E-02	1.67E-02
UB_Wall	0.0	0.0	3.62E-06	9.51E-04	2.52E-03	4.26E-03	5.49E-03	5.54E-03	5.14E-03	4.98E-03	4.81E-03	4.03E-03
Bone_Sur	1.00E-02	1.33E-01	2.73E-01	3.50E-01	2.19E-01	6.57E-02	3.80E-02	3.47E-02	3.31E-02	2.91E-02	2.63E-02	2.28E-02
Brain	0.0	7.65E-07	3.81E-04	5.07E-03	1.19E-02	8.96E-03	1.01E-02	1.16E-02	1.14E-02	1.14E-02	1.13E-02	9.96E-03
Breasts	1.23E-06	2.15E-02	9.91E-02	2.54E-01	1.58E-01	1.02E-01	9.72E-02	1.17E-01	1.06E-01	9.11E-02	8.31E-02	7.82E-02
St_Wall	0.0	3.81E-05	4.16E-03	2.13E-02	3.64E-02	2.48E-02	2.40E-02	2.98E-02	2.61E-02	2.35E-02	2.17E-02	1.73E-02
SI_Wall	0.0	1.87E-08	8.34E-05	3.57E-03	8.68E-03	9.21E-03	9.29E-03	9.94E-03	8.87E-03	8.61E-03	8.50E-03	7.89E-03
ULI_Wall	0.0	5.49E-08	1.47E-04	4.26E-03	9.44E-03	1.14E-02	9.28E-03	9.24E-03	1.02E-02	1.01E-02	9.62E-03	7.93E-03
LLI_Wall	0.0	2.06E-09	1.75E-05	1.67E-03	3.30E-03	5.09E-03	5.55E-03	5.87E-03	6.02E-03	5.78E-03	5.47E-03	4.56E-03
Kidneys	0.0	1.72E-07	2.96E-04	8.57E-03	1.42E-02	1.47E-02	1.28E-02	1.23E-02	1.17E-02	1.13E-02	1.10E-02	1.06E-02
Liver	0.0	8.82E-05	6.28E-03	4.02E-02	3.98E-02	2.61E-02	2.71E-02	2.89E-02	2.53E-02	2.28E-02	2.13E-02	1.94E-02
ET1-bas	1.09E-02	4.45E-01	9.61E-01	1.02E+00	4.72E-01	2.60E-01	2.58E-01	2.76E-01	2.47E-01	2.42E-01	2.38E-01	2.00E-01
ET2-bas	1.09E-02	4.45E-01	9.61E-01	1.02E+00	4.72E-01	2.60E-01	2.58E-01	2.76E-01	2.47E-01	2.42E-01	2.38E-01	2.00E-01
LN-ET	1.09E-02	4.45E-01	9.61E-01	1.02E+00	4.72E-01	2.60E-01	2.58E-01	2.76E-01	2.47E-01	2.42E-01	2.38E-01	2.00E-01
BBi-bas	1.32E-04	4.03E-02	1.72E-01	2.58E-01	1.41E-01	8.11E-02	7.83E-02	7.85E-02	7.84E-02	6.88E-02	6.11E-02	4.88E-02
BBi-sec	1.32E-04	4.03E-02	1.72E-01	2.58E-01	1.41E-01	8.11E-02	7.83E-02	7.85E-02	7.84E-02	6.88E-02	6.11E-02	4.88E-02
bbe-sec	1.32E-04	4.03E-02	1.72E-01	2.58E-01	1.41E-01	8.11E-02	7.83E-02	7.85E-02	7.84E-02	6.88E-02	6.11E-02	4.88E-02
AI	1.32E-04	4.03E-02	1.72E-01	2.58E-01	1.41E-01	8.11E-02	7.83E-02	7.85E-02	7.84E-02	6.88E-02	6.11E-02	4.88E-02
LN-Th	1.32E-04	4.03E-02	1.72E-01	2.58E-01	1.41E-01	8.11E-02	7.83E-02	7.85E-02	7.84E-02	6.88E-02	6.11E-02	4.88E-02
Lng_Tiss	1.32E-04	4.03E-02	1.72E-01	2.58E-01	1.41E-01	8.11E-02	7.83E-02	7.85E-02	7.84E-02	6.88E-02	6.11E-02	4.88E-02
Lung_NP	1.09E-02	4.45E-01	9.61E-01	1.02E+00	4.72E-01	2.60E-01	2.58E-01	2.76E-01	2.47E-01	2.42E-01	2.38E-01	2.00E-01
Lung_TB	1.32E-04	4.03E-02	1.72E-01	2.58E-01	1.41E-01	8.11E-02	7.83E-02	7.85E-02	7.84E-02	6.88E-02	6.11E-02	4.88E-02
Lung_P	1.32E-04	4.03E-02	1.72E-01	2.58E-01	1.41E-01	8.11E-02	7.83E-02	7.85E-02	7.84E-02	6.88E-02	6.11E-02	4.88E-02
Muscle	5.54E-02	1.31E-01	1.71E-01	1.47E-01	7.57E-02	4.47E-02	4.63E-02	4.86E-02	4.58E-02	4.25E-02	3.95E-02	3.15E-02
Ovaries	0.0	3.53E-10	1.27E-05	1.89E-03	3.64E-03	5.96E-03	7.04E-03	6.91E-03	6.61E-03	6.36E-03	6.16E-03	5.13E-03
Pancreas	0.0	1.68E-05	3.56E-03	2.49E-02	4.68E-02	3.05E-02	2.51E-02	2.32E-02	2.49E-02	2.52E-02	2.45E-02	1.98E-02
R_Marrow	1.58E-03	1.88E-02	3.60E-02	4.47E-02	3.39E-02	2.24E-02	2.27E-02	2.37E-02	2.32E-02	2.06E-02	1.87E-02	1.62E-02
Skin	1.82E-03	2.31E-02	5.95E-02	6.63E-02	3.60E-02	2.32E-02	2.55E-02	2.86E-02	2.85E-02	2.55E-02	2.31E-02	1.93E-02
Spleen	0.0	2.45E-06	1.18E-03	1.98E-02	2.79E-02	1.82E-02	1.89E-02	1.68E-02	1.97E-02	1.87E-02	1.77E-02	1.46E-02
Testes	0.0	0.0	2.78E-07	2.67E-04	2.03E-03	2.85E-03	3.00E-03	3.24E-03	3.32E-03	3.23E-03	3.10E-03	2.73E-03
Thymus	7.69E+01	5.42E+01	3.33E+01	1.29E+01	4.23E+00	2.37E+00	2.54E+00	2.75E+00	2.61E+00	2.42E+00	2.25E+00	1.81E+00
Thyroid	1.09E-02	4.45E-01	9.61E-01	1.02E+00	4.72E-01	2.60E-01	2.58E-01	2.76E-01	2.47E-01	2.42E-01	2.38E-01	2.00E-01
GB_Wall	0.0	7.54E-06	2.03E-03	3.03E-02	3.06E-02	2.45E-02	2.04E-02	1.77E-02	1.54E-02	1.47E-02	1.45E-02	1.50E-02
Ht_Wall	3.54E-02	2.96E-01	5.94E-01	5.92E-01	2.96E-01	1.68E-01	1.64E-01	1.74E-01	1.69E-01	1.49E-01	1.33E-01	1.03E-01
Uterus	0.0	3.37E-10	1.23E-05	1.85E-03	2.85E-03	4.44E-03	5.90E-03	6.82E-03	6.60E-03	6.34E-03	6.07E-03	5.10E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	9.36E-08	2.57E-04	1.02E-02	1.84E-02	1.72E-02	1.59E-02	1.42E-02	1.27E-02	1.18E-02	1.11E-02	9.65E-03
