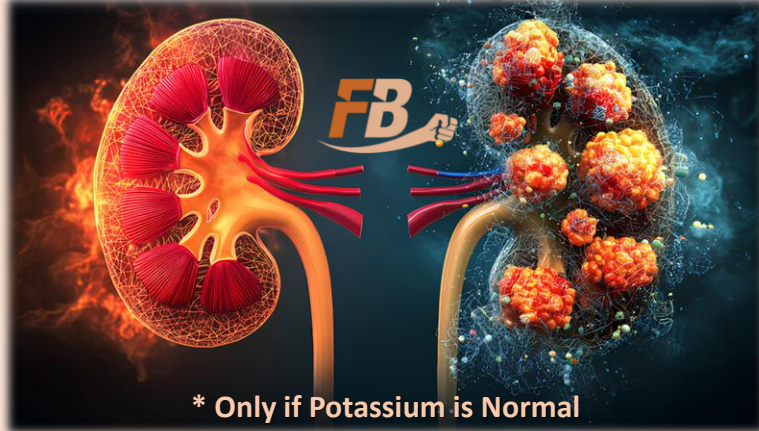


**Path to Kidney Health**

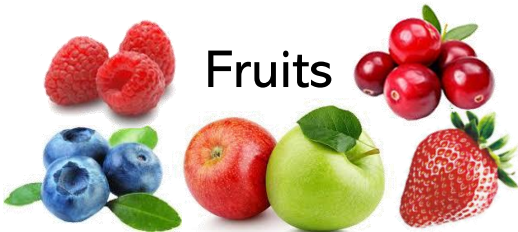
- ❖ Apples
- ❖ Avocado \*
- ❖ Beans
- ❖ Bell Peppers
- ❖ Blueberries
- ❖ Broccoli
- ❖ Brown Rice
- ❖ Cauliflower
- ❖ Cabbage
- ❖ Cranberries



- ❖ Fatty Fish
- ❖ Herbal Teas
- ❖ Lentils \*
- ❖ Nuts (Unsalted)
- ❖ Olive Oil (Virgin)
- ❖ Oats (Steel Cut)
- ❖ Quinoa
- ❖ Raspberries
- ❖ Strawberries
- ❖ Water (Hydrate!)

\* Only if Potassium is Normal

**Fruits (Antioxidant Rich), Cruciferous Vegetables & Leafy Greens, Healthy Fats & Fish, Plant Proteins & Whole Grains**



**Fruits**

Apples, Blueberries, Cranberries  
Raspberries, Strawberries



**Cruciferous Vegetables**

Broccoli, Cabbage, Cauliflower,  
Kale, Red Bell Peppers

**Battle Kidney Cancer Naturally!\***



**Healthy Fats & Fish**

Avocado\*, Extra Virgin Olive Oil, Fatty Fish  
(Salmon, Trout, Sardines), Walnuts & Other Nuts



**Plant Proteins & Whole Grains**

Brown or Wild Rice, Beans,  
Chickpeas, Lentils, Oats, Quinoa

**JUST ADD TO**

- ❖ HEALTHY SNACKING *Please see Pages 8 – 9*
- ❖ FRUIT & NUT BOWLS *for Sample Meals/Details*
- ❖ BERRY & GREEN SMOOTHIES
- ❖ CLEAN VEGGIE or FISH ENTREES
- ❖ STEAMED SIDE-DISHES & GRAIN BOWLS
- ❖ VEGETABLE & LEGUME PROTEIN SOUPS

**FRESH FIRST! THEN FIGHTBACK!**

\* **Caution:** Kidney Cancer & Chronic Kidney Disease (CKD) Diets Differ *(Please see MD)*





# FIGHTING THE GOOD FIGHT

*Nutrition Naturally!*



**KIDNEYS** quietly filter & balance our entire inner world, yet many kidney problems from cysts & stones, to cancer & CKD aren't visible until lab results flag trouble. This **FIGHTBACK FOODS** kidney-aware infographic is designed to help you connect what's on your plate with what's in your blood and urine, so food becomes part of your daily kidney-support strategy, not an added risk. **Every kidney is different:** The right choices depend on a specific diagnoses (*CKD<sup>1</sup> stage, cysts, tumors, stones, and inflammation*), personal lab indicators (*eGFR<sup>2</sup>, phosphorous, creatinine, potassium, protein in urine, blood pressure*), and how these labs trend over time.

<sup>1</sup> Estimated glomerular filtration rate (eGFR) is blood test calculation. Measures how well kidneys filter waste & fluids from blood and is the primary marker for kidney function.

<sup>2</sup> Low eGFR numbers indicate decreased function and a potential Chronic Kidney Disease (CKD).

**PLEASE NOTE:** The information contained herein is only provided as a courtesy and represents a summary of sample research & scientific knowledge. It was created to inform people about the impacts of Kidney-related issues, potential foods, dietary impacts and adjustments, necessary to support healthy kidney function. This in no way replaces a professional Nephrologist, Oncologist or Renal Dietician/Nutritionist advice or guidance.

**20 Sample Articles Selected:** From the **MAYO Clinic, National Kidney Foundation, National Institute of Health (NIH), PUBMED Central (PMC) & the Cleveland Clinic;** These are considered expert and reliable resources for Kidney insights.

