**Research Topics(Second level) -**

**راسبى الترم الأول من المستوى الثانى**

1. **Nutrition Module:**

|  |  |
| --- | --- |
| **Items** | **Subtitles** |
| 1. **Obesity**
 | * Definition
* Ways of assessment
* Abnormalities in lipid and carbohydratemetabolism
* Storage of energy in the form of TAG and denovo

synthesis of fatty acids* Hormonal regulation of fat deposition andappetite
* Relationship between obesity and insulinresistance
* Basal metabolic rate and specific dynamic action
* Causes and methods of prevention
 |
| 1. **Diabetes Mellitus**
 | * Definition
* Types of DM
* Comparison between both types
* Metabolic changes occurring in both types.
* Insulin hormone: structure and mechanism ofaction
* Complications
* Basal metabolic rate and specific dynamic action
* Causes and methods of prevention
 |
| 1. **Inborn errors of proteinmetabolism**
 | * Discuss in detail different examples of inbornmetabolic disorders with the reference to theenzymatic deficiency, defective metabolic pathway, clinical picture and management.
* Basal metabolic rate and specific dynamic action
* Causes and methods of prevention
 |
| 1. **Vitamins and theirimplications on health**
 | * Vitamins Classification
* Types
* Functions
* Deficiencies
* Basal metabolic rate and specific dynamic action
* Causes and methods of prevention
 |