

Nutrition & Cancer

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Winning the fight against cancer, every day.®

Feeling confused about nutrition?

HEALTH

Low-fat and low-carb diets shown to reduce inflammation

High-Carb Diet Linked to Colon Cancer Recurrence in Study

HEALTH

FitGirl: Carbs Are Now OK For Dieting

High-protein diet may help some people shed pounds

Exercise and coffee may ward off dementia, studies say

Coffee

Coffee Linked to Vision Loss

9 Dangers of Gluten-Free Products

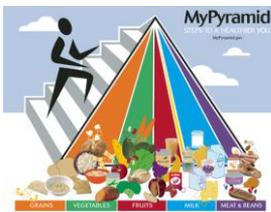
LATEST NEWS

Drs. Oz and Roizen: A daily multivitamin cuts the risk of cancer

Local Doctor Explains Benefits Of Gluten-Free Diet



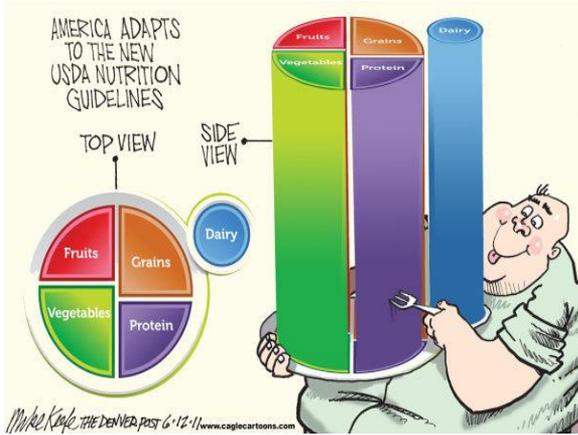
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US Mortality

Rank	Cause of Death	No. Deaths	% of Deaths
1	Heart Disease	599,413	24.5
2	Cancer	567,628	23.2
3	Chronic Respiratory Disease	137,353	5.6
4	Stroke	128,842	5.2
5	Accidents	118,021	4.8
6	Alzheimer's Disease	79,003	3.2
7	Diabetes	68,705	2.8
8	Influenza/Pneumonia	53,692	2.2
9	Nephritis	48,935	2.0
10	Intentional self-harm (suicide)	36,909	1.5

Source: US Mortality Public Use Data Tape 2009, National Center for Health Statistics, Centers for Disease Control and Prevention, 2009.

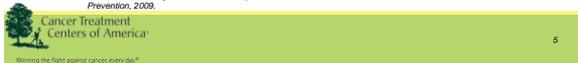
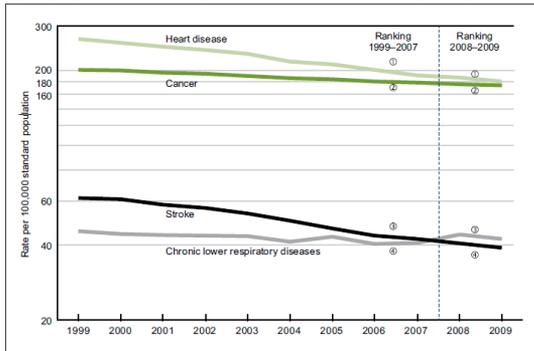


Figure 6. Age-adjusted death rates for leading causes of death: United States, 1999–2007 and preliminary 2008 and 2009



Source: CDC, Death in the United States, 2009.



Challenges

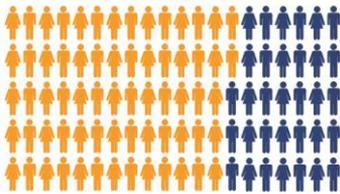
- Malnutrition: Because of the cancer itself or from side-effects of treatment. Can be the limiting factor for continuing treatment.
- Nutrition confusion: Patients often don't know where to find good advice, or find conflicting information.
- "Food fights": Nutrition often becomes a battle between patients and caregivers.
- Sometimes nutrition gets put on the back-burner

Prevention

"An ounce of prevention is worth a pound of cure."
- Benjamin Franklin



One in three cancer cases can be prevented



For every 100 people who get cancer
33 cases could be prevented through simple lifestyle changes

AICR Guidelines for Cancer Prevention

1. Be as lean as possible without becoming underweight.
2. Be physically active for at least 30 minutes every day.
3. Avoid sugary drinks. Limit consumption of energy-dense foods.
4. Eat more of a variety of vegetables, fruits, whole grains and legumes such as beans.
5. Limit consumption of red meats (such as beef, pork and lamb) and avoid processed meats.
6. If consumed at all, limit alcoholic drinks to 2 for men and 1 for women a day.
7. Limit consumption of salty foods & foods processed with sodium.
8. Don't rely on supplements to protect against cancer.

Source: American Institute for Cancer Research, Second Expert Report, 2007

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1. Healthy Weight

1. Be as lean as possible without being underweight.



Downsize

Being **overweight** is linked with several cancers such as oesophagus, colorectal, breast and kidney.

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1. Healthy Weight

Why does weight matter?

- Fat (especially abdominal fat) acts as a hormone pump
- Strong link to colon, pancreas and endometrial cancer, as well as breast cancer (in postmenopausal women).
- Risk factor for other health issues (diabetes, heart disease, etc)



Source: American Institute for Cancer Research, Second Expert Report, 2007

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2. Physical Activity

2. Be physically active for at least 30 minutes each day.



Get sweaty

30 mins of physical activity a day
(60 mins for children) reduces
risk for several major cancers.

