

# **CULINARY ART**

## **LEVEL – II**

**Based on March, 2022, Curriculum Version I**



**Module Title: Preparing Fruits and Juices**

**Module Code: CST CUA2 M07 0322**

**Nominal duration: 70 hours**

**Prepared By: Ministry of Labor and Skill**

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## Introduction to the Module

In culinary art field; Prepare fruits and juices helps to prepare, fruit -based dishes for buffet, special occasion and breakfast. It requires the ability to prepare, decorations and presenting fruit.

This module is designed to meet the industry requirement under the Culinary Art occupational standard, particularly for the unit of competency: Prepare fruits and juices.

**This module covers the units:**

- Selecting and preparing fruit
- Selecting and using equipment
- Producing variety of fruit dish and juices
- Storing fruits and juices

### Training Objective of the Module

- Select and prepare fruit
- Select and use equipment
- Produce variety of fruit dish and juices
- Store fruits and juices

### Module Instruction

For effective use this modules, trainees are expected to follow the following module instruction:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below.
3. Read the information written in the information Sheets
4. Accomplish the Self-checks
5. Perform Operation Sheets
6. Do the “LAP test”

## Unit one: Selecting and preparing fruit

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics:

- Selecting and assembling fruit
- Handling fruit safely

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Select and assemble fruit according to the sequencing of fruit preparation
- Handle fruit safely

## 1.1. Selecting and assembling fruit

A fruit is the soft, pulpy part of a flowering plant that contains seeds. It is formed from the ovaries of angiosperms and is exclusive only to this group of plants.

A fruit is a mature, ripened ovary, along with the contents of the ovary. The ovary is the ovule-bearing reproductive structure in the plant flower. The ovary serves to enclose and protect the ovules, from the youngest stages of flower development until the ovules become fertilized and turn into seeds.

In culinary language, a fruit is the sweet or not sweet (even sour) tasting produce of a specific plant (e.g., a peach, pear or lemon); nuts are hard, oily, non-sweet plant produce in shells (hazelnut, acorn).

### 1.1.1. Selection of Fruits

When we select fruits, choose soft, plump fruit with intact, bent stems. Minor bruises or tears typically are harmless. Choose fruits that are firm, plump and heavy for their size. They should be firmly attached to the stems.

Fresh fruits provide vitamins, minerals and fiber to help keep your body healthy. To make sure that your fruits are safe to eat, it is important to know how to select good quality produce.

Occasionally, fresh fruits can become contaminated by harmful bacteria or viruses, which are also known as pathogens. Examples of pathogens include Salmonella, E. coli 0157:H7 and Hepatitis A. Produce can be contaminated at any point, from the field to your table.

If you eat a contaminated fruit, it could make you ill. Common signs of food borne illness include nausea, vomiting, diarrhea, headache and fever. These symptoms usually appear within 12 to 72 hours after you have eaten contaminated food.

When buying fresh fruits, choose those that have a good shape, texture and color and a fresh smell. It is best to shop for fresh produce often and buy only what you will use within a few days. This will cut down on the amount wasted because of spoilage.

Do not buy fresh produce that is moldy, bruised or injured or that shows signs of insect damage. Handle produce gently to avoid bruising and other damage. Bruises and cuts may allow pathogens to enter a fruit or vegetable and cause it to spoil quickly.

When buying pre-cut or prepackaged fruits and vegetables, make sure they are refrigerated or surrounded by ice at the grocery store. Avoid damaged items and open or torn packages. Be sure to check the use-by dates on packages of pre-cut fruits. Choose the freshest items, and eat them by the use-by date. Selecting quality fruits and vegetables may take a few more minutes, but it will be well worth your time.

### **1.1.2. Assembling Fruits to the sequence of preparation**

Assembling fruits used to identify and obtain ingredients according to standard recipes, recipe cards or enterprise requirements and also to assemble ingredients according to the correct quantity, type and quality required.

Many techniques are used for food preparation before cooking and they are done according to the requirements of the various dishes. This helps to improve, appearance texture, palatability and flavor and Fruits combine readily.

Preparation of ingredients is popularly termed as Mise-en-place. Mise-en-place (pronounced mizãplas, is literally "set in place"), it is a French phrase defined by the Culinary Institute of America as "everything in place". It is used in kitchens to refer to the ingredients, such as cuts of fruits in ready to cook or eat. precooked items, spices, freshly chopped fruits and other components that a cook requires for the menu items that they expect to prepare.

Some vegetables are actually fruit but are consumed as vegetables:

- Tomatoes
- Beans
- Corn
- Peas
- Pumpkin and squash

### **1.1.3. Types of fruit**

Fruit is the sweet, fleshy, edible part of a plant. It generally contains seeds. Fruits are usually eaten raw, although some varieties can be cooked. They come in a wide variety of colours, shapes and flavours. Common types of fruits that are readily available include:

- apples and pears
- citrus – oranges, grapefruits, mandarins and limes



- stone fruit – nectarines, apricots, peaches and plums
- tropical and exotic – bananas and mangoes
- berries – strawberries, raspberries, blueberries, kiwifruit and passionfruit
- melons – watermelons, rockmelons and honeydew melons
- Tomatoes and avocados.

### 1.2. Handling fruit safely

In proper handling of fruit handling, to reduce the risk of food contamination and food borne illness. Fresh fruits should be carefully selected; at the store, they should not be damaged or bruised; and precut pieces should be refrigerated or surrounded by ice.

#### The six steps used to handle fruits safely:

1. **Check:** Never buy damaged or bruised fresh fruits and only buy cut fruits, such as packaged salads and precut melons that are refrigerated.
2. **Clean:** Wash hands with hot soapy water, for at least 20 seconds, before and after handling fresh produce, or raw meat, poultry or seafood, as well as after using the bathroom, changing diapers, or handling pets. Wash all surfaces and utensils, such as cutting boards, counter tops or knives, with hot water and soap before and after preparing fresh fruits. Rinse all fresh fruits under running tap water, including those with skins and rinds that you will not be eating. While rinsing under running tap water, rub or scrub firm skinned fruits with a clean fruit brush. Never use detergent or bleach to wash fresh fruits or since these products are not consumable. Wash all fresh produce under running, drinking water before peeling, cutting or eating.
3. **Separate:** When shopping, separate fresh fruits from household chemicals and raw foods, such as meat, poultry and seafood. Store fresh fruits separately from raw meat, poultry or seafood in the refrigerator. Always wash kitchen utensils and cutting boards with hot soapy water between preparation of fresh fruits and raw meats, poultry and seafood.
4. **Cook:** Remove and throw away bruised or damaged portions of fruits and vegetables before cooking or eating raw. Throw away any fruit that will not be cooked if it has touched raw meat, poultry or seafood.
5. **Chill:** Refrigerate all cut, peeled or cooked fresh fruits within two hours of preparation.
6. **Throw Away:** Throw away fresh cut-up, peeled or cooked fruits that have not been refrigerated within two hours.

### **Tip for Safe handling of fruits**

To be sure fruits are not contaminated with harmful bacteria, follow these simple steps when selecting and storing fruits.

1. Keep fruits separated from raw meat, poultry, and seafood to prevent cross-contamination.
2. Store all fresh-cut ready-to-eat prepared produce in the refrigerator to keep it cold.
3. Wash all whole fruits, including larger items like melons, just before preparation for eating. Cut out damaged (bruised, discolored) areas before eating.
4. Before and after handling fruits make sure your work area and utensils are clean and that your hands have been washed with hot soapy water.
5. Fruits should be washed under running water. Soaking them in water increases the opportunity for cross- contamination and is not recommended.
6. Produce such as apples, cucumbers and melons that can be rubbed without damage should be scrubbed using clean hands or a clean scrub brush.
7. Dry washed fruits with clean disposable paper towels.
8. Once cut or prepared, all fruits should be refrigerated promptly. After serving, refrigerate leftovers within two hours.
9. It is not necessary to wash ready-to-eat prewashed and packaged fresh-cut produce. If you choose to rewash this type of produce follow the instructions above. Always wash unpackaged prepared salad mixes under running water prior to consumption.

