

# Sample research paper on sous vide

[Food & Diet](#), [Cooking](#)



\n[[toc title="Table of Contents"](#)]\n

\n \t

1. [How Sous Vide can be Used](#) \n \t
2. [Advantages of Sous Vide](#) \n \t
3. [Disadvantage of Sous Vide](#) \n

\n[/toc]\n \n

Sous Vide is a cooking method that came from a French term that means under pressure. In the process, food is sealed in an airtight bag made from plastic material. The food is then cooked in the water longer than the usual cooking time. This can be done in meats and vegetables through precisely regulated temperature, which is much lower than usually used for cooking. The temperature normally ranges from 55 °C to 60 °C. This method is intentionally done so that meats and vegetables are cooked evenly without overcooking the outside portion while keeping the food's inside portion well-done as well as keeping its juiciness. There are several ways how the Sous Vide method can be used in our property whether or not using a Sous Vide machine.

## **How Sous Vide can be Used**

The Sous Vide method is a practice that has been used in many fine-dining restaurants with famous chefs. However, this kind of cooking method is now being used for home cooking because available solutions are now increasing its availability in the market.

For home use, applying the Sous Vide method can be done even without using a Sous Vide machine. A submersion heater can be used as an

alternative, which goes into a pot with almost full of water. The heater will create some air bubbles that will circulate the heat within the pot. This method works like a Sous Vide machine in which the heat will slowly go into the food's inner portion making it well-done inside and out.

The Sous Vide technique can be used at home. People will be able to enjoy the same doneness without leaving their property. At home, an improvised Sous Vide technique can be done using immersion circulators together with water that is temperature-controlled are the basic tools that are needed. Also, Sous Vide cooking can be done using a ziplock bag, stove, pot, and digital thermometer so that your Sous Vide style cooking can be accomplished.

This cooking technique is also the answer for home chefs who are on a budget. Even though it sounds fancy, Sous Vide can be easily done as it is especially useful to cook meats and seafood. When cooking these foods in a traditional way, the proper doneness that we normally get from a fine dining restaurant can now be acquired at home.

When we are frying our fish, its flesh would be the most tender and succulent within a narrow range of temperature. Since pan cooking is far hotter than the ideal temperature of the fish, the result would be a fish edge that is far more cooked compare with its center when it is pan fried.

However, applying the Sous Vide technique in fish will make it not only more presentable, but more delicious as you will still feel its tenderness without losing its juice.

The Sous Vide cooking technique can also be done using a crock pot. Just by filling up the crock pot with seventy percent water, setting it to the lowest,

and leaving it for about two to three hours, you will be able to reach the balanced temperature with time. In this case, meat can now be cooked using Sous Vide style. This kind of technique can also be done while camping and get to eat a Sous Vide style cooked meat, fish or even vegetable.

## **Advantages of Sous Vide**

Sous Vide cooking style has a lot of advantages as it is one of the unique ways of cooking our food. The airtight seal that is created in a Sous Vide cooking bag trap all the flavors of the food we cook, which is otherwise lost through traditional cooking. Therefore, the aromatic flavor and its taste are improved through airtight sealing. The cooking process also keeps the food's vitamins and fat contents, which also affects its taste. Additionally, Sous Vide cooking preserves the juicy and tender texture of the meat, fish and vegetable, making them no less than what it should taste.

Since the process involves more time, it will allow a better planning as well as time management in the kitchen while helping us save energy costs versus the traditional cooking using the grill or oven. Moreover, Sous Vide would stop the development of the meats aerobic flora, which can be harmful to humans.

Besides keeping the food's flavor, Sous Vide cooking would also save the food from overcooking, which normally happens in the traditional way of cooking. Burnt food or overcooked food is not going to happen in Sous Vide style as the heat is controlled at a desired temperature. Since it requires longer cooking time, you do not need to hurry your kitchen time. You can do some other tasks while cooking without the worry of burning the food. We can also make sure that the food will not have any cold spot because of the

extended cooking time.

Because the Sous Vide cooking requires an airtight plastic bag, we can ensure that the food will stay fresh for an extended period of time as there are no bacteria that can enter the sealed plastic cooking bag.

## **Disadvantage of Sous Vide**

Some people may want to apply the Sous Vide cooking technique using the tools that are intended for this style. One of the disadvantages of Sous Vide cooking is the boiling apparatus price, in which the main apparatus is the immersion heater. This is important as it will allow the accurate checking of temperature. However, you can use a Sous Vide cooking controller along with a rice cooker as an alternative. This method would be a cheaper solution.

The Sous Vide process may also have the risk of the development of anaerobic flora on the product's surface because of the absence of air in the airtight bag. In addition, the Sous Vide cooking technique may not be used in all products. An example would be a fish bone that could bore the airtight vacuum bag.

Since the process involves low cooking temperature, there would be no chance of getting any kind of crust on the meat, skin, or fat. However, this may not be a real problem as the food or meat can be fried quickly after the process to get the crusty flavor of the skin, but of course, it would be another process.

One of the advantages Sous Vide technique is its requirement for longer cooking time. However, this could also be its advantage as we need to wait longer hours for the product. This may not be applicable to an event or an

occasion that involves a short time preparation. An instantaneous event that needs quick food preparation would not be possible to include Sous Vide cooked food as one of its dishes.

Lastly, Sous Vide cooking will still not replace the traditional cooking that has been part of our gathering such as grilling for barbecues, which also been part of many family culture.