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ACKNOWLEDGMENTS

Many thanks to all who inspired these recipes, including Native American family members and friends.

A special thank you to Hy-Vee®, Inc., whose products, including their excellent store brands, are among the preferred ingredients for the dishes here. Not only does this grocer carry healthy foods, many of which contain no additives, the store also offers vegan and vegetarian versions of various products. In addition, Hy-Vee® employees assisted the writer with researching nutritional values; without the excellent customer service at Hy-Vee® this cookbook could not have been written.

Thanks also to Cynthia Quetsch, Paul Sullivan & Michelle Wessler for the new kitchen.

Hy-Vee®, registered trademark of Hy-Vee, Inc.
I was out doing errands when I received a call from a dear friend over a year ago. She was calling with sobering news. Her diabetes was worse, her kidneys were damaged, she might need to have dialysis eventually.

So what did she do? She took matters into her own hands – literally. She started researching how to deal with her kidney issues and diabetes. Her goals were to feel healthier, perhaps to slow the kidney disease progression and improve renal function, and to better manage the diabetes, reducing the need for as much insulin.

Well dear readers, I am delighted to report that partly due to her dietary changes, my friend is more energetic, has been able to delay dialysis for a while, now needs less insulin, and what started out as a self-help initiative for her own personal survival has received positive feedback from physicians.

Subsequently it seemed appropriate to compile a second, shorter collection featuring native dishes adapted to a diabetic/kidney friendly diet. Here the writer honors her Native American heritage by sharing recipes highlighting foods from the North American eastern woodland and southeastern culture areas as well as ingredients indigenous to South America.

Although she insists that these recipes are not a cure for chronic illness, if you choose to follow them she hopes you will see positive outcomes just as she has.

- Briony Aaron Tomalesky, Ph.D.
The author is a retired nurse diagnosed with chronic kidney disease and type two diabetes, not a registered dietitian or a professional chef.

These recipes are not intended as medical advice but represent only personal experience with renal- and diabetic-friendly vegetarian or vegan ingredients from plants indigenous to the Americas. Nor do they comprise a complete collection but are a limited number of portion-controlled recipes using Native American foods. Nor is this collection a promotion of veganism. It’s simply a compilation of recipes using indigenous American flora and it’s intended for those who choose to follow a vegetarian or vegan menu and who also have diabetes and/or kidney disease, therefore must limit or even avoid certain foods.

At first glance, these recipes may seem unusual in that they require no dairy or wheat; anything calling for wheat flour, white sugar, milk, butter or other such contributions to the evolution of so-called native dishes has been excluded.

For example, the corn dishes list no animal milk as an ingredient since most native Americans had limited access to dairy products until the advent of the Europeans – not even from bison or wild ungulates very often (if at all) except for llama milk in South America. Recipes omitting dairy also might be helpful to renal patients who must limit or avoid milk products.

Some dishes identified with Native America and calling for ingredients not available before European arrival have been omitted as well. Delicious fry bread, for instance, is not included despite that it represents Native American resilience and ability to adapt and survive. Created from poor quality commodities sent to reservations weevil-infested wheat flour, white sugar, and rancid lard were not part of a First American’s pre-colonial diet.

Other foods common to the modern diet, both native and non-native, weren’t present in North America before the arrival of Columbus so most have been excluded too.

Apples, for instance, were introduced from Europe, although one species of crabapples is indigenous to the Americas. While crabapples may be listed in a recipe here, unless one grows one’s own native trees, they’re difficult to find so
substitution is inevitable.

Black pepper wasn't available in the Americas until after European contact; South Americans used “pink pepper,” from Piper nigrum, distinct from the more-common dried "pink peppercorns," which are actually the fruits of a plant from a different family. The bark of Drimys winteri ("Canelo" or "Winter's Bark") was a substitute for pepper in cold and temperate regions of Chile and Argentina where it was easily available, and chili pepper was used similarly to how black pepper is used today for spicy “heat.”

There were no cucumbers, watermelons, or cantaloupes, no Brussels sprouts or broccoli or cauliflower or cabbage or kale or lettuce, no peas, bananas or okra. At least none were found at the Eagle Butte site said to be about 10,000 years old.

Today when we speak of mealtime we think in terms of three meals a day with main meals served in courses. Such generally was not the case with native people in pre-colonial North America, many of whom ate one or two regular meals daily (when not fasting for spiritual purposes) and snacked on corn, nuts, and fruits during the day. For quite a few neolithic groups dinner could be any time one felt hungry enough to dip into a pot of savory stew, though many also enjoyed communal meals.

Among the Southeastern tribes, as well as other groups, a morning meal often was cornmeal-based while stews and soups were afternoon or evening food. Meats, fish, vegetables, and fruits were stewed, roasted, smoked, and dried, though meat wasn’t always served as a main dish except after successful hunts or if small game (rabbit, squirrel, quail, etc.,) was available. Instead, native cooks combined smoked or dried meat with dried beans and dried corn or hominy and animal fat and water to stew over the fire, especially in winter.

Seasonal eating also was the norm. People enjoyed fresh game and fresh fruits and vegetables during hunting and growing months when they also dried or smoked or jerked meat and fish for colder times. Fresh fruit in summer and fall became dried fruit in winter. Corn and beans were available the year around, either fresh or dried. Wild greens (poke, watercress, wood sorrel among them) usually were gathered in spring. Spring and fall mushrooms also were available.
Ground nuts (peanuts) could be grown in summer and hickory nuts, walnuts, and pecans gathered in autumn. Soft-shelled (summer) squashes had a fairly long growing season while harder shelled fruits like pumpkins kept well in colder weather. Potatoes also were available seasonally, though not the large Burbank-modified tubers familiar to us today. Sweet potatoes and peppers became part of the North American daily diet after finding their way from the south before the end of the first century A.D.

Because modern Americans have become accustomed to a daily diet high in salt, fat, sugar, and less nutritious carbohydrates and starches, some might find that many of the foods presented here have flavors different from – and often more subtle than – today’s usual dishes. However, once a person grows accustomed to healthier ingredients not masked by preservatives, chemicals, and starchy or sugary additives, the flavors can speak for themselves; one really can taste the corn or beans or squash, not the lard or sugar.

It’s worth noting that illnesses which beset people today, especially among American Indians – hypertension, heart disease, diabetes, and alcoholism – were rare or absent from Native American populations prior to European arrival. When wheat flour, cane sugar, pork products, and dairy items became available the incidence of disease rose dramatically, especially on reservations. Today some indigenous groups have established pilot programs emphasizing traditional ingredients and preparation and their morbidity rates have decreased.

The theory that we are genetically predisposed to do well on specific ancestral diets has its proponents, this writer among them. Today many Americans, native heritage or not, live on refined flour, white sugar, pork lard, shortening, domestic meats, and lots of salt, all of which are ingredients in much reservation cookery as well. That morbidity rates from diabetes, hypertension, and heart disease are elevated is not surprising, especially on reservations (except among those eating indigenously) as well as in the American population at large.

Whether of Native American or European or Mediterranean or Asian or Middle Eastern descent, those who eat seasonally and eat what their ancestors ate, such as fish, very lean meats like venison (rightly portioned,) wildfowl now and then, a certain amount of beneficial fat, along with one or two starches, whole grains, greens and fruit,
might live longer, healthier lives.

However, this cannot be guaranteed and the recipes in this collection do not constitute cures for illness.

Therefore, *it is imperative to consult with the care team before preparing or consuming any of these recipes!* Any or all ingredients or dishes should be modified or even omitted if appropriate.

- H. K. Yeager
1 BREADS

Nutrient values for the recipes here come primarily from the USDA and the National Institutes of Health while some are from product distributors, manufacturers, and grocers, including Hy-Vee®, Inc.

Daily values for stages 1-3 CKD recommended by the NIH are 800-1200 mg phosphorus, 1500-2700 mg potassium, 2000-3000 mg sodium, and 0.36 grams of protein per pound of body weight. Some recommend even less phosphorus, 700-800 mg a day, others less protein, as little as 35 grams a day, perhaps lower. The American Heart Association suggests using less sodium, 1500 mg or 1.5 grams daily.

Food values listed sometimes are for raw ingredients. However, cooking often modifies totals, lowering phosphorus, potassium, and sodium. Therefore the nutritional totals given for each ingredient and each dish or serving may actually be lower than stated, higher only occasionally.

Because manufacturers can change ingredients or amounts which then alter values from what someone previously might have read on product packages, it’s good to check labels before each purchase, maybe even to contact the companies for updated information.

At present food producers are not required to list phosphorus content on labels and many do not. But while some don’t assay phosphorus, quite a few do know how much an item contains and usually will share that knowledge with the consumer when asked.

It’s wise as well to try to find out how certain ingredients are processed. For instance, a certain kind of tortilla the manufacturer says is vegan contains enzymes which could be either plant or animal derived and the only way to learn which is to inquire.

Since many renal patients often feel tired, most of these recipes are fairly simple and relatively quick to prepare. Even those requiring a longer time to fix, like baked cornbread pudding or tamales, offer built-in rest times while the dough rises or the baked goods cook or cool.
2 BREADS

It was Native Americans who first invented chemical leavening, using ashes for grain cakes the way modern cooks use baking powder. Ashes themselves usually weren’t added to baking ingredients directly due to their unpalatability but were processed first by leaching the ashes with water through a woven sieve or basket and collecting the lye water in a container below the leaching equipment. Native Americans also soaked field corn in lye made from wood ashes which made certain B vitamins bio-available.

However, specific mineral and nutritional values of wood ash vary greatly, depending on what was present in the tree, but most wood ash has potassium, calcium and magnesium in relatively large amounts so it’s probably better for renal patients not to use it. On the other hand, baking soda and baking powder contain a lot of sodium and phosphorus and low sodium baking powder has a relatively large amount of potassium.

Native Americans likely did not use or even have access to yeast for lightening breads, either. Therefore baking authentic dishes with all-American-indigenous ingredients can be problematic for renal and diabetic patients.

One solution is to substitute yeast for baking powder, which works well in certain baked goods but isn’t an original native American ingredient. Another strategy would be to use baking soda or baking powder instead of lyed wood ashes and consume only small portions of the finished product. Or leavening can be omitted altogether with the result that the baked item will be denser, flatter, and tougher than if a rising agent were used. This is fine for flatbreads like tortillas or skillet cornbread but doesn’t work well if the item requires a good deal of rise to be edible, such as masa or cornmeal biscuits.