See: **1** [Chronic kidney disease-Symptoms and causes-Mayo Clinic](#); **2** [How to Read Your Kidney Health Lab Results National Kidney Foundation](#); **3** [Healthy Eating for Adults with Chronic Kidney Disease – NIDDK](#)

## General Testing Guidelines for Kidney Health & Function: CKD and ACR

Chronic Kidney Disease Chart			Albuminuria (ACR) Categories		
			A1 <sup>(1)</sup>	A2 <sup>(2)</sup>	A3 <sup>(3)</sup>
			< 3 mg/mmol	3-30 mg/mmol	> 30 mg/mmol
eGFR Categories	G1	≥ 90	Low Risk	Moderate Risk	Moderate Risk
	G2	60-89	Low Risk	Moderate Risk	High Risk
	G3a	45-59	Moderate Risk	High Risk	Very High Risk
	G3b	30-44	High Risk	Very High Risk	Very High Risk
	G4	15-29	Very High Risk	Very High Risk	Very High Risk
	G5	< 15	Very High Risk	Very High Risk	Very High Risk

**Albumin-to-Creatinine Ratio (ACR):** Urine test ratio; albumin (*protein*) to creatinine (*waste product*); detects early kidney damage, especially from diabetes & high BP.

(1) ACR <3 mg/mmol = ACR <30 mg/g (2) ACR 3-30 mg/mmol = ACR 30-300 mg/g (3) ACR >30 mg/mmol = ACR >300 mg/g



# FIGHTING THE GOOD FIGHT

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This **KIDNEY** infographic is simply a practical map to understand which foods are generally kidney-supportive, which may need portion limits, and which are often red-flagged for certain lab patterns, but never as a substitute for medical advice.

Please review your current labs and imaging with your kidney specialist<sup>1</sup> and a renal dietitian or oncology nutritionist prior to any dietary changes; they can personalize these **FIGHTBACK FOODS** guidelines to your personal test results, treatments, and kidney-disease concerns.

<sup>1</sup> A *Kidney Specialist* is a *Nephrologist*: Medical doctor who specializes in diagnosing, treating, and managing diseases and disorders of the kidneys. Nephrologists (often called "kidney doctors") handle conditions like chronic kidney disease (CKD), acute kidney injury, glomerulonephritis, kidney stones, high blood pressure related to kidney function, and they oversee dialysis and medical aspects of kidney transplantation.

See: [4 What Is A Nephrologist? When To See One & What To Expect](#)

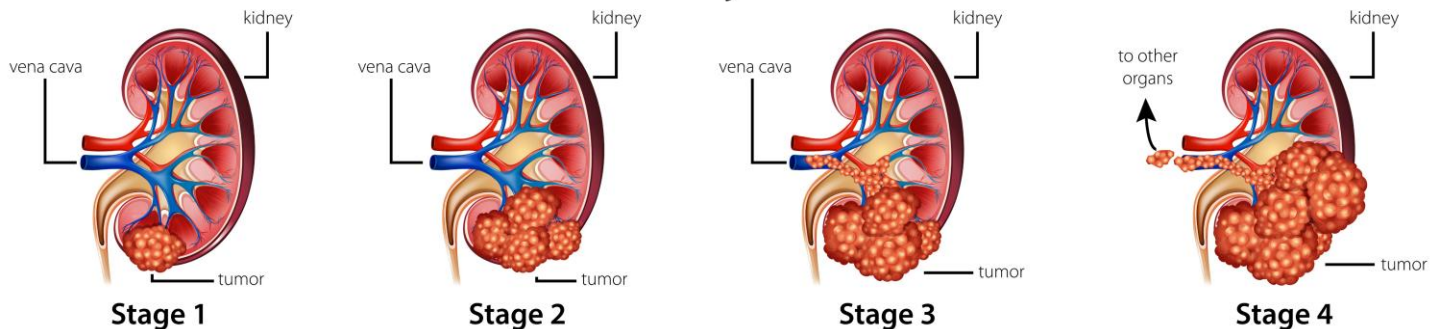
## Identifying Specific Kidney Problems as a Foundation for Aligning Diets

Many **KIDNEY PROBLEMS** from *Tumors* to *CKD* show up as patterns across blood & urine labs; personalized diets are then adjusted mainly around levels of *sodium*, *protein*, *potassium*, *phosphorus*, and *total energy* ... not just the diagnosis label.

**MAJOR KIDNEY ISSUES:** (*high level*): These are the big clinical "buckets" that are most relevant to lesions, tumors, inflammation and chronic kidney damage:

❖ *Kidney Cancers*: Renal cell carcinoma (*RCC*), transitional cell carcinoma of the renal pelvis, Wilms tumor (*children*), and metastatic tumors to the kidney.

## Kidney Cancer



❖ *Benign Renal Masses*: Range from simple to complex cysts, angiomyolipoma (*AML*), oncocytoma, and tuberous-sclerosis-related lesions.

### 3 Relevant Articles & Links:

See: [5 Nutrition and cancer: A review of the evidence for an anti-cancer diet - PMC](#)

[6 Dietary patterns, polygenic risk, and kidney cancer incidence: a UK Biobank cohort study - PMC](#)

[7 Cruciferous Vegetables Intake Is Associated with Lower Risk of Renal Cell Carcinoma: Evidence from a Meta-Analysis of Observational Studies - PMC](#)



# FIGHTING THE GOOD FIGHT

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**MAJOR KIDNEY ISSUES:** (*continued*): These are the big clinical “buckets” that are most relevant to lesions, tumors, inflammation and chronic kidney damage:

- ❖ **Chronic Kidney Disease (CKD):** Key function loss from diabetes, hypertension, glomerulonephritis, polycystic kidney disease, reflux nephropathy, etc.
- ❖ **Glomerular Diseases:** IgA nephropathy, focal segmental glomerulosclerosis (*FSGS*), membranous GN, lupus nephritis, anti-GBM disease.
- ❖ **Tubulointerstitial and Vascular Disease:** acute interstitial nephritis, drug/toxin nephropathy, ischemic nephropathy, vasculitis (*ANCA-vasculitis, microscopic polyangiitis*) affecting the kidneys.
- ❖ **Obstructive/Structural:** Kidney stones, hydronephrosis, congenital anomalies, medullary sponge kidney, polycystic kidney disease.

