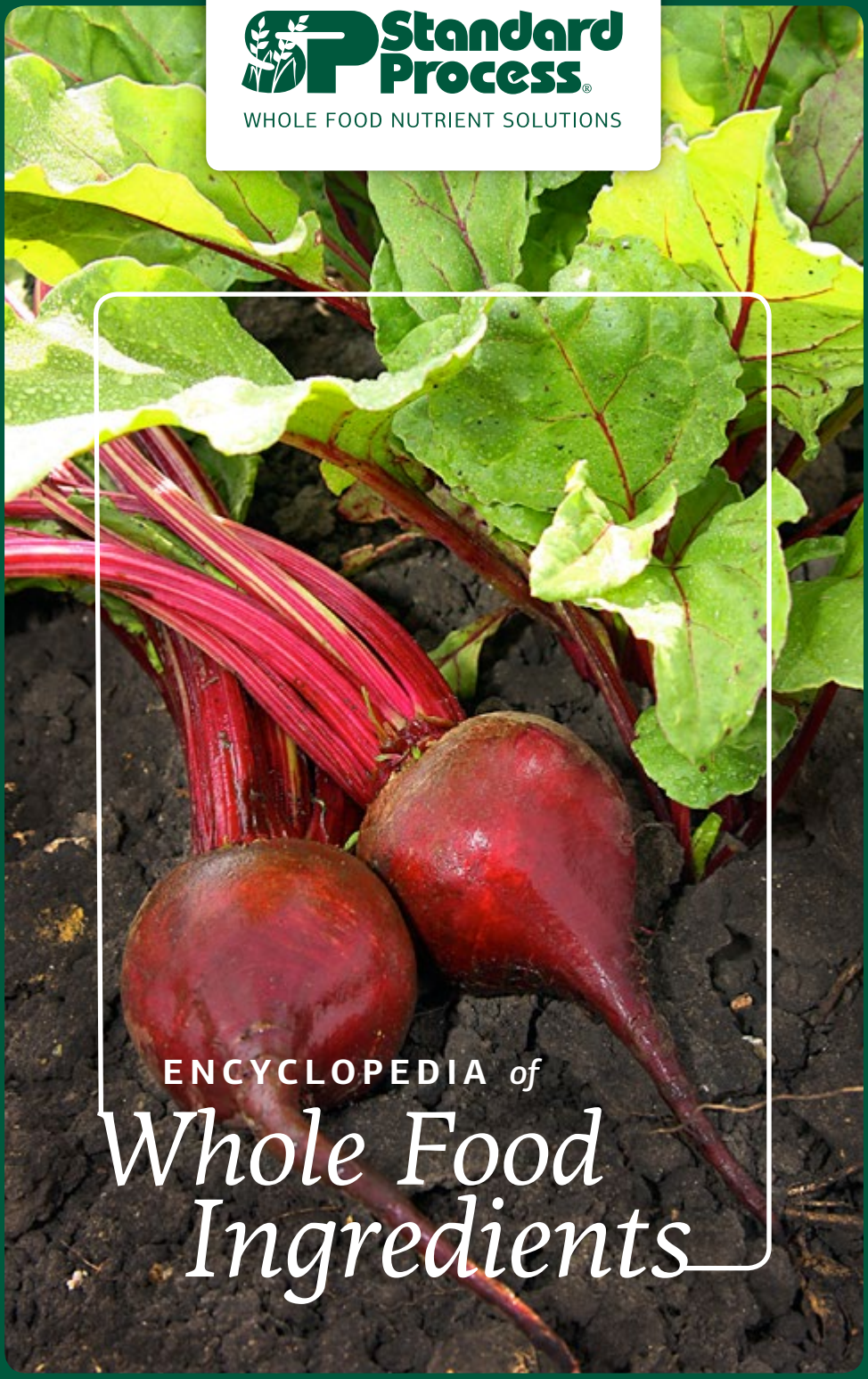
Standard Process®

WHOLE FOOD NUTRIENT SOLUTIONS



ENCYCLOPEDIA *of* *Whole Food Ingredients*

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At Standard Process, we believe in the power of nutrition and want to share our knowledge and love of whole foods with you. Join us on a journey through the world of whole food ingredients that focuses on the crops we grow on the Standard Process® certified organic farm. Learn the history and curious facts about these valuable plants, and find healthy recipes to make and enjoy.

We hope you will share this book with your patients and use it for information and inspiration.

Live life one whole food at a time!

"The best sources of vitamins and minerals are found in whole foods."

—Dr. Royal Lee, Standard Process founder

Alfalfa

Medicago sativa

Alfalfa is a perennial flowering legume in the pea family, Fabaceae, that is cultivated in many countries around the world. Thought to be a native plant in Asia Minor and the Caucasus Mountains area, alfalfa has been cultivated for centuries. First established as a crop in the United States around 1850 in California, alfalfa wasn't widely cultivated until the 20th century. Today, alfalfa's high protein content makes it a valuable ingredient for both human foods as well as feed for livestock.

Alfalfa has been used for centuries for its health supporting properties. From traditional Chinese medicine to folk remedies, alfalfa has been said to support healthy blood flow, provide digestive support, and stimulate the appetite. Used in a poultice, alfalfa reportedly addresses skin challenges and insect bites. Alfalfa has also been used as a magic charm for prosperity and protection from hunger, poverty, or unhappiness.

Standard Process Alfalfa

Alfalfa is the second-largest crop grown on the Standard Process certified organic farm. Since it's a perennial, it is planted and used in the same area over the course of three to four years. The crop is planted over 40 acres and harvested four times per season. We harvest the plant before the buds have formed, at the peak of nutrition. Upon harvest, the nutrient-rich alfalfa is processed right on the farm; about half is dried and the other half is pressed to make alfalfa leaf juice and pulp.

