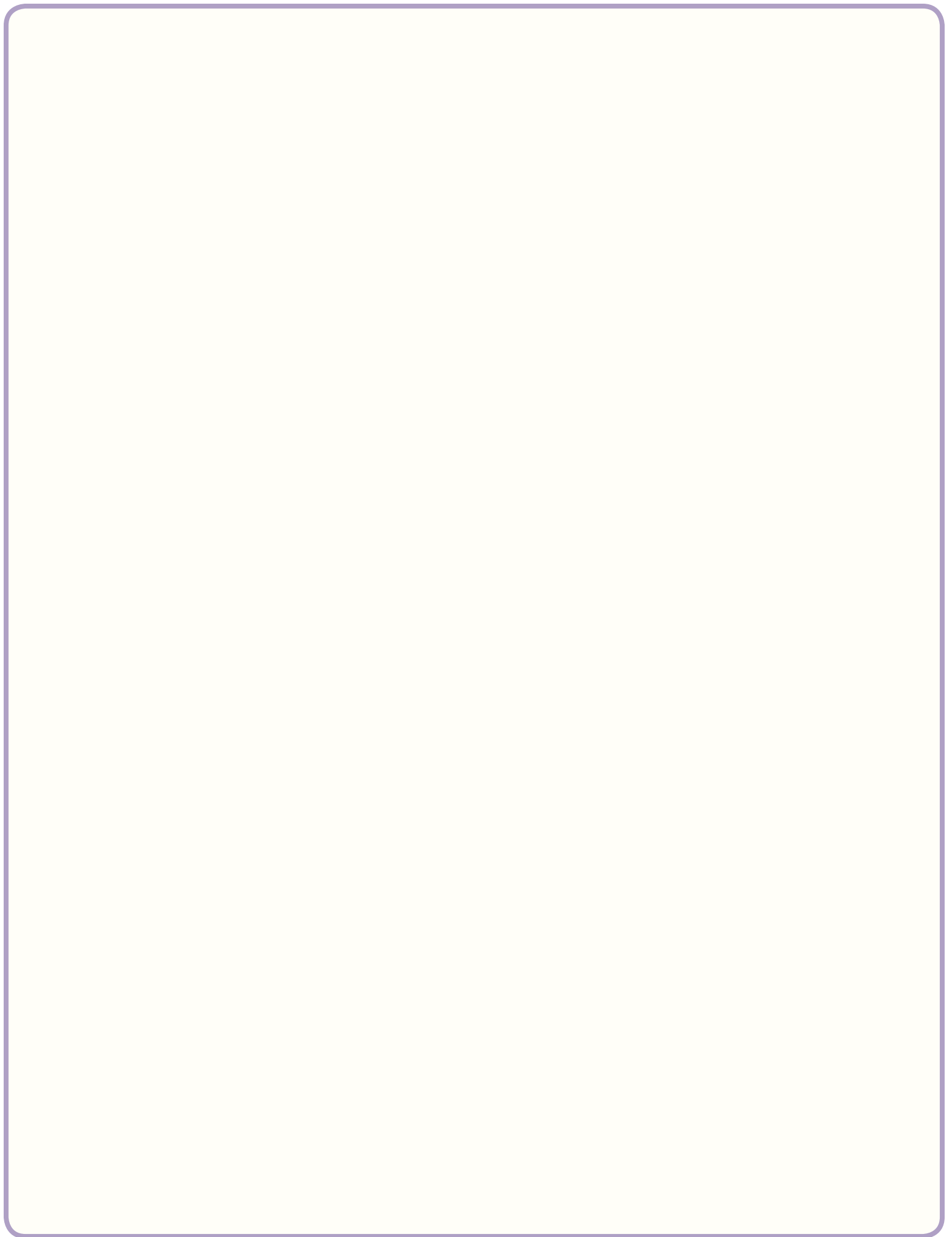


MEET YOUR KIDNEYS!

FACILITATOR RESOURCE



NOTES

RESOURCES MENU

1. Your Kidney Health Team
2. **MEET YOUR KIDNEYS!**
3. Balance
4. Connections
5. Healthy Eating
6. Being Active
7. Taking Medicines
8. Healthy Blood
9. Bone Health
10. Blood Pressure
11. Acid Balance
12. Growth
13. Chronic Kidney Disease
14. Family Coping Resources
15. My Coping Resources
16. Glossary

PRE-SCHOOL LEVEL



SCHOOL AGE LEVEL



ADOLESCENT LEVEL



2. GLOBAL LEARNING OBJECTIVES

By the end of this session, the children and their family will be able to identify of all key parts of the kidney and urinary tract.

