

Alternative Milk Beverages

Jennifer Tarantola, RD, LDN, and Lesley Wujastyk, RD, LDN

THE INCREASED VARIETY and selection of alternative milk beverages have left many nephrology dietitians questioning the appropriateness of these products for patients with chronic kidney disease (CKD) patients. Most nephrology dietitians encourage CKD patients to limit their intake of cow's milk due to the high phosphorus and potassium contents. Eight ounces of cow's milk contains approximately 230 mg phosphorus and 365 mg potassium.¹ It is generally recommended that CKD patients limit milk intake to one half cup per day. In the past, nondairy creamer has been suggested as an alternative to milk. Nondairy creamer contains 154 mg phosphorus and 458 mg potassium per 8-ounce serving.¹ Some dietitians may also recommend soy and/or rice milk as an alternative to cow's milk for those following a prescribed renal diet. Although soy and rice milk have been on the market for many years, they have recently gained popularity and have become more widely available. A wide variety of other alternative milk beverages have also recently emerged in the market, including nut, oat, and hemp milk beverages. This product update discusses the appropriateness of these products for the CKD population. Table 1 provides the nutritional information for alternative milk beverage products found at major grocery retailers across the country (Trader Joe's, Whole Foods, Safeway stores, and Supervalu stores).

As early as 1933, scientists were studying the phosphorus content of milk.² It is known that milk contains calcium, magnesium, sodium, potas-

sium, citrate, chloride, and inorganic phosphate.³ Many dialysis patients were raised drinking milk and told it was "good for their bones." Ironically, once they experience kidney failure, the opposite is true. Between 30% and 60% of the phosphorus content in milk is absorbed in the intestines and is linearly related to the overall phosphorus intake over a wide range of 4 to 30 mg/kg/day.⁴ Phosphate is a well-known uremic toxin, which is known to contribute to hyperparathyroidism, vitamin D metabolism, and hypocalcemia in dialysis patients.⁵ Uncontrolled hyperphosphatemia leads to metabolic disturbances of the bone and altered mineral metabolism. This results in more complications and long-term damage to the parathyroid glands, bones, and cardiovascular system. Serum phosphorus levels greater than 5.0 mg/dl are an independent risk factor for mortality in hemodialysis patients. It has been studied that the relative risk of death with a phosphorus level between 5.0 mg/dl and 6.0 mg/dl is 1.07, and the risk increases to 2.02 with a phosphorus level of greater than 9.0 mg/dl.⁶

Hyperphosphatemia may result for a variety of reasons. Some reasons may include excess dietary phosphorus intake, either by naturally occurring or added sources of phosphorus in food and beverage products, and increased intestinal absorption of phosphorus, sometimes caused by the inappropriate use of vitamin D therapies or the inadequate use of phosphorus binders. Other causes of hyperphosphatemia in dialysis patients include inadequate dialysis removal of phosphorus and the release of phosphorus from the bone and tissue.⁷ Each dialysis treatment removes approximately 250 to 1000 mg of the phosphorus.⁸ In addition to dialysis, the other options for the management of phosphorus in dialysis patients are dietary modification, phosphate binder medications, and vitamin D analogs.

Dietary modification is one of the primary methods used to prevent and treat hyperphosphatemia. The average American diet is high in phosphorus. According to recent data from the U.S.

Fresenius Medical Care, Garfield Dialysis Center, Chicago and Oak Park, IL.

Address reprint requests to Jennifer Tarantola, RD, LDN, Fresenius Medical Care, Garfield Dialysis Center, 5401 S. Wentworth Ave., Suite 18, Chicago, IL 60609. E-mail: jennifer.tarantola@fmc-na.com.