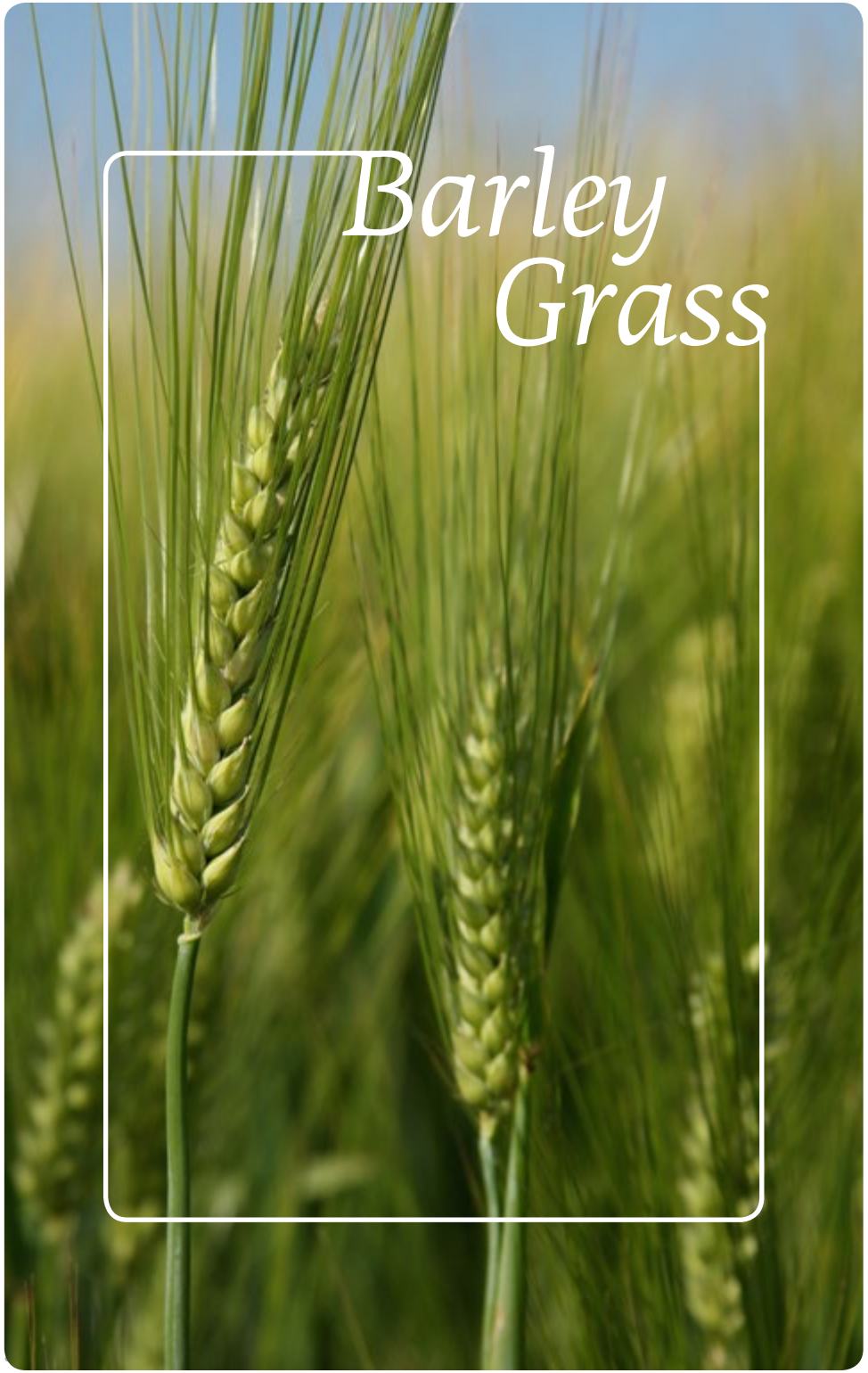
Sprouted Vegetable Soup

- 2 tablespoons coconut oil
- 1 onion, chopped
- 2 cloves garlic, chopped
- 2 tablespoons paprika
- ¼ teaspoon marjoram
- 2 carrots, chopped into rounds
- 2 cups cabbage, thinly sliced
- 1 bell pepper, chopped
- 2 cups mushrooms, sliced
- 2 cups sprouts, alfalfa or any variety
- 4 cups fresh tomatoes, chopped or crushed
- 5 cups vegetable broth
- 2 tablespoons balsamic vinegar
- 1 tablespoon dill weed
- Sea salt and ground pepper

1. In a large pot, heat oil over medium heat. Add onion and garlic and sauté until onion is translucent.
2. Add paprika, marjoram, carrots, and cabbage and cook for 5 minutes, stirring often.
3. Add the mushrooms, sprouts, and tomatoes, cooking an additional 5 minutes.
4. Add broth, vinegar, and dill and bring to a boil.
5. Season with sea salt and pepper to taste. Reduce heat and allow to simmer for about 30 minutes or until vegetables are tender.

Servings: 2-4

This original recipe appears in Dr. Georgia Nab's book, "One Degree of Change: The Standard Process 21-Day Purification Program Cookbook."



Barley Grass

Hordeum vulgare

Barley is an annual grass belonging to Poaceae family. Barley's cultivation as a food crop is estimated to have begun 10,000 years ago. Originating in the Middle East, barley was first used for human consumption in breads, soups, and cereals. As time passed, more uses for barley were found, including as a feed for livestock and as malt for brewing beer. Barley is also used as a cover crop to support healthy soil.

