

Potassium Education: Where to go from here?

The evaluation and development of a potassium education tool which facilitates self-management





the original diet - simple



Self-management



Self-management



Self-management



Self-management



Self-management

The renal diet +

- Add diabetic diet
- Add modified fat and cholesterol
- Add texture modification
- Add celiac disease
- Add vegetarian diet



So what's left?



**“Is it true all that is left is...
parsley and ice cubes?”**



POTASSIUM

Potassium is a mineral needed for your nerves and muscles. With reduced kidney functions your kidneys are not able to clear excess potassium. Potassium build up can cause your heart to stop. A build up of potassium may cause: No symptoms, weakness or rubbery legs, or diarrhea. The following food list will help you choose lower potassium foods.

FRUITS	<u>LOW</u> Choose more often	<u>MEDIUM</u> Choose less often	<u>HIGH</u> Avoid
<p>*Caution: Starfruit (Carambola) Not recommended for people with chronic kidney disease*</p>	<p>Apple, apple juice, apple sauce</p> <p>Berries: black, blue, goose, boysen, cranberries, raspberries, strawberries</p> <p>Fruit cocktail, grapes, lemon, lime, mandarin oranges (canned), peaches (canned), pear (canned), plums, pineapple, prunes (2), tangerine</p> <p>_____ servings/day (1 serving = 1/2 cup or 1 small fruit)</p>	<p>Apricots (canned), apricot nectar, cherries, grapefruit, grapefruit juice, grape juice, peach (raw), pear (raw), pineapple juice, rhubarb raisins (2 tbsp)</p>	<p>Avocado, apricots (raw), banana, canteloupe, dried fruit (ie. Apricots, currants, dates, figs), lychee, guave, honeydew, jack fruit, kiwi, mango, nectarine, orange, orange juice, papaya, plantain, pomegranate, prickly pear, prune juice, soursop, tamarind, watermelon, japanese persimmon (Hachiya, fuyu varieties also known as "Kaki" or "Shizi")</p>
<p>VEGETABLES</p>	<p>Alfalfa sprouts, bean sprouts, bamboo shoots (canned), beans-green/yellow, beets (canned), broccoli, cabbage-green or red, celery (raw 1stalk), cucumber, dandelion greens, eggplant, endive, leeks, lettuce, onions, peppers, radish, radicchio, shallots, spaghetti squash, watercress</p> <p>_____ servings/day (1 serving = 1/2 cup)</p>	<p>carrots, cauliflower, celery (cooked), corn (kernels or on-the-cob), kale, peas, potato peeled/pre-soaked/mashed or boiled, spinach (raw), squash-butternut, turnip, zucchini</p> <p>_____ servings/day (1 serving = 1/2 cup)</p>	<p>Artichoke, asparagus, bamboo shoots (raw), lima beans, beets and beet greens (raw or boiled), brussels sprouts, carrot juice, cassava, dried peas and beans (ie. Chick peas, kidney beans, navy beans, lentils etc), kohlrabi, mushrooms, okra, parsnips, *potato-baked, french fried, microwaved or roasted, pumpkin, rutabaga, spinach (cooked), squash-acorn or hubbard, sweet potato, swiss chard, tomato, tomato-canned, juice, paste or sauce, vegetable juice, yam, rapini (cooked)</p>

* potato preparation: 1) peel, cube, soak 6-8 hours, discard water and cook or 2) peel, cube, boil 15 minutes, discard water and boil again 15 minutes.

July 2009



Motivation

To produce a new tool:

