**What is Microwave Radiation?**

Microwaves are a form of "electromagnetic" radiation; that is, they are waves of electrical and magnetic energy moving together through space. Electromagnetic radiation spans a broad spectrum from very long radio waves to very short gamma rays. The human eye can only detect a small portion of this spectrum called visible light. A radio detects a different portion of the spectrum, and an X-ray machine uses yet another portion.

Visible light, microwaves, and radio frequency (RF) radiation are forms of non-ionizing radiation.  Non-ionizing radiation does not have enough energy to knock electrons out of atoms. X-rays are a form of ionizing radiation. Exposure to ionizing radiation can alter atoms and molecules and cause damage to cells in organic matter.

Microwaves are used to detect speeding cars and to send telephone and television communications. Industry uses microwaves to dry and cure plywood, to cure rubber and resins, to raise bread and doughnuts, and to cook potato chips. But the most common consumer use of microwave energy is in microwave ovens. Microwaves have three characteristics that allow them to be used in cooking: they are reflected by metal; they pass through glass, paper, plastic, and similar materials; and they are absorbed by foods.