

Salt and Thirst

There is a direct connection between the amount of salt you eat and your level of thirst. Before beginning dialysis, do you remember eating something very salty only to find that your shoes or rings were tight the next morning? This is because of the connection between salt and water in your body.

Salt is an electrolyte (ee-leck-tro-light) (for more information on electrolytes, please see the “Know Your Numbers brochure”). Electrolytes help with many of your body’s functions. They must remain in a narrow margin for your body to work as it should. When you eat something that has a lot of salt (also called sodium) in it, your body will conserve water in an attempt to bring the level of salt in your blood stream within this margin. As a result, you may notice some swelling.

The increase in salt in your blood also causes you to want to drink more fluid. This is your body’s natural way of attempting to dilute the amount of salt in your blood. When kidneys work, the extra salt and water is removed through your urine. However, when kidneys do not work or work well, the

additional salt and fluid remain in your bloodstream.

If you are having difficulty with your fluid gains, ask your dialysis staff to look at your sodium setting on the machine. Also ask the dietitian for tips on reducing the amount of sodium in your diet.



Heartland Kidney Network

7306 NW Tiffany Springs Pkwy
Suite 230
Kansas City, MO 64153

Phone: (800) 444-9965
Main Fax: (816) 880-9088
Data Fax: (816) 880-1775

Web: heartlandkidney.org
Email: net12@nw12.esrd.net

Patient
Information
Series

FLUID CONTROL



Promoting and facilitating high quality care standards for dialysis and kidney transplant patients in Iowa, Kansas, Missouri and Nebraska.

PATIENT EDUCATION SERIES

Background & Purpose

The amount of fluid you eat and drink has an impact on your dialysis treatment, blood pressure, your heart, weight gain, and swelling. In addition, the amount of salt you eat, and, in diabetic patients sugar also influences your thirst. This can cause you to drink more and have higher weight gains than your dialysis team has encouraged.

This brochure discusses the effects of fluid on your treatment, blood pressure, your heart, as well as salt intake in relation to thirst. We encourage you to speak with your dialysis staff and physician as well.

INSIDE!

- ★ Impact on the Dialysis Treatment
- ★ Blood Pressure & Heart
- ★ Salt & Sugar: Thirst Drivers

THE MANY IMPACTS OF FLUIDS

Fluids are not just the liquids you drink, but also the water absorbed by cooking rice or pasta and the water content of vegetables or fruit. Your doctor may have prescribed a “fluid restriction” for you based on your specific needs. While some people starting dialysis may still urinate, this will decrease over time. This decrease may change the “fluid restriction” ordered by your doctor.

Fluid and the Dialysis Treatment

In addition to removing wastes from your blood, the dialysis treatment removes fluid. The amount of fluid that can be safely removed during a treatment is different for every person. The dialysis staff subtract your **dry weight** (see brochure on dry weight for more details) from your current weight. This step determines your goal for fluid removal during treatment. Some units also add the amount of saline needed to rinse your blood back at the end of treatment and any fluids you drink while you are on treatment to your goal.

The important thing to remember is the higher the goal for removing fluid, the more difficult it is to get all the fluid off during that treatment - especially if you are a small person. Why? Because usually the higher the **percent** of fluid to remove compared to your total body weight, the more difficult it is to remove.

Fluid and Your Blood Pressure

The amount of fluid circulating in your blood stream, directly impacts your blood pressure. More fluid in your blood stream means higher blood pressure. For example, imagine hooking up your garden hose to a faucet. The hose can handle the amount of water coming out of the faucet without any real difficulties. Now imagine attaching the same hose to a fire hydrant. The fire hydrant has more fluid and will exert more force on the hose. Because the water goes through the hose and the hose can only expand a little, the pressures will be different, and in the case of the fire hydrant, higher.

Another event that happens to some people on dialysis is a hardening or narrowing of blood vessels. Imagine hooking up a 1/2” hose to your faucet versus a 3/4” hose. The 1/2” hose has a smaller diameter and when compared to the larger hose, will also have a higher pressure.

As dialysis cannot bring your blood pressure to normal levels at all times, your doctor may have prescribed **anti-hypertensives** (blood pressure pills) to help bring your blood pressure down.

Fluid and Your Heart

You may have heard the staff encourage you to limit or watch the amount of fluids

you drink. Occasionally, staff may even share their concern that you are drinking too much fluid, or putting on too much weight between your treatments. What may not always be shared is the reason why too much fluid is harmful to your heart in the long run. Consider this:

Fill a balloon at your kitchen sink as full as it can possibly be. Dump out the water and repeat this process about 80 times a minute for 10 minutes. Lay your balloon on the counter and lay a new balloon next to it. The balloon you filled and dumped will be noticeably bigger because it was stretched out. Also because of the stretching, it has lost some of its elasticity.

Now imagine the balloon is your heart, more specifically the left ventricle. The left ventricle in your heart is responsible for pushing blood out to your body. Over time, it can lose its ability to push blood out to the body from high fluid gains. When this happens, it is called left ventricular hypertrophy (ven-trick-you-lur hi-per-tro-fee). The left ventricle in your heart is “stretched” or over-used because of high fluid gains and as a result, it can no longer push blood out to the body as effectively as it used to. You can limit your chances of this difficulty by carefully watching and measuring the amount of fluid you eat and drink.