

For the use only of a Registered Medical Practitioner or a Hospital or a Laboratory

Colonise Forte

(Pre and Probiotic capsule – DS)

Composition:

Each capsule contains:

Streptococcus faecalis T-110 JPC 60 Million

Clostridium butyricum TO-A 4 Million

Bacillus mesentericus TO-A JPC 2 Million

Lactic acid bacillus 100 Million (Lactobacillus sporogenes)

Approved colors used in capsule shell.

Supplement Facts:

Serving Size: 1 Capsule

Each capsule contains	
Streptococcus faecalis T-110 JPC	60 million
Clostridium butyricum TO-A	4 million
Bacillus mesentericus TO-A	2 million
Lactic acid bacillus (Lactobacillus sporogenes)	100 million
Excipients	q.s

Colonise Forte contains a pre & probiotic combination which restores the gastrointestinal microflora, thus minimizes gastrointestinal infection, regulates bowel movements and supports gastrointestinal health.

About Pre and Probiotics

Poor eating habits, illness and some medications deplete the body's probiotics, which are necessary for maintaining a healthy digestive tract and promoting a healthy immune system. Probiotics are good microorganisms that offer many beneficial effects to the humans. Probiotic facilitates the digestion of food materials including milk products, strengthen the immune function and also improves the nutritional status by producing Vitamin B complex and K. Prebiotics are the natural food source for the probiotics (beneficial bacteria) present in the intestine. Prebiotics enable the probiotics to proliferate exponentially.

Uniqueness of Colonise Forte

Colonise Forte is a pre & probiotic supplement made with a combination of unique prebiotics Streptococcus faecalis T-110, Clostridium butyricum TO-A, Bacillus mesentericus TO-A and a probiotic Lactic acid bacillus (Lactobacillus sporogenes). Colonise Forte is designed to replenish gastrointestinal microflora and decreasing the duration of infection and discomfort contributing to good Gastrointestinal health. Also the probiotic strengthens the immune function and also improves the nutritional status by producing Vitamin B complex and K.

The uniqueness of Colonise Forte as compared to other Probiotics can be summarised as follows

- Resistant to gastric acidity and bile salts
- Survives transit through the gastrointestinal tract
- Resistant to antibiotics
- Proliferates the beneficial bacteria
- Significantly inhibits enteric pathogens
- Normalizes the altered microflora
- Has anti-inflammatory properties
- Regulates bowel movements
- Aids in digestion

Benefits of taking Colonise Forte

- Replenishes the disturbed gut microflora
- Protects against enteric pathogens
- Regulates bowel movements
- Decreases the duration and severity of infection
- Aids in digestion

Three live bacteria that act as prebiotic and probiotic agents.

- a. *Streptococcus faecalis* T-110 (lactic acid bacteria)
- b. *Clostridium butyricum* TO-A (butyric acid bacteria)
- c. *Bacillus mesentericus* TO-A (amylolytic bacteria)

Streptococcus faecalis T-110 are live gram-positive, aerobic, non-spore forming cocci. They proliferate actively through the symbiotic action with *B. mesentericus* TOA and *C. butyricum* TO-A to yield lactic acid with inhibition of growth of harmful bacteria. This lactic acid bacteria is found in the region from the upper to lower part of small intestine.

Clostridium butyricum TO-A are live gram-positive, anaerobic, spore forming bacilli. They proliferate actively through the symbiotic action with *Streptococcus faecalis* T-110 to yield short chain fatty acids such as butyric acid and acetic acid with a resultant decrease in intestinal pH and inhibition of growth of harmful bacteria. The short chain fatty acids, in addition, help to regularize abnormal bowel movements. The short chain fatty acids also help in adjustment of water and electrolyte concentration of the intestinal tract. They also serve as source of nutrient for intestinal mucosal cells. It is found predominantly in the region from the upper small intestine to the colon.

Bacillus mesentericus TO-A are live gram-positive, aerobic, spore forming bacilli. They proliferate actively through the symbiotic action with *Streptococcus faecalis* T-110. It is a spore forming bacteria and produces an amylolytic enzyme (amylase) and protease to activate proliferation of *Streptococcus* TO-A. It is also responsible for production of a nutrient which helps in increasing the count of bifidobacteria. It is found predominantly in the small intestine.

