

# A Deeper Understanding: Debunking Cancer Diet Myths

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# Debunking Cancer Diet Myths

## Objectives

- Review common nutrition and cancer claims
  - Sugar and cancer
  - Juicing
  - Alkaline diet
  - Organic foods
  - Supplements and cancer
- Learn how to apply a healthy perspective on emerging diet practices
  - Turn to trustworthy sources
- Support what you know: Eating healthy shouldn't be complicated!

# Sugar “Feeds” Cancer



# Sugar feeds cancer

## Myth!

- Sugar (glucose) is found in many foods
  - Complex carbohydrates
  - Simple carbohydrates
  - Fruits and vegetables
- Glucose is broken down to acetyl coA, which feeds every cell in our body
- Cancer cells will produce sugar (gluconeogenesis) even if you cut out sugar from your diet
  - Protein and Fat can be converted to acetyl coA
- We cannot control which cells use glucose and which do not
- Excessive intake can lead to obesity, which can increase cancer risk



**Bottom Line:** Enjoy high calorie sweets in moderation to prevent excessive weight gain

American Institute for Cancer Research

RECOMMENDATIONS FOR  
**SUGAR**

Limit consumption of sugar sweetened drinks

Limit consumption of fast foods and other processed foods high in fat, starches or sugars



Juicing is a cure-all for cancer



# Juicing is a cure-all for cancer

## Myth!

- Many people have been taught that juice diets/fasts are a safe and productive practice
- Juice should not be used to meet basic nutrient needs as it significantly reduces consumption of multiple food groups
- People who practice these methods need to be aware that it significantly reduces the amount of fiber in the diet



**Bottom Line:** Juicing can be a great way of adding more fruits and vegetables to an already healthy diet

- Aim for first 5 servings to come in whole food form
- Focus on vegetables rather than fruits
- Aim for variety
- Add protein or fat source





An acidic environment promotes cancer



# Alkaline Diet

## Myth!

- Based on the theory that an acidic environment is toxic to the body and increases cancer risk while an alkaline environment is protective
- The version promoted by the Acid-Alkaline Association (AAA) is intended to balance pH by consuming 80% alkaline foods and 20% acid-forming foods
  - Alkaline: vegetables, fruits, legumes
  - Acid-forming foods: beef, poultry, dairy foods, coffee, sugar, alcohol

# Alkaline Diet Myth!

- Urine pH may be affected by diet
  - Cancer cells are not affected by urine pH, but blood pH
- If kidney function is normal, body maintains optimal blood pH regardless of diet
- No scientific evidence available that supports the effectiveness or safety



**3** Carbonated Water, Club Soda, Energy Drinks

**4** Popcorn, Cream Cheese, Buttermilk, Prunes, Pastries, Pasta, Cheese, Pork, Beer, Wine, Black Tea, Pickles, Chocolate, Roasted Nuts, Vinegar, Sweet and Low, Equal, Nutra Sweet

**5** Most Purified Water, Distilled Water, Coffee, Sweetened Fruit Juice, Pistachios, Beef, White Bread, Peanuts, Nuts, Wheat,

**6** Fruit Juices, Most Grains, Eggs, Fish, Tea, Cooked Beans, Cooked Spinach, Soy Milk, Coconut, Lima Beans, Plums, Brown Rice, Barley, Cocoa, Oats, Liver, Oyster, Salmon

**7** Neutral pH  
Most Tap Water, Most Spring Water, Sea Water, River Water

**8** Apples, Almonds, Tomatoes, Grapefruit, Corn, Mushrooms, Turnip, Olive, Soybeans, Peaches, Bell Pepper, Radish, Pineapple, Cherries, Wild Rice, Apricot, Strawberries, Bananas

**9** Avocados, Green Tea, Lettuce, Celery, Peas, Sweet Potatoes, Egg Plant, Green Beans, Beets, Blueberries, Pears, Grapes, Kiwi, Melons, Tangerines, Figs, Dates, Mangoes, Papayas

**10** Spinach, Broccoli, Artichoke, Brussel Sprouts, Cabbage, Cauliflower, Carrots, Cucumbers, Lemons, Limes, Seaweed, Asparagus, Kale, Radish, Collard Greens, Onion



# Alkaline Diet

## Myth!

**Bottom Line:** Choose more plant-based foods for overall health

- Choose more plant based foods for overall health
- Many acidic foods are also nutritious





Organic foods are better  
than conventional

The New York Times

## Can Eating Organic Food Lower Your Cancer Risk?

In a study, those who ate more organic produce, dairy, meat and other products had 25 percent fewer cancer diagnoses over all, especially lymphoma and breast cancer.



# Only organic foods are healthy

## Myth!

- Insufficient evidence that organic foods are more cancer protective
- Organic foods may contain slightly high levels of antioxidants
- Pesticide levels are well below EPA established safety guidelines
- Benefits from fruits and vegetables outweigh the risk of residue

**Bottom Line:** Include more plant-based foods any way you can get them – organic, conventional, frozen, etc.

## Supplements can halt or reverse disease



# Supplements and Cancer

## Myth!

- The American Institute for Cancer Research (AICR) does not support the use of dietary supplements as an effective strategy to reduce cancer risk
- More is Not better
  - Beta-carotene and increased risk of lung cancer in smokers
- Not regulated by the FDA
  - Select brands with the USP or NSF certifications
- May interact with treatment
  - Discuss all supplements, herbs, and vitamins with medical team





**Bottom Line:** Focus on consuming nutrients from whole food , rather than supplements, when possible

American Institute for Cancer Research®

RECOMMENDATION ON  
**SUPPLEMENTS**

Don't rely on supplements for cancer prevention.

To reduce your risk of cancer, choose a balanced diet with a variety of foods.

# Turning to Trustworthy Sources

Talk to a Dietitian!

“Probably the biggest problem is that everyone feels that they can be an expert on nutrition...if there was a debate about the optimal rocket fuel to get to Mars and back, you wouldn't have bloggers, book authors and athletes all talking about it with people listening to them as though they all had equal weight of expertise.”

(The Washington Post April 24, 2018)



# Nutritionists are Dietitians

Myth!

## Dietitians

### Education

- Requires at least a bachelor's degree from an accredited dietetics program
- Completion of 1200 hours of supervised practice
- Pass a comprehensive registration exam prior to receiving credentials
- At least 75 hours of continuing education credits every 5 years

### Accreditation

- Registered with the Commission of Dietetics Registration
- State licensure to practice
- Legally able to provide Medical Nutrition Therapy (MNT)



# Credible Nutrition Resources

- The American Institute for Cancer Research
  - [AICR.org](http://AICR.org)
- The Academy of Nutrition and Dietetics
  - [Eatright.org](http://Eatright.org)
- The USDA
  - [ChooseMyPlate.gov](http://ChooseMyPlate.gov)





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# Supporting What We Know

## Eating Healthy Isn't Complicated!

- CDC's latest findings (2018):
  - only 12.2% of adults meet the daily fruit intake recommendation
  - only 9.3% of adults meet the daily vegetable intake recommendation





# References

1. <https://www.choosemyplate.gov/>
2. <https://www.wcrf.org/dietandcancer>
3. [http://www.aicr.org/reduce-your-cancer-risk/diet/sugar-and-cancer-risk.html?\\_ga=2.203210321.1134931639.1540844061-791647270.1526400573](http://www.aicr.org/reduce-your-cancer-risk/diet/sugar-and-cancer-risk.html?_ga=2.203210321.1134931639.1540844061-791647270.1526400573)
4. <https://www.cdc.gov/nutrition/downloads/fruits-vegetables/2018/2018-fruit-vegetable-report-508.pdf>
5. Schwalfenberg GK. The alkaline diet: Is there evidence that an alkaline pH diet benefits health? *J Environmental Public Health*. 2012; 2012: 727763.
6. <http://www.acidalkalinediet.net/>





# Questions?

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Thank You!