

## CONCEPT OF PREBIOTIC AND PROBIOTIC IN AYURVEDA

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### **ABSTRACT:**

Probiotics are live microbes that can be formulated into many different types of product, including foods, drugs, and dietary supplements. Probiotics are live beneficial bacteria that naturally created by the process of fermentation in foods like Dadhi, takra etc. Prebiotics are dietary substances that nurture a selected group of microorganisms living in the gut. They favour the growth of beneficial bacteria over that of harmful ones. Prebiotic fibre is a non-digestive part of food like banana, asparagus, onions, garlic, chicory root, skin of apples, beans etc. Ayurveda have many herbs, fibre and therapeutic preparations termed as asava-arishtas (fermentation preparation) that are fermented products as well as a few pathya kalpas (diet preparations) that are fermented products. In this paper list of them which probably have the effect of probiotics and prebiotics.

**KEY WORDS:** Probiotics, Prebiotics, Pathya, Ayurveda

### **Introduction**

Probiotics are live microorganisms (usually bacteria) that are similar to beneficial microorganisms found in the human gut that are taken as dietary supplements or found in foods. Most probiotics are bacteria similar to those naturally found in the intestine<sup>1</sup>. Common examples are lactobacillus and Bifidobacterium . They may occur naturally in yogurts and certain fermented foods. Probiotics have been

used as treatment for

various gastrointestinal conditions including irritable bowel syndrome.

Prebiotics are typically non digestible fiber compounds that pass undigested through the upper part of the gastrointestinal tract and stimulate the growth or activity of advantageous bacteria that colonize the large bowel by acting as substrate for them.

Ayurveda have many herbs, fibre and therapeutic preparations termed as

asava- arishtas (fermentation preparation) that are fermented products as well as a few pathya kalpanas (diet preparations) that are fermented products. In this paper list of them which probably have the effect of probiotics and prebiotics.

### Material and Method

In our daily food item and in ayurvedic preparation there are many prebiotic and probiotics. So in these paper there are collection of dravyas and kalpanas which are really prebiotic and probiotics.

### Result

List of herbs which are prebiotic and probiotics<sup>3</sup>.

Amalaki, (*Emblica officinalis*),  
Haritaki, (*Terminalia chebula*)  
Pippali (*Piper longum*),  
Maricha (*Piper nigrum*)  
Yavani (*Trachyspermum ammi*)  
Dadima (*Punica granatum*)  
Satavari (*Asparagus racemosus*),  
Yashtimadhu (*Glycyrrhiza glabra*),  
Musta (*Cyperus rotundus*),  
Pippalimoola, Sunthi (*Zingiber officinale*),  
Chitraka (*Plumbago zeylanica*)

### List of Prebiotic fiber

Banana  
Onions,  
Garlic,  
Chicory root,  
Skin of apples,

Beans

List of Pathya kalpana

Dadhi

Takra kalpana

Dadhi kurchika

Takra kurchika

Satakra saka khada

Kambalika

List of Sandhana kalpana (fermentation preparation)

Two types

1. Madhya kalpana (alcoholic preparation) and

2 Shukta kalpana (acidic preparation).

Madya sandhana kalpana (alcoholic preparation) are classified as sura, sidhu, varuni and asava- arishta.

Shukta is a preparation made by fermenting tubers, roots, fruits, etc. with oil and salt in liquid.

Tushodaka

Souviraka

Kanjika

Sandaki

Maireya

Chukra

### Discussion

In our ayurvedic classics many dravyas and kalpanas contain prebiotic and probiotic property. Ancient seers of Ayurveda attributed various functions to Jatharagni and its moieties (digestive and metabolic regulators) and clearly defined that Jatharagni imparts immunity, good health and

longevity. Disturbances of agni engenders several diseases in general and gastrointestinal diseases in particular. Caraka emphasizes the role of buttermilk a probiotic in the treatment of inflammatory bowel diseases<sup>5</sup>. These studies are novel in highlighting the significant prebiotic potential of medicinal herbs and suggest that the health benefits of these herbs are due, at least in part, to their ability to modulate the gut microbiota in a manner predicted to improve colonic epithelium function, reduce inflammation, and protect from opportunistic infection. The fermented preparations explained under pathya kalpana can be said to have the benefit of enriching the health with good bacteria.

### Conclusion

In our science acharyas already explained about pre and probiotics.so

use of above substances in daily life help us for healthy and nutritive life. And it need more research with scientific reason.

### Reference

1. National Health Service. 27 November 2018.
2. Hutkins RW; Krumbeck JA; Bindels LB; Cani PD; Fahey G Jr.; Goh YJ; Hamaker B; Martens EC; Mills DA; Rastal RA; Vaughan E; Sanders ME (2016).
3. <https://www.longdom.org/proceedings/role-of-herbal-prebiotics-and-probiotics-in-intestinal-health-43820.html>
4. <https://www.healthline.com/nutrition/19-best-prebiotic-foods>
5. Pt. Kashinath shashtri, Dr Gorakhanatha chaturvedi;Caraka Samhita; Chaukhambha bharti academy; part 2; chikitsasthana chapter 15.

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