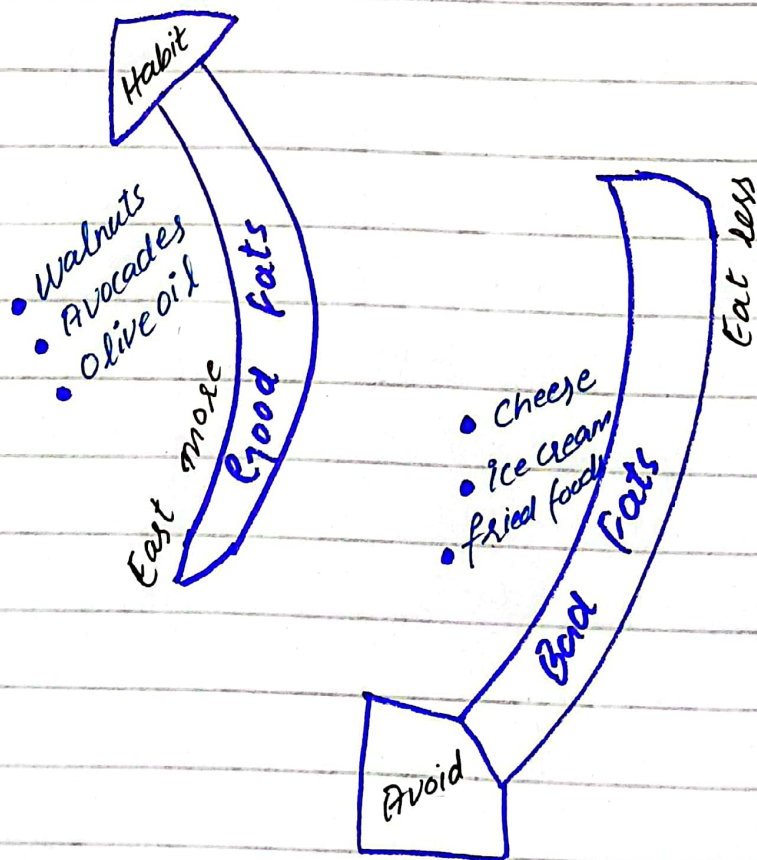


Q:02

(A) Difference between good fats vs bad fats

Introduction:-

Good fats help protect your body against heart diseases. Bad fats pose a threat to your heart and blood vessel system.



Good Fats

Bad Fats

- | | | |
|-----|--|--|
| (1) | Least amount of processing as possible. All natural organic unrefined. | Polyunsaturated trans fats refined, bleached and hydrogenated. |
| (2) | Do not make a good fat a bad fat by overheating and smoking it. Higher point oils are safer. | These over processed and unstable fats are rancid to the body and congest cells creating diseases. |
| (3) | Olive oil
Avocado oil
Butter, Ghee, Lard
cocoa Butter, Almond oil, coconut oil,
Unrefined Palm | Soyabean oil,
canola oil, corn oil, sunflower oil,
Rice bran oil,
Refined Rapeseed. |
| (4) | walnut oil,
rapeseed oil, flax oil, sesame oil, seed & fish. | Processed creams,
Artificial Butter spreads, candy, Margarine,
Fried foods & poor supplements. |

Conclusion:-

In conclusion there are necessary to making healthy food choices because it help to keep healthy body weight and help to prevent diseases.

(B) Give 5 uses of each of following:-

(1) Vitamin B-Complex:-

Uses:

- (i) Increase energy levels
- (ii) Reduce stress
- (iii) Boost mood
- (iv) Reduce symptoms of anxiety.
- (v) Helps prevent infections

(2) Vitamin E:-

Uses:-

- (i) Prevent of oxidative stress
 - (ii) Prevent heart disease
 - (iii) Support immune system
 - (iv) Anti-inflammatory processes
 - (v) Help fade acne scarring.
-

(3) Vitamin D:-

Uses:-

- (i) Building and maintaining healthy bones.
 - (ii) Reduce cancer cell growth
 - (iii) Help control infections
 - (iv) Reduce inflammation
 - (v) Facilitating immune system
-

(4) Iron:-

Uses:-

- (i) Hemoglobin production
 - (ii) Reduction of dark circles.
 - (iii) Enhanced sports performances.
 - (iv) Reduced fatigue.
 - (v) Immune system support.
-

(C)

Food Adulteration

Introductions-

Food adulteration is an act of intentionally debasing the quality of food offered for sale either by the admixture of inferior substances of some valuable ingredient.

