|  |  |
| --- | --- |
|   | **DIETARY MANAGEMENT OF****HIV/AIDS**  |
| **Made by Amna Suleman on April 28 2012 as a part of course no Of BS HE.** **Under the guidance of Prof. Dr. Rubina Hakeem (RH)** |

|  |
| --- |
|  **WHAT IS AIDS?**C:\Users\Rizwan Ahmad\Documents\HIV\logos\Untitled-1 copy.JPGHIV (human immune deficiency virus) infection is characterized by progressive deterioration of the immune system, which can lead to the opportunistic Infection and certain cancers. Aids is the end stage of HIV infection.HIV is a retrovirus that infect CD 4 lymphocytes in particular slowly reduce the number Of these cells. As the CD 4 cell count decrease, person with HIV become at a high risk for opportunistic infection, maligences, and gynecological problem in Women’s. Infection with HIV results in progressive immunosuperssion and frequently malnutrition.Malnutrion and its complications, can increase susceptibility to opportunistic infection. |
|  **CAUSES OF HIV/AIDS**Associated infection disease, drug nutrient interaction, metabolic abnormalities, effects on organ system and also different micronutrient deficiency are identified in individual. AIDS is the end stage of HIV infection. |
|  **NUTRITIONAL CONSIDERATIONS*** **PROTEINS;** A high calorie high protein diet may be prescribed to help to maintain

 lean body mass. Some studies have demonstrated that total energy expenditure in weight stable .HIV infected individual comparable to that in healthy subject therefore some clinics have recommended using 35-45 kcal per KG body weight to estimate baseline energy and protein needs.* **FATS;** Avoid high fat and overly sweet, use low fat especially in symptoms of nausea

 and diarrhea.* **CARBOHYDRATES:** lactose freesupplement can be offered and can be offer better tolerated.
* **FIBER;** Reduce crude or insoluble fiber. Increase soluble fiber in diarrhea and nausea patient who is infected from HIV.
* **VITAMINS And MINERALS;** Multiple micro nutrient deficiency including vitamin A

 E, B6 and B12, riboflavin, folic acid, copper, selenium and zinc also be identified in HIV infected person.* **FLUID REQUIREMENTS**: Drink plenty of liquids (not alcohol caffeine containing
* food and beverages)
* **ENERGY REQUIREMENTS:** energy requirement is increased from normal person.
 |

|  |
| --- |
| **DIETARY CONSIDERATIONS**There is a common problem for people with HIV infection Symptoms related to HIV are Anorexia, chewing and swelling problem, nausea or vomiting, Diarrhea, and hyperglycemia. Following are the symptoms and their dietary consideration. |
|  **Do’s**  | **Moderation** | **Don’ts** |
| Anorexia; consume small meal, frequent meal o take calorie dense supplement.Chewing and swallowing problem; Eat soft and blenderized food. Eat room temperature or chilled soft food and calorie dense beverage.Nausea or Vomiting; try small, frequent meals, Eat bland, salty, dry or cold foods. Use antinausic medication.Diarrhea: Consume small frequent meal instead of large one.eat foods at or near room temperature to slow down the gastrointestinal gland. Hyperglycemia; use medical treatment including insulin, diet for diabetes. |  -  -  -  - - | Calorie dense supplement avoid using with meals.Avoid acidic, hard, salty foods.Avoid high fat and overly sweet food. Avoid food with strong odors. Avoid caffeine diet. - |
| **FOOD AND DRUG/ DISEASE INTERACTIONS ORTREATMENT SIDE EFFECTS**Some HIV drugs don’t work well with some food and some have a side effect that you will want to control as much as possible. Antiretroviral therapies use drug to stop the growth of a retrovirus such as HIV.Three type of drugs are used,1.Nonnucleoside reverse transcriptase inhibitor (NNRTIs) these drug blocking the virus reproduction mechnism.These are taken without food or without regard to food. This should be taken on empty stomach, which should not be taken with a high fat meal. 2. Nucleoside reverse transcriptase inhibitor (NRTIs) This drug is chemically different but working in same manner.NNRTIs may contribute independently to alteration in lipid metabolism.3. Protease inhibitor (PI) This class of drug works by stopping the virus from maturing and thus stopping its growth. The patient diet does need to be considered when taking the PI specially when taking alone. Some PI may contribute to alterations in lipid metabolism, including hypertriglyceridemia and hypercholesterolemia.  |
| **References used:**American Dietetic Association Manual.(ADA Manual)Nutrition Care Manual.(NCM) |
| **Sources of further information:** No |