

Lecture 2



Inorganic Mineral Supplement

- ✚ Calcium
- ✚ Magnesium
- ✚ Manganese
- ✚ Boron
- ✚ Copper
- ✚ Zinc
- ✚ Phosphorus



- Cobalt: Component of vit. B 12 and B 12 coenzymes.
- Copper: Hb and collagen production, function of **heart, energy production, absorption of iron.**
- Iodine: Proper function of **thyroid gland.**
- Chromium: With insulin it helps in **conversion of carbohydrate and fat into energy, treatment of diabetes.**
- Selenium: **Antioxidant**, functioning of heart muscle
- Zinc: Essential for **cell reproduction, wound healing**

VITAMINS

Fat Soluble Vitamins



- ❑ **Vitamin A:** Acts as **antioxidant**, essential for **growth and development**, maintains healthy vision, skin and mucous membranes, may aid in the prevention and treatment of certain cancers and in the treatment of certain skin disorders.
- ❑ **Vitamin D:** Essential for **formation of bones and teeth**, helps the **body to absorb and use calcium**.
- ❑ **Vitamin E:** Antioxidant, helps to **form blood cells**, boost immune system.
- ❑ **Vitamin K:** Essential for **blood clotting**

Water soluble vitamins



Vitamin C: Antioxidant, necessary for **healthy bones, gums, teeth and skin**. Helps in **wound healing**, prevent from **common cold**.

Vitamin B1 (Thiamine): Helps in **carbohydrate metabolism**, essential for **neurological function**.

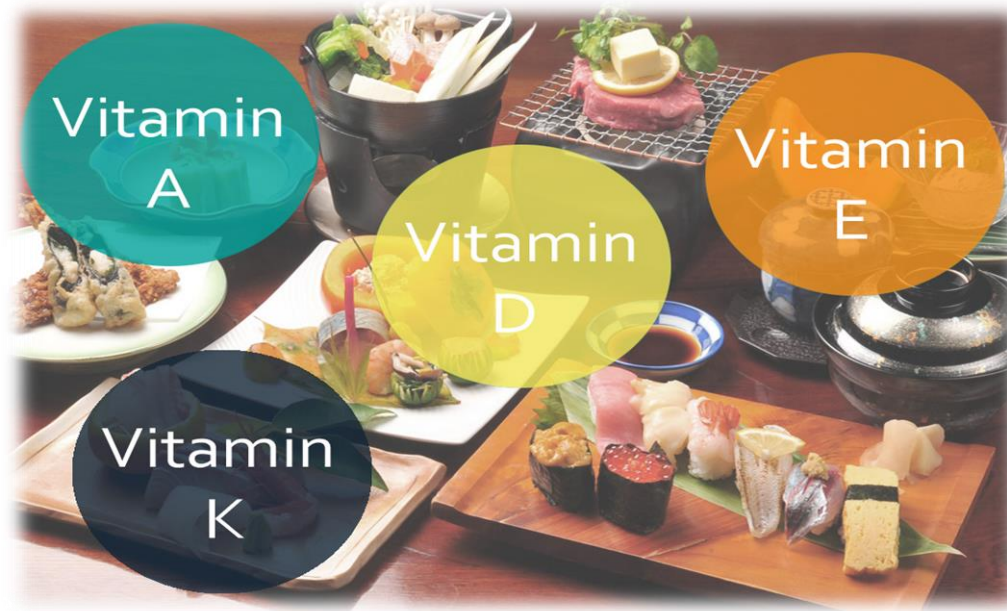
Vitamin B2 (Riboflavin): Energy metabolism, maintain **healthy eye, skin** and **nerve function**.

Vitamin B3 (Niacin): **Energy metabolism, brain function**.

Vitamin B6 (Pyridoxine): Helps to produce **essential proteins**, convert **proteins to energy**