Key parts include: kidneys, the renal pelvis, the ureters, the bladder, the urethra, the glomeruli (filters), arteries and veins.

Supports: Diagrams or models in each appointment room.

KIDNEY HEALTH MODULES DESIGN OVERVIEW

This material was compiled and designed to meet the needs of the diverse children, their families, caregivers and the health care providers who will be facilitating learning about how to live well with chronic kidney disease.

The design incorporates findings from research on providing health education information to children and adults. A number of families agreed to allow the consultant observe their appointments and interview them about learning about and managing their or their child's chronic kidney disease. In addition, health care providers received a questionnaire and were interviewed about their priorities for children and families in order to manage CKD effectively.

To determine initial topic areas, children and families were asked what was most important to know and most important to be able to do to manage their disease well. The Project Team considered what is required to manage CKD well from their perspective. From this information, topics were grouped into the resulting 16 topic areas. Certainly, for parents and children, "being able to do" things to manage CKD took priority over understanding so much about the disease.

Once the topic areas were determined, the consultant worked with pediatric nephrology health care providers to determine learning objectives for the 3 developmental stages and parents and caregivers.

Using plain language principles and best practices for developmental stage learning design, modules were designed to guide learners towards achieving the learning objectives.

Each module begins with an overview of all learning objectives. The learning objectives are informed by the Key Messages and Clinical Targets which are supported by Resource Materials for the facilitator for each module.

Each section of the module begins with reminders about your approach, appropriate for each developmental level. There is ample white space for you to write your own notes and ideas for delivery.

The Parent and Caregiver Resource provides highlights of the concepts and terms for each module as well as the full glossary for that module. There is also a listing of relevant online and library-available resources.

FACILITATING LEARNING

Facilitating learning puts the emphasis on the learners and their interests and abilities rather than on an outside entity. How does this affect what you, as the healthcare provider, do?

- Work with people where they are at.
- If families are not ready to make a change, they do not need to sit through the presentation of materials. You may want to just give the Activity Sheet to these people. Or you may wish to start a conversation about what the Kidney Health Team can do to help the family feel they are ready to make some changes.
- Use Motivational Interviewing techniques.
- Be careful not to ask for more than one change at a time.
- Not everyone will be able to understand or use the information in the same way. You may find yourself revisiting modules with some children and families repeatedly while others will go away and look into things on their own.
- You will be helping people learn how to manage the disease rather than learn about the disease and understand why the doctor or healthcare team is recommending certain types of management.

Connecting and Relating Learning

A key premise of this work is interconnections. As a facilitator, find ways of linking concepts and tools throughout the modules. As much as possible, concepts are built upon throughout the modules. For instance, in Connections we begin to talk about heart health and kidneys. In Blood Pressure, we build upon that knowledge and introduce the concept of perfusion.

Applying information

Encourage children and families to refer back to information and use the concepts and terms presented. Make sure they are holding the “story books” flipping through them and back and forth in a way that makes sense to them. The concepts and information designed are age-appropriate, clinically and medically accurate and meant to be applied. The Activity Sheets are designed for use people at all levels to reinforce vocabulary and concepts.

Visual Learning

The vast majority of people are visual learners rather than auditory learners. Interesting graphics that tell a story are a more effective way for many people to learn than either listening to information on its own or reading dense information. You will notice that the glossary terms are supported through graphics linked to concepts introduced in the modules.

Literacy Levels

In Manitoba, 40% of working adults have low literacy levels. Give people time. Let them contemplate the graphics. Keep your language plain.

RESEARCH KEY FINDINGS

Developmental Stages and Learning Design Key Points

- Importance of play in learning and education for all levels.
- School-age: time to create and reinforce healthy rituals.
- Adolescence: begin to share consequences but limited.
- Delivery of learning is key: recommendation to embrace motivational interviewing as intervention approach.
- Use of transtheoretical / stages of change model.
- HCP as facilitator of learning.