UB_Wall	0.0	0.0	2.38E-07	2.52E-04	1.97E-03	2.80E-03	3.08E-03	3.36E-03	3.31E-03	3.22E-03	3.16E-03	2.68E-03
Bone_Sur	1.44E-06	5.93E-03	6.50E-02	2.34E-01	1.98E-01	6.84E-02	3.47E-02	2.93E-02	2.73E-02	2.55E-02	2.42E-02	2.09E-02
Brain	0.0	1.12E-04	3.70E-03	3.14E-02	3.90E-02	2.58E-02	2.65E-02	2.69E-02	2.52E-02	2.41E-02	2.31E-02	2.02E-02
Breasts	0.0	6.90E-05	9.11E-03	4.12E-02	3.73E-02	3.34E-02	3.21E-02	3.43E-02	3.33E-02	3.17E-02	3.03E-02	2.48E-02
St_Wall	0.0	1.35E-07	2.41E-04	1.30E-02	1.53E-02	1.28E-02	1.30E-02	1.30E-02	1.18E-02	1.13E-02	1.08E-02	8.94E-03
SI_Wall	0.0	0.0	6.11E-06	1.73E-03	3.20E-03	4.28E-03	4.36E-03	5.09E-03	5.14E-03	4.91E-03	4.75E-03	4.49E-03
ULI_Wall	0.0	2.17E-10	9.91E-06	1.63E-03	4.14E-03	6.31E-03	6.19E-03	6.10E-03	6.05E-03	5.92E-03	5.80E-03	4.83E-03
LLI_Wall	0.0	0.0	1.26E-06	4.59E-04	2.63E-03	3.31E-03	3.59E-03	3.86E-03	3.77E-03	3.66E-03	3.58E-03	3.02E-03
Kidneys	0.0	3.00E-09	3.95E-05	3.74E-03	8.20E-03	8.49E-03	7.56E-03	8.37E-03	9.00E-03	8.40E-03	8.00E-03	6.41E-03
Liver	0.0	2.44E-07	3.17E-04	1.12E-02	1.81E-02	1.37E-02	1.26E-02	1.30E-02	1.31E-02	1.27E-02	1.22E-02	1.02E-02
ET1-bas	0.0	1.12E-04	3.70E-03	3.14E-02	3.90E-02	2.58E-02	2.65E-02	2.69E-02	2.52E-02	2.41E-02	2.31E-02	2.02E-02
ET2-bas	0.0	1.12E-04	3.70E-03	3.14E-02	3.90E-02	2.58E-02	2.65E-02	2.69E-02	2.52E-02	2.41E-02	2.31E-02	2.02E-02
LN-ET	0.0	1.12E-04	3.70E-03	3.14E-02	3.90E-02	2.58E-02	2.65E-02	2.69E-02	2.52E-02	2.41E-02	2.31E-02	2.02E-02
BBi-bas	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
BBi-sec	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
bbe-sec	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
AI	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
LN-Th	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
Lng_Tiss	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
Lung_NP	0.0	1.12E-04	3.70E-03	3.14E-02	3.90E-02	2.58E-02	2.65E-02	2.69E-02	2.52E-02	2.41E-02	2.31E-02	2.02E-02
Lung_TB	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
Lung_P	1.17E-07	3.06E-03	5.34E-02	1.32E-01	9.51E-02	4.91E-02	4.71E-02	5.03E-02	4.63E-02	4.32E-02	4.02E-02	3.05E-02
Muscle	1.33E-01	2.64E-01	3.11E-01	2.38E-01	1.13E-01	6.48E-02	6.57E-02	6.81E-02	6.39E-02	5.94E-02	5.54E-02	4.44E-02
Ovaries	0.0	0.0	9.80E-07	5.30E-04	3.12E-03	3.89E-03	4.10E-03	4.39E-03	4.26E-03	4.13E-03	4.03E-03	3.39E-03
Pancreas	0.0	1.06E-07	2.79E-04	9.80E-03	1.18E-02	1.35E-02	1.41E-02	1.37E-02	1.30E-02	1.24E-02	1.20E-02	9.87E-03
R_Marrow	3.20E-06	1.05E-03	1.09E-02	3.75E-02	3.73E-02	2.61E-02	2.30E-02	2.28E-02	2.15E-02	2.02E-02	1.91E-02	1.64E-02
Skin	7.12E-07	1.98E-03	1.84E-02	4.47E-02	3.16E-02	1.99E-02	2.10E-02	2.23E-02	2.25E-02	2.05E-02	1.92E-02	1.94E-02
Spleen	0.0	3.72E-08	1.43E-04	1.00E-02	1.64E-02	1.50E-02	1.36E-02	1.26E-02	1.15E-02	1.07E-02	1.00E-02	8.32E-03
Testes	0.0	0.0	1.90E-08	7.27E-05	9.37E-04	1.65E-03	1.95E-03	2.23E-03	2.25E-03	2.22E-03	2.20E-03	1.89E-03
Thymus	1.09E-02	4.45E-01	9.61E-01	1.02E+00	4.72E-01	2.60E-01	2.58E-01	2.76E-01	2.47E-01	2.42E-01	2.38E-01	2.00E-01
Thyroid	5.33E+02	2.80E+02	1.45E+02	4.90E+01	1.54E+01	8.73E+00	9.42E+00	1.02E+01	9.89E+00	9.00E+00	8.26E+00	6.83E+00
GB_Wall	0.0	2.82E-08	1.24E-04	6.10E-03	1.35E-02	1.13E-02	1.06E-02	1.11E-02	1.05E-02	1.01E-02	9.74E-03	8.04E-03
Ht_Wall	8.02E-10	7.46E-04	1.66E-02	8.60E-02	8.00E-02	5.01E-02	4.52E-02	4.56E-02	4.90E-02	4.36E-02	3.89E-02	3.22E-02
Uterus	0.0	0.0	8.68E-07	4.98E-04	3.01E-03	3.78E-03	4.01E-03	4.29E-03	4.18E-03	4.04E-03	3.95E-03	3.32E-03

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	1.49E-05	3.18E-02	1.51E-01	3.63E-01	2.48E-01	1.37E-01	1.35E-01	1.35E-01	1.23E-01	1.09E-01	9.90E-02	8.18E-02
UB_Wall	0.0	1.26E-04	9.90E-03	5.07E-02	8.04E-02	4.52E-02	3.46E-02	3.68E-02	3.60E-02	3.27E-02	3.05E-02	2.38E-02
Bone_Sur	1.07E-07	2.28E-03	5.15E-02	2.44E-01	2.27E-01	7.88E-02	4.10E-02	3.31E-02	3.23E-02	2.94E-02	2.70E-02	2.31E-02
Brain	0.0	0.0	2.70E-07	2.25E-04	8.45E-04	1.46E-03	1.71E-03	2.08E-03	2.40E-03	2.59E-03	2.65E-03	2.49E-03
