# EVERYTHING YOU NEED TO KNOW ABOUT VACUUM PACKAGING

## QUESTIONS AND ANSWERS ABOUT VACUUM PACKAGING

- Q: What is Vacuum Packaging?
- A: The process of removing air around a food product and then sealing that product in an impermeable package.
- Q: Why Vacuum Package?
- A: To extend shelf life of any fresh perishable product by 3 to 5 times is normal refrigerated life.
- Q: How is shelf life extended under Vacuum?
- A: Removing the air that surrounds food inhibits growth of bacteria, mold and yeast, because these and other spoilage micro-organisms need oxygen to grow. Once moist air is removed and the pouch is sealed, oxygen levels continue to drop where carbon dioxide levels increase. The low oxygen, high carbon dioxide environment significantly reduces the growth of normal spoilage organisms, allowing longer shelf life.
- Q: Do Vacuum Packaged products still need to be refrigerated?
- A: Yes. Some organisms are resistant to high carbon dioxide levels. Their growth is slowed at lower temperatures.
- Q: Who should Vacuum Package?
- A: Anyone, who buys, sells, transports or stores perishable food products.
- Q: What are some special advantages of Vacuum Packaging?
- A: Only a sampling of the advantages include:
  - 1. Vacuum Packaging allows for money saving quantity buying. Products such as cheese, continental small goods, fish, bacon, coffee and nuts, processed meats and many other food items may be bought in bulk at a lower price and then pre-packaged by either a central warehouse or in each supermarket or restaurant outlet.
  - 2. Vacuum packaging reduces product shrinkage. There is no moisture loss or evaporation in a sealed vacuum bag. Therefore, the weight you package will be the weight you sell.
  - 3. Vacuum packaging reduces trim losses by eliminating oxidation and freezer burn.
  - 4. Vacuum packaging can enhance product quality. Vacuum packaged meat held at 32° to 35°F does not hinder "aging" or tenderising.
  - 5. Vacuum packaging allows more efficient use of time. Food can be prepared in advance without loss of freshness, so slack times are more productive and busy times are more manageable.

Warning - If vacuum packaged food is not top quality, fresh, prepared in a sanitary manner at proper pH levels and stored at an appropriate temperature, it may not reach optimum shelf Shelf life and could be harmful to a persons health if consumed. Vacuum packaging is not a substitute for canning. Perishable foods must be refrigerated.

## TYPICAL SHELF LIVES OF VACUUM PACKAGED PRODUCTS

All vacuum packaged foods must be top quality, fresh and prepared in a sanitary method in order to reach optimum shelf life. In addition, shelf life can be affected by acidity, pH level, temperature and ingredients. Vacuum packaging is not a substitute for canning. Perishable food must be refrigerated.

Some typical shelf lives of vacuum packaged refrigerated products, as compared to normal refrigeration, are:

	Normal Refrigerated Life	Estimated Refrigerated Life Under Controlled Atmosphere 32° to 35°F (Vacuum Packing)
Item		
Fresh Beef & Veal	1-2 weeks	6 weeks
Fresh Pork	1-2 weeks	2 weeks
Smoked Fish	1-2 weeks	6-12 weeks
Fresh Fish	1-2 days	1 week
Fresh Produce	2-4 days	1-2 weeks
Fresh Poultry	1-2 days	1 week
Smoked Meats	2-4 weeks	6-12 weeks
Pizza	1-2 days	1 week
Cheese	1-1,5 weeks	6-12 weeks
Sliced Deli Meats	1-2 days	6-12 weeks

(Typical Shrink Loss 0,5 to 1,5 without vacuum packaging)

The above shelf lives may vary and can be affected by product freshness, acidity, pH level, temperature, ingredients, sanitation and laminates used in pouch construction.