1. To be current and contemporary
2. To provide person focused care
3. To incorporate principles of self-management

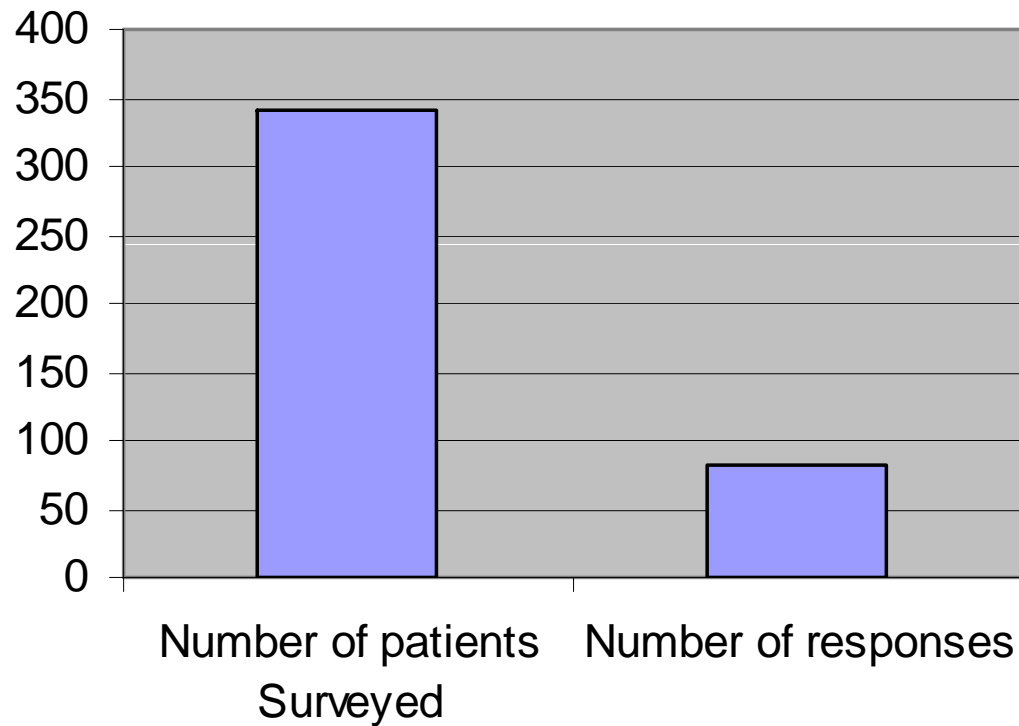


Survey Questions

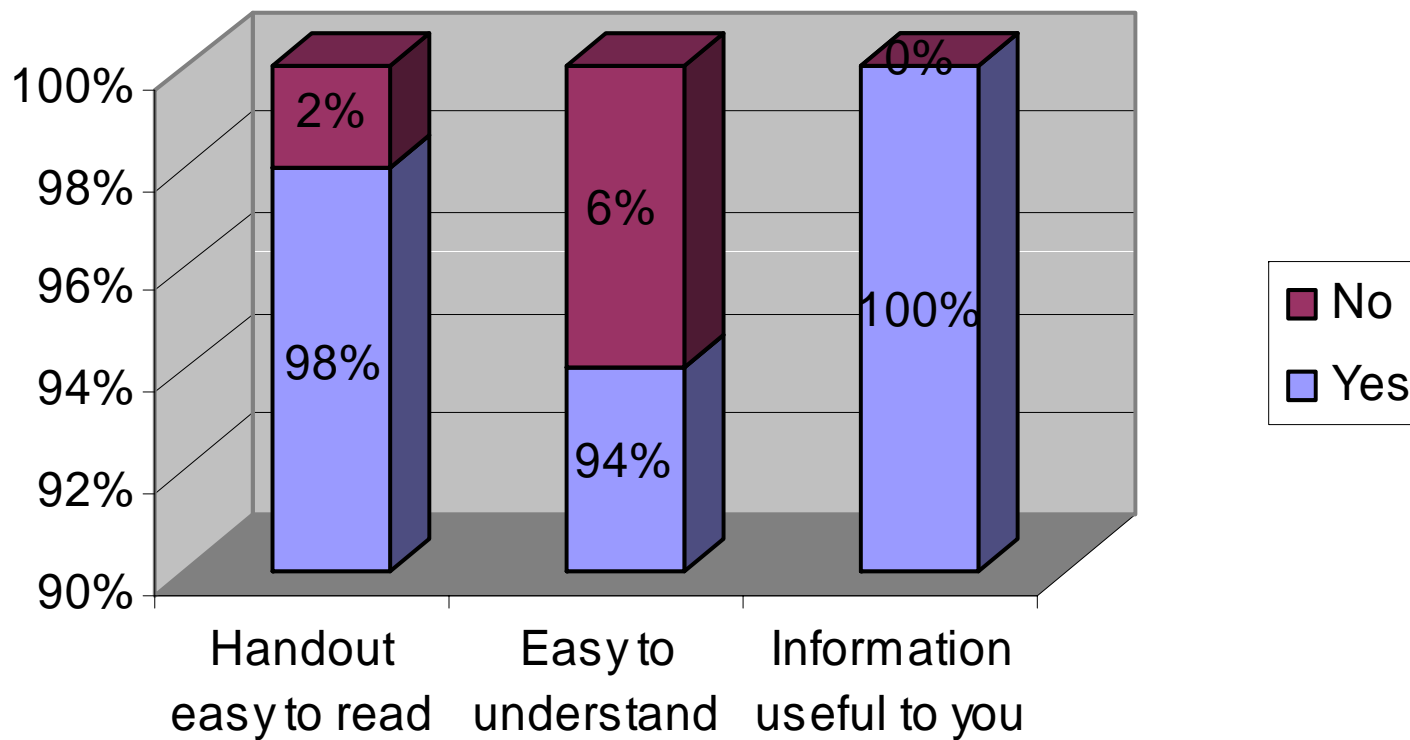
1. Is the handout easy to read?
2. Is the information easy to understand?
3. Is the information useful to you?
4. List any foods or other information that you would like to have added to this handout
5. Comments