Breasts	0.0	7.56E-05	9.25E-03	6.31E-02	4.76E-02	3.67E-02	3.36E-02	3.57E-02	3.53E-02	3.26E-02	3.02E-02	2.47E-02
St_Wall	1.12E-02	5.18E-01	1.18E+00	1.22E+00	5.81E-01	3.14E-01	2.89E-01	2.82E-01	2.82E-01	2.74E-01	2.59E-01	2.00E-01
SI_Wall	3.52E-02	1.54E-01	4.71E-01	6.48E-01	3.45E-01	1.92E-01	1.84E-01	1.81E-01	1.69E-01	1.57E-01	1.46E-01	1.17E-01
ULI_Wall	3.29E-01	9.73E-01	1.41E+00	1.16E+00	5.42E-01	2.93E-01	3.05E-01	3.08E-01	2.93E-01	2.72E-01	2.50E-01	1.79E-01
LLI_Wall	2.43E-08	2.48E-03	3.30E-02	1.18E-01	1.01E-01	5.47E-02	5.30E-02	5.50E-02	4.54E-02	4.61E-02	4.62E-02	3.53E-02
Kidneys	5.72E-08	3.83E-03	1.01E-01	2.87E-01	1.96E-01	1.07E-01	1.11E-01	1.01E-01	1.06E-01	9.15E-02	7.98E-02	6.70E-02
Liver	9.89E-02	7.89E-01	1.38E+00	1.16E+00	5.21E-01	2.84E-01	2.76E-01	2.88E-01	2.68E-01	2.46E-01	2.27E-01	1.86E-01
ET1-bas	0.0	2.73E-08	1.22E-04	6.08E-03	1.41E-02	1.40E-02	1.04E-02	1.11E-02	1.05E-02	1.01E-02	9.73E-03	8.03E-03
ET2-bas	0.0	2.73E-08	1.22E-04	6.08E-03	1.41E-02	1.40E-02	1.04E-02	1.11E-02	1.05E-02	1.01E-02	9.73E-03	8.03E-03
LN-ET	0.0	2.73E-08	1.22E-04	6.08E-03	1.41E-02	1.40E-02	1.04E-02	1.11E-02	1.05E-02	1.01E-02	9.73E-03	8.03E-03
BBi-bas	2.68E-07	2.90E-03	4.44E-02	1.33E-01	9.14E-02	5.69E-02	5.12E-02	5.00E-02	4.68E-02	4.37E-02	4.10E-02	3.45E-02
BBi-sec	2.68E-07	2.90E-03	4.44E-02	1.33E-01	9.14E-02	5.69E-02	5.12E-02	5.00E-02	4.68E-02	4.37E-02	4.10E-02	3.45E-02
bbe-sec	2.68E-07	2.90E-03	4.44E-02	1.33E-01	9.14E-02	5.69E-02	5.12E-02	5.00E-02	4.68E-02	4.37E-02	4.10E-02	3.45E-02
AI	2.68E-07	2.90E-03	4.44E-02	1.33E-01	9.14E-02	5.69E-02	5.12E-02	5.00E-02	4.68E-02	4.37E-02	4.10E-02	3.45E-02
LN-Th	2.68E-07	2.90E-03	4.44E-02	1.33E-01	9.14E-02	5.69E-02	5.12E-02	5.00E-02	4.68E-02	4.37E-02	4.10E-02	3.45E-02
Lng_Tiss	2.68E-07	2.90E-03	4.44E-02	1.33E-01	9.14E-02	5.69E-02	5.12E-02	5.00E-02	4.68E-02	4.37E-02	4.10E-02	3.45E-02
Lung_NP	0.0	2.73E-08	1.22E-04	6.08E-03	1.41E-02	1.40E-02	1.04E-02	1.11E-02	1.05E-02	1.01E-02	9.73E-03	8.03E-03
Lung_TB	2.68E-07	2.90E-03	4.44E-02	1.33E-01	9.14E-02	5.69E-02	5.12E-02	5.00E-02	4.68E-02	4.37E-02	4.10E-02	3.45E-02
Lung_P	2.68E-07	2.90E-03	4.44E-02	1.33E-01	9.14E-02	5.69E-02	5.12E-02	5.00E-02	4.68E-02	4.37E-02	4.10E-02	3.45E-02
Muscle	6.41E-02	1.50E-01	1.83E-01	1.58E-01	8.64E-02	5.15E-02	5.16E-02	5.32E-02	5.04E-02	4.63E-02	4.29E-02	3.50E-02
Ovaries	4.60E-10	1.53E-03	4.57E-02	1.70E-01	1.54E-01	9.63E-02	8.19E-02	7.38E-02	6.60E-02	5.97E-02	5.56E-02	4.55E-02
Pancreas	1.70E+00	4.82E+00	5.67E+00	3.24E+00	1.29E+00	6.94E-01	6.53E-01	7.27E-01	6.88E-01	5.93E-01	5.34E-01	4.80E-01
R_Marrow	1.56E-07	2.97E-04	6.76E-03	3.18E-02	3.43E-02	2.45E-02	2.38E-02	2.26E-02	2.28E-02	2.08E-02	1.91E-02	1.63E-02
Skin	1.73E-08	8.15E-04	8.34E-03	3.10E-02	2.74E-02	1.90E-02	1.82E-02	1.97E-02	2.08E-02	1.96E-02	1.84E-02	1.69E-02
Spleen	3.85E-07	1.29E-02	1.03E-01	2.98E-01	2.06E-01	1.22E-01	1.21E-01	1.09E-01	1.04E-01	1.03E-01	9.84E-02	7.05E-02
Testes	0.0	4.37E-07	5.34E-04	1.33E-02	2.19E-02	1.95E-02	1.81E-02	1.66E-02	1.48E-02	1.37E-02	1.29E-02	1.12E-02
Thymus	0.0	7.26E-06	2.01E-03	2.60E-02	3.22E-02	2.42E-02	1.93E-02	1.76E-02	1.49E-02	1.41E-02	1.40E-02	1.50E-02
Thyroid	0.0	2.73E-08	1.22E-04	6.08E-03	1.41E-02	1.40E-02	1.04E-02	1.11E-02	1.05E-02	1.01E-02	9.73E-03	8.03E-03
GB_Wall	1.45E+02	1.12E+02	6.68E+01	2.48E+01	7.92E+00	4.38E+00	4.75E+00	5.22E+00	5.13E+00	4.70E+00	4.27E+00	3.20E+00
Ht_Wall	1.98E-06	1.11E-02	9.88E-02	2.17E-01	1.45E-01	9.00E-02	8.06E-02	8.18E-02	8.61E-02	8.13E-02	7.37E-02	4.99E-02
Uterus	9.73E-10	1.94E-03	3.77E-02	1.60E-01	1.78E-01	8.74E-02	7.60E-02	6.92E-02	6.65E-02	6.83E-02	6.59E-02	4.27E-02

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	1.64E-05	2.49E-02	1.81E-01	3.79E-01	2.47E-01	1.31E-01	1.38E-01	1.30E-01	1.05E-01	1.00E-01	9.69E-02	8.15E-02
UB_Wall	0.0	1.23E-04	9.78E-03	4.83E-02	7.34E-02	4.73E-02	3.94E-02	4.06E-02	3.71E-02	3.22E-02	2.89E-02	2.37E-02
Bone_Sur	1.07E-07	2.28E-03	5.15E-02	2.44E-01	2.27E-01	7.88E-02	4.10E-02	3.31E-02	3.23E-02	2.94E-02	2.70E-02	2.31E-02
Brain	0.0	0.0	2.63E-07	2.47E-04	1.22E-03	1.42E-03	1.45E-03	2.12E-03	2.42E-03	2.58E-03	2.65E-03	2.48E-03
