

10141

CALICUT UNIVERSITY
FIFTH SEMESTER B Sc DEGREE EXAMINATION
(CBCSS-UG)

Core Course- Family and Community science

FCS5B06 –DIET IN HEALTH

Time: 2.5 Hours

Maximum Marks: 80

Section A

Answer all questions. Each question carries 2 marks.

1. Name the vitamin that which helps to repair injured cells and mention its sources.
Vitamin C. Perhaps the best-known antioxidant, vitamin C offers a wide-variety of health benefits. These benefits include protecting your body from infection and damage to body cells, helping produce collagen (the connective tissue that holds bones and muscles together) and helping in the absorption of iron
2. Enlist the international organizations that work to ensure nutritional health of individuals.
UNICEF works to prevent all forms of malnutrition by improving children's and women's access to nutritious, safe, affordable and sustainable diets. We support quality nutrition, health, water and sanitation, and social protection services that keep children well nourished.
3. What are the major causes of low birth weight?
Premature birth (before 37 weeks of pregnancy) and fetal growth restriction are the most common causes of low birthweight.
4. List down the causes of adolescent obesity?
 - Diet. Regularly eating high-calorie foods, such as fast foods, baked goods and vending machine snacks, can cause your child to gain weight. ...
 - Lack of exercise.
 - Family factors
 - Psychological factors.
 - Socioeconomic factors.

- Certain medications.

5. What is the total energy intake recommended for a lactating woman?

An additional 330 to 400 kilocalories (kcal) per day is recommended for well-nourished breastfeeding mothers, compared with the amount they were consuming before pregnancy (approximately 2,000 to 2,800 kcal per day for breastfeeding women versus 1,600 to 2,400 kcal per day for moderately active, non-pregnant women who are not breastfeeding).

6. What is lactation failure?

Lactation failure is defined as the need to start top feeds for the baby within 3 months of delivery because of inadequate breast milk supply. What is amino acid? Why are they important during pregnancy?

Amino acids are molecules that combine to form proteins. Amino acids and proteins are the building blocks of life. When proteins are digested or broken down, amino acids are left. The human body uses amino acids to make proteins to help the body: During pregnancy, amino acids represent one of the major nutrients for fetal life; they are important precursors for fetal development and growth, for the biosynthesis of proteins, nucleotides (purine and pyrimidine), neurotransmitters, and so forth.

7. Suggest few ways to improve bio availability of iron in food.

Enhance the absorption of iron from meals by eating foods high in vitamin C, vitamin A or beta-carotene. Eating meat, fish or poultry with other foods can also help.

8. Give few recommendations for healthy food choices for adolescents.

Choose whole grains, like whole-wheat bread, brown rice, oatmeal, and whole-grain cereal. Power up with low fat or lean meats like turkey or chicken, and other protein-rich foods, such as seafood, egg whites, beans, nuts, and tofu. Build strong bones with fat-free or low-fat milk products.

9. List out the ill-effects of anemia on adolescents.

Anemia in the adolescence causes reduced physical and mental capacity and diminished concentration in work and educational performance, and also poses a major threat to future safe motherhood in girls.

10. Why do elder adults need to limit their sodium intake?

Excessive sodium consumption increases the risk of high blood pressure, stroke, congestive heart failure, kidney damage, and heart disease among other chronic health conditions.

11. How do antioxidants help in improving health?

Antioxidants are man-made or natural substances that may prevent or delay some types of cell damage.

12. What are the major factors that needs to be considered while menu planning?

- Available Time to Cook. Take a look at your week and determine how much time you have to cook
- Seasonal Food Availability.
- Variety of Foods.
- Special Occasions.
- Financial Resources.

13. **How are carbohydrates classified on basis of number of sugar units?**

Carbohydrates are divided into four types: monosaccharides, disaccharides, oligosaccharides, and polysaccharides. Monosaccharides consist of a simple sugar; that is, they have the chemical formula $C_6H_{12}O_6$. Disaccharides are two simple sugars.

14. **How can inadequate protein intake affect the quality of breast milk?**

Protein is essential for the production of breast milk, and it passes from the woman to the baby to nourish and support growth. For this reason, breastfeeding women require an additional 25 grams of protein per day. To ensure a steady supply of milk, it is essential to eat plenty of protein-rich foods every day.

(Ceiling marks=25 Marks)

Section B

Short answer questions

Answer all questions in a paragraph. Each question carries 5 marks

15. Elucidate the advantages and disadvantages of artificial feeding.

- Advantages
- Anyone can feed the baby. ...

- It can be done in public. ...
- Keeping a track of your baby's intake is easy. ...
- You don't have to worry if your breast milk supply is low. ...
- You don't have to worry about making changes to your diet. ...
- Bottle feeding helps babies who have lactose intolerance.
 - Disadvantages
- Formula doesn't provide the same protection against infections, diseases, and conditions as breast milk.
- You need to mix and prepare formula to make sure it's the correct temperature.
- Bottles, formula, rubber nipples, and breast pumps can be expensive.
- Formula can cause digestive trouble like constipation and gas.