Potassium Survey Results YCH May 2010



Survey responses original tool York Central Hospital May 2010



Survey comments

- Alphabetized list
- Less clutter
- Larger font size
- More cultural food choices
- Specific quantities listed
- How much they could have each day
- More fresh vegetables and fruit choices



Resources

1. Canadian nutrient file
2. USDA nutrient file
3. International food tables
4. Consulted colleagues of various cultures to discuss use of cultural foods, usual portion size
5. Manual of clinical dietetics, American Dietetic Association and Dietitians of Canada, 6th ed.2000.







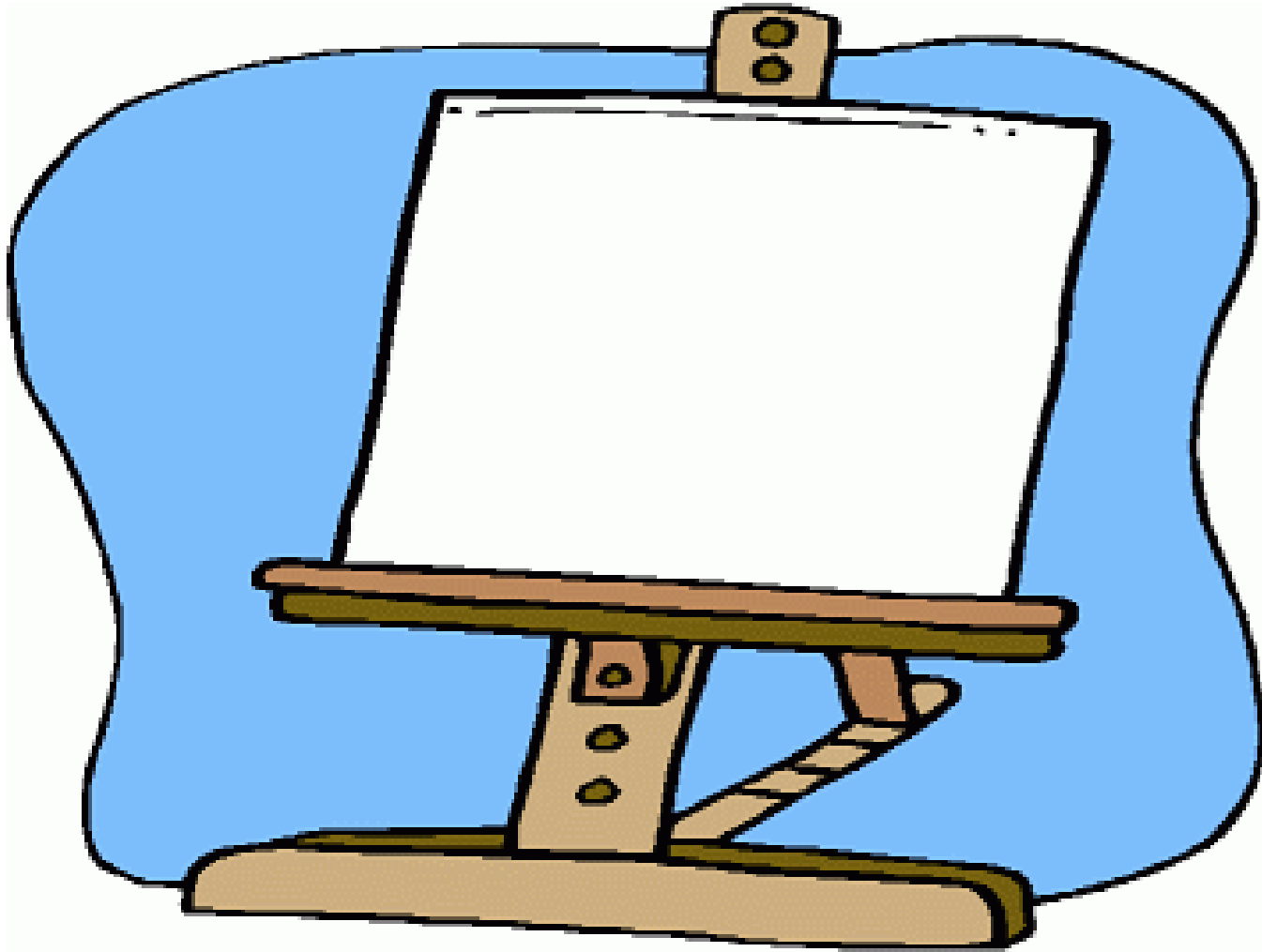
Potassium in Fruit, Juices, Vegetables and Beans



Comments

- Simple
- Easy to read
- Alphabetized
- Listed specific portions
- More comprehensive list
- Too much information
- Contained foods that are not common to the majority
- One sheet double sided requested







Potassium is a mineral needed for nerves and muscles. With reduced kidney function, your kidneys are not able to remove extra potassium from your body. A high potassium level can cause your heart to stop.

Fruit 3 servings/day	Vegetables 3 to 4 servings/day
Low Potassium	
Apple - 1 small or ½ cup applesauce Apricot - 2 fruit Berries: ½ cup blackberries, blueberries, cranberries, raspberries, strawberries Canned fruit: ½ cup apricots, fruit salad, mandarin, peaches, pears, pineapple Cherry, sweet - 10 Clementine, mandarin, tangerine - 1 fruit Coconut, raw - ½ cup Date or fig - 1 *Grapefruit (½) Grapes - 20 Lemon or Lime – 1 fruit Mango - ½ Passion fruit - 2 