Self-check 1	Written test
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Name..... ID..... Date.....

**Directions:** Answer all the questions listed below.

**Test I Short Answer Questions**

1. Define fruits in culinary term? (5 pts)
2. Describe the steps to handle fruits properly? (6 pts)
3. How to select fruits as freshness?( 5 Pts)

**Note: Satisfactory rating - 10 points      Unsatisfactory - below 10 points**

You can ask you teacher for the copy of the correct answers

## Unit Two: Selecting and using equipment

This unit to provide you the necessary information regarding the following content coverage and topics:

- Selecting suitable types of equipment
- Using equipments safely and hygienically

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Select suitable types of equipment
- Use equipments safely and hygienically

## 2.1. Selecting suitable types of equipment

When selecting equipment, capacity, trade name, good quality, simple design and ease to clean should be the prime criteria, whereas the purpose and price should also be considered.

Suitable tools and equipment used to prepare Fruit dishes and juices are peeling knife, spoon, fork, blender, inch knife, jug, bowl, Wisk, oval plat, glassware, chopping board etc.

Paring knives (also called peeling knives) are very versatile, and a mainstay of the professional kitchen as a result. Many cooks use them to peel or cut fruit and vegetables into small pieces, or to carry out other similar precision work.



Figure 2.1. Paring/peeling knife

A juicer, also known as a juice extractor, is a tool used to extract juice from fruits, herbs, leafy greens and other types of vegetables in a process called juicing. It crushes, grinds, and/or squeezes the juice out of the pulp. Some types of juicers can also function as a food processor.



Figure 2.2. Juice Blender

## 2.2.Using equipment safely and hygienically

Always wash your fruits and vegetables properly before eating; juicing, or blending, this can help reduce external bacteria.

Clean knives, cutting boards, juicers, and all other equipment thoroughly both before and after making a juice.

Drink a fresh-made juice within 24 to 48 hours as any bacteria that were on the original produce prior to juicing or blending can colonize in the juice.

Store juices in the refrigerator or cooler with ice packs until ready to drink. This helps to keep nutrient quality as well as help prevent bacterial growth.

Be aware that unpasteurized juices may be dangerous for young children and pregnant women to include in their diets. This is due to potential bacteria exposure in the face of weaker immune systems as well as potential harm to the baby.

Any store-bought bottled juices should be pasteurized.

In general, juicing can be part of a well-balanced, healthy diet. It can be a way to increase our total vegetable and fruit intake, and while focusing on whole produce is important, occasionally including blended and juiced produce can add variety.

Fresh juices can be one way to get more produce into your diet. However, keep in mind that water is best for hydration, so be sure to meet your needs!

Wash all produce and equipment before and after use to help avoid and reduce food-borne bacteria in your juice. Keep juices in the refrigerator or cooler with ice packs until you are ready to drink, and drink the juice within 24 to 48 hours.

Store bought juices can be high in added sugar and may have minimal nutrients compared to a fresh-made juice.

Juice diets do not provide all the nutrients our body needs. Having juice as a snack or part of a meal can be a great way to boost nutrient intake. Also be sure to have most of your produce be from whole raw or cooked vegetables and fruit!

Self-Check 2	Written test
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Name..... ID..... Date.....

**Directions:** Answer all the questions listed below.

**Test I Short Answer Questions**

1. What are the tools and equipment used in fruit dishes and Juices? (2.5pts)
2. Describe safety and hygiene of equipment used in fruit dishes and Juices (2.5 pts)
3. What are the criteria to select suitable equipment used for fruit dishes and juices? (2.5pts)

**Test II Write true if the statement is correct and false if statement is incorrect**

1. Juicing can be part of a well-balanced, healthy diet. (2.5 pts)
2. Juice diets does provide all the nutrients our body needs (2.5 pts)
3. Any store-bought bottled juices should be pasteurized. (2.5 pts)
4. Store bought juices can be high in added sugar and may have minimal nutrients compared to a fresh-made juice. (2.5 pts)

**Note: Satisfactory rating - 15 points      Unsatisfactory - below 15 points**

You can ask you teacher for the copy of the correct answers

### Unit Three: Producing variety of fruit dish and juices

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics:

- Cutting techniques of fruit
- Producing fruit dish and juices
- Identifying fruit colors and decorations

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Cut fruits using different techniques according to their characteristics
- Produce fruit and juices dish for buffet, breakfast, and special occasions
- Identify fruit colors and decorations to prepare a variety of fruit dishes



### 3.1.Cutting techniques of fruits

Fresh cut fruits are products that have been cleaned, peeled, sliced, cubed, wedged, segmented, ball, payesanne or prepared for convenience or ready-to-eat consumption but remains in a living and respiring physiological condition.

#### A. Peeling of fruits

Peeling means to remove (the skin, rind, outer covering, etc) of a fruit. Peeling is a common unit process for many fruits to produce fresh-cut, minimally processed, and canned food products. The peeling process intends to remove the inedible or undesirable layer of rind or skin from raw produce.

Peels are packed with beneficial nutrients. The amounts of nutrients they contain vary based on the type of fruit or vegetable. However, generally speaking, unpeeled produce contains higher amounts of vitamins, minerals, and other beneficial plant compounds than peeled produce does.

Some fruits that can be eaten without removing their peels are peaches, pears, plums, grapes, apples, guavas, and oranges with their white colored skin.

Peels also act as a barrier to help protect the fruit from pests and pathogens. And they play a crucial role in respiration by balancing the gas and water exchange of the fruit with the environment.

Pineapples, papayas, mangos, bananas, melon and lychee are tropical fruits that you should always peel. These fruits have skins that are either difficult to chew and digest, or downright inedible.



Figure 3.1 Fruit peeling techniques

### B. Slicing of fruits

A variant of slicing is dicing (applied to vegetables, fruits and meats), where the food is first sliced and then cut into strips by rotating blades. The strips are passed on to a second set of rotating knives, which operate at right angles to the first set, and cut the strips into cubes.

To slice means to cut and to dice means to cut into very small uniform sections and the two actions are often performed sequentially. For example, a chef may first cut an onion into slices and then cut the slices up into dices.



Figure 3.2. Slicing fruits

### C. Cube and Dice cut of fruits

A dice cut consists of a uniform cube that is even on all sides. This classic knife cut is made by squaring off the sides of the product and slicing it into even planks, then slicing it into long matchsticks before cutting the matchsticks into cubes.

Cube cuts. Cuts with six even sides include: Large dice; (or "Carré" meaning "square" in French); sides measuring approximately 3/4 inch (20 mm).

Dicing is a culinary knife cut in which the food item is cut into small blocks or dice. This may be done for aesthetic reasons or to create uniformly sized pieces to ensure even cooking. Dicing allows for distribution of flavour and texture throughout the dish, as well as a somewhat quicker cooking time.



Figure 3.3. Cube and dice fruit cutting techniques

### D. Wedge cutting techniques of fruits

If working with a wedge, cut crosswise at an angle (or various angles) into jewels. Cut fruits of vegetables crosswise into round slices, and then cut crosswise into half moon. Strips torn, cut, or scraped from fruits.



Figure 3.4.wedged cuts of fruits

### E. Segment cutting techniques of fruits

Segmenting citrus fruit, also known as supreming, is a French cooking technique for separating the peel and bitter pith from the delicious fruit so it can be served in slices.

