

There are a variety of milk alternatives on the market made from oats, soy, rice, nuts, and seeds. Plant-based milks are becoming more popular and are common at the grocery store.

## Why Are Milk Alternatives a Superfood?

- Milk alternatives can be lower in phosphorus and potassium than cow's milk unless they have additives
- Soy milk is high in protein
- Almond milk is a good source of vitamin E and antioxidants
- Nut and seed-based milks contain monounsaturated and polyunsaturated fats, which benefit heart health
- Oat milk has more riboflavin (vitamin B2) and vitamin B12 than low-fat cow's milk
- Plant-based milks are a great alternative if you are lactose-intolerant or have high cholesterol levels
- There are also yogurt, frozen desserts, and cheeses that are made from plant-based milks

# Milk Alternatives and Kidney Disease

Milk alternatives have varying amounts of potassium and phosphorus. The type and how much you may have each day will depend on your stage of kidney disease or the type of dialysis you receive. Use the chart on the next page and ask your kidney dietitian how to choose milk alternatives that will fit your kidney diet plan.

## **CHRONIC KIDNEY DISEASE (CKD)/TRANSPLANT**

Most people with CKD or kidney transplant do not have to limit milk alternatives due to potassium or phosphorus unless directed by their kidney dietitian. Find a kidney dietitian at sites.google.com/view/ckdrd/home

## **HEMODIALYSIS (3 TIMES/WEEK)**

Potassium and phosphorus can be a concern for some milk alternatives depending on your lab results. Ask your kidney dietitian how much and which type of plant-based milk is best for you.

## DAILY HOME AND NOCTURNAL HEMODIALYSIS/ PERITONEAL DIALYSIS

These types of dialysis can remove more potassium. You may consume milk alternatives for more dietary potassium if they do not have phosphorus additives. If you are on peritoneal dialysis and need more protein, soymilk is a protein-rich alternative.

#### **KIDNEY STONES**

Soy, almond, and cashew milks have a high oxalate content and may be restricted if you have a history of calcium oxalate kidney stones. Consult your doctor or kidney dietitian for more information on oxalate-containing foods.



## COMMON PLANT-BASED MILK BRANDS (1 cup serving)

BRAND	CALORIES	PROTEIN (g)	PHOSPHORUS (mg)	POTASSIUM (mg)
Silk® Original Soy Milk	110	8	220	380
Rice DREAM™ Enriched Original Rice Milk	120	0	150	30
Silk® Unsweet Original Coconutmilk	40	0	N/A*	310
Blue Diamond Almond Breeze® Original Almondmilk	60	1	20	170
Elmhurst® Milked Cashews Unsweet Cashewmilk	130	10	N/A	145
Oatly Original Oatmilk (Chilled)	120	3	270*	390

Source: Manufacturers website

\*Contains added phosphates. If consuming this item, take phosphate binder(s) if prescribed by your doctor.

## Recipe

## SWEET STRAWBERRY-PINEAPPLE PLANT-BASED SMOOTHIE

### **MAKES: 2 SERVINGS. SERVING SIZE 8 OZ**

34 cup almond milk or soymilk yogurt

 $\frac{1}{2}$  cup plant-based milk (e.g., soy, almond, cashew). Use less than  $\frac{1}{2}$  cup milk if you prefer a thicker smoothie

½ cup frozen or fresh pineapple chunks

½ cup frozen or fresh strawberries, stems removed

3-4 ice cubes

#### **INSTRUCTIONS**

- 1) Place all ingredients in an electric blender.
- 2) Blend on high speed until all ingredients blend to liquid consistency.
- 3) Pour smoothie into a tall glass and enjoy!

#### **NUTRITIONAL ANALYSIS**

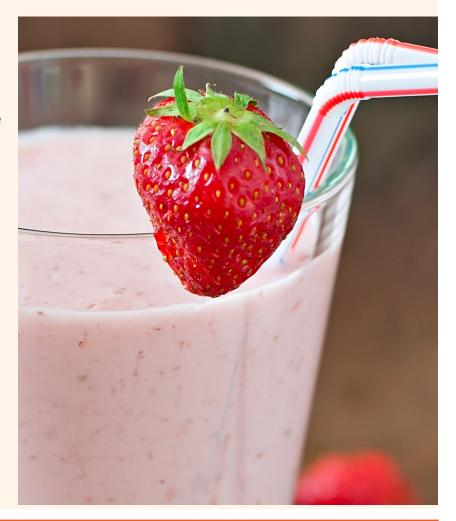
Prepared with almond milk and vanilla almond milk yogurt

Calories......127

Total fat	8 g
Saturated fat	0 g
Total carbohydrates.	11 g
Protein	3 g
Fiber	2 g
Potassium	251 mg
Phosphorus	100 mg
Calcium	10∩ ma

Sodium......90 mg

\*Phosphorus content of Silk® Almondmilk Vanilla Yogurt (118.25 mg P/100g) on file at the University of Minnesota.



## For more information, contact the National Kidney Foundation

Toll-free help line: 855.NKF.CARES or email: nkfcares@kidney.org

The National Kidney Foundation wishes to thank its Council on Renal Nutrition (CRN) for the development of this fact sheet.











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