

# Nutrition Tips

for those with Diabetes  
and Chronic Kidney Disease

This pamphlet is intended  
for people diagnosed  
with early stage chronic  
kidney disease.



Saskatchewan  
Ministry of  
Health

# Living Well With Diabetes

- ✓ Eat in a healthy way; follow Canada's Food Guide
- ✓ Strive for daily physical activity
- ✓ Maintain a healthy weight
- ✓ Keep your blood sugar levels in your target range
- ✓ Have your blood pressure checked every 3-6 months
- ✓ Keep your cholesterol and other blood fats in target range
- ✓ Take your medications as directed
- ✓ Don't smoke or chew tobacco
- ✓ Seek help if you feel anxious, depressed or stressed

Discuss with your health professional what you can do to stay healthy.

## KNOW YOUR ABCs of diabetes care

**A** = A1C (measure of blood sugar levels over previous 2-3 months)

Target 7% or lower

**B** = Blood Pressure Target 130/80 mm/Hg or lower

**C** = Cholesterol LDL: 2 mmol/L or lower

Total cholesterol to HDL ratio: 4 or lower



# What Do Your Kidneys Do?

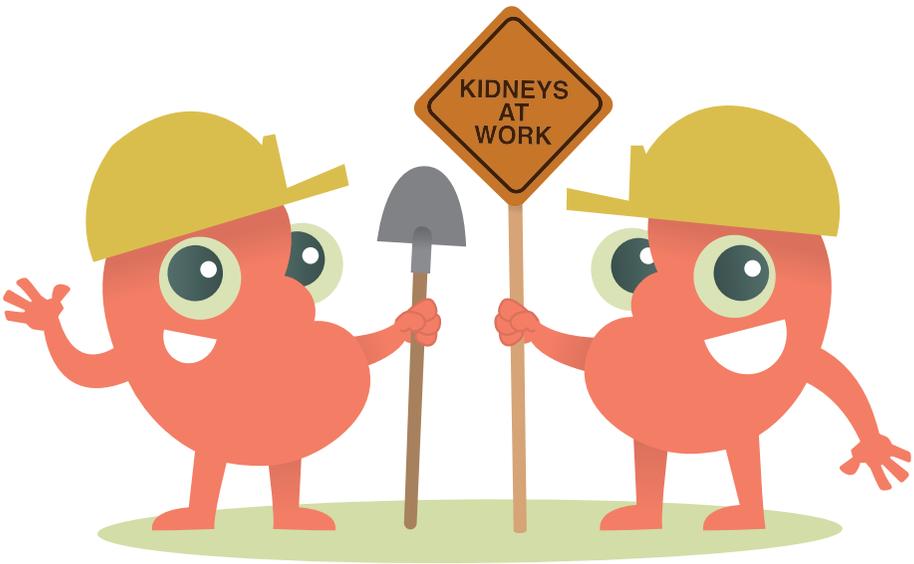
- ✓ Act as filters in the body
- ✓ Remove waste products
- ✓ Keep water and minerals balanced in the body

## What are the two most common causes of kidney damage?

- ✓ Diabetes
- ✓ High blood pressure

## What are the signs and symptoms if the kidneys are not working well?

- ✓ Kidney disease is usually a silent disease.
- ✓ Most people do not have symptoms in the early stages; it is not until one kidney is severely damaged that symptoms appear.



# What are some tests that can be done to check how well my kidneys are working?

**Microalbuminuria (MAU)** – a urine test to see if protein is “leaking” from the kidneys. The normal range is 0-20 mg/L.

**Albumin:Creatinine Ratio (ACR)** – another urine test to see if protein is “leaking” from the kidneys. The normal range is:

Men - less than 2.0 mg/mmol

Women - less than 2.8 mg/mmol

**Creatinine Clearance (CrCl or eGFR)** – a calculation to see how well the kidneys are working. It is calculated from a blood test or 24 hour urine test, your age and weight.

## How often should these tests be done?

The Canadian Diabetes Association recommends:

- ✓ People with Type 1 diabetes have these tests done once a year if you have had diabetes for over five years.
- ✓ People with Type 2 diabetes have these tests done every year.
- ✓ If you already have protein in the urine, or reduced kidney function, these tests should be done every six months to monitor changes.

