

Welcome to CKiD!

Dear Participants and Families,
Welcome to the third issue of the CKiD family newsletter. We would like to give our heartfelt thanks to all of you for your generosity and dedication to this important research study.

Since 2005, nearly 600 children from around the United States and Canada have joined the study and helped us learn more about the effects of kidney problems in children. You have spent hours filling out forms and answering questions. The children have had blood drawn, IVs started, and even several hairs cut and nails clipped. Many of you have already, or will eventually benefit from the information we have gathered. You should know that by participating in this study many other children living with kidney disease will be helped in the future.

We hope your experience with the study visits has been good so far. We also hope that the results we have shared with you have helped with your child's understanding of and coping with his or her kidney disease.

We recently had our annual meeting with all the participating CKiD centers and we're very excited about the wonderful progress we've made so far. Check out the Study Results section on page 2.



Geographic locations of the 50 centers participating in the CKiD study

Sincerely,

Dr. Susan Furth & Dr. Brad Warady
Principal Investigators, East Coast and Mid-West Clinical Coordinating Center

Dr. Alvaro Muñoz and Dr. George Schwartz
Principal Investigators, Data Coordinating Center and Central Laboratory

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Recruitment Update

Over 600 children have now joined the CKiD study, which makes us the largest study of children with mild to moderate kidney function in the US. This great accomplishment would not have been possible without each of you, and your hard working study coordinators and doctors.

THANK YOU for being part of this study!

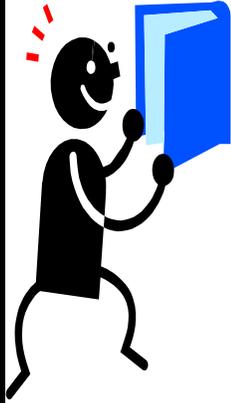
We are also pleased to announce that we are enrolling 280 more children into the study. Because of your continued participation, we have collected a lot of valuable information that has generated excitement within the nephrology

community. By enrolling more children, we will have the opportunity to learn more about the early stages of CKD in children and the factors that help kidneys stay healthy!



Study Results

What Have We Learned So Far?



The next few paragraphs describe for you and your child what impact your participation in this study has had.

CKD Progression

Practice makes perfect! Everyone knows that this is true. Since *you* joined this study, we have been learning each time you have the lohexol test to measure GFR. This test is now being used in many other big studies of people with kidney problem in the USA and Canada. That is because all of you have helped prove how important it is! Also, because of *you* we can now do this test using only 2 or 3 blood samples—when we started we needed TEN!

Even more important is that because of **every** child in this

study, many other children need fewer fancy lohexol tests to check their kidney function. Since we know each of you so well from the questions you have answered and from seeing you every year and watching you grow, when we draw your blood and send it to the lab, we can use special calculators to “guess” how well your kidneys are working even without the fancy lohexol test. It’s sort of like using last week’s questions on the school quiz to predict the questions on the final exam. Because of each one of you, that special guess is getting more and more accurate every day—even for children who never had a chance to be in this study at all. This is all because of you!

Cognition and Behavior

One of the important things we have learned so far is that most

children with kidney problems are doing well on intelligence and memory tests and getting along well at home. This is great news and we encourage parents to help their children keep a positive attitude about their great potential! We have also recognized though, that about 4 out of 10 parents and 4 out of 10 children in the CKiD study report some school problems. Most of these children are receiving some extra help. However, if your child is complaining about keeping up in school, concentrating during lessons or getting along with classmates, we encourage you to contact your child’s teacher, principal or guidance counselor to request help. Your child’s pediatrician should also be told about school problems so that he/she can assist you in getting help for your child.

Recipe File

Fun Summer Time Recipes:



Watermelon Summer Cooler

Ingredients

- 1 cup crushed ice
- 1 cup seedless watermelon cubes
- 2 teaspoons lime juice
- 1 tablespoon sugar (or sugar substitute equal to 1 TB sugar)

Directions:

- Place all ingredients in a blender and blend for 30 seconds.
- Pour into 2 small glasses and enjoy!



