

Questions and Answers: For Examination

Short Notes:

1. Probiotics: Definition and Benefits.

Probiotics are live microorganisms that provide health benefits when consumed in adequate amounts. They mainly consist of bacteria and yeast that promote gut health by balancing the microbiota. Common benefits include improved digestion, stronger immune function, and reduced symptoms of gastrointestinal disorders like irritable bowel syndrome (IBS). Probiotics also support mental health through the gut-brain connection.

2. Applications of Probiotics in Medicine and Health.

Probiotics have numerous applications in the treatment of digestive disorders like diarrhea, constipation, and inflammatory bowel diseases (IBD). They are used in managing antibiotic-associated diarrhea and in reducing the risk of infections in vulnerable populations. Probiotics are also being researched for their potential to support metabolic health, enhance skin conditions, and alleviate symptoms of anxiety and depression.

One-Line Questions and Answers:

Q1. What are probiotics?

Ans.- Probiotics are live microorganisms that offer health benefits when consumed in sufficient quantities.

Q2. How do probiotics benefit gut health?

Ans.- They restore the balance of good bacteria in the gut, improving digestion and reducing inflammation.

Q3. What is a common source of probiotics?

Ans.- Yogurt, kefir, and fermented foods like kimchi and sauerkraut are common sources.

Q4. Can probiotics help with antibiotic-associated diarrhea?

Ans.- Yes, probiotics can help restore gut balance and reduce the risk of diarrhea caused by antibiotics.

Q5. What is the role of probiotics in mental health?

Ans.- Probiotics may influence the gut-brain axis, potentially reducing symptoms of anxiety and depression.

Q6: What are probiotics?

Ans.- Probiotics are live microorganisms that provide health benefits when consumed in adequate amounts.

Q7: How do probiotics benefit gut health?

Ans.- Probiotics balance the gut microbiota, improving digestion and supporting the immune system.

Q8: Can probiotics help with diarrhea?

Ans.- Yes, certain probiotics can help reduce the duration and severity of diarrhea, especially antibiotic-associated diarrhea.

Q9: Are probiotics useful for irritable bowel syndrome (IBS)?

Ans.- Yes, some probiotics may alleviate IBS symptoms like bloating, gas, and abdominal discomfort.

Q10: Do probiotics support immune function?

Ans.- Yes, probiotics enhance the immune system by promoting the production of protective antibodies and stimulating immune cells.

Q11: Can probiotics prevent urinary tract infections (UTIs)?

Ans.- Probiotics may help prevent UTIs by maintaining a healthy balance of bacteria in the urinary tract.

Q12: Are there any risks associated with probiotics?

Ans.- For most people, probiotics are safe, but those with weakened immune systems should consult a doctor before use.

Q13: Can probiotics help with mental health?

Ans.- Some research suggests that probiotics may improve mood and reduce symptoms of anxiety and depression by influencing the gut-brain axis.

Q14: Can probiotics be taken with antibiotics?

Ans.- Yes, taking probiotics with antibiotics can help maintain gut flora balance and reduce the risk of antibiotic-associated diarrhea.

Q15: Are all probiotics the same?

Ans.- No, different strains of probiotics offer unique health benefits, so choosing the right strain for specific health issues is important.

Q16: What is the most common probiotic species used in dairy products?

Ans.- *Lactobacillus acidophilus* is the most common probiotic species used in dairy products like yogurt.

Q17: How does *Bifidobacterium bifidum* benefit gut health?

Ans.- *Bifidobacterium bifidum* helps in maintaining a healthy balance of gut bacteria and improving digestion.

Q18: Which probiotic species is commonly used to reduce symptoms of irritable bowel syndrome (IBS)?

Ans.- *Lactobacillus plantarum* is often used to reduce symptoms of irritable bowel syndrome (IBS).

Q19: What is the role of *Saccharomyces boulardii* in treating diarrhea?

Ans.- *Saccharomyces boulardii* is effective in treating both antibiotic-associated and traveler's diarrhea by restoring gut flora.

Q20: Can *Lactobacillus rhamnosus* be beneficial for women's health?

Ans.- Yes, *Lactobacillus rhamnosus* is often used to promote vaginal health and prevent urinary tract infections.