Imaging (*ultrasound, CT, MRI*) identifies masses, cysts, stones & structural lesions; blood/urine labs then show how much function or inflammation is present.



Despite impressive speed and accuracy gains, nephrologists remain divided on AI imaging tools because the kidney health field confronts several fundamental reliability, validation, and trust gaps that AI-enabled speed alone cannot address.

**See:** [8 Artificial intelligence and radiomics in evaluation of kidney lesions: a comprehensive literature review - PMC](#)



# FIGHTING THE GOOD FIGHT

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## KEY CORE BLOOD TESTS AND WHAT THEY IMPLY NUTRITIONALLY

These are the routine panels you can map directly into nutrition levers.  
*(sodium, protein, potassium, phosphorus, acid load)*

### Kidney Function:

- ❖ **Serum creatinine and eGFR:** quantify kidney function + CKD stage; downward eGFR trends prompt tighter sodium, protein, potassium & phosphorus limits.
- ❖ **BUN (blood urea nitrogen):** Blood test that measures amount of urea-nitrogen waste in your blood, which rises when kidneys filter poorly or when protein breakdown or dehydration is increased. It rises with reduced filtration, high protein intake, catabolism (metabolic), and dehydration. A very high BUN is a reason to moderate protein and improve hydration under medical supervision.

## Electrolytes

## & Minerals:



ENERGY HYDRATION



FLUID REPLENISHMENT



MINERAL CONTENT



PERFORMANCE BOOST



NATURAL INGREDIENTS

- ❖ **Sodium (NA):** high level plus edema or hypertension → reinforce low-sodium pattern; keep processed foods, restaurant meals, broths, salty snacks minimal.
- ❖ **Potassium (K):** If high (*hyperkalemia*) → restrict or measure out high-K foods such as (*bananas, oranges, potatoes, tomatoes, beans, many greens, dates*) and avoid potassium-based salt substitutes; If low → ensure adequate fruits/vegetables and review diuretics.
- ❖ **Bicarbonate ( $HCO_3$  or  $CO_2$ ):** If low, it suggests metabolic acidosis in CKD; more plant-forward, alkali-producing foods (*fruits/vegetables within K limits*) and sometimes bicarbonate therapy are used to correct acidosis.
- ❖ **Calcium (Ca) and Phosphorus (P):** key for mineral-bone disorder; high phosphorus or high Calcium-Phosphorus Product **CaxP** product → limit high-phosphorus foods (*cola with phosphates, processed meats/cheese, many nuts and seeds, bran, dark sodas*) and use binders as prescribed.
- ❖ **Magnesium (Mg):** less often a main dietary target but high Mg with CKD may require moderating supplements and high-Mg laxatives or antacids.

**See: 2** [How to Read Your Kidney Health Lab Results | National Kidney Foundation](#)



# FIGHTING THE GOOD FIGHT

*Nutrition Naturally!*



## KEY CORE BLOOD TESTS AND WHAT THEY IMPLY NUTRITIONALLY

These are the routine panels you can map directly into nutrition levels.

*(sodium, protein, potassium, phosphorus, acid load); continued*

### Protein:

- ❖ **Serum Albumin:** *If low*, suggests malnutrition or inflammation; the response is usually better-quality calories & adequate, but not excessive protein.

### CBC and Inflammatory Markers:

- ❖ **Anemia** (*low hemoglobin/hematocrit*): Common in CKD & many cancers; may want to emphasize iron-rich, folate- and B12-containing foods and adequate protein, while respecting any potassium/phosphorus limits.

## CORE URINE TESTS, LESIONS, AND DIET

Urine testing connects structural problems & glomerular inflammation to what you eat/drink.

### ❖ **Standard Urinalysis:**

- ❑ **Protein/albumin:** Albuminuria (*excess albumin, a primary blood protein, in the urine*) may signal kidney damage/disease or diabetic nephropathy (*a criterion for CKD*); may need to moderate protein intake (*not high-protein diets*) and BP/sodium control.
- ❑ **Blood (hematuria):** can reflect tumors, stones, cyst bleeding, or glomerulonephritis; diet is tailored more to the underlying cause (*e.g., stone prevention vs. CKD pattern*) than to the blood itself.
- ❑ **Leukocytes/nitrite:** May suggest UTI; very important in obstructed or tumor-bearing kidneys; hydrate & avoid bladder irritants (*caffeine, alcohol*), alongside antibiotics.

### ❖ **Quantitative Urine Protein:**

- ❑ **ACR (albumin-creatinine ratio) or 24-h Protein:** Higher values track CKD progression risk; dietary response is usually sodium restriction, blood-pressure control, and moderate protein (often  $\approx 0.6\text{--}0.8$  g/kg in advanced CKD), not high-protein regimens.

### ❖ **Stone and Metabolic Evaluation:**

- ❑ **24-hour Urine:** For calcium, oxalate, citrate, uric acid, sodium, volume: identifies stone drivers and points to specific food changes.
  - ✓ **High urine calcium:** limit excessive sodium and very high animal-protein intake; keep normal—not low-dietary calcium from food.
  - ✓ **High oxalate:** moderate high-oxalate foods (spinach, beet greens, rhubarb, nuts, chocolate, tea), pair oxalate with calcium at meals, and avoid mega-dosing vitamin C.
  - ✓ **Low citrate:** emphasize hydration and citrate-containing drinks (lemon/lime water) while watching potassium if CKD is present.



