

## Diet tips to prevent stones

### ► Drink enough fluids each day

- Pass more than 2 litres of urine each 24 hours
- Drink at least 3 litres of fluids (more than this if you exercise heavily or are in hot weather)
- Spread your fluid intake throughout the day and night (all drinks count – water, coffee, tea, milk)
- Drink more low sugar, sugar-free beverages
- Drink beer, wine, spirits in moderation

### ► Make good choices about what you eat and drink

General guidelines from the Ministry of Health “Eating and Activity Guidelines for New Zealand Adults” will benefit most stone formers.

#### Enjoy a variety of nutritious foods every day including:

- Plenty of fruits and vegetables
- Grain foods, mostly wholegrains
- Some milk and milk products
- Some legumes, nuts, fish, eggs, poultry, red meat
- Choose and prepare foods that are low in salt with little or no added sugar

[www.health.govt.nz/publication/eating-and-activity-guidelines-new-zealand-adults](http://www.health.govt.nz/publication/eating-and-activity-guidelines-new-zealand-adults)

### ► Achieve a healthy body weight

Make good choices about what you eat and drink and be physically active to achieve and maintain a healthy body weight

### ► Referral to a dietitian may be required

Some people may require more specific nutrition care. A dietitian experienced in kidney stone management can provide targeted nutrition therapy based on your type of stone, specific needs and stone risk factors.



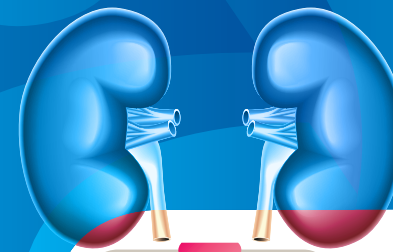
Information based on Urology Care Foundation™  
“Kidney Stones: A Patient Guide”, Developed in 2015

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# Kidney Stones

## A patient guide

Kidney stone disease is one of the oldest and most common problems of the urinary system.

People often get stones in mid-life where family and work commitments are at their highest which makes stones costly.

Kidney stones are often very painful and can keep happening in some people.

More than  
**8,000**  
New Zealanders  
will get a kidney  
stone this year

Tim has lived with stones for over 7 years. In 1995 he had his first stone surgery, shockwave lithotripsy. He also had stones removed with Ureteroscopy surgery in 2000. Stones have been a part of his life for many years.

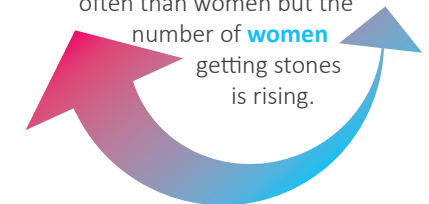
**“The pain is the worst thing”** says Tim.

Tim has had help to prevent stones forming. He is now careful about how much he drinks and what he eats. He wishes he had known years ago how important drinking fluids was in reducing the risk of stones.

**“I am much better educated today about how to prevent kidney stones”** says Tim.

**“I drink a lot of fluids and have cut down on eating some foods that form my stones.”**

**Men** get kidney stones more often than women but the number of **women** getting stones is rising.



**Changing what you eat and using medication can be good ways to stop stones forming.**



## Get the facts

**What are kidney stones?**

Urine contains many dissolved minerals and salts.

When you have high levels of these you can form stones.

**What are the symptoms?**

Stones in the kidney often do not cause any symptoms. When a stone leaves the kidney it travels to the bladder through the ureter. This may cause severe pain, frequent urination, blood in urine and sometimes nausea and vomiting.

**What causes kidney stones?**

Major risk factors are low urine volume and mineral imbalances. What you eat and drink can affect your chances of forming a new stone.

**What are stones made of?**

There are many different types. Calcium oxalate are the most common followed by uric acid and less commonly struvite and cystine stones.

## Get diagnosed

"Silent" kidney stones, those that cause no symptoms, are often found when an X-ray is taken in a health examination.

Others have stones diagnosed when sudden pain occurs while a stone is passing and medical attention is needed.

Tests like a CT scan or an Ultrasound may diagnose a stone.



## Get treated

**Wait for a stone to pass itself:**

Waiting for 4- 6 weeks for the stone to pass is safe if the pain is bearable.

**Medication:**

Certain medications have been shown to improve the chance a stone will pass.

**Surgery:**

Surgery may be needed to remove a stone from the ureter or kidney.

**Surgeries include:**

- Shock wave lithotripsy (SWL)
- Ureteroscopy (URS)
- Percutaneous nephrolithotomy (PCNL)
- Your Urologist will discuss this with you.

**Drinking enough fluid each day helps to prevent kidney stones**

## Prevention

**What will I need to do to find out why I develop stones?****Stone analysis:**

Save any stone you pass so it can be tested to find out what type you have.

**Imaging:**

X-rays can be done to see where your stones are in your urinary tract.

**Blood and urine tests:**

Blood tests can help find out if a medical problem is causing your stone.

If you are at high risk of getting stones in the future 24 hour urine tests will be requested to check for stone forming substances in your urine.

**Advice on fluid and diet:**

You **may** need to change your diet to help prevent stones forming. There is no "one size fits all" diet for preventing stones, everyone is different. Drinking enough water and making good choices about what you eat and drink is helpful in preventing stones.