

Title: Diet and Exercise in Cancer Prevention

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Abstract: Being overweight or obese is linked with the development of several cancers. This brochure reviews ways to lose weight and talks about specific agents that may assist to lower your risk of developing cancer.

This document was created by a medical student enrolled in the Family Medicine Clerkship at the University of Minnesota Medical School as part of the course project. The aim of the project is to present information on a medical topic in the format of a patient education handout. It does not necessarily reflect the views of the University of Minnesota Medical School physicians and faculty. These materials are provided for informational purposes only and are in no way intended to take the place of the advice and recommendations of your personal health care provider. The information provided may no longer be up to date since it has not been reviewed since the date of creation. The information provided should not be used to diagnose a health problem or disease, or as a means of determining treatment. In the event of a medical emergency, immediately contact a doctor or call 911.

**Two thirds of Americans
are either
overweight or obese.**

**14% to 30% of all cancer
related deaths are
contributed to being
overweight or obese.**

**Being overweight or obese is
linked to:**

**Breast Cancer
Colon Cancer
Endometrial Cancer
Adenocarcinoma of the Esophagus
Kidney Cancer
Pancreatic Cancer
Cancer of the Gallbladder
Thyroid Cancer
Ovarian Cancer
Cervical Cancer
Multiple Myeloma
Hodgkin's Lymphoma
Aggressive Prostate Cancer**

Further Resources:

American Cancer Society guidelines on nutrition and physical activity for cancer prevention. Available from the HYPERLINK "http://www.cancer.org/docroot/PED/content/PED_3_2X_Diet_and_Activity_Factors_That_Affect_Risks.asp?sitearea=PED" [American Cancer Society \(ACS\) Web site.](http://www.cancer.org/docroot/PED/content/PED_3_2X_Diet_and_Activity_Factors_That_Affect_Risks.asp?sitearea=PED)

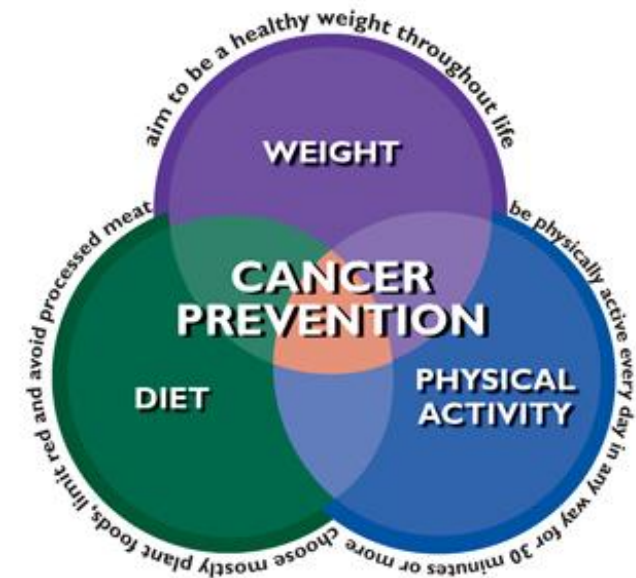
Also available by calling 1-800-ACS-2345

American Cancer Society Guidelines on Nutrition and Physical Activity for Cancer Prevention: Reducing the Risk of Cancer With Healthy Food Choices and Physical Activity. Kushi LH, Byers T, Doyle C, Bandera EV, McCullough M, McTiernan A, Gansler T, Andrews KS, Thun MJ; American Cancer Society 2006 Nutrition and Physical Activity Guidelines Advisory Committee. CA Cancer J Clin. 2006 Sep-Oct;56(5):254-81; quiz 313-4.

