

Simple Sous Vide

with Wylie Dufresne

PRESENTED BY POLYSCIENCE





PolyScience

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WHAT IS SOUS VIDE COOKING?



Sous Vide is a method of cooking in which food is heated gently at a specific temperature, ensuring that it is uniformly cooked to perfect doneness. This is achieved by sealing the food in airtight bags using a vacuum sealer and submerging it in a precisely controlled water bath created by a machine called an immersion circulator.

Sous vide provides for unparalleled precision in cooking temperature and makes it easy to get exact and repeatable results that are practically impossible to achieve any other way.

WHY WOULD ANYBODY USE IT?

Let's ask someone who has made great use out of sous-vide cooking—Wylie Dufresne, the esteemed chef of Alder and the groundbreaking restaurant wd~50 in New York City.



“In a professional kitchen, the goal is to make the *best* thing. Extra steps are okay. And any tool that can help make the end product better is an ally. At home you won't and can't do everything we can at the restaurant, but you still want the best results.”

“Okay, I buy that.”



“Sous-vide technology gives you an edge that takes some of the guess work out of cooking, and can free you up to do other things, like getting side dishes ready.”

WHAT CAN IT DO FOR ME?

What if I told you it could help you make perfect poached eggs with almost *no effort* – for one person or a dozen?

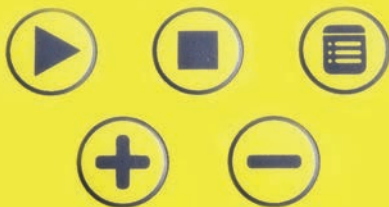
What if I told you that you'd never have to hear your kids complain about dry chicken breasts again?

What if I told you that sous-vide turns cheap, tough steaks tender?

What if I told you how to transform a melon magically in minutes?



**INTERESTED?
STEP RIGHT THIS WAY...**



PolyScience
SousVide® DISCOVERY





I've got friends coming over and I want brunch to be perfect! How do I poach eggs for a crowd?

A Polyscience Discovery Series Immersion Circulator makes cooking eggs about as simple as running a hot bath. The circulator heats the water to whatever temperature you tell it, holds it there, and keeps the water moving so there aren't hot and cold spots like you'd find in a pan, oven, or grill. Not only will all of the eggs cook to exactly the right consistency, but you can even cook them days in advance, know they'll stay perfectly done, and warm them up once your Hollandaise is ready!



Eggs Benedict

MAKES 4 SERVINGS

INGREDIENTS

8 whole eggs	+ cayenne pepper
4 egg yolks	+ salt
2 sticks (½ pound) cold butter, diced, + 1 T	4 toasted English muffins
Juice of ½ a lemon	8 slices Canadian bacon
	+ Maldon sea salt, to garnish

EQUIPMENT

1. POLYSCIENCE DISCOVERY SERIES IMMERSION CIRCULATOR
2. FOOD SAFE CONTAINER

For the Poached Eggs

1. Clamp the circulator to the backside of a tank or other food safe container and fill it with water. (The Polyscience Discovery Series Immersion Circulator indicates a fill line for the minimum and maximum amount.) Set the temperature to 65°C or 149°F. The water will begin to

bubble around the basin like a hot tub creating a consistent and even temperature throughout. Place the whole eggs (in their shells!) in the water for 45 minutes.

2. Remove eggs from the circulator. The eggs can be made and kept in the refrigerator for a few days. Just recirculate the eggs at 63°C (145°F) before serving.





For the Hollandaise

1. Whisk together the egg yolks and lemon juice in the saucepan you will later cook the sauce in.

2. Put the saucepan on low heat and whisk vigorously, moving the pan on and off the heat so as not to scramble the eggs. Whisk continuously for about 3 minutes, at which point the mixture should be thickened and pale yellow with small bubbles at the surface.

3. Remove the pan from the heat, add in 1/3 of the butter, and return the pan to the stove, whisking constantly and vigorously. As the sauce accepts the butter, add more, in three additions. When the sauce is the consistency of a thick pudding remove it from heat. It will take 4-5 minutes to fully incorporate the butter.

4. Taste and season with salt, a pinch of cayenne, and a touch more lemon juice, if desired. Reserve the hollandaise until ready to use.



WD TIP: The quicker you can make the Hollandaise the better. The longer it takes, the more air you beat out of it.

For the Canadian Bacon

1. Crisp up the bacon however you like. Wylie likes to use butter: Heat 1 T butter in a cast-iron skillet over medium-high heat. Place bacon in the pan and cook for 1-2 minutes on each side, until brown.

