

Mishmeres Guf

Guard not Only Your Tongue, but Your Entire Body

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Cardiovascular Disease, Stroke and Diabetes

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- Cardiovascular disease affects 27 million Americans.
- Stroke affects more than 4 million Americans.
- Diabetes affects nearly 26 million Americans and has significant associated co-morbidities and complications.

Health Consequences of Smoking

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- Half of all those who continue to smoke will die from smoking-related diseases.
- In the US, tobacco use is responsible for nearly 1 in 5 deaths, or about 443,000 premature deaths each year.
- In addition, an estimated 8.6 million people suffer from chronic conditions related to smoking, such as chronic bronchitis, emphysema, and cardiovascular diseases.

Smoking and Cardiovascular Disease *

- *Smoking is a major risk factor for illness and death from cardiovascular diseases.*
 - Smokers have an increased risk of developing heart disease that is 2-4 times greater than non-smokers. Smoking triples the risk of dying from heart disease among middle-aged adults.
 - Smokers are at double the risk of having a stroke. By quitting, a smoker reduces his or her risk of stroke to that of a non-smoker within 5 to 15 years.
 - Smokers have an increased risk of developing peripheral artery disease that is ten times greater than that of non-smokers.

Smoking and Cancer

- Smoking accounts for at least 30% of all cancer deaths and 80% of lung cancer deaths.
- The risk of developing lung cancer is about 23 times higher in male smokers and 13 times higher in female smokers, compared to lifelong nonsmokers.
- The risk of lung cancer is just as high in smokers of “light” or “low-tar” yield cigarettes as in those who smoke “regular” or “full-flavored” products.

Secondhand Smoke

- Secondhand smoke (SHS), or environmental tobacco smoke, contains numerous human carcinogens for which there is no safe level of exposure.
- SHS contains more than 7,000 chemicals, at least 69 of which cause cancer.
- Each year, about 3,400 nonsmoking adults die of lung cancer as a result of breathing SHS.
- SHS causes an estimated 46,000 deaths from heart disease in people who are not current smokers.

OBESITY AND CANCER

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What is known about the relationship between obesity and cancer?

- *Obesity is associated with increased risks of the following cancer types, and possibly others as well:*
 - Esophagus
 - Pancreas
 - Colon and rectum
 - Breast (after menopause)
 - Endometrium (lining of the uterus)
 - Kidney
 - Thyroid
 - Gallbladder

OBESITY AND CANCER

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What is known about the relationship between obesity and cancer?

- One study estimated that in 2007 in the US, about 34,000 new cases of cancer in men (4%) and 50,500 in women (7%) were due to obesity.
- The percentage of cases attributed to obesity varies widely for different cancer types but was as high as 40% for some cancers, particularly endometrial (uterus) cancer and esophageal adenocarcinoma.

Physically Active Lifestyle

- Living a physically active lifestyle is important to reduce the risk of a variety of types of cancer, as well as heart disease and diabetes.
- Scientific evidence indicates that physical activity may reduce the risk of several types of cancer, including cancers of the breast, colon, and endometrium, as well as advanced prostate cancer.
- Physical activity also indirectly reduces the risk of developing the many types of obesity-related cancers because of its role in helping to maintain a healthy weight.

Physically Active Lifestyle

- Adults should engage in at least 150 minutes of moderate-intensity or 75 minutes of vigorous-intensity activity each week, or an equivalent combination, preferably spread throughout the week.
- Children and adolescents should engage in at least 1 hour of moderate- or vigorous-intensity activity each day, with vigorous-intensity activity at least three days each week.

Prolonged sitting may reduce a person's life expectancy *

- *The Wall Street Journal* (July 10, 2012) reports that, according to a study published online in *BMJ Open*, sitting for three hours per day or longer may reduce an individual's life expectancy.
- On its website, ABC News (July 10, 2012) reports, "Based on all [these] data, the researchers calculated that limiting the time Americans spend sitting to three hours or fewer each day would increase the life expectancy of the US population by two years. Cutting down TV watching to fewer than two hours each day would bump life expectancy up by another 1.4 years."