Despite certain difficulties and except for the uses of modern stoves instead of cooking fires, modern cooking utensils instead of flat stones or boiling baskets or coals, and unavoidable substitutions for indigenous ingredients no longer available or unsafe to consume, these recipes still are as authentically Native American as possible.
Cornbread <735 cal   167 mg P   <242 mg K   <0.2-97 mg Na
1/8 small cake  92 cal   21 mg P   <124 mg K   <49 mg Na

1 C yellow corn meal  480 cal   167 mg P   242 mg K
Very small Pinch salt*   96 mg Na (can be omitted)
½ T maple sugar*   15.9 cal   0.15 mg P   <5.5 mg K   0.2 mg Na
1-2 C boiling water
2 T (more if needed) corn oil (not bear grease as in the past) 238.8 cal

Stir salt & sugar into corn meal, mixing well
Add enough boiling water to make thick batter
Stir well until mixed completely
Let sit a few min so corn meal absorbs the moisture
Place in warm oiled skillet** (not on oiled stone in coals as in the past)
Cook on low to med heat 15-25 min or until edges pull away from sides
Place 2\textsuperscript{nd} oiled skillet on top of skillet containing the corn bread
Flip skillets so uncooked side of bread is on surface of 2\textsuperscript{nd} skillet
Cook 15-25 min more until light brown at edges then remove from heat
When cool enough loosen cornbread carefully with wide spatula
Place plate upside down over cooled skillet
Flip skillet so cornbread falls onto plate

Freezes fairly well but needs to be warmed in skillet on med heat after thawing
  *if care provider allows
  **cast-iron works best
Cornmeal Dumplings

<table>
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<tr>
<th>Ingredient</th>
<th>Calories</th>
<th>Phosphorus</th>
<th>Potassium</th>
<th>Sodium</th>
<th>Protein</th>
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</thead>
<tbody>
<tr>
<td>1 C cornmeal</td>
<td>480 cal</td>
<td>167 mg</td>
<td>242 mg</td>
<td>96 mg</td>
<td>0.8 Gm</td>
</tr>
<tr>
<td>Pinch salt (can omit for lower Na total or increase but add increase to total)</td>
<td>96 mg Na*</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2 T chopped green onion tops**</td>
<td>3 cal</td>
<td>4 mg</td>
<td>31.2 mg</td>
<td>0.4 mg Na</td>
<td>0.2 Gm protein</td>
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<tr>
<td>¼ C pureed summer squash***</td>
<td>6 cal</td>
<td>10.4 mg</td>
<td>69 mg</td>
<td>0.7 mg Na</td>
<td>0.3 Gm protein</td>
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<tr>
<td>2 C broth (recipe in Soups)</td>
<td>&lt;120 cal</td>
<td>&lt;184 mg P</td>
<td>&lt;904 mg K</td>
<td>32.8 mg Na</td>
<td>2 Gm protein</td>
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Bring broth to boil in saucepan
Mix all other ingredients together, add sm amt water if dough too dry
Pinch off pcs of dough, gently roll in palms to form 1” balls
Drop into boiling broth
Shake pot gently to make sure each dumpling covered by liquid
Do not stir
Boil about 10 min
Makes ca 1 doz sm dumplings/3 svgs

*Check with care team before using table salt
** if wild onion unavailable
***can sub 2 T pureed crabapples if available or regular applesauce

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<tr>
<th>Ingredient</th>
<th>Calories</th>
<th>Phosphorus</th>
<th>Potassium</th>
<th>Sodium</th>
<th>Protein</th>
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<tr>
<td>10 cal</td>
<td>2.1 mg P</td>
<td>27 mg K</td>
<td>0.1 mg Na</td>
<td></td>
<td></td>
</tr>
<tr>
<td>mixed w/ ½ T maple sugar</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>15.9 cal</td>
<td>0.15 mg P</td>
<td>&lt;5.5 mg K</td>
<td>0.2 mg Na</td>
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</tr>
<tr>
<td>or regular unsweetened applesauce</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>13 cal</td>
<td>1.5 mg P</td>
<td>22.6 mg K</td>
<td>0.6 mg Na</td>
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adjust nutrient totals accordingly
5  BREADS

**Corn Tortillas**  832 cal   490 mg P   680 mg K   11.4 mg Na   21.2 Gm protein
1 tortilla   83 cal   49 mg P   68 mg K   <1.2 mg Na   <2.2 Gm protein

2 C white or yellow masa harina  832 cal   490 mg P   680 mg K   11.4 mg Na   21.2 Gm protein
Pinch salt* (can omit)   96 mg Na
1 ½ C warm water

Measure salt (if using) and 2 C masa into bowl
Add 1 C warm water, stir til water absorbed
Add remaining water a little at a time to form dough
Knead into ball - if too sticky add a little more masa, if too stiff add some water
Let rest 20 min or so.
Separate into about 12 golf ball size chunks
Place ball on wax paper, cover w/wax paper, press flat w/sm iron skillet
Place tortillas on another sheet, cover to keep from drying out
Heat skillet to med, add tortilla
Flip after 10 sec then cook ea side 1-2 min
Makes approx 10 six-inch tortillas to bake or fry

Can serve right away or store in fridge in airtight container
Also can freeze w/tortillas separated by pcs wax paper in freezer container

*Check with care team before using table salt
6 BREADS

Masa Biscuits  686 cal  356 mg P  401 mg K  606 mg Na  10.6 Gm protein
1 biscuit   ca 57 cal  30 mg P  ca 33 mg K  51 mg Na  0.9 Gm protein

Native American Ingredients except baking powder & coconut milk

1 C masa  416 cal  245 mg P  340 mg K  5.7 mg Na  10.6 Gm protein
1 T cornstarch  91.5 cal  12 mg P  1.4 mg K  2.1 mg Na
1 tsp maple sugar  10.6 cal  0.1 mg P  8.2 mg K  0.3 mg Na  negligible protein
1 tsp baking powder*  2.4 cal, 98.6 mg P, 0.9 mg K, 477 mg Na
1 T corn oil  120 cal
1 C coconut milk**  45 cal  417 mg P****  50 mg K  25 mg Na  negligible protein

Combine dry ingredients
Stir corn oil into coconut milk then cut into dry ingredients
Drop generous spoonfuls onto lightly oiled baking sheet
Bake 12 min @ 450

12 biscuits

*instead of clean leached wood ashes
**Manufacturer values for specific brand; can sub water if desired
***USDA phosphorus value for generic product
Savory Mush  1013 cal   347 mg P   535 mg K   97.5 mg Na   0.5 Gm protein
        1 slab  84 cal   29 mg P   45 mg K   8 mg Na   negligible protein

2 C cornmeal   960 cal   334 mg P   484 mg K
1 C cold water
Pinch salt*   96 mg Na (can omit)
3 C water
2 T chopped onion (wild or regular)  4 cal   2.9 mg P   14.6 mg K   0.4 mg Na   0.1 Gm protein
½ T minced garlic  6.2 cal   6.3 mg P   16.5 mg K   0.7 mg Na   0.3 Gm protein
1 T chopped red bell pepper   3 cal   2.4 mg P   19.6 mg K   0.4 mg Na   0.1 Gm protein
1 tsp corn oil  40 cal

Combine cornmeal & cold water in bowl
Bring 3 C water to boil in saucepan on high heat, add Pinch salt (can omit)
Stir onion, garlic, pepper into cornmeal in bowl, mixing well
While water is heating, slowly add cornmeal mixture, stirring constantly
When mixture starts to bubble, reduce heat to low
Simmer ca 10 min, continuing to stir
Pour into lightly oiled dish or pan & refrigerate overnight
        24 thin slices or 12 slabs

*check with care team before using salt
Some dietitians claim that boiling high-potassium foods (peeled potatoes, sweet potatoes, carrots, beets, winter squash, and rutabagas) then draining again can leach up to 41% of the potassium and may also leach phosphorus, sodium, and some oxalates.

According to SELF Nutrition Data, cooking reduces phosphorus in raw food up to 25% and cooking then draining can reduce it up to 35%. Similarly, cooking reduces raw food’s potassium content by as much as 30% while cooking and draining is said to lower it up to 70%. Sodium can be lowered up to 25% by cooking raw food and up to 55% if raw food is cooked and drained. Some items might become quite soft, however, even mushy.

Rinse, peel, wash large/dense vegetables in warm water then soak in 10 times more warm water than vegetables at least 2 hours. Drain, rinse again in warm water, cook in 5 times more water than volume of ingredients, drain once more.

Preparing fresh and whole foods usually is preferable to using already processed products but sometimes it’s easier for an energy-challenged renal patient to cook drained and well-rinsed, low-sodium canned vegetables. Some foods can be microwaved in small amounts of water to “sauté” then drained again.

⅛ C green beans

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<th>Potassium (mg)</th>
<th>Sodium (mg)</th>
<th>Protein (Gm)</th>
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<tr>
<td>Frozen, cut</td>
<td>22.2</td>
<td>16.1</td>
<td>131.5</td>
<td>1.7</td>
<td>1.1</td>
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<tr>
<td>Canned, cut</td>
<td>20</td>
<td>12.6</td>
<td>100</td>
<td>15</td>
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⅛ C corn

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<tr>
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<th>Potassium (mg)</th>
<th>Sodium (mg)</th>
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<tr>
<td>Frozen</td>
<td>66.4</td>
<td>64.8</td>
<td>191</td>
<td>10</td>
<td>2.1</td>
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<tr>
<td>Canned</td>
<td>70</td>
<td>28.4</td>
<td>140</td>
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<td>2</td>
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CKD patients are told to limit or avoid tomatoes but they’re included here because the mineral content of certain varieties is within recommended parameters if consumed in small amounts. Also recommended to be limited are potatoes. The wild potato wasn’t the same as what we use now but small amounts of the modern version carefully prepared can be eaten with medical approval.
The Three Sisters, corn, squash and beans, often were eaten together. Corn is about 10% protein but lacks lysine and tryptophan; beans, rich in both, complete the protein and squash adds vitamin A. In order to limit minerals, green beans are used for limas, summer squash for hard-shelled, since green beans and softer-shelled squashes are lower in phosphorus and potassium.

It’s said that cornstarch was “discovered” by a “white” man late in the 19th century but it’s difficult to believe that American Indians didn’t derive starch from maize so cornstarch also is included in this collection, both as a thickening agent and as a breading or coating ingredient. Arrowroot can be substituted for cornstarch.
Native ingredients except for baking powder, spread & applesauce*

1 ¾ C masa harina 728 cal <429 mg P 595 mg K <10 mg Na <19 Gm protein
1 C + 2 T hot water
½ C unsweetened applesauce 26 cal 3 mg P 45.2 mg K 1.2 mg Na 0.1 Gm protein
2 T vegan spread,** melted 94.4 cal 0 P 9 mg K <164 mg Na (brand mfg values)
(not all ingredients are indigenous; omit salt since spread contains sodium)
½ tsp baking powder (not wood ash) 1.8 cal <74 mg P <0.7 mg K <358 mg Na
¼ C broth (soup section) <15 cal 3 mg P <32 mg K <7 mg Na <0.1 Gm protein
1 C diced summer squash 36 cal 52.2 mg P 306 mg K 0 Na 1.6 Gm protein
1 C 0-added Na canned corn 140 cal 130.4 mg P 280 mg K <20 mg Na 4 Gm
2 C chopped wild, green or reg onion 48 cal 64 mg P 499.2 mg K 6.4 mg Na 3.2 Gm protein
½ C chopped bell pepper 12 cal 9.2 mg P 78.4 mg K 1.6 mg Na 0.4 Gm protein

Lidded casserole dish (or cover w/foil)
Lidded cooking pot lg enough for cass dish to fit inside
Rack/insert to keep bottom of dish away from hot surface

Bring 1 -2 C water to boil in lg saucepan then turn to simmer
Drain corn, rinse, set aside
Puree ¼ C squash, set aside
Measure masa into bowl, add hot water, mix well
Measure applesauce & spread into larger bowl, beat til fluffy
Stir in 1/3 masa/water mixture, mix well, repeat til all masa is mixed in
Stir in broth then add rest of ingredients & mix well
Pour batter into cass dish, cover, place on rack in lg pot of boiling water
Cover lg pot, steam @med heat ca 1 hr
Check water level to add water if needed
Carefully lift cass lid or foil toward end of hr to see if firm
Turn off heat, let cool then remove casserole, let cool few min more
6-8 svgs
*unless native crabapples or crabapple sauce available
**not made from native flora but not bear grease, either!
Green Bean/Tomato Bake  368 cal  197.3 mg P  891 mg K  525.5 mg Na  11 Gm protein
1 svg  122.6 cal  65.7 mg P  297 mg K  175 mg Na  <3.7 Gm protein

Native ingredients or modern versions of them:

2 C frozen cut grn bns  88.8 cal  64.4 mg P  526 mg K  6.8 mg Na  4.4 Gm protein
Sm Roma tomato, coarsely chopped 11.2 cal  14.9 mg P  147 mg K  3.1 mg Na  0.5 Gm protein
2 T diced wild onion (or green on)  4 cal  2.9 mg P  14.6 mg K  0.4 mg Na  0.1 Gm protein
½ C broth (recipe in SOUPS)  <15 cal  <23 mg P  <113 mg K  4.1 mg Na  0.5 Gm protein
2 tsp cornstarch*  61 cal  8 mg P  <0.5 mg K  1.4 mg Na
Sm amt corn oil  20 cal
Pinch salt (can be omitted)  96 mg Na
3-4 corn meal croutons, crumbles  168 cal  58 mg P  90 mg K  16 mg Na  negligible protein

Thaw, rinse, drain green beans
Microcook in sm amt water until green beans begin to soften
Stir in tomatoes & onion, microcook few sec more
Add Pinch salt if approved
Dissolve cornstarch in broth, stir into veggies
Stir in crumbled croutons
Pour mixture into lightly oiled casserole dish or cast iron skillet
Bake 20-30 min @350

3 svgs

*can sub arrowroot, decrease totals accordingly
Squash/Tomato/Pepper Bake  

<354 cal  <184 mg P  <896 mg K  <124 mg Na  <4 Gm prot

Native American Ingredients or modern versions of them:

1 C sliced summer squash  36 cal  52.2 mg P  306 mg K  0 Na  1.6 Gm protein
1 C diced sweet pepper  <38 cal  <25 mg P  <224 mg K  2.7 mg Na  1.2 Gm protein
1 sm Roma tomato, chopped  11.2 cal  14.9 mg P  147 mg K  3.1 mg Na  0.5 Gm protein
2 T diced wild onion (or green on)  4 cal  2.9 mg P  14.6 mg K  0.4 mg Na  0.1 Gm protein
½ C broth  <15 cal  <23 mg P  <113 mg K  4.1 mg Na  0.5 Gm protein
2 tsp cornstarch*  61 cal  8 mg P  <0.5 mg K  1.4 mg Na
Sm amt corn oil  20 cal
Pinch salt (can be omitted)  96 mg Na
3-4 corn meal croutons  168 cal  58 mg P  90 mg K  16 mg Na  negligible protein

Lightly oil sm casserole dish
Place layer of squash rounds on bottom
Sprinkle diced pepper, tomato, onion on top of squash
Repeat layers
Dissolve cornstarch in broth and slowly pour over vegetables
Bake at 350 until peppers are fork-tender
Crumble corn meal croutons over top of casserole, bake few min more
  2 sm svgs

*can sub arrowroot, decrease totals
Three Sisters Casserole  489.5 cal  290 mg P  963.4 mg K  49.6 mg Na  4.7 Gm prt
¼ casserole  122.4 cal  72.5 mg P  <241 mg K  12.4 mg Na  <1.2 Gm protein

Native ingredients or modern versions:

1 C sliced summer squash  36 cal  52.2 mg P  306 mg K  1.6 Gm protein
1 C no Na added cut green beans  40 cal  25.2 mg P  200 mg K  30 mg Na  0.4 Gm protein
1 C no Na added cream corn*  140 cal  131.2 mg P  248 mg K  negligible Na  2 Gm protein
¼ C chopped wild onion (or regular)  60 cal  8 mg P  62.4 mg K  0.8 mg Na  0.4 Gm protein
1 tsp cornstarch**  30.5 cal  4 mg P  <0.5 mg K  0.7 mg Na
¼ C broth  <7.5 cal  <11.5 mg P  <56.5 mg K  <2.1 mg Na  <0.3 Gm protein
Sm amt corn oil  15 cal
4 corn meal croutons, crumbled  168 cal  58 mg P  90 mg K  16 mg Na  negligible protein

Lightly oil casserole dish, set aside
Rinse/drain grn bns, optional to soak & parboil
Microwave corn 2-3 min in covered med-size bowl
Stir in green beans, microwave 2 min more
Stir in squash cubes, microwave 2 min more
Stir in onion
Dissolve cornstarch in broth, mix well, stir into veggie mix
Bake in casserole dish 20-30 min @ 350 or until veggies tender
Last 5 min baking time sprinkle crouton crumbs over top of casserole
        4 sm svgs

*contains no dairy as the “cream” is cornstarch; can sub reg corn but increase cornstarch
**may sub arrowroot & decrease totals
Spicy Green Beans & Grits  786 cal  <436 mg P   1002 mg K  <360 mg Na  <20 Gm prot  
1 svg  262 cal  145 mg P  334 mg K  <120 mg Na  6.5 Gm protein 

Native ingredients or modern versions of them:

1 C no Na added cut green beans  40 cal  25.2 mg P  200 mg K  30 mg Na  0.4 Gm protein 
1 C sliced summer squash  36 cal  52.2 mg P  306 mg K  1.6 Gm protein 
1 sm can no added Na mushrooms* 35 cal  77 mg P  125 mg K  225 mg Na  4 Gm protein 
¼ C chopped wild onion (or regular)  60 cal  8 mg P  62.4 mg K  0.8 mg Na  0.4 Gm protein 
1 T diced jalapeno (or less)  4 cal  3.6 mg P  34.7 mg K  0.4 mg Na  0.1 Gm protein 
¼ C broth  <7.5 cal  <11.5 mg P  <56.5 mg K  <2.1 mg Na  <0.3 Gm protein 
1 T cornstarch* or less dissolved in ¼ C water  91.5 cal  12 mg P  1.4 mg K  2.1 mg Na 
Pinch salt (optional)  96 mg Na 
1 C cooked hominy grits  512 cal  245.6 mg P  216 mg K  2.8 mg Na  12.8 Gm protein 

Rinse/drain grn bns (optional to soak separately, rinse, parboil & drain 1st) 
Wash squash, dice half then peel & puree (or parboil & mash) other half 
Microwave diced squash in sm amt water until slightly softened 
Add green beans & microwave 1 min 
Mix green beans, diced squash, grits, mushrooms, jalapenos w/puree & broth 
Stir in cornstarch water if needed for thickening 
Pour into casserole dish & bake 20-30 min @ 350 
   3 svgs

*can sub 1 tsp arrowroot “flour”  <10 cal  negligible P, K, Na, protein  decrease totals
Veggie-Wild Rice Casserole  590 cal  517 mg P  1119mg K  <356 mg Na  14.7 Gm prot
1 svg  <148 cal  129 mg P  <278 mg K  89mg Na  <3.7 Gm protein

1 C no Na added cut green beans  40 cal  25.2 mg P  200 mg K  30 mg Na  0.4 Gm protein
1 C no Na added cream corn  140 cal  131.2 mg P  248 mg K  negligible Na  2 Gm protein
1 C sliced summer squash  36 cal  52.2 mg P  306 mg K  1.6 Gm protein
1 sm can no added Na mushrooms*35 cal  77 mg P  125 mg K  225 mg Na  4 Gm protein
¼ C chopped wild onion (or regular)  60 cal  8 mg P  62.4 mg K  0.8 mg Na  0.4 Gm protein
¼ C broth  <7.5 cal  <11.5 mg P  <56.5 mg K  <2.1 mg Na  <0.3 Gm protein
1 T cornstarch** dissolved in ¼ C water  91.5 cal  12 mg P  1.4 mg K  2.1 mg Na
Pinch salt (optional)  96 mg Na
1 C cooked wild rice (optional)***  160 cal  200 mg P  120 mg K  0 Na  6 Gm protein
Sm amt corn oil for casserole dish  20 cal

Rinse/drain green beans
Wash summer squash, dice half then peel & puree (or parboil & mash) half
Mix green beans, corn, diced squash, wild rice & mushrooms with puree & broth
Stir in cornstarch water if needed for thickening
Pour into lightly oiled casserole dish & bake 30-45 min @ 350

4 sm svgs

*Hy-Vee® brand
**can sub 1 tsp arrowroot “flour”  <10 cal negligible P, K, Na, protein decrease totals
***producer’s values
While Native Americans did not sit down to a chef’s salad with spinach and iceberg lettuce laced with deli meats and topped with boiled eggs and bacon bits at lunch, greens and fruits were part of the diet and were enhanced with a variety of flavorings, including juniper berries and wild cinnamon.

However, juniper is a powerful diuretic. Certain varieties of juniper berry contain safe, low amounts of Thujone, while other varieties contain high levels and can make one very sick. The common juniper, Juniperus communis, is the variety most often used to make gin, medicines and food dishes, as it is considered safe for human consumption. Many “mainstream” medical practitioners caution against its use in patients with kidney disease, though. A few others claim that because the crushed berry is vastly different from juniper oil it is safe for those with renal impairment. **Be sure to check with care team before deciding to add it to recipes.** The author no longer uses it and even though it may appear in an ingredients list somewhere, it always can be omitted!

Some recipes here call for wild cinnamon, slightly different from Asian varieties of the ground-up imported bark commonly found in grocery stores. American cinnamon is a tree-like bush native to Florida and tropical America. It isn’t readily available today so commercial cinnamon can be substituted in any recipe calling for the American wild variety.

Allspice is the dried “green” fruit of Pimenta dioica native to the Greater Antilles, southern Mexico, and Central America, and is available at most grocery stores.

Diabetic renal patients face special dietary challenges since following a diabetic diet means eating whole grains and fruits and vegetables like tomatoes, oranges, spinach, etc., sometimes contraindicated or to be eaten sparingly on stricter renal diets. Portion control, therefore, is even more important, which is why most recipes here yield much smaller servings than a lot of people are used to.

Yet what many miss most is the flavor and texture of familiar or favorite foods, not necessarily large servings. Preparing smaller amounts allows a person to enjoy preferred foods which might not be permitted otherwise. This also removes the temptation to overeat.
However, a larger batch can be made with portions to be saved for later, though some dishes (like salads!) do not keep well or can’t be frozen so should be prepared as one or two servings.