To segment, cut into the fruit right next to a membrane. When the blade reaches the center of the orange, rotate it to peel the segment away from the opposite membrane. Or, simply cut both sides of the segment away from the membrane -- whichever method is easier for you.

When a ripe fruit falls down, its individual segments are broken apart and eaten by different animals/birds, this in turn helps in dispersal of seeds to geographically distinct (distant) locations.



Figure 3.5. Segment cut fruit

### 3.2. Producing fruit dish and juices

#### 3.2.1. Producing Fruit Dishes

Fruit dishes are those that use fruit as a primary ingredient. Condiments prepared with fruit as a primary ingredient.

##### A. Fruit Platter

A Fruit Platter is a pretty display of fruit for a party, event or get together. It sounds easy enough to make, and it is, however, with a few tricks you can make sure it lasts, looks delicious and the fresh fruit stays at its best.

A fruit platter is a serving tray with different types of cut fruit displayed on it. It is a popular fixture at breakfast buffets, parties, or any type of event where snack foods or appetizers are served, such as baby showers or bridal showers. A fruit platter is easy to make and it is a healthy option that is good for many people, even those who may have certain dietary restrictions. There are a number of different ways to make a delicious and attractive platter, and it can be entirely customized to tastes.

When preparing a fruit platter, the fruit should be as fresh and ripe as possible, especially if it will be eaten that day. Many people try to choose a good mixture of not just different types of fruits, but many different colors as well, which will make the platter look more interesting and decorative. For instance, strawberries, green grapes, pineapple, and cantaloupe are not just delicious varieties of fruit, but varieties of color as well. A small bowl of blueberries can be added for additional color. Other popular fruits for fruit platters include mangoes, honeydew



melon, and watermelon, as well as kiwis. Of course, there are no rules, and selecting exotic or seasonal fruits can add variety as well.



Figure 3.6 Fruit platter

## B. fruit salad

Fruit salad is a dish consisting of various kinds of fruit, sometimes served in a liquid, either their juices or syrup. In different forms, fruit salad can be served as an appetizer or a side salad. When served as an appetizer, a fruit salad is sometimes known as a fruit cocktail, or fruit cup.

Fruit salad is a dish comprised primarily of fruit and typically served as a dessert, although some may be offered as appetizers. There are a number of different styles, ranging from simple blends of mixed fruit to complex constructions enshrined in gelatin. Some markets and delis carry packaged salads for people to purchase, and this dish can also be made at home with ease.

Eating fruit salads promotes weight loss, provides healthy skin and hair, boosts the immune system, eases digestion, prevents heart diseases and treats anemia as fruits are loaded with fiber, antioxidants, vitamins and minerals.

### The 6 Power Packed Fruit Combos to Fuel the Dish:

#### 1. Anti-inflammatory plate: Cherry, pineapple, blueberry

Pineapple is packed with vitamin C and contains an enzyme called bromelain that reduces inflammation of the gut, boosts immune function, and stimulates protein digestion. Try

combining it with blueberries, which are loaded with antioxidants and vitamins A, C, and E. Anthocyanin is the main antioxidant in both blueberries and cherries and is what gives these fruits their gorgeous deep blue and red colors. Grab some tart cherries over sweet ones as they are shown to contain higher amounts of phenolic compounds, delivering a stronger anti-inflammatory punch.

## **2. Immune-boosting plate: Grapefruit, kiwi, strawberry**

Kiwi, grapefruit, and strawberries can give your immune system the boost it needs to keep you healthy. Kiwis are rich in vitamin C, which helps support the immune system and prevents free radical damage that can lead to inflammation in the body. Grapefruit and strawberries are also some of our top vitamin C foods (containing more C than oranges!) that can help boost immunity and fight off sickness. Rich in both vitamins A and C, strawberry seeds also contain minerals that support immune function. Helpful hint don't wait until it's too late and you're already sneezing. This would be a great fruit plate to get in before a long flight so that your immune system is strong and ready to go.

## **3. Antioxidant plate: Fig, red grape, pomegranate**

These three fruits are high in antioxidants and disease-fighting compounds that protect our bodies from free radical damage and keep us looking and feeling youthful. The resveratrol in red grapes — and red wine — offers powerful antioxidant and anti-aging properties that help combat disease and signs of aging. Grapes are also high in lutein and zeaxanthin, which keeps our vision strong and can minimize the harmful effects of ultraviolet rays. Pomegranates contain higher levels of antioxidants than most fruits and can help to reverse free-radical skin damage. Figs are not only dangerously delicious — they are also rich in minerals including potassium, calcium, magnesium, iron, and copper and they are a great source of vitamins A, E, and K. Incorporate some of these antioxidant fruits on your plate to help you fight disease, age gracefully, and keep strong.

## **4. Detoxifying plate: Goji berry, watermelon, lemon**

We can't detoxify without the help of foods that will hydrate and flush toxins out of the system. So, let's start with watermelon, which is 92 percent water and also contains a major detoxifying agent called glutathione. It is also a source of lycopene and vitamins A and C, which further aid in detoxing and fighting free radicals. Super alkaline upon digestion, lemon is also a strong detoxifier and has antibacterial and antiviral qualities. I like to squeeze it over my fruit, add it to green juice (with lots of parsley and cucumber for a major de-bloating combination), or drink it

with warm water first thing in the morning to help cleanse the body and get the digestive system going. And let's not forget goji berries. These little guys are a great source of antioxidants, vitamins (A, B, C, and E), iron, and choline, which the liver needs for detoxification processes.

#### 5. **Beauty plate: Blackberry, papaya, cantaloupe**

Here's what you should be eating on the morning before your next big event! Papaya is full of antioxidants and nutrients that assist in the production of collagen. It also contains an enzyme called papain that helps to counter skin damage. Blackberries are delicious low-sugar fruits that are packed with antioxidants and vitamins A and C. We don't want to miss out on cantaloupe. It contains beta-carotene, which is converted into vitamin A in the body and helps make our skin glow and our hair strong and shiny.

#### 6. **Energy plate: Banana, avocado, apple**

The next time you're looking for some fuel or wanting to charge up your pre- or post-workout, throw together this energy plate. These nutrient-rich fruits (yes, avocado is a fruit) will replenish and keep you going for hours. Bananas provide us with quick energy and are great choice pre-workout. The healthy fats in avocados slow down digestion and are better to incorporate into your post workout meal. Apples are high in fiber and will keep you full for long periods of time. Take your pick or choose all three... If you're looking for a burst of energy, this plate is for you.



Figure 3.7. Fruit salad



### C. Fried Banana And Pineapple

Fried banana and pineapple made of simply for bananas, pineapple, batter (which you'll make, of course), and oil for frying. So, all you need is the fruit itself, all-purpose flour, some sugar, some salt, some baking powder, and a good deal of vegetable oil.

Banana and pineapple is rich in dietary fiber and aids in digestion. Pineapple has anti-inflammatory properties, reduces excessive coagulation of the blood, and reduces mucus in the throat and nose. Banana is rich in fiber. It helps control asthma and reduces the risk of blood cancer.



Figure 3.8 Fried banana and pineapple

### D. Banana Flambé

A majestic way to end a meal, a flambé (“flamed” in French) is any dish that is doused in alcohol and lit on fire usually sweets, though the technique can be applied to savory items and sauces as well.



Figure 3.9 Banana flambé

### E. Baked Apple

A baked apple is a dish consisting of an apple baked in an oven until it has become soft. The core is usually removed and the resulting cavity stuffed with sweet or savory fillings and seasonings. Pears and quinces may be prepared in the same way.

The best way to keep apples' nutrition intact is to eat them raw since cooking can result in the loss of certain nutrients. Having said that, cooked apples are still a very wholesome food that can contribute to maintaining good overall health.

