Bch

4: Itemize what heterotrophic cells do with the free energy obtained from the degradation of molecules? Heterotrophs degrade some of the organic molecules they take in (catabolism) to make the ATP that they need to synthesize the others into the macromolecules of which the are made ( anabolism). 1: Ingestion: taking food within the body. 2: Digestion: the enzyme\_catalyzed hydrolysis of polysaccharide ( e.g starch) to sugar, protein to amino acids and nucleic acids to nucleotides. 3: Absorption into the body and transport to the cells. 4: Absorption into the cells. Within the cells, these molecules are further degraded into still simpler molecules containing two to four carbon atoms.

5: Two fundamental laws of thermodynamics? The first law of thermodynamics also known as law of conservation if energy state that, energy can neither be created nor destroyed but can only be transferred from one form to another…the second law states that, the entropy of any isolated system spontaneously evolve towards thermal equilibrium, the state of maximum entropy of the system.