

Farmhouse Vegetable and Barley Soup

From America's Test Kitchen episode: *Simple & Satisfying Vegetable Mains*.

Serves 6 to 8

We prefer an acidic, un-oaked white wine such as sauvignon blanc for this recipe. We love the richness added by the Lemon-Thyme Butter (related), but the soup can also be garnished with crisp bacon, crumbled cheddar cheese, or croutons.

INGREDIENTS

- 1/8** ounce dried porcini mushrooms
- 8** sprigs fresh parsley plus 3 tablespoons chopped
- 4** sprigs fresh thyme
- 1** bay leaf
- 2** tablespoons unsalted butter
- 1 1/2** pounds leeks, white and light green parts sliced 1/2 inch thick and washed thoroughly
- 2** carrots, peeled and cut into 1/2-inch pieces
- 2** celery ribs, cut into 1/4-inch pieces
- 1/3** cup dry white wine
- 2** teaspoons soy sauce
- Salt and pepper
- 6** cups water
- 4** cups low-sodium chicken broth or vegetable broth
- 1/2** cup pearl barley
- 1** garlic clove, peeled and smashed
- 1 1/2** pounds Yukon Gold potatoes, peeled and cut into 1/2-inch pieces
- 1** turnip, peeled and cut into 3/4-inch pieces

1 1/2 cups chopped green cabbage

1 cup frozen peas

1 teaspoon lemon juice

INSTRUCTIONS

1. Grind porcini with spice grinder until they resemble fine meal, 10 to 30 seconds. Measure out 2 teaspoons porcini powder; reserve remainder for other use. Using kitchen twine, tie together parsley sprigs, thyme, and bay leaf.

2. Melt butter in large Dutch oven over medium heat. Add leeks, carrots, celery, wine, soy sauce, and 2 teaspoons salt. Cook, stirring occasionally, until liquid has evaporated and celery is softened, about 10 minutes.

3. Add water, broth, barley, porcini powder, herb bundle, and garlic; increase heat to high and bring to boil. Reduce heat to medium-low and simmer, partially covered, for 25 minutes.

4. Add potatoes, turnip, and cabbage; return to simmer and cook until barley, potatoes, turnip, and cabbage are tender, 18 to 20 minutes.

5. Remove pot from heat and remove herb bundle. Stir in peas, lemon juice, and chopped parsley; season with salt and pepper to taste. Serve, passing Lemon-Thyme Butter separately.

TECHNIQUE

BUILDING SAVORY FLAVOR ON THE DOUBLE

To ramp up savory flavor in our Farmhouse Vegetable and Barley Soup, we tried adding umami boosters like soy sauce and porcini mushrooms and made an interesting discovery. We found that using less of both ingredients—versus more of just one or the other—had a powerful impact on flavor. Here's why: Soy sauce contains high levels of naturally occurring, flavor-enhancing compounds called glutamates, while mushrooms are rich in flavor-amplifying compounds known as nucleotides. Used together, the two compounds can boost savory, umami-like

flavors exponentially. Their effect is even more pronounced when the ratio of glutamates to nucleotides is very high. (Studies suggest that an effective ratio is 95:5.)

Of course, we couldn't measure exactly how much of each compound was making it into the pot, so we tinkered with the amount of soy and porcini we were adding until we hit it just right.

Glutamates + Nucleotides = Big Savory Flavor

Due to the synergist effect of their difference flavor-enhancing compounds, small amounts of both soy sauce and porcini mushrooms add up to a more profound impact on flavor than a greater amount of just one of these ingredients.



America's Test Kitchen is a 2,500-square-foot kitchen located just outside of Boston. It is the home of *Cook's Country* and *Cook's Illustrated* magazines and is the workday destination for more than three dozen test cooks, editors, and cookware specialists. Our mission is to test recipes until we understand how and why they work and arrive at the best version. We also test kitchen equipment and supermarket ingredients in search of brands that offer the best value and performance. You can watch us work by tuning in to *America's Test Kitchen* (www.americastestkitchen.com) on public television.