2. Physical Activity

Three Strategies for Lifestyle Change



ADD



SUBTRACT



REPLACE

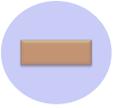
2. Physical Activity



ADD

- Add 30 minutes per day (150 minutes per week)
- Do something you love!
- Try tying the activity to something you already have a habit of doing.
- Phone a friend
- SET A GOAL... (Try it right now!!)
 - Be specific! What days, for how long, what activity, where, with whom.
 - Is it attainable?
 - Do you have a plan B? (You DO live in Oklahoma.)

2. Physical Activity



- Subtract TV time from your weekly routine.
 - More likely to eat mindlessly
 - More likely to eat undesirable foods

SUBTRACT

- Limit sedentary activities
- If you can't peel yourself away from the latest episode of 30 Rock, try these tips:
 - Get out of the chair at each commercial break
 - Do some simple exercises during the show (sit-ups, push-ups)
 - Set up a new household rule: only eat at the table! If you want a snack, the TV must be OFF.

2. Physical Activity



- Once you get moving, kick it up a notch!
- Replace your usual moderate-level activity with a vigorous activity twice a week
 - Use the talk test
 - Heart rate: if you want to be more precise

REPLACE

Remember, every little bit counts, and ANY activity is better than none.

Don't have 30 minutes to spare? Break it up into two 15 minute sessions, or three 30 minute sessions.

3. Energy Density

3. Avoid sugary drinks. Limit consumption of energy-dense foods.



Not so sweet

Sugary soft drinks, **sweet and fatty foods** cause weight gain, which increases your cancer risk. **Water's better.**

Carbohydrates

- Simple vs Complex Carbohydrates
 - Simple carbs: Refined flour, cookies, pastries, white rice, sweeteners, soft drinks, etc
 - High intake of soft drinks and refined carbohydrates linked to pancreatic cancer
 - Empty calories, may promote weight gain.

Choose **complex carbohydrates** more frequently: whole grains, fruits/vegetables, beans, etc. Drink water or unsweetened beverages.

 Cancer Treatment Centers of America
Sources: American Institute for Cancer Research, 2007
Larsson, S., Bengtsson, L. & Wolk, A. (2006). Consumption of sugar and sugar-sweetened foods and the risk of pancreatic cancer in a prospective study. *American Journal of Clinical Nutrition*, 84, 1171-1176. 22

Energy Density



Guess which side has more calories

 Cancer Treatment Centers of America
Photos: Dr. Barbara Rolls, Penn State University 23

Fats

- Unsaturated Fats (the "good")
 - Liquid at room temperature
 - Plant sources
- Saturated Fats (the "bad")
 - Solid at room temperature
 - Animal Sources (mostly)
 - Linked to cancer, heart disease
 - Limited quantity
- Trans Fats ("the "ugly")
 - "Hydrogenated Fats"
 - Self stable and frozen products
 - Avoid entirely



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Fats (con't)

- Omega-3 (anti-inflammatory)
 - Fish (fatty, cold-water)
 - Walnuts
 - Canola Oil
 - Fortified Foods
 - Flaxseed
- Omega-6
 - Fried Foods
 - Animal Meats
 - Grains



May benefit from changing ratio of Omega-3 to Omega-6 by increasing Omega-3's.

4. Plant Foods

4. Eat more of a variety of vegetables, fruits, whole grains and legumes (such as beans).



5 a day
An apple a day keeps the doctor away - Literally. Eating fruit and veg may reduce risks for many cancers.

Prevention & Diet

Move Fruits & Vegetables to the Center of the Plate

- Goal: Five to Nine Servings a Day
 - Standard serving: ½ cup
- Prevent at least 20% of all cancers
- Fiber
 - Don't count on juice!
- Vitamins, Minerals, Phytochemicals
 - Primary source of the cancer-preventative properties of fruits and vegetables



6. Alcohol

6. If consumed at all, limit alcoholic drinks to 2 for men and 1 for women a day.



Know your limits

Alcohol increases cancer risk. No more than two drinks for men and one for women per day.

Cancer & Alcohol

- Drink alcohol only in moderation, if at all
 - Can cause cancer
 - Mouth, esophageal, laryngeal, pharyngeal, breast, and liver cancers
 - 75-80% of oral cancers frequently used alcohol
 - Men: 2 drinks a day; Females: 1 drink per day
 - More alcohol = Higher risk
 - Higher risk if use tobacco
 - Empty calories
 - Increase appetite



7. Sodium

7. Limit consumption of salty foods and foods processed with salt (sodium).



Shake off salt

Too much salt increases your risk of stomach cancer.

Prevention & Diet

- Select foods low in fat and in salt
 - Limit processed foods
 - Linked to most cancers
 - Goal: less than 2.4 g (about a teaspoon)
- Caution: Don't rely on taste!
 - Table salt = sodium chloride
 - Taste desensitization



8. Supplements

8. Don't rely on supplements to protect against cancer.

- Supplements do have a place (ex: vitamin deficiency, inadequate intake, etc)
- Problem: They are often used indiscriminately
 - Get an expert opinion! (Hint: Registered Dietitians)
- Bottom line: Food comes first!

There is absolutely NO substitute for a healthy diet!



Tobacco & Cancer

- Do not use tobacco in any form
- Not just lung cancer... kidney, head & neck, breast bladder, esophageal, pancreatic, stomach cancer...



Quit!

The world's single, biggest cause of cancer. More than 25% of all cancer deaths. 10% of all adult deaths.

Cancer Prevention

- Maintain a healthy weight and be physically active
- Choose a diet rich in a variety of plant based foods
- Limit intake of red meat, processed meats
- Eat plenty of vegetables and fruits
- Drink alcohol only in moderation, if at all
- Select foods low in fat and salt
- Do not use tobacco in any form



Source: American Institute for Cancer Research, 2007

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Resources

American Cancer Society:

www.cancer.org

American Institute for Cancer Research:

www.aicr.org

Cancer Treatment Centers of America:

www.cancercenter.com



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