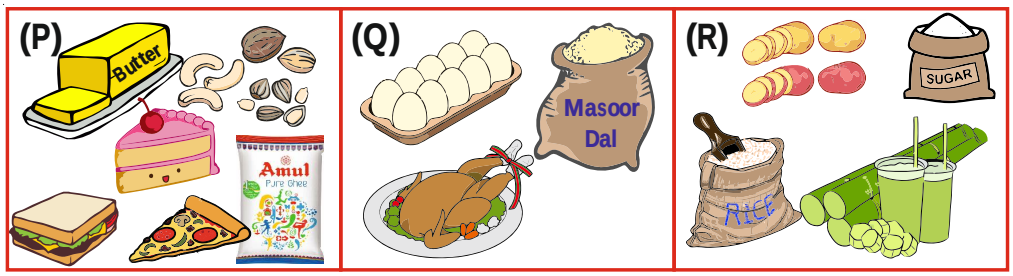
01 Look at the picture and answer the following.



(a) Name three classes of food. Derive respective answers observing the pictures 'P, 'Q', and 'R' respectively.

(b) Which food item among 'P, 'Q', and 'R' is the highest in its calorific value ?

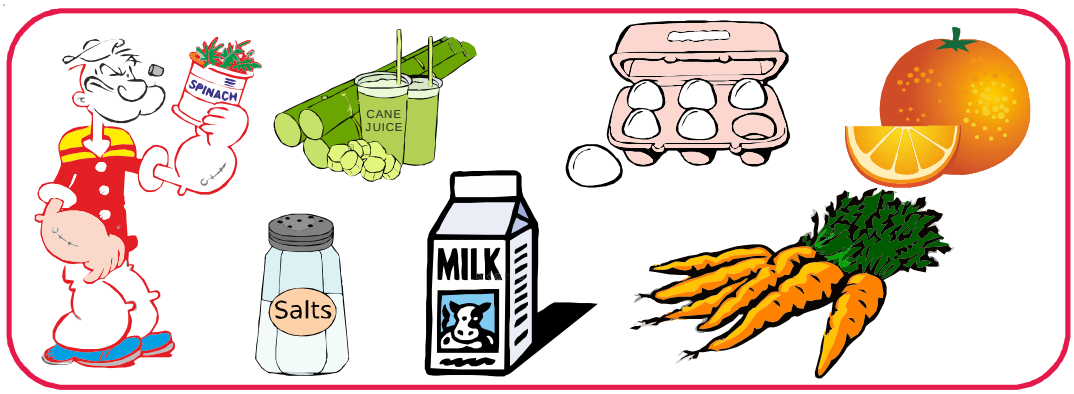
(c) What are the effects of consuming excess fat in diet ?

(a) P - Fats, Q - Proteins, R - Carbohydrates.

(b) P - Fats

(c) Excess fat consumed gets deposited in the body, making a person obese. At a later stage, this may lead to many heart problems as well.

02 **Some food stuffs are shown in the picture given below. Study them carefully to answer the following.**



(a) **Draw a circle around the food, rich in vitamins and minerals.**

(b) **Draw a square around the food which prevents scurvy.**

(c) **Mark the picture with a mark (4) that help in preventing goitre.**

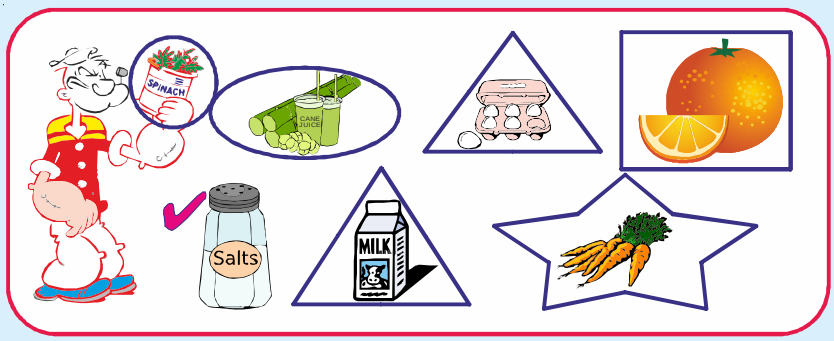
(d) **Draw a star around the food rich in vitamin 'A'.**

(e) **Draw a triangle around the food items rich in all nutrients or a complete food.**

(f) **Draw an oval around an instant source of energy.**

(g) **Suggest five healthy eating habits.**

(a) - (f)



(g) 1) Avoid junk food (eat nutritious food).

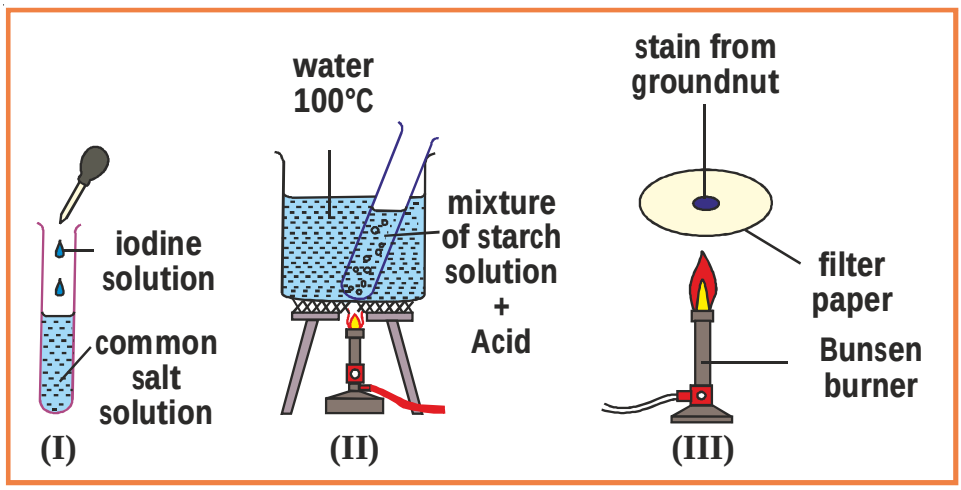
2) Stick to regular timings of meal.