Important properties of the three live bacteria

The three bacteria proliferate actively throughout the intestinal tract through symbiosis, which is defined as the biological association of two or more species to their mutual benefit.

The three activated bacteria strongly inhibit the growth of potentially pathogenic bacteria in the gastrointestinal tract (probiotic effect). *In vitro* studies using bacterial cultures have shown that when the three live bacteria are grown together with potentially pathogenic bacteria like enterotoxigenic *Escherichia coli*, *Clostridium perfringens*, *Salmonella Typhi*, *Vibrio parahaemolyticus*, *Campylobacter*, *Yersinia enterocolitica*, the three live bacteria significantly inhibited the growth of the above mentioned potentially pathogenic organisms.

The three bacteria facilitate the proliferation of bifidobacterium, thereby increasing their count significantly in the intestine. To a lesser extent they also facilitate proliferation of lactobacilli in the intestine (prebiotic effect). The growth acceleration of bifidobacteria in the intestine by the three live bacteria is through the production of a growth factor by the bacteria *Bacillus mesentericus* TO-A.

The three bacteria normalize the intestinal flora, prevent colonization of the gastrointestinal tract by potentially pathogenic organisms and help regulate abnormal bowel movements.

Intestinal flora is normalized through its prebiotic action that helps in the proliferation of bifidobacteria and lactobacillus.

Prevention of colonization of the gastrointestinal tract by potentially pathogenic organisms is by lowering of intestinal pH by production of lactic acid (by *Streptococcus faecalis* T-110), butyric acid and acetic acid (by *Clostridium butyricum* TO-A).

Regulation of abnormal bowel movements is done by the action of short chain fatty acids such as butyric acid and acetic acid, produced by *Clostridium butyricum* TO-A, on the bowel wall.

Additionally, acetic acid and butyric acid, produced by *Clostridium butyricum*, help in adjustment of water and electrolyte concentration of the intestinal fluid and also serve as a source of nutrient for the intestinal mucosal cells.

The three live bacteria have been shown to be resistant to the action of gastric juice and intestinal juice including bile. They can therefore pass unaffected through the upper GI tract (stomach and duodenum) and colonize in the lower GI tract (upper and small intestine and colon), when taken orally.

It has been shown that these live bacteria help in normalizing the intestinal flora by promoting the growth of beneficial bacteria and preventing the growth of harmful bacteria. In cases of intestinal infection with pathogenic bacteria, intake of these three live bacteria can lower the counts of the pathogenic bacteria, while simultaneously increasing the count of beneficial bacteria. This is shown by a reversal of ratio of predominant aerobic:anaerobic bacteria to a predominant anaerobic : aerobic bacterial ratio. Here the aerobic bacteria signify the potentially pathogenic organisms whereas; the anaerobic bacteria signify the beneficial resident bacteria in the intestine. The increased count of bifidobacteria, generated in the intestine through the action of the three live bacteria, produces Glutamine from NH_4^+ and glutamic acid in the intestine.

Glutamine is the fuel for the intestinal cells and helps in maintaining the integrity of the intestinal mucosal barrier. In this manner, the colonization by potentially pathogenic microorganisms in the intestine is inhibited.

Mechanism of Action

Streptococcus faecalis, Clostridium butyricum and Bacillus mesentericus are a probiotic. Probiotics are defined as live microorganisms, including Lactobacillus species, Bifidobacterium species and yeasts that may beneficially affect the host upon ingestion by improving the balance of the intestinal microflora.

Pharmacokinetics

The effectiveness of probiotics is related to their ability to survive in the acidic stomach environment and the alkaline conditions in the duodenum, as well as their ability to adhere to the intestinal mucosa of the colon and to colonize the colon. After passage through the stomach and the small intestine, those probiotics that do survive become established transiently in the colon.

Indication

For restoration of intestinal microflora

Recommended Usage:

One Capsule twice or thrice a day for optimum gastrointestinal health.

Directions for Use:

Capsule to be taken with a glass of water after food

Contra-indications

Hypersensitivity to the drug

Pregnancy Related Information

Use with caution

Breast Feeding Related Information

Use with caution

Side Effects

1. Flatulence
2. Constipation

Expiry date

Do not use later than the date of expiry

Storage

Store below 25°C, Protected from light & moisture

Presentation

Available in strip pack of 10 Capsules

MARKETED BY:



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