Again, taste and texture matter more than a filled plate.
Corn Salad*  226.5 cal  151.7 mg P  465.1 mg K  23 mg Na  4.9 Gm protein
1 svg  113 cal  75.8 mg P  232.5 mg K  12.5 mg Na  <2.5 Gm protein

Ingredients native to the Americas or related to indigenous ingredients:

1 C 0-added Na canned corn  140 cal  130.4 mg P  280 mg K  <20 mg Na  4 Gm
¼ C chopped wild onion (or regular)  60 cal  8 mg P  62.4 mg K  0.8 mg Na  0.4 Gm protein
2 T chopped bell pepper  12 cal  9.2 mg P  78.4 mg K  1.6 mg Na  0.4 Gm protein
2 T unsweetened cranberry juice  14.5 cal  4.1 mg P  24.3 mg K  0.6 mg Na  0.1 Gm protein

Combine ingredients
(Adding Pinch red pepper &/or crushed allspice does not significantly increase values)
2 half-cup svgs

*American Indians may or may not have prepared such a dish before Columbus but ingredients are native to the New World
**Fresh Fruit Salad*** 115.2 cal  <139 mg P  301 mg K  2.4 mg Na  <3.2 Gm protein
½ C  57.6 cal  <69.4 mg P  <151 mg K  1.2 mg Na  1.6 Gm protein

Ingredients indigenous to the Americas unless wild cinnamon unavailable:

¼ C fresh dewberries  15.4 cal  7.9 mg P  58.2 mg K  <0.4 mg Na  0.5 Gm protein
¼ C fresh blueberries  21.1 cal  <4.5 mg P  28.5 mg K  <0.4 mg Na  <0.3 Gm protein
¼ C fresh grapes  15.4 cal  2.3 mg P  44 mg K  <0.5 mg Na  <0.2 Gm protein
¼ C sliced fresh strawberries  13.2 cal  9.9 mg P  63.5 mg K  0.4 mg Na  <0.3 Gm protein
¼ tsp crushed allspice berries  1.1 cal  0.5 mg P  4.6 mg K  0.3 mg Na
Pinch cayenne  <2.3 mg P  15.7 mg K  0.2 mg Na
1 T chopped black walnuts**  47.9 cal  39.8 mg P  40.5 mg K  0.2 mg Na  1.9 Gm protein

Combine fruits in bowl, let sit @ room temp few min for juices to form
Stir in seasonings
Add nuts & toss well
Chill

2 half-cup svgs

*Native Americans may or may not have made this historically but some do so now
**may sub 1 T pecans
Quinoa Salad:  366.3 cal   313.6 mg P   610.4 mg K   18.8 mg Na   9.5 Gm protein
1 svg   183 cal   <157 mg P   305.2 mg K   9.4 mg Na   <4.8 Gm protein

Ingredients indigenous to the Americas or modern versions:

½ C quinoa  222 cal   281 mg P   318 mg K   13 mg Na   8.1 Gm protein AFTER COOKING
¾ C chopped wild onion (or regular)  60 cal   8 mg P   62.4 mg K   0.8 mg Na   0.4 Gm protein
⅛ tsp crushed allspice berries  1.1 cal   0.5 mg P   4.6 mg K   0.3 mg Na
2 T chopped bell pepper  12 cal   9.2 mg P   78.4 mg K   1.6 mg Na   0.4 Gm protein
1 sm Roma tomato, chopped  11.2 cal   14.9 mg P   147 mg K   3.1 mg Na   0.5 Gm protein
½ T corn oil  60 cal

Toss cooked quinoa with chilled veggies & oil
2 small svgs
**Watercress Salad*** <116 cal  <127 mg P   <600 mg K   <125 mg Na   <4.7 Gm protein

1 svg   <39cal   <43 mg P   200 mg K   <42 mg Na   <1.6 Gm protein

1 bunch watercress= to 1 C  3.7 cal  20.4 mg P  112 mg K  13.9 mg Na  0.8 Gm protein
4 cattail hearts   20 cal  36 mg P  236 mg K  84 mg Na  <0.9 Gm protein
½ C chopped dandelion greens   12.5 cal  18 mg P  109 mg K  21 mg Na  0.5 Gm protein
1 T chopped blk walnuts**  47.9 cal  39.8 mg P  40.5 mg K  0.2 mg Na  1.9 Gm protein
1 T chopped green onion tops   1.5 cal  2 mg P  15.6 mg K  0.2 mg Na  0.1 Gm protein
1 T crushed allspice berries   15.8 cal  6.8 mg P  62.6 mg K  4.6 mg Na  0.4 Gm protein
2 T unsweetened cranberry juice   14.5 cal  4.1 mg P  24.3 mg K  0.6 mg Na  0.1 Gm protein

Combine all ingredients
Toss well & chill
3 half-cup svgs

*ensure dandelion, cattail hearts, watercress are from safe sources & washed well  
**or pecans
<table>
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<tr>
<th>Wild Rice Salad</th>
<th>304.3 cal</th>
<th>&lt;233 mg P</th>
<th>&lt;413 mg K</th>
<th>5.8 mg Na</th>
<th>7.6 Gm protein</th>
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<tr>
<td>1 svg</td>
<td>152 cal</td>
<td>116.3 mg P</td>
<td>&lt;207 mg K</td>
<td>2.9 mg Na</td>
<td>3.8 Gm protein</td>
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</table>

1 C cooked wild rice  160 cal  200 mg P  120 mg K  0 Na  6 Gm protein
¼ C chopped wild onion (or regular)  60 cal  8 mg P  62.4 mg K  0.8 mg Na  0.4 Gm protein
¼ tsp crushed allspice berries  1.1 cal  0.5 mg P  4.6 mg K  0.3 mg Na
2 T chopped bell pepper  12 cal  9.2 mg P  78.4 mg K  1.6 mg Na  0.4 Gm protein
1 sm Roma tomato, chopped  11.2 cal  14.9 mg P  147 mg K  3.1 mg Na  0.5 Gm protein
½ T corn oil (or less)  60 cal

Toss cooked wild rice w/chilled veggies & oil

2 svgs
Diabetics are encouraged to limit sugars, renal patients are told to avoid high-sodium, high-potassium, high-phosphorus foods and dairy, in some cases even to restrict fluids. A patient once characterized an online diabetic-and-renal-friendly meal plan as an “If It Tastes Good Spit It Out” menu.

The question arises, how can anyone enjoy a meal without salt or sugar? How can the vegetarian/vegan with diabetes and/or kidney disease season anything?

The answer lies in substitutes or in small amounts, both in preparation and consumption. While herbs and spices do help flavor foods, while one can grow accustomed to limiting table salt or sugar, sometimes a dish simply needs a little salt or a little sugar or a little sauce to make it more palatable (emphasis on the word little.)

Masa/cornstarch “water gravy” or sauce made with vegetable drippings can be quite flavorful if the vegetables are well-seasoned with Native American ingredients.

Although American Indians might not have prepared this often, fruits mashed and juiced then heated and thickened with masa or cornstarch or arrowroot make a great sweet sauce. Cooled and poured over whole fruit or smeared onto a slab of cornbread, fruit sauce is a real treat.

Yet sometimes bland meals are well-suited to a renal patient who doesn’t feel like eating. When this is not the case, if the care provider agrees to limited use, extremely small amounts of salt or maple sugar used in preparation of a dish and extremely small amounts of sauces and other seasonings on foods can make a difference as to whether they are “fit to eat.”

These recipes for Sauces/Dips/Seasonings are meant to enhance an otherwise bland meal, not to overwhelm it. And if the care team cautions against adding salt or using sugar, a few drops of tart cranberry or tart grape juice (or even vinegar or lemon juice, though not in the Americas before Columbus,) can bring a little extra flavor and add some brightness to a dish.

Once again, portion control and taste both matter. So does careful preparation.
Applesauce*  222.4 cal  30.6 mg P  <348 mg K  4.7 mg Na  1 Gm protein
1 svg  111.2 cal  15.3 mg P  174 mg K  <2.4 mg Na  0.2 Gm protein

Non-native ingredients substituted for crabapples, American cinnamon, wild ginger:

2 C apples after peeling, boiling  181.2 cal  27.4 mg P  300 mg K  3.4 mg Na  0.8 Gm protein
1 T maple sugar (can be omitted for a less sweet sauce) <32 cal  0.3 mg P  <25 mg K  0.9 mg Na
½ -1 tsp cinnamon  6.2 cal  1.6 mg P  10.8 mg K  0.1 mg Na  0.1 Gm protein
½ tsp ground ginger  ca 3 cal  1.3 mg P  <12 mg K  0.3 mg Na  0.1 Gm protein

Mash the cooked apples or chop finely in blender
Stir in cinnamon
Add maple sugar to taste (or omit)
2 svgs

Eat plain or spread on warm cornbread or mush
Cranberry-Grape Relish

279.2 cal  43 mg P  572 mg K  41.8 mg Na  2 Gm protein
1 svg   34.9 cal  <5.4 mg P  71.5 mg K  5.2 mg Na  <0.3 Gm protein

2 C fresh or frozen cranberries  92 cal  24 mg P  170 mg K  4 mg Na  0.8 Gm protein
2 C fresh Concord grapes   123.2 cal  18.4 mg P  352 mg K  3.6 mg Na  1.2 Gm protein
Maple sugar or syrup to taste – 2 T <64 cal  0.6 mg P  <50 mg K  1.8 mg Na

Chop cranberries and grapes fine, transfer to bowl
Stir in maple sugar (or maple syrup)
Store in refrigerator or freezer
  8 tart half-cup svgs
**Corn Milk**  
123 cal  109 mg P  368 mg K  6.3 mg Na  4.1 Gm protein

1 svg  61.5 cal  54.5 mg P  184 mg K  <3.2 mg Na  <2.1 Gm protein

1 ear of frozen yellow corn*  
123 cal  109 mg P  368 mg K  6.3 mg Na  4.1 Gm protein

1 C fresh water, more or less

Cut kernels from cob
Puree in blender w/fresh water
Strain through fine mesh sieve or cheesecloth
(Save particles for other use later)
Refrigerate separately in sealed containers
Use within 48 hrs
Makes a little over a cup for 2 half-cup svgs

*Nutrient values for 1 ear fresh corn cut from cob unavailable
Fruit Sauce 216.9 cal  54.4 mg P  534.1 mg K  29.6 mg Na  4.8 Gm protein
1 svg  54.2 cal  13.6 mg P  133.5 mg K  7.4 mg Na  1.2 Gm protein

1 C tomatoes, stewed  79.8 cal  38.4 mg P  250 mg K  24 mg Na*  2 Gm protein
1 C mashed slip-skin grapes**  61.6 cal  9.2 mg P  176 mg K  1.8 mg Na  0.8 Gm protein
1 T maple sugar  <64 cal  0.6 mg P  <50 mg K  1.8 mg Na (if using more add to totals)
1 tsp American cinnamon  6.2 cal  1.6 mg P  10.8 mg K  0.1 mg Na  0.1 Gm protein
1 tsp crushed allspice  <5.3 cal  <2.3 mg P  31.3 mg K  <1.6 mg Na  0.1 Gm protein
Pinch cayenne  <2.3 mg P  16 mg K  <0.3 mg Na
Sm amt water if needed for thinning

Combine tomatoes and fruit, mashing into smooth paste
Add spices and seasonings, mixing well
Stir in oil if needed or water if mixture needs to be thinned
4 half-cup svgs

*est
**such as Concord
Fry Mix  603 cal  275 mg P  385 mg K  106.5 mg Na  10.6 Gm protein
  ¼ C  151 cal  69 mg P  96 mg K  27 mg Na  <2.7 Gm protein

½ to 1 C masa*  416 cal  245 mg P  340 mg K  5.7 mg Na  10.6 Gm protein
2 T cornstarch**  183 cal  24 mg P  2.8 mg K  4.2 mg Na
Pinch salt***  96 mg Na
Pinch-¼ tsp cayenne pepper  <4 cal  6 mg P  42 mg K  0.6 mg Na

*for coarser mix use cornmeal
**can sub arrowroot, decrease totals
*** check w/care team before using
Modernized Seasoning  35.5 cal  27.7 mg P  156.7  111.1 mg Na  0.9 Gm protein
  1 svg  7.1 cal  <5.5 mg P  31.3 mg K  22.2 mg Na  <0.2 Gm protein

1 tsp crushed allspice  <5.3 cal  <2.3 mg P  31.3 mg K  <1.6 mg Na  0.1 Gm protein
1 tsp American cinnamon  6.2 cal  1.6 mg P  10.8 mg K  0.1 mg Na  0.1 Gm protein
Pinch cayenne  <2.3 mg P  16 mg K  <0.3 mg Na
½ T minced garlic  <6.2 cal  6.3 mg P  16.5 mg K  <0.8 mg Na  0.3 Gm protein
1 T dried onion flakes  17.5 cal  15.2 mg P  81.1 mg K  1.1 mg Na  0.4 Gm protein
Salt (can omit on sodium restricted diets)  Pinch=96 mg Na
1 tsp liquid smoke  0-0.3 cal  0P  0-1 mg K  0-7.9-8-11 mg Na  (use in moderation)

Mix ingredients together
Sprinkle over food either before or after cooking
Makes 2 ½ T or  5 svgs of  ½ T ea
Veggie “Gravy/Sauce” 61.9 cal <50 mg P 261 mg K <106 mg Na 1.03 Gm protein
1 svg 20.6 cal <17 mg P 87 mg K 35 mg Na 0.34 Gm protein

1 C broth <29 cal <45 mg P 226 mg K 8.2 mg Na 1 Gm protein
1 tsp crushed allspice berries 4.4 cal 2 mg P 18.4 mg K 1.2 mg Na
Pinch cayenne <2.3 mg P 16 mg K <0.3 mg Na
<1 T arrowroot powder* 28.5 cal 0.4 mg P <0.89 mg K <0.2 mg Na <0.03 Gm protein
Pinch salt 96 mg Na

Measure 2-3 T broth & set aside
Bring remaining broth to boil in saucepan or skillet then turn to simmer
Dissolve arrowroot in the broth set aside
Add thickening slowly to simmering broth, stirring constantly
When thick enough, remove from heat
Stir in seasonings

makes 3 fourth-cup svgs

*if sauce too thin, add more arrowroot dissolved in water; if too thick add water
Worth noting is that foods coated in corn flour mixed with cornstarch or with arrowroot then fried in peanut or corn oil are crisper but paler than foods dredged in wheat flour.