Breasts	0.0	7.89E-05	9.34E-03	6.39E-02	4.69E-02	3.43E-02	3.13E-02	3.41E-02	3.29E-02	3.13E-02	3.02E-02	2.47E-02
St_Wall	2.19E-02	4.68E-01	1.30E+00	1.24E+00	5.44E-01	3.08E-01	2.92E-01	2.95E-01	2.89E-01	2.77E-01	2.58E-01	1.83E-01
SI_Wall	9.95E-03	1.44E-01	4.86E-01	6.48E-01	3.44E-01	1.87E-01	1.82E-01	1.79E-01	1.66E-01	1.48E-01	1.34E-01	1.09E-01
ULI_Wall	1.92E-01	8.24E-01	1.34E+00	1.11E+00	5.28E-01	2.74E-01	2.67E-01	3.07E-01	2.75E-01	2.44E-01	2.21E-01	1.71E-01
LLI_Wall	3.48E-08	2.64E-03	3.34E-02	9.94E-02	1.03E-01	6.06E-02	6.21E-02	5.48E-02	4.39E-02	4.00E-02	3.77E-02	3.21E-02
Kidneys	1.05E-07	9.28E-03	1.09E-01	2.79E-01	1.90E-01	1.11E-01	1.16E-01	1.05E-01	1.02E-01	8.83E-02	7.80E-02	6.46E-02
Liver	2.14E-01	9.22E-01	1.47E+00	1.18E+00	5.23E-01	2.88E-01	2.80E-01	2.97E-01	2.77E-01	2.53E-01	2.35E-01	1.90E-01
ET1-bas	0.0	2.82E-08	1.24E-04	6.10E-03	1.35E-02	1.13E-02	1.06E-02	1.11E-02	1.05E-02	1.01E-02	9.74E-03	8.04E-03
ET2-bas	0.0	2.82E-08	1.24E-04	6.10E-03	1.35E-02	1.13E-02	1.06E-02	1.11E-02	1.05E-02	1.01E-02	9.74E-03	8.04E-03
LN-ET	0.0	2.82E-08	1.24E-04	6.10E-03	1.35E-02	1.13E-02	1.06E-02	1.11E-02	1.05E-02	1.01E-02	9.74E-03	8.04E-03
BBi-bas	4.44E-07	3.31E-03	4.55E-02	1.33E-01	8.97E-02	5.54E-02	5.09E-02	5.02E-02	5.04E-02	4.36E-02	3.87E-02	3.43E-02
BBi-sec	4.44E-07	3.31E-03	4.55E-02	1.33E-01	8.97E-02	5.54E-02	5.09E-02	5.02E-02	5.04E-02	4.36E-02	3.87E-02	3.43E-02
bbe-sec	4.44E-07	3.31E-03	4.55E-02	1.33E-01	8.97E-02	5.54E-02	5.09E-02	5.02E-02	5.04E-02	4.36E-02	3.87E-02	3.43E-02
AI	4.44E-07	3.31E-03	4.55E-02	1.33E-01	8.97E-02	5.54E-02	5.09E-02	5.02E-02	5.04E-02	4.36E-02	3.87E-02	3.43E-02
LN-Th	4.44E-07	3.31E-03	4.55E-02	1.33E-01	8.97E-02	5.54E-02	5.09E-02	5.02E-02	5.04E-02	4.36E-02	3.87E-02	3.43E-02
Lng_Tiss	4.44E-07	3.31E-03	4.55E-02	1.33E-01	8.97E-02	5.54E-02	5.09E-02	5.02E-02	5.04E-02	4.36E-02	3.87E-02	3.43E-02
Lung_NP	0.0	2.82E-08	1.24E-04	6.10E-03	1.35E-02	1.13E-02	1.06E-02	1.11E-02	1.05E-02	1.01E-02	9.74E-03	8.04E-03
Lung_TB	4.44E-07	3.31E-03	4.55E-02	1.33E-01	8.97E-02	5.54E-02	5.09E-02	5.02E-02	5.04E-02	4.36E-02	3.87E-02	3.43E-02
Lung_P	4.44E-07	3.31E-03	4.55E-02	1.33E-01	8.97E-02	5.54E-02	5.09E-02	5.02E-02	5.04E-02	4.36E-02	3.87E-02	3.43E-02
Muscle	1.67E-01	2.03E-01	2.08E-01	1.64E-01	8.93E-02	5.31E-02	5.25E-02	5.46E-02	5.17E-02	4.83E-02	4.51E-02	3.63E-02
Ovaries	6.30E-10	1.58E-03	4.60E-02	1.71E-01	1.32E-01	9.47E-02	7.14E-02	5.69E-02	5.48E-02	5.23E-02	5.06E-02	4.13E-02
Pancreas	3.86E+00	6.01E+00	5.89E+00	3.34E+00	1.29E+00	6.85E-01	6.89E-01	7.50E-01	6.66E-01	6.06E-01	5.72E-01	5.17E-01
R_Marrow	1.56E-07	2.97E-04	6.76E-03	3.18E-02	3.43E-02	2.45E-02	2.38E-02	2.26E-02	2.28E-02	2.08E-02	1.91E-02	1.63E-02
Skin	3.34E-08	9.73E-04	8.19E-03	3.16E-02	2.78E-02	1.90E-02	1.84E-02	2.15E-02	2.00E-02	1.84E-02	1.73E-02	1.49E-02
Spleen	6.45E-07	1.39E-02	9.99E-02	3.00E-01	2.03E-01	1.21E-01	1.07E-01	1.12E-01	9.66E-02	9.10E-02	8.70E-02	7.07E-02
Testes	0.0	4.38E-07	5.34E-04	1.32E-02	2.18E-02	1.61E-02	1.49E-02	1.55E-02	1.48E-02	1.41E-02	1.36E-02	1.12E-02
Thymus	0.0	7.54E-06	2.03E-03	3.03E-02	3.06E-02	2.45E-02	2.04E-02	1.77E-02	1.54E-02	1.47E-02	1.45E-02	1.50E-02
Thyroid	0.0	2.82E-08	1.24E-04	6.10E-03	1.35E-02	1.13E-02	1.06E-02	1.11E-02	1.05E-02	1.01E-02	9.74E-03	8.04E-03
GB_Wall	6.36E+02	2.61E+02	1.24E+02	4.07E+01	1.31E+01	7.38E+00	8.00E+00	9.04E+00	8.53E+00	7.97E+00	7.50E+00	6.23E+00
Ht_Wall	2.51E-06	9.02E-03	8.10E-02	2.12E-01	1.43E-01	8.68E-02	7.97E-02	8.14E-02	8.53E-02	7.63E-02	6.75E-02	4.99E-02
Uterus	1.23E-09	1.99E-03	3.13E-02	1.69E-01	1.53E-01	7.30E-02	7.77E-02	7.30E-02	6.59E-02	7.31E-02	7.38E-02	4.26E-02

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	1.28E-07	8.16E-03	7.19E-02	1.94E-01	1.41E-01	7.75E-02	7.77E-02	8.10E-02	7.02E-02	6.68E-02	6.28E-02	4.36E-02
UB_Wall	0.0	7.83E-09	5.62E-05	3.40E-03	7.37E-03	7.64E-03	7.75E-03	7.63E-03	8.23E-03	8.58E-03	8.45E-03	6.67E-03
Bone_Sur	5.57E-04	2.64E-02	1.55E-01	3.70E-01	2.62E-01	8.45E-02	4.49E-02	3.81E-02	3.62E-02	3.33E-02	3.09E-02	2.55E-02