Mishmeres Guf

Call to Action

- In order to improve the health of the community and demonstrate that protecting one's life and health is as important as protecting one's possessions, pulpit Rabbonim, *poskim*, *roshei yeshiva* and *mechanchim* should speak out and model behaviors that include:
 - Strong advice (*eitzah tovah*) that men and women should stop smoking, or not begin; *Rebbeim* should not smoke in class, shul, or other public venues.
 - *Rebbeim* should take appropriate care of their own physical health by eating and exercising appropriately, etc.
 - *Yeshivos* and seminaries must encourage, and provide time in their curriculum for, regular exercise, as well as providing menus featuring healthful food.
- Let us make it known that the imperative of *Mishmeres Guf* is as important as *Mishmeres Lashon*.

Additional Slides

Health Consequences of Smoking

- *Smoking and exposure to secondhand smoke (SHS) accounts for 1 in 5 deaths in the United States.*
 - An estimated 443,000 people in the US die prematurely from smoking and exposure to SHS each year.
 - Cigarette smoking is the leading preventable cause of death in the US. According to the US Centers for Disease Control and the National Cancer Institute, almost 174,500 people will die from cardiovascular diseases due to smoking and SHS.

Smoking and Cardiovascular Disease

- *Smoking has many unhealthy effects on the heart and circulatory systems.*
 - Increases LDL (“bad cholesterol”) and decreases HDL (“good cholesterol”)
 - Promotes atherosclerosis, or development of fatty plaques in the arteries
 - Increases levels of blood clotting factors (fibrinogen) in the blood vessels
 - Nicotine constricts blood vessels and decreases blood flow to vital organs.

Smoking and Cardiovascular Disease

- *Smoking has many unhealthy effects on the heart and circulatory systems.*
 - Carbon monoxide decreases the amount of oxygen that blood can carry.
 - Increases heart rate, which strains your heart
 - Increases blood pressure (hypertension), which can lead to damage to the heart, kidneys, and other vital organs
 - Increases the risks of having a heart attack, stroke, and congestive heart failure (when the heart can't pump enough blood to other organs)

Smoking and Cardiovascular Disease

- *Smoking is a major risk factor for illness and death from cardiovascular diseases and stroke.*
 - Smoking increases the risk of heart attack and stroke.
 - Coronary heart disease, the most common type, is the leading cause of death in the US.
 - Cerebrovascular disease, or stroke, is the 3rd leading cause of death.
 - Each year, 80,000 people die from ischemic heart disease, 15,900 people die from cerebrovascular disease, and 32,500 people die from other cardiovascular diseases (e.g., aneurysm, atherosclerosis) as a result of their smoking habits.

