



Medium Cut-Off Dialyzers and Expanded Hemodialysis:

WHAT YOU NEED TO KNOW



What is a Dialyzer?

- A **dialyzer** is your “artificial kidney.” It is a plastic tube with a filter that cleans your blood during **hemodialysis**.
- The filter removes waste and extra fluid before putting the clean blood back into your body.



Figure 1: The medium cut-off dialyzer targets a wider range of waste products (middle molecules) compared to standard dialyzers.



What is Expanded Hemodialysis (HD)?

- Expanded HD uses a newer type of dialyzer to clean your blood. It is called a medium cut-off dialyzer.
- The filter in this dialyzer removes a wider range of waste products called **middle molecules**. When these molecules build up in your body, they can make you feel sick.
- By removing more waste products, expanded HD may help you feel better during and after your treatment.
- Expanded HD uses the same dialysis machines already in your center. The staff do not need to do anything extra to use this dialyzer for your treatment.

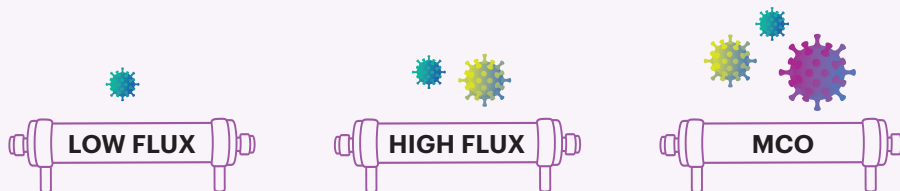


Understanding Your Dialyzer Options

Different dialyzers have filters with different sized “holes” to let waste out.

- **High-Flux Dialyzer:** This is the most common dialyzer. It has holes big enough to remove basic waste but can leave behind larger middle molecules.
- **Medium Cut-Off Dialyzer:** This dialyzer has bigger holes that let larger middle molecules leave the blood while holding back the healthy proteins your body needs. There are people who say they have less itching, better sleep, and more energy with this dialyzer.
- **Low-Flux Dialyzer:** This is an older type of dialyzer that is not used very often because it removes the least amount of waste.

Figure 1: The medium cut-off dialyzer targets a wider range of waste products (middle molecules) compared to standard dialyzers.



Symptoms That May Improve with Expanded HD

If you have any of these **uremic symptoms**, ask your team if expanded HD could help:

- Feeling very tired (fatigue)
- Itching
- Muscle cramps
- Nausea or loss of appetite
- Restless legs
- Bone pain
- Shortness of breath



Questions to Ask Your Dialysis Team

What type of dialyzer am I using now?

How do we decide which dialyzer is best for me?

Glossary

Hemodialysis: A life-saving treatment that cleans your blood when your kidneys can no longer do it.

Dialyzer: A plastic tube with a filter that removes waste and fluid.

Middle Molecules: Large waste products that build up in the body and cause symptoms like itching and fatigue.

Uremic Symptoms: Feeling sick (nausea, itching, or tiredness) because waste is building up in your blood.



Learn more

For more information, contact the National Kidney Foundation

Toll-free help line: **855.NKF.CARES** or email: **nkfcares@kidney.org**



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