## **Prebiotics and Probiotics:**

- a. Prebiotics: Prebiotics are non-digestible food ingredients that promote the growth and activity of beneficial microorganisms in the gut. These microbes transferred from mother to baby during natural childbirth via the vaginal canal, contribute significantly to the development of the infant's immune system. Consequently, babies born through vaginal delivery generally exhibit stronger immune responses compared to those delivered via Caesarean section. Beneficial gut microbes produce various enzymes that function as catalysts, facilitating the release of essential nutrients from the food we consume. In biological terms, cells form tissues, tissues form organs, and the human body comprises over 80 organs, each with specific roles and responsibilities. If an organ fails to function properly due to undernourishment, it can have a cascading effect on the health and functionality of other organs. Many diseases remain incurable because medical science often struggles to pinpoint the malfunctioning organ, identify the deficient hormones, or determine the specific nutritional deficiencies. Therefore, it is crucial to nourish the beneficial gut microbes to maintain overall health. Some of the most effective prebiotic foods include garlic, ginger, and soaked fenugreek seeds (methi).
- **b. Probiotics:** Probiotics involve the intake of live beneficial microbes to enhance the gut microbiota. This can be achieved by consuming foods such as curd (yogurt), pickles, fermented rice, and cheese. These probiotic foods help maintain a healthy balance of gut microbiota, which is essential for digestion, nutrient absorption, and overall health.