

The Link Between Cancer and Obesity

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Cancer and obesity are two major health concerns facing Americans today, with cancer being second leading cause of death (behind heart disease) and obesity rates skyrocketing. Over the past decade, obesity rates have hit a record level with nearly 70% of Americans classified as being overweight or obese. Is there a link between cancer and obesity, and should Americans be concerned?

Research has shown obesity is a risk factor for developing certain cancers, including cancer of the colon, breast, uterus, ovaries, esophagus, thyroid, pancreas, gallbladder, liver, and kidney. Risk is also increased for blood cell cancers, including myeloma, leukemia, and non-Hodgkin's lymphoma. More than half of cancers diagnosed in women and a quarter of those diagnosed in men are associated with being overweight and obese.

It has been shown that excess weight increases cancer risk by increasing inflammation in our bloodstream. Long-term inflammation can activate proteins and cells that stimulate the unhealthy growth of blood vessels and lead to harmful changes in our DNA, which lead to tumor development. Fat cells also actively release molecules called adipokines, many of which are linked to cancer development. Obesity is also associated with increased estrogen production, leading to increased tumor cell growth in breast, endometrial, and ovarian cancers. Individuals with obesity often have increased blood levels of hormones such as insulin, which can lead to type 2 diabetes and may promote the development of colon, kidney, and prostate cancers.

In addition to increasing cancer risk, obesity also complicates cancer treatment. Individuals with obesity have higher risks of surgical complications, poorer surgical outcomes, longer time for wound healing, and longer hospital stay. It has been shown that obesity also decreases the effectiveness of many cancer treatments including types of chemotherapy, targeted therapy, and anti-angiogenic therapy.

Lowering obesity rates is a good first step in improving cancer prevention and treatment. Studies have shown that avoidance of weight gain or losing weight reduces cancer risk, with stronger evidence showing this relationship in those who have undergone weight loss (bariatric) surgery. At **CMC's New England Weight Management Institute (NEWMI)**, we are happy to be a part of providing effective, evidence-based treatment for obesity and helping to decrease cancer risk for our patients.

