* Chapter 3 :
* Inorganic : water and minerals
* One kilocalorie represents the amount of heat it takes to raise the temperature of one liter of water 1°C
* Starch and sugar are the main source of energy and essential for synthesis of certain non-essential amino acids
* Complex sugars : dextrins ( digestible ) – lignin ( indigestible)
* An adult person needs 400-420 gms of carbohydrates everyday.
* Cellulose - Beta-glucans- Chitin and chitosan - Hemicellulose Pectins, gums, and mucilages - Fructans - Algal polysaccharides Lignin
* Complete proteins: Foods containing all the essential amino acids Examples: fish, meat, eggs, milk, cheese
* Incomplete proteins: Foods that are missing some essential amino acids Examples: Legumes, nuts, whole grains
* 9 of the 20 amino acids are called essential amino acids because you must obtain them from the foods you eat since your body cannot make them. (HI LLTT MVP )
* all animal proteins are HBV except gelatin
* all plant except soybeans are LBV
* For adults over age 19 the reference protein intake is 0.75 g/kg/day (RDA is 0.8(
* 50-65 grams of protein per day or between 200 to 250 Kcal.
* 1 cup milk , yogurt equals 8-12 grams protein
* Cholesterol needed for synthesis of cell membranes, vitamin D, and hormones.
* low-density lipoprotein (LDL) Blood fat that transports cholesterol to organs and tissues;
* high-density lipoprotein (HDL) Blood fat that helps transport cholesterol out of the arteries
* omega 3
* Humans need 13 vitamins; of these, four are fat-soluble (A, D, E, and K), and nine are water-soluble
* Vitamin A,K,C read
* Calcium , iron
* Glycemic Index (GI) :Relative ability of different dietary carbohydrates to raise blood glucose levels either glucose or white bread)
* 55 or less A low glycemic index level. Pizza , white bread , milk
* 56 to 69 A medium glycemic index level. icecream
* 70 or more A high glycemic index level. dates