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Table 1. Alternative Milk Beverages

Beverage (8 ounces)	Calories	Fat (g)	Saturated Fatty Acids (g)	Trans-Fatty Acids (g)	Na (mg)	K (mg)	CHO (g)	Fiber (g)	Sugars (g)	Protein (g)	PO ₄ (mg)	Ca (mg)	Vitamin D (%)	Manufacturer and Contact Information
8th Continent Original (Refrigerated)	80	3	0.5	0	100	n/a	7	0	7	6	255	300	25	Heritage Foods 692 Arrow Grand Circle, Ste B Covina, CA 91722 1-800-247-6458 www.8thcontinent.com
8th Continent Vanilla (Refrigerated)	100	3	0.5	0	105	n/a	11	0	10	6	257	300	25	
8th Continent Chocolate (Refrigerated)	140	3	0.5	0	125	n/a	22	1	20	7	294	300	25	
8th Continent Light Original (Refrigerated)	50	2	0	0	115	n/a	2	0	2	6	255	300	25	
8th Continent Light Vanilla (Refrigerated)	60	2	0	0	110	n/a	5	0	5	6	258	300	25	
8th Continent Light Chocolate (Refrigerated)	90	1.5	0	0	125	n/a	12	<1	11	7	294	300	25	
8th Continent Fat-Free Original (Refrigerated)	60	0	0	0	100	n/a	8	0	7	6	256	300	25	
8th Continent Fat-Free Vanilla (Refrigerated)	70	0	0	0	100	n/a	11	0	10	6	257	300	25	
EdenBlend Organic	120	3	0.5	0	90	250	18	<1	8	7	100	40	n/a	Eden Foods Inc. 701 Tecumseh Road Clinton, MI 49236 1-888-424-3336 www.edenfoods.com
EdenSoy Carob Organic	170	4	0.5	0	95	350	28	<1	13	7	100	80	n/a	
EdenSoy Chocolate Organic	180	3.5	1	0	105	410	28	<1	14	8	150	100	n/a	
EdenSoy Vanilla Organic	150	3	0	0	85	320	24	<1	16	7	100	80	n/a	
EdenSoy Extra Original, Organic	130	4	0.5	0	100	440	13	<1	7	11	150	200	10	
EdenSoy Extra Vanilla, Organic	150	3	0	0	90	310	23	<1	15	7	100	200	10	
EdenSoy Light Original, Organic	100	2	0	0	90	220	15	0	10	5	80	100	n/a	
Edensoy Light Vanilla, Organic	110	1	0	0	110	200	22	0	12	4	60	100	n/a	
Edensoy Original Organic	140	5	0.5	0	105	440	14	<1	7	11	150	100	n/a	
EdenSoy Unsweetened, Organic	120	6	1	0	5	460	5	<1	2	12	150	40	n/a	
Good Karma Original Rice Milk	80	3	0	0	170	n/a	12	0.4	10	1	150	250	25	Good Karma Foods 441 Beaver St., Suite 201 Sewickley, PA 15143 1-800-550-6731
Good Karma Vanilla Rice Milk	110	3	0	0	170	n/a	19	0.4	16	1	150	250	25	
Good Karma Chocolate Rice Milk	130	3	0	0	190	n/a	25	1	21	1	150	250	25	

(Continued)

Table 1. Alternative Milk Beverages (Continued)

Beverage (8 ounces)	Calories	Fat (g)	Saturated Fatty Acids (g)	Trans-Fatty Acids (g)	Na (mg)	K (mg)	CHO (g)	Fiber (g)	Sugars (g)	Protein (g)	PO ₄ (mg)	Ca (mg)	Vitamin D (%)	Manufacturer and Contact Information
Living Harvest Hempmilk Unsweetened Original	70	6	0.5	0	120	60	1	<1	0	4	400	400	20	Living Harvest Conscious Nutrition, Inc PO Box 4407 Portland, OR 97208 1-888-690-3958 www.worldpantry.com
Living Harvest Hempmilk Unsweetened Vanilla	70	5	0.5	0	120	60	1	<1	0	4	400	400	20	
Living Harvest Hempmilk Original	130	4	0.5	0	130	80	20	<1	14	4	400	400	20	
Living Harvest Hempmilk Chocolate	210	5	0.5	0	145	80	36	<1	24	4	400	400	20	
Living Harvest Hempmilk Vanilla	130	4	0.5	0	130	80	20	<1	16	4	400	400	20	
Organic Valley Soy Milk Original (Refrigerated)	110	4	0.5	0	100	280	11	3	6	7	106	300	30	
Organic Valley Soy Milk Chocolate (Refrigerated)	130	3	0.5	0	160	160	20	3	16	5	64	300	30	
Organic Valley Soy Milk Vanilla (Refrigerated)	110	3	0	0	100	230	14	2	10	6	94	300	30	
Organic Valley Soy Milk Unsweetened (Refrigerated)	80	4	0	0	110	280	3	1	1	7	79	300	30	
Pacific Foods Almond Beverage Plain	70	3	0	0	140	n/a	9	1	8	1	28	300	25	Pacific Natural Foods 19480 SW 97th Avenue Tualatin, OR 97062 503-692-9666 www.pacificfoods.com
Pacific Foods Almond Beverage Almond Vanilla	90	2.5	0	0	140	n/a	16	0	14	1	25	300	25	
Pacific Foods Unsweetened Almond Beverage	35	2.5	0	0	180	n/a	2	0	0	1	21	300	25	
Pacific Foods Unsweetened Almond Vanilla Beverage	40	25	2.5	0	180	n/a	3	0	0	1	18	0	25	
Pacific Foods Beverage Hazelnut Original	110	3.5	0	0	120	n/a	18	1	14	2	195	300	25	
Pacific Foods Beverage Organic Oat Plain	130	2.5	0	0	110	n/a	24	2	19	4	270	350	25	