Most baked or battered goods call for salt in recipes but usually the amount can be reduced and in some cases even omitted without altering the results much if at all.

*The care team should be consulted before including a “pinch,” a “dash,” or even a “smidgen” as defined in the Measurements section!*
32 SNACKS/FINGER FOODS

All veg tamales*  ca 1040 cal  554 mg P  1308 mg K  163 mg Na  25.7 Gm protein
    1 tamale   87 cal   46 mg P   109 mg K   13.6 mg Na   2.1 Gm protein

Wraps  952 cal  490 mg P  680 mg K  107.4 mg Na  21.2 Gm protein
Filling  88.2 cal  64.1 mg P  627.7 mg K  55.9 mg Na  4.5 Gm protein

12 cornhusks plus extra for tearing into ties
Lg pot of boiling water if no steamer or double boiler available
Masa dough wraps (see wrap recipe)
Filling (see filling recipe)

Can be made all at once or in stages over several days to prevent fatigue
Prepare dough on Day One, refrigerate in sealed container
Prepare filling on Day Two, refrigerate in sealed container
Soak cornhusks in water overnight on Day Two to make pliable
Tear 3 or 4 husks into 12-24 strings for ties on Day Three
Flatten golf ball sized dough-ball on ea husk on Day Three
Leave enough space @ wide end to fold over
Place 1 T filling in center of ea pc dough wrap
Fold lengthways so dough edges meet then fold/roll rest of husk around tamale
Fold up wide end & tie with husk string, tie narrow end closed without folding
Can be steamed or boiled on Day Three or use easier method:
    Stack tamales in microwaveable bowl w lid (or cover w/plastic wrap)
    Cook 6-8 min (check after 6 min for firmness)
    Let cool ca 5 min & serve or refrigerate or freeze in sealed container
Makes about a dozen

*These are “traditional” homemade tamales & will not look like store-bought
All veg tamale wraps*  952 cal  490 mg P  680 mg K  107.4 mg Na  21.2 Gm protein
1 wrap  79 cal  40.8 mg P  57 mg K  9 mg Na  <1.8 Gm protein

12 water-softened cornhusks plus extra to tear into ties
2 C yellow masa harina  832 cal  490 mg P  680 mg K  11.4 mg Na  21.2 Gm protein
Pinch salt (can omit)  96 mg Na
1 ½ C warm water
1 T corn oil  120 cal

Measure salt (if using) and 2 C masa into bowl
Add 1 C warm water & some of the corn oil, stir til water absorbed
Add remaining water & oil a little at a time to form dough
Knead into ball - if too sticky add masa, if too stiff add water
Let rest a few minutes while preparing cornhusks

Pinch off pieces of dough to spread ½” to 1” thick layer on each corn husk

*can store dough in fridge in sealed container 24-48 hrs until ready to make tamales
All veg filling  88.2 cal  64.1 mg P  627.7 mg K  55.9 mg Na  4.5 Gm protein
    For 1 tamale  7.4 cal  5.3 mg P  52.3 mg K  4.7 mg Na  <0.4 Gm protein

Water
1 C 0-Na added grn bns  40 cal  14 mg P  200 mg K  <32 mg Na  2 Gm protein
1 T diced onion  4 cal  2.9 mg P  14.6 mg K  0.4 mg Na  0.1 Gm protein
½ T minced fresh garlic  <6.2 cal  6.3 mg P  16.5 mg K  <0.8 mg Na  0.3 Gm protein
1 tsp cumin (not indigenous)  8 cal  10.5 mg P  37.5 mg K  3.5 mg Na  0.4 Gm protein
1 T diced jalapeno*  4 cal  3.6 mg P  34.7 mg K  0.4 mg Na  0.1 Gm protein
2 T tomato paste  26 cal  26.8 mg P  324.4 mg K  18.8 mg Na  <1.6 Gm protein

Rinse beans, drain
Microboil beans in 10 T water ea until mushy, chop fine if needed
    Drain, rinse, drain again, set aside
Micro sauté onion & garlic in sm amt water, drain, stir into beans
Add cumin, jalapeno, tomato paste, mixing well

*Can omit or increase or can sub cayenne or red pepper flakes or hot pepper sauce
Corn Meal Croutons  1013 cal  347 mg P  535 mg K  97.5 mg Na  0.5 Gm protein
4 croutons  168 cal  58 mg P  90 mg K  16 mg Na  negligible protein

Savory mush recipe*(in BREADS)

Cut into 24 squares
Bake 24-45 min @ 400

*Check with care team before using table salt
**Fried Summer Squash** 515.9 cal 219.2 mg P 548 mg K 96 mg Na 1.6 Gm protein

1 svg <258 cal <110 mg P 274 mg K 48 mg Na 0.8 Gm protein

1 C sliced summer squash 36 cal 52.2 mg P 306 mg K 1.6 Gm protein
1 C cornmeal 480 cal 167 mg P 242 mg K
Pinch salt if allowed 96 mg Na

**Mix cornmeal & sm amt water to make thick batter**
**Dredge squash rounds in batter**
**Fry in hot oil until golden brown, turning once**
**Sprinkle paprika or red pepper**
**Drain well**

2 very sm svgs
Fried Vegetables  192.2 cal  <96 mg P  <240 mg K  28.9 mg Na  3.7 Gm protein

2 bell pepper rings (ca ¼ C)  4 cal  4 mg P  35 mg K  0.6 mg Na  0.2 Gm protein
1 med mushroom sliced in half  4 cal  15.5 mg P  57.2 mg K  0.9 mg Na  0.6 Gm protein
2 slices summer squash  3.2 cal  7.4 mg P  51 mg K  0.4 mg Na  0.2 Gm protein
¼ C fry mix  151 cal  69 mg P  96 mg K  27 mg Na  <2.7 Gm protein
1 T corn oil  120 cal (much less than ½ actually absorbed by the veggies)

Stir sm amt water into fry mix to make thick batter
Coat veggies with batter
Fry in corn oil
Drain well
Makes very small but tasty snack for one person
SNACKS/FINGER FOODS

Veggie Balls*  274.4 cal   149 mg P   630.9 mg K   135.3 mg Na   6.9 Gm protein
3 or 4  137.2 cal   74.5 mg P   <315.5 mg K   <67.7 mg Na   <3.4 Gm protein

Native ingredients except for applesauce subbed for crabapple sauce:

¼ C minced green onion tops  12.5 cal   17.1 mg P   130 mg K   2 mg Na   0.9 Gm protein
½ C minced sweet pepper  14.9 cal   14.9 mg P   130.5 mg K   <2.3 mg Na   <0.7 Gm protein
1 med mushroom, minced  4 cal   15.5 mg P   57.2 mg K   0.9 mg Na   0.6 Gm protein
1 C minced 0 added Na green beans  40 cal   25.2 mg P   200 mg K   30 mg Na   2 Gm protein
¼ C masa  104 cal   <61.3 mg P   85 mg K   1.4 mg Na   <2.7 Gm protein
1 T cornstarch**  91.5 cal   12 mg P   0.9 mg K   2.1 mg Na
1 T applesauce  7.5 cal   0.75 mg P   11.3 mg K   0.3 mg Na
Pinch salt  96 mg Na
Pinch cayenne  <2.3 mg P   16 mg K   <0.3 mg Na

Combine all ingredients
Form into balls
Fry in corn oil (add 120 cal to total) or bake in oiled pan 15-20 min  @ 350-400
Makes 6-8 sm veggie balls (2 svgs)

*Can be frozen for later use
** can sub arrowroot, adjust totals
According to the NIH, phosphorus in animal-based food is more readily absorbed than phosphorus in plant-based food. Therefore some renal experts advise their patients to eat less meat and more plant based meals while others may encourage following a vegetarian diet which can include fish, eggs, and dairy, though non-vegetarian renal patients still may need to limit these. (Eggs and dairy were not part of the Native American diet pre-Columbus anyway.) A vegan diet is plant-sourced only, no gelatin, no eggs, no dairy, no fish, no honey, no flour bleached with bone char, etc. Vegan alternatives to non-vegan ingredients appear in Substitutions.

Non-vegetarians and some in the medical community might ask if vegan meals offer enough protein. Nephron.org states the pre-dialysis protein limit for a 150-pound man as 37-41 grams a day. Yet the more amino acid waste to be removed, the harder the kidneys need to work. Some nephrologists may have a patient limit protein to 35 grams daily. So protein requirements can vary depending on type of kidney disease.

Amino acids are building blocks of protein. Approximately 20 amino acids can form protein but there are 9 essential ones people don’t produce on their own. A protein must contain all 9 of those amino acids in nearly equal amounts be complete.

Combinations of plant-based foods in a single meal can yield the correct amino acid chains for complete proteins but this is currently considered unnecessary if enough appropriate foods are taken within the day – not every amino acid must be in every bite, there only needs to be a sufficient amount of each amino acid consumed daily. In fact, some dietitians say that plant-based diets contain such a wide variety of amino acids that vegetarians and vegans can get all the “right” proteins in daily meals. Also, we already have seen how mixing corn with beans results in the right amino acids to form a complete protein. But protein supplements are available if needed, B12 as well.

