How does obesity increase cancer risk?

Several possible methods have been suggested to explain the association of obesity with increased risk of some cancers:

- Fat tissue produces extra amounts of estrogen, which have been associated with the risk of breast, endometrial, and other cancers.
- Obese people often have increased levels of insulin and insulin-like growth factor-1 in their blood, which may promote the development of some tumors.
- Fat cells produce hormones that may increase or decrease cell growth and fat cells may also have effects on tumor growth.
- Obese people often have chronic low-level inflammation, which has been associated with increased cancer risk.

Does losing weight reduce cancer risk?

People who lose weight have body changes that help reduce cancer risks. Weight loss helps reduce hormones that can cause cancer. There is still much to learn about how weight loss affects cancer risk. Maintaining a healthy weight should be a priority not just for cancer prevention, but prevention of many other chronic diseases. Studies show that losing just 7% to 10% of your body weight will reduce chances of developing type 2 diabetes.
Obesity-Related Cancers in West Virginia

Recommendations for policies and systems change

While the basic causes of obesity seem simple, the solutions are not. Uniting governments, health care systems, payers, and communities in a concerted effort must begin with understanding the threat that obesity poses at each level.

A projection of future health and economic burden of obesity says that if changes are not made, a half-million new cancer cases will occur in the U.S. before 2030. The same study found that if every adult reduced their BMI by 1%, it would prevent the increase in cancer cases and stop about 100,000 new cases of cancer from ever developing.  

The U.S. Preventive Services Task Force recommends screening all adults for obesity. Clinicians should offer or refer patients with a BMI of 30 or higher to intensive, multicomponent behavioral interventions.

The National Cancer Institute established the following recommendations:

- Limit television viewing, computer time and video gaming
- Provide safe and secure places to exercise, like giving streets more sidewalks and bike lanes
- Support policies in schools and workplaces that promote physical activity
- Reduce consumption of sugar-sweetened beverages and provide healthier alternatives in schools, worksites, restaurants and communities
- Implement high nutritional standards for school and government food programs and clear, understandable labeling of foods and beverages in stores, restaurants, and vending machines
- Increase consumption of fruits, vegetables, whole grains, and nuts
- Limit sugar, solid fats, and alcohol
- Avoid high-calorie junk food and sweets
- Encourage breastfeeding infants and assure children get nutritious foods

What are we doing to prevent obesity-related cancers?

The Division of Health Promotion and Chronic Disease (HPCD) partners with communities to improve walking environments and increase access to physical activity, community gardens and farmer’s markets.

HPCD and Mountains of Hope Cancer Coalition provide mini-grants and technical assistance to improve the health of communities and works with healthcare providers to make referrals to community prevention and management programs.

For more information, visit our website at www.wvchronicdisease.org.

Counts of Obesity-Related Cancers
West Virginia Cancer Registry 2008-2012

<table>
<thead>
<tr>
<th>Cancer Site</th>
<th>Cases 2008-2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Esophagus*</td>
<td>450</td>
</tr>
<tr>
<td>Colon and Rectum</td>
<td>5,629</td>
</tr>
<tr>
<td>Gallbladder</td>
<td>116</td>
</tr>
<tr>
<td>Pancreas</td>
<td>1,336</td>
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<tr>
<td>Corpus and Uterus females</td>
<td>1,895</td>
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<tr>
<td>Kidney and Renal Pelvis</td>
<td>2,058</td>
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<tr>
<td>Thyroid</td>
<td>1,426</td>
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<tr>
<td>Breast, Post-Menopausal**</td>
<td>5,632</td>
</tr>
</tbody>
</table>

*Adenocarcinomas only. These are esophageal cancers shown to be linked to obesity.

**Defined as malignant breast cancer in women diagnosed at age 50 or greater.

References


www.wvcancer.org

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