(Continued)

Table 1. Alternative Milk Beverages (Continued)

Beverage (8 ounces)	Calories	Fat (g)	Saturated Fatty Acids (g)	Trans-Fatty Acids (g)	Na (mg)	K (mg)	CHO (g)	Fiber (g)	Sugars (g)	Protein (g)	PO ₄ (mg)	Ca (mg)	Vitamin D (%)	Manufacturer and Contact Information
Pacific Foods Beverage Organic Oat Vanilla	130	2.5	0	0	110	n/a	25	2	20	4	270	300	25	
Pacific Foods Low Fat Rice Beverage Plain	130	2	0	0	55	n/a	27	0	14	1	175	30	25	
Pacific Foods Low Fat Rice Beverage Vanilla	130	2	0	0	55	n/a	27	0	14	1	175	30	25	
Pacific Foods Organic Soy Beverage Unsweetened	90	4.5	0.5	0	150	n/a	4	2	2	9	125	20	n/a	
Pacific Foods Ultra Soy Plain Beverage	120	4	0.5	0	150	n/a	11	1	8	10	250	500	25	
Pacific Foods Ultra Soy Vanilla Beverage	130	4	0.5	0	150	n/a	14	1	10	10	250	500	25	
Pacific Foods Select Soy Vanilla Beverage	80	20	0	0	115	n/a	11	1	9	5	65	20	n/a	
Pacific Foods Ultra Soy Plain Beverage	70	2.5	0	0	115	n/a	9	1	6	5	65	20	n/a	
WestSoy Organic Plus Plain	100	4	0.5	0	135	270	10	<1	8	7	250	300	25	WestSoy Consumer Relations The Hain Celestial Group 4600 Sleepytime Dr. Boulder, CO 80301 1-800-434-4246 www.westsoy.biz
WestSoy Organic Plus Vanilla	130	4	0.5	0	135	270	16	<1	15	7	250	300	25	
WestSoy Organic Low Fat Plain	110	2.5	0	0	105	65	20	0	13	1	100	250	25	
WestSoy Organic Low Fat Vanilla	120	1.5	0	0	90	160	21	2	10	4	150	200	25	
WestSoy Lite Plain	70	2	0	0	95	160	10	<1	9	4	150	300	25	
WestSoy Lite Vanilla	90	2	0	0	75	160	14	<1	13	5	150	300	25	
WestSoy Non Fat Plain	70	0	0	0	105	210	10	<1	9	6	150	250	25	
WestSoy Non Fat Vanilla	80	0	0	0	105	220	12	<1	10	6	150	250	25	
WestSoy Organic Soymilk	130	3.5	0.5	0	125	240	18	3	12	8	n/a	40	0	
WestSoy Unsweetened Original	90	4.5	0.5	0	30	300	5	4	1	9	n/a	40	n/a	
WestSoy Unsweetened Vanilla	100	4.5	0.5	0	30	300	5	4	1	9	n/a	40	n/a	
WestSoy Unsweetened Chocolate	100	4.5	0.5	0.5	30	370	6	5	1	9	n/a	40	n/a	
WestSoy Unsweetened Almond	90	4.5	0.5	0	30	300	5	4	1	9	n/a	40	n/a	
WestSoy Soy Slender Plain	60	3	0.5	0	105	210	3	3	<1	6	250	300	25	