Cooked apples are a good source of vitamin C. Microwave apples has 0.3 mg of vitamin C per 100 grams while boiled apples contain 0.2. Cooked apples also contain smaller amounts of thiamin, riboflavin, niacin, vitamin B-6, folate, vitamin A and vitamin E.



Figure 3.10. Baked apple

### 3.2.2. Variety of fruit Juices

A variety of common fruit juices have apple juice, grapefruit juice, exotic fruit juice, mango juice, pineapple juice, watermelon juice, grape juice, cranberry juice, orange juice, coconut juice, lemon juice, cantaloupe juice, strawberry juice, papaya juice.

#### A. Apple juice

Apple juice is a fruit juice made by the maceration and pressing of an apple. The resulting expelled juice may be further treated by enzymatic and centrifugal clarification to remove the starch and pectin, which holds fine particulate in suspension, and then pasteurized for packaging in glass, metal, or aseptic processing system containers, or further treated by dehydration processes to a concentrate.



Figure 3.11. Apple juice

#### B. Grapefruit Juice

Grapefruit juice is the juice from grapefruits. It is rich in vitamin C and ranges from sweet-tart to very sour. Variations include white grapefruit, pink grapefruit and ruby red grapefruit juice.



Grapefruit juice is important in medicine because of its interactions with many common drugs including caffeine and medications, which can alter how they behave in the body.



Figure 3.11 Grape fruit juice

#### F. Exotic Fruit Juice

Exotic Juice is a signature blend of apple, orange and pineapple juice and banana, peach, mango and guava purée. Bursting with flavor, vitamins and nutrients, this delicious and refreshing drink will quench your thirst and transport your senses.



Figure 3.12 Exotic Fruit juice

### G. Mango Juice

This sweet, tangy, and fruity tropical juice can be made using a blender, handheld blender, or a food processor in under 5 minutes. All you have to do is peel and chop the mangoes and blend them with sugar and water. Although mango juice is available in the market, homemade juice is much better than store bought ones.

Mango juice is full of potassium and magnesium, the two compounds that regulate blood pressure in the body. Consuming Mango juice daily can help one keep fit and maintain blood pressure and keep hyper tension in check. Drinking Mango juice also makes sure there is enough fluid in the body to keep it balanced.



Figure 3.13. Mango Juice

### H. Pineapple Juice

Pineapple juice is a liquid made from pressing the natural liquid from the pulp of the pineapple (a fruit from a tropical plant).

Pineapple juice is a popular base for smoothies and cocktails, and a person can even use it to tenderize meat. It contains a rich assortment of vitamins, minerals, and antioxidants.



Figure 3.14. Pineapple juice

### I. Watermelon Juice

Watermelon's high water content, antioxidants, and amino acids may make for a better workout. It's also high in potassium, a mineral that could cut down on cramps at the gym. You can sip watermelon juice after you sweat, too. Doing so could help prevent muscle soreness, as long as you don't push yourself too hard.

Watermelon: A hydrating fruit rich in lycopene, it will increase your body's arginine levels, an amino acid that ups the body's fat-burning potential. At the same time the juicy red fruit helps the body burn fat, it also builds lean muscle. Just 1 cup a day does the trick.



Figure 3.15. watermelon juice

## J. Orange Juice

Orange juice is a fruit juice obtained by squeezing, pressing or otherwise crushing the interior of an orange. Orange juice is a nutrition powerhouse with naturally occurring vitamins and minerals and many antioxidants. All types of juice can be found in health food and grocery stores.

Orange juice is an excellent source of Vitamin C one cup contains twice the daily recommended value. Vitamin C supports your immune system and may be effective in fighting against the common cold. The folate in orange juice supports healthy fetal development.



Figure 3.16. Orange Juice

## K. Coconut Juice

Coconut water is the clear liquid inside coconuts. In early development, it serves as a suspension for the endosperm of the coconut during the nuclear phase of development. As growth continues, the endosperm matures into its cellular phase and deposits into the rind of the coconut pulp.

Coconut water is made from the clear liquid inside green coconuts, and it contains electrolytes, vitamins, and minerals. It can be easy to confuse coconut water with coconut milk, which is made from the water and the flesh of mature coconuts. About 95 % of coconut water is just water.



Figure 3.17. Coconut juice

### L. Lemon Juice

Lemon and lime juice, which contain citric acid, are used in products such as ceviche, some salad dressings and pickles, but traditional procedures to acidify foods and confer keeping quality and safety usually employ acids of microbial origin.

Lemons contain a high amount of vitamin C, soluble fiber, and plant compounds that give them a number of health benefits. Lemons may aid weight loss and reduce your risk of heart disease, anemia, kidney stones, digestive issues, and cancer.



Figure 3.18. Lemon Juice



### M. Strawberry Juice

Strawberry juice is the fruit juice from strawberries. It is rich with Vitamin C and ranges from sweet to sweet tart in taste.

Simple ingredients: you only need 3 main ingredients (strawberries, lemon juice and sugar) plus water to make this strawberry juice recipe.

Strawberries are a great source of vitamin C. One serving of strawberries contains higher levels of vitamin C than one orange. Vitamin C boosts immune-boosting antibodies that ultimately increase your body's capability to fight off infections.



Figure 3.19. Strawberry juice

### N. Papaya Juice

Papaya juice made from ripe papaya is a heavenly experience for palate and provides healthy dose of nutrients and minerals.

Drinking Papaya juice daily helps manage stress better, regulate mood swings, and restore hormonal balance. Being rich in antioxidants, flavonoids, and phytonutrients, drinking Papaya juice aids in fighting free radical damage. Regular intake of Papaya juice prevents, breast, colon, and prostate cancers.

Papayas contain an enzyme called papain that aids digestion; in fact, it can be used as a meat tenderizer. Papaya is also high in fiber and water content, both of which help to prevent constipation and promote regularity and a healthy digestive tract.

### Side Effects of Papaya Juice:

- May cause yellowing of soles and palms due to excessive consumption.
- May cause inflammation of the stomach lining.
- May cause wheezing.
- May cause nasal congestion.
- May irritate the stomach.



Figure 3.20. Papaya Juice

### O. Avocado fruit Juice

Avocado juice is a simple kind of juice that includes the essence of the avocado. The avocado, which has been alternately classified or thought of as a fruit or a vegetable, has been known to help with various health disorders. Making it into avocado juice is a palatable and easy way to get more of this food in a diet.

Avocado juice may be used for cardiovascular diseases, lowering cholesterol, managing diabetes, improving eye and skin health, and treating osteoarthritis.



Figure 3.21 Avocado juice

#### **P. Mixed fruit juice**

Mixed Fruit Juice is one of the most refreshing Beverage or Juice, full of nutrients and taste. Generally make this juice in hot season with different fruits that are available at home. It is a simple and easy homemade juice made with Oranges, Apples, Grapes, Lemon and Kiwi. This Juice is fully loaded with nutritional values and taste.

Hot season is really hot and when the sun is on top, it becomes difficult to digest our daily homemade food. In this situation several types of juices fills the quota of food and prevents our body from dehydration.

This Juice is healthy and provides a variety of vitamins and minerals. Some fruits or fruit juice in between lunch and dinner, because it helps fill the stomach and satiate the slight hunger in between meals and prevents from reaching other high calorie food.

Packed with Nutrients, Real Mixed Fruit Vitamin Boost is a delicious and nutritious way to get more Vitamin A, C and E in your diet! Vitamin A helps support healthy eyes and healthy skin, vitamin C helps strengthen immunity, and vitamin E supports healthy skin and strengthens immunity.