Peach - 1 Pear - 1 Pear, Asian - ½ Pineapple - ½ cup Plum - 1 Pomegranate - ½ Prune - (3) dried Raisin, seedless - 2 Tbsp Rhubarb (cooked) - ½ cup Watermelon - 1 cup diced Note: Starfruit (Carambola) not recommended in kidney disease	Asparagus - 6 Bean sprouts - ½ cup Beet - 1 small, canned or fresh, boiled Broccoli, fresh or frozen boiled - ½ cup Cabbage - ½ cup Carrot - ½ large or 8 baby carrots Cauliflower - ½ cup Celery - 1 medium stalk Corn - 1 ear or ½ cup Cucumber - ½ cup Eggplant, cooked - 1 cup Green and yellow string beans – 1 cup Kale - ½ cup Lettuce, all types - 1 cup Mushroom: white or shiitake - ½ cup Okra, fresh boiled - ½ cup Onion, fresh or boiled - ½ cup Peas, green - ½ cup (canned or frozen, boiled) Peppers - ½ cup **Potato - double boiled - ½ cup Radish - ½ cup Snow peas - 10 pods raw or ½ cup boiled Spinach, raw - 1 cup Squash, butternut (frozen, boiled) - ½ cup Squash, spaghetti - ½ cup Tomato - ½ small or 4 cherry or 2 Tbsp sauce Turnip, boiled - ½ cup Zucchini, raw - ½ cup
*Grapefruit: Potential drug interaction, speak to your health care team ** Potato: Peel, slice thin, bring to a boil, discard water, add fresh water and boil again	
Fruit	Vegetables
High Potassium	
Ackee Avocado Banana Breadfruit Cantaloupe Guava Honeydew Jackfruit Kiwi Nectarine Orange	Artichoke Beans: adzuki, baked, black, chick peas, kidney, lentils, lima, mung, navy, pinto, soy Bok Choy, boiled Brussels sprouts Mushroom: crimini, oyster, portabello Parsnip, boiled Peas, green – fresh or dry, boiled **Potato: baked, chips, mashed, french fries Pumpkin Rapini, cooked