Historically, barley has been used for support of gastrointestinal, skin, blood, and liver health.

Ancient gladiators used barley to support strength and stamina, and the Roman physician Pliny used barley in a ritualized ceremony for skin challenges. Barley grass is a good source of vitamins A, B1, B2, B3, B6, E, and K. In addition, barley contains magnesium, phosphorous, and potassium, as well as essential minerals like zinc, calcium, and iron.

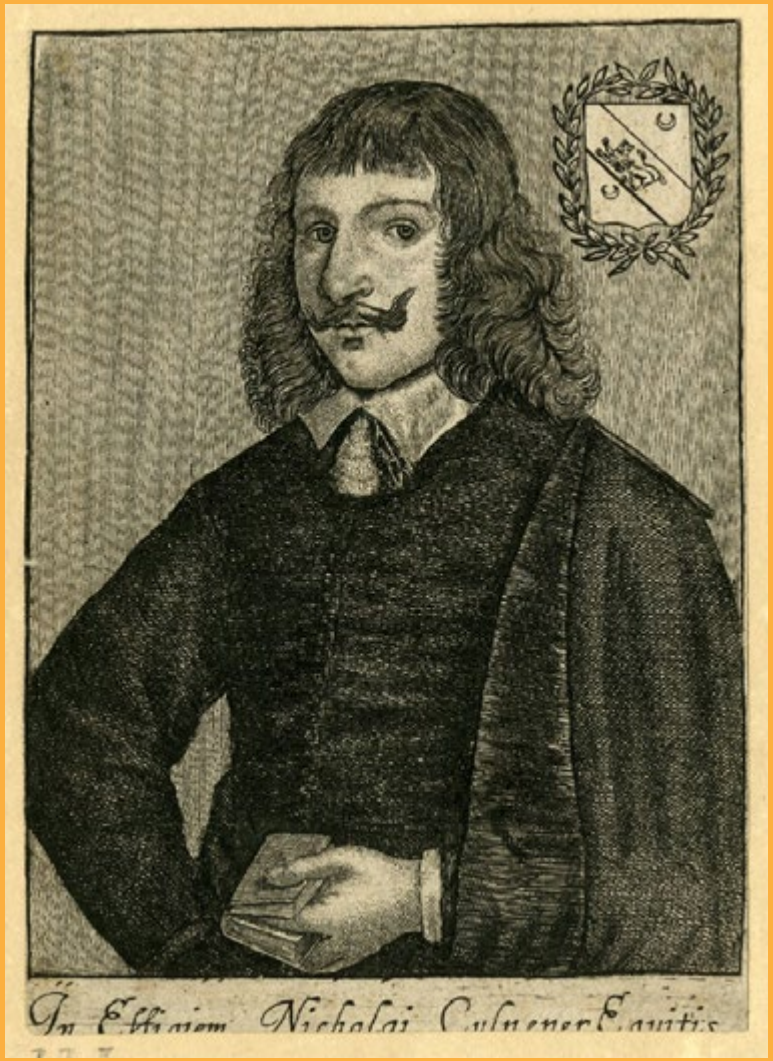
Standard Process Barley

Young barley grass grown on the Standard Process organic farm is harvested for its antioxidant-rich green leaves before the head of the plant is formed, ensuring this ingredient is gluten-free. The grass is then pressed and juiced. This crop is grown on 5 acres at the farm. It's planted as close to April 1 as possible, and harvested once per year in late May.

Nicholas Culpeper, MD, a 17th century English botanist, herbalist, physician, and astrologer, discussed barley in "The English Physician," written in the 1650s.

"It is a notable plant of Saturn: if you view diligently its effects by sympathy and antipathy, you may easily perceive a reason of them, as also why barley bread is so unwholesome for melancholy people. Barley in all the parts and compositions thereof (except malt) is more cooling than wheat, and a little cleansing: And all the preparations thereof, as barley-water and other things made thereof, give great nourishment to persons troubled with fevers, agues, and heats in the stomach . . ."[1]

—Nicholas Culpeper



https://commons.wikimedia.org/wiki/File%3AIn_Effigiam_Nicholai_Culpeper_Equitis_by_Richard_Gaywood.jpg

1. *The English Physician Enlarged.* Barker, London [1800] by the University and State Library Düsseldorf. Digital edition. (http://nbn-resolving.de/urn:nbn:de:hbz:061:2-7591-p0001-4).

Beets

Beta vulgaris

Beets are biennial plants that are usually planted annually for use as a food crop. A member of the Chenopodiaceae family, the cultivated beet plants we see today are descended from the wild beet, which is thought to have originated in prehistoric times. Excellent sources of folate, beets are also a good source of manganese and potassium, as well as magnesium, phosphorus, iron, vitamin B_6, and vitamin C.

The ancient Romans were among the first people to cultivate beets. Historically, beets have been used to support healthy blood, circulation, and digestion. Old Irish folklore suggests that using beet juice to write a love letter guarantees that the writer's love interest will not be able to resist.

Standard Process Beets

Beets are an important crop on the Standard Process organic farm. Planted in early June, they are grown on 45 acres here. We use different parts of the beet plant for specific formulas. Twice per season, we harvest the leaves, which then are pressed for juice and dried. The crimson roots are harvested once per season, between Halloween and Thanksgiving, then washed, diced, and dried for use in our products.