Child / Parent Consultations Summary Key Points

- The “how” needs to come before the “why” in educating. Some patients and families may never get to the “why.”
- Global approach to living healthily and move towards the rationale.
- The lived experience is how we need to think about the learning and educating.
- Appreciation for visual cues and teaching aids.
- Need for useable, family-friendly diet information:
 - shopping lists and pantry list.
 - meal plans for breakfasts, lunches, dinners, snacks that are kidney health friendly and will work for whole family.
- Patients and families do and want to learn from each other.
- Value in emailing nurse clinician.

Best Practices for Health Education Summary Key Points

- Emphasis on action-oriented teaching: what people need to do and how to do it.
- Put positive in front of negative: provide hope rather than feed despair.
- Use simple pictures and graphics to display proportions.
- Plain language is not “dumbed down”: it is simply clear.

For more information, contact any member of the Kidney Health Advisory Group:

Angela Chotka, MA

Julie Strong, BN

Tom Blydt-Hansen, MD

Diane McKenty, RN

DEVELOPMENTAL LEVEL OBJECTIVES

By the end of this session:

The Pre-School Age Child will be able to:

- a) say they have 2 kidneys and indicate size, shape and location in the body. Key terms to recognize are kidneys and bladder.

Possible activities include: include colouring kidneys and bladder; using a teaching doll to touch kidney and bladder; matching shapes on shapes, pointing to the named part and / or assembling a puzzle; hold up fists with straw / tube attached to bag (bladder)

The School Age Child will be able to:

- a) point to the key parts of the kidney and urinary tract as health care provider names the part.
- b) recognize that the parts of the urinary and kidney tract are connected.
- c) begin connecting the written word to the named part.

Possible activities include: colouring the named part, drawing lines to connect the parts as they are named and / or spelling / letter match activities.

The Adolescent will be able to:

- a) identify the parts of the kidney and urinary tract as a functional unit to move urine out of the body.

Possible activities include: matching, labeling, outlining flow of urine.

The Parents and Caregivers will be able to:

- a) identify the parts of the kidney and urinary tract as a functional unit to move urine out of the body.

KEY MESSAGES

1. We can look at the kidney's size and structure on ultrasound to tell us about their health status.
2. Kidneys need to grow along with the child.
3. High pressure in the urinary system can result in kidney damage over time, and should be corrected.
4. Complete bladder emptying is important – otherwise there is increased risk of urine infections and high bladder pressure.
5. Physical damage to kidney structure (like scars or atrophy) represents permanent injury and isn't reversible.
6. There are many variations in kidney anatomy - these are multifactorial. Some are hereditary and there is an increased risk of similar malformations in siblings. Some parents blame themselves for congenital malformations, but unless there has been a documented and confirmed exposure, parents are told that it is not likely related to something they did during the pregnancy.

TARGETS FOR FACILITATORS TO BE AWARE OF

1. Normal kidney growth (or expected hypertrophy) over time using kidney length growth charts.
2. Maximum safe pressure that can be measured in the bladder in cases of urinary tract obstruction.
3. Healthy bowel and voiding habits emphasizing awareness of need for elimination and avoidance of urinary/fecal retention behaviours.
4. Reduced frequency of UTI.
5. Awareness of signs/symptoms of UTI by parents in at-risk children.

PRE-SCHOOL LEARNING

1. PRE-SCHOOL LEVEL

2. MEET YOUR KIDNEYS!



RESOURCES MENU

1. Your Kidney Health Team
2. MEET YOUR KIDNEYS!
3. Balance
4. Connections
5. Healthy Eating
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14. Family Coping Resources
15. My Coping Resources
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PRE-SCHOOL LEARNING OBJECTIVES

Remember ... children can use words and images to represent objects but are not yet reasoning logically.

The Pre-School Age Child will be able to:

- a) say they have 2 kidneys and indicate size, shape and location in the body. Key terms to recognize are kidneys and bladder.

Possible activities include: include colouring kidneys and bladder; using a teaching doll to touch kidney and bladder; matching shapes on shapes, pointing to the named part and / or assembling a puzzle; hold up fists with straw / tube attached to bag (bladder)

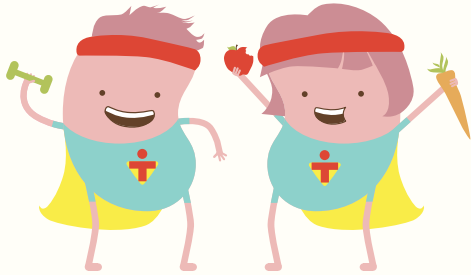
MY APPROACH

1. Where is this family at? (Stages of Change)
2. Acknowledge what children do or say.
3. Model attitudes, ways of approaching problems and behaviours towards others rather than telling them.
4. Ask questions to provoke thinking; describe pictures.
5. Provide hints to assist children when they are struggling with concepts.
6. Offer a variety of choices when children are trying to find the answer.
7. While your time is limited, try to give children and family time to think about the material and messages.

