

## **Bowel Problems and Radiation Therapy**

(The following information is based on the general experiences of many prostate cancer patients. Your experience may be different.)

## Table of Contents

What Will I Learn By Reading This? .....	3
What Is Radiation Enteritis Or Intestinal Irritation?.....	4
Why Causes Intestinal Irritation?.....	5
When May I Get Intestinal Irritation?.....	6
What Are The Symptoms (Signs) of Intestinal Irritation?.....	7
Are There Things That Can Help Make My Intestinal Irritation Better? .....	8
What Can I Do To Make My Intestinal Irritation Better? .....	9
Are There Foods That I Should Not Eat? .....	10
Are There Foods That Are Good For Me To Eat?.....	13
Are There Other Things I Can Do To Help Myself? .....	14
When Should I Change How I Eat?.....	15
Should I Plan My Meals?.....	16
What Did I Learn By Reading This? .....	19
Key Words .....	20

## **What Will I Learn By Reading This?**

When you and your doctor talked about radiation therapy as a treatment for your prostate cancer, you probably talked about the side effects or unwanted changes that may happen to you during and after your radiation therapy. It is important for you to learn about these side effects so you will know what to expect and how best to take care of yourself during and after radiation therapy. In this booklet, you will learn about a common side effect or unwanted change in your body called radiation enteritis (N –terr – EYE – tis). You will learn the following:

- What radiation enteritis is.
- How you can take care of your body during and after radiation therapy.

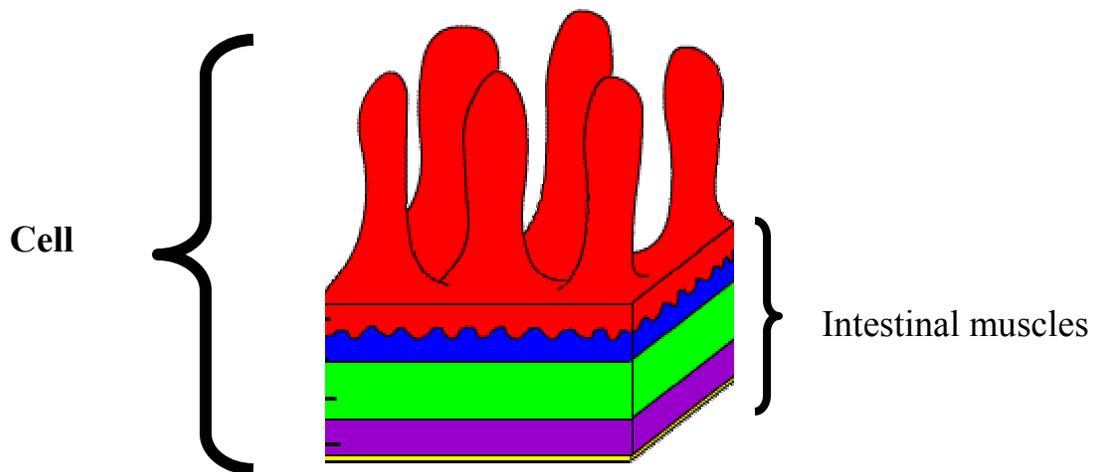
It is important to think about how you will take care of yourself so that you can live your life as well during and after your radiation therapy.

## What Is Radiation Enteritis or Intestinal Irritation?

Radiation enteritis is an irritation of the cells that cover the inside of your intestines.

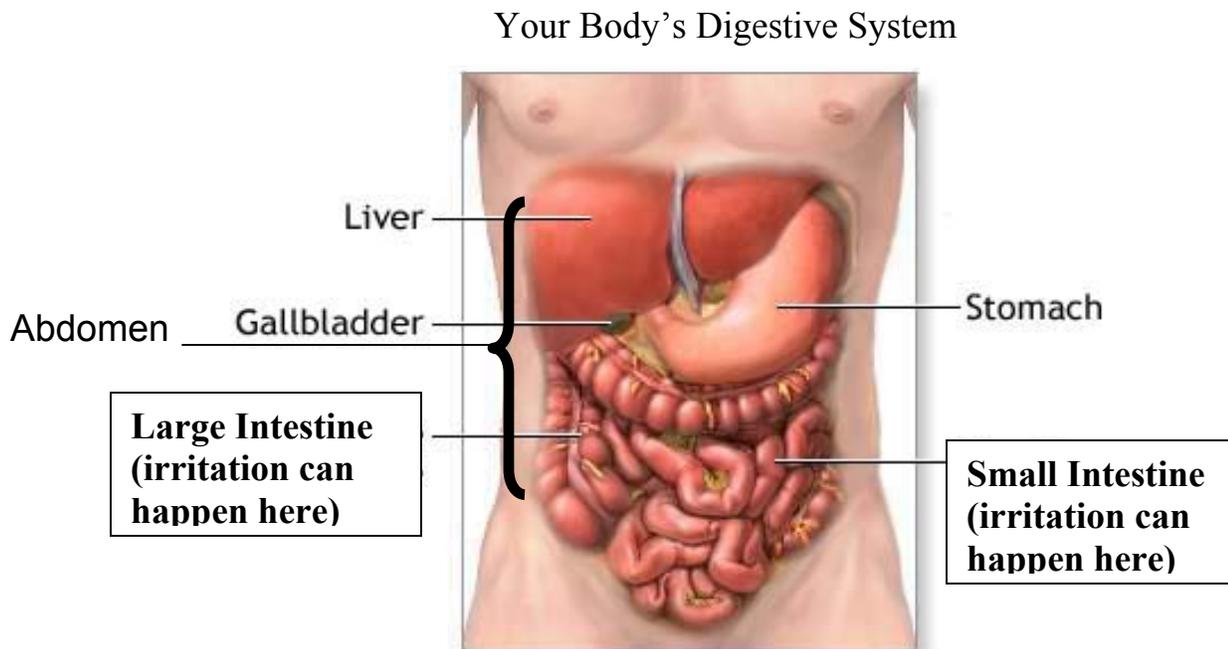
**Look at the picture below to see what the cells that cover the inside of your intestines look like.**

