



Vegetarian Nutrition

a dietetic practice group of the American Dietetic Association



RD Resources for Consumers:

Vegetarian Diets in Chronic Kidney Disease

Whether you are lacto-ovo vegetarian or vegan, your food choices can be adapted to a diet designed for kidney disease management.

Research shows that a plant-based diet may slow down some complications of chronic kidney disease such as heart disease, protein loss in urine and the progression of kidney damage.

Treatment for kidney disease includes a meal plan that will help lower the levels of protein, potassium, sodium, fluid and phosphorus in your body. Carefully following a meal plan that meets your individual needs will help keep nutrients in your blood at normal levels, lessen the amounts of fluids your body retains and prevent bone loss.

There is no one diet that is right for everyone with kidney disease. And, your individual meal plan will change over time. Your doctor and registered dietitian will determine the levels of protein, potassium, sodium fluid and phosphorus that your meal plan should provide. Your dietitian will explain your meal plan and provide food lists along with cooking and shopping information.

Nutrients of Special Concern

Protein

About two-thirds of protein in your meal plan should come from a variety of high quality protein sources. Below are the best sources of high quality plant proteins, including lacto-ovo choices. Choose a variety of three or more different protein choices each day. Soy protein has been shown to be beneficial with chronic kidney disease. Try to include at least one soy choice in your diet daily.

High Quality Protein Sources

Lower Phosphorus

- Eggs
- Cottage cheese*
- Meat analogues (such as veggie burgers)*
- Seitan
- Unsalted natto (fermented soybeans)
- Tofu

Higher Phosphorus

- Cheese
- Cooked, dried beans and peas
- Edamame
- Milk
- Nut butters
- Soy milk
- Yogurt
- Unsalted nuts

**These foods may contain higher amounts of sodium.*

Source: Nutrition Care Manual

Phosphorus

Phosphorus often needs to be limited, even if blood phosphorus levels are normal. Some vegetarian options such as milk, cheese, yogurt, dried cooked beans and nuts are high in phosphorus. These foods should not exceed recommended amounts. Since phosphate additives found in dark carbonated beverages and commercial iced teas are highly absorbed, other beverage choices are recommended on a low phosphorus diet.

Potassium

Your doctor or dietitian will let you know if you need to avoid fruits and vegetables that are high in potassium. Listed below are some examples.

Examples of high potassium vegetables

Avocado
Beets
Brussels sprouts
Greens (collard, beet, chard, etc.)
Potatoes
Pumpkin
Spinach
Sweet potatoes
Tomatoes
Tomato and vegetable juice
Winter Squash

Examples of high potassium fruits

Apricots
Banana
Honeydew melon
Nectarines
Orange
Orange Juice
Prune Juice

Source: Nutrition Care Manual

Sodium

All foods contain sodium however, processed and canned foods have higher amounts. If you rely on processed vegetarian food, you may be consuming too much sodium.

Examples of High Sodium Foods

Convenience foods:

Frozen meals
Canned or dried soups
Canned beans
Canned vegetables with salt added
Vegetable miso
Processed cheese
Salted snack foods

Meat analogues, examples:

Veggie burgers
Tofu hot dogs
Frozen meal entrée

Condiments:

Soy and teriyaki sauces
Salt, including sea salt
Garlic, onion and seasoned salts

Fluid

Fluid usually does not need to be restricted unless you are in end stage kidney disease. Fluid is defined as anything liquid at room temperature, such as water, tea, coffee, soda, gelatin, ice cream and sherbet. Follow your doctor's or dietitian's instructions regarding fluid intake.



Vitamins and Minerals

Discuss vitamin and mineral supplements with your doctor and dietitian. A vitamin, and possibly mineral, supplement may be beneficial when following a diet modified in potassium, phosphorus and protein.

An over the counter multivitamin may be adequate for your needs. Also, be sure to let your doctor and dietitian know about any dietary supplements or herbal products that you are taking.



More information

Consult with a Registered Dietitian (RD) for a personalized meal plan and nutrition guidance.



Visit www.eatright.org and click on **Find a Registered Dietitian** to find an RD in your area.

Resources

American Dietetic Association. Nutrition Care Manual®. <http://nutritioncaremanual.org>. Accessed February 10, 2010.

Avery-Grant, A. Eating Meatless on Dialysis: A Guide for the Adult Hemodialysis Patient, 1999

Hogan Brookhyser, Joan. Vegetarian Diet for Kidney Disease Treatment, 2009