

# American women are well aware of the frightening statistics of the chances of contracting breast cancer.

What many American women are not aware of is the tragic fallacy of "early detection," as defined by the National Cancer Institute and conventional medicine in general. In 95% of cancer diagnoses, by the time a malignant tumor is able to be detected by physical examination or mammography, it has existed for eight years, and has already had ample opportunity to metastasize (spread to other parts of the body). By this time many women feel they have no choice but to undergo surgery, radiation, and chemotherapy.

Many women are also unaware of how inaccurate mammography is. According to Dr. Charles B. Simone, MD, MMS, a former clinical associate in immunology and pharmacology at the National Cancer Institute, and founder of the Simone Protective Cancer Center, "About 5% of screening mammograms are positive. Of these, however, about 80% to 90% are false positives that require excessive workups, such as unnecessary surgical biopsies, and even needless mastectomies." Meanwhile, negative mammography readings provide false assurances in 10% to 15% (some say up to 20%) of women who actually do have cancer.

Many women are also unaware that mammography itself—the standard diagnostic technique—is universally acknowledged as causing cancer in a small but significant percentage of women who use it. (See the sidebar, "How Mammography Causes Cancer.")

But there is an alternative. It is a quantum leap in the use of infrared technology—commonly referred to as thermography—that allows a physician to diagnose cancer through observing functional changes in the breast at least two or three years be-

fore a malignant tumor could be detected by any other means.

This alternative is called the Thermal Image Processor (TIP), developed by Maurice Bales and manufactured by his company, Bales Scientific Inc. in Walnut Creek, California. TIP is approved by the FDA, but the technology is so new that only 15 systems are presently in clinical use in the U.S. (Medical Centers using TIP are listed at the end of this article.) Technically, TIP is a form of thermography—in the same sense that the space shuttle is a type of aircraft.

This space shuttle analogy is apt, because Maurice Bales got started in this field in the 1970's while working at the University of California at Berkeley—developing equipment to test the integrity of materials for the space shuttle. Bales was responsible for programming the electronics for mass spectrometers, and, later, thermographic optical analyzers. These devices were used to scan materials for imperfections—weaknesses—in their structure.

Bales started his own company in 1979. He spent years upgrading every aspect of his own thermographic system. Finally, he put everything together into one integrated system—a complete workstation—that was able to take precise thermal data, translate it into remarkably detailed structural images, and manipulate, store, print, and transfer the information in a myriad of ways.

He successfully sold his device to the government, aircraft manufacturers, and comput-

er companies (which used them to test circuit boards). And this same equipment excelled in another application: it was able to see abnormalities in the human

body on an extremely sensitive level. Bales was soon approached by various doctors who wanted to use the equipment to pinpoint musculo-skeletal problems, such as stress fractures and myofascial pain. Bales took the algorithms he had devised to interpret thermal data on the corrosion of metals, and adapted them to the human body.

Both regular thermography and the TIP system are based on the same principle: they measure infrared radiation and convert it to



**The Alternative Medicine Definitive Guide to Cancer** shows how cancer can be reversed using clinically proven complementary and alternative therapies. It includes an overview of the disease in its many forms; the successful cancer treatment plans of 23 eminent physicians, with their complete protocols; a guide to other innovative approaches. Future Medicine Publishing, 1997. Tel: 888-333-HEAL (4325).

This is the image of a woman who had been diagnosed with breast cancer, and had had a lumpectomy performed five days previously. The area from which the tumor was removed is still "hot." The second image is the same woman three months later. It shows that so far the surgery was a success. The area that was "hot" is reduced, meaning that the blood supply which fueled the tumor is continuing to diminish. Furthermore, the whole breast area shows smoother contours in temperature variations, which is a sign of healthy tissue.

