



Yamamori Trading Co. Ltd.

YTC NEWS LETTER

Joint Class : Retort Sterilization

(Food Science & Technology Dept., Faculty of Agro-Industry, KU)



On September 12,14 &16 2011 - YTC had got an opportunity to make lectures for the students in the Department of Food Science & Technology, Faculty of Agro- Industry Kasetsart University about the topic of

"Retort Sterilizing Products,Theory & Practice". Also with co-operation by the specialists of Thai Nisshin Seifun Co.,Ltd. and Siam Yamamori Co.,Ltd., YTC had prepared the materials for the lectures; Powerpoint file and cooking formula with YTC J-Sauces. We hope that this lecture could help the attend students get better understanding the theory and the practice of retort pouch food production.

We appreciate it if the other universities give us a chance to have the same kind of lecture.



Bumrungrad Fair 2011



- Present corner of the "New Coming" Apple Pectin Gel

On September, 10, 2011 - YTC with Kobe-Ya Shokuhin Kogyo joined to set a booth at Bumrungrad Hospital's event ; Living in Bangkok Fair 2011. At the booth, YTC presented our retail products of Japanese Soy sauce, Japanese seasoning sauces and retort pouch foods including the new product of " Apple pectin gel ", and Kobe-Ya served Japanese dish of ODEN, OKONOMIYAKI etc. cooked with YTC J-Sauces to attract the visitors.

YTC will continue to actively participate coming events and exhibitions also from now onward.

Technical Information

As the same series from last 2 volumes (Vol-10 & 11), we would insert a report related to R&D work to make sample using soy sauce.
(Review)

- Vol-10 : Specification of Soy sauce is w/v% basis
How to convert w/v% to w/w% basis for R&D work to make sample.
- Vol-11 : In case of two kinds of soy sauce mixed to use in sample, the ways to estimate color number and sodium chloride content.

In this volume, the following attendance points to determine the quality would be explained.

- (1) Yielded weight**
- (2) Analysis data**
- (3) Stability on microbes**

(1) Yielded weight after cooking

Before the start of sample making, please do not forget to weigh and record the weight of your using pot in empty.

By heating to cook, water in your mixed sauce must be evaporated out, and its weight is to be lost.

Therefore, you shall check the weight after cooking and add to compensate correspondence of the evaporated water into your making sample to adjust the final weight.



(2) Analysis data

We would recommend to analyze and record at least pH, Brix and sodium chloride percentage in your making sample. Because those three items are relatively easy to check, but almost enough to identify the quality.

Further, if you have your calculated estimation of Brix and/or sodium chloride percentage, you can make sure appropriateness of your analyzed data by comparing analysis data and calculated estimation.

Its calculation method was explained at Vol-10 and Vol-11, please review them.



Brix Digital Refractometer



Brix is used in the food industry for measuring amount of sugar.



pH meter

pH is use to incated which is acidity or alkalinity

Burette Titration



use to determine the unknow concentration of Identified analyte (such as NaCl)

(3) Stability on microbes

Factor & Area of Bacteria growing

		Col-form bacteria	Cocci (bacteria)	Psychrophilic bacteria	Mesophilic bacteria	Thermophilic bacteria	Heat resistant bacteria	Anaerobic bacteria	Lactic acid bacteria	Halotolerant lactic acid bacteria	Yeasts	Halotolerant Yeasts	Fungi (Mold)	Xerophilic Fungi (Mold)			
Aw (Water activity)	1 ~ 0.95	■	■	■	■	■	■	■	■	■	■	■	■	■	(A) Retort	} Retort	
	0.94 ~ 0.90	■	■	D	D	D	■	■	■	■	■	■	■	■			(B) Aw control production
	0.89 ~ 0.85	■	■	■	■	■	■	■	■	■	■	■	■	■	(B) pH control production		
	0.84 ~ 0.65	■	■	■	■	■	■	■	■	■	■	■	■	■			(A) Retort
pH	3.0 ~ 4.5	■	■	■	■	■	■	■	■	■	■	■	■	■			
	4.6 ~ 9.0	■	■	■	■	■	■	■	■	■	■	■	■	■			
Temperature (°C)	9.0 ~ 11.0	■	D	■	D	D	■	■	D	■	■	■	■	■			
	0 ~ 5	■	■	■	■	■	■	■	■	■	■	■	■	■			
	6 ~ 10	■	■	■	■	■	■	■	■	■	■	■	■	■			
	11 ~ 35	■	■	D	■	■	■	■	■	■	■	■	■	■			
	36 ~ 45	D	D	■	D	■	■	■	D	D	D	D	D	D			
	46 ~ 55	■	■	■	■	■	■	■	■	■	■	■	■	■			
	more than 56	■	■	■	■	■	D	D	■	■	■	■	■	■			
Oxygen gas (%) in the package	20.9%	■	■	■	■	■	■	■	■	■	■	■	■	■			
	0.2 ~ 0.4%	■	■	■	■	■	■	■	■	■	■	■	■	■			
Heat resistance	80°C 10 minutes	■	■	■	■	■	■	■	■	■	■	■	■	■			
Alcohol	2 %	D	■	D	D	D	D	■	D	■	■	D	D				
Salt	3 %	■	■	■	■	■	■	■	■	■	■	■	■	■			
	7 %	■	■	■	■	■	■	■	■	■	■	■	■	■			
		■	: Area that bacteria be able to grow.														
		D	: Area that some species of bacteria be able to grow.														
		□	: Area that bacteria be unable to grow.														

Area of bacteria growing are generally determined by pH and Aw (water activity).

Regarding pH, the foods are generally categorized into three zones, low acide food (pH > 4.5), acid food (pH = 4.5 – 3.7) and high acid food (pH < 3.7).

Regarding Aw, also categorized into three zones, Aw 0.89—0.85, 0.84—0.65 and less than 0.65.

According to its belonging areas of pH and/or Aw, the species of growable bacteria are presumed, and its required pasteurization or sterilization conditions are determined. Theory of sterilization including D-value, Z-value and F-value will be explained in other occasion.

New Easy Recipe'

from YTC

yamamori

J-Sauce World!

อร่อยง่ายทำตามสบาย



Thailand is now facing the critical situation that comes from the flood. We wish it would be better soon. This time, we would like to present an easy "donburi" menu that can be cooked at home.

Pork and Cabbage Don



Ingredients

- | | |
|-------------------------|---------------------------|
| 1. Japanese cooked rice | 200 g. |
| 2. Sliced pork | 60 g. |
| 3. Fresh grated ginger | 1/4 tsp |
| 4. Fresh grated garlic | 1/4 tsp. (or as you like) |
| 5. Cabbage | 50 g. |
| (cut size ~ 2 inch) | |
| 6. Hon-Kaeshi | 1 tbs |
| 7. Fried Chicken sauce | 1.5 tbs |
| 8. White sesame seed | a little |
| 9. Oil | 1 tbs |



1. Mix sliced pork, greated ginger, greated garlic and Hon Kaeshi, set aside.



2. Fry cabbage with vegetable oil until almost cooked and then put mixed pork in the first step into the pan and stir-fry until cooked .



3. Add Fried chicken sauce and stir- fry a monent or until all ingredients mixed well.



4. Place on cooked rice by put cabbage first and top with pork and sauce.



5. Sprinkle with white sesame . Ready to serve.

Tips

- Don't stir-fry mixed pork too long, because it will make pork too firm and not juicy with sauce.

Yamamori Fried chicken sauce



Yamamori Hon-kaeshi
(Sweetened Soy sauce)