LEARNING SUPPORTS

Have you got the Learning Supports you might want to use? A teaching doll; crayons; copy of activity sheet; flexible hoses, bag for bladder & glass of water; diagram /module of urinary tract/kidneys

1



Say HELLO to the **Kidney Twins**! The Kidney Twins live inside your body.

1. Say HELLO to the Kidney Twins. The Kidney Twins live inside your body.

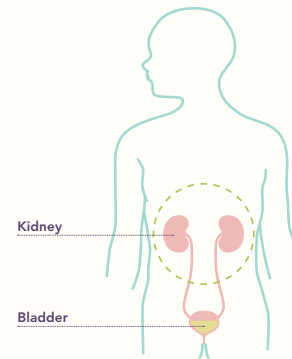
How many kidneys do you think you have?

What are the Kidney Twins doing?

- they are moving
- they are having fun
- they are eating foods that are good for their kidneys

2

The Kidney Twins live in your back.




2. The Kidney Twins live in your back.

Can you point to the kidneys?


(Can you see the shape of the Kidney Twins on this picture?)

For parents, if appropriate: We can look at the kidneys' size and structure on an ultrasound test. That test can help us see how healthy the kidneys are.

3



Each kidney is about the size of your fist.



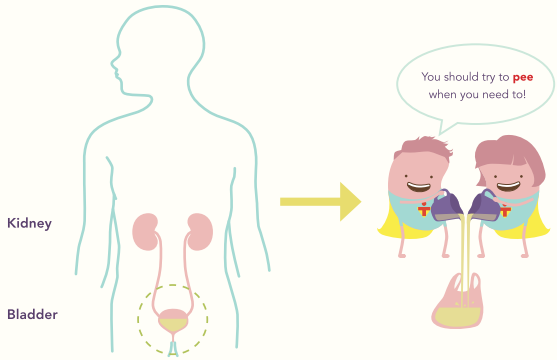
3. See the children holding up their fists?

Can you hold up your fists? That's about how big your kidneys are.

See my fist? That's about how big my kidneys are. Our kidneys grow as we grow.

4

The Kidney Twins make **pee**. They put this pee in a big bag called the **bladder**.



Kidney

Bladder

You should try to **pee** when you need to!

UP NEXT: SCHOOL AGE LEVEL

4. The Kidney Twins make pee.

They put this pee in a big bag called the bladder.

Pee is also called urine.

UP NEXT: SCHOOL AGE LEVEL

SCHOOL AGE LEARNING

2. SCHOOL AGE LEVEL

2. MEET YOUR KIDNEYS!



RESOURCES MENU

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SCHOOL AGE LEARNING OBJECTIVES

Remember ... children can think logically about concrete objects and can apply rules in a consistent way.

The School Age Child will be able to:

- a) point to the key parts of the kidney and urinary tract as health care provider names the part.
- b) recognize that the parts of the urinary and kidney tract are connected.
- c) begin connecting the written word to the named part.

Possible activities include: colouring the named part, drawing lines to connect the parts as they are named and / or spelling / letter match activities.

MY APPROACH

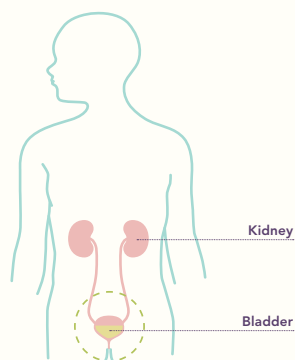
1. Where is this family at? (Stages of Change)
2. Acknowledge what children do or say.
3. Model attitudes, ways of approaching problems and behaviours towards others rather than telling them.
4. Provide information, directly giving children facts, labels and other information.
5. Ask questions to provoke thinking; describe pictures.
6. Provide hints to assist children when they are struggling with concepts.
7. Offer a variety of choices when children are trying to find the answer.
8. While your time is limited, try to give children and family time to think about the material and messages.

