9.3 Procedure for Safe Production of Sushi and Sashimi SOP

Sushi: Food made from cooked rice which has been flavoured with vinegar, pressed into shape and rolled with other ingredients including raw or cooked seafood, vegetables, cooked meat, cooked egg and seaweed.

Sashimi: Food made from seafood including fillets of marine fish, molluscs, crustaceans, fish roe intended to be eaten raw.

Food Safety Risks With Sushi and Sashimi:

Production of sushi and sashimi dishes require specific food safety controls because:

- Dishes are prepared raw ingredients with no cooking process to kill any parasites or food poisoning bacteria that may be present.
- Raw seafood (whether it is fresh or frozen) can contain parasites and food poisoning bacteria which can be transmitted to consumers if the foods do not go through a safe cooking process.
- Dishes containing cooked, pressed rice may involve the cooked rice ingredient being held out of temperature control for periods of time (the rice is easier to press into shape when it is at room temperature) and if not handled correctly Bacillus cereus may form spores and toxins.

How to Produce Sushi and Sashimi Safely:

General Hygiene:

- Practice excellent personal hygiene including regular hand washing using soap and warm water immediately before food preparation. Dry hands with disposable paper towels.
- Store raw foods separately from ready to eat food to avoid cross-contamination. Where ingredients are used in their raw state these should also be stored away from or above other raw foods (such as raw meat).
- Defrost ingredients in small amounts as you require them. Ensure chilled ingredients are in-date, and follow a stock control system based on the 'first in, first out' principle or individually date code your products with a preparation and use/dispose of date.
- Wash fresh fish, rice and vegetables before use.
- Keep food preparation areas and food equipment clean and disinfected (using a food safe sanitiser, or dishwasher at above 82ºC).
- Cook any egg or meat used to above 75ºC or to a point where you can tell visually that they are thoroughly cooked.
- Minimise preparation time and store or display any prepared Sushi and Sashimi at or below 4ºC, until it is served.

NB: The above guidance to keep prepared Sushi and Sashimi below 4ºC is for good practice. The Food Hygiene (England) Regulations 2013 requires food that can support the growth of pathogenic micro-organisms or the formation of toxins to be held at or below 8ºC. However, it would be a defence for you, if you can prove that the Sushi/Sashimi kept for service or on display at a temperature above 8ºC, but below 63ºC, was for less than 2 hours if the rice is to be served warm, such as straight from the rice cooker/warmer; or for less than 4 hours it the product is served chilled, i.e. from the fridge.

*However, to use either the "2-hour" or "4-hour" rule as a defence against a failure to keep the food at or below 8°C, you will have to show that you have a system for monitoring the length of time each food has been out of temperature control for i.e. to prove that it was less than 2 hours for warm/hot food or less than 4 hours for chilled food. Such a system must be documented and stated clearly within your food safety management system.

- All the safety procedures that you put in place to produce the food that you sell must be documented as part of your food safety management system.

Fish:

- Use good quality ingredients from reputable suppliers.
- Carry out visual inspections (at delivery and during preparation) of the fish to ensure that they are free of parasites. However, be aware that Tapeworms and flukes may not always be visible so this method is not 100% effective.
- Freezing raw fish will kill any tapeworm larvae present. However for this to work effectively the raw fish must be frozen so that it reaches at least -20ºC or colder for at least 24 hours or -35 ºC for at least 15 hours. This is a Legal Requirement. (See below for more information.)
- If the manufacturer / supplier of the fish has carried out the appropriate freezing process to eliminate parasites there should be a record of this with the consignment. It is a legal requirement for records of processes, such as freezing, to follow the product consignment.
- If there is no paperwork with the fish to show that the manufacturer / supplier has carried out the appropriate freezing process (or an equivalent procedure to kill parasites), you must do it yourself. You will need to keep evidence of this.
- After freezing, defrost the fish in a chiller. If you cannot achieve -2ºC for at least 24 hours, do not use raw fish. It must be cooked.

LEGAL REQUIREMENTS REGARDING FISH TO BE EATEN RAW OR ALMOST RAW

COMMISSION REGULATION (EU) No 1276/2011, which amends Annex III to Regulation (EC) No 853/2004.

As already stated above, there are specific requirements concerning the control of parasites in fish where the fish is to be consumed raw. This is of particular relevance to suppliers and caterers dealing in Sushi or Sashimi.

The following fishery products **must** be frozen at a temperature of not more than -20ºC in all parts of the product for no less than 24 hours or -35 ºC for not less than 15 hours. This treatment can be applied to the raw product or the finished product:

a) fishery products intended to be consumed raw; or

b) marinated, salted and any other treated fishery products, if the treatment is insufficient to kill the viable parasite;

If the fish has been frozen before arriving with your business, it must have with it documentation, showing what process it has undergone. This will identify for you whether the freezing process was sufficient to comply with the requirement above. If it is, you need not take any further action. If not, you must ensure that the fish is frozen to the levels stated above. You must keep this documentation easily retrievable as evidence. Ideally, it should be kept with the monitoring records for your food safety management system.

You need not carry out the freezing treatment set out above, if: -

(a) The fish are from wild catches, and provided that:

(i) There are epidemiological data available indicating that the fishing grounds of origin do not present a health hazard with regard to the presence of parasites;

And

(ii) The competent authority so authorises;

(b) The fish are derived from fish farming, cultured from embryos and have been fed exclusively on a diet that cannot contain viable parasites that present a health hazard, and one of the following requirements is complied with: -

(i) The fish has been exclusively reared in an environment that is free from viable parasites; or

(ii) You are able to verify through procedures, approved by the competent authority, that the fishery products do not represent a health hazard with regard to the presence of viable parasites.

*Based on a recent study the Food Standards Agency (FSA) have declared an exemption from freezing for farmed and pellet fed Atlantic salmon.

Sushi Rice:

Once the Sushi rice is cooked it must be held at a temperature above 63ºC or chilled down to below 8ºC as soon as possible, unless using for immediate preparation. Any unused Sushi or Sashimi must be disposed of at the end of the day.

It is recognised that mixing sushi rice with vinegar and salt seasoning will increase the acidity of the mix, which in turn will help prevent the growth of bacteria such as Bacillus cereus and the formation of their toxins. This will enable it to be left out of temperature control for longer periods, such as when making the sushi or sashimi. **However, if you rely on this you must:**

- As part of your food safety management system (HACCP), you must have written down your procedure for ensuring the precise amounts of vinegar/salt you are using in your solution.
- The acidity i.e. the pH of the rice and vinegar mix must be checked. This acidity will have to be low enough to inhibit bacterial growth, i.e. below pH4.5. pH meters can be purchased from specialist stores or on-line. The pH must be checked for every batch and recorded or you must be able to show that it has been checked in some other way e.g. by using a bought in solution that has been tested by a manufacturer and following manufacturer's instructions.

*If you are not able to standardise your vinegar/salt solution for the Sushi rice and/or you are not able to check the pH level to ensure that it is below pH4.5, you must not allow the rice to be out of temperature.

You are therefore advised to prepare only small amounts in advance, chill them down, store in the refrigerator and allow them to warm up to room temperature naturally just before service.

Using the correct solution of vinegar to reduce the pH of Sushi rice to pH4.5 or lower, should help to inhibit the growth of pathogenic bacteria such as Bacillus Cereus, which is commonly found in rice. However, you must still ensure that you protect the rice against physical and chemical contamination. Additionally, you must remember that it is only the Sushi rice that is mixed with the vinegar solution. **Any other food e.g. fish, meat or egg, added to the product, will not be protected and must not be left out at room temperature.