# FIGHTING THE GOOD FIGHT

## Nutrition Naturally!



### EXAMPLE FOOD PATTERNS “by lab issue,” NOT JUST DIAGNOSIS

This table summarizes how key blood/urine findings steer foods to emphasize vs. limit, across CKD, cancer, stones and inflammatory disease. (*Please see MD/dietician*)

Lab / Issue (blood or urine)	What the issue generally means	Consider Emphasizing these Types of Foods	Generally Limit or Avoid these types of foods
High sodium, edema, hypertension	Kidneys not handling salt (sodium) well	Home-cooked meals with no-salt herbs; fresh fruits/vegetables within Potassium (K) limits; unsalted grains; plain beans/lentils in controlled portions within limits	Processed meats, canned soups, fast food, salty snacks, salted nuts, bouillon, sports drinks high in sodium (Na)
High Potassium (K)	Reduced excretion capacity, meds, or high-K intake	Lower-K fruits (apples, berries, grapes); cabbage, cauliflower, lettuce; refined grains if needed to control Potassium (K)	Large portions of bananas, oranges, potatoes, tomato products, high-K greens, legume heavy bowls, coconut water, salt substitutes with potassium chloride (KCL)
Low Potassium (K)	Losses from diuretics, diarrhea, poor intake	More fruits and vegetables, especially moderate Potassium (K) items; check need for higher-K foods under MD guidance	Unnecessary restriction of fruit/vegetables; heavy caffeine/alcohol if causing GI loss
High Phosphorus (P), CKD-MBD	Phosphate retention with CKD	Lower-P plant foods: many fruits and most vegetables; white rice/pasta; phosphorus-free drinks; limited portions of lower-P nuts like macadamias/pecans	Processed meats/cheeses, dark colas with phosphate additives, many nuts/seeds, bran cereals, large portions of dairy, protein powders with phosphate additives
Rising creatinine, lower eGFR	Worsening kidney function	Plant-forward pattern; modest protein from fish, poultry, beans, soy in measured amounts; high quality calories (olive oil, grains)	High-protein fads (keto/Atkins), large red-meat portions, frequent processed meats, high-sodium (Na) ultra-processed foods
Albuminuria/ Proteinuria	Glomerular leak, CKD progression risk	Mediterranean-style, low-sodium (Na), moderate protein, plenty of vegetables and fruits within electrolyte limits	Very salty foods, repetitive large meat portions, protein supplements unless prescribed
Metabolic acidosis (low bicarbonate)	Acid retention in CKD	More fruits/vegetables (alkali-producing) within Potassium (K) limits; plant-dominant proteins	Very high animal-protein load and low produce intakes
Calcium-oxalate stones, high urine oxalate	Kidney stone risk	Adequate fluids; normal calcium (Ca) at meals (dairy or fortified alternatives); moderate oxalate	Spinach, beet greens, very large portions of nuts, rhubarb, high-dose vitamin C, heavy tea/chocolate intake
Uric-acid stones, high uric acid	Acidic urine, high purine intake	Hydration, more vegetables/whole grains, plant proteins; citrus beverages for urinary citrate	Organ meats, large red-meat portions, some shellfish, heavy fructose-sweetened drinks



# FIGHTING THE GOOD FIGHT

*Nutrition Naturally!*



Anti-inflammatory, nutrient-dense and antioxidant-rich foods may support a body battling **KIDNEY CANCER** aiding kidney(s) tissue, manage treatment side-effects, bolster immune defenses, promote recovery/quality of life during/after therapies.

- 1. HEALTHY SNACKING:** Supports steady energy, stabilizes blood sugar, and reduces reliance on ultra-processed foods that can worsen inflammation and treatment-related fatigue in kidney cancer:
  - ❖ Sliced apples or pears with a small handful of unsalted walnuts or almonds (*portion-controlled for potassium/phosphorus*) or substitute 1-2 tablespoons of almond, walnut, Brazil nut or walnut butter.
  - ❖ Raw veggie sticks (*red bell peppers, cucumber, carrots*) with low sodium hummus or white-bean dip.
  - ❖ Small bowl of blueberries and cranberries with a few low-sodium whole-grain crackers.
- 2. FRUIT & NUT BOWLS:** Provide fiber, phytonutrients, and healthy fats in a concentrated, easy-to-digest format that can help maintain weight and immune resilience without excess sodium or additives:
  - ❖ Mixed berries + apple or pear chunks; 1–2 tablespoons chopped nuts & spoon of oats/quinoa flakes.
  - ❖ Unsweetened yogurt or a fortified plant yogurt if protein/calcium are needed and kidney labs allow.
  - ❖ Cabbage-slaw style fruit bowl: shredded raw cabbage with diced apples, dried cranberries, and sliced almonds in a light vinaigrette (low sodium).
- 3. BERRY & GREEN SMOOTHIES:** Gentle, fiber-rich Berry & green smoothies are gentle, fiber-supportive & easy on sensitive appetites; supporting kidney health and cancer care (*with potassium adjusted to labs*):
  - ❖ ½ cup blue, ¼ cup straw-berries, handful kale, ½ Sml apple, unsweet almond milk, 1 tsp ground Flax seed.
  - ❖ ½ cup raspberries, ¼ cup pineapple/pear, ½ cup chop cucumber, 4 spinach leaves, water, 1 tsp chia .
  - ❖ ½ cup strawberries, ¼ Sml avocado, few baby greens, ½ cup cooked/cooled white rice/oats, water.
- 4. CLEAN VEGGIE OR FISH ENTREES:**
  - ❖ *Lemon-Herb Baked Salmon with Broccoli:* Bake salmon fillet in olive oil, lemon, garlic & parsley; roast broccoli florets on same tray with light drizzle of oil & herbs; season lightly w/ salt or salt-free blend.
  - ❖ *One-Pan Mediterranean Veggie & Chickpea Bake:* Toss zucchini, bell peppers, red onion, cherry tomatoes & chickpeas w/ olive oil, oregano & garlic; roast until tender; finish w/ lemon fresh basil.
  - ❖ *Turmeric-Ginger White Fish w/ Greens:* Rub cod or halibut with olive oil, turmeric, ginger & pepper; pan-sear or bake; serve on a sautéed cabbage and spinach (*or other allowed greens*) cooked gently in garlic w/ lemon.
- 5. STEAMED SIDE-DISHES & GRAIN BOWLS:**
  - ❖ *Steamed Broccoli–Carrot Medley:* Steam broccoli florets and carrot coins until just tender; toss with a drizzle of olive oil, and then a squeeze of lemon, adding a sprinkle of chopped parsley or dill.
  - ❖ *Simple Brown Rice & Veggie Bowl:* Spoon warm cooked brown rice into bowl; top with steamed green beans and red bell pepper strips; then finish with a light splash of olive oil and a lemon or herb vinaigrette.
  - ❖ *Quinoa, Cabbage & Mushroom Bowl:* Steam shredded green cabbage & sliced mushrooms; serve over cooked quinoa; then season with garlic, pepper, and a drizzle of tamari or low-sodium soy sauce if allowed.
- 6. VEGETABLE & LEGUME PROTEIN SOUPS:** Warm, easily digestible bowls that deliver gentle plant protein, fiber and micronutrients; keeping sodium / phosphorus in check; Portion size and potassium adjusted to labs / tests.
  - ❖ *Cabbage, lentil, and carrot herb soup:* Simmer green or brown lentils with chopped cabbage, carrots, celery, onions & garlic in a low-sodium vegetable broth; then finish with light parsley & olive oil.
  - ❖ *Cauliflower, chickpea, and barley stew:* Combine cauliflower florets, carrots, a small portion of chickpeas, and pearled barley in a lightly seasoned broth with thyme and bay leaf.
  - ❖ *Broccoli, white bean, and leek soup:* Gently cook leeks, garlic, broccoli, and a measured amount of canned, rinsed white beans in low-sodium broth, then partially blend for creaminess; this provides satisfying protein and fiber with controlled sodium and phosphorus for sensitive kidneys