Brain	0.0	6.26E-09	3.24E-05	1.84E-03	4.47E-03	4.75E-03	4.93E-03	6.86E-03	6.77E-03	6.69E-03	6.60E-03	5.85E-03
Breasts	1.71E-04	5.85E-02	2.67E-01	4.24E-01	2.19E-01	1.26E-01	1.37E-01	1.57E-01	1.38E-01	1.24E-01	1.14E-01	9.27E-02
St_Wall	4.55E-05	1.99E-02	9.39E-02	2.12E-01	1.43E-01	7.80E-02	7.58E-02	7.76E-02	7.27E-02	6.83E-02	6.37E-02	4.87E-02
SI_Wall	0.0	6.20E-06	1.96E-03	2.05E-02	3.20E-02	2.21E-02	2.00E-02	2.13E-02	2.04E-02	1.90E-02	1.78E-02	1.46E-02
ULI_Wall	0.0	1.65E-05	4.15E-03	2.58E-02	3.85E-02	2.61E-02	2.27E-02	2.40E-02	2.36E-02	2.41E-02	2.37E-02	1.77E-02
LLI_Wall	0.0	6.57E-07	3.40E-04	7.43E-03	1.18E-02	1.12E-02	1.01E-02	1.16E-02	1.12E-02	1.04E-02	9.93E-03	8.94E-03
Kidneys	0.0	1.09E-04	9.33E-03	4.93E-02	5.49E-02	3.70E-02	3.46E-02	3.81E-02	3.27E-02	3.26E-02	3.22E-02	2.50E-02
Liver	7.29E-04	3.99E-02	1.74E-01	2.63E-01	1.58E-01	8.81E-02	8.71E-02	9.04E-02	8.04E-02	7.65E-02	7.26E-02	5.50E-02
ET1-bas	3.75E-10	7.44E-04	2.27E-02	1.03E-01	1.02E-01	5.63E-02	5.53E-02	5.35E-02	5.04E-02	4.52E-02	4.15E-02	3.62E-02
ET2-bas	3.75E-10	7.44E-04	2.27E-02	1.03E-01	1.02E-01	5.63E-02	5.53E-02	5.35E-02	5.04E-02	4.52E-02	4.15E-02	3.62E-02
LN-ET	3.75E-10	7.44E-04	2.27E-02	1.03E-01	1.02E-01	5.63E-02	5.53E-02	5.35E-02	5.04E-02	4.52E-02	4.15E-02	3.62E-02
BBi-bas	3.07E-02	3.32E-01	7.21E-01	6.59E-01	2.93E-01	1.57E-01	1.56E-01	1.61E-01	1.54E-01	1.43E-01	1.33E-01	1.02E-01
BBi-sec	3.07E-02	3.32E-01	7.21E-01	6.59E-01	2.93E-01	1.57E-01	1.56E-01	1.61E-01	1.54E-01	1.43E-01	1.33E-01	1.02E-01
bbe-sec	3.07E-02	3.32E-01	7.21E-01	6.59E-01	2.93E-01	1.57E-01	1.56E-01	1.61E-01	1.54E-01	1.43E-01	1.33E-01	1.02E-01
AI	3.07E-02	3.32E-01	7.21E-01	6.59E-01	2.93E-01	1.57E-01	1.56E-01	1.61E-01	1.54E-01	1.43E-01	1.33E-01	1.02E-01
LN-Th	3.07E-02	3.32E-01	7.21E-01	6.59E-01	2.93E-01	1.57E-01	1.56E-01	1.61E-01	1.54E-01	1.43E-01	1.33E-01	1.02E-01
Lng_Tiss	3.07E-02	3.32E-01	7.21E-01	6.59E-01	2.93E-01	1.57E-01	1.56E-01	1.61E-01	1.54E-01	1.43E-01	1.33E-01	1.02E-01
Lung_NP	3.75E-10	7.44E-04	2.27E-02	1.03E-01	1.02E-01	5.63E-02	5.53E-02	5.35E-02	5.04E-02	4.52E-02	4.15E-02	3.62E-02
Lung_TB	3.07E-02	3.32E-01	7.21E-01	6.59E-01	2.93E-01	1.57E-01	1.56E-01	1.61E-01	1.54E-01	1.43E-01	1.33E-01	1.02E-01
Lung_P	3.07E-02	3.32E-01	7.21E-01	6.59E-01	2.93E-01	1.57E-01	1.56E-01	1.61E-01	1.54E-01	1.43E-01	1.33E-01	1.02E-01
Muscle	7.69E-03	5.00E-02	9.99E-02	1.14E-01	6.74E-02	4.08E-02	4.03E-02	4.17E-02	3.96E-02	3.69E-02	3.44E-02	2.78E-02
Ovaries	0.0	1.05E-07	2.45E-04	1.19E-02	1.32E-02	1.33E-02	1.22E-02	1.14E-02	1.09E-02	1.06E-02	1.05E-02	1.03E-02
Pancreas	6.59E-07	7.38E-03	1.06E-01	2.73E-01	1.81E-01	1.08E-01	1.02E-01	9.49E-02	9.75E-02	8.06E-02	6.97E-02	6.50E-02
R_Marrow	8.35E-05	3.68E-03	2.05E-02	4.67E-02	3.91E-02	2.70E-02	2.59E-02	2.63E-02	2.53E-02	2.33E-02	2.16E-02	1.82E-02
Skin	4.05E-04	3.68E-03	1.76E-02	4.05E-02	3.08E-02	2.08E-02	2.19E-02	2.38E-02	2.28E-02	2.03E-02	1.85E-02	1.63E-02
Spleen	1.15E-09	9.37E-04	2.98E-02	1.15E-01	9.24E-02	5.56E-02	5.36E-02	5.43E-02	4.96E-02	4.46E-02	4.15E-02	3.78E-02
Testes	0.0	0.0	3.92E-06	1.02E-03	2.07E-03	3.51E-03	4.50E-03	5.17E-03	5.18E-03	4.97E-03	4.76E-03	4.15E-03
Thymus	7.27E-03	1.94E-01	5.40E-01	6.25E-01	3.27E-01	1.73E-01	1.75E-01	1.92E-01	1.68E-01	1.53E-01	1.43E-01	1.14E-01
Thyroid	3.75E-10	7.44E-04	2.27E-02	1.03E-01	1.02E-01	5.63E-02	5.53E-02	5.35E-02	5.04E-02	4.52E-02	4.15E-02	3.62E-02
GB_Wall	1.10E-07	4.31E-03	5.34E-02	1.78E-01	1.27E-01	7.26E-02	7.21E-02	6.94E-02	5.93E-02	5.54E-02	5.31E-02	4.70E-02
Ht_Wall	3.89E+00	6.26E+00	5.88E+00	3.17E+00	1.19E+00	6.56E-01	6.88E-01	7.19E-01	6.73E-01	6.13E-01	5.65E-01	4.65E-01
Uterus	0.0	9.02E-08	2.25E-04	1.10E-02	1.31E-02	1.31E-02	1.21E-02	1.26E-02	1.23E-02	1.16E-02	1.11E-02	1.01E-02

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	6.41E-07	8.96E-03	7.17E-02	1.89E-01	1.36E-01	7.63E-02	7.67E-02	7.89E-02	7.51E-02	6.45E-02	5.76E-02	5.13E-02
UB_Wall	0.0	2.01E-08	8.75E-05	5.88E-03	6.64E-03	7.59E-03	8.32E-03	8.73E-03	8.64E-03	8.47E-03	8.31E-03	7.89E-03
Bone_Sur	5.57E-04	2.64E-02	1.55E-01	3.70E-01	2.62E-01	8.45E-02	4.49E-02	3.81E-02	3.62E-02	3.33E-02	3.09E-02	2.55E-02
