



Diabetes Insipidus (DI)

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What the kidneys do

The kidneys' job is to remove extra fluids from the body. The kidneys filter fluids from your blood and then make urine. The urine then passes into your bladder and out of your body. To do the job right, the kidneys must remove the right amount of fluid from your blood — not too much or too little.

A problem called DI

If the kidneys remove too much fluid from your body, you have a problem. Your urine becomes weak, or diluted. You also have a lot more urine to pass, so you must urinate often and in large amounts. As a result, you are thirsty all the time and drink large amounts of liquids. This problem is called diabetes insipidus (in-SIP-ih-diss), or DI for short. DI is a rare disease, but dangerous. When you have DI, you could become dehydrated.

What happens with DI

To work right, your kidneys need a substance called ADH. It stands for anti-diuretic (DIE-your-et-ik) hormone. Your brain makes ADH in a gland called the hypothalamus (high-po-THALL-uh-mis). Another gland in your brain stores and releases ADH as needed. This gland is the pituitary (pih-TOO-ih-tair-ee).

When ADH is released, it tells your kidneys to return some fluid to the blood. But your kidneys may not get the message. There may be too little ADH or your kidneys may not respond to ADH. When this happens, your body does not return enough fluid to the blood. Then large amounts of fluid pass out of your body in the urine.

Some causes of DI

Sometimes DI is inherited and begins during infancy. DI may also occur when there's a tumor on the pituitary or hypothalamus. Surgery on the pituitary also can lead to DI. Any brain injury may lead to DI.

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Tracking input and output

You are at risk for getting DI, so your nurse will monitor you. Your nurse will track all the liquids you take into or pass out of your body. This is called tracking input and output, or “I and O” for short. Your nurse will enter the amounts of liquid on a chart. This chart must be kept accurate and up to date. The nurse will need your help to track your input and output.

Input includes all liquids, such as water, milk, coffee, soda, and juice. It also includes any food that would be a liquid at room temperature. Some examples are ice cream and gelatin (such as Jell-O). It is **very important** to tell your nurse when you take in any liquids.

Output is the urine you pass. Your nurse will measure all your urine and save it. Each time, your nurse also will measure how diluted the urine is. This is called its specific gravity. If this check is done at your bedside, a strip is dipped into the urine and gives a result. Urine also may be sent to the lab to be checked. Periodically, your blood may be tested to check the balance of your fluids.

How DI is treated

When DI occurs after surgery (post-op), it usually lasts about 1 to 3 weeks. Sometimes it is permanent. To treat DI, you take man-made ADH to replace the natural ADH that is missing. The name is DDAVP (desmopressin). DDAVP comes in 3 forms:

- nasal spray
- tablets
- injections

You may need to keep taking DDAVP after you go home.



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Pittsburgh, PA, USA
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SYS237820 BPI/JDS REV 05/05
Form # 7815-82190-0505

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