# FIGHTING THE GOOD FIGHT

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No single food cures Kidney Cancer, but evidence supports controlled diets as important action in support of best possible outcomes during & after Kidney Cancer Treatments.

Proactive opportunity to functionally integrate diets rich in Kidney-supportive foods.

Natural Food	Key Nutrients / Compounds	Kidney Cancer - Fighting Benefits*
<b>Apples</b>	Fiber, vitamin C, polyphenols (quercetin)	Antioxidant, anti-inflammatory, fiber for gut microbiome, metabolic; may lower cancer/CKD risk.
<b>Avocado</b>	Monounsaturated fats, fiber, folate, Vitamin E, Potassium	Healthy fats & antioxidants; anti-inflammatory; (portion-control if potassium is limited).
<b>Beans (Legumes)</b>	Plant protein, fiber, folate, magnesium, phytochemicals	Healthy weight, blood sugar, gut microbiome; high-fiber, plant-protein; may lower kidney-cancer risk
<b>Bell Peppers</b>	Vitamin C, carotenoids (including beta-carotene), fiber	High VIT-C, low-potassium antioxidant vegetable; supports immune function and cellular protection.
<b>Blueberries</b>	Vitamin C, fiber, anthocyanins	Pigmented, low/moderate potassium berries; strong antioxidant & anti-inflammatory may slow cancer.
<b>Broccoli</b>	Fiber, vitamin C, glucosinolates (e.g., sulforaphane)	Cruciferous vegetable; intake of crucifers (broccoli, cabbage, cauliflower) may lower RCC risk.
<b>Brown Rice</b>	Complex carbs, fiber, B vitamins, minerals	Whole grain for energy, weight, glycemic control; (Mediterranean/DASH); support lower cancer risk.
<b>Cauliflower</b>	Fiber, vitamin C, glucosinolates	Crucifer; isothiocyanates and other compounds tied to reduced RCC risk in meta-analysis data.
<b>Cabbage</b>	Fiber, vitamin C, glucosinolates, phytochemicals	Low-potassium crucifer; strong antioxidant; detox - supporting compounds; may lower RCC risk.
<b>Cranberries</b>	Vitamin C, proanthocyanidins, antioxidants	Low-potassium; urinary tract health; antioxidants; may reduce inflammation, oxidative stress.
<b>Fatty Fish</b> <i>(e.g., salmon, mackerel)</i>	Omega-3 fats, vitamin D, high-quality protein, selenium	Omega-3, anti-inflammatory, cardio-protective; may lower RCC risk, though evidence is mixed/evolving.
<b>Herbal Teas</b> <i>(ginger, chamomile, rooibos)</i>	Polyphenols, flavonoids; often caffeine-free	Gentle hydration, antioxidants; can replace sugar - sweetened drinks; support as anti-inflammatory.
<b>Lentils</b>	Plant protein, high fiber, folate, iron, polyphenols	Fiber, plant-protein, supports weight, glycemic and lipid control; may reduce kidney-cancer risks.
<b>Nuts (Unsalted)</b>	Healthy fats, vitamin E, magnesium, phytochemicals (watch phosphorus/CKD)	Moderate/lab-guided portions; Mediterranean diet may lower cancer/cardiovascular risks; good fats.
<b>Olive Oil (Virgin)</b>	Monounsaturated fats, polyphenols	Core fat in Mediterranean diet; anti-inflammatory & antioxidant, may lower cancer/cardiovascular risk.
<b>Oats (Steel Cut)</b>	Soluble fiber (beta-glucan), complex carbs, B vitamins	May help cholesterol, glycemic control, satiety; whole-grain-rich may reduce kidney-cancer risk.
<b>Quinoa</b>	Complete plant protein, fiber, magnesium, iron	Higher-protein whole grain, plant-forward meals; anti-inflammatory, may help cancer & kidney health.
<b>Raspberries</b>	Fiber, vitamin C, anthocyanins (control potassium levels)	High-fiber, strong antioxidant, anti-inflammatory support of kidney-cancer diets, kidney-friendly.
<b>Strawberries</b>	Vitamin C, manganese, anthocyanins	Low-potassium berry; antioxidant profile; supports plant-forward, anti-inflammatory; reduced RCC risk.

