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# Joint Event on International Conference on FOOD NUTRITION AND MICROBIOLOGY

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## How retort packing can contribute to alleviate the threat of global food crisis and sustainability

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This abstract delves into the captivating realm of 'retort food packing' and how it can contribute into the imminent global food crisis. The retort pouch packaging market was valued at USD3.06 billion in 2020, and is estimated to reach USD4~5billion by 2026 and yet is expected to grow at the pace of 6% CGR over the coming years.

The once luxury type of package which used to be popular only in certain markets, namely Japan, has immensely increased its demand globally due to several factors mainly for the preference for ready to serve packing solutions which also ensures room temperature distribution and longer shelf life.

We would like to present an overview of the 'retort food packing with the following contents:

0. Background

Global challenges caused by contradiction of "Food Crisis" and "Food Waste"

- 1. What is retort food?
- 1-1. Characteristics and Benefits of retort foods
- 1-2. Type of retort foods
- 1-3. Status of retort foods in each country Japan

**Europe United States** 

Asia

- 2. Development and manufacturing of retort foods
- 2-1. Manufacturing process of retort food
- 2-2. Necessary equipment in retort food packaging
- 3. About the sterilization conditions of retort foods
- 3-1. what to consider about the microorganisms/bacteria on foods
- 3-2. what are F-Value, P-Value (D/Z value)
- 4. How it can contribute to the global sustainable future, especially in terms of food safety, reduction in food waste as well as easy handling without requiring modernized logistics such as refrigerated warehouse or transportation.
- 4-1. Examples in Japanese market
- 4-2. Demands in OD \(\ddots\) base projects for developing markets
- 5. Quick presentation of  $\mbox{$\frac{1}{2}$}$  lp equipment suited for retort food packing 5-1.

Advanced Retort \(\frac{1}{2}\) utoclave model RK-3030

- 5-2. Multipurpose Retort \$\dagger\$ utoclave model RKZ-40II
- 5-3. Low-end economical Retort cooker model RKE-40.

### **Biography**

Takahiro Imai, Senior Managing Director. He majored in mechanical engineering at Nagoya University in Japan and has expertise in thermodynamics and biomaterials engineering. After graduating, engaged in Food technology for packaged foods, including continuous sterilization systems, at a major general food manufacturer. Currently, he is in charge of designing and developing small retort sterilizers for a food manufacturing Venture Company.