#### **Q. Fruit smoothies**

A smoothie is a thick drink made from crushed fruit, sometimes with yogurt or ice cream added. A smoothie is a beverage made by puréeing ingredients in a blender. A smoothie commonly has a liquid base, such as fruit juice or milk, yogurt, ice cream or cottage cheese. Other ingredients

may be added, including fruits, vegetables, non-dairy milk, crushed ice, whey powder or nutritional supplements.

### Important Benefits of Drinking Healthy Smoothies:

- helps you lose weight
- aid in digestion
- enhances immunity
- improves skin
- detoxifies the body
- fights depression
- improves bone health
- keeps blood sugar in check
- Balances Hormonal Functioning
- prevents dehydration
- source of antioxidants
- curbs sleep disorders
- provides liquid food benefits
- boosts brain power
- provides a good amount of fiber
- prevents heart disorders
- Reduces Chances of Cancer

### 3.3. Identifying fruit colors and decorations

Red fruits are good for eyes, the heart, digestion and cells. Orange fruits are good for eyes, your immune system, cells and the heart. Yellow fruits are good for the skin, eyes, circulation, and the immune system. Green fruits help lower cholesterol and are good for your organs.

Fruit carving is the art of carving fruit, a very common technique in Europe and Asian countries, and particularly popular in Thailand, China and Japan. There are many fruits that can be used in this process; the most popular one that artists use are watermelons, apples, strawberries, pineapples, and cantaloupes.

Stunning and edible, create a simple fan garnish with apples, pears or other sturdy fruit. Cut thin slices of fruit and pierce with skewer or toothpick to hold them together. Fan the pieces and add to drink.

In fact, you can just chop up some of your favorite fruits, arrange them on a platter, and serve completely as is. If you want to get fancy, you can serve a fruit platter with a yogurt or cream cheese dip so your guests can dip and enjoy. Another option is to chop up some fruit and create an easy fruit salad.



Figure 3.22 Color and decoration of fruit dish

Self-Check 3	Written test
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Name..... ID..... Date.....

**Directions:** Answer all the questions listed below.

**Part 1: Multiple choice questions (2 pts each)**

- Which one of the following are the cutting techniques of fruit?  
A. Segment B. slice C. wedge D. all
- ..... is a pretty display of fruit for a party, event or get together.  
A. Fruit Salad B. Fruit platter C. Banana Flambé D. none
- Which of the following is part of fruit dish?  
A. Fruit Salad B. Fruit platter C. Banana Flambé D. all
- ..... is high water content, antioxidants, and amino acids may make for a better workout.  
A. Watermelon B. Pineapple C. Banana D. papaya
- ..... is a beverage made by puréeing ingredients in a blender.  
A. Pineapple juice B. Smoothie juice C. Papaya juice D. none

**Part 2: Short answer question**

- List at least 10 important benefits of drinking healthy smoothies. (5 pts)
- What are the side effects of papaya juice? 5 pts)
- Describe the 6 Power Packed Fruit Combos to Fuel the Dish. (3 pts)

**Note: Satisfactory rating - 10 points**

**Unsatisfactory - below 10 points**

You can ask you teacher for the copy of the correct answers

## Operation Sheet 3.1

## Producing fruit dishes

### 1. Fruit Platter

#### Ingredients:

- cups melon or pineapple chopped
- 1 orange or kiwi sliced
- 2 cups grapes or cherries
- 1 to 2 cups berries or pomegranate seeds

#### Methods:

1. **Start with a Filler Fruit** - Make a pile or two toward the back of your platter with a filler fruit such as cantaloupe, honey dew melon, watermelon, or pineapple. This gives you a base to add to. If adding bowls of yogurt and granola to the platter, set the bowls out first (you can fill them later).
2. **Make Something Curve** - Around your filler fruit, add sliced oranges or kiwi in a curve shape.
3. **Something for Height** - Add large piles of grapes or cherries for some height. Grapes can be left on the stem but cut into bunches with a scissors in amounts for 1 person.
4. **Finish with Berries** - Make piles of berries here and there, the more colorful the better! You can also make lines of berries along your curves and in between the piles of different fruits.
5. **Garnish** - Not really necessary but kinda fun! Mint leaves, pomegranate seeds, and edible flowers are great! A kiwi or a small papaya cut around in a zig zag pattern and pulled apart also looks nice.

### 2. Fruit Salad

#### Ingredients:

#### For The Dressing

- 1/4 cup honey
- 1/4 cup freshly squeezed orange juice



- Zest of 1 lemon

### For the Salad

- 500 g strawberries, hulled and quartered
- 200 g blueberries
- 200 g raspberries
- 3 kiwis, peeled and sliced
- 1 orange, peeled and wedges cut in half
- 2 apples, peeled and chopped
- 1 mango, peeled and chopped
- 2 cup grapes

### Methods:

1. Step 1 In a small bowl whisk together honey, orange juice, and lemon zest. Add fruit to a large bowl and pour over dressing, tossing gently to combine. Chill until ready to serve.

## 3. Fried Banana And Pineapple

### Ingredients:

- 2 eggs
- 1/8 teaspoon cinnamon
- 2 cups bread crumbs
- 2 bananas, cut into 1-inch pieces
- 1/2 pineapple, cut into 1-inch pieces
- Oil, for frying
- 1/4 cup organic honey, optional

### Methods:

1. In a shallow bowl, whisk the eggs with the cinnamon using a fork. Place bread crumbs on another plate. Toss the fruit in the egg, then into the crumbs. Repeat this 1 more time to make a second coating.
2. In a 6 to 8-quart pan heat canola oil, filled just 3 inches from top of the pan, to 365 degrees F. Drop the fruit into the oil and cook until brown on all sides. Drain on paper towels.
3. Serve immediately, drizzled with honey, if desired.



#### 4. Banana Flambé

##### Ingredients:

- 1 banana
- 1 tablespoon sunflower oil
- 2 tablespoon sugar
- 1/2 teaspoon lemon juice
- 1/4 cup white rum
- 2 scoops vanilla ice cream

##### Methods:

##### 1. Cook the bananas

To prepare this delicious dessert recipe, peel the banana first and slice it into two halves lengthwise. Next, heat oil in a frying pan and when the oil is hot enough, add the halved bananas and stir fry. Cook from both sides until they turn slightly brown in colour.

##### 2. Add sugar and rum

Now, add sugar and white rum to the pan and cook the bananas for around 2 minutes, it will create a burst of flames. Then, pour lime juice over the bananas.

##### 3. Ready to be served

Take out the fried bananas on a plate and put vanilla ice cream on the side. Banana Flambe with vanilla ice cream is ready. Serve immediately and enjoy!

#### 5. Baked Apple

##### Ingredients:

- 4 large good baking apples
- 1/4 cup brown sugar
- 1 teaspoon cinnamon
- 1/4 cup chopped pecans, optional
- 1/4 cup currants or chopped raisins
- 1 tablespoon butter
- 3/4 cup boiling water

### Method:

1. Preheat your oven: Set your oven to 375°F (190°C).
2. Cut out holes in apples for stuffing: Rinse and dry the apples. Using a sharp paring knife or an apple corer, cut out the cores, leaving the bottom 1/2 inch of the apples intact.
3. Stuff apples, then, dot with butter: Place the brown sugar, cinnamon, currants or chopped raisins, and chopped pecans (if using) in a small bowl and stir to combine.
4. Bake until tender: Pour the boiling water into the bottom of the baking dish. Bake at 375°F (190°C) for 30 to 45 minutes, until the apples are cooked through and tender, but not overcooked and mushy.

<b>LAP Test 3.1</b>	<b>Practical Demonstration</b>
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Name : \_\_\_\_\_ Date : \_\_\_\_\_

Time started : \_\_\_\_\_ Time finished : \_\_\_\_\_

*Instructions:*

1. You are required to perform any of the following:

Request your teacher to arrange for you all necessary tools, materials and equipment. Submit your outputs to your teacher for evaluation.