\**"Cancer-fighting benefits"*: Supports anti-inflammatory, antioxidant, weight & glucose-regulating diets; may help renal-cell-carcinoma risk or survivorship; no guarantee of prevention or cure. **ALWAYS ALIGN PORTIONS & DIET** w/ nephrologist & renal/oncology dietitian based on eGFR, potassium, phosphorus & treatment plan.



# FIGHTING THE GOOD FIGHT

*Nutrition Naturally!*



## FUELING KIDNEY STRENGTH

### Age/Gender-Smart Nutrition to Fight BACK Against Kidney Cancer and CKD

Eating healthy with *KIDNEY CANCER* and/or *CHRONIC KIDNEY DISEASE (CKD)* is not about a *one-size fits all* “renal diet.” It is about using food as a targeted tool that shifts with gender, age, eGFR, potassium & phosphorus so that you can tolerate treatment, protect remaining kidney function & slow further damage. Men & women experience kidney cancer and CKD differently, but both improve odds and outcomes with relevant mixes of calories, protein, minerals, and anti-inflammatory foods tuned to their personal labs.

See: [9. Sex and Gender Differences in Kidney Cancer: Clinical and Experimental Evidence - PMC](#)



**FIGHT BACK MESSAGE:** You are not a passive recipient of dialysis risk or cancer statistics. Every lab draw is feedback, and every meal is a chance to respond. The strongest outcomes come when you, your nephrologist, oncologist, and renal/oncology dietitian treat nutrition as a shared project, adjusting protein, potassium, phosphorus, and calories the way your doctors titrate (optimize to reduce side-effects) medications. Showing up with questions, food logs, and goals (maintain strength, protect eGFR, support treatment) turns clinic visits into co-design sessions for your personal **FIGHT BACK Food** plan. Participate in your own Fight!

See: [10. Personalized Nutrition in Chronic Kidney Disease – PMC](#)

[11. NKF Nutrition Hub | National Kidney Foundation](#)

[12. Nutrition and Kidney Disease, Stages 1-5 \(Not on Dialysis\) | National Kidney Foundation](#)

Below are science-based nuances by life stage and sex. These are population-level patterns; your exact plan must match your stage of CKD, type of kidney cancer, and current labs.

#### MEN vs. WOMEN: Big-picture Differences

- ❖ **Men** are roughly twice as likely to develop kidney cancer and more likely to progress to kidney failure once CKD is present.
- ❖ **Women** with CKD often have slower eGFR decline but can be at higher risk for under-eating protein and calories, especially at older ages.

In observed CKD Studies: *Men tend to eat more protein, sodium, potassium & phosphorus* than women; *Women often have slightly higher fruit intake and overall diet-quality scores*.

**Implication:** [13 Sex Differences in Diet Quality & Nutrient Intake: Adults Living w Chronic Kidney Disease-PMC](#)

[14 Nutrition Management in Geriatric Patients with CKD – PMC](#)

- ❖ **Men** often need more aggressive sodium/protein moderation and weight/waist control.
- ❖ **Women** often need stronger safeguards against protein-energy malnutrition and anemia.



# FIGHTING THE GOOD FIGHT

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## KIDNEY STRENGTH – LIFESTAGES (Ages 20-40)

Age and Gender-Smart Nutrition to Fight Back against Kidney Cancer & CKD

### AGE GROUP 1: Adults 20 – 40 Years:

**Men 20 – 40 Goals:** Prevent or slow CKD, counter male-predominant kidney-cancer risk factors (*obesity, hypertension, high animal protein*).

**15** [Role of diet in renal cell carcinoma incidence: Review of meta-analyses of observational studies - PMC](#)

#### ❖ **Increase or Emphasize:**

- ✓ **Plant-forward protein:** Beans/lentils (*portion-controlled for CKD*), tofu, nuts/seeds in modest amounts; shift red/processed meat toward fish and poultry.
- ✓ **High-quality carbs:** Whole grains (oats, barley, brown rice), vegetables, and low-sugar fruits to support healthy weight and blood pressure.
- ✓ **Omega-3 fats:** Salmon, trout, sardines, ground flax and walnuts to reduce inflammation and support cardiovascular risk, which is tightly linked to CKD outcomes.

#### ❖ **Decrease or Limit:**

- ✓ **Red & Processed Meats; high-protein “bulking” diets:** CKD & RCC risk in men when intake is high.
- ✓ **Sugary Drinks & Energy Drinks:** Major dietary drivers of CKD incidence, weight gain & hypertension.
- ✓ **High-sodium fast food and snacks:** Aim for <2,300 mg sodium/day or lower if advised.

#### ❖ **Lab-driven Tweaks:**

- ✓ **Rising creatinine / falling eGFR** → tighten total protein (*often toward 0.8 g/kg/day*) and salt; pivot more strongly to plant protein.
- ✓ **High BP, triglycerides or fasting glucose** → weight control priority, fiber, cut refined carbs & sodium.

**Women 20–40 Goals:** Preserve kidney function, support iron and bone health, and leverage female “*protection*” without sliding into under-nutrition.