Some also express concern that a vegetarian or vegan diet could cause kidney stones since many plants contain oxalic acid, already a normal product of human metabolism. Yet at least two fairly well-known epidemiological studies indicate that vegetarians are at lower risk for developing stones. In addition, just as it leaches potassium, sodium, and phosphorus, soaking and cooking high oxalate foods may help.
Broth From Native Flora <87 cal <135 mg P <677 mg K <25 mg Na 3.2 Gm protein
1 C <29 cal <45 mg P <226 mg K 8.2 mg Na 1 Gm protein

3 T chopped wild onion/green onion 4.5 cal 6 mg P 46.8 mg K 0.6 mg Na 0.3 Gm protein
¼ C no added Na canned corn 35 cal 32.6 mg P 70 mg K <5 mg Na 1 Gm protein
¼ C diced summer squash 8 cal 13 mg P 76.5 mg K 0.8 Gm protein
1 small red or green pepper, diced 22.9 cal 19.2 mg P 156 mg K 3 mg Na 0.7 Gm protein
1 T allspice 15.8 cal 6.9 mg P 62.6 mg K 4.6 mg Na 0.4 Gm protein
½ sm bay leaf crumbled 56.5 mg P <265 mg K 11.5 mg Na
4 C water

Bring water to boil
Add ingredients
Simmer covered until corn, squash & pepper are mushy
Remove from heat & strain liquid into canning jar
Let cool then seal jar
Store in refrigerator or freezer
   Approximately 3 cups
Corn Chowder  <137 cal  <171 mg P  442 mg K*  <55 mg Na  3.4 Gm protein

¼ C no added Na canned yellow corn  35 cal  32.6 mg P  70 mg K  <5 mg Na  1 Gm protein
¼ C no added Na canned cream corn  35 cal  32.8 mg P  62 mg K  0.5 Gm protein
¼ C canned diced potatoes  27 cal  25.1 mg P  <53 mg K  <40.5 Na  0.5 Gm protein
2 T chopped onion (wild or regular)  4 cal  2.9 mg P  14.6 mg K  0.4 mg Na  0.1 Gm protein
½ T minced garlic  6.2 cal  6.3 mg P  16.5 mg K  0.7 mg Na  0.3 Gm protein
1 C broth  <29 cal  <45 mg P  226 mg K  8.2 mg Na  1 Gm protein

Drain & rinse yellow corn and potatoes separately, set yellow corn aside
Parboil potatoes in 1 ¼ C water, drain & rinse again,* set aside
Bring broth to boil in sm saucepan, reduce heat to simmer, add yellow corn
Let cook 2-3 min, add onion & garlic
Let cook 2-3 min more, stir in potatoes & cream corn
Remove from heat
If too thin, thicken w/sm amt cornstarch*** in water, add to values above
   1 sm svg

*chowder is relatively high in potassium so monitor content in other foods same day
**lowers values for potatoes shown above
***or arrowroot, decrease totals
**Corn Soup**  
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<td>838 mg K*</td>
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<td>1 svg</td>
<td>72.3 cal</td>
<td>81 mg P</td>
<td>280 mg K</td>
<td>45 mg Na</td>
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<tr>
<td>72.3 cal</td>
<td>81 mg P</td>
<td>280 mg K</td>
<td>45 mg Na</td>
<td>2.2 Gm protein</td>
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2 C broth  
1 C 0 added Na yellow corn  
1 chopped mini red bell pepper  
2 T chopped onion (wild or regular)  
½ T minced garlic  
Pinch cayenne  
Pinch salt  

Heat 3 T broth to medium heat in lg frying pan  
Add onion, pepper, corn, onion & sauté about 6 min or til tender  
Remove from heat, pour into med size bowl & mash  
Add seasonings, mix well  
Return to pan & stir in broth  
Heat to boiling then remove from heat  
3 small svgs <1 C ea

* relatively high potassium so monitor content in other foods same day
Green Bean Chili  202.4 cal  <127 mg P  901 mg K  <177 mg Na  <2.2 Gm protein
1 svg  50.6 cal  <31.8 mg P  225 mg K  44 mg Na  <0.6 Gm protein

2 C 0 added Na canned cut green beans 80 cal  50.4 mg P  400 mg K  60 mg Na  0.8 Gm protein
1 chopped Roma tomato  11.2 cal  14.9 mg P  147 mg K  3.1 mg Na  0.5 Gm protein
¼ C chopped wild onion (or grn onion)  60 cal  8 mg P  62.4 mg K  0.8 mg Na  0.4 Gm protein
2 T diced bell pepper  6 cal  4.8 mg P  39.2 mg K  0.8 mg Na  0.2 Gm protein
1 C broth + 1 C water  <29 cal  <45 mg P  <226 mg K  8.2 mg Na  1 Gm protein
Pinch salt  96 mg Na
Pinch cayenne (or more, adjust totals)  <2.3 mg P  15.7 mg K  0.2 mg Na
Pinch paprika  <0.8 cal  <0.9 mg P  <5.9 mg K  <0.1 mg Na  negligible protein
Pinch allspice  <1.1 cal  <0.5 mg P  <4.6 mg K  <0.3 mg Na
½ T arrowroot*  <14.3 cal  0.2 mg P  <0.45 mg K  <0.1 mg Na  <0.015 Gm protein

Rinse & drain green beans, microwave in sm amt water 2-3 min to soften
Add bell pepper, microcook 2 or 3 min
Add tomato, microwave 2 or 3 min
Remove from microwave, stir in onion and seasonings, set aside
Add 2/3 C water to broth, microwave until starting to bubble
While broth is heating, dissolve arrowroot in remaining 1/3 C water
Stir thickener into broth, microwave few sec at a time, stirring often
When slightly thickened, remove from microwave, stir in seasoned veggies
4 very small svgs

*or cornstarch – works better but adjust totals
**Stale Cornbread Soup**  
<325 cal  <174 mg P  888 mg K*  <149 mg Na  3.2 Gm protein  
1 svg  <163 cal  <87 mg P  444 mg K  <75 mg Na  1.6 Gm protein  

1 C no Na added canned grn bns  40 cal  25.2 mg P  200 mg K  30 mg Na  0.4 Gm protein  
1 C sliced summer squash  36 cal  52.2 mg P  306 mg K  1.6 Gm protein  
1 chopped Roma tomato  11.2 cal  14.9 mg P  147 mg K  3.1 mg Na  0.5 Gm protein  
¼ C chopped wild onion (or grn onion)  60 cal  8 mg P  62.4 mg K  0.8 mg Na  0.4 Gm protein  
¼ C broth  <7.5 cal  <11.5 mg P  <56.5 mg K  <2.1 mg Na  <0.3 Gm protein  

Pinch salt  96 mg Na  
Pinch cayenne  <2.3 mg P  15.7 mg K  0.2 mg Na  
Pinch paprika  <0.8 cal  <0.9 mg P  <5.9 mg K  <0.1 mg Na  negligible protein  
Pinch allspice  <1.1 cal  <0.5 mg P  <4.6 mg K  <0.3 mg Na  
4 stale cornbread croutons  168 cal  58 mg P  90 mg K  16 mg Na  

Drain, rinse, drain green beans  
Microwave few min in sm amt water, drain again, set aside  
Microwave summer squash few min in water, drain, set aside  
Microwave tomatoes few sec in sm amt water, drain, set aside  
Combine veggies in lg bowl, stir in broth, 1 C water, onion & seasoning  
Heat in microwave until liquid begins to bubble  
Stir well, add croutons, let stand long enough to soften but not fall apart  

2 svgs  

* relatively high potassium so monitor content in other foods same day
Since microwaving can take less time and energy than stovetop boiling, potassium, sodium – even some phosphorus – still might be leached from foods in the microwave as long as they are drained, rinsed, perhaps even soaked first, then microboiled in a large enough container for water five times greater than the volume of the food being leached, drained once more and rinsed again before preparing the rest of a given recipe. Using less water to micro-leach still reduces the mineral content, however.

Pre-soaking, stovetop boiling, then draining any vegetable, including potatoes, still is a viable choice with the result that potassium and sodium values will be less than those shown in some recipes here, although, as stated earlier, foods treated by such a method may be much softer to the point of being mushy. This may be all right for soups (if not on fluid restriction) but not for some main dishes or some sides.

Before leaching:

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<th>Na</th>
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<td>225</td>
<td>1679</td>
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<td>7 Gm</td>
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<tr>
<td>1 lg russet potato</td>
<td>292</td>
<td>203</td>
<td>1539</td>
<td>18.5</td>
<td>7.9 Gm</td>
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<td>½ C diced russet potato</td>
<td>59.3</td>
<td>41.3</td>
<td>313</td>
<td>3.8</td>
<td>1.6 Gm</td>
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<td>1 lg “white” potato</td>
<td>284</td>
<td>210</td>
<td>1554</td>
<td>22.1</td>
<td>7.5 Gm</td>
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<tr>
<td>½ C diced “white” potato</td>
<td>57.7</td>
<td>42.8</td>
<td>316</td>
<td>4.5</td>
<td>1.5 Gm</td>
</tr>
<tr>
<td>½ C potatoes, baked</td>
<td>56.7</td>
<td>30.5</td>
<td>238</td>
<td>3.1</td>
<td>1.2 Gm</td>
</tr>
</tbody>
</table>

Canned potatoes go through a natural leaching process due to soaking in the can but contain much more sodium, not all of which is eliminated by draining. ½ C canned drained diced new potatoes has about 50 calories, 25.2 mg of phosphorus, 260 mg of potassium, 280 mg of sodium (0.28 grams,) and 1 gram of protein.

To leach fresh potatoes, peel and cut them into thin slices or dice them then place in pot of water at least 5 times the amount of potatoes, bring to a boil, drain then add fresh water, bring to 2nd boil and cook til tender, drain again. 2/3 C diced double boiled potato contains approximately 200 mg K as well as lower P & Na content.

Cooking larger batches on the stove than in the microwave allows for extra food to be frozen for subsequent use. This can reduce a person’s energy expenditure and save time later. But when doubling a recipe even experienced cooks will need to measure carefully.
Green Beans & Potatoes <257 cal <149 mg P <719 mg K <140 mg Na 5.1 Gm protein
<129 cal <75 mg P <360 mg K <70 mg Na 2.6 Gm protein

1 1/3 C leached russet diced potatoes <149 cal <104 mg P 400 mg K <10 mg Na <4 Gm protein
1 C no Na added canned grn bns 40 cal 25.2 mg P 200 mg K 30 mg Na 0.4 Gm protein
¼ C chopped wild onion (or regular) 60 cal 8 mg P 62.4 mg K 0.8 mg Na 0.4 Gm protein
¼ C broth <7.5 cal <11.5 mg P <56.5 mg K <2.1 mg Na <0.3 Gm protein
Pinch salt 96 mg Na

Drain and rinse green beans, place in sm-to-med microwaveable bowl
Pour in broth bowl, stir in onion, microcook few min until green beans are softer
Stir in leached potatoes, microcook 1 or 2 min until ingredients heated through
Sprinkle Pinch of salt & serve
2 svgs
**Popped Wild Rice** 190 cal  200 mg P  120 mg K  96 mg Na  6 Gm protein

1 C wild rice  160 cal  200 mg P  120 mg K  0 Na  6 Gm protein

3 C water
1 tsp corn oil  30 cal
Pinch salt  96 mg Na

Rinse rice well in cold water
Bring water, oil, salt to boil in heavy saucepan, stir in rice
Reduce the heat, cover, simmer til rice pops (about 1 hour)
Do not lift cover while rice is cooking
Potato Casserole  < 364 cal   288 mg P <895 mg K  1725 mg Na (1.7 Gm)  7.2 Gm protein
1 svg <91 cal  72 mg P  <224 mg K  431 mg Na (0.4 Gm)  1.8 Gm protein

1 C canned diced potatoes  108 cal  100.4 mg P  213 mg K  < 162 mg Na  2 Gm protein
1 C 0-Na added canned yellow corn  140 cal  130.4 mg P  280 mg K  <20 mg Na  4 Gm protein
1 C 0-Na added canned cut grn bns  40 cal  25.2 mg P  200 mg K  60 mg Na  0.2 Gm protein
¼ C chopped wild or grn onion  8 cal  11.6 mg P  29.2 mg K  0.8 mg Na  0.2 Gm protein
¼ C diced bell pepper  24 cal  18.4 mg P  156.8 mg K  3.2 mg Na  0.8 Gm protein
Pinch salt  96 mg Na
Pinch cayenne  <2.3 mg P  15.7 mg K  0.2 mg Na
2-3 tsp arrowroot dissolved in ¼ C water  28.5 cal  OR cornstarch; adjust totals
Tiny amt corn oil for casserole or iron skillet  15 cal

