

Fred Hutchinson Cancer Center **CORE Family Studies** 1100 Fairview Ave. N M4-B402 P.O. Box 19024 Seattle, WA 98109-1024

**Address Service Requested** 

## ONE POT SWEET POTATO TURKEY SKILLET

This recipe is brought to you by Caroline Motzer, the daughter of one of our CORE studies staff members, She has a Master of Science degree in Food Science and Technology. This was adapted from an original recipe by Carissa Stanton (https://broccyourbody.com/one-pan-turkey-sweet-potato-skillet/). We recommend pairing with your favorite sparkling water or mocktail. Serves 4; cook time 30 minutes.

#### Ingredients:

- 2 tablespoons extra-virgin olive oil or avocado oil
- 1 yellow onion, diced
- 2 garlic cloves, finely chopped
- 1 pound ground turkey or ground chicken
- 1 tablespoon chili powder
- 1 1/2 teaspoons ground cumin 1 1/2 teaspoons garlic powder
- Freshly ground black pepper 2 cups roughly chopped broccoli florets
- 1 red bell pepper, diced
- 1 large sweet potato, peeled and cut into 1/2- to 3/4-inch cubes
- 3/4 cup water, chicken broth, or vegetable broth 1/2 cup shredded mozzarella or Mexican blend
- cheese Whole-milk Greek yogurt or sour cream, for serving Chopped fresh cilantro, for garnish
- Thinly sliced green onion, for garnish
- Sliced avocado, for garnish Hot sauce for serving

## Instructions

- 1. Heat the olive oil in a large skillet over medium heat. Once hot, add the onion and garlic and cook, stirring occasionally, until fragrant, 2 to 3 minutes.
- 2. Increase the heat to medium-high. Add the ground turkey and cook, without stirring, until lightly browned, about 2 minutes. Continue to cook, stirring frequently and breaking the meat up with a wooden spoon, until browned all over, about 3 minutes.
- 3. Add the chili powder, curnin, garlic powder, 1 teaspoon kosher salt, and 1/4 teaspoon pepper and stir to thoroughly combine.
- 4. Add the broccoli, bell pepper, sweet potato, and water and stir to combine. Reduce the heat to low, cover, and simmer until the sweet potatoes are tender when pierced with a fork and the water is absorbed, 15 to 20 minutes.
- 5. Taste and season with more salt and/or pepper
- 6. Serve right out of the skillet or divide among 4 bowls.
- 7. Top with the mozzarella, yogurt, cilantro, avocado, and green onion. Pass hot sauce at the table for anyone who wants it.





Sending a warm greeting to our wonderful CORE Studies participants! In 2025, the Fred Hutchinson Cancer Center is celebrating its 50th anniversary! We are proud to be part of an organization with 50 years of dedication to advancing the science and practice of cancer prevention, detection, and treatment. And for over half of that time (almost 27 years), the CORE Studies have been part of that mission. Thank you so much for your commitment to this project. None of this would have been possible without the trust from patients and the dedication of our amazing participants. If you'd like to read more about some of the highlighted breakthroughs from Fred Hutch's 50 years and their 50th anniversary campaign, please visit this link; https:// www.fredhutch.org/en/ways-to-give/campaign-for-fred-hutch/our-breakthroughs.html

# Beyond



Speaking of cancer prevention, this edition of CORE news is devoted to exploring modifiable environmental exposures, both old and new. First, we discuss the latest news around drinking alcohol and cancer. If you have completed your CORE Studies follow-up survey recently, you may have noticed the additional questions we are asking about diabetes diagnosis and new medications like semaglutide (e.g. Ozempic). Here we attempt to explain why we are interested in these topics as a cancer study. Next, we discuss microplastics: what they are, what we can do about them, and how we plan to study them. Finally, we end with another delicious and healthy recipe.

We want to end by saying we are grateful for you and the work we get to do. We are committed to conducting rigorous science on behalf of our participants, their families, and everyone affected by cancer. It is an honor to be able to partner with you on this research.

Warm regards,

Amanda Co Phipps

**Amanda Phipps** 



#### ALCOHOL AND CANCER: UNDERSTANDING THE RISKS AND RECOMMENDATIONS

Many people enjoy an occasional drink, whether it's a glass of wine with dinner or a beer while catching up with friends. However, growing research shows that even moderate alcohol consumption can increase the risk of developing several types of cancer. An updated report from the U.S. Surgeon General highlights that alcohol use can increase the risk of developing at least seven cancers, including cancers of the mouth, throat, voice box, esophagus, liver, breast (in women), and colorectum. You can read the full report here: https://www.hhs.gov/surgeongeneral/reports-and-publications/alcohol-cancer/index.

