

The Cancer Process

- 1. A mistake **is made in the duplication process** of the cell's genetic material. (80,000 genes situated on 23 pairs of chromosomes) *Healing: antioxidants and regular detoxification help to decrease the number of mistakes*.
- 2. When genetic mistakes occur, the cell may fix them with repair mechanisms, or it may die shortly after being reproduced. Typically **cancer cells divide too frequently and lack mechanisms for controlled, programmed cell death** (also known as apoptosis) **and for cellular repair**. *Healing: Vitamin B3, lipoic acid, inositol, IP6, perillyl alcohol and limonene help to normalize cell division*.
- 3. In a good scenario, if the mutated cell survives, components of our immune system would recognize it as "non-self" and destroy it before it became a larger tumour. When the immune system is weakened because of stressors, pollutants, glandular imbalances, poor nutrition or emotional and spiritual factors, **the cancer cell will continue to divide and reproduce, forming a cancerous tumour**. *Healing: astragalus, Echinacea, goldenseal, mistletoe (Iscador or Helixor), thymus extract, Vitamins A, B6, C, E, B12, folic acid and zinc and selenium strengthen immunity.*
- 4. The **doubling time for breast cancer cells can range between 21-100 days**. This means that during this span of time the cells will double in number. A mass of 100 billion cells is about the size of a golf ball and can take three to more than ten years to form. *Healing: IP6, inositol, limonene, perillyl alcohol, goldenseal and bloodroot reduce the doubling time*.
- 5. When a cancerous tumour attains the size of a pinhead, it sends out chemical signals that cause small blood vessels to encircle it, providing it with nutrients and carrying away waste. This increased blood supply encourages the tumour to grow to a large size. Healing: green tea, turmeric decrease angiogenesis.
- 6. As the tumour grows, it can release clumps of cancer cells into the blood stream or into the lymphatic system from where they can colonize other bodily organs or tissues. This process is called **metastasis**. The most common sites for breast cancer metastases include the liver, bones, brain and lungs. *Healing: modified citrus pectin and melatonin reduce the possibility of metastases*.

Source: The Healthy Breast Program, Sat Dharam Kaur, N.D., pp. 44-45