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# VACUUM PACKAGING APPLICATIONS

1.	OVER PURCHASES OR BUY-INS	Preserve quality and extend shelf life or stored raw foods - meats, dairy, vegetables, fruits.
2.	OVER PRODUCTION	Preserve cooked food without exposure to air or dehydration.
3.	MEATS	Portion and re-package for assured shelf life. Store (refrigerated or frozen) and preserve quality of prime items for future use.
4.	PRE-PREPARATION	Prepare high cost speciality items in advance for serving on a "as needed" basis. Allows better use of slow times.
5.	SPECIALITY MEALS	Portion pack, identify and preserve low volume menu selections or needs, (i.e. salt free, fat free). Save labour, time and money through scheduling.
6.	SAUCES	Prepare in advance and pre-package for daily requirements.
7.	FREEZER	Vacuum Packaging prevents freezer burn and dehydration. It is excellent for freezer storage of meats, poultry, fish and vegetables - FRESH or COOKED. Save space with compact, clear, heavy-duty bags that are sealed under vacuum, easy to identify and date, sanitary and disposable.
8.	CATERING	Utilise more pre-production time by vacuum packaging bulk and portioned items.
9.	BANQUETS	Save over-production for upcoming events and menus. Reduce waste.
10.	CHEESE	Prevents drying, crumbling and mold of bulk and grated. Eliminates the labour cost of trimming and rewraps.
11.	VEGETABLES	Portion pack "in-season" product and refrigerate for later preparation. Re-package bulk quantities for menu rotation. Maintain salad freshness and crispness.
12.	QUALITY AWARENESS	Promotes better food handling and care. Takes extra care of stored foods, will increase overall employee awareness for quality.
13.	SANITATION	Prevents cross contamination of flavours and aromas. Also prevents yield loss of products (i.e. blood, water).

14.	DRY INGREDIENTS	Re-package with airtight seal to prevent moisture absorption or infestation.
15.	FORECASTING	Vacuum packaging provides greater forecast flexibility by extending stored shelf life with protected flavour quality. With vacuum packaging you can eliminate "sell-outs" and increase customer satisfaction.
16.	DELI MEATS	Large bulk meat products can be sliced and packaged for customer appeal and self-service.
17.	PIZZA	Wrapping in plastic wrap gives it maximum of 4 day protection. Vacuum packaging will improve that protection for up to 7 - 10 days, depending on the contents. Overall savings on preparation time and reduction of waste.
18.	SMOKED MEATS	Most smoked products contain a percentage of water. Vacuum Packaging prevents moisture evaporation (yield loss) plus provides an attractive temper resistant package.

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# Operation

#### Practice

Restaurant/Hotel Chef Butcher	Preparing in Advance (Sous-Vide) Portioning
Grocery Store	Portioning
	Portioning
Dell	Portioning
Meat Department	Portioning
Other Foodservice	
Cafeteria	Portioning
Hotels	Portioning
Hospitals	Portioning
Schools	Portioning
Butcher	Portioning
Slaughter House	Portioning
Salmon & Fish	
Fresh and smoked	Portioning & Freezing

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## 1. HYGIENE

Vacuum products will not automatically insure against spoilage. Good, clean packaging practice must be employed. Remember, a bad or contaminated product does not improve with vacuum packaging. The general rule is, if you put a fresh, good product in the pouch, you will get a fresh, good product out! Therefore, it is particularly important to clean and sanitize surfaces that may come in contact with food products, as well as your hands, personal gear, work spaces and utensils. Vacuum packaging equipment also needs careful attention. It is recommended that it be cleaned and sanitized at the end of each day.

#### 2. HANDLING OF FILLED AND SEALED BAGS

Vacuum Packaging Pouches are made of the finest virgin materials in a thickness suitable for handling, shipping and storing with only minimal care. Damage to packaged products may be avoided by adhering to these simple principles.

- a. Avoid contact with carton staples or material handling devices that have sharp edges.
- b. Use cartons that will not crush when stacked.
- c. Wear gloves when handling packages. Rings and fingernails may cause scars that will eventually result in tears or pinholes.
- d. Assure product being vacuum packaged is free of any sharp edges or points that may puncture the pouch.
- e. Treat the pouch gently to avoid any breakage
- f. If breakage occurs, re-package immediately.

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