(Continued)

Table 1. Alternative Milk Beverages (Continued)

Beverage (8 ounces)	Calories	Fat (g)	Saturated Fatty Acids (g)	Trans-Fatty Acids (g)	Na (mg)	K (mg)	CHO (g)	Fiber (g)	Sugars (g)	Protein (g)	PO ₄ (mg)	Ca (mg)	Vitamin D (%)	Manufacturer and Contact Information	
WestSoy Soy Slender Vanilla	70	3	0.5	0	125	210	4	3	<1	6	250	300	25		
WestSoy Soy Slender Chocolate	70	3	0.5	0	125	290	5	4	<1	7	250	300	25		
WestSoy Soy Slender Cappuccino	70	3	0.5	0	125	210	4	3	<1	7	250	300	n/a		
WestSoy Soy Shake Vanilla	170	3	0	0	125	380	28	3	23	7	150	300	25		
WestSoy Soy Shake Chocolate	170	3.5	0	0	130	480	30	4	23	7	150	300	25		
WestSoy Rice Drink Plain	110	2.5	0	0	110	65	20	0	13	1	100	250	25		
WestSoy Rice Drink Vanilla	110	2.5	0	0	110	65	20	0	13	1	100	250	25		
Almond Breeze Original	60	2.5	0	0	150	180	8	1	7	1	100	200	25	Blue Diamond Growers Co-op 1802 C Street Sacramento, CA 95812 916-442-0771 www.bluediamondgrowers.com	
Almond Breeze Vanilla	90	2.5	0	0	150	180	16	1	15	1	100	200	25		
Almond Breeze Chocolate	120	3	0	0	150	250	22	1	20	2	150	200	25		
Almond Breeze Unsweetened Original	40	3	0	0	180	190	2	1	0	1	40	200	25		
Almond Breeze Unsweetened Vanilla	40	3	0	0	180	190	2	1	0	1	40	200	25		
Almond Breeze Unsweetened Chocolate	45	3.5	0	0	180	230	3	1	0	2	40	200	25		
Rice Dream Enriched Chocolate	160	3	0	0	90	200	34	1	28	2	150	300	25		Taste The Dream Consumer Relations The Hain Celestial Group, Inc. 4600 Sleepytime Dr. Boulder, CO 80301 800-434-4246 www.tastethedream.com
Rice Dream Enriched Original	120	2.5	0	0	100	60	23	0	10	1	150	300	25		
Rice Dream Enriched Vanilla	130	2.5	0	0	105	53	26	0	12	1	150	300	25		
Rice Dream Enriched Original Heartwise	130	2	0	0	80	30	27	3	9	1	150	300	25		
Rice Dream Heartwise Vanilla	140	2	0	0	80	30	30	3	10	1	150	300	25		
Rice Dream Horchata	160	2.5	0	0	5	80	32	0	18	1	n/a	40	n/a		
Rice Dream Original	120	2.5	0	0	100	56	24	0	11	1	57	20	n/a		

(Continued)

Table 1. Alternative Milk Beverages (Continued)

