What Causes Cancer-related Fatigue?

The causes of cancer-related fatigue are not fully understood. It may be the cancer and/or the cancer treatment.

- Cancer and cancer treatment can change normal protein and hormone levels that are linked to inflammatory processes which can cause or worsen fatigue.

- Treatments kill normal cells and cancer cells, which leads to a build-up of cell waste. The body uses extra energy to clean up and repair damaged tissue.

- Cancer can also cause fatigue indirectly by forming toxic substances in the body that change the way normal cells work.

Problems that often occur along with cancer, like low levels of certain blood cells, sleep problems, stress, pain, eating too little, lack of exercise, and other factors are also thought to be linked to cancer-related fatigue. Fatigue is often caused by more than one thing.

It’s important for you to tell someone on your cancer care team about fatigue and any other unpleasant side effects you’re having. This way they can monitor and treat them, both during cancer treatment and afterward when fatigue can linger.

Checking for other medical problems is a key part of treating fatigue. Sometimes medical causes can be found and treated. If no treatable medical cause is found, there are practical ways to manage and minimize cancer-related fatigue, including good sleep habits, approved physical activities, and smart use of your time and energy. Some of the more common causes of cancer-related fatigue are:

**Anemia**

Cancer itself can cause fatigue by spreading to the bone marrow and causing anemia (a low red blood cell count). Red blood cells carry oxygen to fuel all the cells in the body. Too few red blood cells mean not enough energy to meet the body’s needs. Chemo and radiation can also affect the bone marrow and blood cells counts.

Your red blood cell count will be measured with a blood test called a CBC. (CBC stands for complete blood count.) Doctors often define anemia as a blood hemoglobin (HGB)
level of less than 12 g/dL (grams per deciliter). But many people do not feel much
different until the hemoglobin level falls below 11 g/dL.

**Symptoms of anemia** get worse as the hemoglobin level gets lower, and can include:

- Fast heart beat
- Shortness of breath
- Trouble breathing with activity (such as when walking or climbing stairs)
- Dizziness
- Pale skin, mouth, or nail beds
- Fatigue

There are many different causes of anemia. Your cancer care team will try to find out
what’s causing yours, so they can treat it and help you feel better.

For more on this, please see *Anemia in People With Cancer*.

**Pain**

Cancer pain can make you less active, make you not want to eat, cause sleep problems,
and cause depression – all of which can lead to fatigue. Cancer pain should not be
accepted as part of cancer treatment. Something can always be done to make pain better.
Talk to your doctor or nurse to get more information about treating cancer pain. You can
also learn more by calling us (1-800-227-2345) or visiting www.cancer.org.

**Emotional distress**

People with cancer go through a lot of unpleasant emotions. There are many different
feelings, from anger to depression. These uncomfortable feelings are often called distress.
Distress can include a feeling of sadness about the loss of good health or fear of what will
happen in the future. It’s normal to have these feelings. But sometimes the distress
becomes so great that it causes physical problems like fatigue. Depression and anxiety are
common types of distress that can cause or worsen fatigue. Your cancer care team can
help you deal with the emotional, as well as the physical issues that come with cancer.
Talk to them to get the help you need.

**Sleep problems**

If you wake up often during the night, have trouble falling asleep, or wake up early in the
morning and can’t go back to sleep, you’re probably not getting the rest you need. These
sleep changes can lead to fatigue. Tell your doctor or nurse about your sleep problems.
They will try to find out why you’re having trouble sleeping so they can help plan the
best treatment for this problem.
Medicines

Many medicines can cause fatigue and problems with thinking. This includes certain over-the-counter drugs and possibly herbs and other supplements, as well as prescription medicines. The drugs most likely to cause fatigue are

- Pain medicines
- Sleep medicines
- Anti-depressants
- Anti-nausea medicines
- Anti-seizure medicines
- Certain antihistamines
- Certain heart medicines

Some of these drugs can also make you feel sleepy. The degree of sleepiness varies from person to person. Taking many drugs that have a lot of side effects can make fatigue worse, too. It’s important to tell your team about all vitamins, herbs, supplements, and medicines you take. Don’t forget to tell them about the non-prescription drugs and those you use every now and then as needed.

