Patient One P3-HCL Digest helps to promote a favorable environment for digestive comfort and efficiency with restorative hydrochloric acid combined with enzymatic support nutrients. P3-HCL Digest is formulated around a core of betaine hydrochloride, which helps to optimize the stomach’s hydrochloric acid to ideal levels for complete digestion of food. Papaya-derived papain is included to supply enzymatic support for the metabolism of proteins, while bromelain and pepsin promote digestion of proteins, carbohydrates and fats. Patient One P3-HCL Digest optimizes the metabolism of all foods, helping to enhance nutrient absorption and promote overall digestive health and wellness.

**PATIENT BENEFITS**

- Promotes favorable digestive environment
- Optimizes digestive ease and efficiency
- Encourages metabolism of dietary proteins
- Supports optimal absorption of nutrients

**UNIQUE PROPERTIES**

Betaine HCL:
Hydrochloric acid (HCL), an important gastric secretion, enables the body to break down proteins, activate important enzymes and protect against bacterial overgrowth in the gut. Achlorhydria (the complete absence of stomach acid) and hypochlorhydria (low stomach acid) are common but often overlooked digestive problems. Symptoms of low stomach acid include heartburn, indigestion and bloating, among others. Numerous studies have shown that hydrochloric acid secretion declines with advancing age. Supplementation with HCL is a natural way to combat the negative effects associated with little to no stomach acid.

Betaine HCL is a digestive aid comprised of beet-derived betaine bound to hydrochloric acid. Betaine HCL lowers stomach pH, creating a favorable environment for digestive enzymes to begin food metabolism and promote ideal nutrient absorption. HCL also aids in the absorption and assimilation of vitamins and minerals such as folic acid, ascorbic acid, beta-carotene and iron by increasing their bioavailability and effecting their release from food.

**Papain:**
Papain, an enzyme found in green papaya, has been used in traditional medicine for thousands of years. It has the ability to break down larger proteins into smaller proteins or peptides, or even into the smallest amino-acid subunit by cleaving bonds in the protein chain in a broad pH range.
range. Papain is also responsible for the breakdown of toxic elements in food, which gives it a marked ability to enhance the total digestive process and increase the nutrient absorption of protein-based foods. Papain has been known to help ease symptoms often experienced by those suffering from digestive disorders and is a beneficial addition to any diet.

**Bromelain:**
Bromelain, a proteolytic enzyme found in pineapple, has been researched since the late 1800s and has been found to be very effective in digesting proteins, especially those found in tough meats. Bromelain has the unique ability to assist the body’s own digestive mechanisms in reducing very large, complex protein molecules into smaller peptide units or individual amino acids. These smaller components are crucial for the body’s production of muscle, neurotransmitters, and other protein-based molecules that the body produces. Bromelain has been associated with a reduction in bloating, gas, indigestion and other unfavorable symptoms often associated with poor digestion.

**Pepsin:**
Pepsin is the chief digestive enzyme that is naturally produced by the body. Its zymogen, pepsinogen, is released by peptic cells in the stomach which reduce proteins into peptides. Pepsin is one of three protein-degrading, or proteolytic enzymes, in the digestive system belonging to the aspartate protease family. During the process of digestion, pepsin works with chymotrypsin and trypsin to sever links between specific types of amino acids to break down dietary proteins into their components, peptides and amino acids, which can then be absorbed by the intestinal lining.

**RESEARCH**
Numerous studies have shown that hydrochloric acid secretion declines with age. One study performed by US researchers found that over 30% of men and women over the age of 60 suffer from atrophic gastritis, a condition marked by little or no acid secretion.6 In another study involving 3,484 subjects, researchers found that among both males and females, 27% suffered from achlorhydria, with the greatest incidence (39.8%) occurring in females aged 80 to 89 years.7 Japanese researchers have also measured a similar age-related drop in gastric acidity in elderly Japanese subjects. In 1984 researchers found that 60% of Japanese men and women over age 50 suffered from achlorhydria. New research based on data collected from 1989 to 1999 continued to substantiate a substantial age-related decrease in stomach acid production, though the total percentage of achlorhydric subjects dropped from 60% to 40%.8

**REFERENCES**