Rinse/drain potatoes, corn, grn bns separately
Microwave separately in sm amts water to soften, drain, set aside
Micro-“sauté” onion & pepper in sm amt water to soften
Stir salt & cayenne into onion & pepper
Combine vegetables & seasoning in lg bowl, mixing well
Stir in arrowroot mixture, mixing well
Spoon into casserole dish or skillet, bake 30-45 min @350
Makes 4 svgs
Quinoa (South America)  222 cal  281 mg P  318 mg K  109 mg Na  8.1 Gm protein
  1 med svg  111 cal  <141 mg P  159 mg K  <55 mg Na  4.5 Gm protein

½ C quinoa*  222 cal  281 mg P  318 mg K  13 mg Na  8.1 Gm protein  AFTER COOKING
1 C water
Pinch salt  96 mg Na

Rinse** quinoa in fine mesh sieve until water runs clear, drain, place in med pot
Add 1C water & Pinch salt, bring to boil
Cover, turn heat low, simmer until water absorbed, about 15 min
Remove from heat, set aside 5 min, uncover and fluff with fork
  2-3 svgs

*1C cooked quinoa  222 cal  281 mg P  318 mg K  13 mg Na  8.1 Gm protein
**rinsing removes saponin; it is said saponin can be used as laundry soap
**Quinoa and Vegetables**  353 cal  <371 mg P  <545 mg K  <337 mg Na  <13 Gm protein

1 sm svg  118 cal  <124 mg P  <182 mg K  112 mg Na  4.3 Gm protein

½ C quinoa*  222 cal  281 mg P  318 mg K  13 mg Na  8.1 Gm protein *AFTER COOKING

1 C water

½ sm can no added Na mushrooms**  35 cal  77 mg P  125 mg K  225 mg Na  4 Gm protein

¼ C chopped wild onion (or regular)  60 cal  8 mg P  62.4 mg K  0.8 mg Na  0.4 Gm protein

2 T diced bell pepper  6 cal  4.8 mg P  39.2 mg K  0.8 mg Na  0.2 Gm protein

Pinch salt  96 mg Na

Sm amt corn oil for sautéing  30 cal

Rinse quinoa in fine mesh sieve til water runs clear

Drain, place in med pot

Add 1 C water and Pinch salt, bring to boil.

Cover, turn to low, simmer til water absorbed, about 15 min

Remove from heat

While quinoa simmers, sauté remaining ingredients in oil

Drain & stir into cooked quinoa

2-3 Svgs

*1C cooked quinoa  222 cal  281 mg P  318 mg K  13 mg Na  8.1 Gm protein

**Hy-Vee® brand
Wild Rice  160 cal  200 mg P  130 mg K  96 mg Na  6 Gm protein

⅛ C raw wild rice
4 C water
Pinch salt  96 mg Na

Place wild rice in strainer in sink under cold running water, shake to drain
Place rice in saucepan, add 4 C water or stock, Pinch salt
Cover, bring to a boil over high heat then lower heat & simmer ca 30-45 min
Drain then fluff with fork

2 sm svgs or 1 med svg
Yes! Baked Potatoes! <56.7 cal <30.5 mg P <238 mg K <3.1 mg Na <1.2 Gm protein + condiment values

½ C diced boiled russet potato  59.3 cal  41.3 mg P  313 mg K  3.8 mg Na  1.6 Gm protein
½ C diced boiled “white” potato  57.7 cal  42.8 mg P  316 mg K  4.5 mg Na  1.5 Gm protein

½ C potatoes after baking  <56.7 cal <30.5 mg P <238 mg K <3.1 mg Na <1.2 Gm protein

Peel potato(es,) coarsely chop, soak, rinse, parboil, drain & rinse, boil again, drain
Place in lg, lightly oiled iron skillet and bake at 400 until fork-tender
Sprinkle condiments of choice– pinch salt, pinch cayenne, pinch paprika, finely
chopped wild or grn onion, drizzle of corn oil – be sure to add to values above
very small but very tasty svg
Recipes here call for unsweetened applesauce or maple sugar instead of refined white sugar or artificial sweeteners. While the stevia plant is indigenous to the Americas, it is thought by some to have an adverse effect on kidney function.

Small amounts of real, raw maple sugar has fewer calories per volume/measure than cane sugar. Perhaps an even “safer” sugar is unsweetened applesauce, which also can replace eggs and/or oil in baking and can give a small amount of body to thin soups.

- 1 tsp cane sugar 15.5 cal negligible P 0.1 mg K negligible Na negligible protein
- 1 tsp maple sugar 10.6 cal 0.1 mg P 8.2 mg K 0.3 mg Na negligible protein
- 1 tsp unsweetened applesauce 2.1 cal 0.5 mg P <7.6 mg K 0.2 mg Na negligible protein
- 1 T unsweetened applesauce 7.5 cal 0.75 mg P 11.3 mg K 0.3 mg Na negligible protein

Any sucrose (sugar) or sweetener (particularly stevia since it can be hard for the kidneys to process) should be used only if the care team approves.

Just as not all sweeteners/sugars are the same, not all flours and thickeners are the same:

- 1 tsp arrowroot “flour” <10 cal negligible P, K, Na, protein
- 1 tsp cornstarch 30.5 cal 4 mg P 0.23 mg K 0.7 mg Na
- 1 C masa harina 416 cal 245 mg P 340 mg K 5.7 mg Na 10.6 Gm protein
- 1 C cornmeal 480 cal 167 mg P 242 mg K

Treats are special and usually higher in carbs, calories, and/or sodium, so prepare and consume in moderation.
Blueberry Crumble  <399 cal  55.3 mg P  <390 mg K  <57 mg Na  0.7 Gm protein
1 svg  <200 cal  <27.7 mg P  <145 mg K  28.3 mg Na  <0.4 Gm protein

1 C frozen unsweetened blueberries*  79.1 cal  17.1 mg P  83.7 mg K  1.6 mg Na  0.7 Gm protein
1 tsp crushed allspice berries  4.4 cal  2 mg P  18.4 mg K  1.2 mg Na
1 tsp ground cinnamon  4.4 cal  2 mg P  18.4 mg K  1.2 mg Na (commercial values)
½ C maple sugar  127.2 cal  1.2 mg P  <44 mg K  1.6 mg Na
1 T cornstarch**  91.5 cal  12 mg P  1.4 mg K  2.1 mg Na
1 sm svg skillet cornbread  92 cal  21 mg P  <124 mg K  <49 mg Na

Combine frozen berries w/1 T water, allspice & cinnamon in saucepan
Cook over med-to-low heat, stirring occasionally, until berries “pop”
Combine maple sugar w/ 1 T cornstarch, add to berries
Cook & stir til mixture starts to bubble & thicken
Remove from heat and pour into 2 bowls
Crumble cornbread on top & serve
   2 svgs

*can sub other native fruits such as dewberries or strawberries but will not “pop”
   adjust nutrient totals according to type of fruit
**or use arrowroot & decrease totals
Cornbread “Pudding”  
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1/3 C no sugar added craisins*
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4 T unsweetened applesauce
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2 T maple sugar
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1 tsp crushed allspice berries
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1 tsp ground cinnamon
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1 T chopped pecans
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1 svg cornbread
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½ T corn oil plus small amt to oil skillet
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Lightly oil sm cast iron skillet
Mix together craisins, applesauce, sugar, allspice, cinnamon in bowl
Add oil & mix well
Stir in pecans & coarsely chopped cornbread
Spoon into oiled skillet & bake @ 350 until slightly solid
  2 very sm svgs

*can sub other native fruit, adjust amts if undried, change nutrient totals accordingly
Maple Candy   1151 cal   28.4 mg P   142 mg K   6.4 mg Na   1.2 Gm protein
1 svg   <48 cal   <1.2 mg P   <6 mg K   <0.4 mg Na   0.04 Gm protein

1 C maple syrup   1055 cal   2.4 mg P   88 mg K   6.4 mg Na
2 T chopped pecans   96 cal   26 mg P   56 mg K   1.2 Gm protein
Sm amt corn oil for sheet pan*   very few cal absorbed by candy

Place 1 cup maple syrup in small saucepan
Heat to just under 300 degrees then
Remove from heat, stirring constantly until it begins to cool
Place by spoonfuls onto oiled sheet pan smeared w sm amt corn oil (ca 24 tsp)
Top each spoonful with nut pieces
Let cool completely so "candies" come off sheet pan easily
OR
Pour thin layer onto oiled pan, sprinkle with chopped nuts
Allow to cool & harden, break into 24 sm pieces

*or use parchment paper or wax paper
Sweet & Salty Popcorn 427-488 cal 115 mg P <128 mg K 195-387 mg Na 4 Gm protein
1 C 107-123 cal <28.8 mg P 31.8 mg K 49-95 mg Na (0.4-0.95) Gm <1 Gm protein

2-2 ½ T oil 240-300 cal
2 T maple sugar 63.6 cal 0.6 mg P <22 mg K 0.8 mg Na¾-½ tsp salt 192-384 mg (0.4)Gm
1/3 C popcorn (2.6 oz) makes 4 C popped 124 cal 114.4 mg P 105.2 mg K 2.4 mg Na 4 Gm protein

Mix oil, sugar, salt in microwave popper
Microwave 9 sec, stir
Add popcorn, stir
Spread popcorn over bottom of popper
Place vented lid on popper, microwave 3 min or less (not all kernels will pop)
4 svgs
Approx=approximate (ly)
@=at
C=cup
Cal=calories
Chppd=chopped
CKD=chronic kidney disease
Gm=gram
Grn bns=green beans
K=potassium
Lo=low
Med=medium
Min=minutes
Mini=special miniature pepper
Mg=milligram
Na=sodium
NIH-National institutes Of Health
Oz=ounce(s)
P=phosphorus
Pc=piece
Sec(s)=second(s)
Svg(s)=serving(s)
Sm=small
Sub=substitute
T=tablespoon
Tsp=teaspoon
USDA=United States Department Of Agriculture
Veg, Veggies=vegetable(s)
Wt=weight
>=greater than
<=less than
W/=with
According to kitchen supply manufacturers, a “dash” of salt is $\frac{1}{8}$th tsp while a “pinch” is $\frac{1}{2}$ dash or $\frac{1}{16}$th tsp and a “smidgen” is half that or $\frac{1}{32}$nd tsp.

1 tsp=60 drops (gtts)  
3 tsp=1 T or $\frac{1}{2}$ fluid oz  
4 T= $\frac{1}{4}$ C or 3 fluid oz or 90 milliliters (ml)  
8 T= $\frac{1}{2}$ C  
16 T= 1C or 8 fluid oz or $\frac{1}{2}$ pint  
1 C vegan spread=227 grams  
1 C dry ingredients (not flour)=8 oz or 128 grams  
1 C syrup=340 grams  
1000 milligrams=1 gram  
$\frac{1}{2}$ C raw sliced or chopped mushrooms =roughly $\frac{1}{4}$ C cooked
Cornstarch: 1 tsp arrowroot flour in water = ½ T cornstarch (not for “cream” sauces)

Egg: ¼ C unsweetened applesauce
   OR 1 T cornstarch whisked w/3 T warm water 91.5 cal 12 mg P 1.4 mg K 2.1 mg Na
   OR 1 T cornstarch mixed with 1 T corn oil 211.5 cal 12 mg P 1.4 mg K 2.1 mg Na

Hy-Vee® store brands are among preferred recipe ingredients but other brands can be used – check labels and/or contact manufacturers for nutrient values

Maple Sugar: Use half the amt of maple syrup per amt sugar

Mushrooms:
   For 2 med white mushrooms 8 cal 31 mg P 114.4 mg K 1.8 mg Na
   1 T drained canned mushrooms 8.5 cal<51 mg P<51 mg K 7.5 mg Na 1.4 Gm protein (Hy-Vee® 0-Na added stems and pieces)

Oil: Equal amt applesauce replaces oil in baking, also adds a little body to liquids

Salt: Few drops of cranberry or tart grape juice can help w/flavor

Grind cornmeal in a blender to make masa flour

Grind quinoa in a blender to make quinoa flour

Substitute mashed fruit measure for measure for shortening

Substitute tart grapes, cranberries or their unsweetened juice for citrus & vinegar.

