

GRILLING

Joan Kortbein, Registered Dietitian, Certified Diabetes Educator



Grilling season is now officially in high gear. Nothing says “summer” more than the smell of charcoal or the smoky, caramelized flavor from food made on the grill. And while you have heard that grilled meat is healthier because the fat drips away, you have likely also heard that grilled meat may increase your risk for cancer. So here is some general information along with recommendations from the American Institute for Cancer Research (AICR) on this issue.

What the research currently shows is that meat cooked at high temperatures, like with grilling, creates cancer-causing substances known as polycyclic aromatic hydrocarbons (PAH's) and heterocyclic amines (HCA's). They can cause changes in DNA that may lead to cancer. Research has shown exposure to very high levels of HCAs and PAHs in lab animals has caused cancer in these animals, however the levels of HCA and PAH used in the research would be equivalent to thousands of times more than a human would consume as part of a “normal” diet. There isn't enough evidence from these studies to show that grilled meat does, in fact, increase a person's risk for cancer as it does in the animal studies.

Research has shown the risk of PAH and HCA forming is higher with red meats like burgers and steak, and processed meats such as hotdogs and brats. PAH's can also form when smoking or charring meats. Interestingly, PAH's are also in car exhaust, polluted air and cigarette smoke which everyone can be exposed to on a regular basis so it makes being able to directly link the PAH's in meat with cancer much more of a challenge.

Keep in mind that a higher intake of red meat and processed meat, regardless of how they are prepared, have already been linked with increased risk for colorectal cancer.

Other grilling tips to reduce your risk include:

- Clean your grill before cooking; any charred material left on it contains the HCA and PAH
- Avoid contact between the flames and your meat
- If you are grilling a larger portion of meat consider doing some cooking in the oven or microwave prior to grilling to reduce exposure to high temperatures
- Choose lean meats for grilling so there is less fat to drip on the coals or heat elements
- Marinate meats before grilling as this has been shown to significantly reduce the amount of carcinogens in the meat as long as the marinade doesn't contain a lot of sugar
- Add some fruits and vegetables to the grill since these not only produce little to no HCA or PAH when grilled, but also contain antioxidants and phytochemicals to help defend you from cancer

Bottom line: More research is currently being done to determine if there is a clear link between the way meat is cooked and cancer rates. So for now, the AICR recommends limiting your intake of red meat to 18 ounces or less per week and avoiding processed meats regardless of how you are preparing them.

Grilled Salmon

- 1 Tbsp. smoked paprika
- 1 tsp. black pepper
- 1 tsp. salt
- 1 pound salmon steaks
- About 4 tsp. honey

Spray grill before lighting it with non-stick spray or brush with vegetable oil to prevent sticking. Mix the spices together in a small bowl. Rub the mixture evenly over the salmon. Grill for five minutes per side, drizzling lightly with a squeeze from the honey container (about 1 tsp. per steak) just before they're done.

Makes four servings. Per serving: 190 calories, 23 grams (g) protein, 7 g carbohydrates, 7 g fat (1 g saturated), less than 1 g fiber, 630 milligrams sodium

