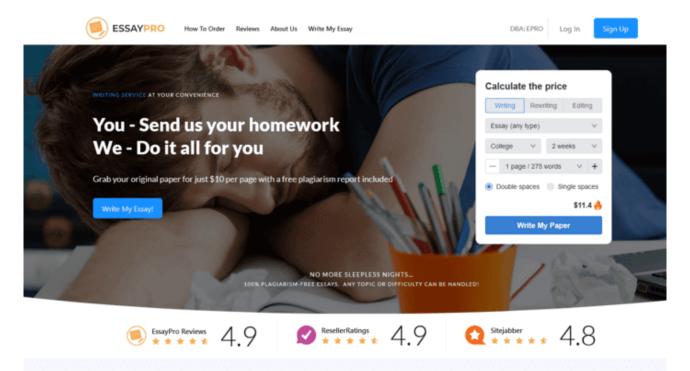
Radioactive Isotopes



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Radioactive Isotopes

I never thought nuclear energy would play a role in my life, but that was until two years ago when my family was hit with horrifying news. A close friend of ours was diagnosed with breast cancer. Because of a new technology called radiation therapy or radiotherapy, my mother's best friend is alive today. Radiotherapy is produced by a form of nuclear energy called radioactive isotopes. The class EGEE 101 has educated me about the subject of nuclear energy, but I wanted to take it a step further and discover how nuclear energy plays a role in medicine.

Radioactive isotopes are radioactive atoms of common elements like carbon, cobalt, phosphorus, or sodium. Radioactive isotopes are located in "atomic ash" that is left behind after uranium atoms are split in a "nuclear pile." Some radioactive isotopes are produced from the exposure of common elements to powerful <u>radiation</u> inside a nuclear <u>reactor</u> during fission (Nuclear Energy 2005). Fission occurs when an atom's nucleus splits into two or more smaller nuclei, producing a large amount of energy. Radioactive isotopes release radiation in the form of beta and <u>gamma</u> rays. The strength of the radiation is relative to the rate where radioactive material decays. Because of this, different

radioisotopes can be used for different purposes, depending on their strength. (Nuclear Energy 2005).

Radioactive isotopes have led to what some are calling "nuclear medicine." This type of medicine uses the radioactive isotopes to prevent, diagnose, and treat many diseases. During nuclear medicine diagnosing methods, a small amount of radioactive matter is penetrated into the body. The radioactive materials are attracted to cer...

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.... Radioisotopes in Medicine. May 2004. Uranium Information Centre Ltd. 4 Apr. 2005 http://www.uic.com.au/nip26.htm.

"Nuclear Energy." Britannica Student Encyclopedia. 2005. Encyclopedia Britannica Online 4 Apr. 2005 http://search.eb.com/ebi/article?tocld=205779.

"Nuclear Engineering." Encyclopedia Britannica. 2005. Encyclopedia Britannica Online 4 Apr. 2005 http://search.eb.com/eb/article?tocld=64710.

Schenter, Robert. Nuclear Medicine Research Council. 18 Nov. 1998. Nuclear Medicine Research Council. 4 Apr. 2005 http://www.cbvcp.com/nmrc/>.

Schenter, Robert. What Is Nuclear Medicine. 21 Sept. 1999. Nuclear Medicine Research Council. 4 Apr. 2005 http://www.cbvcp.com/nmrc/nucmed.html.

What Is Radiation Therapy. Dec. 2003. Your Medical Source. 4 Apr. 2005 http://yourmedicalsource.com/library/radiationtherapy/RT_whatis.html.

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