

HOME ECONOMICS

FOOD PROCESSING, PURCHASING, PRESERVATION AND SAFETY

FOOD PROCESSING: is the transformation of raw ingredients, by physical or chemical means into food, or of food into others.

MEANING OF (FPSA): Food Processing Suppliers Association. The food processing suppliers' association is the trade association for suppliers to the food processing and packaging or bagging.

MEANING OF FOOD PURCHASING: is how foods are purchased. All food is purchased through a competitive bidding process. Pricing to gain and buy.

BULK PURCHASING OR BUYING: bulk buying is the process of buying foodstuffs in large quantity.

PRESERVATION: food preservation is the caring for or treating Food in such a way that it will keep in good condition for a long period of time. A preserved food can be stored for a longer period than a raw food.

GEPP Means Good food Purchasing Policy. The purchasing of major institutions to encourage greater purchase. Purchasing food products from an approved supplier is the first step in ensuring safe food to serve to customers.

SAFETY

Safety is the state of being safe from harm or danger. Safety is a concept that includes all measure and practices taken to preserve the life. Health and bodily integrity or individual.

MEANING OF FOOD SAFETY

Food safety refers to the conditions and practices that preserve the quality of food to prevent contamination and foodborne illness.

Food safety is a scientific discipline describing handling preparation and storage of food in ways that prevent foodborne illness.

PERISHABLE AND NON- PERISHABLE FOOD:

Perishable food are those foods that can spoil easily e.g. of perishable foods are fresh meat, fresh fish, fresh vegetables, fresh fruits, fresh milk and butter.

HINTS ON STORAGE OF PERISHABLE FOODS:

1. Perishable foods can also be processed into forms that can store for fairly long periods. For instance, some vegetables and fruits can be dried while fish and meat can be smoked.
2. Fruits and vegetables can be stored at the lowest part of the refrigerator. Some fruits and vegetables can also be stored in the freezer for prolonged period e.g. tomatoes, pepper, washed bitter leaf.
3. Fresh meat and fish can be stored in the freezer.
4. Prolonged stored of fruits and vegetables in the refrigerator can cause some of them to lose their taste, colours and nutritive value.

NON- PERISHABLE FOOD

Non-perishable foods are those foods that do not spoil easily. These can keep for a long time if stored properly. Nonperishable foods include Rice, maize, different types of beans, flours, sugar, yam, dried maize. Those foods can be brought in bulk and stored outside the refrigerator.

HINTS ON STORAGE OF NON- PERISHABLE FOOD

1. Store only foods that are free from weevils and other insects. **Weevils:** are small insect which destroy grains and pulses e.g. maize, beans and rice etc.
2. Store food in dry and well covered containers.
3. Food such as beans, maize, soya bean, etc. can be stored for very long period in air tight plastic containers.

WISE BUYING PRACTICES.

1. Make a good shopping list.
2. Keep to the shopping list when buying.
3. Ensure that there are adequate storage facilities for the food stuff to be purchased.
4. Buy food that are in season.
5. Judge the quality of food before buying.
6. Judge values of food before buying. Most stores help you judge the value of a food item by providing unit prices. A unit price is the price per kilo gram or other accepted unit or measure. This information makes it easy to compare the cost of products in different sized packages.
7. Check measurement e.g. cups and scales when buying such food as grains pulses (maize, millet, rice, beans etc.) and garri.
8. Read labels on food containers such as canned foods, bottled fats and oil, etc. Check expiry dates, food content, weights values volumes etc.
9. Make bulk purchases whenever possible.
10. Compare values and prices in different stores and with different Sellers.

FACTORS TO CONSIDER WHEN BUYING FOODS

1. **SIZE OF THE FAMILY:** A family of three persons will require less food than a large family of ten.
2. **THE FAMILY FOOD NEEDS:** it is necessary to consider the nutritional needs of the family, their food preference, likes and dislike. Some members may have dietary restrictions based on health.
3. Food preservation and storage facilities available to the family.
4. **QUALITY FOOD:** it is important to buy good quality food stuff.
5. **FOODS IN SEASON:** these are cheapest and at their best.
6. **MONEY AVAILABLE TO THE FAMILY:** this determines the quality and quantity of food to buy. It sometimes also determines where to buy.
7. **WHERE TO BUY FOOD:** food can be purchased in open market, supermarket or special stores etc.
8. Buy non-perishable foods in bulk and store properly.
9. Purchase vegetables and fruits as and when needed.
10. Avoid waste by purchasing just the food which the family will eat.