Despite this well-established connection, many people remain unaware of the risks. Raising awareness is particularly important for cancer survivors and their families who want to make informed choices for a healthier future

Malt Liquor

8-9 fl. oz

≈ 7% alcoho

Regular Beer

12 fl. oz

When we drink alcohol, our bodies break it down into a chemical compound that can damage DNA, potentially increasing cancer risk over time. Alcohol can also promote inflammation, and may increase the absorption of harmful carcinogens. Additionally, alcohol may alter hormone levels—such as estrogen which may play a role in hormone-related cancers like breast cancer.

The relationship between alcohol and cancer is dose-dependent, meaning that the more alcohol a person consumes over time, the higher the risk. However, even small amounts can contribute to cancer risk, particularly for cancers of the breast, mouth, and throat. While the link between alcohol and cancer

vodka, teguila, etc

1.5 fl. oz

≈ 40% alcohol

Table Wine 80-Proof Spirits

5 fl. oz

≈ 12% alcohol

development is well-documented, research on whether alcohol

influences cancer recurrence among people with a history of cancer still ongoing.

#### **Guidelines for Alcohol Consumption**

Given these risks, many health experts recommend either avoiding alcohol entirely or consuming it within established guidelines to

#### In the U.S., quidelines suggest:

- . Men: No more than two drinks per day
- · Women: No more than one drink per day

Many healthcare professionals also advise incorporating alcoholfree days each week. However, for cancer prevention, organizations such as the American Institute for Cancer Research (AICR) recommend abstaining from alcohol altogether.

Global guidelines on alcohol use vary; the UK advises a limit of 14 units per week (about six medium glasses of wine or pints of beer), while Canada now recommends no more than two drinks per week to reduce alcohol-related harm. While some studies once suggested

moderate drinking might have heart health benefits, newer research suggests these effects were likely overstated. Many experts now believe that factors such as a balanced diet and regular exercise better explain those perceived benefits.

These variations highlight the complexity of defining a universal "safe" level of alcohol consumption, which is why ongoing research is essential Scientists collect long-term data on drinking habits and health outcomes to better understand alcohol's role in cancer risk and provide the most accurate recommendations to the public.

For those who choose to drink, understanding what constitutes a "standard drink" is essential. In the U.S., a standard drink is defined as:

- 12 oz of beer (5% ABV)
- . 5 oz of wine (12% ABV)
- . 1.5 oz of distilled spirits (40% ABV)

Keep in mind that many popular beverages can contain more than one standard drink. Whether you're enjoying a pint of strong beer, a large glass of wine, or a cocktail with several types of alcohol, it's important to be mindful of your consumption.

## Considerations for Cancer Survivors

If you are undergoing cancer treatment, most healthcare providers advise avoiding alcohol entirely. During treatment, your body is already working hard to heal, and alcohol can add extra stress to your liver and immune system. It may also worsen side effects such as nausea, dehydration, and fatigue.

For those in remission, reducing or abstaining from alcohol intake may support better sleep, increased energy, and an overall improved sense of well-being. Monitoring drinking habits and discussing them with a healthcare provider can be an important part of long-term health planning.

Living with or recovering from cancer often involves making thoughtful decisions about everyday habits. If you choose to drink, consider keeping consumption within recommended limits—no more than one drink per day for women, two drinks per day for men, and incorporating alcohol-free days each week.

While no single lifestyle change can eliminate cancer risk, reducing or avoiding alcohol can support the immune system, improve quality of life, and promote

By understanding the connection between alcohol and cancer risk, you can make informed choices that align with your health goals. If you're interested in reducing or quitting alcohol, resources such as the National Institute on Alcohol Abuse and Alcoholism (NIAAA) Rethinking Drinking program can provide guidance and support, https://rethinkingdrinking.niaaa.nih.gov/ For personalized recommendations, consult your healthcare provider to discuss how alcohol may impact your health journey



# SEMAGLUTIDES - WHAT'S THE **CONNECTION BETWEEN WEIGHT LOSS DRUGS AND CANCER?**

You may have noticed a few changes in our survey questions, including asking about the use of semaglutides - medications used for weight loss and commonly known as Ozempic, Wegovy, Rybelsus, and other brand

Semaglutides are GLP-1 (glucagon-like peptide-1) receptor agonists. They trigger the release of GLP-1 into your gastrointestinal track which initiates insulin production and lowers blood sugar, which normally happens when you eat. Semaglutides trick the body into thinking it's full while also slowing down the digestion process, which is how people lose weight on the drugs. They are currently administered as pills or injections

While semaglutides have shown promise in managing obesity, they can also help people reduce their risk for conditions driven by excess weight and the inflammation it causes, like diabetes, cardiovascular disease, and other conditions. Emerging studies are also beginning to explore their impact on cancer risks, specifically colorectal cancer.