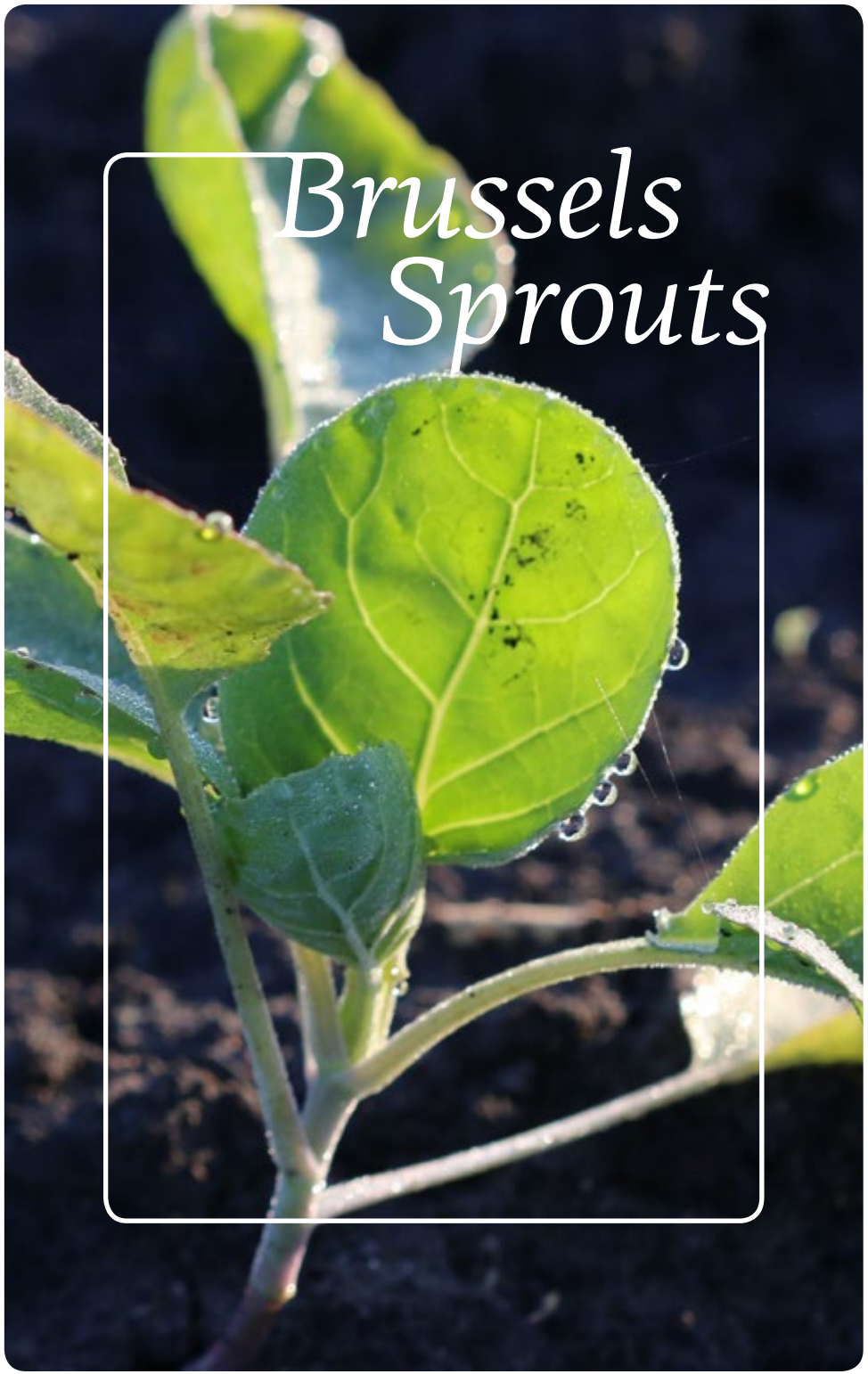
Roasted Root Vegetables

- 1 pound beets, chopped
- 1 butternut squash, peeled, seeded, and chopped
- 1 large sweet potato, peeled, chopped
- 1 large parsnip, peeled, chopped
- 1 large carrot, chopped
- ½ red onion, chopped
- 6 cloves garlic, chopped or whole
- 3 tablespoons fresh thyme leaves
- 3 tablespoons extra-virgin olive oil
- Sea salt and pepper

1. Preheat oven to 425 F.
2. Placed all chopped vegetables in a large bowl with garlic, thyme leaves, and olive oil. Toss to coat evenly.
3. Spread vegetables out evenly on a cookie sheet in a single layer. Sprinkle with sea salt and pepper.
4. Place vegetables in the oven and bake for about 45 minutes, stirring once halfway through baking, until vegetables are tender and starting to turn golden.

Servings: 2-4

This original recipe appears in Dr. Georgia Nab's book, "One Degree of Change: The Standard Process 21-Day Purification Program Cookbook."



Brussels Sprouts

Brassica oleracea | *var. gemmifera*

Brussels sprouts are an annual plant in the gemmifera group of the family Brassicaceae (cabbages). A cruciferous vegetable, the Brussels sprout is a cultivar of the same species as broccoli, cabbage, collard greens, kohlrabi, and kale. Brussels sprouts are an excellent source of vitamins C and K and are a good source folate, manganese, choline, and vitamins B_1 and B_6.

Plants similar to Brussels sprouts were thought to have been cultivated in ancient Rome. The Brussels sprouts we know today were likely grown during the 13th century in the area we now call Belgium. In the 18th century, French settlers brought the plant to the United States. Thomas Jefferson grew Brussels sprouts at his primary plantation, Monticello, in Charlottesville, Virginia.

Standard Process Brussels Sprouts

Our Brussels sprouts get their start with lots of special care in the on-site greenhouses at the end of March, and are transplanted into the rich, organic farm soil in early May. Most years, Standard Process grows this crop over 5 acres. These nutritious vegetables are harvested in early August, then are chopped whole and dried for use in our formulas.

