The Basics of Cancer*

What is cancer?

Cancer is a group of many diseases. There are many different types of cancer. Cancer occurs when the human body's production of new cells is too active. Normal adult cells divide only to replace or repair damaged cells. Cancer cells are different because they cannot stop dividing and they spread out of control. Each cancer is named after the part of the body where it starts. Cancer can be cured, but the cure rate depends on which variety the person has, how soon it was diagnosed, and how healthy the person's body is.

Causes of cancer

Many different factors can be identified as contributing to cancer development. Among these factors are hormonal imbalances, genetic abnormalities, some viral infections, nutritional disorders, and immune system disorders. If genetic abnormalities are inherited from another family member there could be a high risk for a particular type of cancer.

Carcinogens, or cancer causing substances, can transform a healthy cell into a cancerous one. Substances such as tobacco and tobacco smoke contain many different carcinogens that can interact with each other causing a higher risk of cancer. Chemicals such as asbestos fibers, benzene, and radiation are known to cause cancer.

What role does heredity play in whether a person gets cancer?

Your family's genetic history plays a larger role than any other single factor in determining whether you're likely to get cancer. Studies have concluded that a defective, cancer-causing gene is passed from one generation to the next. People who understand this fact, and are aware of a cancer history in their families, will more likely to have their health monitored regularly and to catch any cancer if and when it occurs early enough to be treated.

How can I reduce my chances of getting cancer?

You can reduce your chances of getting some cancers by:

- Not smoking or using other tobacco products
- Using sun safe methods such as hats, long-sleeves, long pants and sunscreen
- Eating a health diet
- Getting daily exercise

Are there tests to see if I have cancer?

For some types of cancer, there are screening tests (also called early detection tests) that can help find cancer early when it is most treatable. Some early detection tests include:

- The mammogram for breast cancer
- The Pap test for cervical cancer
- The stool blood test for colorectal cancer

Treatment of cancer

There are three standard methods that are used in the treatment of cancer. They are surgery, radiation therapy (radiotherapy), and chemotherapy (drug therapy). Sometimes a combination of two or more

treatments is used.

Most cancer treatment methods cause undesirable side effects such as scarring or loss of an organ or body part due to surgery, hair loss or skin irritation due to radiation, or nausea or fatigue due to chemotherapy. Side effects are dependent on the individual and the type of treatment used. Most side effects disappear once treatment is completed.

*Basic Facts about Cancer - Massachusetts Comprehensive Cancer Prevention and Control Program; Cancer - Signs, Symptoms, Stages, Types and Treatment - CancerAnswers.net; The Basics of Cancer by Toni Vernetti