When we’re getting chemotherapy treatments, there’s a long list of side effects that we might experience. Nausea, vomiting, lack of appetite, diarrhea, constipation, mouth sores... the list goes on. Sound familiar?

Your primary care provider will speak with you about potential side effects before starting treatment. You might also receive medications for you to manage these side effects. It’s important to take all prescribed medications as directed.

But what else can you do?

We hear so much about the health promoting power of food. These foods are called functional foods. Research exploring the functional and synergistic properties of foods is underway, and some of these functional foods may be helpful for managing side effects of certain chemotherapy regimens.
Generally, functional foods are safe to eat for everyone, but it is best to speak with your health care provider about the risks and benefits before you make any changes to your diet.

1. Ginger

The root of the ginger plant is commonly eaten to treat a variety of gastrointestinal problems. New research shows that ginger may also be used to help reduce chemotherapy-induced nausea, too.

A randomized controlled study (the gold standard of research) explored the role of ginger to reduce chemotherapy-induced nausea. 576 participants took either a ginger capsule or the placebo, alongside taking their prescribed anti-vomiting medication. Researchers found that a small dose of ginger actually reduced the intensity of acute nausea (or, nausea on the first day after chemotherapy) (Ryan et al., 2012).

This study supports what’s seen in the clinical setting all the time: ginger has wondrous effects for controlling nausea. So, in practice, it seems to work.

Figure 1- Fresh ginger root is available at many grocery stores and markets.
Scientists aren’t quite sure exactly how ginger is able to control nausea. In fact, they’re a bit stumped. Research suggests that compounds called gingerols may bind to the 5-HT3 receptors in our bodies (Giacosa et al, 2015). However, this mechanism, and the appropriate time, dose, and form of ginger for nausea prevention during chemotherapy is still being studied.

**The take away message here is this:** Small amounts of fresh ginger may be helpful for reducing the severity of your nausea post chemotherapy. I recommend trying ginger tea. To make a cup, place a few slices of washed and peeled ginger root into a mug. Fill you mug with hot water and let it steep for five minutes before sipping.

2. Probiotic-rich Foods

Mucositis is one of the most common side effects experienced by people receiving chemotherapy (McGuire et al, 2013). It affects the mucous linings of our digestive system, and can lead to mouth sores, inflammation, and diarrhea. Changes to gut bacteria during chemotherapy treatments is one of the reasons why mucositis can develop.

**So how can probiotics help?**

Probiotic-rich foods contain good bacteria. Think fermented foods like kefir, kimchi or sauerkraut, tempeh, and kombucha; all of which contain probiotics. Consuming an appropriate amount of probiotic-rich foods may help maintain our gut’s natural microflora, and keep our digestive tract balanced.

Let’s look at the evidence. A systematic review of all of the studies conducted on probiotics for the treatment of cancer-related mucositis showed that while probiotics are effective in reducing inflammation, there’s not enough evidence to support using them to treat the underlying mucositis (Prisciandaro, 2011).
Another systematic review looked at the impact that probiotics have on the reduction of diarrhea after chemotherapy treatments. Across 11 studies including more than 1600 participants, probiotics helped to reduce the severity of diarrhea for some participants. However, for people who had mild diarrhea, there was no benefit to using probiotic supplements (Wang et al, 2016).

**Figure 2**- Kefir, a fermented dairy product, is a source of probiotics.

**What does this mean?**

Probiotics might be an option if you’re experiencing severe diarrhea (at least seven loose, watery stools more than your normal bowel movements). They might also help with inflammation, but aren’t likely to fix the underlying cause.

**A word of caution:** There are some risks associated with using probiotics. Studies do show that in rare cases, using probiotics during chemotherapy can lead to infection. Speak to your care provider to discuss the potential of incorporating probiotics-rich foods into your diet.
3. Pineapple

Believe it or not, chewing on pineapple bits during a chemotherapy treatment may actually help to reduce your chances of getting mouth sores.

Pineapple contains an enzyme called bromelain that may help reduce inflammation associated with mouth sores (Beuth, 2007; Cassileth, 2011). Forget the Magic Mouthwash and baking soda rinses. Pineapple, with all its juicy goodness, may be the fix for you!

_In a nutshell:_ While the evidence backing up pineapple’s success in preventing mouth sores is lacking, there are no risks involved with eating it. Not only is it a tasty snack, its juiciness can help with dry mouth, too. Fresh or frozen pineapple, without added sugar, is your best option.

**Warning:** Bromelain may interact with some medications. Your pharmacist can tell you whether or not pineapple is safe for you.

**Every Diet is Unique**

There are so many factors that make each and every one of our diets unique. The side effects of chemotherapy can make enjoying our usual foods very difficult. A registered dietitian can help you with personalized nutrition strategies to manage taste and smell changes, loss of appetite, difficulty chewing, and mouth sores. For more information, visit eatrightontario.ca
References:


