UNDERSTANDING DIET'S ROLE IN CANCER RISK

Cancer is a complex disease. Many factors – some within our control and some not – can increase individual cancer risk. Being overweight and eating an unhealthy diet have been linked to increased cancer risk, but no available evidence has proven that single foods cause or cure cancer.





- 1 The total diet has more of an impact on cancer risk than any single food or ingredient
- 2 Measuring what and how we eat is an imperfect science
- 3 Diet is closely linked to other lifestyle factors
- 4 People respond differently to foods
- 5 More research on diet's role in cancer is needed



WHAT IS A HAZARD?

Something that is capable of causing harm under some circumstances.



WHAT IS RISK?

The chance (high or low) that a hazard will cause harm under certain circumstances.

Cancer is a hazard, but an individual's risk of getting cancer depends on a number of factors – some controllable and some not.¹

LIFETIME (ABSOLUTE) RISK

The risk of developing or dying from cancer sometime during a person's lifetime, based on average characteristics of the U.S. population as a whole including age, gender, environment and lifestyle.²



RELATIVE RISK

A statistical measurement in research used to compare the response of two different groups to a particular risk.³



INDIVIDUAL (PERSONAL) RISK

The risk of developing or dying from cancer based on many factors, including a person's age, birthplace, gender, genetics, environment, lifestyle and socioeconomic traits.²



UNDERSTANDING RISK IN RESEARCH REPORTS AND MEDIA HEADLINES

The lifetime risk for developing colorectal cancer is 4.5% or about 1 in 20.4

50g of processed meat a day - less than two slices of bacon - increases the chance of developing colorectal cancer by 18%.⁵

- World Health Organization (WHO)

Translation

Total lifetime risk of developing colorectal cancer increases from 4.5% to 5.3%.

For comparison

Smoking cigarettes increases the chance of developing lung cancer by 2,500%.²

DON'T CONFUSE HAZARD AND RISK

A hazard is not a risk until you are exposed to that hazard at a level that will cause harm.

- 1. Canadian Centre for Occupational Health and Safety. Hazard and Risk. https://www.ccohs.ca/oshanswers/hsprograms/hazard_risk.html. 2. American Cancer Society. Cancer Facts & Figures 2016. Atlanta: American Cancer Society; 2016.
- $3. Institute for Work \& Health. What researchers mean by ... absolute and relative risk. \ https://www.iwh.on.ca/wrmb/absolute-and-relative-risk.$
- 4. National Cancer Institute Surveillance, Epidemiology, and End Results (SEER) Program. http://seer.cancer.gov/statfacts/html/colorect.html.
- 5. Gallagher, J. Processed meats do cause cancer WHO. http://www.bbc.com/news/health-34615621.