Beverage (8 ounces)	Calories	Fat (g)	Saturated Fatty Acids (g)	Trans-Fatty Acids (g)	Na (mg)	K (mg)	CHO (g)	Fiber (g)	Sugars (g)	Protein (g)	PO ₄ (mg)	Ca (mg)	Vitamin D (%)	Manufacturer and Contact Information
Rice Dream Supreme Chocolate Chai	160	3	0	0	70	n/a	35	1	21	1	150	350	25	
Rice Dream Supreme Vanilla Hazelnut	140	2.5	0	0	65	n/a	29	0	17	1	150	300	25	
Rice Dream Vanilla	130	2.5	0	0	105	57	27	0	12	1	57	20	n/a	
Rice Dream Enriched Original (Refrigerated)	120	2.5	0	0	80	60	23	0	10	1	150	300	25	
Rice Dream Enriched Vanilla (Refrigerated)	130	2.5	0	0	80	53	26	0	12	1	150	30	n/a	
Almond Dream Original	50	2.5	0	0	100	n/a	6	<1	5	1	150	300	25	
Almond Dream Unsweetened	30	2.5	0	0	100	n/a	1	<1	0	1	150	300	25	
Oat Dream Original	120	3	0	0	20	n/a	20	3	16	4	n/a	300	25	
Oat Dream Maple Brown Sugar	120	3	0	0	20	n/a	20	3	16	4	n/a	300	25	
Silk Soymilk Plain	100	4	0.5	0	120	300	8	1	6	7	95	300	30	WhiteWave Foods Company Consumer Affairs 12002 Airport Way Broomfield, CO 80021 888-820-9283 www.silksoymilk.com
Silk Soymilk Vanilla	100	3.5	0.5	0	95	300	10	1	7	6	95	300	30	
Silk Soymilk Unsweetened	80	4	0.5	0	85	300	4	1	1	7	n/a	300	30	
Silk Soymilk Plain (Refrigerated)	100	4	0.5	0	120	300	8	1	6	7	n/a	300	30	
Silk Soymilk Vanilla (Refrigerated)	100	3.5	0.5	0	95	300	10	1	7	6	n/a	300	30	
Silk Soymilk Plus for Bone Health (Refrigerated)	100	3.5	0.5	0	95	300	11	2	7	6	n/a	400	30	
Silk Soymilk Plus Omega-3 DHA (Refrigerated)	110	5	0.5	0	120	350	8	1	6	7	100	350	30	
Silk Soymilk Plus Fiber (Refrigerated)	100	3.5	0.5	0	95	300	14	5	7	6	n/a	300	30	
Silk Soymilk Very Vanilla (Refrigerated)	130	4	0.5	0	140	300	19	1	16	6	100	350	30	
Silk Soymilk Chocolate (Refrigerated)	140	3.5	0.5	0	100	350	23	2	19	5	95	300	30	
Silk Soymilk Light Plain (Refrigerated)	70	2	0	0	120	300	8	1	6	6	100	300	30	
Silk Soymilk Light Vanilla (Refrigerated)	80	2	0	0	95	300	10	1	7	6	100	300	30	
Silk Soymilk Light Chocolate (Refrigerated)	120	1.5	0	0	100	350	22	2	19	5	n/a	300	30	

(Continued)

Table 1. Alternative Milk Beverages (Continued)

Beverage (8 ounces)	Calories	Fat (g)	Saturated Fatty Acids (g)	Trans-Fatty Acids (g)	Na (mg)	K (mg)	CHO (g)	Fiber (g)	Sugars (g)	Protein (g)	PO ₄ (mg)	Ca (mg)	Vitamin D (%)	Manufacturer and Contact Information	
Silk Soymilk Unsweetened (Refrigerated)	80	4	0.5	0	85	300	4	1	1	7	n/a	300	30		
365 Organic Ricemilk Original	90	2.5	0	0	150	30	17	0	9	1	150	250	25	Whole Foods Market, Inc. 550 Bowie Street Austin, TX 78703-4644 512-477-4455 www.wholefoods.com	
365 Organic Ricemilk Vanilla	120	2.5	0	0	150	35	23	0	13	1	150	250	25		
365 Organic Ricemilk Unsweetened	45	2	0	0	135	15	10	6	0	1	150	250	25		
365 Organic Soymilk Original	90	3.5	0.5	0	160	560	10	2	6	6	80	300	30		
365 Organic Soymilk Vanilla	100	3.5	0.5	0	160	560	11	2	7	6	80	300	30		
365 Organic Soymilk Chocolate	150	3.5	0.5	0	170	630	24	3	18	7	100	300	30		
365 Organic Soymilk Unsweetened	70	3.5	0.5	0	120	550	5	2	1	7	80	300	30		
365 Organic Soymilk Original (Refrigerated)	90	3.5	0.5	0	120	560	10	2	6	6	80	300	30		
365 Organic Soymilk Unsweetened (Refrigerated)	70	4	0.5	0	120	350	4	2	1	7	80	300	30		
365 Organic Soymilk Vanilla (Refrigerated)	100	3.5	0.5	0	120	560	11	2	7	6	80	300	30		
365 Organic Soymilk Chocolate (Refrigerated)	140	3.5	0.5	0	120	640	23	2	19	7	100	300	30		
Vitasoy Organic Plain Soymilk	110	4	0.5	0	120	360	11	1	5	7	n/a	300	20		Vitasoy USA Inc. One New England Way Ayer, MA 01432 800-848-2769 www.vitasoy-usa.com
Vitasoy Organic Unsweetened Soymilk	80	4	0.5	0	140	340	5	<1	<1	7	n/a	300	20		
Vitasoy Organic Chocolate Soymilk	160	4	0.5	0	150	320	24	1	19	7	n/a	300	20		
Vitasoy Organic Vanilla Soymilk	120	4	0.5	0	120	360	13	1	8	7	n/a	300	20		
Vitasoy Lite Plus Plain Soy Beverage	60	2	0.5	0	130	180	5	2	4	4	185	300	20		
Vitasoy Lite Plus Vanilla Soy Beverage	70	2	0.5	0	120	180	8	2	6	4	185	300	20		
Vitasoy Lite Plus Chocolate Soy Beverage	100	2	0.5	0	140	200	17	2	14	4	185	300	20		