Crispy Tortilla Pizza

Ingredients

- Two 8” flour tortillas
- 1 “I Can’t Believe it’s Not Butter” spray
- 2 oz. regular cream cheese
- 4 Tbsp. marinara sauce
- 2oz. Grilled chicken, sliced
- 1/4 cup red onion, sliced
- 1/4 cup raw mushrooms, sliced
- 1/4 cup raw broccoli, chopped

Directions:

- Preheat oven to 400° F. Spray both sides of each flour tortilla with spray and place on an aluminum foil covered pizza pan. Bake both tortillas in the oven until golden brown as needed, approximately 5-10 minutes. Remove tortillas from oven and spread each with 1 oz. cream cheese. Add 2 Tbsp. marinara sauce to each tortilla, then top with vegetables. Layer 1 oz. of sliced chicken on each tortilla then top with vegetables. Reheat in 400° F oven for 5 minutes or until vegetables are cooked. Remove from oven, cut in quarters and serve.



Kid's Corner



CONNECT-THE-DOTS! Connect the numbers 1 to 30 below to find out what the mystery drawing is.



KIDNEY CROSSWORD:

How much do you know about Chronic Kidney Disease (CKD)? Turn to page 4 for the answers.

ACROSS:

- 1. Chemical element represented by the symbol Na.
- 4. Fats in the bloodstream & all cells in the body
- 6. The number of kidneys most people have.
- 7. Organs that filter blood & help keep blood pressure normal.
- 10. Liquid waste removed by kidneys commonly known as "pee".
- 12. A condition when a person has low amounts of red blood cells.

DOWN:

- 1. Common food flavoring that should be avoided by people with kidney problems.
- 2. Chemical element represented by the symbol K.
- 3. Type of fat made by the liver and comes from food from animal sources. e.g. meat, butter, eggs.
- 5. A high blood ____ level is usually a sign of kidney damage.
- 8. The dye used to measure your kidney function in the CKiD study.
- 9. Abbreviation for the measure of kidney function also known as Glomerular Filtration Rate.
- 10. Urinary Tract Infection (Abbreviated)
- 11. A mineral that helps make red blood cells.

1.									2.		3.
4.							5.		6.		
			7.	8.							
	9.										
10.		11.									
						12.					

Recently Published Articles From the CKiD Study

Clinical Coordinating Centers:

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- Abraham AG, Muñoz A, Furth SL, Warady BA, Schwartz GJ. Extracellular Volume and Disease Progression in Children with Chronic Kidney Disease. Clin J Am Soc Nephrol 2011;6:741-7**
 Body fluid found outside of cells is controlled by the kidney. As kidney function gets worse, this type of body fluid can increase which may lead to heart disease. Investigators looked at the results of the first two CKiD iohexol studies and found that this body fluid is relevant to chronic kidney disease, but there was not a significant association between this body fluid and high blood pressure
- Greenbaum LA, Muñoz A, Schneider MF, Kaskel FJ, Askenazi DJ, Jenkins R, Hotchkiss H, Moxey-Mims MM, , Furth SL, Warady BA. The Association between Abnormal Birth History and Growth in Children with CKD. Clin J Am Soc Nephrol 2011;6:14-21**
 Investigators evaluated whether abnormal birth history (determined from the forms you fill out) is associated with the growth of children with chronic kidney disease (CKD). They found that ‘low birth weight’ and ‘small for gestational age’ babies are at risk for short stature and lower weight percentiles if they have mild to moderate impaired kidney function.
- Atkinson MA, Pierce CB, Zack RM, Barletta GM, Yadin O, Mentser M, Warady BA, Furth SL. Hemoglobin Differences by Race in Children with CKD. Am J Kidney Dis 2010; 55:1009-17. Editorial by Filler G, Huang SS, Sharma AP on pages 981-3.**
 There are racial differences in anemia (low red blood cell count) in adults with CKD, but the difference has not been well studied in children. Investigators found that African Americans compared with White children have more anemia if they have CKD no matter what the cause of CKD.
- Gerson AC, Wentz A, Abraham AG, Mendley SR, Hooper SR, Butler RW, Gipson DS, Lande MB, Shinnar S, Moxey-Mims MM, Warady BA, Furth SL. Health-related Quality of Life of Children with Mild to Moderate Chronic Kidney Disease. Pediatrics 2010; 125:349-57**
 Investigators compared the health related quality of life of children with CKD with healthy children. They found that children with CKD reported poorer health-related quality of life than healthy children.



Answers to crossword on page 3:

1. S	O	D	I	U	M				2. P		3. C
A									O		H
4. L	I	P	I	D	S		5. C		6. T	W	O
T							R		A		L
			7. K	8. I	D	N	E	Y	S		E
	9. G			O			A		S		S
	F			H			T		I		T
10. U	R	11. I	N	E			I		U		E
T		R		X			N		M		R
I		O		O			I				O
		N		L			N				L
					12. A	N	E	M	I	A	