Final Survey

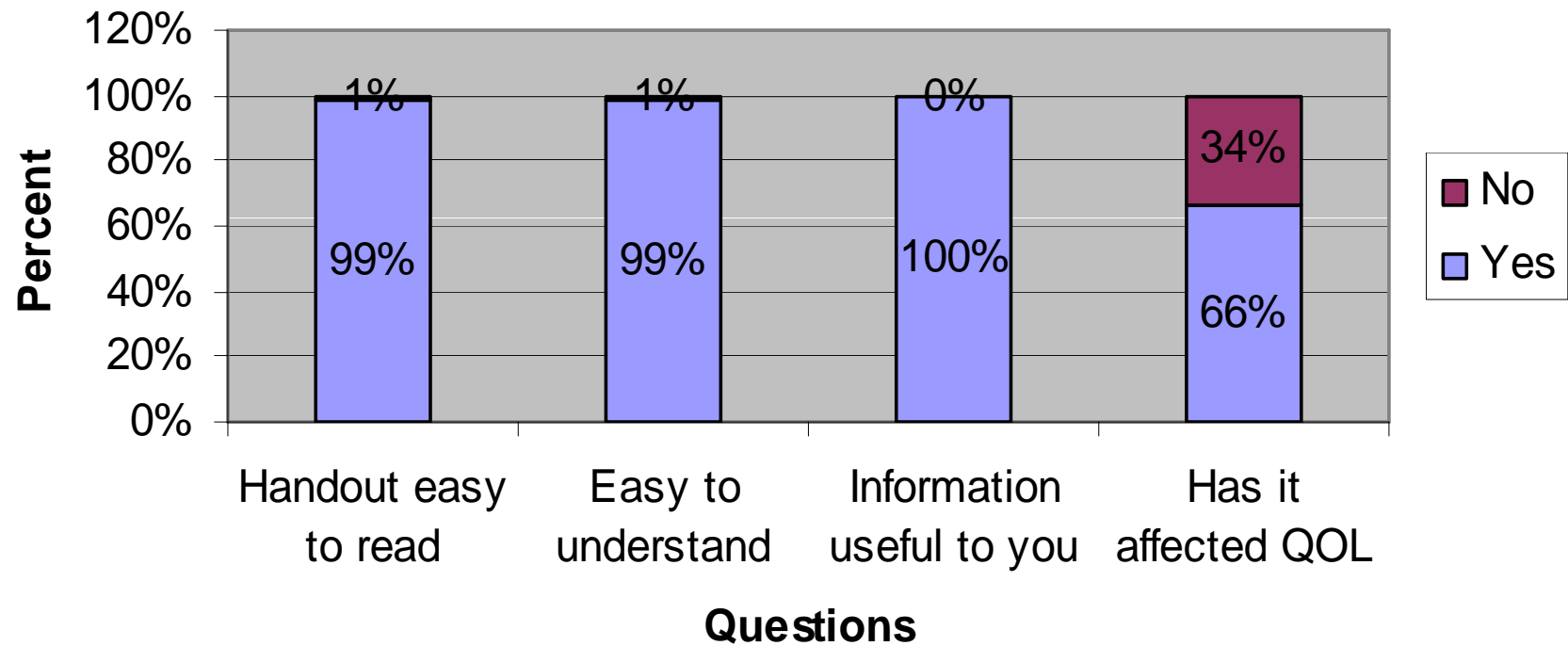


Final Survey

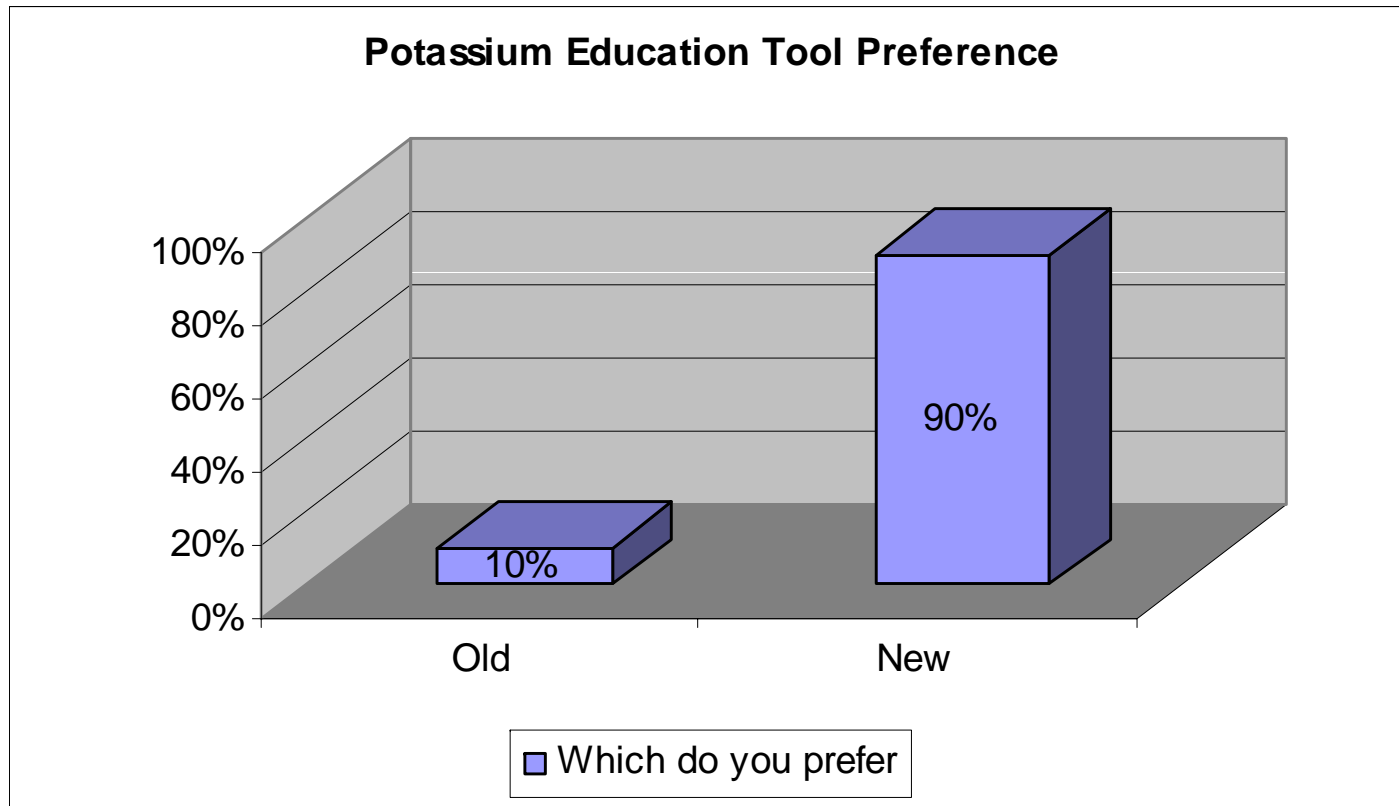
5. Do you feel the new potassium handout has affected your quality of life?
6. How has the new potassium handout affected your quality of life?
7. Which potassium handout do you prefer