Roasted Cauliflower and Brussels Sprouts

- 1 medium cauliflower, cut into 1-inch florets
- 2 cups Brussels sprouts, ends trimmed, halved
- 4 tablespoons olive oil
- 3 cloves garlic, minced
- 1½ teaspoons fresh rosemary, chopped (or ½ teaspoon dried rosemary)
- Sea salt and pepper

1. Preheat oven to 450 F.
2. In a large bowl, combine all ingredients. Mix well.
3. Spread vegetables in single layer on large baking sheet.
4. Roast until vegetables are crisp-tender and beginning to brown at the edges, about 20 minutes.

Servings: 4-6

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Buckwheat

Fagopyrum esculentum

Buckwheat is an annual plant and a member of the Polygonaceae family, which includes rhubarb and sorrel. Polygonum literally means “many knees” in Latin, referencing the swollen nodes on the leaf stems of these plants. Buckwheat leaf flour is rich in proteins and minerals such as magnesium, calcium, potassium, copper, manganese, and iron. Studies have also shown that buckwheat leaves contain high amounts of rutin.

Native to Northern Europe and Asia, buckwheat was cultivated in China from the 10th century through the 13th century. Long known by Chinese herbalists as *qiao mai*, the buckwheat plant was cultivated in Europe and Russia in the 1300s and 1400s and finally brought to the United States by the Dutch in the 17th century. Buckwheat crops tolerate poor soil and have been used to improve soil quality. Both Thomas Jefferson and George Washington planted buckwheat on their Virginia farms.

Standard Process Buckwheat

Buckwheat is our largest crop. This fast-growing crop is unique because it's continually planted and harvested throughout the growing season. The planting process starts in late May and continues weekly in different locations for six straight weeks on 100 acres. After just six weeks in the ground, buckwheat has reached its peak nutrition and is ready for harvesting by early July. The planting and harvesting cycle continues through Thanksgiving. After each harvest, the young leaves are juiced and dried on-site.

Buckwheat leaves are both dried and pressed before processing, creating two distinct ingredients used in our products: dried buckwheat leaf juice and buckwheat leaf powder.

Other ingredients from this crop include buckwheat seed and buckwheat flour, which is made from ground seeds.

In 1831, the American poet Henry Pickering wrote an ode to buckwheat, which appeared in the New-York Evening Post. An excerpt appears below:

The Buckwheat Cake

The Buckwheat Cake! my passion when a boy,
And still the object of intensest love—
Love undivided, knowing no decline,
Immutable. My benison on thee,
Thou glorious Plant! That, mid life's chequer'd scenes,
Not only yieldest me the lively taste,
But furnishest the means of happiness . . .

—Henry Pickering

Kale

Brassica oleracea | var. acephala

Kale is a cool-season biennial that is usually planted as an annual. A leafy green vegetable, kale belongs to the Brassica family, which includes cabbage, collards, and Brussels sprouts. Kale is a cruciferous plant that is a good source of vitamins C and K, carotenoids, and many other nutrients. In traditional Chinese medicine, kale is considered to be warming and used for strengthening the stomach.

An offshoot of wild cabbage, kale reportedly originated in Asia Minor and was brought to Europe around 600 B.C. Kale was cultivated in ancient Rome, was part of the typical Middle Ages diet, and was brought to North America in the 17th century.

Standard Process Kale

Kale is started in the greenhouses and transplanted into the farm fields in early May. It is usually planted over about 4 acres, and is harvested once per season, in early August. Kale is both dried and pressed for use in our products.

Raw Kale Salad With Root Vegetables

- 2 (12-ounce) bunches kale, stems removed, leaves cut into thin strips
- 2 tablespoons olive oil or nut oil
- 1 tablespoon apple cider vinegar
- 1 teaspoon sea salt
- 1 medium turnip, peeled and grated
- ½ medium rutabaga, peeled and grated
- 1 medium beet (red or golden), peeled and grated
- 1 medium carrot, grated
- 2 green onions, cut thin on diagonal
- 1 cup raw pecans, whole (optional, not while doing purification)

Dressing:

- 2 tablespoons fresh lemon juice
- 1 tablespoon fresh lemon zest
- 1 tablespoon olive oil
- 1 tablespoon balsamic vinegar
- 1 teaspoon whole-leaf stevia powder
- Sea salt and ground pepper (optional)

1. Place kale in a large bowl and pour olive oil, vinegar, and sea salt over top.
2. Gently massage mixture into kale about 2-3 minutes by hand or until kale starts to wilt. Let rest 30 minutes.
3. Stir turnip, rutabaga, beet, carrot, and green onions into kale mixture.
4. Prepare dressing by whisking together all dressing ingredients.
6. Season with salt and pepper if desired.
7. Add dressing to kale salad and toss thoroughly.
8. Garnish with pecans if desired.

Servings: 6.