Request a set of tools, materials, equipment for the tasks then perform the following tasks in front of your teacher:

2. Prepare:-

1. Fruit salad
2. Fruit platter
3. Banana flambé
4. Baked apple
5. Fried Banana and pineapple

3. Request your teacher for evaluation and feedback

## Operation Sheet 3.2

## Variety of Fruit Juices

### 1. Apple juice

#### Ingredients:

- 3 peels and cores from red apples - seeds removed
- 5 cups water
- ¼ cup white sugar

#### Methods:

Place the peelings and cores into a saucepan, and stir in the water. Bring to a boil, reduce heat to a simmer, and cook, stirring occasionally, until the water picks up the apple flavor and color, about 30 minutes. Drain the apple juice, discarding solid pieces, and stir in the sugar until dissolved. Allow to cool before drinking.

### 2. Grapefruit Juice

#### Ingredients:

- Pink grapefruit
- Apples
- Ice
- Cold water
- Salt
- Honey, maple or agave syrup, optional

#### Methods:

1. **Blend all ingredients on high until pureed and smooth.** Pureeing it with ice will help to chill it a bit before you drink it.
2. **Strain!** This is the important part. Strain the juice through a medium or fine mesh strainer / sieve or using a nut milk bag (a nut milk bag is faster). Using a medium mesh strainer results in juice with more pulp, which will give you more fiber. A fine mesh sieve makes it perfectly clear. Discard that pulp, or see below for some uses.

### 3. Exotic Fruit Juice

#### Ingredients:

- 4 passion fruit (halved)
- 1 small cantaloupe (cut into slices)
- 1 cup orange juice
- 2 tbsp honey
- 1 cup crushed ice

#### Methods:

1. Scoop out the pulp from the passion fruit halves. Pass through a sieve into a food processor or blender.
2. Dice the flesh from most of the melon slices, reserving a couple of small slices as a garnish.
3. Add the melon flesh, orange juice, honey, and ice to the passion fruit juice. Blend on high for 1- 2 minutes until smooth.
4. Pour into glasses and garnish with slices of melon before serving

### 4. Mango Juice

#### Ingredients:

#### 1. Simple Syrup (optional)

- 2 cups water
- ½ cup sugar
- Mint leaves

#### 2. Mango Juice

- 2 big mangos (about 3-4 cups of mango flesh)
- 1 cup water
- Ice cubes (optional)
- Mint leaves to garnish (optional)

#### Methods:

1. Combine the water, sugar, and mint leaves in a small saucepan. Bring to a boil, stirring until sugar dissolves. Simmer for 1 minute. Remove from heat and let syrup steep for

about 30 minutes.

2. Slice the sides along the mango seed. Cut the flesh in a grid-like pattern without going through the mango skin. Use a large spoon to detach the flesh from the skin and scoop the cubes out.
3. Transfer the mango flesh and water to a blender or food processor and blend until smooth. You can add more water if preferred until you reach your desired consistency.
4. Pour the mango juice into a jar, followed by the optional sugar syrup. Add as much or as little sugar syrup as you prefer since this is purely optional. Stir to combine.
5. Serve with ice cubes and garnish with mint leaves.

## 5. Pineapple Juice

### Ingredients:

- 1/2 Ripe Pineapple (regular size) (or 1½ cups chopped Fresh Pineapple)
- A pinch of Ground Black Pepper (optional)
- 1-2 teaspoon Sugar or to taste (optional)
- Pinch of Salt (optional)
- 5-6 Ice cubes

### Methods:

1. Wash pineapple and remove its outer skin using a long knife. Cut it into two halves. Take one half and chop into pieces. Keep another half for other purpose. If you feel that peeling it messy and difficult, then you can use store bought pineapple (we recommend sliced fresh pineapple). If you are using pineapple slices, then chop them and take around 1½ cups chopped pieces.
2. Pour 1/2 water in a blender jar or a mixer grinder jar. Add chopped pineapple.
3. Blend until smooth puree and there are no chunks of fruit.
4. Keep a fine mesh strainer over a large bowl and pour prepared puree over it.
5. Press it gently with spatula to get the maximum juice out of the pulp. Discard the remaining pulp.
6. Add ice cubes and stir for a minute. Taste the juice and if you like, add sugar, a pinch of salt and a pinch of black pepper powder. Stir for a minute and pour it into two serving glasses and serve.

## 6. Watermelon Juice

### Ingredients:

- small sweet watermelon (a 6 pounder will do)
- 1 small lime, juiced (optional)

### Methods:

1. Slice the watermelon in half. Using a big spoon, scoop chunks of sweet watermelon into the blender. Discard the rind.
2. Blend the watermelon until it is totally pulverized. This shouldn't take more than a minute. For extra flavor, squeeze the juice of one small lime into the blender and blend for a few seconds.
3. If your watermelon is notably pulpy or seeded, pour the mixture through a fine mesh strainer into a pitcher. If not, you can pour it directly into glasses filled with ice. Watermelon juice will keep in the refrigerator, covered, for up to 4 days. The juice will separate over time; stir it with a spoon to recombine.

## 7. Orange Juice

### Ingredients:

- 1kg oranges or any orange
- 1/4 cup honey/sugar
- few ice cubes

### Methods:

1. Rinse the oranges under water. Wipe them with a cloth or napkin.
2. Peel the oranges and slice them into four parts.
3. Place the sliced oranges into the grinder or juicer.
4. Drizzle some honey or add sugar and also add few ice cubes.
5. Grind until they become juicy. I don't have a pic for this step.
6. Sieve the juice over a mesh strainer. Collect the juice in a vessel.
7. Pour the collected orange juice into tall glasses. Serve the orange juice chilled and garnish with mint leaves.

## 8. Coconut Juice

### Ingredients:

- cup of coconut water
- 1/4 cup of tender coconut
- 1 teaspoon of sugar
- ice cubes as preferred

### Methods:

1. Start by making a hole in the coconut and take the water out in a bowl.
2. With the help of a spoon or a scooper, start removing the tender coconut from inside the coconut shell. To get a tender coconut, you will need to talk to the seller about which coconut will be soft on the inside.
3. In a blender, you will need to add the coconut water, the coconut pulp, and the sugar.
4. Keep blending until the coconut has fully blended in with the coconut water. Since the coconut will be soft, it will not take too much time.
5. Pour the coconut juice into a town and leave it in the freezer for at least 10 minutes. When the juice is being served cold, it will taste the best.
6. When serving, pour into serving tumbler glass and add 2 ice cubes.

## 9. Lemon Juice

### Ingredients:

- 5 medium Lemons
- ½ cup Water
- 3 tbsp Sugar (optional)
- Ice as needed

### Methods:

1. Combine sugar and water in a small saucepan. Stir to dissolve sugar while mixture comes to a boil. Set aside to cool slightly.
2. Meanwhile, roll lemons around on your counter to soften. Cut in half lengthwise, and squeeze into a liquid measuring cup. Add pulp to the juice, but discard any seeds. Continue juicing until you have fresh juice and pulp.



3. Pour ice-cold water into a pitcher. Stir in lemon juice and pulp, and then add simple syrup to taste. Add ice.

## 10. Strawberry Juice

### Ingredients:

- 500 Strawberries
- Water
- Sugar (optional)
- Pinch of salt – brings out the flavor
- Lemon
- Ice cubes (optional)
- Fresh strawberry or lime slices for garnish (optional)

### Methods:

1. Set up your juicer and weigh out the strawberries.
  2. Rinse and hull the strawberries. Slice in half.
  3. Turn on the juicer, add the strawberries, and collect the extracted juice.
  4. Add the agave nectar to the fresh strawberry juice. Stir or whisk well.
  5. Pour into a glass over ice (if desired) and add a squeeze of fresh lime juice, if desired.
- Garnish with fresh strawberry and/or lime slices. Enjoy.