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Table 1. Alternative Milk Beverages (*Continued*)

Beverage (8 ounces)	Calories	Fat (g)	Saturated Fatty Acids (g)	<i>Trans</i> -Fatty Acids (g)	Na (mg)	K (mg)	CHO (g)	Fiber (g)	Sugars (g)	Protein (g)	PO ₄ (mg)	Ca (mg)	Vitamin D (%)	Manufacturer and Contact Information
Manitoba Harvest Hemp Bliss Organic Vanilla	150	7	0.7	0	120	n/a	14	1	13	5	n/a	20	n/a	Manitoba Harvest Hemp Foods & Oils 69 Eagle Drive Winnipeg, Manitoba Canada R2R 1V4
Manitoba Harvest Hemp Bliss Organic Original	110	7	0.7	0	95	n/a	7	1	6	5	n/a	20	n/a	
Manitoba Harvest Hemp Bliss Organic Chocolate	160	6	0.7	0	120	n/a	17	1	16	5	n/a	40	n/a	
Trader Joe's Soymilk Vanilla	100	2	0	0	120	n/a	16	1	11	5	n/a	400	30	Trader Joe's 800 S. Shamrock Ave. Monrovia, CA 91016 626-599-3700 www.traderjoes.com
Trader Joe's Soymilk Chocolate	130	3	0	0	120	n/a	17	1	12	7	n/a	300	30	
Trader Joe's Soymilk Original	80	3	0.5	0	170	n/a	13	1	6	7	n/a	300	30	
Trader Joe's Organic Soymilk Unsweetened	70	3.5	0.5	0	70	n/a	1	1	2	7	n/a	300	30	
Trader Joe's Soy Essential Unsweetened	90	4	0.5	0	70	350	6	3	1	7	n/a	350	30	
Trader Joe's Organic Soymilk Regular (Refrigerated)	100	4	0.5	0	120	300	8	1	6	7	n/a	300	30	
Trader Joe's Organic Soymilk Unsweetened (Refrigerated)	70	3.5	0.5	0	70	300	1	1	2	7	n/a	300	30	
Trader Joe's Organic Soymilk Vanilla (Refrigerated)	100	3.5	0.5	0	95	300	10	1	7	6	n/a	300	30	
Trader Joe's Rice Drink Unsweetened Vanilla	130	2.5	0	0	105	n/a	26	0	12	1	150	300	25	
Trader Joe's Rice Drink Organic Unsweetened Original	120	2.5	0	0	100	n/a	23	0	10	1	150	300	25	
Trader Joe's Rice Drink Original (Refrigerated)	120	2.5	0	0	50	80	22	0	14	1	150	300	25	
Trader Joe's Rice Drink Vanilla (Refrigerated)	130	2.5	0	0	70	85	24	0	15	1	200	300	25	

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Table 1. Alternative Milk Beverages (Continued)