2. Remove the bacon from the pan and drain on paper towels. Reserve until ready to use.

Assemble the Benedicts

1. Toast, butter, and place

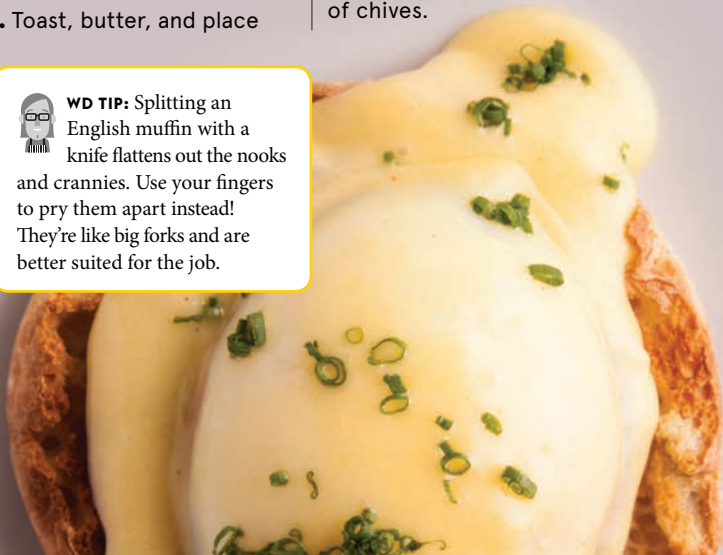


WD TIP: Splitting an English muffin with a knife flattens out the nooks and crannies. Use your fingers to pry them apart instead! They're like big forks and are better suited for the job.

the muffins on plates. Top each half with a slice of Canadian bacon.

2. Time for those perfectly poached eggs: Put a slotted spoon on top of some paper towels. Crack the poached egg on the slotted spoon and rub back and forth on the paper towel. This technique helps to remove any loose egg white.

3. Top each muffin half with an egg and sprinkle with Maldon salt. Dollop with a generous amount of Hollandaise sauce and garnish with a sprinkle of chives.





My daughter only ever wants chicken for dinner but it always ends up dry! Can your “sous vide” help me out with that?

Circulating bagged chicken breasts at 149°F and browning them just before they get served will take care of your problem. But if you want to turn simple into spectacular (without *too* much effort) follow Wylie’s recipe, which adds flavor and juiciness to the bird, and uses sous vide cooking to make sure that it never has a chance to dry out.



Pan-Roasted Chicken with Early Summer Vegetables

MAKES 4 SERVINGS

INGREDIENTS

3 quarts **BRINE**

- 2 skin-on chicken breasts (with the wing joint “Frenched” if your butcher is helpful like that!)
- ¼ C chicken fat (or olive oil) steeped with thyme, garlic, and bay leaf
- 4 T clarified butter (or regular butter)
- 6 garlic cloves, skins left on
- 10–12 thyme sprigs

FOR THE BRINE

- 3 quarts water
- 2 T salt
- 1 T sugar

FOR THE VEGETABLES

- 2 t unsalted butter
- 1 C corn kernels, cut off the cob (frozen is fine)
- 8 asparagus spears, finely sliced

EQUIPMENT

1. **POLYSCIENCE DISCOVERY SERIES IMMERSION CIRCULATOR**
 2. **POLYSCIENCE 150 SERIES VACUUM SEALING SYSTEM**
 3. **AN 11" x 16" VACUUM SEALER BAG**
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WD TIP: The next time you cook a whole chicken, save the extra chicken skin and trimmed fat. Simmer it with some water and when the water evaporates, you'll be left with rendered chicken fat to flavor and use later.

For the Brine

1. Combine the water, salt, and sugar in a stock pot and heat over medium heat until everything is dissolved. Remove from heat and allow to cool completely. The brine can be made several days in advance.



WD TIP: Play with some other flavors in your brine. Thyme and lemon are a winning combo, but also try mushrooms, coriander seeds, or paprika.

1. Submerge the chicken breasts in the brine for 3 hours — could be in a bowl or a bag, but not the bag you'll ultimately vacuum seal them in.

2. Clamp the PolyScience Discovery Series Immersion Circulator to the back of a container or pot filled with enough water to submerge the chicken. Set the circulator temperature to 65°C (149°F).

3. Remove the chicken breasts from the brine, pat them dry, and lay them flat in a sealer bag making sure they do not overlap. Spoon a couple tablespoons of flavored fat over each breast. Vacuum press the bag with the Polyscience 150 Series Vacuum Sealer and drop it into the circulator to cook for 90 minutes.

4. Heat the clarified butter over medium-high heat. Take the chicken out of the vacuum bags and, when the pan is nice and hot, add the chicken breasts skin side down. After 2 minutes, add the garlic and thyme to the pan. Tilt the pan toward you and use a spoon to scoop up the butter, basting the chicken continually for about 3 minutes. Remove the chicken from the pan and allow to rest, skin side up, for 5 to 10 minutes. Slice chicken on a bias into ½-inch slices. Serve with vegetables if you so choose!