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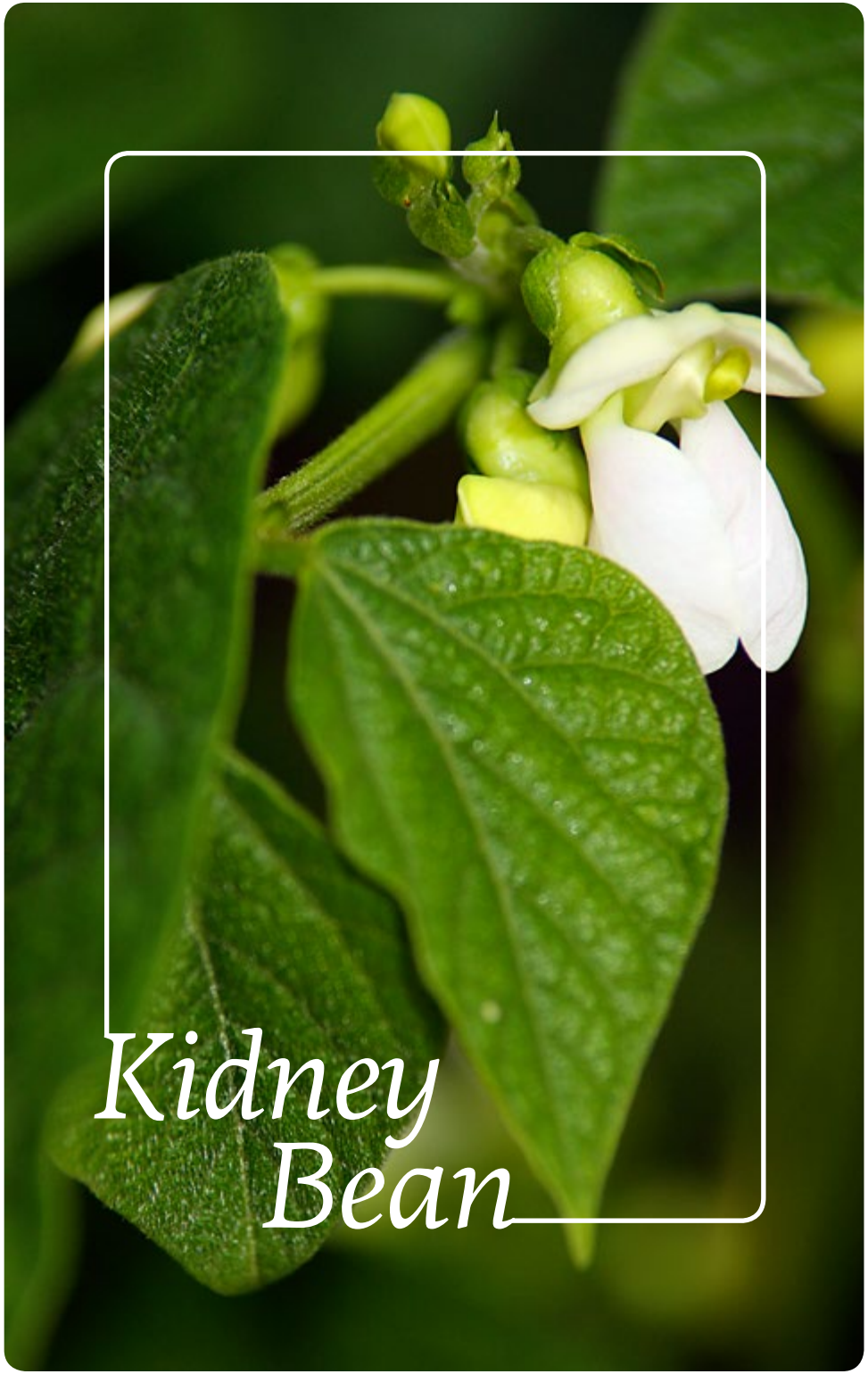


Kidney Bean

Phaseolus vulgaris

The kidney bean is planted as an annual and is a member of the Fabaceae family. Along with pinto, navy, and black beans, kidney beans are called “common beans” because it is thought that they all came from a common bean ancestor in Peru. Spanish explorers brought beans to Europe in the 15th century. Kidney beans were cultivated in colonial Louisiana in the late 1700s.

Raw leaves of the kidney bean plant are a source of fiber, calcium, phosphorus, iron, beta carotene, thiamine, riboflavin, niacin, ascorbic acid, and vitamins A and K.

In folk medicine, beans have been used to provide support to address matters ranging from skin, digestive, and bladder issues to bloating and hiccups.

Standard Process Kidney Beans

The kidney beans are planted in June over 20 acres on our organic farm. This crop is harvested in mid-August. The plants are juiced and then dried for use in our formulas.

The Journal of the Northamptonshire Natural History Society & Field Club reported on the quaint sayings of country folk in 1894. Sage advice on planting kidney beans was one of the topics, and the following proverb was offered:

When elm leaves are as big as a shilling,
Plant Kidney Beans if to plant ’em you’re willing;
When elm leaves are as big as a penny,
You must plant Kidney Beans if you mean to have any.

Oats

Avena sativa

Oats are an annual grass crop in the Poaceae family. Said to have originated in Asia, oats were first used medicinally and later as a dietary staple for people in many European countries. Scottish settlers brought oats to North America in the 17th century.

An excellent source of dietary fiber, oats are a good source of manganese and molybdenum as well as phosphorus, copper, biotin, magnesium, chromium, zinc, and vitamin B1. Oats have a long history of use in folk medicine. The plant was used in a calming tonic for nerves and sleep support and in soothing baths for skin challenges.

Standard Process Oats

The organic oats on the Standard Process farm are planted in early April over 10 acres and harvested from the field as a dry grain. The grain is then milled. It is one of the few crops on our organic farm that are not dried or pressed.

"Oats, Peas, Beans and Barley Grow" is a traditional British, Scottish, and American folk song often sung as a children's game. The children stand in a ring and perform the actions of the song.

