

Food inspection procedure using "MC-Media Pad"

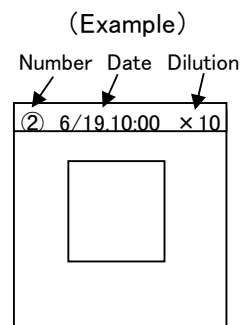
Example of inspection method per food sample (3-step dilution)

1. Required inspection equipment

Equipment	Quantity	Equipment	Quantity
MC-Media Pad Acplus (Bacteria)	6	Sterilized dropper	3
MC-Media Pad EC (E. coli · Coriforms)	2	Stomacher	1
Stomacher bag	1	Incubator	1
90 ml of sterile saline	1	Balance	1
9 ml of sterile saline	1	Tweezers	1
		Scissors	1

2. Inspection procedure

1) Enter the test date, sample number, and dilution ratio on the color tape part of the "MC-Media Pad" cover film.



2) Make a 10-fold diluted solution.



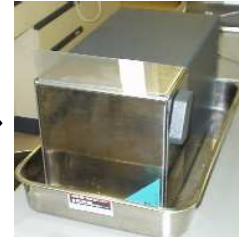
Put 10g of ingredients in the Stomacher bag.



Put 90 ml of sterile saline in the Stomacher bag.



Set the Stomacher bag in the Stomacher.



Close the stomacher door and process the stomacher for 30 seconds. The resulting sample solution becomes a 10-fold diluted solution.

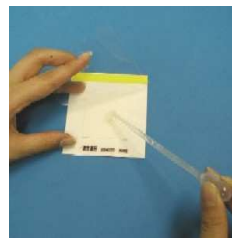
3) Add 10-fold diluted solution to "MC-Media Pad".



Make a cut on the liquid part of the Stomacher bag with sterilized scissors.



Insert a sterile spoid into the filter section of the cut end and collect 1 ml of the



Add the diluent to the pad part of "MC-Media Pad". Add 2 each of ACplus and EC.

4) Make a 100-fold diluted solution and add it to "MC-Media Pad".



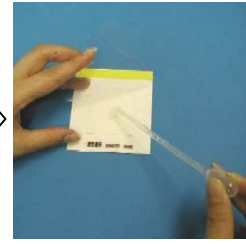
Insert a sterile spoid into the filter section of the cut end and collect 1 ml of the diluent.



Put the collected diluent in a 9 ml sterile diluent, close the cap and shake well. The resulting sample solution becomes a 100-fold diluted solution.



Use new dropper and collect 1 ml of 100-fold diluted solution.



Add the diluent to the pad part of "MC-Media Pad". Add to 2 of ACplus.

5) Make a 1000-fold diluted solution and add it to "MC-Media Pad".



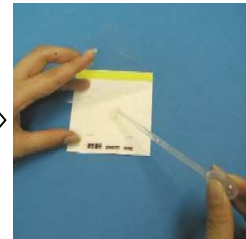
Collect 1 ml of 100-fold diluted solution.



Put the collected diluent in a 9 ml sterile diluent, close the cap and shake well. The resulting sample solution becomes a 1000-fold diluted solution.



Use a new dropper and collect 1 ml of 1000-fold diluted solution.



Add the diluent to the pad part of "MC-Media Pad". Add to 2 of ACplus.

6) Place the "MC-Media Pad" in the incubator and incubate.

ACplus ; 35°C 24 to 48 hours
EC ; 35°C 24 hours



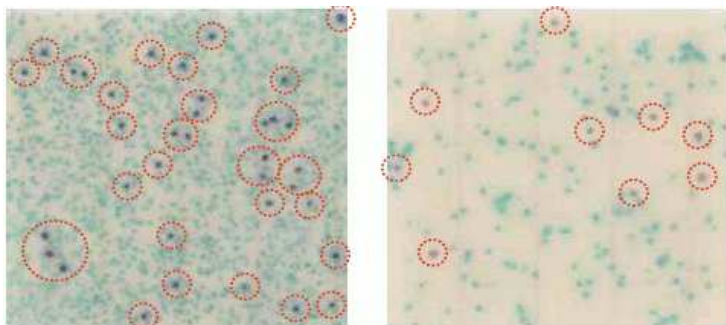
7) Judge.



Mark colonies with magic
And count the number of bacteria.

3. Judgment method

- 1) After culturing, count the number of colonies that appear in "MC-Media Pad" Acplus and EC. You can only count sheets in the range (less than 1000 pieces). EC can measure the number of E. coli and the number of coliform bacteria at the same time.



Both E. coli and coliforms are colored. The area surrounded by red is E. coli. The other light blue is coliforms.

Indigo: E. coli
Blue to turquoise: Coliforms

Example of MC-Media Pad EC color development

- 2) From the result of 1), multiply the dilution ratio to obtain the number of bacteria.
- In the case of 10-fold diluted solution: Number of bacteria = Number of counted bacteria x 10
 - In the case of 100-fold diluted solution: Number of bacteria = Number of counted bacteria x 100
 - In the case of 1000-fold diluted solution: Number of bacteria = Number of counted bacteria x 1000
- ③ Calculate the average of Acplus and EC, and use them as the aerobic count, coliforms count, and E. coli count.
The unit is "cfu / g" or "pieces / g".

Sample	Bacteria	Coliforms	E. coli
Cabbage			
Lettuce			
Cucumber			
Red cabbage			
Carrots			
Ginger			
Green onion			
Grated radish			
Onion			

- ※1 In the case of coliforms, the whole of the sheet media may develop from pale bluish green to blue due to the action of the enzyme that raw vegetables have.
The color develops in a short time (from about 2 hours) after starting the culture. As a result, it may be difficult to see the colonies that develop color, so please change the above explanation to the following for foods that cause such a phenomenon.
- 1) Add the 100-fold diluted solution of 4) of the above inspection procedure.

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