**Picture of Cells that Cover the Inside of Your Intestines**



## What Causes The Irritation of Your Intestinal Cells?

When you get radiation therapy to treat your prostate cancer, healthy cells are also killed along with your prostate cancer cells. This may bother or irritate your intestines. Your intestines tract help your body to take food, water, and other liquids into your body. When your intestines are irritated, they cannot take water and foods into your body very well. This can cause you to have pain in your belly (the part of your body above and around your belly button).



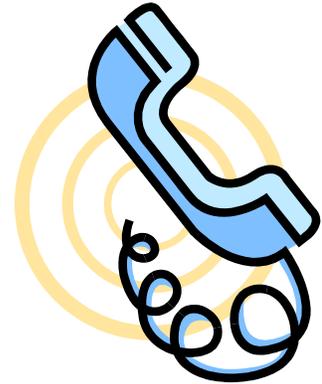
## **When May I Get Intestinal Irritation?**

You may have intestinal irritation during and after your radiation treatment.

Intestinal irritation may happen any time from the day you start your radiation therapy until up to 8 weeks or more following the end of your treatment. In some cases, this side effect of your radiation therapy may not happen for 6 to 18 months after your treatment has ended. If you get intestinal irritation, there are things you can do to make yourself feel better and to manage this side effect of radiation therapy.

## **What Are The Symptoms (Signs) of Intestinal Irritation?**

Intestinal irritation may cause you to have nausea (feeling queasy or sick to your stomach) with vomiting (throwing up), cramps, and diarrhea (loose and runny bowel movements). If you have any of these signs during or after your radiation treatment, please call your doctor or nurse case manager.



## **Are There Things That Can Help Make My Intestinal Irritation Better?**

Yes. These symptoms or intestinal irritation usually get better with medications, changes in diet, and rest. Your doctor may give you medications called antidiarrheals to help stop your diarrhea. You may also be given medications to help stop any pain you may have in your belly. Speak with your doctor if you have nausea (feeling queasy or sick to your stomach) with vomiting (throwing up), cramps, and diarrhea (loose and runny bowel movements).



## **What Can I Do To Make My Intestinal Irritation Better?**

The best thing you can do to help make your intestinal irritation better is to change what you eat. When you have intestinal irritation your body cannot make enough enzymes (a substance made by your body to help it break down food). By changing what you eat, you can choose foods that will be easier for your body to digest (break down). This will lower the number of symptoms you have in your belly.

**Are There Foods That I Should Not Eat?**

Yes. One of the enzymes your body makes that is most affected by the radiation is lactose. Lactose helps your body digest (breakdown) milk and things made from milk such as cheese, ice cream, puddings, custards, and flan. Try not to drink milk or eat things made with milk.

If you are unsure if some foods have milk, make a list of those foods and then check the label to see if it lists “milk”, “milk solids”, or “whey”. You may also want to check with your Nurse Case Manager about these foods.

**Think of the foods and liquids that you eat or drink that might have milk in them?**

**List them here.**

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Other foods you should stay away from when you have intestinal irritation are:

- High-fiber foods, such as whole grain products (cereals, breads) and foods containing bran (bran muffins). These foods tend to increase the digestion process and can make diarrhea worse.
- Nuts, seeds like sunflower seeds, and coconut
- Fresh and dried fruit (like raisins) and some juices like prune juice
- Popcorn, potato chips, and pretzels.
- Sweets, fried and fatty foods (like fried fish, fried chicken, French fries, ice cream, or high fat milk products), and acidic foods (like tomatoes and citrus fruits).
- Vegetables that are hard to digest, such as broccoli, cabbage, cauliflower, and corn.
- Raw vegetables.
- Spicy foods such as chilies or foods made with chilies or hot sauce.
- Food and drinks that have caffeine like, chocolate, coffee, tea, and sodas.