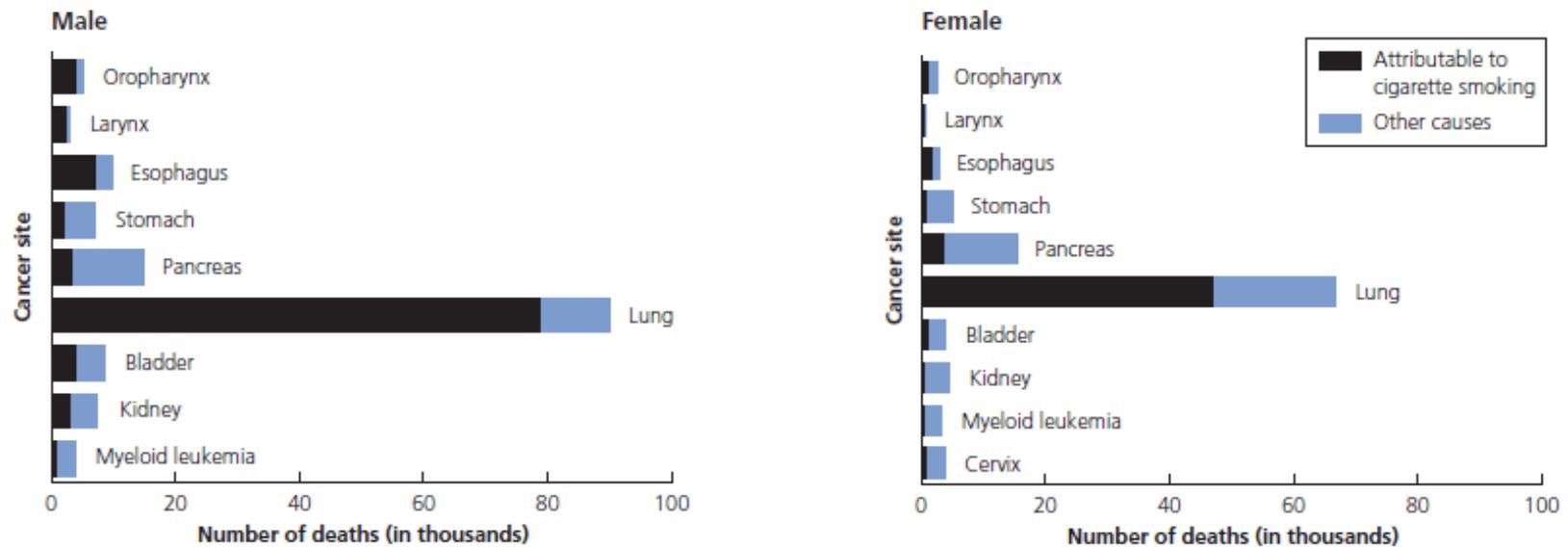
CANCER MORTALITY

Smoking-Attributable Fractions by Gender and Age (US, 2004)

Disease Category	Male		Female	
	35-64	65+	35-64	65+
Malignant Neoplasms				
Lip, Oral Cavity, Pharynx	75%	69%	53%	43%
Esophagus	70%	71%	64%	53%
Larynx	82%	80%	77%	70%
Trachea, Lung, Bronchus	88%	86%	76%	68%
Urinary Bladder	46%	44%	31%	27%
Cardiovascular Disease				
Ischemic Heart Disease	38%	14%	33%	10%
Aortic Aneurysm	64%	61%	60%	46%
Respiratory Diseases				
Bronchitis, Emphysema	89%	90%	82%	81%
Chronic Airway Obstruction	80%	80%	79%	74%

Smoking and Cancer

Annual Number of Cancer Deaths Attributable to Smoking by Sex and Site, US, 2000-2004



Source: Centers for Disease Control and Prevention. Smoking-attributable mortality, years of potential life lost, and productivity losses – United States, 2000-2004. *MMWR Morb Mortal Wkly Rep.* 2008;57(45):1226-1228.

American Cancer Society, Surveillance Research, 2012

OBESITY AND CANCER

What is known about the relationship between obesity and cancer?

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

- Fat tissue produces excess amounts of estrogen, high levels of which have been associated with the risk of breast, endometrial (uterus), and some other cancers.
- Obese people often have increased levels of insulin and insulin-like growth factor-1 (IGF-1) in their blood (i.e., hyperinsulinemia or insulin resistance), which may promote the development of certain tumors.

OBESITY AND CANCER

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

- Fat cells produce hormones, called adipokines, that may stimulate or inhibit cell growth. For example, leptin, which is more abundant in obese people, seems to promote cell proliferation.
- Fat cells may also have direct and indirect effects on other tumor growth regulators.
- Obese people often have chronic low-level, or “subacute,” inflammation, which has been associated with increased cancer risk.

Physically Active Lifestyle

- One should limit sedentary behavior such as sitting, lying down, and watching television and other forms of screen-based entertainment.
- Doing any intentional physical activity above usual activities, even if one is currently inactive, can have many health benefits.