Comparison of the E-Jen Vacuum Container with a Common Airtight Container

Benefits

Item ItemE-Jen Vacuum Container		Common Airtight Container Remarks		
Browning	Prevents the browning of food.	The food color is turned into brown or black when exposed to air.	Soybean paste, Soy sauce and Hot pepper paste Marinated beef ribs	
Dampness	Minimizes the exposure to the moisture to prevent the dried seaweeds and cookies from becoming damp.	Moderately minimizes the exposure to the moisture.	Seaweeds, cookies, bread crumbs, cereals, etc.	
Growth	Continuously maintains the vacuum to inhibit the overgrowth that lowers the taste and quality.	Air gets in to stimulate the overgrowth that lowers the taste and quality.	Mushrooms	
Evaporation of the water content	Keeps the water content to prevent an excessive dryness of the dried goods.	Moderately prevents the evaporation of the water content.	Dried goods	
Vacuum	Preserves the food in vacuum to prevent the discoloration or decay. Keeps the flavor of the food from the beginning to the end of the storage.	Foods may be discolored or spoiled.	Bean curd, chopped garlic and open canned goods	
Food texture	Keeps the water content and prevents the air in to maintain a crisp and fresh texture.	Keeps the water content.	Fruits and vegetables	
Food smell	Outer and inner lids double trap the food smell.		Mellow Kimchi, fermented soybeans, etc.	
Others	Inhibits the attraction of grain weevils.	Attracts grain weevils.	Grains e.g., rice	



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JEN W

(E-jen) Vacuum and Airtight Storage Container



E-jen Vacuum and Airtight Storage Container

Principle of E-jen Vacuum and Airtight Storage Container

To store foods for a long time, we have to protect them from being perished and there are four factors playing a role in perishing such as otemperature, a moisture, nutritive elements and air. If one of these factors is insufficient or doesn't exist, the putrefaction never happens or goes slowly.

One of the best way to store food is containers like canned goods or cans.

The canned goods are available to store foods for a long time for storing foods in vacuum state but they can be used just one time.

If there is a container providing vacuum like cans and is able to use several times, it will be an outstanding one.

All the containers as we know are composed of bodies and lids. All of them have air layer with the same size of the contents (layer between lids and contents, HEAD SPACE) and the more we pull contents out of containers, the bigger head space and this makes molds or deteriorate the original taste of food by bad microbes in the air.

E-jen, vacuum and airtight storage container, has vacuum plate (pressing plate) in the middle of the container and movable upward and downward. If you press the plate close to the food inside, the air in the container becomes minimized and blocks air flowing from the head space so it has very similar effect to cans.

There are many fermented food in Korea such as kimchi, soy bean sauce and pickle. To store these foods, people have used kimchi leaves to cover the upper part or wide and heavy stones

e-jen has silicon packing inserted along the edge of the vacuum plate. The pressing mechanism of the vacuum plate improves the insulation of the silicon packing and has the following features.

- 1) preserving perishable food in a container
- 2) compacting food
- 3) preserving perishable food in a vacuum state

The e-jen is preservative container with the same benefits of canned Food in the utility sense of being a container, compactor and preserving the contents in a vacuum state.

Square-shaped [e-jen]

① 1.7L $18 \times 11 \times 15 \text{ cm}$ 2 3.4L 22 × 14.5 × 17cm ③ 5.2L 26 × 20 × 15.5 cm 4 6.4L 20 × 22 × 22 cm $7.4L 26 \times 23.5 \times 22 \text{ cm}$ 8.2L $26 \times 20 \times 23.5$ cm) 8.5L $29 \times 22 \times 20 \text{ cm}$ 11L $35 \times 24 \times 18.2 \, \text{cm}$ 11.5L 26 \times 23.5 \times 27 cm 12L $32 \times 23 \times 23$ cm $35 \times 27 \times 22.5 \,\mathrm{cm}$

17L $35 \times 24 \times 27 \text{ cm}$

Rounded-shaped [e-jen]

1	0.6L	12	×	7.5cmH
2	1.5L	15	×	11cmH
3	3L	19	×	13cmH
4	5L	22	×	16cmH
(5)	8L	25	×	20cmH
6	12L	28	×	25cmH
7	22L	32	×	32cmH
8	32L	37	×	37cmH
9	45L	42.5	×	42.5cmH



In the middle of the vacuum and airtight storage container, there is vacuum plate (pressing plate) movable upward and downward. You can store food with vacuum state by pressing the plate to move it close to the food and there are effects as follows.

1. Kimchis

The vacuum plate makes kimchi inside the kimchi juice so it can keep its vivid colors and is crisp for making kimchi tissues alive and you can taste carbonated like sodas because the carbonate from fermentation of kimchi dissolves in the juice.

The pressing plate blocks the air outside and makes kimchi anaerobic state and you can have kimchi with many lactobascilli by helping proliferate them.

2. Sov Sauce

Many kinds of fundi, aerobic microbes, on the surface of soy sauce, If the pressing plate is close to soy sauce, the surface of sauce doesn't contact air and you can have healthy sauce without

Pickles are stored in salt water and the surface of the water, aerobic yeast fungi are proliferated and make the surface white and if the pickles float on the water, the tissue get soft so we can't eat them. The vacuum plate in the e-jen keeps pickles inside the water so it makes tissues firm and prevents generation of the yeast fungi by blocking contact with air.

4. Fruit Wines (Enzymes for Fermenting Vegetables and Fruits)

Fruit wines are made by yeasts, alcohol fermentation fungi inside wines and there should be joy of smelling alcohol and fruits if the unique smell of fruits remains inside the alcohol. It is important to minimize contact with air in making fruit wines. If air remains inside the wines,

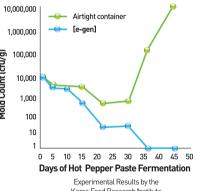
- 1) Alcohol becomes oxide by acetobacters which like oxygen in the air and people can't unique smell of fruit wines due to smell of vinegar in fruit wines from acetic acid fermentation.
- 2) Fruits on the surface are exposed to air and generate fungi, aerobic microbes. They produce abnormal fermentation, curb yeast generation, alcohol fermentation fungi, and generate foreign materials.

5. Coffee

Coffee becomes extremely stale & loses taste & flavor in contact with oxygen or moisture, but the aroma & the taste will be preserved stored vacuumed packed in a cool place or frozen.

It will lose its' taste as the flavor will be lost or fungus will appear after opening the feed in contact with moisture in the air but you can prevent this by storing it vacuumed packed in a cool





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