Brain	0.0	6.16E-09	2.69E-05	1.65E-03	3.85E-03	4.54E-03	4.92E-03	5.90E-03	6.16E-03	5.82E-03	5.45E-03	4.48E-03
Breasts	5.23E-03	1.99E-01	5.62E-01	5.75E-01	2.73E-01	1.66E-01	1.71E-01	1.89E-01	1.73E-01	1.67E-01	1.60E-01	1.28E-01
St_Wall	2.37E-03	9.18E-02	2.71E-01	3.54E-01	2.06E-01	1.09E-01	1.16E-01	1.20E-01	1.13E-01	9.71E-02	8.70E-02	7.72E-02
SI_Wall	0.0	1.75E-05	2.64E-03	2.58E-02	3.60E-02	2.51E-02	2.26E-02	2.47E-02	2.28E-02	2.14E-02	2.02E-02	1.63E-02
ULI_Wall	0.0	4.61E-05	5.28E-03	3.14E-02	4.17E-02	2.57E-02	2.51E-02	2.77E-02	2.77E-02	2.58E-02	2.39E-02	1.94E-02
LLI_Wall	0.0	2.14E-06	6.23E-04	1.11E-02	1.27E-02	1.26E-02	1.26E-02	1.34E-02	1.31E-02	1.23E-02	1.14E-02	9.06E-03
Kidneys	0.0	1.84E-04	1.22E-02	5.22E-02	5.56E-02	3.69E-02	3.33E-02	3.59E-02	3.89E-02	3.45E-02	3.11E-02	2.84E-02
Liver	8.28E-03	1.07E-01	2.55E-01	2.94E-01	1.68E-01	9.72E-02	9.95E-02	9.98E-02	9.31E-02	8.57E-02	7.91E-02	6.20E-02
ET1-bas	8.02E-10	7.46E-04	1.66E-02	8.60E-02	8.00E-02	5.01E-02	4.52E-02	4.56E-02	4.90E-02	4.36E-02	3.89E-02	3.22E-02
ET2-bas	8.02E-10	7.46E-04	1.66E-02	8.60E-02	8.00E-02	5.01E-02	4.52E-02	4.56E-02	4.90E-02	4.36E-02	3.89E-02	3.22E-02
LN-ET	8.02E-10	7.46E-04	1.66E-02	8.60E-02	8.00E-02	5.01E-02	4.52E-02	4.56E-02	4.90E-02	4.36E-02	3.89E-02	3.22E-02
BBi-bas	8.93E-02	4.34E-01	7.10E-01	5.92E-01	2.71E-01	1.48E-01	1.47E-01	1.47E-01	1.45E-01	1.35E-01	1.23E-01	9.09E-02
BBi-sec	8.93E-02	4.34E-01	7.10E-01	5.92E-01	2.71E-01	1.48E-01	1.47E-01	1.47E-01	1.45E-01	1.35E-01	1.23E-01	9.09E-02
bbe-sec	8.93E-02	4.34E-01	7.10E-01	5.92E-01	2.71E-01	1.48E-01	1.47E-01	1.47E-01	1.45E-01	1.35E-01	1.23E-01	9.09E-02
AI	8.93E-02	4.34E-01	7.10E-01	5.92E-01	2.71E-01	1.48E-01	1.47E-01	1.47E-01	1.45E-01	1.35E-01	1.23E-01	9.09E-02
LN-Th	8.93E-02	4.34E-01	7.10E-01	5.92E-01	2.71E-01	1.48E-01	1.47E-01	1.47E-01	1.45E-01	1.35E-01	1.23E-01	9.09E-02
Lng_Tiss	8.93E-02	4.34E-01	7.10E-01	5.92E-01	2.71E-01	1.48E-01	1.47E-01	1.47E-01	1.45E-01	1.35E-01	1.23E-01	9.09E-02
Lung_NP	8.02E-10	7.46E-04	1.66E-02	8.60E-02	8.00E-02	5.01E-02	4.52E-02	4.56E-02	4.90E-02	4.36E-02	3.89E-02	3.22E-02
Lung_TB	8.93E-02	4.34E-01	7.10E-01	5.92E-01	2.71E-01	1.48E-01	1.47E-01	1.47E-01	1.45E-01	1.35E-01	1.23E-01	9.09E-02
Lung_P	8.93E-02	4.34E-01	7.10E-01	5.92E-01	2.71E-01	1.48E-01	1.47E-01	1.47E-01	1.45E-01	1.35E-01	1.23E-01	9.09E-02
Muscle	5.36E-02	1.02E-01	1.31E-01	1.23E-01	6.91E-02	4.13E-02	4.16E-02	4.31E-02	4.11E-02	3.83E-02	3.57E-02	2.90E-02
Ovaries	0.0	2.76E-07	3.78E-04	1.19E-02	1.51E-02	1.42E-02	1.29E-02	1.23E-02	1.18E-02	1.14E-02	1.10E-02	1.00E-02
Pancreas	1.89E-05	3.24E-02	2.01E-01	3.90E-01	2.07E-01	1.16E-01	1.18E-01	1.28E-01	1.13E-01	1.03E-01	9.55E-02	7.48E-02
R_Marrow	8.35E-05	3.68E-03	2.05E-02	4.67E-02	3.91E-02	2.70E-02	2.59E-02	2.63E-02	2.53E-02	2.33E-02	2.16E-02	1.82E-02
Skin	1.15E-03	9.77E-03	2.51E-02	4.45E-02	3.18E-02	2.04E-02	2.30E-02	2.47E-02	2.32E-02	2.27E-02	2.17E-02	1.66E-02
Spleen	2.76E-08	2.77E-03	4.26E-02	1.50E-01	1.15E-01	6.22E-02	6.14E-02	6.23E-02	5.13E-02	4.96E-02	4.91E-02	4.35E-02
Testes	0.0	0.0	6.23E-06	1.26E-03	1.94E-03	2.42E-03	2.96E-03	4.62E-03	5.46E-03	5.49E-03	5.31E-03	4.43E-03
Thymus	3.54E-02	2.96E-01	5.94E-01	5.92E-01	2.96E-01	1.68E-01	1.64E-01	1.74E-01	1.69E-01	1.49E-01	1.33E-01	1.03E-01
Thyroid	8.02E-10	7.46E-04	1.66E-02	8.60E-02	8.00E-02	5.01E-02	4.52E-02	4.56E-02	4.90E-02	4.36E-02	3.89E-02	3.22E-02
GB_Wall	2.51E-06	9.02E-03	8.10E-02	2.12E-01	1.43E-01	8.68E-02	7.97E-02	8.14E-02	8.53E-02	7.63E-02	6.75E-02	4.99E-02
Ht_Wall	2.86E+01	1.80E+01	1.13E+01	4.85E+00	1.72E+00	9.62E-01	1.02E+00	1.10E+00	1.05E+00	9.56E-01	8.78E-01	6.91E-01
Uterus	0.0	2.40E-07	3.54E-04	8.93E-03	1.42E-02	1.38E-02	1.32E-02	1.46E-02	1.44E-02	1.37E-02	1.30E-02	1.09E-02

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	8.18E-06	2.79E-03	3.18E-02	3.08E-02	2.92E-02	2.73E-02	2.44E-02	2.21E-02	2.07E-02	1.98E-02	1.75E-02
UB_Wall	2.69E-01	2.00E+00	2.91E+00	2.00E+00	8.46E-01	4.59E-01	4.90E-01	4.48E-01	4.95E-01	4.14E-01	3.55E-01	3.20E-01
