# The Role of Diet in Treatment of Kidney Cancer

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## Kidney Cancer Diet and Nutrition

If you have been diagnosed with kidney cancer, you are probably wondering what things you can do to help treat your cancer — or at least improve your symptoms. Changing your regular diet to a kidney cancer diet is something you can easily control.

According to the Kidney Cancer Association, the relationship between cancer and diet is not clear. A poor diet may contribute to causing cancer, but can improving diet improve the outlook of cancer?

Research still needs to be done, as there is little evidence at this time regarding diet changes and treatment of cancer. But that doesn't mean you won't benefit from taking a look at your current diet and making some changes.

It is estimated that diet is a factor in the development in 35% of cancers. Being obese may be a risk factor in the development of kidney cancer.

It can be tough to develop cancer and think that it was your fault (guess what – it's not!) Changing your diet significantly is not considered to be curative, but it is believed to be significantly supportive.

According to the Kidney Cancer Association, "A healthy, well-balanced diet helps the patient maintain strength, prevents body tissues from breaking down, prevents infection, and promotes the regeneration of normal tissues. Eating right is especially important if you are undergoing cancer therapy. Many foods can be beneficial."

### Does Diet Have an Impact on Developing Kidney Cancer?

Well, the jury is still out, but according to *Reuters,* eating red meat may increase your risk of developing kidney cancer, while consuming a diet high in vegetables may have a protective benefit. Also of note is that people with diets high in white bread and white potatoes were at a greater risk than those who ate the foods with less frequency.

In regards to eating red meat, the study found that people had to eat quite a bit of it to boost their odds of developing kidney cancer – five or more times per week.

However, research still needs to be done as the study was not large enough to say with certainty that red meat, white bread, and white potatoes grossly increases your risk of developing kidney cancer.

### Supplements

It is important to note that while supplements may play a significant role in your health, they should only be taken at the advice of your physician. Research has not yet proven that megadoses of vitamins (for example, vitamins A

and C) are helpful in the treatment of cancer unless you are deficient in these vitamins.

A large dose of vitamin A may interact with medications, have undesirable side effects, and be toxic to the body while a large dose of vitamin C can cause kidney stones. For a person who has had a nephrectomy due to kidney cancer, a large dose of vitamin C may be damaging to the remaining kidney.

**The Research of Supplements and Kidney Cancer**

Being said, a 2016 research study conducted at UC Davis found that docosahexaenoic acid (DHA) “reduces renal cell carcinoma invasiveness, growth rate, and blood vessel growth when combined with the anti-cancer therapy regorafenib.”

DHA is a fatty acid that is found in fish and fish oil supplements.

This was a groundbreaking found because according to Robert Weiss, professor of medicine at UC Davis and chief of nephrology at Sacramento VA Medical Center, “Most renal cell carcinomas learn to escape therapy after a couple of years. A simple additive, which is completely non-toxic, could have a positive effect on disease, even rescuing regorafenib and similar therapies from resistance.”

Unfortunately, the benefit seems to be peculiar to the synergistic action of DHA and regorafenib. At this time there is no proof about how taking a fish oil supplement or eating lots of salmon will have an impact on kidney cancer on its own, or with a different type of medication – at least not yet.

*Next page: Learn how eating can reduce sickness, and how a kidney cancer diet plays an important role during treatment.*

## Eating to Reduce Sickness

If you’re going through chemotherapy, you’re more susceptible to infection. You’ve probably been told to wash your hands and avoid people who are ill. What you may not know is that the foods you eat can make you sick if you do not handle them properly.

Before eating produce, ensure it is thoroughly washed. When consuming meat and eggs, make sure they are cooked thoroughly — the meat should not be pink, and the yolks should not be runny.

When purchasing milk, make sure it is pasteurized; the pasteurizing process reduces possible contaminants. Pay close attention to expiration dates, and don’t eat the food past its date.

Also, by now you probably are experiencing (or have been told) about chemotherapy’s nasty side effect of nausea and vomiting, as well as change the way that food tastes and cause constipation. In addition to treating these side effect with medication, there are ways you can modify your diet that can help.

For example, if foods became tasteless, try modifying them or switching them up!

**Appetite, Diarrhea and Other Side Effects of Chemotherapy**

According to Cara Anselmo, a clinical dietitian at Memorial Sloan-Kettering Cancer Center, water often becomes unpalatable to people undergoing chemotherapy – so she’ll recommend flavoring the water with fruit or drinking flavored mineral waters. Also, often meat becomes distasteful, so she’ll offer a list of various other protein choices that are non-meat options.

If appetite suffers, carbohydrate foods are often digested well. Unless contraindicated because of other conditions, hot cereals, toast with nut butters, pita bread with hummus, yogurt and soups are all great options that can all be incorporated into the kidney cancer diet plan.