For the Vegetables

1. Heat the butter in a skillet over medium heat. After a minute, add the corn and asparagus.
2. Saute the vegetables, shaking or stirring every half minute or so, until they

begin to brown. When the pan starts taking on color (developing a brown *fond*), add a large spoonful or two of water to deglaze it; the steam from the boiling water will finish cooking the vegetables. Once they are crisp-tender, after about 4 minutes of cooking, season with salt, and serve.



My buddies love steak but it breaks the bank when I opt for prime beef? You got a way to circulate me out of that?

I do, I do. Firstly: prime cuts are great, but there's a lot of flavor to savor elsewhere in the cow. The biggest obstacle to using cheaper cuts is that they're tough, but with sous vide that's not a problem. Immersion-circulating a hanger steak at a low temperature tenderizes the meat and cooks it to whatever doneness you want!





Hanger Steak with Brunoise Potatoes

INGREDIENTS

Two 10-oz. hanger steaks,
trimmed
+ salt and pepper to taste
6 garlic cloves, peeled
12 to 16 thyme sprigs
¼ C olive oil
2 T clarified butter or other
high smoke-point oil, such

as sunflower or canola

FOR THE POTATOES

+ canola oil or other frying oil
3-4 peeled Idaho potatoes,
brunoise
+ Maldon sea salt

EQUIPMENT

1. POLYSCIENCE DISCOVERY SERIES IMMERSION CIRCULATOR
2. POLYSCIENCE 150 SERIES VACUUM SEALING SYSTEM
3. AN 11" x 16" VACUUM SEALER BAG

For the Steak

1. Clamp the PolyScience Discovery Series Immersion Circulator to the back of a food safe container or pot large enough to fit the sealer bag. Fill with water and set the circulator temperature to 54°C (129.2°F).

2. Season the steaks with salt and pepper and place them in a sealer bag along with the garlic, thyme, and olive oil. Make sure the steaks aren't overlapping. Seal the bag with the PolyScience 150 Series External Vacuum Sealer and drop it into the water bath for 2 hours. At this point, if you'd like to, you can hold the steak in the bag in the refrigerator for up to two days before searing it on the stove-top. Simply reheat the steak in the circulator at 52°C before cooking so that it's evenly warmed through.

3. Heat the clarified butter or oil in a cast-iron skillet over medium-high heat. While the

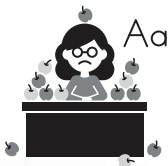
butter is getting hot, remove the steaks from the bag and discard the garlic, olive oil, and thyme. One at a time, add the steaks to the hot pan and sear, rolling them on each side until they're deeply browned, occasionally basting them with spoonfuls of clarified butter. about 4–5 minutes,

4. Remove the steaks from the pan and let them rest before slicing — on the bias and against the grain — into ½-inch pieces. To finish the dish à la Wylie Dufresne, lay down a thin layer of crispy potatoes on each plate and fan out steaks on top. Sprinkle with Maldon sea salt.

For the Potatoes

1. In a medium pot, heat the oil to 375°F. Working in batches, fry the potatoes until crisp, about 3 minutes. Use a slotted spoon to transfer the potatoes to a paper towel to drain the excess oil and season with salt to taste immediately.





I am B-O-R-E-D with fruit. Can your machines help me jazz up my usual routine of apples, apples, and more apples?

Sure, teach! The trick to making a fruit dessert really exciting without lacing it with sugar or covering it with flour and butter is to make it taste like the best version of itself.

Vacuum-sealing melon with melon juices makes it taste like the most melony melon you've ever had. (That principle applies to all fruits!) A touch of lime adds intrigue. And since you seem so keen on finding new ways to enjoy fruit, chef Dufresne has made an extra trip to the supermarket on your behalf and bought a couple bags of freeze-dried fruit. It used to be just for astronauts, but you can enjoy it too!



Honeydew Melon Cubes with Freeze-Dried Fruit

MAKES 4 SERVINGS

INGREDIENTS

½ C honeydew juice/puree,
made from the reserved
scraps of a sliced melon
2 t fresh lime juice
1 C honeydew, cut into ½-inch
cubes

1 C good quality vanilla or
butter milk ice cream
½ C crushed freeze dried
fruit (pineapple, banana,
mango or any combination)

EQUIPMENT

1. POLYSCIENCE 300 SERIES CHAMBER VACUUM SEALER
2. A 6" x 10" SEALER BAG

1. Pass the honeydew juice/puree through a sieve or fine-mesh strainer, then combine it with the lime juice and cubed melon.
2. Seal the bag in the Poly-science 300 Series chamber sealer and let it sit anywhere from 15 minutes to overnight.

3. Place a few spoonfuls of melon at the bottom of a bowl, followed by a scoop of ice cream and some more melon climbing along the side of the ice cream. Arrange some freeze-dried fruit over the top of the melon and serve.





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