What is an intravenous (IV) magnesium loading test?
An IV magnesium loading test is used to find out if your body has enough magnesium. Magnesium is a mineral used in more than 300 processes in the body. It is very important in energy metabolism.

Why do I need an IV magnesium loading test?
If you do not have enough magnesium, you may have symptoms such as:

- body pain and/or muscle spasms
- fatigue (tiredness)
- not sleeping well or not feeling rested after sleeping
- gastrointestinal symptoms
- migraines and headaches

How is an IV magnesium loading test done?
- This test is done by giving magnesium through an intravenous (IV) needle inserted in your arm. The test will take about 2 to 3 hours.
- You will need to collect two 24-hour urine samples: one before the IV is given and one after.

ICCS staff will compare the amount of magnesium in each urine sample. This will tell us if your body has enough magnesium. **It is important that you follow all of the instructions to collect your urine. If you don’t follow the instructions, the results may not be correct.**

What will happen after the test?
If the IV magnesium loading test shows that you do not have enough magnesium, there are several treatment options. These include:

- Taking oral (by mouth) magnesium supplements regularly and eating foods high in magnesium.
- Getting IV magnesium infusions for 4 to 6 more weeks. If you do not live near the ICCS, we may be able to arrange for IV magnesium infusions in your community.

Based on your results, you and your health care provider may decide to take no further action at this time.

When you come to the ICCS for your appointment, please remember:

- Do not bring any food. You may bring a drink in a covered container.
- Follow the steps to be scent-free for your appointment.
- There is a family room where family members can wait during your test. Family members will not be able to sit in the room with you while you are having the test.
- Bring both urine collection bottles to your IV magnesium loading test appointment.
A nurse will call you 1 to 2 weeks before your appointment to go over the instructions for the test and answer any questions you have. If you have any questions after this phone call, call the ICCS nursing staff at 902-860-2032. We are happy to answer your questions at any time!

24-hour urine collection instructions:
For 3 days before your appointment, stop taking all:
› oral magnesium supplements
› oral calcium supplements
› multivitamins that have magnesium and/or calcium
› Epsom salt baths

Take your requisition to your local laboratory (find locations at www.nshealth.ca/specimentesting)
• Ask for two 24-hour urine collection bottles.
• Do not follow any instructions given by the lab because our instructions are specific for this kind of test.
• Keep all collected urine cool, but **do not keep it in the fridge**. Put it in a cool place away from any heat or sunlight.
• If it is easier, you can urinate in another container and then put the urine in the collection bottle. The urine does not have to be kept sterile (free of bacteria).

**Remember to bring both urine collection bottles to your test appointment at ICCS:**
• Bottle #1 will have your last 24 hours of urine and bottle #2 will be empty.

**How to collect urine:**
Collection times will be reviewed with you during your phone call with the nurse (to fill in the table below):

<table>
<thead>
<tr>
<th>Collection bottle #1 (24 hours before your test appointment)</th>
<th>Start time:</th>
<th>End time:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(day before test)</td>
<td>(day of test)</td>
</tr>
</tbody>
</table>

Use the washroom as usual to empty your bladder. **Do not collect this urine.** This is your start time. Collect ALL of your urine in the bottle that day and night.

When you arrive for your appointment at ICCS, collect your last urine sample in collection bottle #1.

<table>
<thead>
<tr>
<th>Collection bottle #2 (when your test starts)</th>
<th>Start time:</th>
<th>End time:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(day of test)</td>
<td>(day after test)</td>
</tr>
</tbody>
</table>

After the IV is started, start collecting all of your urine in collection bottle #2.

Collect your last urine sample in collection bottle #2. Take both urine collection bottles and your requisition to your local lab.

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The information in this pamphlet is to be updated every 3 years or as needed.