IMPORTANCE OF BUYING GOOD QUALITY FOODSTUFFS

GOOD QUALITY FOODSTUFF is one that is fresh and has a good appearance. It is not damaged and may be expensive.

REASONS FOR BUYING GOOD QUALITY FOODSTUFF:

1. Good quality foodstuffs are fresh and wholesome.
2. Their nutrient content is still intact.
3. They keep well in storage.
4. They are not yet attacked by food spoilage organisms.
5. They are appetizing and taste good.
6. They are economical because there is little or no wastage. This is because they are still fresh.
7. They have good appearance e.g. fresh fruits.

ADVANTAGES OF BULK BUYING:

1. It ensures that food is always in the house.
2. It is very useful for food management in large families and institutions such as school, hotels etc.
3. It enables the homemaker to buy food in season. This means buying and storing food in the period of plenty.
4. It saves time and energy as the homemakers do not need to go to the market daily.
5. It is economical and saves money: this is because it is cheaper to buy large quantities than in small bits.

DISADVANTAGES OF BULK BUYING:

1. It can take much of the family income and prevent purchase of other needed commodities.
2. One kind of food purchased in bulk can become monotonous to the family diet.
3. Lack of proper storage and management of food can lead to wastage.
4. Poor quality foodstuffs purchased in bulk will spoil in storage.

FOOD PROCESSING

FOOD PROCESSING can destroy the water soluble B- group and C- vitamins. The main reasons to process food are to eliminate microorganisms which may have been artificially fortified with some of the nutrients that were lost after milling.

MILL: A MILL is a building where grain is crushed to make flour or crops in the food.

MILLING OF FOOD GRAINS: the nutritive value of food is modified by processing. The common household Methods of food processing are milling. Milling of cereal grains may make them less nutritious, but it may also make them easier.

MILLING OF RICE (CEREAL)

Milling is a crucial step in post-production of rice. The basic objective of a rice milling system is to remove the husk and the bran layer and produce an edible, white rice, kernel that is sufficiently milled are free of impurities. Depending on the requirements of the customer, to the requirements of the rice should have a minimum number of broken kernels.

MODERN RICE MILLING PROCESSES CONSIST OF STAGES AND FUNCTIONS:

No.	STAGES	FUNCTION
1	Pre- cleaning	Removing all impurities and unfilled the grain from the paddy.

2	Husk aspiration	Separating the husk from the brown rice/unhusked paddy.
3	Husking	Removing the husk from the paddy.
4	Paddy separation	Separating the unhusked paddy from the brown rice.
5	De-stoning	Separating small stones from the brown rice.
6	Whitening	Removing all or part of the bran layer and germ from the brown rice.
7	Polishing	Improving the appearance of milled rice by removing remaining bran particles and by polishing the exterior of the milled kernel.
8	Sifting	Separating small impurities or chips from the milled rice.
9	Length grading	Separating small and large broken from the head rice.
10	Blending	Mix head rice with predetermined amount of broken, as required by customer.
11	Weighing and bagging	Preparing milled rice for transport to the customer.

FLOUR: several outer layers that make up the bran, constituting about 13 percent, and the oily germ, or embryo plant, approximately 2 percent. In the production of refined flour, the purpose of the milling process is to separate the endosperm from the other kernel portion. In the production of whole wheat flour, all parts of the kernel are used.

SUGARCANE: sugar juice extraction shredded cane then goes through the crusher, a set of roller mills in which the cane cells are crushed and juice extracted. As the crushed cane proceeds through a series of up to eight four roll mills, it is forced against a counter current for water known as water of maceration or inhibition. Stream of juice extracted from the cane, mixed with maceration water from all mills are combined.