LEARNING SUPPORTS

Have you got the Learning Supports you might want to use? A teaching doll; crayons; copy of activity sheet; flexible hoses, bag for bladder & glass of water; diagram /module of urinary tract/kidneys

1

The **Kidney Twins** live inside your body in your back. The Kidney Twins make **pee**, or **urine**. They put the urine in a big bag called the **bladder**.



1. The Kidney Twins live inside your body.

Can you guess where they live?

Can you point to the kidneys in this picture?

How many kidneys do you have?

The Kidney Twins make pee or urine. They put the urine in a big bag called the bladder.

2



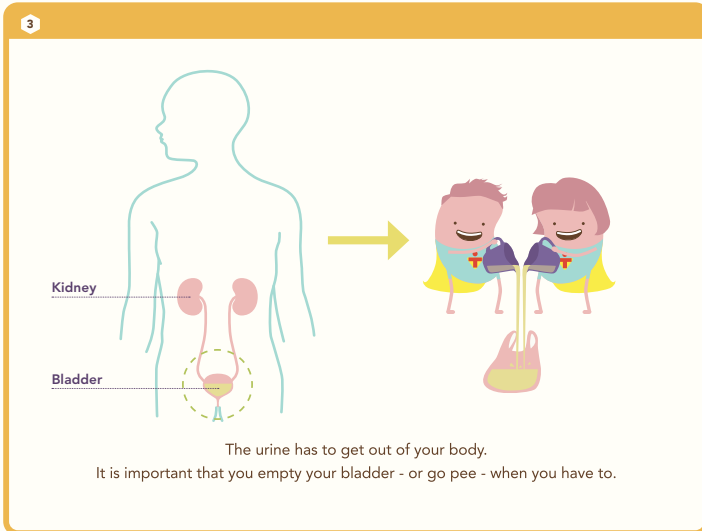
Each kidney is about the size of your fist.



2. See the children holding up their fists? Can you do that too? Each kidney is about the size of your fist.

See how big (your Mom's or Dad's or my) fist is? That's about how big their /our kidneys are too. So our kidneys grow as we grow.

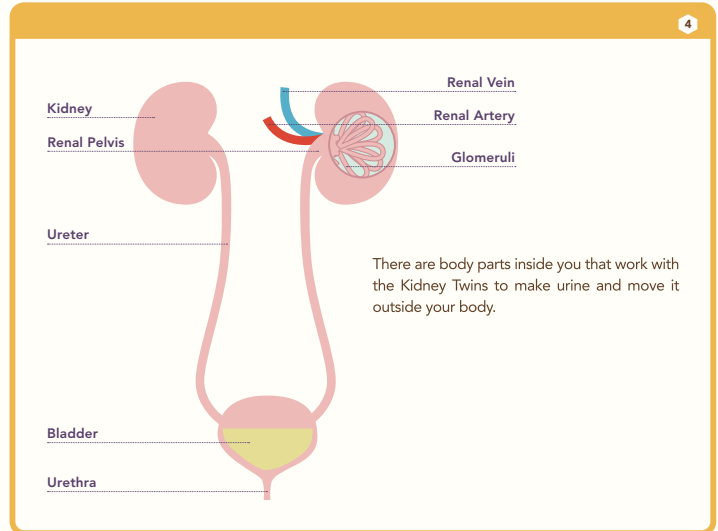
For parents, if appropriate: We can look at the kidneys' size and structure on an ultrasound test. That test can help us see how healthy the kidneys are.



3. Remember the Kidney Twins make pee or urine. Can you say "urine?"

The Kidney Twins put the urine in a big bag called the bladder.

The urine has to get out of your body. It is important that you empty your bladder – or go pee – when you have to.



4. There are inside body parts that work with the Kidney Twins to make urine and move it outside your body.

Can you point to the kidneys? Great! After the kidneys make pee or urine, it sits in this part, called the renal pelvis.

When there is enough urine in the renal pelvis, the urine flows through the ureters, these long hoses, to this big bag. Do you remember what that big bag is called? It's a bladder.