Can you think of some other foods that you eat that are fried, greasy, or fatty?

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Remember, not drinking milk or eating these foods can help you feel better. You will be able to have them again after your radiation treatment is finished and your symptoms get better.

## **Are There Foods That Are Good For Me To Eat?**

There are a lot of foods that are good for you to eat when you have intestinal irritation. You should:

- Eat fish, chicken, turkey, lean beef or pork that has been broiled or roasted and not fried.
- Eat bananas, applesauce, peeled apples, boiled white rice, tapioca, and cream of rice cereal.
- Eat white bread and toast
- Eat macaroni and noodles
- Eat baked, boiled, or mashed potatoes
- Eat cooked vegetables that are mild like green beans, carrots, squash, or spinach.
- Eat eggs
- Eat creamy peanut butter
- Eat buttermilk, yogurt, and mild processed cheese.
- Drink beverages and eat foods that are "clear," such as apple juice and ginger ale, soup broth, popsicles, and Jell-O®. These are usually gentler on your stomach and easier to digest.

## **Are There Other Things I Can Do To Help Myself?**

Yes, there are many things you can do besides changing what you eat. You can:

- Eat foods at room temperature. Food has less smell if it is served at room temperature.
- If smells bother you, try turning on a kitchen fan, covering foods when cooking, and cooking outdoors in good weather.
- Try adding nutmeg (no more than a  $\frac{1}{4}$  teaspoon) to food like applesauce. Nutmeg can help slow down your intestines. This will help with the diarrhea (loose or runny bowel movements) that you may be having.
- It is helpful to drink a lot of liquids everyday. Drink at least eight 8-ounce glasses of water a day. It is important to put back the fluids you lose. If you drink soda, it is best to open it and let it sit until the carbonation (the bubbles in your drink) is gone.
- Plan your meals. This will help you change the way that you eat.
- Make sure you get plenty of rest.

## **When Should I Change How I Eat?**

It is best if you change how you eat the day that you start radiation therapy. But, you can change how you eat anytime you start having trouble with intestinal irritation.



## **Should I Plan My Meals?**

Yes. Anytime you change how you eat, it can be helpful to you to plan out your meals and snacks. You can also use this plan to help make your shopping list.

Use the sample menu on the next page to help plan your meals. Write down what you will have for breakfast, morning snack, lunch, afternoon snack, supper, and evening snack. Choose foods from the list of things that are good for you to eat. Stay away from foods on the not good to eat list. If you have trouble or are not sure about some foods you should eat or stay away from, ask your Nurse Case Manager. By changing how you eat, you can manage your intestinal irritation.

## Weekly Meal Planner

	Sunday	Monday	Tuesday	Thursday	Friday	Saturday	<b>Foods to eat</b>
<b>Breakfast</b>							Broiled or roasted fish, chicken, turkey, lean beef or pork, bananas, applesauce, peeled apples, apple and grape juice, white bread and toast, macaroni and noodles baked, boiled, or mashed potatoes, cooked vegetables that are mild like green beans, carrots, squash, or spinach, eggs, creamy peanut butter, yogurt, buttermilk.
<b>Morning Snack</b>							
<b>Lunch</b>							
<b>Afternoon Snack</b>							<b>Foods to stay away from</b>
<b>Dinner</b>							Whole bran bread and cereals Nuts, fried foods, fresh and dried fruit (like raisins), prune juice, raw vegetables, rich sweets, strong spices and herbs, Chocolate, coffee, tea, and caffeine
<b>Evening Snack</b>							
<b>Grocery List</b>							



## **What Have I Learned By Reading This?**

In this booklet, you learned about:

- Radiation enteritis or intestinal irritation
- Why you may get intestinal irritation
- What things you can do to take care of yourself when you have intestinal irritation

If you have any questions, please talk to your doctor or nurse case manager. It is important that you understand the side effects or unwanted changes in your body that may happen during and after your treatment. This knowledge will help you take better care of yourself and feel more in control so that you can get the most from your treatment.

## Key Words

**antidiarrheal** (an – tie – dye – a – real) – medication that helps stop diarrhea.

**carbonation** – the bubbles that are found in a soft drink.

**diarrhea** (dye – a - re – a) – loose and runny bowel movements.

**digest** – to break down.

**enzyme** (n - zhyme) - a substance made by your body to help it break down food.

**Intestinal irritation** – when the cells that cover the inside of your intestines are irritated from radiation therapy treatment.

**nausea** - feeling queasy or sick to your stomach.

**radiation enteritis** (N –terr – EYE – tis) – is an irritation of the cells that cover the inside of your intestines.

**symptom** – sign.

**vomiting** – to throw up.