Aseptic Packaging

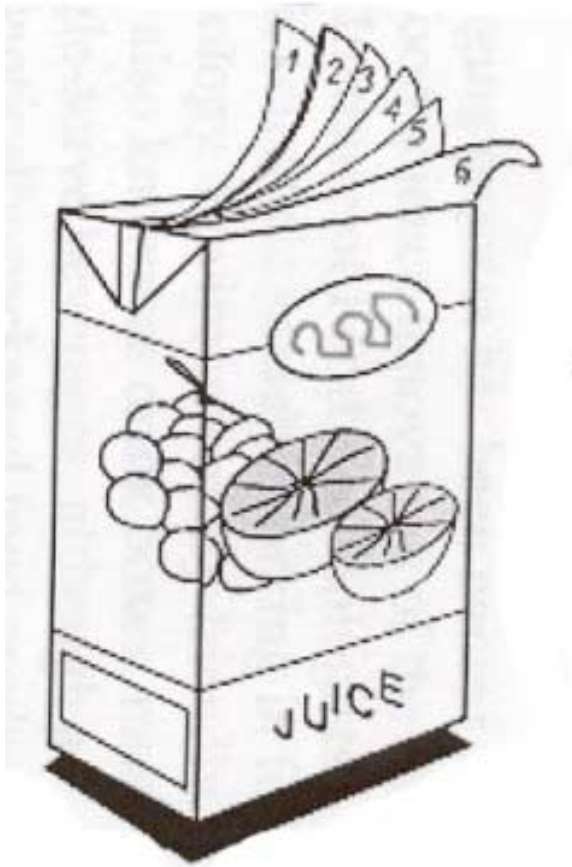
Aseptic packaging is a food processing technology that functions as a system incorporating a paperboard based package.

- Aseptic packaging was developed in the 1940s in Europe by Dr. Ruben Rausing
- Aseptic packaging was approved for use in the US in 1981
- Also known as the “drink box”, “Juice Box” or brick-pack

Aseptic packaging system

- Achieves room-temperature, shelf-stability
- Fills a sterilized package with sterile food in a sterile environment
- Food are processed using Ultra High Temperatures (UHT)
  - Rapidly heat food (3 to 15 seconds at 195 to 285^{o}F or 90.5 to 140.5^{o}C)
  - Rapidly cool food
- Process places least amount of thermal stress on product

Aseptic package structure



1. Polyethylene
2. Paperboard
3. Polyethylene
4. Aluminum foil
5. Polyethylene
6. Polyethylene

Aseptic packages are available in a variety of sizes

Source: Tetra Pak, Photographer Owesson Lars

Aseptic packages are made from a continuous roll of material

Source: Tetra Pak, Photographer Ulf Cronberg

…on a specially designed machine.

Source: Tetra Pak,

Aseptically packaged products, include:

UNITED STATES		EUROPE
Milk	Tofu	Milk
Lactose free milk	Soy beverages	Yogurt drinks
Juices	Wines	Fruit based desserts
Tomatoes	Liquid eggs	Savory sauces
Soups	Whipping cream	
Broths	Teas	

Aseptic packaging offers consumer benefits:

- Shelf stable product that can be kept for long periods of time without refrigeration
- Perceived to offer and maintain product safety
- Process maintains nutritional value
- Brick shape is easy to handle
- Paperboard construction is shatter proof
- Offers tamper evident features

Aseptic packaging offers foodservice benefits:

- Shelf stable product that can be kept for long periods of time without refrigeration
- Light weight carton
- Space efficient block shape for storage
- Easy open, easy pour
- Reclosable
- Eliminates can opener and sharp metal edges
- Easily crushed to minimize space in garbage containers