3) Drink enough clean and pure water to keep yourself safe.

4) Chew your food well before swallowing it.

5) Avoid overeating.

03 **Study experimental set ups - I, II and III and answer the following questions.**



(a) Read the tests I, II and III from column I. Note down respective observations in column II.

	TEST (Column - I)	OBSERVATIONS (Column - II)
(I)	In a test tube, iodine is added to the solution of common salt.	
(II)	A mixture of starch and acid is allowed to stand for 5 minutes. It is boiled in a water bath for 15-20 minutes. Then, 2 drops of Benedicts reagent is added to the test tube.	
(III)	This paper is then dried on a flame.	

(b) What is the principle lying behind in an experimental set up 'II' shown ?

(c) What would be your observation in experimental set up - I, if you add iodine to a boiled potato instead of adding it to common salt ?

a)

	TEST (Column - I)	OBSERVATIONS (Column - II)
(I)	In a test tube, iodine is added to the solution of common salt.	No colour change is observed.
(II)	A mixture of starch and acid is allowed to stand for 5 minutes. It is boiled in a water bath for 15-20 minutes. Then, 2 drops of Benedicts reagent is added to the test tube.	Orange red colour is observed
(III)	This paper is then dried on a flame.	A greasy spot is observed on the paper

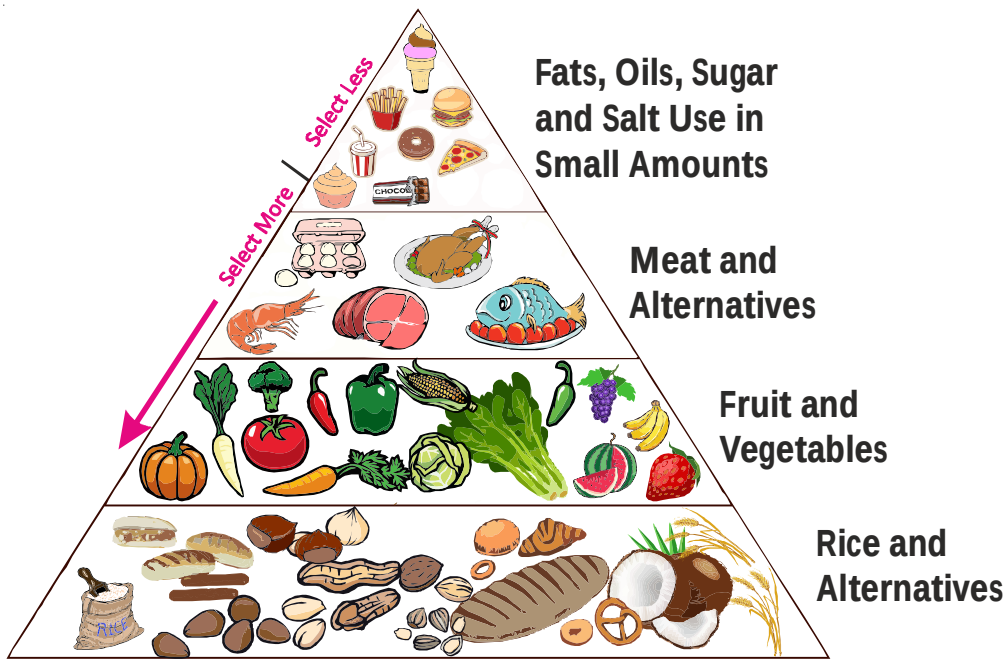
b)

CONCLUSIONS (Column - III)
I) Absence starch is confirmed.
II) Indicates presence of simple sugar.
III) Indicates presence of fats/oils

c) Acid was added to the starch in this experiment. It was boiled for 15 - 20 minutes. Breakdown of complex starch to its simpler form of sugar (glucose) takes place which would result in orange, red/brick coloured complex when reacts with Benedicts reagents.

Iodine reacts with boiled potato to give dark blue colour. This indicates presence of starch in the test tube (complex carbohydrate) [Potato is rich in its starch content].

04 **In the given picture "Food Pyramid" is shown in detail. Analysing the facts given, answer the given below questions.**



(a) Name the nutrients present in the food group shown at the bottom level of the food pyramid ?

(b) Which vitamin is the main constituent in citrus fruit group ?

(a) Carbohydrates

(b) Vitamin C

05 **An information table of vitamins is shown below. Read the rows carefully to find odd one out. List all of them in their respective columns I and II.**

	Vitamins	Column - I Category	Column - II Odd one
(P)	Retinol, Thiamine, Tocopherol, Phylloquinone		
(Q)	Ascorbic acid, Niacin, Calciferol, riboflavin		

	Vitamins	Column - I Category	Column - II Odd one
(P)	Retinol, Thiamine, Tocopherol, Phylloquinone	Fat soluble vitamins	Thiamine water soluble
(Q)	Ascorbic acid, Niacin, Calciferol, riboflavin	Water soluble	Calciferol fat soluble