## Here are some other blood tests that your doctor may order to help monitor your kidney function:

✓ Sodium

✓ Phosphorus

✓ Urea

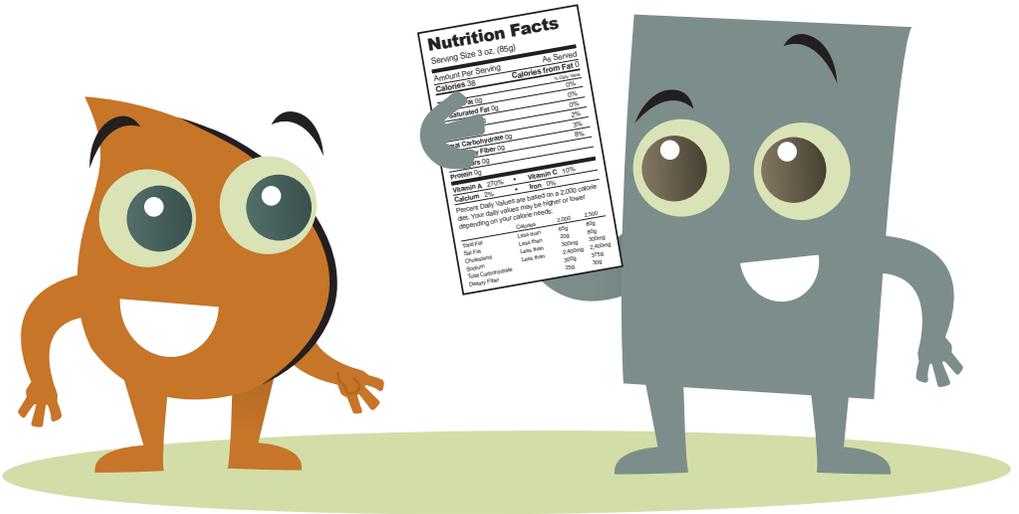
✓ Potassium

✓ Creatinine

Check with your health care provider to ensure that your kidney function is checked regularly.

# What diet changes can help my kidneys?

- ✓ Decrease use of salt and salty foods
- ✓ Adjust protein intake
- ✓ Ask your health care provider if you need to limit foods high in potassium
- ✓ Be aware of added sources of phosphorus



Note: everyone with kidney disease will have different diet needs.

# Decrease Salt & Salty Foods

## Sodium (salt) is important for:

- ✓ Helping maintain the right balance of fluids in your body
- ✓ Helping transmit nerve impulses
- ✓ Contraction and relaxation of muscles

Decreasing salt will decrease the amount of fluid that the body will retain and helps blood pressure medications to work better. This will help your blood pressure.

## Tips for decreasing salt:

- ✓ Take the salt shaker off the table
- ✓ Decrease salt in cooking
- ✓ Choose to flavour foods with non-salty spices instead
- ✓ Read food labels and choose lower sodium options
- ✓ Eat less canned foods, deli meats, convenience foods, fast foods and salty snack foods
- ✓ Eat less ready made sauces, coatings and condiments like ketchup and soy sauce



## Choose these foods more often:

- ✓ Fresh or frozen vegetables
- ✓ Whole grain breads and cereals
- ✓ Fresh or frozen meats and fish
- ✓ Plain rice, pasta and potatoes
- ✓ Unsalted spices



Talk to a dietitian about flavouring your foods with herbs & spices.

# Adjusting Protein Intake

## Protein is important for:

- ✓ Building muscles and hormones
- ✓ Healing wounds
- ✓ Helping to fight infections

However, when the kidneys are not working well, large amounts of protein foods can lead to a build up of a waste product called urea.

In later stages of kidney damage, high urea levels can lead to:

- ✓ Tiredness
- ✓ Weakness
- ✓ Loss of appetite and possibly nausea and vomiting
- ✓ Some research shows that eating smaller amounts of protein may help preserve kidney function

## Protein is found mainly in:

- ✓ Meats, fish and poultry
- ✓ Eggs
- ✓ Milk and milk products



## When choosing protein foods:

- ✓ Choose fresh or frozen unprocessed meats, poultry, pork and fish most often.
- ✓ Limit salty protein choices such as deli meats (ham, bologna, salami), bacon and sausages.
- ✓ Choose a serving size no bigger than the palm of your hand at a main meal.



You will need to speak to a dietitian to determine the right amount of protein for you.

# Limit Foods High in Potassium

## Potassium is important for:

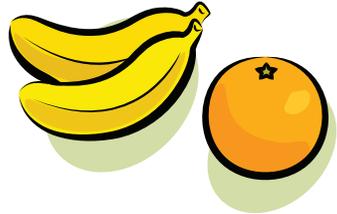
- ✓ Muscle and heart function
- ✓ Water balance
- ✓ Healthy nervous system

Although not as common in early stages of kidney disease, some people MAY NEED TO adjust the amount of potassium in their diet.

Ask your doctor to refer you to a DIETITIAN if this is necessary for you.

## If you have been told by your doctor to lower your potassium intake, avoid or limit these foods:

- Avocados
- Bananas
- Cantaloupe or honeydew melons
- Dried fruits including raisins
- Oranges and orange juice
- Potatoes — especially baked, french fries, potato chips
- Salt substitutes with potassium i.e, No Salt™ or Half Salt™
- Sweet potato or yams, winter squash
- Tomato paste and sauces and tomato juice
- Nuts and sunflower seeds



Talk to your dietitian about other food changes that may help to lower potassium levels.

# Limit Foods High in Phosphorus<sup>o</sup>

## Phosphorus is important for:

- ✓ Strong bones and teeth
- ✓ Healthy cells

Phosphorus can build up in the blood when the kidneys are not working properly. This causes an imbalance with calcium leading to weak bones and over time may cause problems with blood vessels or your heart.

## If you have been told by your doctor to lower your phosphorus intake, avoid or limit these foods:

- Hot chocolate, beer, cola based soft drinks, bottled iced tea
- Instant pancake and biscuit mixes
- Instant pudding mixes
- Chicken nuggets
- Deli meats such as bologna and hot dogs
- Processed cheese slices and cheese spreads
- Packaged macaroni and cheese
- Instant soup noodles
- Read labels and limit foods with added *phosphoric acid* or *phosphate*

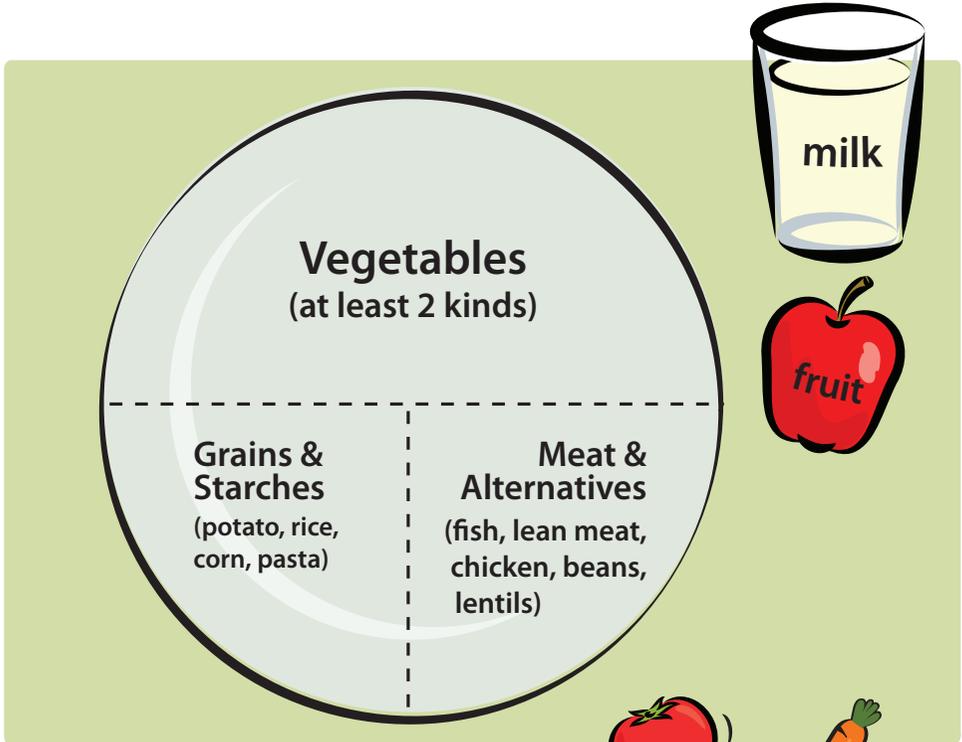


Talk to your dietitian about other food changes that may help lower phosphorus levels.