Bone_Sur	1.88E-07	7.16E-03	9.17E-02	2.87E-01	2.39E-01	8.00E-02	4.12E-02	3.42E-02	3.32E-02	2.94E-02	2.66E-02	2.28E-02
Brain	0.0	0.0	2.51E-09	2.28E-05	2.28E-04	3.10E-04	4.64E-04	7.99E-04	1.08E-03	1.20E-03	1.25E-03	1.36E-03
Breasts	0.0	8.58E-09	8.00E-05	5.14E-03	1.25E-02	1.19E-02	1.12E-02	1.05E-02	9.87E-03	9.52E-03	9.28E-03	7.61E-03
St_Wall	0.0	4.10E-04	1.50E-02	6.84E-02	8.93E-02	5.37E-02	4.52E-02	4.30E-02	4.80E-02	4.57E-02	4.19E-02	3.14E-02
SI_Wall	2.77E-02	7.36E-01	1.60E+00	1.35E+00	6.22E-01	3.41E-01	3.32E-01	3.41E-01	3.22E-01	2.88E-01	2.62E-01	2.23E-01
ULI_Wall	4.61E-04	9.32E-02	4.29E-01	6.98E-01	3.65E-01	1.98E-01	1.86E-01	1.81E-01	1.76E-01	1.61E-01	1.47E-01	1.09E-01
LLI_Wall	2.82E-04	1.08E-01	5.36E-01	8.00E-01	4.28E-01	2.25E-01	2.13E-01	2.38E-01	2.17E-01	1.94E-01	1.78E-01	1.43E-01
Kidneys	0.0	2.54E-04	9.50E-03	6.53E-02	7.31E-02	4.67E-02	4.72E-02	4.36E-02	3.96E-02	3.67E-02	3.47E-02	3.08E-02
Liver	0.0	2.80E-04	8.88E-03	6.41E-02	6.37E-02	4.03E-02	3.78E-02	3.99E-02	3.54E-02	3.46E-02	3.35E-02	2.57E-02
ET1-bas	0.0	0.0	8.68E-07	4.98E-04	3.01E-03	3.78E-03	4.01E-03	4.29E-03	4.18E-03	4.04E-03	3.95E-03	3.32E-03
ET2-bas	0.0	0.0	8.68E-07	4.98E-04	3.01E-03	3.78E-03	4.01E-03	4.29E-03	4.18E-03	4.04E-03	3.95E-03	3.32E-03
LN-ET	0.0	0.0	8.68E-07	4.98E-04	3.01E-03	3.78E-03	4.01E-03	4.29E-03	4.18E-03	4.04E-03	3.95E-03	3.32E-03
BBi-bas	0.0	2.69E-07	3.39E-04	6.89E-03	1.60E-02	1.00E-02	1.10E-02	1.30E-02	1.21E-02	1.08E-02	1.01E-02	9.20E-03
BBi-sec	0.0	2.69E-07	3.39E-04	6.89E-03	1.60E-02	1.00E-02	1.10E-02	1.30E-02	1.21E-02	1.08E-02	1.01E-02	9.20E-03
bbe-sec	0.0	2.69E-07	3.39E-04	6.89E-03	1.60E-02	1.00E-02	1.10E-02	1.30E-02	1.21E-02	1.08E-02	1.01E-02	9.20E-03
AI	0.0	2.69E-07	3.39E-04	6.89E-03	1.60E-02	1.00E-02	1.10E-02	1.30E-02	1.21E-02	1.08E-02	1.01E-02	9.20E-03
LN-Th	0.0	2.69E-07	3.39E-04	6.89E-03	1.60E-02	1.00E-02	1.10E-02	1.30E-02	1.21E-02	1.08E-02	1.01E-02	9.20E-03
Lng_Tiss	0.0	2.69E-07	3.39E-04	6.89E-03	1.60E-02	1.00E-02	1.10E-02	1.30E-02	1.21E-02	1.08E-02	1.01E-02	9.20E-03
Lung_NP	0.0	0.0	8.68E-07	4.98E-04	3.01E-03	3.78E-03	4.01E-03	4.29E-03	4.18E-03	4.04E-03	3.95E-03	3.32E-03
Lung_TB	0.0	2.69E-07	3.39E-04	6.89E-03	1.60E-02	1.00E-02	1.10E-02	1.30E-02	1.21E-02	1.08E-02	1.01E-02	9.20E-03
Lung_P	0.0	2.69E-07	3.39E-04	6.89E-03	1.60E-02	1.00E-02	1.10E-02	1.30E-02	1.21E-02	1.08E-02	1.01E-02	9.20E-03
Muscle	8.26E-02	1.80E-01	2.29E-01	2.01E-01	1.06E-01	6.24E-02	6.19E-02	6.38E-02	5.97E-02	5.52E-02	5.12E-02	4.04E-02
Ovaries	3.70E-02	1.55E+00	3.45E+00	2.53E+00	1.05E+00	5.63E-01	5.61E-01	5.98E-01	5.67E-01	5.14E-01	4.63E-01	3.28E-01
Pancreas	0.0	6.87E-05	8.79E-03	4.98E-02	7.38E-02	4.39E-02	3.51E-02	3.26E-02	3.09E-02	3.08E-02	3.01E-02	2.44E-02
R_Marrow	2.21E-07	1.44E-03	1.66E-02	4.54E-02	4.03E-02	2.80E-02	2.60E-02	2.59E-02	2.53E-02	2.24E-02	2.04E-02	1.82E-02
Skin	4.54E-08	8.19E-04	9.56E-03	3.46E-02	3.00E-02	1.93E-02	1.98E-02	2.34E-02	2.33E-02	2.21E-02	2.06E-02	1.57E-02
Spleen	0.0	2.94E-05	4.99E-03	4.76E-02	4.45E-02	4.05E-02	3.67E-02	3.20E-02	2.85E-02	2.65E-02	2.52E-02	2.21E-02
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	3.37E-10	1.23E-05	1.85E-03	2.85E-03	4.44E-03	5.90E-03	6.82E-03	6.60E-03	6.34E-03	6.07E-03	5.10E-03
Thyroid	0.0	0.0	8.68E-07	4.98E-04	3.01E-03	3.78E-03	4.01E-03	4.29E-03	4.18E-03	4.04E-03	3.95E-03	3.32E-03
GB_Wall	1.23E-09	1.99E-03	3.13E-02	1.69E-01	1.53E-01	7.30E-02	7.77E-02	7.30E-02	6.59E-02	7.31E-02	7.38E-02	4.26E-02
Ht_Wall	0.0	2.40E-07	3.54E-04	8.93E-03	1.42E-02	1.38E-02	1.32E-02	1.46E-02	1.44E-02	1.37E-02	1.30E-02	1.09E-02
Uterus	2.09E+02	1.30E+02	7.16E+01	2.59E+01	8.08E+00	4.55E+00	4.96E+00	5.44E+00	5.23E+00	4.82E+00	4.43E+00	3.41E+00

Specific Absorbed Fraction of Photon Energy in kg-1: Recommended Values for the Newborn

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	2.83E-01	2.81E-01	2.56E-01	1.81E-01	9.34E-02	5.41E-02	5.53E-02	5.68E-02	5.35E-02	4.97E-02	4.63E-02	3.71E-02
UB_Wall	2.13E-01	2.00E-01	1.91E-01	1.42E-01	7.56E-02	4.58E-02	4.76E-02	4.99E-02	4.69E-02	4.34E-02	4.04E-02	3.24E-02
