



New Scientific Thinking Implicates Body Fat as Cancer Promoter

Excess Fat May Act as Continuous “Hormone Pump,” Raising Risk

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Scientists at the AICR/WCRF International Research Conference on Food, Nutrition and Cancer said today that new research is revealing how obesity fundamentally alters the body’s systems in ways that can “pave the way” for tumors.

“The more we understand about obesity, the more we realize that simply being overweight and inactive – in other words, living the modern American lifestyle – produces basic hormonal and metabolic changes. These changes make it easier for cancer to gain a foothold,” said obesity expert George Bray, M.D., of the Pennington Biomedical Research Center in Louisiana.

Body Fat Seen as Highly Active “Hormone Pump”

Recent scientific thinking has focused on the role of excess body fat, Bray said. “Throw out the popular conception of body fat. Most of us look at our guts and our hips and our love handles and think of fat as an inert substance that merely collects and hangs off of us. We imagine that those extra pounds just sit there quietly, storing energy, until we ‘burn’ them.”

In fact, Bray said, fat is a remarkably active substance. Studies have suggested that fat cells behave like endocrine cells, constantly producing and secreting a wide variety of hormones and other so-called “growth factors” into the bloodstream.

Bray said that these substances send signals to other parts of the body, and it is these signals that, under certain conditions, seem to make it easier for certain cancers to initiate, and to grow.

“These substances are perfectly ordinary,” said Bray, “they are the sex hormones, insulin, and other factors that contribute to our natural body chemistry. Under normal conditions, they simply carry out basic life functions, such as encouraging cells to grow and divide in a precise and regulated way.”

But scientists now believe that in many obese individuals, excess body fat causes greater amounts of these hormones and growth factors to be continually pumped into the bloodstream. As a result, an obese person’s cells are urged to grow and divide at an accelerated rate.

The reason this is thought to raise cancer risk, Bray said, is that when cell division and replication occur more frequently, the chances increase that something could go wrong in the process. One such possibility is the occurrence of the kind of random mutation that can lead to cancer.

Links to Obesity and Overweight Emerge for Specific Cancers and Cancer in General

Scientists now say that although obesity is thought to raise cancer risk the most, there is some consensus that even being a few pounds overweight carries extra cancer risk. Dr. Bray said that generally speaking, cancer risk increases as body weight increases.

Dr. Bray went on to cite a February 2002 report by the World Health Organization’s International Agency for Research on Cancer that estimated that being overweight and inactive accounts for one-quarter to one-third of worldwide cases of breast cancer, colon cancer, endometrial cancer, kidney cancer and esophageal cancer. “That’s somewhere between 102,000 and 135,000 cases in the U.S. alone,” he said.

If your weight has been slowly increasing, take the initiative. *Shape Your Future...Your Weigh!*[™] can provide additional practical strategies to prevent weight gain. Your Dietitian and

Health and Wellness Center (HAWC) provides guidance on modifying your portion size to stay fit and healthy. Call them today!