

Survey: About Half of Americans Unaware of Obesity's Link to Cancer

BY PEGGY EASTMAN

WASHINGTON, DC—A new survey from the American Institute for Cancer Research (AICR) has found that just 51% of Americans now know that excess body fat is a cause of cancer—versus, for example, 94% for awareness of the tobacco-cancer link and 87% for the sun exposure-cancer link.

In addition, the survey found that less than half of Americans (46%) know that a lack of physical activity raises their risk of cancer. Ironically, at a time when Americans are growing heavier and more sedentary, the survey found that they rate cancer as their number one health fear: 37% named cancer as their top health concern, compared with 21% for heart attack, number two on the list of health fears.

An AICR report prepared earlier this year jointly with the World Cancer Research Fund (WCRF), titled “Policy and Action for Cancer Prevention,” noted data showing that obesity raises the risk of seven different cancers: postmenopausal breast, colorectal, endometrial, pancreatic, gallbladder, kidney, and esophageal. The report estimated that obesity related excesses of these seven cancers combined account for about 100,500 preventable deaths a year in the US, with postmenopausal breast cancer leading the way (see box). While public awareness of the obesity-cancer link has risen from just 35% in 2001, it is still much too low, speakers said here at the AICR Annual Research Conference on Food, Nutrition, Physical Activity and Cancer.

‘Alarmingly Low’

“Awareness [of obesity] lags far behind some of the more established links and is alarmingly low,” said AICR Nutrition Communications Manager Alice Bender, MS, RD. “This is really a message that needs to be heard,” the public needs to realize that excess body fat is on a par with smoking in terms of cancer risk.

But, she noted, “We have a high level of fear [about cancer] and a feeling that there really isn’t much you can do about it, and that is a toxic combination.” The AICR survey found that just 20% of Americans rated cancer a highly preventable disease, compared with 34% for stroke, 45% for heart attack, and 46% for diabetes.

“Years ago people thought of fat as just inert tissue,” said Laurence Kolonel, MD, PhD, Deputy Director of the Cancer Research Center of Hawaii. “But adipose tissue is actually a very bioactive organ in the body.... Adipose tissue produces hormones and creates a low-grade inflammation in the body.”

That low-grade inflammation can lower immunity. He called the link between obesity and the seven cancers convincing, and said, “100,000 deaths is not a trivial number. The message is that if we can get the population to maintain normal weight and exercise, we can have a very substantial impact on the incidence of cancer—along the lines of reducing the incidence due to smoking.”

The more adipose tissue there is in the body, the greater the insulin resistance and the higher the production of insulin-like growth factors, he explained.

Speakers decried the combination of excess body fat and lack of physical activity that permeates modern US society. “The population's becoming much more sedentary,” Dr. Kolonel said. “In our daily lives we just sit at our computers; we don't even walk to the next office, we e-mail. Just when people should have been eating less, they started eating more.”

Obesity is not only a risk for developing cancer, but it can also impede quality of life and lower survival for cancer survivors, said Melinda L. Irwin, PhD, MPH, Associate Professor of Epidemiology at Yale University. She noted that a higher body mass index (BMI) has been associated with poorer outcomes in cancer survivors. “Some cancer treatments cause weight gain in breast cancer patients, and we know that moderate activity can lower breast cancer risk.

“The message for breast cancer survivors particularly is that it's never too late to start an exercise program, not only to help patients shed excess pounds but also to reduce fatigue, depression, and anxiety. I hope insurance programs will begin reimbursing for these exercise programs,” she said, likening “cancer rehab” programs to cardiac rehab programs.

As to whether it is realistic for cancer survivors feeling a general sense of malaise to undertake an exercise program, Dr. Irwin said that when patients do increase their activity, they find they have less fatigue. “We have to educate a lot of the clinicians and oncologists that diet and exercise can make a difference for survivors. They are the gatekeepers,” she noted.

Julia H. Rowland, PhD, Director of the Office of Cancer Survivorship at the National Cancer Institute, agreed that exercise can make a difference for cancer survivors. But right now, she said, few cancer survivors meet exercise recommendations, and few talk with their physicians about lifestyle modification. “The good news is there's a lot of room to do better,” Dr. Rowland said.

While public awareness of the obesity-cancer link stands at just over half the US population, the fact that it has increased since 2001 is a good sign, said Peter Greenwald, MD, DrPH, Director of NCI's Division of Cancer Prevention.

“At least part of the public, the educated public, understands that the way you live your life can affect your chances of getting cancer.... As we build for the future, it is clear that to accelerate progress in lowering cancer risk, a much greater investment is needed in basic nutritional science linked to clinical studies and community-based, multi-level intervention research to improve eating behavior.”

Clinical studies of dietary changes might best be studied with joint funding, and perhaps as public-private partnerships, Dr. Greenwald said.

More Funding

Other speakers at the AICR meeting also stressed that the nation needs to put much more funding into cancer prevention trials. This is particularly true for prostate cancer, said plenary session chair Steven K. Clinton, MD, PhD, Professor of Internal Medicine and

Program Leader for Molecular Carcinogenesis and Chemoprevention at Ohio State University's Comprehensive Cancer Center.

“Treating prostate cancer is very expensive; we would much rather prevent it,” said Dr. Clinton, who is also Chief of Prostate and Genitourinary Oncology for the Division of Hematology and Medical Oncology at Ohio State and the James Cancer Hospital. “Today, the support for therapeutic trials far exceeds that for prevention trials. Prevention can reduce health care costs by hundreds of millions of dollars. We really need to see a continuous effort, to set up an infrastructure for prevention trials and keep it going.

“NCI ultimately has to be very involved with this.” He added that in his experience with prostate cancer, it is not that difficult to recruit subjects for a prevention trial lasting five to seven years—“Men are very willing to do this.”

Estimated Percentages of Annual US Cancers Caused by Excess Body Fat

Breast: 17%, 33,000 cases	Esophagus: 35%, 5,800 cases
Pancreas: 28%, 11,900 cases	Gallbladder: 21%, 2,000 cases
Colorectal: 9%, 13,200 cases	Endometrial: 49%, 20,700 cases
Kidney: 24%, 13,900 cases	

Source: AICR/WCRF “Policy and Action for Cancer Prevention” report, 2009.

Significant Quotes from Experts:

ALICE BENDER, MS, RD: “We have a high level of fear [about cancer] and a feeling that there really isn’t much you can do about it, and that is a toxic combination.” *American Institute for Cancer Research*

LAURENCE KOLONEL, MD, PHD: “Adipose tissue is actually a very bioactive organ in the body. It produces hormones and creates a low-grade inflammation in the body, which can lower immunity”. *American Institute for Cancer Research*

MELINDA L. IRWIN, PHD, MPH: “The message for breast cancer survivors particularly is that it’s never too late to start an exercise program, not only to help patients shed excess pounds but also to reduce fatigue, depression, and anxiety. I hope insurance programs will begin reimbursing for these exercise programs”. *Yale University*

JULIA H. ROWLAND, PHD agreed that exercise can make a difference for cancer survivors. But right now, she said, few cancer survivors meet exercise recommendations, and few talk with their physician about lifestyle modification. “The good news is there is a lot of room to do better”. *National Cancer Institute*