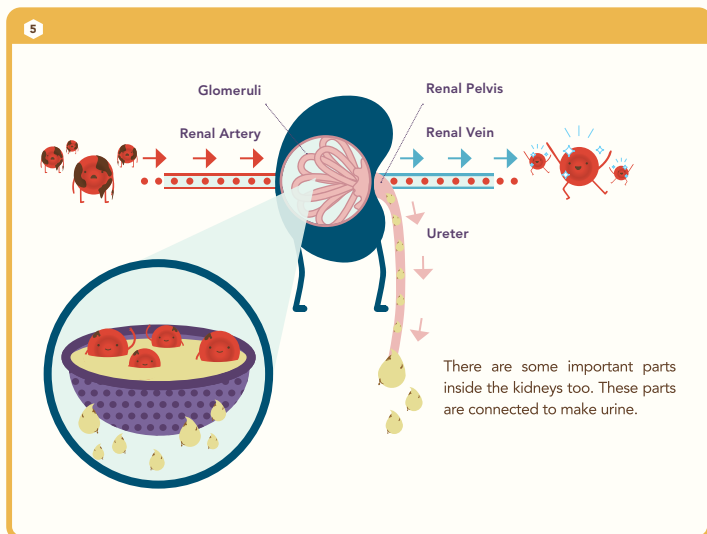
The urine or pee stays in the bladder until when?

Until you go pee!

Then the urine leaves your body through your urethra.

Those are a lot of new words!

* **Facilitator's Note:** Use the diagram or model and ask if the parent or child can show where urine is made and how it gets out of the body.



5. Inside the kidney are some important parts. The renal artery brings dirty blood to the kidney for cleaning. We will talk more about dirty and clean blood in another module.

The renal vein carries the clean blood back into the body.

The kidneys have filters called glomeruli. These filters – the glomeruli – clean the blood.

If using Model / Diagram: Ask child and parent, if they can outline the flow of dirty blood and making urine in the body.

- * **Facilitator's Note:** Ask which parts of the urinary tract they can name. You can provide hints for the others and see if they can point to them. Lastly, you can name and point. You might want to refer them to the handout again. Child can start colouring parts on Activity Sheet.

Refer parent to the parent handout.

ADOLESCENT LEARNING

3. ADOLESCENT LEVEL

2. MEET YOUR KIDNEYS!



RESOURCES MENU

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ADOLESCENT LEARNING OBJECTIVES

Remember ... many adolescents can reason abstractly and think in hypothetical terms

The Adolescent will be able to:

- a) identify the parts of the kidney and urinary tract as a functional unit to move urine out of the body.

Possible activities include: matching, labeling, outlining flow of urine.

MY APPROACH

1. Where is this family at? (Stages of Change)
2. Acknowledge what the adolescents say and do.
3. Model attitudes, ways of approaching problems and behaviours towards others rather than telling them.
4. Ask questions to provoke thinking; describe pictures.
5. Guide, do not dictate. Youth want info so they can make their own decisions.
6. Be patient. Don't be discouraged if your first offers of support are turned down.
7. Give opportunities to use strategic thinking, reasoning and problem solving.
8. Let them do some evaluation and monitoring of their understanding
9. While your time is limited, try to give children and family time to think about the material and messages.

LEARNING SUPPORTS

Have you got the Learning Supports you might want to use? pencils / pens; copy of activity sheet; flexible hoses, bag for bladder & glass of water; diagram /module of urinary tract/kidneys

1

Each kidney is about the size of your fist. Your **kidneys** make **urine (pee)** and move it out of your body when you **urinate**.

Your kidneys are connected to some other parts inside your body.

Kidney
Bladder
Ureter

Remember to empty your **bladder** - it is important for your kidney health.

2

Renal Vein
Renal Artery
Glomeruli
Renal Pelvis
Ureter
Bladder
Urethra

These body parts work to make urine and move it outside your body when you urinate.

The **glomeruli** (filters) help make pee, or urine. The urine collects in the **renal pelvis**. Then it flows to the **ureters**, where it is stored in the bladder. The bladder holds the urine until you can go to the bathroom, then it comes out through the **urethra**.

1. How many kidneys do you think you have? Your kidneys have a few important jobs in your body. Today we are talking about one: making urine.

Do you know another word for urine? (pee)

Kidneys make urine and, with some other body parts, move it outside your body when you urinate.

You can see that the kidneys are connected to a big bag - called the bladder - by some tubes or hoses. The bladder is a big bag - What do you think it is for?

Those tubes are called ureters. What do they connect? (the kidneys and the bladder)

When you have to go to the bathroom, you empty your bladder and your urine comes out your urethra.

2. Do you know any of these parts on this diagram?

(Kidneys)

Anything else?

Can you guess how urine moves from your kidneys outside your body?

