Sous vide is just another method of cooking, so most of the hygiene and safety know-how is not new. However, given the lower temperatures used, there are a few need-to-knows on:
- Time and temperature
- Pasteurization
- Food hygiene
- Food storage

The importance of time and temperature in sous vide cooking

A common misconception about low temperature cooking is that it is unsafe as it involves cooking in lower temperatures that are in the bacterial "danger zone" of 5°C - 55°C (41°F - 131°F).

Food safety is a function of both time and temperature; a low cooking temperature would be perfectly safe if maintained at that temperature for long enough to achieve pasteurization.

Pasteurization isn't strictly necessary for safe consumption (think sushi!), however it's a requirement if cook-chill is needed. As a reminder, there are 2 types of low-temperature cooking: cook-serve and cook-chill. With cook-serve, food is cooked and served immediately; whereas cook-chill means that food is cooked, chilled, stored and reheated prior to consumption at a later date.

Generally food items that are heated and served within 4 hours are considered safe (including unpasteurized food), but meat that is cooked for longer to tenderize must reach a temperature of at least 55°C (131°F) within 4 hours and then be kept there, in order to pasteurize the meat.

How do I store my food?

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Timing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Cooking Temperature</strong></td>
<td>Less than 55°C (131°F)</td>
</tr>
<tr>
<td><strong>Cooking time</strong></td>
<td>Cook &amp; serve within 4 hours</td>
</tr>
<tr>
<td><strong>How to store</strong></td>
<td>Unpasteurized Short term cook &amp; chill (3 - 5 days)</td>
</tr>
</tbody>
</table>

*This rule generally applies for meat cuts up to 2 inches thick. For accurate details on pasteurization times, please refer to each respective food section's sous vide cooking guide.
The concept of pasteurization
Unpasteurized food is considered raw or minimally cooked and not suitable for highly susceptible, pregnant or those with weaker immune systems (“immuno-compromised”).

That said, unpasteurized food is safe to eat with practice of good food hygiene and using fresh, high quality ingredients - or else we wouldn’t have sushi, rare steak or carpaccio!

Pasteurizing food cooked sous vide requires a minimum cooking temperature of 55°C (131°F). You can see pasteurization times and temperatures in each food section’s sous vide cooking guide.
Food hygiene best practices

Sous vide cooking is safe with good food hygiene practices, purchase of fresh food and adherence to the time-temperature guidelines. These precautions apply to conventional cooking methods as well!

**Key food hygiene best practices:**

- Buy fresh, good quality ingredients that are thoroughly cleaned.
- Keep ingredients refrigerated (or frozen) at less than 5°C (41°F) until use.
- Don’t let food be in the bacteria “danger zone” of 5°C - 55°C (41°F - 131°F) for more than 4 hours.
- Minimize cross contamination by using separate cutting boards and storage units for different food, such as vegetables, fruits, fish, poultry and meat.
- Serve freshly cooked food right away or follow proper chilling and storage practices (Food storage Q & A).