New Potassium Education Tool Survey Results York Central Hospital April 2011



Survey Results-New Tool



Comments

- More choices and variety
- Less crowded
- Easy to read
- Liked that there were specific portions and quantities listed

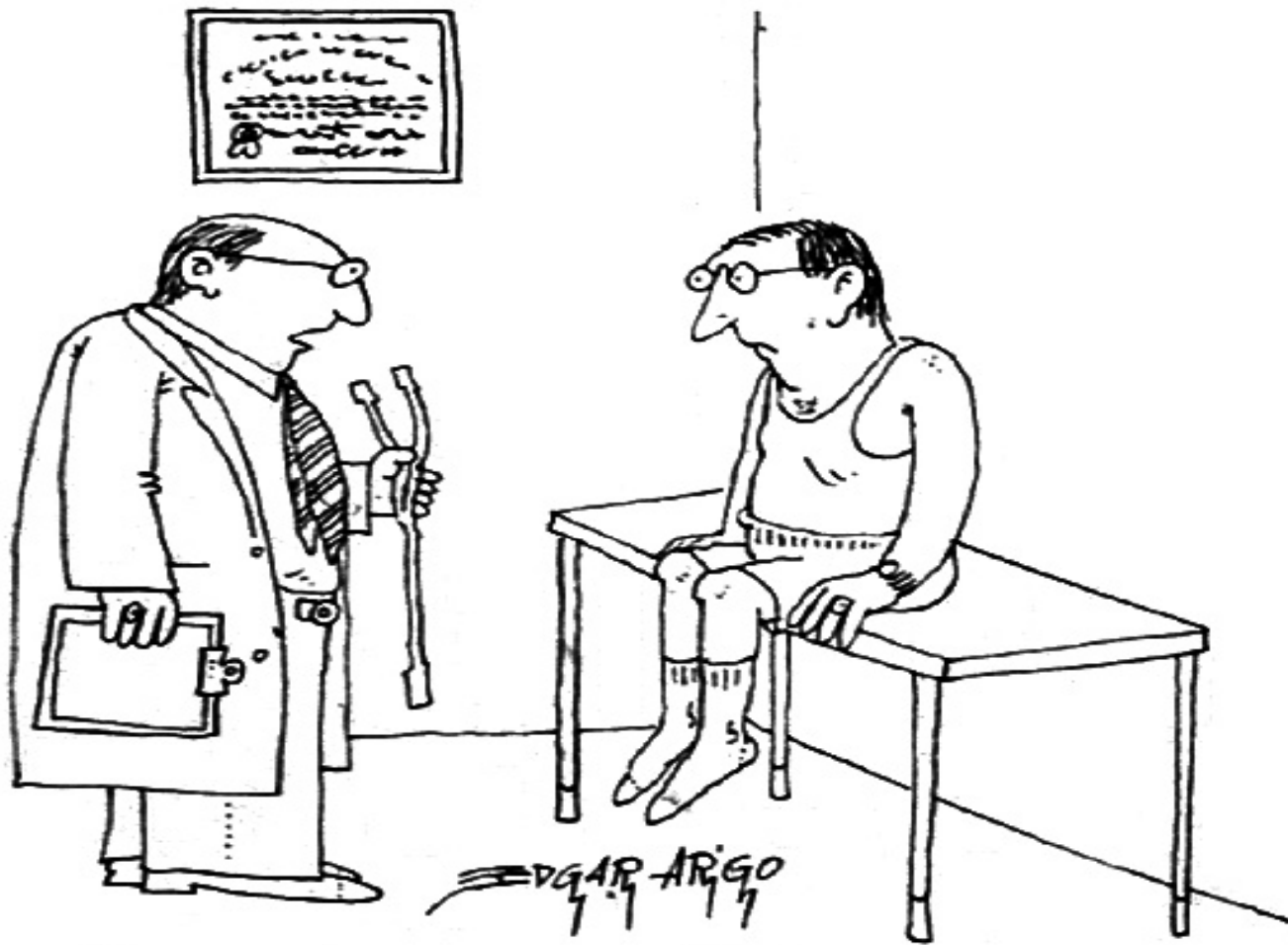


Comments

“It increased my independence in making food choices”

