

Radiation Therapy to the Prostate

You and your doctor have chosen radiation therapy as part of your treatment for prostate cancer. This handout describes:

- › What to expect
- › How to care for yourself during treatment
- › How to reduce side effects and increase your comfort during treatment

If you have any questions, please talk with a member of your care team.

Most often, your doctor will prescribe 25 to 44 radiation treatments. The radiation treatment itself is just like having an X-ray. It is not painful and you will not feel anything.

Treatment schedule

The treatments take place once a day Monday through Friday (no weekends or holidays). Your therapist will work with you to set up daily appointment times, each lasting 15 to 20 minutes. While the actual treatments take only a few minutes, it is best to allow an hour for:

- › X-rays
- › Meetings with your doctor or nurse
- › Any unexpected delays

You will have X-rays as prescribed by your doctor to make sure you are in the correct position on the table. Your doctor does not use the X-rays to diagnose problems or assess treatment effects.



You will meet with your doctor at least once a week. During these visits, your doctor will check your treatment and side effects. You may discuss any concerns you have with your treatment during this time.

Preparing for treatment

Your radiation treatment targets the cancer in your prostate. It is important to protect the healthy tissue in this area of your body. Too much stool and gas can cause the lower bowel (rectum) to expand and be exposed to radiation. By having a full bladder and an empty bowel, you can lessen the treatment effects on the healthy tissues in your bowel.

Full bladder

When your bladder is full, it pushes up on your bowel and helps move it out of the treatment area. Your nurse and therapist will give you instructions on how to fill your bladder for treatment.

Empty bowel

The area treated for prostate cancer is very small. Any gas bubbles in your belly may cause nearby organs to move. This can change the treatment field. This may lead to delays or cancellations of treatment.

Please try to have a bowel movement before each treatment. Your care team will take an image of your pelvis each day before treatment. If gas and stool are causing your bowel to expand, you will be asked to use the restroom to have a bowel movement and/or expel gas.

Diet during pelvic radiation treatment

Radiation to the pelvis may cause some side effects that change your ability to eat well during treatment. Some possible side effects are gas, stomach discomfort, pain with urination and diarrhea.

Ways to help reduce gas

- › Swallow less air
 - How and what we eat can cause gas. Here are some suggestions to swallow less air:
 - Eat slowly and chew well.
 - Avoid talking a lot while eating.

- Do not use straws.
- Avoid chewing gum or sucking on hard candies or mints.
- Avoid fizzy drinks (pop/soda, beers/ales, carbonated water).
- Do not smoke.

› **Try to have frequent, regular bowel movements**

- If you are able, go for a walk or stretch for 30 minutes most days of the week. This helps gas and bowel contents move through the intestines.
- Drink plenty of fluids. Aim for 8 cups of water each day.
- Avoid lactose-containing foods if you are lactose intolerant. Lactose is in dairy products. It is highest in milk and ice cream.
- Do not skip meals.

› **Pay attention to foods that cause gas**

Foods that cause gas can be different from person to person. Try to figure out which foods make you gassy and avoid eating these during treatment. Some common gas-producing foods include:

- Sugar-free candies, gums and soda drinks
- Gas-producing vegetables such as broccoli, mushrooms, Brussels sprouts, cabbage, cauliflower, corn, garlic, leeks, onions, peas, and legumes, such as baked beans, kidney beans, split peas, and lentils
- Gas-producing fruits such as prunes, prune juice, apple juice and dried fruits

Ways to help burning with urination

You might have pain when you urinate (pee) with pelvic radiation. It is important to let your healthcare team know if you have pain when you urinate. They will need to check for infection or other causes. Sometimes the foods we eat or drink can cause painful urination.

- › Aim to drink at least 8 cups of water each day.
- › Avoid acidic beverages such as coffee, tea, soda, tomato-based juice and alcohol.
- › Check with your radiation team about drinking cranberry juice to help with symptoms.