Image Sources:

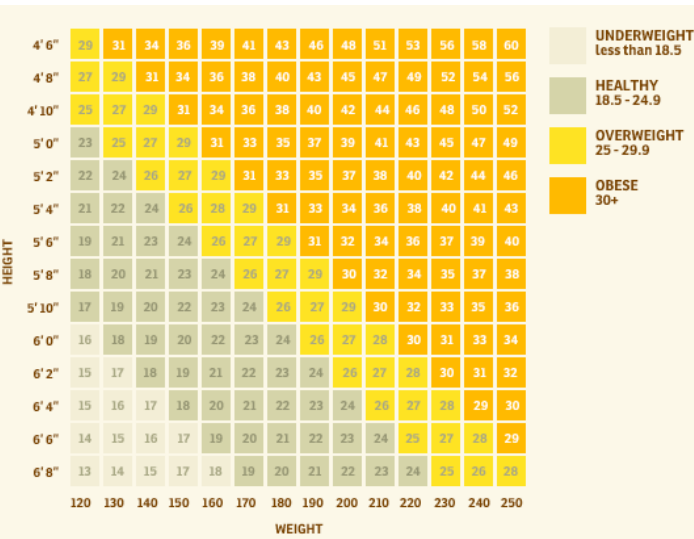
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DIET AND EXERCISE IN CANCER PREVENTION



**University of Minnesota
Primary Care Clerkship
Patient Education Tool**

**Developed by Suzanne Geier
MS4**



Physical Activity

- Physical Activity reduces the risk of breast, colon, prostate and endometrial cancer.
- Recommended for adults: at least 30 minutes per day of moderate to vigorous 5 days a week. 45 to 60 minutes of intentional physical activity is even better.
- Recommended for children and adolescents: at least 60 minutes per day of moderate to vigorous physical activity at least 5 days a week.



Diet

- Eat 5 or more servings of vegetables/day.
- Choose whole grains over processed foods.
- Limit pork and red meat. Choose fish, poultry or beans instead.
- Bake, broil or poach instead of frying foods.
- Read labels! Watch fat and calories!
- Avoid sweets and regular soda.
- Limit alcohol consumption to two drinks per day for men and one drink per day for women.

Common Questions:

What do these things have to do with cancer?

- Antioxidants** Your body defends itself against injury by using antioxidants, often found in fruits and vegetables. These antioxidants are thought to help fight cancer. It is best to eat whole fruits and vegetables as an antioxidant source instead of taking supplements.
- Aspartame and Saccharine** are artificial sweeteners that are about 200 times sweeter than sugar and are very low in calories. There is no evidence that ingestion of these products increases cancer risk.
- Beta Carotene** is an antioxidant related to Vitamin A and is found in many vegetables. Eating vegetables has been shown to reduce the risk of many cancers. Eat whole fruits and vegetables high in beta carotene but avoid high dose beta carotene supplements.
- Pesticides and Herbicides** are only toxic when used incorrectly. Scientific evidence overwhelmingly finds the levels of pesticides at the doses found on our foods do not increase cancer risk. In fact, fruits and vegetables have very convincing protective effects. Do however, make sure to wash your fruits and veggies!
- Soy** is an excellent source of protein and has a weak estrogen like effect that may protect against some hormone dependent cancers. However, survivors of breast and endometrial cancer are advised to consume moderate amounts of soy.
- Vitamin D** Some growing evidence suggests this vitamin may protect against colon, prostate and breast cancer. Vitamin D is made in our bodies when our skin is exposed to sunlight. However, it is safest to obtain Vitamin D through milk, cereals and supplements. Wear your sunscreen!

Achieving a Healthy Weight

- Balance the calories you take in with the calories you burn!
- Maintain a healthy weight beginning in childhood and continuing throughout life.
- Eat a nutritious diet.
- Reduce calories. A reduction of 100 calories/day **prevents** weight gain. A reduction of 500 calories/day **initiates** weight loss.
- Exercise!



Activity	Moderate Intensity	Vigorous Intensity
Exercise and leisure	Walking, dancing, leisurely bicycling, ice and roller skating, horseback riding, canoeing, yoga	Jogging or running, fast bicycling, circuit weight training, aerobic dance, martial arts, jumping rope, swimming
Sports	Volleyball, golfing, softball, baseball, badminton, doubles tennis, downhill skiing	Soccer, field or ice hockey, lacrosse, singles tennis, racquetball, basketball, cross-country skiing
Home	Mowing the lawn, general yard and garden maintenance	Digging, carrying and hauling, masonry, carpentry
Occupational	Walking and lifting as part of the job (custodial work, farming, auto or machine repair	Heavy manual labor (forestry, construction, firefighting)