Bone_Sur	4.87E-01	6.12E-01	6.87E-01	6.26E-01	3.27E-01	1.00E-01	5.68E-02	5.34E-02	5.10E-02	4.65E-02	4.29E-02	3.64E-02
Brain	2.83E-01	2.79E-01	2.46E-01	1.57E-01	7.16E-02	4.15E-02	4.34E-02	4.62E-02	4.38E-02	4.06E-02	3.77E-02	3.02E-02
Breasts	2.30E-01	1.70E-01	1.32E-01	8.62E-02	4.46E-02	2.80E-02	3.07E-02	3.44E-02	3.34E-02	3.11E-02	2.91E-02	2.40E-02
St_Wall	2.39E-01	2.20E-01	2.03E-01	1.48E-01	7.96E-02	4.81E-02	5.00E-02	5.20E-02	4.85E-02	4.50E-02	4.20E-02	3.35E-02
SI_Wall	2.62E-01	2.45E-01	2.27E-01	1.70E-01	9.30E-02	5.50E-02	5.64E-02	5.77E-02	5.38E-02	4.96E-02	4.62E-02	3.78E-02
ULI_Wall	2.21E-01	2.05E-01	1.97E-01	1.53E-01	8.42E-02	5.11E-02	5.23E-02	5.41E-02	5.07E-02	4.68E-02	4.35E-02	3.51E-02
LLI_Wall	2.38E-01	2.27E-01	2.19E-01	1.64E-01	8.61E-02	5.07E-02	5.17E-02	5.42E-02	5.09E-02	4.68E-02	4.34E-02	3.55E-02
Kidneys	2.83E-01	2.77E-01	2.43E-01	1.65E-01	8.55E-02	5.05E-02	5.17E-02	5.44E-02	5.12E-02	4.76E-02	4.46E-02	3.62E-02
Liver	2.83E-01	2.78E-01	2.48E-01	1.67E-01	8.45E-02	5.07E-02	5.27E-02	5.56E-02	5.21E-02	4.82E-02	4.48E-02	3.64E-02
ET1-bas	2.83E-01	2.82E-01	2.60E-01	1.80E-01	9.13E-02	5.42E-02	5.59E-02	5.81E-02	5.49E-02	5.09E-02	4.74E-02	3.88E-02
ET2-bas	2.83E-01	2.82E-01	2.60E-01	1.80E-01	9.13E-02	5.42E-02	5.59E-02	5.81E-02	5.49E-02	5.09E-02	4.74E-02	3.88E-02
LN-ET	2.83E-01	2.82E-01	2.60E-01	1.80E-01	9.13E-02	5.42E-02	5.59E-02	5.81E-02	5.49E-02	5.09E-02	4.74E-02	3.88E-02
BBi-bas	2.83E-01	2.79E-01	2.58E-01	1.70E-01	8.20E-02	4.44E-02	4.63E-02	4.84E-02	4.56E-02	4.23E-02	3.93E-02	3.17E-02
BBi-sec	2.83E-01	2.79E-01	2.58E-01	1.70E-01	8.20E-02	4.44E-02	4.63E-02	4.84E-02	4.56E-02	4.23E-02	3.93E-02	3.17E-02
bbe-sec	2.83E-01	2.79E-01	2.58E-01	1.70E-01	8.20E-02	4.44E-02	4.63E-02	4.84E-02	4.56E-02	4.23E-02	3.93E-02	3.17E-02
AI	2.83E-01	2.79E-01	2.58E-01	1.70E-01	8.20E-02	4.44E-02	4.63E-02	4.84E-02	4.56E-02	4.23E-02	3.93E-02	3.17E-02
LN-Th	2.83E-01	2.79E-01	2.58E-01	1.70E-01	8.20E-02	4.44E-02	4.63E-02	4.84E-02	4.56E-02	4.23E-02	3.93E-02	3.17E-02
Lng_Tiss	2.83E-01	2.79E-01	2.58E-01	1.70E-01	8.20E-02	4.44E-02	4.63E-02	4.84E-02	4.56E-02	4.23E-02	3.93E-02	3.17E-02
Lung_NP	2.83E-01	2.82E-01	2.60E-01	1.80E-01	9.13E-02	5.42E-02	5.59E-02	5.81E-02	5.49E-02	5.09E-02	4.74E-02	3.88E-02
Lung_TB	2.83E-01	2.79E-01	2.58E-01	1.70E-01	8.20E-02	4.44E-02	4.63E-02	4.84E-02	4.56E-02	4.23E-02	3.93E-02	3.17E-02
Lung_P	2.83E-01	2.79E-01	2.58E-01	1.70E-01	8.20E-02	4.44E-02	4.63E-02	4.84E-02	4.56E-02	4.23E-02	3.93E-02	3.17E-02
Muscle	2.70E-01	2.45E-01	2.11E-01	1.42E-01	7.01E-02	4.28E-02	4.45E-02	4.67E-02	4.44E-02	4.12E-02	3.83E-02	3.13E-02
Ovaries	2.80E-01	2.64E-01	2.41E-01	1.78E-01	9.39E-02	5.57E-02	5.63E-02	5.84E-02	5.48E-02	5.07E-02	4.71E-02	3.79E-02
Pancreas	2.82E-01	2.78E-01	2.57E-01	1.89E-01	9.93E-02	5.86E-02	5.98E-02	6.21E-02	5.79E-02	5.32E-02	4.93E-02	4.00E-02
R_Marrow	9.84E-02	1.13E-01	1.17E-01	1.01E-01	6.45E-02	4.26E-02	4.11E-02	4.29E-02	4.04E-02	3.68E-02	3.40E-02	2.85E-02
Skin	1.94E-01	1.61E-01	1.32E-01	8.50E-02	4.28E-02	2.65E-02	2.91E-02	3.20E-02	3.15E-02	2.92E-02	2.72E-02	2.22E-02
Spleen	2.83E-01	2.81E-01	2.53E-01	1.69E-01	8.58E-02	5.07E-02	5.26E-02	5.47E-02	5.16E-02	4.80E-02	4.47E-02	3.63E-02
Testes	2.77E-01	2.46E-01	2.02E-01	1.28E-01	6.31E-02	3.81E-02	4.09E-02	4.43E-02	4.24E-02	3.90E-02	3.61E-02	2.95E-02
Thymus	2.83E-01	2.77E-01	2.42E-01	1.59E-01	7.80E-02	4.62E-02	4.89E-02	5.20E-02	4.92E-02	4.55E-02	4.23E-02	3.40E-02
Thyroid	2.83E-01	2.82E-01	2.60E-01	1.80E-01	9.13E-02	5.42E-02	5.59E-02	5.81E-02	5.49E-02	5.09E-02	4.74E-02	3.88E-02
GB_Wall	1.96E-01	2.11E-01	2.15E-01	1.69E-01	9.23E-02	5.56E-02	5.64E-02	5.86E-02	5.52E-02	5.11E-02	4.76E-02	3.86E-02
Ht_Wall	2.83E-01	2.80E-01	2.54E-01	1.73E-01	8.73E-02	5.17E-02	5.37E-02	5.61E-02	5.31E-02	4.91E-02	4.57E-02	3.70E-02
Uterus	2.83E-01	2.74E-01	2.45E-01	1.77E-01	9.29E-02	5.57E-02	5.69E-02	5.93E-02	5.58E-02	5.14E-02	4.76E-02	3.80E-02

APPENDIX B

TABLES OF SPECIFIC ABSORBED FRACTIONS-

RAW DATA AND RECOMMENDED VALUES

SEE MICROFICHE ON INSIDE BACKCOVER

INTERNAL DISTRIBUTION

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