If diarrhea is a side effect, cutting out foods that promote diarrhea – fried foods, greasy foods, caffeine, fruit juices, raw produce, and sugar alcohols – is recommended. Replace them with other foods, such as oatmeal, fruit without their skin, sweet potatoes, and squash.

Staying hydrated can be a challenge, especially if you are nauseous. Be diligent about watching for dehydration – dark yellow urine, dry, sticky mouth, sunken eyes, and an inability to produce tears – and treat the symptom of nausea ASAP! Eating cool foods can help, as can sipping peppermint or ginger tea and avoid the foods with strong odors, greasy foods, and fried food.

**Protein and Kidney Cancer**

The recommended amount of protein intake can be tricky if you have kidney cancer. Kidney function decreases as a result of kidney cancer. If you've had a nephrectomy, kidney function may be further decreased. A high protein diet may cause your kidneys to work harder.

For your individual protein needs, ask for a referral to speak with a registered dietitian (RD). An RD can calculate your needs based on your kidney function and give you recommendations based on your likes/dislikes.

They can also look at your health in general, looking at other health conditions you may have and design a kidney cancer diet plan to fit your needs.

**Fulfilling Your Calorie Needs**

A typical kidney cancer diet is high in calories. Body weight should be maintained during cancer treatment, even if you are overweight — this may require eating more calories than you're used to.

Some people need to eat high-fat, high-calorie foods to maintain their weight. Again, if this is difficult, this is where speaking with an RD is helpful.

**The Impact of Nutrition Therapy**

We've thrown around "RD" a couple of times now. I know what you're thinking; a visit with yet another healthcare provider – it sounds like just what you want to do when you're feeling awful, right?

Well, an RD can do more than just write down your protein and calorie needs or developing a kidney cancer diet plan for you – they can be an instrumental part of your healthcare team when you're fighting the cancer battle.

By now, you're either in the midst of cancer treatment and are well aware of the symptoms of kidney cancer, the symptoms of kidney cancer treatment, or you've at least discussed them with your oncologist. However, those symptoms (weight loss, fatigue, diarrhea, constipation, nausea, and vomiting, to name a few) can all inhibit the healing process because they get in the way of staying nourished.

The RDs? They can come up with strategies for combating those symptoms, along with the medical therapy your oncologist has prescribed!

In fact, they use nutrition therapy "to help restore digestive health, prevent malnutrition and provide dietary recommendations during treatment … to help you stay strong and nourished, so you can continue with your cancer treatment."

**"Super Foods" for Your Kidneys**

The National Kidney Foundation has outlined seven "super foods" that are beneficial for general kidney health that you can incorporate into your kidney cancer diet plan. These foods are high in antioxidants and vitamins; although they do not cure kidney cancer, they do have benefits for overall health.

**Kidney Cancer Diet Foods to Incorporate In Your Diet**

- **Apples:** The antioxidants are located in the peel so make sure to consume that part of the apple. Apples also contain pectin, which may lower cholesterol and glucose levels.
- **Blueberries:** Blueberries are rich in vitamin C. Studies are being done to evaluate blueberries and their benefit against cancer and heart disease. Blueberries are also high in potassium and high in antioxidants, making them a powerful anti-inflammatory fruit.
- **Fish high in omega-3 fatty acids:** Omega-3 fatty acids help control blood clotting and building the cell membranes of the brain. They may help to lower blood pressure and are thought to reduce triglyceride levels. Omega-3s are also being studied as an agent against cancer, autoimmune disease, and inflammatory bowel disease.
- **Kale:** Kale is rich in vitamin C, calcium, vitamin A, carotenoids, and flavonoids; carotenoids and flavonoids are known to have anti-cancer benefits.
- **Spinach:** Spinach is rich in vitamin A, vitamin C, vitamin K, and folate. It is also rich in beta-carotene, which helps with immunity. People on dialysis do have to watch their intake, as it is high in potassium.

- **Strawberries:** Strawberries are rich in fiber and antioxidants, which causes them to be beneficial for heart health and possibly act as an anti-cancer agent.
- **Sweet potatoes:** Sweet potatoes are rich in beta-carotene, vitamin A, and vitamin B-6. People on dialysis do have to watch their intake though, as it is high in potassium.
- **Cabbage:** Cabbage is a cruciferous vegetable that is filling and nutritious, that also is chock-full of phytochemicals.
- **Cauliflower:** Another cruciferous vegetable, it contains high amounts of vitamin C, folate and fiber, which allows your body to fight off toxins.
- **Garlic:** As a spice that is full of flavor that also has anti-inflammatory properties, garlic can and should be added to every savory meal.
- **Red grapes:** Red grapes contain flavonoids, which are known to reduce the risk of blood clots. The flavonoids are found in the dark skin of the red grape.
- **Olive oil:** Olive oil contains oleic acid and polyphenols, both of which are anti-inflammatory agents.