A Deeper Understanding: Debunking Cancer Diet Myths
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
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

Northwestern Medicine®
Alkaline Diet

**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.
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.
“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**

<table>
<thead>
<tr>
<th>Education</th>
<th>Accreditation</th>
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<tbody>
<tr>
<td>• Requires at least a bachelor’s degree from an accredited dietetics program</td>
<td>• Registered with the Commission of Dietetics Registration</td>
</tr>
<tr>
<td>• Completion of 1200 hours of supervised practice</td>
<td>• State licensure to practice</td>
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<tr>
<td>• Pass a comprehensive registration exam prior to receiving credentials</td>
<td>• Legally able to provide Medical Nutrition Therapy (MNT)</td>
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<tr>
<td>• At least 75 hours of continuing education credits every 5 years</td>
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Credible Nutrition Resources

- The American Institute for Cancer Research
  • AICR.org

- The Academy of Nutrition and Dietetics
  • Eatright.org

- The USDA
  • 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
OUR CANCER PREVENTION RECOMMENDATIONS

Not smoking and avoiding other exposure to tobacco and excess sun are also important in reducing cancer risk. Following these Recommendations is likely to reduce intakes of salt, saturated and trans fats, which together will help prevent other non-communicable diseases.

dietandcancerreport.org

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References

1. https://www.choosemyplate.gov/
2. https://www.wcrf.org/dietandcancer
Questions?

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Thank You!