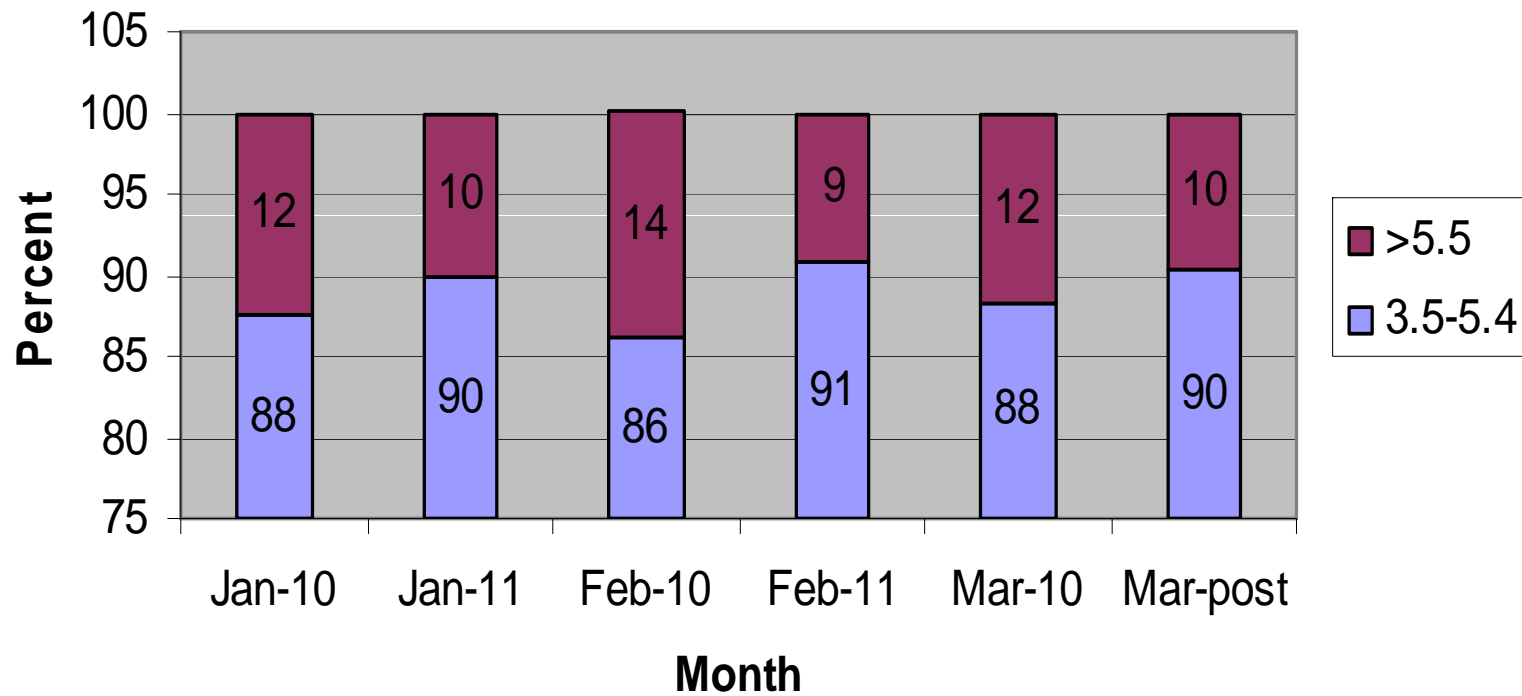
“To compile this list shows caring, dedication on the part of the staff.
Thank You”





**There no improvement, Henry. Are you sure
you're given up *everything* you enjoy?**

Serum potassium levels January-March Pre and Post tool introduction



Self-management

- 422mg. potassium



- 444 mg potassium





Where to go from here?

Journey into a self-management approach to nutrition care:

- Phosphorus Olympics

