

# Sous vide

Get a taste of the future of food with sous vide, a refined version of boil-in-the-bag cooking

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The idea of sous vide originated in the 1940s, when commercial foods were first vacuum-packed as a way to preserve their freshness. It wasn't until the 1970s, however, that sous vide cooking came to fruition. Jean Troisgros, the French three-star Michelin chef, discovered that he could maximise the yield of foie gras — a notoriously expensive ingredient — by wrapping it in layers of plastic and cooking it in below-simmering water. He had unlocked the potential of sous vide cooking. From that point onward, some of the most highly regarded chefs from around the world began to discover the benefits of sous vide.

## WHAT IS SOUS VIDE?

Sous vide, a term that means 'under vacuum' in French, is the first and only cooking method that provides precise control of the temperature at which food is cooked. In essence, it is a more refined version of boil-in-a-bag cooking. The two-step process involves sealing food in a bag with a vacuum sealer, and then cooking the sealed food in a temperature-controlled water bath. An immersion circulator (used to control the water temperature) acts as a thermometer, heater, and water pump, allowing the water to maintain an accurate and consistent temperature over an extended period of time.

## THE UPSIDE

Sous vide has opened up an entirely new realm of possibilities

and conveniences in the kitchen. When foods are cooked at a precise temperature, there is less room for human error. The texture of the product can be manipulated with exacting results: vegetables cooked perfectly *al dente*; meats cooked medium-rare; eggs prepared to a custard-like consistency. Cooking items in a sealed bag helps retain more moisture and flavour, since the aromas and juices of the ingredients are trapped within the bag.

The greatest advantage of sous vide is its ability to transform cheap, tough cuts of meat into something delicate and moist. Traditionally, tougher meats are cooked over a long period of time, which breaks down connective tissue and gives the meat its fall-apart-tender quality. The downside to the traditional method is that the higher cooking temperatures at which the meat is cooked (typically between 120°C and 150°C) simultaneously squeeze the juices from the meat fibres, rendering the meat flaky and dry. With sous vide, the meat is cooked over long durations (sometimes as long as three days) at low enough temperatures to preserve the meat's natural juices while also breaking down the chewy connective tissue. The result? Perfectly tender and juicy meat.

## THE DOWNSIDE

While many pathogens cannot survive in sous vide's oxygen-free environment, you can never be too concerned about Salmonella, E. Coli, Botulism and Listeria.

However, by following a few simple steps, you can avoid any infection. Firstly, all foods should be fresh and completely chilled (not frozen) before they are vacuum-sealed. When cooking between 4°C and 58°C (a temperature range where bacteria thrive, known as the 'danger zone'), food should remain in the water bath for no more than four hours to prevent excessive bacterial growth. Once cooked, the food must either be served immediately or chilled to 1°C in a water bath containing at least 50 per cent ice. Lastly, if you wish to store the food, it must be done so at a minimum of 3°C to significantly hinder any bacterial growth.

## WHERE TO BUY

Polyscience, a leading manufacturer in cooking appliance technology, offers a range of equipment necessary for cooking sous vide. These products are easily accessible through Aksai (aksai.co), India's only Polyscience distributor.

## Chicken Adobo

Serves 4 ■ 1 hour 30 minutes + overnight refrigeration ■ EASY

**canola oil** 2 tbsp, **garlic cloves** 2, minced, **white onions** 2 medium, peeled and sliced, **chicken thighs** 1kg, boneless, skinless, **soy sauce** 1/4 cup, **white vinegar** 1/4 cup, **water** 1/2 cup, **bay leaves** 2, **black peppercorns** 1/2 tsp, crushed

- Heat oil in a small pan and sauté onions until soft and golden brown. Add minced garlic and cook for 30 seconds while stirring. Transfer to a plate to cool.
- Combine the cooled onion and garlic mixture with all remaining ingredients in a food-grade plastic bag and vacuum seal at high pressure.
- Refrigerate overnight or for at least 4 hours.
- Set the immersion circulator to 66°C and allow the water bath to come up to temperature.
- Completely submerge the bag of marinated chicken into the water bath and cook for 1 hour. (If the bag floats, it contains air and must be resealed properly.)
- Remove the bag from the water bath and empty its contents and juice, over freshly steamed jasmine rice.

