

## Sample function

Functions for configuring, logging and monitoring samples can be found in the **“Sample”** menu of the HACCP Tracker service.

## Samples as part of the HACCP plan

The taking of temperature and hygiene measurement samples is part of the self-monitoring of food services. Samples are used to ensure food safety. The SmartKitchen service currently includes digital storage and management of temperature and surface hygiene samples.

### There are two ways to record measurement results:

1. Manually to SmartKitchen service using a web browser.
2. Use the wireless measurement devices and the KitchenHelper app on your Android phone.

### This guide explains:

- configuration of sample management master data for the online service
- manual sample entries
- reading the temperature sample wirelessly from the SmartKitchen I hand probe
- reading the temperature sample wirelessly from a Raytemp infrared thermometer
- reading the surface hygiene sample wirelessly from the Kikkoman Lumitester luminometer

## 1. Preconditions and definition

To use the SmartKitchen Sample function, the SmartKitchen HACCP Tracker license must be activated for the user account. The Sample menu appears for the top navigation of the service.

Start by first creating sampling places, groups, and items. Activate the temperature measurement devices for the account.

### Creating sampling places

Select “Create a new sampling place”.

The sampling place is a description of the place where the sample is taken. For example, “Kitchen surfaces”, “Lunch buffet temperatures”, “Temperatures upon receipt”, “Restaurant tables”, etc.

### Creating groups

Select Sampling place → Settings icon → Edit groups and items

Groups make it easier to manage items, especially when there are many of them.

For example, the groups “Warm Foods”, “Cold Foods”, etc. could be created in the sampling location “Lunch buffet temperatures”.

### Creating items

Select Sampling place → Settings icon → Edit groups and items.

The measurement item describes in more detail where the sample is taken. For example, for temperatures “Soup”, “Salad” etc. and for surface hygiene “Sink”, Door handle “etc.

#### **Activation of measurement devices**

The temperature measurement devices used must be activated for the account. Select the Settings menu → Measurement Devices → Add New Device.

Note! Kikkoman Lumitester is not activated for the account.

## **2. Record measurement results manually**

The results of the samples are entered into the service manually if manual measurement devices or, for example, the strip method for surface hygiene testing are used.

#### **Making entries manually:**

1. Select Sampling place.
2. Select " Add the sample result manually"
3. Make the entries and comments on the form and approve (yes/no) the sample.

## **3. Record measurement results using wireless devices**

#### **KitchenHelper application**

KitchenHelper is an Android application used to transfer measurement result from wireless measurement devices to the SmartKitchen service. Note! Use KitchenHelper app version 1.3 or later.

#### **The following samples are recorded using the KitchenHelper:**

1. Temperature sample from the SmartKitchen I hand probe
2. Temperature sample from the RayTemp infrared thermometer
3. Surface hygiene sample from the Kikkoman Lumitester luminometer

### **3.1. Temperature sampling with the SmartKitchen I hand probe**

Conditions for temperature sampling:

- The measurement device is activated for a user account in the online service
- Sampling place, groups and items are defined with temperature limits
- The KitchenHelper application is installed on your phone

#### **Performing the measurement:**

1. Log in to the KitchenHelper app
2. Select "Temperature"
3. Turn on the measurement device at the power switch.
4. Select the measurement device you are using, the performer of the measurement, the sampling place, the group and the item.
5. Insert the spike of the measurement device into the object to be measured.
6. Select "Save"
7. Write a comment if needed.

### **3.2. Temperature sampling with the RayTemp infrared thermometer**

Conditions for temperature sampling:

- The measurement device is activated for a user account in the online service
- Sampling place, groups and items are defined with temperature limits

- The KitchenHelper application is installed on your phone

Performing the measurement:

1. Log in to the KitchenHelper app
2. Select "Temperature"
3. Turn on the measurement device at the power switch.
4. Select the measurement device you are using, the performer of the measurement, the sampling place, the group and the item. Select "Save" in the KitchenHelper.
5. Point the thermometer at the target. Do not press the "measure" button on the meter. Wait until the meter temperature is displayed in the KitchenHelper.
6. In the KitchenHelper, select "Save".
7. Write a comment if needed.

#### EXAMPLE OF TEMPERATURE SAMPLING

The restaurant serves a cold salad buffet. When serving cold food, the temperature must not exceed +12 °C. According to the HACCP monitoring plan, the temperature sample should be taken once a day.

Before taking the temperature sample, the food to be measured should be mixed slightly, as the temperature of the salad is higher on the surface than on the bottom. The temperature sample is taken with an infrared meter by pointing at the food and selecting the correct item from the "Temperature" menu in the KitchenHelper application. A clarifying comment can also be saved during the measurement. The measurement result of the temperature sample is automatically saved in the SmartKitchen service.

### 2.3. Surface hygiene sample with the Kikkoman Lumitester luminometer

Conditions for luminometer-hygiene sampling

- The sampling place, groups and items of the hygiene measurement are defined in the online service.
- The KitchenHelper application is installed on your phone.
- The luminometer and the phone are paired using the phone's Bluetooth feature.

Performing the measurement:

1. Follow the instructions on the Lumipac A3 Surface package to take a swab.
2. Log in to the KitchenHelper app
3. Select "Hygiene"
4. Power on the Kikkoman Lumitester device.
5. Insert the swab sample tube into the measuring port of the luminometer.
6. If necessary, select the measurement device you are using, after which the measurement results will be read by selecting "Next". Wait until the measurement is completed.
7. Select the performer of the measurement, sampling place, group and item. Select "Next".
8. The measurement result is saved in the SmartKitchen service.

## EXAMPLE OF SURFACE HYGIENE SAMPLING

Surface hygiene sampling can be performed using an established method in the restaurant, for example Hygicult strips, Hygienia or Kikkoman luminometer. Regular sampling ensures that the cleaning according to the self-monitoring plan is followed. The result entries are used to see momentary deviations, archive and also track long-term trends.

Based on the result of the hygiene measurement, the success of the cleaning measures performed can be verified and, if necessary, the process can be improved to achieve the desired result. It is also possible to monitor, for example, the effect of the wear of the worktops on the cleaning result and, if necessary, justify their renewal. The result of the measurement is only comparable if the same method / device is used continuously, as devices from different manufacturers measure hygiene in slightly different ways.

**NOTE!** Changes made to the service (sampling places, groups and items) will take effect with a delay. To see the changed information immediately restart the application.

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