## 11. Papaya Juice

### Ingredients:

- Ripe Papaya - 2 cups peeled and cubed
- Sugar or Honey - 1 tblspn or to taste
- Lemon Juice - 1 tblspn or to taste
- Cold Water as needed

### Methods:

1. Take everything in a blender and puree till smooth.
2. Pour this into glass and serve.

## 12. Mixed Fruit Juice

### Ingredients:

- 4 oranges
- big apple
- cups black grapes
- 1 cup kiwi pieces
- 1 tablespoon sugar (optional)
- A lemon wedge for garnishing

### Methods:

1. Wash and rinse all the fruits and remove tough and bitter parts from them. Also remove their seeds and stems.
2. Chop your fruits into the appropriate-sized chunks, pieces or slices depending on how you will be juicing.
3. Use seedless grapes, and make sure there are no stems lingering. Peel oranges and take out its slices. Peel the apples and cut into thin slices or pieces. Also peel kiwi and cut into slices or pieces.
4. Prepare your juicer. Whether you are using an electric juicer, a food processor, or a hand juicer, make sure it is clean and sanitized before you begin.
5. Put the pieces of of apple, oranges, grapes and kiwi in the mixer and blend for 2 minutes.
6. Add sugar if required and blend for one more minute.
7. Take out the juice from the blender into the strainer and discard the rough particles of it.
8. Your fresh, homemade juice is ready to serve. Refrigerate for about an hour to serve chilled.

<b>LAP Test 3.2</b>	<b>Practical Demonstration</b>
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Name : \_\_\_\_\_ Date : \_\_\_\_\_

Time started : \_\_\_\_\_ Time finished : \_\_\_\_\_

*Instructions:*

1. You are required to perform any of the following:

Request your teacher to arrange for you all necessary tools, materials and equipment. Submit your outputs to your teacher for evaluation.

Request a set of tools, materials, equipment for the tasks then perform the following tasks in front of your teacher:

2. Prepare:-

1. Papaya Juice
2. Avocado Juice
3. Watermelon Juice
4. Pineapple juice
5. Exotic Juice
6. Mango Juice

3. Request your teacher for evaluation and feedback

## Operation Sheet 3.3

## Fruit Smoothies

### 1. Banana smoothie

#### Ingredients:

- 500ml unsweetened almond milk
- 2 tbsp almond butter
- 6 prunes
- 1 tsp cinnamon
- 1 small ripe banana

#### Method:

1. In a blender, whizz the almond milk with the almond butter, prunes, cinnamon and banana.
2. Transfer to 2 bottles and chill until ready to drink, or pack for lunch on the go. The smoothies will keep in the fridge for 2 days.

Note: Popular Alternative (Coconut & banana smoothie)

### 2. Mango Smoothie

#### Ingredients:

- 3-4 ripe mangoes (honey mangoes if possible)
- 500g natural yogurt
- a pinch ground cardamom (crush the seeds from 1-2 pods)
- 1 tbsp honey
- 2 limes, juiced, to taste

#### Method:

1. Put all the ingredients apart from the lime juice in a food processor and blitz. Add the lime juice along with a pinch of salt, to taste, if the cardamom isn't strong enough then add a little more, then pour into glasses with some ice cubes and serve.

### 3. Pineapple Smoothie

#### Ingredients:

- 150g pineapple, trimmed, peeled and chopped
- 1 small banana, peeled and sliced
- 1 lime, juiced
- ice (optional)

#### Method:

1. Blitz the pineapple in a blender with the banana, lime juice and 50ml cold water until smooth.
2. Fill a tall glass with ice, if you like, pour over the smoothie and serve immediately.

### 4. Strawberry smoothie

#### Ingredients:

- 10 strawberries, hulled (approx 175g)
- 1 small banana, sliced
- 100ml orange juice, chilled

#### Method:

1. Blitz the strawberries in a blender with the banana and orange juice until smooth.
2. Pour the smoothie into a tall glass to serve.

### 5. Peanut butter smoothie

#### Ingredients:

- 200ml oat milk
- 1 banana, peeled and chopped
- 20g peanut butter
- 1 tbsp rolled oats
- pinch of cinnamon
- pinch of allspice
- pinch of nutmeg (optional)

- small handful ice cubes

**Method:**

1. Whizz all the ingredients together in a blender (one suitable for crushing ice) until smooth. Pour into a tall glass and serve.

**6. Watermelon Smoothie**

**Ingredients:**

- 150g watermelon, peeled and chopped
- 1 small banana, peeled and sliced
- 100ml cold apple juice

**Method:**

1. Blitz the watermelon in a blender with the banana and apple juice until smooth.
2. Pour the smoothie into a tall glass and serve immediately.

**7. Cherry smoothie**

**Ingredients:**

- 300g frozen or fresh cherries, pitted
- 150g natural yogurt
- 1 large banana, sliced
- ½ tsp vanilla extract

**Method:**

1. Tip all the ingredients into a blender and blitz until smooth. Adjust the thickness to your liking with 50-100ml cold water. Serve in four glasses or chill for up to 24 hrs, giving a good stir before serving.

**8. Coconut & banana smoothie**

**Ingredients**

- 100g coconut yogurt
- 3 tbsp milk of your choice
- ½ tsp ground turmeric
- 3cm piece of fresh ginger, peeled
- 2 tsp baobab powder (optional)

- 1 small ripe banana
- 1 tsp honey
- 1 tbsp oats
- juice of 0.5 a lemon

**Method:**

1. Add the coconut yogurt and milk to a high-speed blender then add the turmeric, fresh ginger and baobab powder (if using). Tip in the remaining ingredients then blend until smooth. Add ice and blitz again if you prefer a colder drink. Pour into glasses and serve.

**9. Creamy mango & coconut smoothie**

**Ingredients:**

- 200ml (½ tall glass) coconut milk
- 4 tbsp coconut milk yogurt
- 1 banana
- 1 tbsp ground flaxseed, sunflower and pumpkin seed
- 120g (¼ bag) frozen mango chunks
- 1 passion fruit, to finish (optional)

**Method:**

1. Measure all the ingredients or use a tall glass for speed – they don't have to be exact. Put them into a blender and blitz until smooth. Pour into 1 tall glass (you'll have enough for a top up) or two short tumblers. Cut the passion fruit in half, if using, and scrape the seeds on top.

**10. Avocado smoothie**

**Ingredients:**

- ½ avocado, peeled, stoned and roughly chopped
- generous handful spinach
- generous handful kale, washed well
- 50g pineapple chunks
- 10cm piece cucumber, roughly chopped
- 300ml coconut water

**Method:**



1. Put the avocado, spinach, kale, pineapple and cucumber in the blender.
2. Top up with coconut water, then blitz until smooth.

### 11. Avocado & strawberry smoothie

#### Ingredients:

- ½ avocado, stoned, peeled and cut into chunks
- 150g strawberry, halved
- 4 tbsp low-fat natural yogurt
- 200ml semi-skimmed milk
- lemon or lime juice, to taste
- honey, to taste

#### Method:

1. Put all the ingredients in a blender and whizz until smooth. If the consistency is too thick, add a little water.

<b>LAP Test 3.3</b>	<b>Practical Demonstration</b>
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Name : \_\_\_\_\_ Date : \_\_\_\_\_

Time started : \_\_\_\_\_ Time finished : \_\_\_\_\_

*Instructions:*

1. You are required to perform any of the following:

Request your teacher to arrange for you all necessary tools, materials and equipment. Submit your outputs to your teacher for evaluation.