Keeping a journal of everything you take, along with the doses, times, and when you have symptoms, might help you figure out which ones may be part of your fatigue.

Other medical problems

Many people have other medical problems or illnesses that aren’t related to cancer but may add to fatigue. These illnesses should be identified and treated. Examples of other medical problems that could be part of fatigue are:

- Problems with other organs, such as the heart, lungs, liver, kidneys, or brain
- Nervous system problems
- Digestive system problems
- Infections, such as pneumonia, urinary tract infections, or viral illnesses
- Dehydration
- Low adrenal gland function (rare, but can cause low blood pressure, fainting, and dehydration)
- Low sex hormones (such as estrogen in women or testosterone in men)
- Low thyroid function
If needed, your doctor can test you to find out if any of these are making your fatigue worse. For example, low thyroid gland function is fairly common in people in the United States. It can often be detected by a simple blood test and is easy to treat. Your doctor may be able to find and treat problems such as these to help with your fatigue.

**Poor nutrition**

The body needs protein, carbohydrates, fats, vitamins, minerals, and water to do its work. Changes in nutrition can affect fatigue. These changes include how well the body can process nutrients and the need for more energy than usual. It can also have to do with poor intake of food, fluids, and certain minerals. The changes can be caused by:

- Changes in metabolism (the body’s ability to break down and use food)
- The increased energy needed to repair damaged cells
- Uncontrolled tumor growth competing for nutrients (the cancer takes energy, protein, vitamins, and the like, for its own growth)
- Poor appetite (you don’t feel like eating)
- Nausea and vomiting
- Diarrhea

You may have blood tests to measure important minerals your body needs, like sodium, potassium, calcium, and magnesium. You can ask to see a registered dietitian who can help you learn how to best meet your nutrition needs during this time.

You can find a lot more information on this in *Nutrition for the Person With Cancer During Treatment: A Guide for Patients and Families*.

**Lack of exercise**

Cancer treatment along with less physical activity can make you less able to do the things you used to do. You might find that it takes much more effort and more energy to do the things you need to do. But doing less can make fatigue worse.

Though it may seem strange, physical activity can help decrease fatigue and help build up your stamina to do more of your usual activities. Resting, on the other hand, can make fatigue worse in the long run.

Talk to your cancer care team before you start any exercise program. A careful work-up by a physical therapist can help you plan the right physical activities for you.
Alcohol or other non-prescribed drugs

Alcohol and other “recreational” drugs might make you feel better for a short time, but in the long run make you feel more tired and disrupt your sleep. They can also interact with the cancer drugs you are taking, and may cause their own medical problems.

If you think drinking or other drugs might be a problem for you, talk honestly with your doctor about how much and how often you drink or use drugs. Keep in mind, too, that alcohol is a carcinogen (cancer-causing agent), which many people with cancer prefer to completely avoid.

Questions to ask your doctor about fatigue

Here are some questions about fatigue and your cancer treatment that you might want to ask:

• Will my cancer treatment cause fatigue?
• Is my fatigue caused by some other problem? How can we find out?
• How bad is the fatigue likely to get?
• What can be done to control my fatigue or make it better?
• If my fatigue gets bad, how will you treat it?
• What can be done if the fatigue doesn’t get better with treatment?
• What are the likely side effects of the treatments for fatigue?
• Are there other health care professionals who can help manage my fatigue?

Talking with your doctor about cancer-related fatigue is the first step in trying to find out its cause. But even when the doctor knows the cause, there’s often no “quick fix.” Still, there are things you and your doctor can do that might make fatigue better.

References