Beverage (8 ounces)	Calories	Fat (g)	Saturated Fatty Acids (g)	Trans-Fatty Acids (g)	Na (mg)	K (mg)	CHO (g)	Fiber (g)	Sugars (g)	Protein (g)	PO ₄ (mg)	Ca (mg)	Vitamin D (%)	Manufacturer and Contact Information
Wild Harvest Organic Soymilk Chocolate	140	3.5	0.5	0	170	n/a	23	2	19	7	n/a	300	n/a	Wild Harvest Organic Supervalu Inc. 11840 Valley View Rd. Eden Prairie, MN 55344 877-932-7948 www.wildharvestorganic.com
Wild Harvest Organic Soymilk Original	90	3.5	0.5	0	160	n/a	10	2	6	6	n/a	300	n/a	
Wild Harvest Organic Soymilk Plain (Refrigerated)	90	4	0.5	0	150	n/a	7	1	6	7	n/a	300	n/a	
Wild Harvest Organic Soymilk Vanilla	100	4	0.5	0	130	n/a	9	1	8	7	n/a	300	n/a	
Wild Harvest Organic Ricemilk Original	100	2	0	0	90	n/a	23	0	15	0	n/a	300	n/a	
Wild Harvest Organic Ricemilk Vanilla	120	2	0	0	95	n/a	26	0	18	0	n/a	300	n/a	
Pearl Organic Soymilk Creamy Vanilla	110	3.5	0.5	0	90	270	11	0	10	7	n/a	300	35	
Pearl Organic Soymilk Coffee	150	4	0.5	0	190	210	24	0	22	6	n/a	300	25	
Pearl Organic Soymilk Chocolate	150	4	1	0	180	290	21	0	18	8	n/a	300	35	
Pearl Organic Soymilk Unsweetened	90	4.5	1	0	130	210	6	0	2	8	n/a	200	25	
Pearl Organic Soymilk Original	110	3.5	0.5	0	110	300	12	1	9	7	n/a	300	35	
Dairy Delicious 2% Milk Beverage	120	5	3	0	110	116	13	0	13	6	197	150	1	Dairy Delicious 521 Fifth Avenue New York, NY 10175 212-292-4511 www.dairydelicious.com

Department of Agriculture, the average daily dietary intake of phosphorus is 1600 mg for adult males and 1148 mg for adult women.⁹ The KDOQI Clinical Guidelines recommend a modification of 800 to 1000 mg of phosphorus per day.¹⁰ The foods that are highest in naturally occurring phosphorus include dairy products, meats, nuts, and beans. The greatest challenge for patients and dietitians alike is phosphate additives, which are being used more frequently in the processing and manufacturing of foods. It is especially challenging since the phosphorus content is not listed on the Nutrition Facts Label because phosphorus labeling is not required and regulated by the Food and Drug Administration.¹¹

In the past, alternative milk beverages were most commonly found in health food stores; they are now more readily available in supermarkets across the country. The products analyzed in this product update are most likely available in both urban and rural areas. The one exception would be the Dairy Delicious 2% Milk Beverage, which is only available for purchase directly from the manufacturer. It should be noted, however, that individuals in lower socioeconomic groups may have limited access to these products due to the typically higher cost for alternative milk beverages compared with cow's milk. Additionally, while these products may be available at major grocery store chains, they are typically not available from neighborhood convenience stores.⁷

Some of the companies we contacted were unable to provide us with the nutrition information we requested. Either the information was not available for their products or it was unavailable on the company website. Dietitians and CKD patients should continue to request phosphorus and potassium information from food manufacturers to encourage these companies to review and expand their food labeling practices.

Although there are more choices now available, many of the alternative milk beverages analyzed for this article may not be appropriate for CKD patients. Many of these products are fortified and enriched, often making them higher in phosphorus, potassium, sodium, and calcium compared to cow's milk. Like other foods and beverages, the mineral content varied widely from brand to brand. For example, 365 Organic Soymilk Original contains 560 mg of potassium and 80 mg of phosphorus, while Vitasoy Lite Plus Plain Soy Beverage contains 180 mg of potassium and 185

mg of phosphorus. We found nominal, if any, differences between the shelf-stable and refrigerated versions of products within each brand.

Based on the information currently available, it appears that Blue Diamond's Almond Breeze beverages may be the best alternative to cow's milk for CKD patients trying to limit phosphorus, potassium, sodium, and calcium intake. The unsweetened varieties do not contain sugar, which may also make them a good choice for diabetic patients. It must again be emphasized that nephrology dietitians need to provide very specific information (i.e., brand, flavor, exact name of product) for those patients interested in using these products as a substitute for cow's milk, since the nutrient content of alternative milk beverages varies widely from brand to brand. CKD patients may be able to take advantage of this emerging market if they work closely with their nephrology dietitian to select appropriate beverages based on their individual and prescribed nutrition needs.

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