Oats, Peas, Beans, and Barley Grow

Chorus:

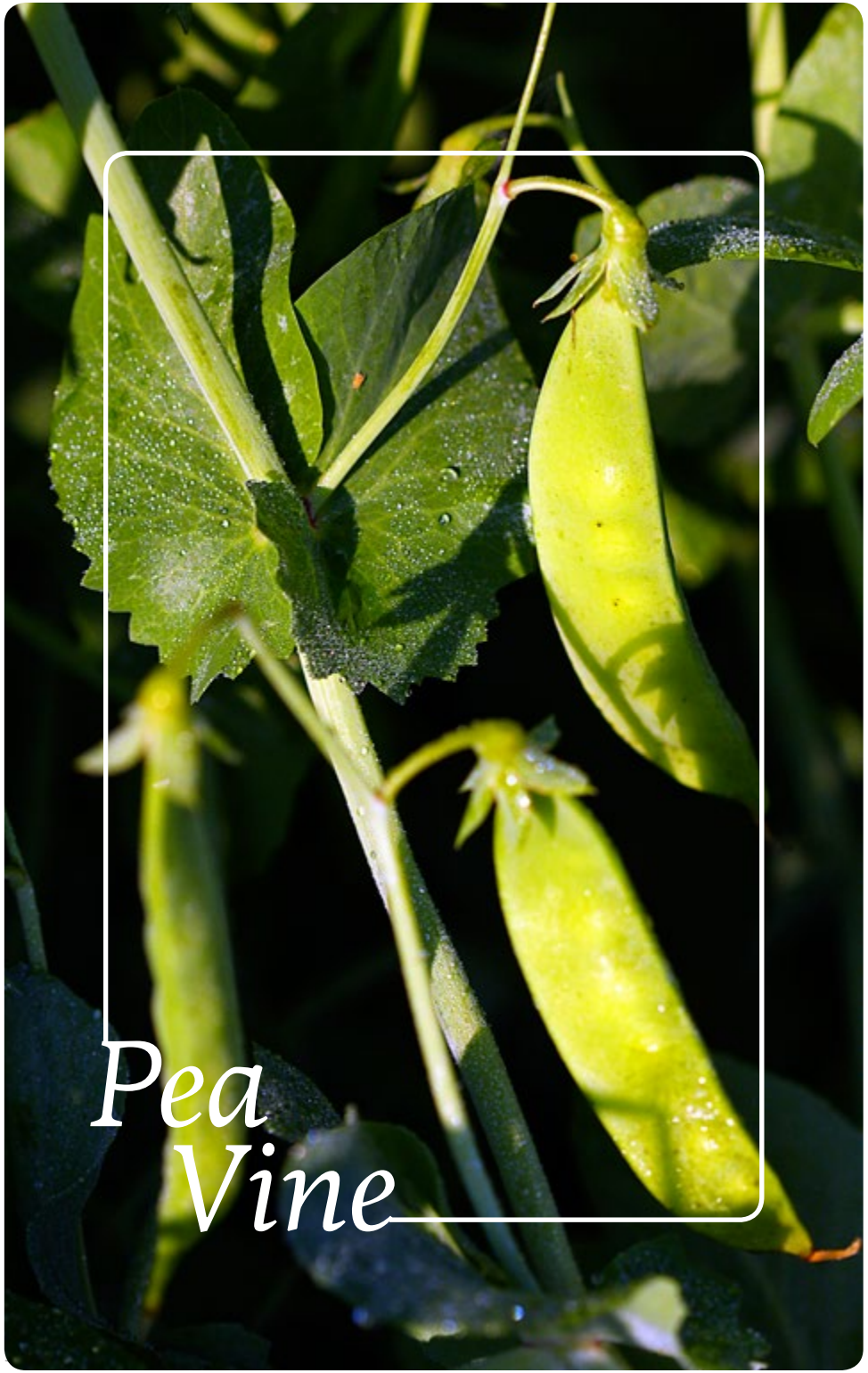
Oats, peas, beans, and barley grow,
Oats, peas, beans, and barley grow,
Can you or I or anyone know
How oats, peas, beans, and barley grow?

Verse 1 (of several):

First the farmer sows his seed,
Stands erect and takes his ease,
He stamps his foot and claps his hands,
And turns around to view his lands.

Chorus:

Oats, peas, beans, and barley grow,
Oats, peas, beans, and barley grow,
Can you or I or anyone know
How oats, peas, beans, and barley grow?



Pea Vine

Pisum sativum

Pea vine is an annual plant in the Fabaceae family. Probably originating in Eurasia around 7,000 B.C., peas were grown in Europe in the Middle Ages. Peas began to be cultivated in America soon after Columbus arrived. Thomas Jefferson was reportedly fond of peas and grew many different varieties of them at Monticello. He held a competition among his fellow gentleman farmers to see who could harvest the first peas of the season.

Fresh green peas are a very good source of vitamins B1, C, and K; manganese; copper; phosphorus; folate; and dietary fiber. They are also a good source of vitamins B2 and B6, niacin, molybdenum, zinc, protein, magnesium, iron, potassium, and choline.