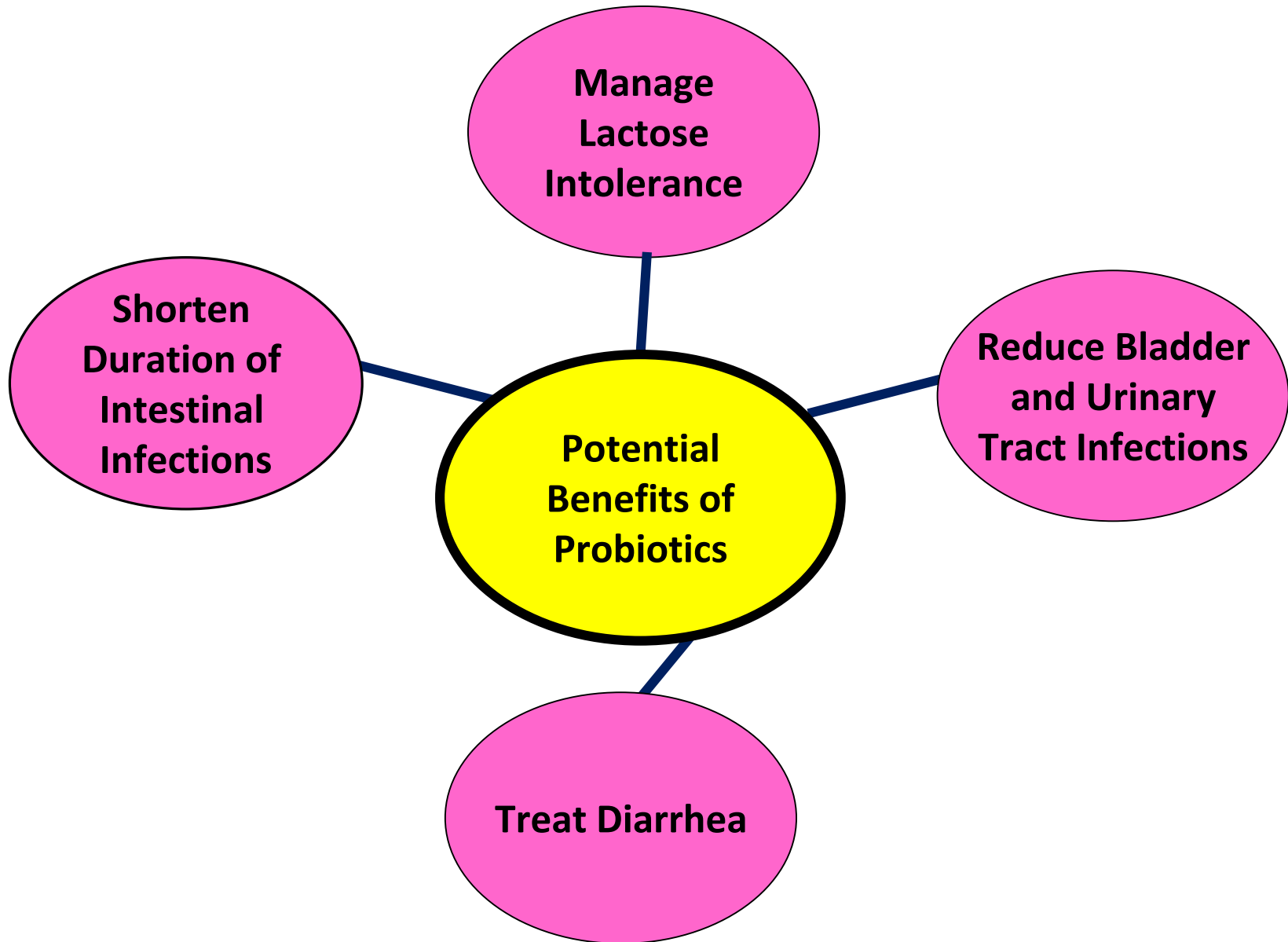
Vitamin B12 (Cobalamins): Help in **producing genetic material, formation of RBC, maintenance of CNS, synthesis of amino acids, involved in metabolism of protein, fat and carbohydrate**.

- **Folic acid:** Helps in RBC formation, formation of **genetic material** of cell, very much **essential during pregnancy**.
- **Pantothenic acid:** Aids in **synthesis of cholesterol, steroids, and fatty acids**, crucial for intra neuronal synthesis of acetylcholine.



Probitics

- + **Live microorganisms** which, when administered in adequate amounts, confer a **health benefit on the host**
- + Species of *Lactobacillus*
- + *Bifidobacterium*
- + yeast *Saccharomyces cerevisiae*



Prebiotics

Nondigestible substances that provide a beneficial physiological effect for the host by selectively **stimulating the favorable growth** of a limited number of indigenous bacteria.

Commonly known prebiotics are:

- + **Oligofructose**
- + **Galacto-oligosaccharides**
- + **Lactulose**



HERBS

- ✚ **Aloe vera:** Anti-inflammatory, emollient, wound healing,
- ✚ **Garlic:** Antibacterial, antifungal, antithrombotic, antiinflan
- ✚ **Ginger:** carminative (relieving flatulence), antiemetic (preventing vomiting), treatment of dizziness.



+ **Green tea:** Antioxidant, reduces risk of CVD, enhances humoral and cell mediated Immunity.

+ **Vegetables, fruits, whole grain, herbs, nuts** and various **seeds** contain an **abundance of phenolic compounds, terpenoids, sulphur compounds, pigments etc.** that has been associated with **protection / treatment of certain disease conditions.**

Thank you

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