

# Kidney Diet Cornerstones: Fluid

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(967 words)

## Fluid and Your Kidneys

One of the kidneys' major functions is to maintain the fluid balance in your body. When your kidneys are not working well, they are not able to remove water as effectively. If you take in more fluids than your body is able to get rid of, this can lead to a buildup of excess fluid, or "edema". Excess fluid can be dangerous, as it puts a great strain on your heart.<sup>1</sup>

For patients on dialysis, it can be challenging to know what amount of fluid is right for their individual needs. Too much or too little fluid can result in a fluid imbalance; this is not only uncomfortable, but may also put your health at risk. It is very important that you know how to recognize if you are not in a healthy balance. Your Registered Dietitian will work with you to determine your fluid needs.

### Possible Signs and Symptoms of Fluid Imbalance\*:

#### OVERHYDRATION

##### (too much fluid)

- High blood pressure
- Swelling (edema)
- Cramping
- Shortness of breath
- Sudden increase in weight
- Sudden drop in blood pressure on dialysis

#### DEHYDRATION

##### (too little fluid)

- Low blood pressure
- Dizziness
- Cramping
- Dry mouth
- Excess fluid loss (ie. vomiting, diarrhea)
- Feeling thirsty

*\*Your healthcare team monitors your fluid status on a regular basis. Knowing the signs and symptoms of having too much or too little fluid in your body enables you to work with your team and come up with a plan that keeps you as healthy as possible.*

## Fluid Balance and Types of Dialysis

Your dialysis treatment plays a significant role in how much fluid you can include in your diet. If you are on a Home Dialysis therapy such as Peritoneal Dialysis or Home Hemodialysis, you may not have the same fluid restrictions as someone who is receiving In-Centre Hemodialysis.

In **Peritoneal Dialysis**, fluid is removed daily. Patients may also continue to have urine output, which provides additional removal of water from the body.

In **Home Hemodialysis**, treatment hours can be extended or more frequent.<sup>1</sup> These therapies often allow patients more flexibility with the amount of fluid they can include each day.

**In-Centre Hemodialysis** implies that most patients receive dialysis three times a week for four hours per treatment. This means fluid builds up between treatments and as a result, patients must be careful with how much liquid they consume.<sup>1</sup>

## **How To Manage Your Fluid**

Managing your fluid can be challenging when you are on dialysis but it is possible. There are steps you can take to minimize fluid buildup and control your thirst.

### **1) Know your limit (and stay within it)**

Rule of thumb when setting daily fluid targets is to aim for four cups plus the amount equal to how much urine you are making. If you have a larger body mass, your Registered Dietitian may calculate your fluid allowance based on 5% of your weight.<sup>1</sup>

### **2) You are what you eat (and drink)**

Next to dialysis, food and fluid play the greatest role in keeping your water gains to a minimum.

#### **Sodium**

High sodium (salt) intake can make you feel thirsty and lead to increased fluid intake. Sodium also causes your body to hold on to extra water. Both can result in excess fluid buildup. Speak to your Registered Dietitian to learn how you can reduce sodium in your diet.

#### **Fluid**

Everything that is liquid at room temperature is considered a fluid and must be counted towards your daily allowance.

## Common Fluids

- Water
- Juices/Fruit Drinks
- Tea/Coffee
- Alcohol
- Ice cream/Sherbet
- Soup
- Ice
- Pop
- Milk
- Nutritional supplements
- Popsicle
- Jello

## Hidden fluid

You may also take in more fluid than you think. Hidden fluid can be found in all foods, which contain water; some have more than others. While you do not count this as part of your daily fluid allowance, you may need to limit the portion size of foods with higher water content.

### Question:

Which food has the greatest amount of hidden fluid?

- a) Green peas
- b) Celery
- c) Watermelon

**Answer:** b) Celery. It contains 95% fluid.  
Watermelon (91%) and peas (79%).

## 3) Tips for Controlling Fluid Intake

### Plan ahead

- Measure how much liquid your favourite cups hold to help plan your fluid for the day.
- Avoid drinking simply out of habit; save your fluid for when it is important to you.
- Spread your fluid throughout the day.

### Track your fluid

- Keep a daily fluid diary. Measure and mark down each time you have a fluid. Remember: small portions such as ice cubes add up quickly.

### Less is more

- Use smaller portions. Eight ½-cup servings stretches your fluid farther than four 1-cup servings.

- Freeze water or juice in ice cube trays. Frozen fluid can be more satisfying than the same portion in liquid form.

Be strategic

- Take your medication with soft foods such as applesauce. Save your fluid for liquids you enjoy.  
**Important:** Check with your healthcare team to learn which pills you can have with your meals.
- Replace liquids with frozen fruit when possible.
- Choose foods that are liquid at room temperature less often.

**Did You Know?**

For every cup of liquid you drink beyond your daily fluid target, you will see  $\frac{1}{2}$  pound of weight gain.<sup>1</sup>

#### 4) Tips for Controlling Thirst

- Limit salt, spicy food, caffeine and alcohol.
- Add lemon or mint to cold water.
- Replace water with plain or flavoured ice cubes. It lasts longer and the options are endless.
- Drink slowly and take small sips to make your fluid last longer.
- Fruit including grapes and berries taste great frozen and help relieve thirst.
- Use candy (hard or sour), gum or mints to increase saliva in your mouth. Speak to your dietitian for options that are right for you.
- Ask your pharmacist about using breath spray or strips.

#### 5) Other Strategies

**Dry mouth?** Brush your teeth and rinse out your mouth with water or non-alcoholic mouthwash.

**High blood sugars?** This could make you feel thirstier. If you have diabetes, it is important to keep your blood sugars under control.

- **Dry air in your home?** Use a humidifier to add moisture.
- **Hot summer day?** Keep cool by staying indoors when possible or by spraying cold mist on your face and body.

#### How much fluid can I have?

The amount of fluid you can include each day will be different for everyone. Your dialysis treatment, urine output and other factors such as medications, body size and physical activity will be considered.<sup>1</sup> Your Registered Dietitian will work with you to determine your fluid needs.

#### References:

1. Canadian Association of Nephrology Dietitians. Essential guide for renal dietitians; 3<sup>rd</sup> edition, 2010.
2. Canadian Nutrient File 2016. <https://food-nutrition.canada.ca/cnf-fce/index-eng.jsp>

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