Ways to help diarrhea

Part of your large bowel or colon may be in the treatment area. This part of your body is sensitive to radiation. As a result, abdominal cramping and diarrhea can occur. Follow these guidelines to help with diarrhea:

- › Avoid gas-producing foods and behaviors that may increase gas (see above).
- › Avoid foods high in lactose. High-lactose foods can make diarrhea worse. Lactose is in dairy products. It is highest in milk and ice cream. It is lowest in hard cheeses and yogurt.
- › Avoid greasy/fried foods. High-fat foods are hard to digest. This can make diarrhea worse.
- › Avoid spicy foods. If you do not eat spicy foods regularly, they can be hard to digest.
- › Eat 5 to 6 small meals/snacks each day. Eat small amounts (1 cup of food or less) to avoid stomach upset. Make up for small amounts by eating more often.
- › Avoid insoluble fiber. Choose more foods with soluble fiber.

Fiber in foods

There are 2 types of dietary fiber – soluble fiber and insoluble fiber.

- › Soluble fiber is good to eat if you are having diarrhea. It helps make your stool solid.
- › Insoluble fiber is bad to eat if you are having diarrhea. It can make you have bowel movements more often.

Heating foods can break down fiber. Heat from the canning process can break down fiber. Steaming certain vegetables can also lower their insoluble fiber content.

Soluble fiber foods (OK to eat)	
Fruits	• Avocado • Banana • Peeled apples or applesauce
Vegetables (steamed/cooked/peeled)	• Carrots • White potatoes or sweet potatoes • Summer squash (de-seeded and peeled) • Zucchini (de-seeded and peeled)
Grains	• White bread • French bread • White pasta • White rice
Insoluble fiber foods (Try to avoid)	
Fruits	• Berries • Dried fruits • Most raw fruits and unpeeled fruits
Vegetables	• Gas-producing vegetables (see above) • Dried beans/lentils/legumes • Most raw/unpeeled vegetables
Grains	• Hearty grain products (12-grain wheat bread, muesli, wheat bran)
Nuts/seeds	• All nuts, including nut butters

Eat other low-fiber foods. These include:

- › Cream of rice, rice or corn cold cereals, pancakes, waffles, and flour tortillas
- › Meats and protein such as beef, chicken, fish, pork, turkey and eggs. (Limit bacon and pork sausage)
- › Low-lactose dairy products such as hard cheese and yogurt without fruit

Common side effects from radiation treatment

Changes in urination

Radiation will cause irritation and swelling of your prostate. Your prostate is close to your urethra (the tube that connects your bladder to the outside of your body). When the prostate swells, it can put pressure on the urethra. This may cause you to have the following:

- › Feeling of urgency and the need to pass urine more often
- › Weak urine stream
- › Feeling the need to push or strain to begin passing urine
- › Feeling of not emptying your bladder completely

Burning with urination

Radiation can irritate your bladder and urethra. This can cause a burning feeling when you pass urine. **If you feel pain or burning when you pass urine, let your doctor or nurse know.** Your doctor may order a urine sample to check for an infection. The doctor can prescribe medications to decrease the burning feeling. Drinking more fluids may also offer some relief.

Diarrhea

Part of your large bowel or colon may be in the treatment area. This part of your body is sensitive to the radiation. As a result, abdominal cramping and diarrhea can occur.

Tell your doctor or nurse if you have diarrhea. Let them know if you have diarrhea 4 or more times in a 24-hour period as this can lead to dehydration.

Your doctor may recommend that you take Imodium® A-D (loperamide hydrochloride) to help the diarrhea.



Diarrhea combined with the radiation can cause the skin around your anus to become irritated. We suggest that you use baby wipes or soft washcloths to clean yourself after having a bowel movement. It is safe to use any unscented lotion made for sensitive skin, such as Aquaphor® healing ointment.

Do not put these creams on your skin within 2 hours before your treatment. Doing so can cause your skin to be more sensitive to the effects of radiation.

Fatigue

Fatigue is a common side effect of radiation treatment. Daily trips for treatment combined with the effects of radiation may make you more tired. Most people often feel decreased energy levels after about 10 to 15 treatments.

Staying active and keeping a consistent sleep schedule can help improve energy levels. Try not to over-exert yourself. If you become tired, plan for rest periods during your day.

When to call your doctor

Call your doctor if you have these symptoms:

- › Blood in your urine
- › Pain or burning when passing urine
- › Unable to pass urine
- › Diarrhea 4 or more times in a 24-hour period

Go to the Emergency Department if you are unable to pass urine.

For more information about Northwestern Medicine, please visit our website at [nm.org](https://www.nm.org).