16. Make a note on the major components of breast milk.

Human Milk Composition. Breast milk is the best food for the newborn. Human milk consists of 87% water, 1% protein, 4% lipid, and 7% carbohydrate (including 1 to 2.4% oligosaccharides) (Figure 1). It also contains many minerals (Calcium, Phosphorus, Magnesium, Potassium, Sodium, etc...) and many vitamins.

17. What is iron deficiency anemia? Explain few symptoms.

Iron deficiency is a common cause of too few healthy red blood cells in the body (anaemia). In a pregnant woman, iron deficiency puts the baby at risk of developmental delays.

- Extreme fatigue.
- Weakness.
- Pale skin.
- Chest pain, fast heartbeat or shortness of breath.
- Headache, dizziness or lightheadedness.
- Cold hands and feet.
- Inflammation or soreness of your tongue.
- Brittle nails.

18. How can binge eating affect the health of an individual?

They may experience bloating, abdominal pain, and nausea. Binge eating overloads a person's system with a flood of calories, sugar, fat, and/or carbs, which results in the body using a large amount of energy to digest the food, which may result in low energy, sleepiness, and sluggishness.

19. What is ICDS? Brief upon the working of ICDS.

Integrated Child Development Services (ICDS) scheme is world's largest community based programme. The scheme is targeted at children upto the age of 6 years, pregnant and lactating mothers and women 16–44 years of age. The scheme is aimed to improve the health, nutrition and education (KAP) of the target community. Integrated Child Development Services (ICDS) is a major national programme that addresses the needs of children under the age of six years. It seeks to provide children with an integrated package of services including supplementary nutrition, healthcare and pre-school education.

20. What are the major factors influencing food preferences in preschoolers?

Parental food habits and feeding strategies are the most dominant determinants of a child's eating behaviour and food choices. Parents should expose their offspring to a range of good food choices while acting as positive role models. Other factors include familiarity, age, peers, teachers and programs designed to influence food habits.

21. Elicit factors that affect nutrition in elderly.

- Appetite. Between 15-30% of older adults experience appetite decline, with higher rates among those in nursing homes.
- Dental health.
- Ability to swallow.
- Depression.
- Disease.
- Taste and smell.

- Nutrient metabolism.
- Ability to shop and cook

22. Explain the principles of sports nutrition.

The three principles are: Fuelling - providing the body with food to enhance stamina, strength and clarity. Hydration - preventing dehydration and fatigue, whilst optimising muscle performance.

(Ceiling marks=35 Marks)

Section C Essay Questions

Answer any two Questions. Each question carries 10 marks.

23. Mention few deficiency disorders associated with adulthood and explain the risk factors involved in them.

Common vitamin deficiencies among aging adults include: Calcium—important for bone density and strength, calcium is found in dark leafy greens and dairy products, as well as calcium-specific supplements. Calcium deficiency can lead to decreased bone density, lowered mobility, and falls.

These include, but are not limited to, Scurvy, Rickets, Beriberi, Hypocalcemia, Osteomalacia, Vitamin K Deficiency, Pellagra, Xerophthalmia, and Iron Deficiency.

24. How has sedentary lifestyle and fast food impacted the health of individuals?

Sedentary lifestyles increase all causes of mortality, double the risk of cardiovascular diseases, diabetes, and obesity, and increase the risks of colon cancer, high blood pressure, osteoporosis, lipid disorders, depression and anxiety. A sedentary lifestyle interacts with overconsumption to produce obesity.

Fast food impacts blood sugar and blood pressure, increases inflammation, and may mean an individual does not eat enough necessary nutrients. In the long term, a diet rich in fast food could lead to issues with digestion, immunity, inflammation, heart health, obesity, and more.

25. Explain the dietary recommendations for a breastfeeding woman.

Include protein foods 2-3 times per day such as meat, poultry, fish, eggs, dairy, beans, nuts and seeds. Eat three servings of vegetables, including dark green and yellow vegetables per day. Eat two servings of fruit per day. Include whole grains such as whole wheat breads, pasta, cereal and oatmeal in your daily diet.

26. Brief on scope of geriatric nutrition in India.

Various studies have revealed that over half of India's senior-citizens (60+ years old) are victims of malnutrition and 9 out of 10 receive less than the recommended nutritional intake. The elderly need an enhanced intake of calcium and vitamin D to maintain their bone health. A geriatric nutritionist specializes in nutrition for the elderly while working as a registered dietitian. They work with older adults and understand how to customize nutrition plans and interventions in order to meet the needs of aging adults and seniors.

(Ceiling marks=20 Marks)