Because renal patients should limit or avoid dried beans, use green beans instead

Hard-shelled squash should be limited so yellow summer squash, either crookneck or straight neck, can be substituted in dishes requiring pumpkin or acorn squash
### NUTRIENT VALUES

USDA figures unless otherwise noted

<table>
<thead>
<tr>
<th>Serving</th>
<th>Calories</th>
<th>Protein (mg)</th>
<th>Potassium (mg)</th>
<th>Phosphorus (mg)</th>
<th>Sodium (mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 tsp maple sugar</td>
<td>10.6</td>
<td>0.1</td>
<td>8.2</td>
<td>0.3</td>
<td>0.3</td>
</tr>
<tr>
<td>OR ½ tsp maple syrup</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10.4</td>
</tr>
<tr>
<td>½ T maple sugar</td>
<td>15.9</td>
<td>0.15</td>
<td>&lt;5.5</td>
<td>0.2</td>
<td>0.2</td>
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<tr>
<td>OR ¼ tsp maple syrup</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15.4</td>
</tr>
<tr>
<td>4 T unsweetened applesauce</td>
<td>26</td>
<td>3</td>
<td>45.2</td>
<td>1.2</td>
<td>0.1</td>
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<tr>
<td>2 T homemade applesauce</td>
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<tr>
<td>2 T diced raw apple</td>
<td>8.1</td>
<td>1.7</td>
<td>16.8</td>
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<tr>
<td>1/3 C no-sugar added dried cranberries</td>
<td>123</td>
<td>3.2</td>
<td>16</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>¼ C fresh dewberries</td>
<td>15.4</td>
<td>7.9</td>
<td>58.2</td>
<td>&lt;0.4</td>
<td>0.5</td>
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<tr>
<td>¼ C fresh blueberries</td>
<td>21.1</td>
<td>&lt;4.5</td>
<td>28.5</td>
<td>&lt;0.4</td>
<td>&lt;0.3</td>
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<tr>
<td>¼ C fresh grapes</td>
<td>15.4</td>
<td>2.3</td>
<td>44</td>
<td>&lt;0.5</td>
<td>&lt;0.2</td>
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<td>¼ C sliced fresh strawberries</td>
<td>13.2</td>
<td>9.9</td>
<td>63.5</td>
<td>0.4</td>
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<tr>
<td>½ C pineapple chunks</td>
<td>86</td>
<td>4</td>
<td>100</td>
<td>2</td>
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<tr>
<td>½ C corn oil</td>
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<tr>
<td>2 T corn oil</td>
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<tr>
<td>1 T non-dairy vegan spread*</td>
<td>47.2</td>
<td>0.1</td>
<td>4.5</td>
<td>81.2</td>
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<tr>
<td>1 tsp spread</td>
<td>15.7</td>
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<td></td>
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<tr>
<td>1 C Native Flora Broth</td>
<td>&lt;29</td>
<td>&lt;45</td>
<td>&lt;226</td>
<td>8.2</td>
<td>1</td>
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<tr>
<td>½ T tomato paste</td>
<td>6.5</td>
<td>6.7</td>
<td>81.1</td>
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<tr>
<td>1 Italian tomato</td>
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<td>14.9</td>
<td>147</td>
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<td>1 plum tomato</td>
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<td>14.9</td>
<td>147</td>
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<td>1 small whole tomato</td>
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<td>21.8</td>
<td>216</td>
<td>4.6</td>
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<td>1 C cherry tomatoes</td>
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<td>35.8</td>
<td>353</td>
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<td>1 C yellow corn meal</td>
<td>480</td>
<td>242</td>
<td>167</td>
<td>0</td>
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<td>1 T cornstarch</td>
<td>91.5</td>
<td>12</td>
<td>1.4</td>
<td>2.1</td>
<td></td>
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<tr>
<td>1 C masa harina</td>
<td>416</td>
<td>245</td>
<td>340</td>
<td>5.7</td>
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<td>1 tsp arrowroot “flour”</td>
<td>&lt;10</td>
<td>negligible</td>
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<tr>
<td>¼ C canned diced potatoes</td>
<td>27</td>
<td>25.1</td>
<td>&lt;53</td>
<td>&lt;40.5</td>
<td>0.5</td>
</tr>
<tr>
<td>1 C canned potatoes</td>
<td>108</td>
<td>100.4</td>
<td>213</td>
<td>&lt;162</td>
<td>2</td>
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<tr>
<td>1 C cooked wild rice</td>
<td>160</td>
<td>200</td>
<td>120</td>
<td>0</td>
<td>6</td>
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<tr>
<td>½ C cooked grits</td>
<td>71.5</td>
<td>13.3</td>
<td>25.4</td>
<td>3.4</td>
<td>1.7</td>
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<tr>
<td>½ C quinoa</td>
<td>222</td>
<td>281</td>
<td>318</td>
<td>13</td>
<td>8.1</td>
</tr>
</tbody>
</table>

AFTER COOKING
| 0.5 T chopped 2 T2 T2 | 24 cal | 9 mg P | 14 mg K | 0.3 Gm protein |
| 9 halves | 92 cal | 37 mg P | 55 mg K | 1.2 Gm protein |
| 1 T (1 oz) black walnuts | 47.9 cal | 39.8 mg P | 40.5 mg K | 0.2 mg Na | 1.9 Gm protein |
| 9 halves | 92 cal | 37 mg P | 55 mg K | 1.2 Gm protein |
| 1 T (1 oz) black walnuts | 47.9 cal | 39.8 mg P | 40.5 mg K | 0.2 mg Na | 1.9 Gm protein |
| ¼ C no added Na cream corn | 35 cal | 32.8 mg P** | 62 mg K | 0.5 Gm protein |
| ¼ C no added Na canned corn | 35 cal | 32.6 mg P | 70 mg K | <5 mg Na | 1 Gm protein |
| 1 T frozen corn | 12.3 cal | 9.8 mg P | 30 mg K | 0.4 mg Na | 0.4 Gm protein |
| 1 T frozen corn microwaved | 19 cal | 14 mg P | 25.7 K | 0.6 mg Na | 0.5 Gm protein |
| ¼ C frozen cut green beans | 22.2 cal | 16.1 mg P | 131.5 mg K | 1.7 mg Na | 1.1 Gm protein |
| ¼ C no-Na added canned green beans | 10 cal | 6 mg P | 50 mg K | <8 mg Na | 0.5 Gm protein |
| 1 small white mushroom | 2.1 cal | 8.6 mg P | 31.8 mg K | 0.5 mg Na | 0.3 Gm protein |
| 1 medium white mushroom, sliced | 4 cal | 15.5 mg P | 57.2 mg K | 0.9 mg Na | 0.6 Gm protein |
| 2 medium white mushrooms | 8 cal | 31 mg P | 114.4 mg K | 1.8 mg Na |
| 1 can Hy-Vee® 0- Na added mushrooms | 68 cal | 206 mg P | 402 mg K | 60 mg* Na | 5.8 Gm protein |
| ¼ C pureed summer squash | 6 cal | 10.4 mg P | 69 mg K | 0.7 mg Na | 0.3 Gm protein |
| 1 C sliced summer squash | 36 cal | 52.2 mg P | 306 mg K | 1.6 Gm protein |
| ½ T chopped onion | 2 cal | 1.5 mg P | 7.3 mg K | 0.2 mg Na |
| 1 T diced onion | 4 cal | 2.9 mg P | 14.6 mg K | 0.4 mg Na | 0.1 Gm protein |
| 1 T minced garlic | 12.3 cal | 12.6 mg P | 33 mg K | 1.5 mg Na | 0.6 Gm protein |
| 1 T minced garlic | 12.3 cal | 12.6 mg P | 33 mg K | 1.5 mg Na | 0.6 Gm protein |
| 1 tsp | 4.1 cal | 4.2 mg P | 11 mg K | 0.4 mg Na | 0.2 Gm protein |
| 1 T chopped bell pepper | 3 cal | 2.4 mg P | 19.6 mg K | 0.4 mg Na | 0.1 Gm protein |
| 1 small red or green pepper | 22.9 cal | 19.2 mg P | 156 mg K | 3 mg Na | 0.7 Gm protein |
| 1 mini pepper | 8.7 cal | 10 mg P? | 59 mg K | 1.1 mg Na | 0.3 Gm protein |
| 1 T water-pak diced canned pimientos | 3 cal | 2.4 mg P | 19.6 mg K | 0.4 mg Na | 0.1 Gm protein |
| 1 T diced jalapeno | 4 cal | 3.6 mg P | 34.7 mg K | 0.4 mg Na | 0.1 Gm protein |
| 1 C chopped watercress | 1.3 cal | 20.4 mg P | 112 mg K | 13.9 mg Na | 0.8 Gm protein |
| 3 oz cranberries | 46 cal | 12 mg P | 85 mg K | 2 mg Na | 0.4 Gm protein |
| 3 oz grapes | 67 cal | 10 mg P | 191 mg K | 2 mg Na | 0.6 Gm protein |
| 1 C | 61.6 cal | 9.2 mg P | 176 mg K | 1.8 mg Na | 0.6 Gm protein |
Herbs & Spices:

1 T allspice  15.8 cal  6.8 mg P  62.6 mg K  4.6 mg Na  0.4 Gm protein
Bay leaf  113 mg P  529 mg K  23 mg Na
1 tsp cayenne  36 mg P  <252 mg K  3.7 mg Na
1 tsp cinnamon  6.2 cal  1.6 mg P  10.8 mg K  0.1 mg Na  0.1 Gm protein
1 tsp ground ginger  6.1 cal  2.6 mg P  23.5 mg K  0.6 mg Na  0.2 Gm protein
1 tsp hot sauce*  0.1 cal  0.2 mg P  1.3 mg K  6.3 mg Na  negligible protein
¼ tsp hot sauce*  0.1 cal  0.1 mg P  1.4 mg K  26.4 mg Na  negligible protein
1 tsp liquid smoke  0-0.3 cal  0P  0-1 mg K  0-7.9-8-11 mg Na  (use in moderation)
1 tsp American paprika  5.8 cal  6.9 mg P  46.9 mg K  0.7 mg Na  0.3 Gm protein
Dash black pepper  negligible cal, minerals, protein – substitute for cayenne of chili pepper flakes
1 tsp black pepper  5.1 cal  3.5 mg P  25.2 mg K  0.9 mg Na
1 tsp tarragon  1.5 cal  1.6 mg P  15.1 mg K  0.3 mg Na  0.1 Gm protein
Very small pinch salt if allowed by renal care provider 96 mg Na
1 tsp vanilla  0.9mg P  3.9mg K  0.2mg Na

*different brands
American Heart Association
Adventist Health Studies
American Journal Of Clinical Nutrition
American Kidney Fund
Cleveland Clinic
Daksi Uku
FDA
Hull, Myna Pearl
Hy-Vee® Stores, Inc/Hy-Vee® brands
Kemper, Cora Myrtle Morgan
King, Pocahontas Rebecca and Ruth Scarritt King Jackson
Mayo Clinic Community Support Groups
National Kidney Foundation
NIH
nutritiondata.self.com
University of Chicago
USDA
Water Hollow Band Clan Mothers