# Healthy Eating

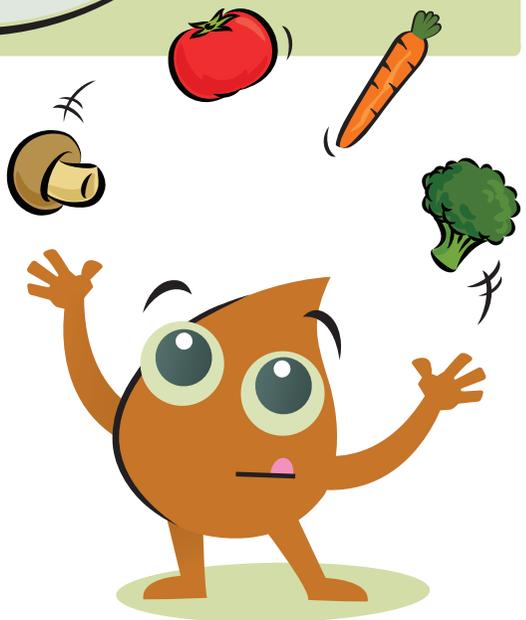
Healthy eating helps you feel great, manage your ABCs of diabetes and maintain a healthy weight.

## What a Balanced Meal Looks Like!



Eat 3 balanced meals a day.

Be sure to eat breakfast. It provides a good start to the day.



## General Healthy Eating Guidelines:

The following information can be used in combination with Canada's Food Guide:

- ✓ Eat 3 balanced meals everyday.
- ✓ Space your meals no more than 4 – 6 hours apart.
- ✓ If snacks are a part of your day, include a healthy snack between your meals and/or before bed.
- ✓ Choose whole grain breads, cereals, noodles, brown rice or potatoes with skin at every meal.
- ✓ Eat more vegetables.
- ✓ Use low fat cooking methods (grilling, broiling, baking, poaching or barbequing) instead of frying.
- ✓ Limit your salt intake. Processed and fast foods tend to have higher levels of salt. For example bologna, wieners, TV dinners, canned or dried soups.
- ✓ Limit your intake of alcohol as it may affect your blood sugars.



Drinking fruit juice, regular pop and sweetened drinks will raise your blood sugar! If thirsty, water is the best choice.

There may be a time when you need to make further changes, talk to a dietitian if you have questions.

# Contact Information and Resources

## To find a local Health Care Provider:

- Call your local Health Region.
- Call the Saskatchewan HealthLine @ 1-877-800-0002.
- On Reserve call your local Community Health Clinic or Tribal Council.

The Kidney Foundation of Canada, Saskatchewan Branch  
1-888-664-8588  
[www.kidney.sk.ca](http://www.kidney.sk.ca)

Saskatchewan HealthLine  
1-877-800-0002  
[www.healthlineonline.ca](http://www.healthlineonline.ca)

Saskatchewan in Motion  
1-866-888-DOIT (3648)  
[www.saskatchewaninmotion.ca](http://www.saskatchewaninmotion.ca)

Smokers Help Line  
1-877-513-5333  
[www.gosmokefree.ca](http://www.gosmokefree.ca)

Canadian Diabetes Association (CDA)  
1-800-BANTING (226-8464)  
[www.diabetes.ca](http://www.diabetes.ca)

First Nations Inuit Health  
(306) 780-5449  
[www.hc-sc.gc.ca/fnih-spni/index\\_e.html](http://www.hc-sc.gc.ca/fnih-spni/index_e.html)

National Aboriginal Diabetes Association  
1-877-232-6232  
[www.nada.ca](http://www.nada.ca)

**To find a LiveWell™ with Chronic Conditions Program  
call the HealthLine @ 1-877-800-0002.**

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