**See:** **16** [Differences between women and men with chronic renal disease - PubMed](#)

#### ❖ **Increase or Emphasize:**

- ✓ **Adequate - not low - Protein:** Often ~0.8 g/kg/day in early CKD, making sure each meal includes a protein source (*fish, poultry, eggs, tofu, Greek yogurt, beans*).
- ✓ **Iron and Folate:** Leafy greens, lentils, fortified grains, and possibly iron-rich animal foods (fish, poultry) to offset menstrual or treatment-related blood loss.
- ✓ **Calcium and Vitamin D:** Dairy or fortified plant milks, calcium-rich greens (within potassium limits) for bone protection, especially if steroids or hormonal therapies are used.

#### ❖ **Decrease or Limit:**

- ✓ **Extreme Dieting or Chronic Low-calorie Patterns:** Can accelerate muscle loss, Worsen CKD outcomes.
- ✓ **Usual CKD Culprits:** Excess sodium, sugary drinks, and processed meats.

#### ❖ **Lab-driven Tweaks:**

- ✓ **Low hemoglobin/ferritin** → tighten iron strategy (*iron-rich foods + VIT C; supplements per clinician*).
- ✓ **Elevated PTH or low vitamin D** → ensure adequate calcium/VIT D & manage phosphorus carefully.

**See:** **10** [Personalized Nutrition in Chronic Kidney Disease - PMC](#)



# FIGHTING THE GOOD FIGHT

Nutrition Naturally!



## KIDNEY STRENGTH – LIFESTAGES (Ages 40-65)

Age and Gender-Smart Nutrition to Fight Back against Kidney Cancer & CKD

### AGE GROUP 2: Adults 40 – 65 Years:

**Men 40 – 65 Goals:** This is the highest-risk window for both kidney cancer incidence and CKD progression, particularly in men.

See: [17 Kidney Failure Risk Factor: Gender \(Sex\) | National Kidney Foundation](#)

[9 Sex and Gender Differences in Kidney Cancer: Clinical and Experimental Evidence - PMC](#)

#### ❖ Increase or Emphasize:

- ✓ **Anti-inflammatory Foods:** Vegetables, fruits, whole grains, legumes, nuts, coffee/tea in moderation, and olive oil—patterns associated with lower RCC and CKD risk.
- ✓ **Moderate, High-quality Protein:** Usually 0.6 – 0.8 g/kg/day in CKD 3–5 not on dialysis (*tuned by dietitian*) with emphasis on fish and plant protein.
- ✓ **Soluble Fiber:** Oats, barley, apples, beans to improve lipids and glycemic control and blunt post-meal spikes.

#### ❖ Decrease or Limit:

- ✓ **Excess Animal Protein & Phosphate Additives:** Reduce large meat portions & processed foods with “*phos-*” ingredients, which increase phosphorus load and CKD progression risks.
- ✓ **Alcohol Excess & Smoking:** Strong RCC risk factors; limit alcohol to ≤1–2 drinks/day or as advised.

#### ❖ Lab-driven Tweaks:

- ✓ **High Phosphorus** → cap total phosphorus (*often 800–1,000 mg/day*), reduce processed meat, cola, big dairy and large nut/seed portions.
- ✓ **High Potassium** → Swap high-K foods (*bananas, oranges, potatoes, tomatoes, dried fruit*) for lower-K choices (*berries, apples, cabbage, cauliflower*).

**Women 40 – 65 Goals:** Navigate perimenopause/menopause (*changes in BP, weight, and bone health*), while preventing CKD progression.

See: [10 Personalized Nutrition in Chronic Kidney Disease - PMC](#)

#### ❖ Increase or Emphasize:

- ✓ **Adequate Protein / Muscle Protection:** Avoid overly restrictive protein; often 0.8 g/kg/day, or higher if *sarcopenia (loss of skeletal muscle & function)* risk.
- ✓ **Phytoestrogen-rich and High-fiber Foods:** Soy (*if allowed*), flax, legumes, whole grains may support cardiovascular and metabolic health without worsening CKD when phosphorus is controlled.
- ✓ **Calcium, VIT D & Magnesium:** To preserve bone density under CKD and cancer therapy stress.

#### ❖ Decrease or Limit:

- ✓ **High-sodium Convenience Foods:** Drive BP spikes that particularly harm post-menopausal kidneys.
- ✓ **Aggressive Low-fat Diets:** That remove healthy fats (*olive oil, nuts*); *needed for satiety & cardio health.*

#### ❖ Lab-driven Tweaks:

- ✓ **Worsening Lipids & Fasting Glucose** → Eat more plant-forward foods; Cut concentrated sugars/starch.
- ✓ **Trends toward Low Albumin/Weight Loss** → Loosen calorie/protein limits, add energy-dense, but kidney-safe foods (*olive oil, avocado if K allows, nut butters in renal-appropriate portions*).



# FIGHTING THE GOOD FIGHT

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## KIDNEY STRENGTH – LIFESTAGES (Ages > 65)

Age and Gender-Smart Nutrition to Fight Back against Kidney Cancer & CKD

**AGE GROUP 3: Adults > 65 Years:** Older adults with CKD and/or Kidney Cancer face a double risk: *progression and malnutrition*.