Request a set of tools, materials, equipment for the tasks then perform the following tasks in front of your teacher:

2. Prepare:-

1. Peanut butter smoothie
2. Watermelon Smoothie
3. Coconut & banana smoothie
4. Avocado smoothie
5. Avocado & strawberry smoothie

3. Request your teacher for evaluation and feedback

## Unit Four: Storing fruits and juices

This learning guide is developed to provide you the necessary information regarding the following content coverage and topics:

- Storing fruits according to intended use
- Storage temperature of Fruits

This guide will also assist you to attain the learning outcomes stated in the cover page. Specifically, upon completion of this learning guide, you will be able to:

- Store fruits according to intended use
- Store at appropriate temperature

#### 4.1. Sorting fruits according to intended use

Sorting is done by hand to remove the fruits which are unsuitable to market or storage due to damage by mechanical injuries, insects, diseases, immature, over-mature, misshapen etc. This is usually carried out manually and done before washing.

Effective sorting and quality analysis systems can play a critical role in enhancing food safety. The sorting process for many different types of produce starts in the field, by identifying larger and more obvious defects and foreign material that should not be entering the processing plants and facilities.

The graded produce fetch better price in the market. Grading helps to develop greater confidence between buyers and growers. Increase the marketing efficiency by facilitating buying and selling a produce without personal selection. Heavy marketing cost in packing and transportation can be avoided by grading.

Separating the different types of fruits from fruit lot is called sorting. It depends on:

1. **Damage product:** The damaged product should be avoided. It should be separated from fruit lot, and the well mature product should be taken.
2. **Diseases:** Diseased free fruit and vegetable should be collected from a lot. It is essential for sorting.
3. **Insect cutting products:** Insect cutting fruit must be avoided because consumers want good fruit.
4. **Maturing:** Mature fruit is delicious. So maturity is very much needed for fruit.
5. **Color:** Colours should be light able. Well-colored fruit should be selected that attract the consumer. Colour also indicates the maturity level of the seed.
6. **Shape:** In the case of packaging, the shape is essential. Some type of fruit should be selected for packaging in case of sorting.
7. **Size:** Size also an essential matter for sorting fruits from a fruit lot. We should select the same size of the fruit.

Generally, the fruits are graded based on size, weight, specific gravity, color, variety, etc. Size grading is predominantly followed in almost all types of fruits based on size. The fruits are graded as small, medium, large, and extra-large. Based on maturity, the fruits are graded as immature, properly mature, and over mature.

## 4.2. Storage temperature of Fruits and Juices

### 4.2.1. Storage temperature of fruits

Whole fruits generally don't need to be refrigerated. However, refrigeration slows down their ripening process. Refrigerating them can help them stay fresh for longer. Once you wash and cut fruit, you should always store it in your refrigerator or freezer.

Proper storage of fresh fruits and vegetables is important to maintain the integrity of the product, prevent spoilage and illness and ensure to get the best value for your labour. In addition to proper temperature and humidity, all fruits and vegetables must be kept in a dark, aerated environment.

The flavor of fruits is influenced by maturity and quality at harvest and by how they are stored afterwards. To maintain the freshness and flavor of the produce you buy at the market or grow in your garden, you should know how to store it at home.

Many fruits should be stored only at room temperature because refrigerator temperatures (usually 38° to 42°F [3.3° to 5.6°C]) damage them or prevent them from ripening to good flavor and texture. For example, when stored in the refrigerator, bananas develop black skin and do not gain good sweetness, and sweet potatoes take on off-flavors and a hard core when cooked after being refrigerated.

Watermelons lose their flavor and deep red color if they are stored for longer than 3 days in the refrigerator. Pink tomatoes ripen to a better taste and red color if they are left at room temperature. They do not turn red in the refrigerator, and even red tomatoes kept in the refrigerator lose their flavor. Other produce can be ripened on the counter, and then stored in the refrigerator. A few fruits and fruit-type vegetables gain sugar or soften when stored at room temperature. For example, Bartlett pears turn yellow and become softer and sweeter on the counter. After they have ripened they can be stored for 1 to 3 days in the refrigerator without losing taste.

#### A. Countertop Storage

The counter storage area should be away from direct sunlight to prevent produce from becoming too warm. Fruits that are recommended to be stored on the counter can be kept for a few days. Even so, moisture loss can be reduced by placing produce in a vented plastic bowl or a perforated plastic bag. Do not place produce in sealed plastic bags on the counter because this

slows ripening and may increase off-odors and decay due to accumulation of carbon dioxide and depletion of oxygen inside the sealed bag. Ripening in a bowl or paper bag can be enhanced by placing one ripe apple with every 5 to 7 pieces of fruit to be ripened. Apples produce ethylene that speeds ripening.

## **B. Refrigerator Storage**

Refrigerated fruits should be kept in perforated plastic bags in the produce drawers of the refrigerator. You can either purchase perforated plastic bags or make small holes with a sharp object in imperforated bags (about 20 pin holes per medium-size bag). Separate fruits from vegetables (use one drawer for each group) to minimize the detrimental effects of ethylene produced by the fruits on the vegetables. Use all refrigerated fruits within a few days since longer storage results in loss of freshness and flavor.

### **4.2.2. Storage temperature of Juices**

Store fruit juice in a tightly sealed, dark colored container: to minimize exposure to oxygen and light. Freezing: for long-term storage, use your freezer. Raw fruit juice will keep well in your freezer for two to three months. For extended shelf life, pasteurization is recommended.

The Fruit juice can be stored in its airtight container in the fridge for 24 - 48 hours and up to 72 hours at the absolute most. If you need to store juices longer than that we suggest you freeze them. However, if freezing them, it is then advisable to thaw in the refrigerator and drink immediately.

All preservation methods that allow juice storage above refrigeration temperatures, greater than about 5°C, are limited by Maillard browning and other slow but persistent reactions. Thus low temperature during manufacture and storage is a valuable hurdle to deterioration.

The recommendation temperature of storing juice is at or below 41° F (5° C). If you have a refrigerated kitchen that is ideal, but if not, make sure your produce goes from the refrigerator and is made into juice as quickly as possible and placed back into the refrigerator.

Leaving perishable food, which includes orange juice, at room temperature for more than two hours (or just one hour at high temperatures of 90 degrees or above) is a bad idea, as it could allow harmful bacteria like salmonella, E.

Some juices need to be refrigerated, because it slows the growth of potentially deadly pathogens. The fridge also retards deterioration of the flavor, color, and texture of many foods.

Unopened juice has a shelf-life of 12 months. But juice can spoil once opened, whether refrigerated or not. Spoiled juice has an off odor and flavor, and drinking it will cause your kids to have stomachaches and diarrhea. In addition to spoiled juice, improperly pasteurized juice can also make your kids sick.



Self-Check 4	Written test
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Name..... ID..... Date.....

**Directions:** Answer all the questions listed below.

**Part I: Short Answer Questions**

1. How to sort the different types of fruits from fruit lot? (5 pts)
2. At what temperature will fruits store? (2 pts)
3. Describe the type of Fruit storage? (2 pts)
4. What is the recommended storage temperature of fruit juice? (1 pt)

**Part II: Write true if the statement is correct and false if statement is incorrect**

1. Refrigeration of fruit slows down their ripening process. (1 pt)
2. Store fruit Juice increase exposure to oxygen and light (1 pt)
3. The Fruit juice can be stored in its airtight container in the fridge for 24 - 48 hours (1 pt)
4. Colour of fruit indicates the maturity level of the seed. (1 pts)
5. Some fruits and fruit-type vegetables gain sugar or soften when stored at room temperature. (1 pt)

**Note:** Satisfactory rating - 10 points

Unsatisfactory - below 10 points

You can ask you teacher for the copy of the correct answers

## Reference

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<https://www.bbcgoodfood.com/recipes/collection/juice-recipes>

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