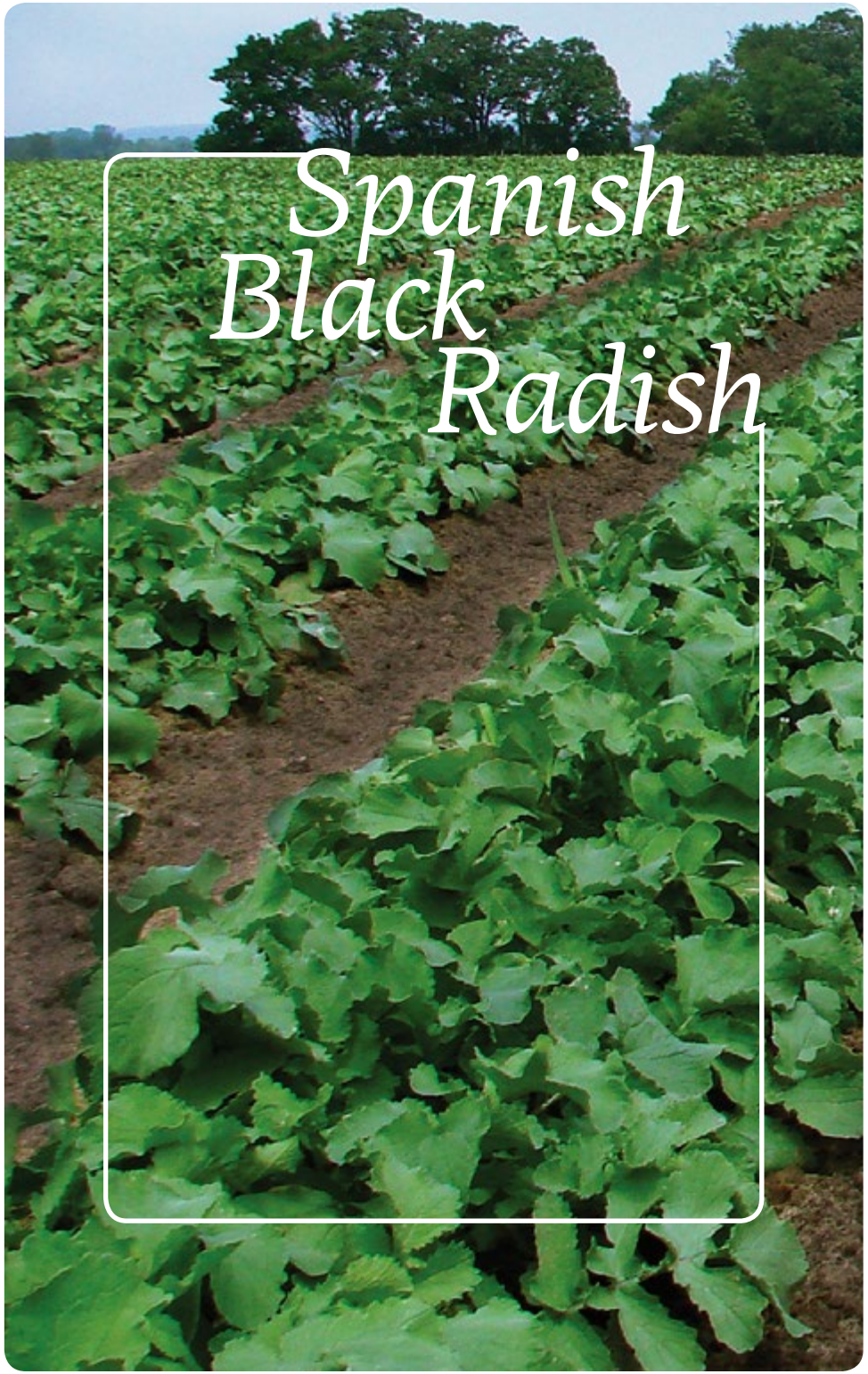
Standard Process Pea Vine

We grow a bounty of organic pea vine on the Standard Process organic farm. The young plants are harvested, juiced by the on-site press, and then vacuum dried for use in our products.

The English poet John Keats featured sweet peas in the following excerpt from his poem "I Stood Tip-Toe Upon a Little Hill."

Here are sweet peas, on tip-toe for a flight:
With wings of gentle flush o'er delicate white,
And taper fingers catching at all things,
To bind them all about with tiny rings . . .

—John Keats



Spanish Black Radish

Raphanus sativus | *var. niger*

The Spanish black radish is an annual root vegetable and a member of the Brassicaceae family. First cultivated in the eastern Mediterranean, the Spanish black radish is believed to be an offspring of the wild radish. Remains of radishes have been found in Egyptian archeological digs. Radishes were popular in 19th-century England and France. Black radishes are an excellent source of vitamin C, folic acid, and potassium. They are also a source of iron and magnesium as well as vitamins A, B, and E.

Known to the Chinese as *hei luo bo*, the Spanish black radish has a long history of use in folk medicine as a stimulant for bile function and as support for gallbladder health. Ancient Egyptian writings mention radishes, onions, and garlic being fed to the builders of the pyramids. In traditional Chinese medicine, the black radish is used to support pulmonary and respiratory health.

Standard Process Spanish Black Radish

Spanish black radish—which is actually a lovely pale white color inside—is planted in late July over 20 acres on our organic farm. The crop is harvested in mid-October. The roots of this powerful plant are washed, diced, and dried for use in our formulas.

Unlike edible red radishes, Spanish black radishes are the size of softballs. These nutritional powerhouses can be eaten raw, though many people find it to be quite spicy.

Research

Standard Process has led the field of Spanish black radish research, having studied the vegetable's makeup in detail and investigated its use first in cells and mice and then in humans as a supplement made from the whole vegetable.

Our most recent research indicates that our Spanish Black Radish supplement is a strong contributor to the body's normal, balanced detoxification processes.*

***These statements have not been evaluated by the Food and Drug Administration. These products are not intended to diagnose, treat, cure, or prevent any disease.**

We're Committed to Being a Leader

Sustainability and environmental stewardship have always been important at Standard Process. Our decision to use environmentally safe farming, manufacturing, and business practices underscores our interest in the health of the planet. Visit www.standardprocess.com/sustainability to learn more.

In our efforts to be more energy efficient and create less waste, we have created this e-book. We encourage our health care professional customers and their patients to read it digitally.

Standard Process®

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