Types of Food Adulteration:-

(i) Deleterious substances:-

If a food contains a deleterious substance that may render it injurious to health, it is adulterated.

(ii) Filth and Foreign Matters:-

Filth and extraneous material include any objectionable substances in food such as foreign matter, undesirable parts of the raw plant material and filth.

(iii) Economic Adulterations:-

A food is adulterated if it omits a valuable constituent in whole part to damage in any manner is the economic adulteration.

(iv) Microbiological Adulterations:-

Generally the presence of pathogens will render the food adulterated. For example the presence of salmonella on fresh fruits.

(v) Intentional Contamination:-

Addition of sand, marble chips, stones, mud, other filth, talc, chalk powder, water and mineral oil.

(vi) Incidental Contamination:-

Presence of pesticide residues, tin from can, droppings of rodents and larvae in foods.

Effects of Food Adulteration:-

Food adulteration include adding water to milk, adding chemicals to spices, adding artificial colours to fruits and vegetables, and using lower quality ingredients in processed foods. These practices can result in serious health consequences such as food poisoning, allergies reaction, diabetes and cardiovascular diseases.

Solutions for food adulterations:-

(i) Adding certain chemicals for faster ripening of fruits.

(ii) Mixing of decomposed fruits and vegetables with the good ones.

(iii) Adding certain natural and chemical dyes to attract consumers.

(iv) Mixing of clay, pebbles

stones, sand and marble chips to the grains, pulses and other crops.

Conclusions:-

In nutshell, Adulteration is an illegal practice of adding raw and other cheaper ingredients to excellent quality products to increase the quantity.

(D) Food Preservation

Food preservation is any of a number of methods by which food is kept from spoilage, after harvest. Among the oldest method of preservation are drying, refrigeration and fermentation. Modern methods plays an important role in the food preservation.

Food Preservation Methods:-

(i) Heat:-

Most bacteria, yeasts and molds grow best in the temperature range of about 16 to 38°C. Thermophiles will grow in the range 66-82°C. It may be necessary to employ only sufficient heat to destroy disease producing organisms in the food. This is done in the case of pasteurized milk.

(ii) Cold:-

At temperatures below 10°C however growth is slow and become slower the colder it gets. But in some foods all of the water is not frozen completely until a temperature of -10°C is reached. This is because of sugars, salt and other constituents.

(iii) Acid:-

In sufficient strength acid modifies bacterial proteins as it denatures food proteins and so microorganisms are sensitive to acid. Examples are citric acid and phosphoric acid to soft drinks.

(iv) Radiation:-

Microorganisms are inactivated to various degrees

by different kinds of radiation. X-Rays, microwaves, ultraviolet light and ionizing radiation.

(V) Drying:-

Microorganisms in a healthy growing state may contain in excess of 80% water.

Drying is used as a food preservation techniques since ages.

Conclusion:-

In short, effective preservation must eliminate all of these factors in a given food which store it for a long term period.

Q:01

(C) Galaxy

A galaxy is a gravitationally bound system of stars, stellar remnants, interstellar gas, dust, and dark matter. The word "galaxy" is derived from the Greek *galaxias*, literally "milky", a reference to the "milky way".

"Astronomers estimate that there about 100 to 200 billion galaxies exist in the observable universe."

→ Galaxies range in size from dwarf with just a few thousands stars to giants.

→ Galaxies are categorized according to their visual morphology.

Black Hole :-

A massive object in space that is so dense that within a certain radius. Its gravitational field does not let anything escape from it, not even light.

Milky Way :-

A spiral galaxy is shaped like a disk, usually with a bulge in the center and with arms that spiral outwards as the galaxy rotates.

(i) The Milky Way is about 100,000 light years in diameter.

(ii) It formed about 13.7 billion years ago.

(iii) Sun takes roughly 250 million years to orbit around Milky Way.

(iv) Nearest galaxy to Milky Way galaxy is Andromeda.

(v) Milky way is part of cluster of three dozens of galaxies called "Local Group".
