How to Take Acetylcysteine (Mucomyst®) Before Receiving Iodine Contrast Dye

This information explains how to take acetylcysteine (Mucomyst®) to protect your kidneys before your computed tomography (CT) scan.

You will get contrast dye during your CT scan. Contrast makes the pictures taken during your CT scan more clear. If your kidneys don’t work as well as they should, which is known as renal insufficiency, your body may not be able to get rid of the contrast dye. This could make your kidney function worse.

Acetylcysteine (Mucomyst) is a medication you can take before your CT scan that may protect your kidneys from harm caused by contrast dye.

You will take 4 doses of acetylcysteine, starting the day before your CT scan. The schedule for taking acetylcysteine is located in the “When to Take Acetylcysteine” section at the end of this resource.

How to Take Acetylcysteine

Follow the directions below. If you have any questions about how to take acetylcysteine, call the doctor who prescribed it for you.

Gather your supplies

You will need:

- 1 vial of acetylcysteine (either 100mg/mL or 200 mg/mL)
- 1 pediatric oral syringe
- 1 (30 mL) medication cup
- 1 cup of your choice
• 4 to 6 ounces of any drink of your choice

Check which solution you have

Acetylcysteine comes in a 100 mg/mL solution and a 200 mg/mL solution. If you’re not sure which one you have, ask your pharmacist, nurse, or doctor.

You will take 4 doses of acetylcysteine and each dose will be 1200 mg.

• If you have a 100 mg/mL solution, you will take 12 mL for each dose.
• If you have a 200 mg/mL solution, you will take 6 mL for each dose.

Instructions for taking acetylcysteine

1. Open 1 vial of acetylcysteine.
2. Pour it into a 30 mL medication cup.
3. Insert the oral syringe into the medication cup and pull the plunger to draw up the acetylcysteine into the syringe.
4. Push the plunger down over the second cup to pour out the acetylcysteine from the syringe.
5. In the second cup, mix the acetylcysteine with 4 to 6 ounces of any drink of your choice.
6. Drink all of it.
7. Refill the cup with any drink of your choice.
8. Drink all of it.
9. Throw out the rest of the acetylcysteine left in the medication cup.

Repeat these steps each time you take a dose of acetylcysteine.
When to Take Acetylcysteine

The day before your CT scan:

- At 8:00 AM, take the first dose of acetylcysteine.
- At 8:00 PM, take the second dose of acetylcysteine.

The day of your CT scan:

- At 8:00 AM, take the third dose of acetylcysteine.
  - If your CT scan is at 8:00 AM, take the third dose at 6:00 AM.
  - If your CT scan is before 8:00 AM, take the third dose when you wake up on the morning of your scan.
- At 8:00 PM, take the fourth dose of acetylcysteine.

If you have any questions, contact a member of your healthcare team directly. If you're a patient at MSK and you need to reach a provider after 5:00 PM, during the weekend, or on a holiday, call 212-639-2000.

For more resources, visit www.mskcc.org/pe to search our virtual library.