



1 Goal

To produce sushi that has a pH of 4.8 or below and can be held at temperatures between 4°C and 15°C for up to eight hours for nigiri pieces and 12 hours for nori rolls.

2 Why?

Harmful microbes can't grow well in acidic food (pH 4.8 and below).

3 How this is done



This procedure provides additional information on preparing sushi (nigiri pieces and nori rolls) safely. It doesn't replace the need to follow other relevant procedures in the Food Control Plan.

- Vinegar is added to the cooked rice until the pH is 4.8, or lower.
- The pH is checked by taking a sample of the cooked rice (with vinegar added) and mixing it with a little bit of water to make a slurry. The pH is tested by using a:

- pH strip
- pH paper
- pH meter



Adding vinegar to the rice makes it acidic and helps stop harmful microbes from growing in the rice and on the other ingredients.

- All ingredients are free from contamination. This is done by:
 - purchasing ingredients in sealed and airtight packaging, or
 - soaking prepared vegetable ingredients in a food-suitable sanitiser for 10 minutes, and then rinsing them.
- Ingredients are handled as little as possible.
- All utensils used are clean and sanitised.
- Sushi is cooled from 60°C to 21°C in the first two hours and to 15°C or colder in another four hours.
- Nigiri pieces are held at a temperature of no more than 15°C for no longer than eight hours. Nigiri pieces still on display after eight hours are thrown away.
- Nori rolls are held at a temperature of no more than 15°C for no longer than 12 hours. Nori rolls still on display after 12 hours are thrown away.



After eight hours at temperatures between 4°C and 15°C, the growth rate of harmful microbes increases on nigiri pieces. As the rice doesn't fully cover the seafood, the acidity of the rice is not able to protect the sushi for as long as the nori rolls.



'Nigiri' is a piece of raw or cooked seafood placed on top of sushi rice.

'Nori' is sushi rice, raw or cooked seafood, vegetables or other ingredients rolled in seaweed sheets.

4 What if there is a problem?

If the pH of the rice is above 4.8, the volume of vinegar being added must be increased. Re-test the pH of the rice until the correct pH is reached. Keep a note of the amount of vinegar required to achieve the correct pH in one kilogram of rice.

Re-train staff in correct food handling procedures.

Throw away any sushi products or their ingredients that might have become contaminated through poor handling.

Write down what you did in the daily page of the Diary.

5 Write it down

Write down the pH of each batch of rice that is tested in the 'Sushi Rice pH Record'!



