# MMC FACT SHEET 905 LOW OXALATE DIET

(prevention of kidney stones)

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Kidney stones are a common disorder of the urinary tract. They are pieces of stone-like material that form on the walls of the kidney. They are caused by a buildup of minerals in urine. Most stones are so small that they pass through the urinary system without pain. However, a large enough stone can cause extreme pain or urinary blockage. This is very painful, and requires treatment or surgery.

Thousands of New Zealanders get kidney stones every year. Sufferers are mostly men, and usually between the ages of 20 and 40. A family history of kidney stones makes their occurrence more likely.

Some kidney stones are made from a build-up of calcium oxalate (pronounced OX-uh-layt). For these people cutting back on high-oxalate foods and salt may help prevent kidney stones. Oxalate is found in many foods. A low oxalate diet means limiting your oxalate to 40 to 50 mg day. The following charts identify foods to avoid, because they are high in oxalate, and foods to eat more freely because they are low in oxalate. This may help prevent kidney stones. Extra vitamin C may be turned into oxalate in the body; avoid high doses of vitamin C supplements (more than 2,000 mg of vitamin C per day).

Be sure to drink plenty of fluids. People likely to get kidney stones should drink 8 to 13 cups of fluid each day. In the following charts, food and drink serving sizes are 100 grams, unless otherwise noted.

#### **AVOID THESE HIGH-OXALATE FOODS AND DRINKS**

High-oxalate foods have more than 10 mg of oxalate per serving.

| DRINKS                       | STARCH                    | VEGETABLES                |
|------------------------------|---------------------------|---------------------------|
| black tea                    | bran cereal               | baked beans               |
| instant coffee               | high fibre cereal         | green beans               |
| chocolate milk Milo/Ovaltine | crispbread (rye or wheat) | kidney beans              |
| soy drinks                   | buckwheat                 | dried beans               |
| juice made from high oxalate | fruit cake                | beetroot                  |
| fruits (see below)           | pretzels                  | capsicum                  |
| mants (See Below)            | taro                      | carrots                   |
|                              | wheat bran                | celery                    |
|                              | wheat germ                | courgette/zucchini        |
| DAIRY                        | wholemeal bread wholemeal | eggplant                  |
|                              | flour                     | kumara                    |
| Chocolate milk               |                           | mesculun greens           |
| soy milk                     |                           | leeks                     |
| soy cheese                   |                           | olives                    |
| soy yoghurt                  |                           | parsley                   |
| , , 3                        |                           | potatoes and fries        |
|                              |                           | squash                    |
| MEAT                         | FDUIT                     | CONDINENTS                |
| MEAT                         | FRUIT                     | CONDIMENTS                |
| None                         | blackberries              | black pepper (more than 1 |
|                              | blueberries               | teasp)                    |
|                              | citrus peel               | marmalade                 |
|                              | currants                  | soy sauce                 |
|                              | figs                      |                           |
| FATS, NUTS, SEEDS            | gooseberries              | MISCELLANEOUS             |
|                              | grapes                    |                           |
| nuts                         | raspberries               | chocolate                 |
| peanut butter                | rhubarb                   | parsley                   |
| Nutella                      | tamarillo                 |                           |
| sesame seeds                 | tinned fruit salad        |                           |
| tahini                       |                           |                           |
| soy nuts                     |                           |                           |

## **LIMIT THESE MODERATE -OXALATE FOODS AND DRINKS**

You should have no more than two or three servings of these foods per day. Moderate-oxalate foods have 2 to 10 mg of oxalate per serving.

| DRINKS                    | STARCH             | VEGETABLES       |
|---------------------------|--------------------|------------------|
| draft beer                | bagels             | artichoke        |
| carrot juice              | brown rice         | asparagus        |
| brewed coffee             | cornmeal           | broccoli         |
| cranberry juice           | cornflour          | brussels sprouts |
| grape juice               | oatmeal            | tinned carrots   |
| Guinness beer             | ravioli            | cron             |
| mate tea                  | spaghetti in sauce | lettuce          |
| orange juice              | sponge cake        | lima beans       |
| tomato juice              | poptarts           | mustard greens   |
| rosehip tea               | tortillas          | onions           |
| Twinings blackcurrant tea | white bread        | tinned peas      |
|                           |                    | tomato           |
|                           | MEAT               | tomato soup      |
| DAIRY                     |                    | turnips          |
|                           | liver              | vegetable soup   |
| yoghurt                   | sardines           | watercress       |
| MEAT                      | FRUIT              | MISCELLANEOUS    |
| None                      | apples             | ginger           |
|                           | apple sauce        | malt             |
|                           | apricots           | potato chips     |
|                           | coconut            | strawberry jam   |
|                           | cranberries        | thyme            |
|                           | mandarins          | ·                |
|                           | oranges            |                  |
| FATS, NUTS, SEEDS         | fresh peaches      |                  |
|                           | plums              |                  |
| flaxseed                  | prunes             |                  |
| sunflower seeds           | strawberries       |                  |
|                           |                    |                  |



# Page Three is your LOW OXALATE DIET

# Enjoy these low-oxalate foods and drinks

Eat as much of the low-oxalate foods as you like. Low-oxalate foods have less than 2 mg of oxalate per serving.

#### **LOW OXALATE DIET**

#### RINKS

apple cider apple juice apricot nectar bottled beer buttermilk cherry juice cola grapefruit juice green tea herbal teas - see below lemonade lemon juice lime juice milk oolong tea pineapple juice wine

# HERBAL TEAS most kinds!! eg Peppermint

Wild Forrest
Blackberry
Mandarin
Orange Spice
Cinnamon
Apple Spice
Cranberry Apple
Red Raspberry
Lemon
Orange and Spice
Mint Medley
Sweet Dreams
Gentle Orange

# DAIRY

Lemon Soothe

Chamomile Flowers

cheese buttermilk milk

#### **FRUIT**

avocado
banana
cherries
grapefruit
grapes (green and red)
kumquat
lychee
mangoes
melons
nectarines
papaya
passion fruit
canned p eaches canned pears
plums (green and yellow)
raisins(1/4 cup)

### **MEAT**

bacon
beef
corned beef
fish (not sardines)
ham
lamb
lean meats
pork
poultry
shellfish

## FATS, NUTS, SEEDS

butter margarine mayonnaise salad dressing vegetable oil

# **STARCHES**

barley
cereals (corn or rice)
chicken noodle soup
egg noodles
English muffin
whole wheat crackers
macaroni
pasta (plain)
white rice
wild rice

#### VEGETABLES

cabbage
cauliflower
chives
cucumber
endive
kohlrabi
mushrooms
peas
radishes
water chestnut

## **CONDIMENTS**

basil cinnamon corn syrup Dijon mustard dill honev imitation vanilla extract jelly made from low oxalate fruits ketchup (1 Tbsp) maple syrup nutmeg oregano peppermint sage sugar vinegar white pepper

## **MISCELLANEOUS**

gelatine (unflavoured)
boiled sweets
jelly
lemon balm
lemon juice
lime juice

Adapted from a diet published by University of Pittsburgh
Medical Center