See: [14 Nutrition Management in Geriatric Patients with CKD - PMC](#)

[10 Personalized Nutrition in Chronic Kidney Disease – PMC](#)

[18 Chronic Kidney Disease | Nutrition Guide for Clinicians](#)

**Men > 65 Goals:** Maintain muscle & function; avoid under-eating while respecting CKD limits.

### ❖ Increase or Emphasize:

- ✓ *Sufficient Protein and Calories:* Newer guidance supports ~1.0 – 1.2 g/kg/day protein for stable older adults with CKD to prevent sarcopenia (*loss of skeletal muscle & function*), tailored to individual status and lab tests.
- ✓ *Soft, easy-to-chew Proteins:* Fish, eggs, tofu (*if allowed in diet*), Greek yogurt, well-cooked beans, and lentils in measured portions.
- ✓ *Frequent Small Meals & Soups/Stews:* Vegetables & legumes - reduce fatigue & GI burden; deliver nutrients.

### ❖ Decrease or Limit:

- ✓ *Severe Protein Restriction:* Causes wasting; more dangerous than moderate uremic toxin rise in frail adults.
- ✓ *High-Sodium Canned Soups & Processed Meats:* Use home-made low-salt soups and freshly prepared meats.

### ❖ Lab-driven Tweaks:

- ✓ *Low Albumin, Weight Loss, or Frailty* → Relax protein limits first (*often closer to ≥1 g/kg*), then adjust phosphorus with binders and food choices rather than cutting calories.
- ✓ *Worsening Acidosis or High Potassium* → Work with the kidney care/nutrition team on alkali therapy and precise potassium exchanges rather than broad vegetable restrictions when/if possible and practical.

**Women > 65 Goals:** Independence, bone & muscle health, avoid under-nutrition and anemia.

### ❖ Increase or Emphasize:

- ✓ *Protein with Bone-supportive Nutrients:* similar 1.0–1.2 g/kg/day target if stable, along with calcium, vitamin D, and possibly vitamin K-rich leafy greens within potassium guidelines.
- ✓ *Iron, B12, and Folate:* Address treatment-related or CKD-related anemia with iron-rich foods and B-vitamin adequacy.
- ✓ *Colorful Plant Foods & Healthy Fats:* Eat berries, crucifers, olive oil, + to support anti-inflammatory appetite and milieu or total environment and influencers; *physical, social, or biological influencers of eating behaviors, nutritional choices, and metabolic processes*.

### ❖ Decrease or Limit:

- ✓ *“Tea and toast”– style low-protein eating Patterns:* Results in accelerated frailty.
- ✓ *Over-reliance on phosphorus-rich dairy if phosphorus is high;* use fortified plant milks as appropriate.

### ❖ Lab-driven Tweaks:

- ✓ *Fragility fractures, rising PTH/phosphorus* → tighten phosphorus sources; favor plant proteins with lower phosphorus bioavailability, and use binders as prescribed.
- ✓ *Persistent Anemia* → Intensify iron sources; consider erythropoiesis-stimulating therapy as/if advised.



# FIGHTING THE GOOD FIGHT

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**SUMMARY:** For **KIDNEY CANCER** with preserved or mildly reduced kidney function, the most protective foods are Mediterranean/DASH-style, plant-forward diets:

- ❖ *Plenty of vegetables, fruits, whole grains, plant proteins, fish, and olive oil*
- ❖ *Very little processed meat, refined grains, or added sugar.*

## Natural Foods/Nutrition may (or may not) help Prevent / Survive Kidney Cancer

No single food “prevents” KIDNEY CANCER, but certain foods and diets are strongly associated with lower RCC risk and better survivorship. See: [19 Renal cell carcinoma: links and risks - PMC](#)

**Higher intake of Fruits, Vegetables & Fiber-rich Foods:** Associated with lower RCC risk; deeply colored fruits and vegetables provide antioxidants and phytochemicals that may help counter oxidative stress and inflammation. See: [20 Diet and Chronic Kidney Disease - PubMed](#)

❑ **Specific Groups:** *Please always Consult with Nephrologist, Oncologist & Renal Dietician*

- ✓ **Cruciferous Vegetables** (*broccoli, cabbage, Brussels sprouts*) for glucosinolates and are linked with lower risk of several cancers, including RCC in some studies.
- ✓ **Berries** (*blueberries, strawberries, raspberries, cranberries*) supply polyphenols and are highlighted as particularly supportive for kidney cancer patients because they are antioxidant-rich and some are relatively low in potassium.
- ✓ **Legumes, Whole Grains, and Nuts:** In moderate portions, support weight control and cardiometabolic health, indirectly lowering CKD and RCC risk; in CKD these need phosphorus/potassium adjustments.

❖ **Avoidance Side:** Obesity, high use of processed meats, heavy alcohol and tobacco use all result in higher RCC risk. Healthy-weight and Mediterranean-style diet appears protective.

Please see your **KIDNEY CANCER EXPERTS** for personalized “what should I eat today” guidance.

- ❖ **Nephrologist:** Interprets kidney function (*eGFR, potassium, phosphorus, proteinuria*); Limit protein, fluids, potassium & phosphorus if CKD/reduced renal function is present.
- ❖ **Oncologist or Urologic Oncologist:** Aligns diet to surgery, immunotherapy/targeted therapy; manage treatment side-effects that affect eating (*nausea, diarrhea, weight loss*).
- ❖ **Renal / Oncology Dietitian** (*registered dietitian nutritionist, RDN*): Specialist who turns labs, stage, medications, and symptoms into specific meal plans, portions, and food lists tailored to kidney cancer plus CKD, stones, or other kidney issues.

**Ask Explicitly:** “Given my age, gender, Cancer / CKD stage & treatment, *what is my daily target for protein (g), sodium (mg), potassium (mg), and phosphorus (mg)?*” Ask how to hit those targets with mostly plant-forward foods? Revisit targets after major changes, surgery, therapy, shift in eGFR, so your **FIGHT BACK plan evolves!**

**CORE CARE TEAM:** Research supports an anti-inflammatory, plant-forward diet, but your Nephrologist, Oncologist & Dietician translate your lab tests into a personalized eating plan.