Obesity and chronic inflammation are known risk factors for many types of cancer, including colorectal cancer, and studies have consistently shown that weight loss can reduce cancer risk. Some studies have suggested that GLP-1 receptor agonists might exert anti-inflammatory effects or help increase the function of the immune system. By decreasing inflammation in tissues such as the gut, regulating the immune response, and facilitating weight loss, semaglutides may lower the risk of colorectal cancer.

These weight management drugs are relatively new and research is in the early stages. Clinical trials have not yet shown that these drugs prevent cancer, and the impact of these medications on patients with a history of cancer is unclear. However, there is intriguing data regarding semaglutides' role in prevention, including a large study in JAMA Oncology that found GLP-1 receptor agonists did reduce the risk of colorectal cancer. Tested on patients with and without extra weight, the drug was especially helpful in reducing colon cancer risk in those who had a body mass index that was classified as obese and overweight.

So, what's the downside here? First, the drugs can have significant side effects, the most common being nausea, diarrhea, abdominal pain, vomiting, and constipation. More serious side effects include kidney failure. gallbladder problems, pancreatitis, bowel obstruction, vision changes, and depression. Animal studies have also shown a connection between semaglutides and thyroid tumors. Second, these drugs are expensive, limiting access and prolonged use. Third, these drugs can't do the job alone. Without behavior change, such as a healthier diet and exercise program, studies have shown that people will put the weight right back on when they stop using them. Finally, you have to consider the clinical appropriateness of weight loss. This is especially important for cancer patients and survivors who may be undergoing cancer treatment or taking maintenance therapies. Cancer patients can already be experiencing side effects from cancer treatment and adding another medication with similar side effects may be too much to handle. There can also be drug-drug interactions. As with any medication, it is important for patients to work closely with their healthcare providers to make informed decisions about

# MICROPLASTICS – THE UNANSWERED **QUESTIONS**

The production and use of plastics has increased >230-fold since 1950. Plastics are lightweight, durable, flexible, and inexpensive to produce. These properties have led to their widespread use around the world in packaging, building materials, household products, and even medical

Microplastics are tiny plastic particles that enter the environment through the slow breakdown of larger plastics. These tiny particles are now present in the oceans, in drinking water, in our food supply, and in the air we breathe. A growing amount of research is also finding microplastics in the human body - although the health implications of microplastic exposure and accumulation in the body is still unclear. The digestive system, including the colon and rectum, could be particularly exposed to microplastics. through the ingestion of foods and beverages with microplastics in them

One emerging hypothesis is that microplastics could contribute to colorectal cancer development through pathways such as causing inflammation, thinning the layer of mucus that protects gut cells, and changing the gut microbiome. The timeline of accumulating microplastics in the environment may also be relevant in explaining the rising rates of "early-onset" colorectal cancer diagnosed among those <50 years of age. However, lots of

In late 2024, Dr. Phipps and colleagues received funding from the National Cancer Institute to research microplastics and their potential role in colorectal cancer development and progression. Their proposal aims to measure the levels of microplastics in stool and colorectal tumor tissue samples, to see if there are differences between individuals with and without cancer and between those with early- vs. later-onset cancers. They also plan to perform some laboratory experiments to see how microplastics affect the microbiome to better understand the possible pathways through which microplastics could contribute to cancer.



So, what do we do while we wait for more information? We really can't avoid microplastics. They are everywhere. But, we can do things to reduce our exposure and reduce the amount of plastic that gets added to the environment. This can be hard because often the plastic option is the most economical and convenient. You can start small by looking around your house and slowly replacing plastics with other materials (wood toys; not using a plastic bag around your produce; glass or aluminum water bottles and storage containers; laundry detergent sheets instead of plastic tubs). We know heat speeds up the leaching of microplastics, so don't microwave your food in plastic containers, but instead transfer it to a glass or ceramic dish first. Don't leave your plastic water bottles out in the sun. We can all take "micro" actions that can 1) add up and lead to a bigger impact 2) protect ourselves, and 3) benefit future generations to come