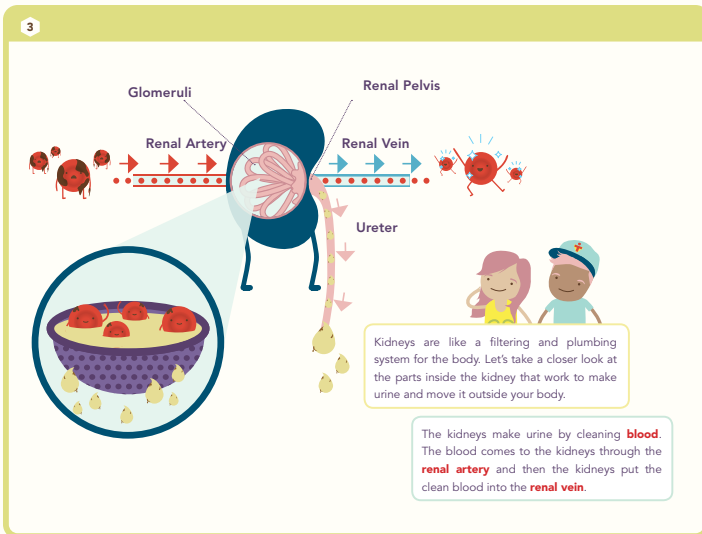
Through the hoses, called ureters, to the ??...

(Bladder)

When you go to the bathroom, the urine comes out your urethra.

Urine contains wastes and salts the body does not need.

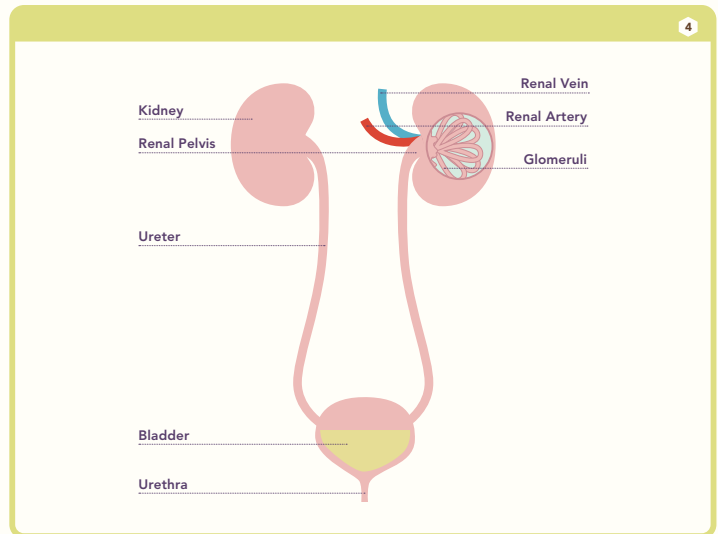
Name the parts and pronounce them slowly and clearly. Might want to use analogy of filter and plumbing system.



3. The kidneys make urine by cleaning blood brought to the kidneys by the renal artery and putting the clean blood into the renal vein.

The dirty blood moves into the parts that are filters – can you guess which part they are?

The waste from cleaning the blood goes into urine. After the glomeruli filter the blood, they send the waste to sit in this part (point to it), called the renal pelvis.



4. When there is enough urine in the renal pelvis, the urine flows to the bladder. How do you think it gets there?

(Through the ureters, these long hoses, to the bladder.)

The urine sits in the bladder until you urinate or go pee, then the urine leaves your body through your urethra.

Use the diagram or model and ask if the parent or child can show where urine is made and how it gets out of the body.

5

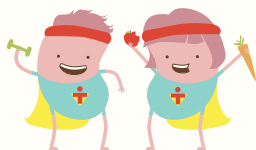
There's so many new words - why do I need to know them?

You're going to hear these words and it will help you understand what the health care team is talking about. That way you can learn how to stay healthier!



5. There are a lot of new words. Over time, you will learn them. We use these words a lot when we are talking about your kidneys and your renal system.

Let's review – let's take a look at the parent and caregiver resource.



Created by Julie Strong BN, Tom Blydt-Hansen MD, Diane McKenty RN, and Angela Chotka MA with Pediatric Nephrology (Children's Hospital Health Sciences Centre) and Chotka Consulting: Creative Balanced Solutions. With thanks to the Children's Hospital Foundation of Manitoba for their generous support.

For more information about this resource, please contact Pediatric Nephrology at 204-787-4947 or jstrong@exchange.hsc.mb.ca or the Children's Hospital Foundation of Manitoba <http://goodbear.mb.ca>