To study growth velocity and disease activity in children with Crohn’s disease receiving intermittent feedings of a peptide diet.

To determine the incidence of glutathione (GSH) depletion in ICU patients if a diet high in cysteine can replete GSH.

To evaluate incidence of chyle leaks after change in surgical technique: length of stay in patients with chyle leaks nutrition effect on recovery time.

To determine if Peptamen would minimally stimulate the pancreas and decrease pain associated with chronic pancreatitis.

To determine if Peptamen minimally stimulated the pancreas and cholecystokinin release, as compared to a 30 gm fat oral diet (hamburger) and/or Ensure®

To compare tolerance and outcomes in patients with acute pancreatitis receiving Peptamen versus an intact casein-based diet.

To determine if Peptamen resulted in a significant improvement in height/weight velocity (p<0.001/p<0.02) and reduced disease activity (P<0.01), allowing a reduction in prednisone intake.

43% of the patients had depleted GSH levels. GSH levels increased on Peptamen, but did not increase on the casein-based diet. The patients on Peptamen received a cysteine-rich protein source that provided seven times more cysteine than the casein diet.

Patients with HIV tolerated Peptamen well. Significant decrease in number of stools (p<0.01) was seen during the Peptamen phase of the study, in addition to a significant decrease in fecal fat content of stool (p<0.019).

Adult ICU patients under physiologic stress

Adult HIV

Adults with chronic pancreatitis and healthy adults

Adults with acute pancreatitis

Upper GI cancer surgery

Adults with active Crohn’s disease

Adults with active Crohn’s disease

Interruption feedings with Peptamen resulted in a significant improvement in height/weight velocity (p<0.001/p<0.02) and reduced disease activity (P<0.01), allowing a reduction in prednisone intake.
Here is just some of the evidence in support of PEPTAMEN® formulas

### Authors and Journal

**Study Objective**
- To investigate the feeding effects on glutathione and inflammatory markers when using an early enteral formula containing whey protein in comparison to an early enteral formula containing casein as the protein source.

**Formulas Studied**
- Peptamen 1.5
- Peptamen 1.5 vs. standard formula and a protein modular

**Patient Conditions**
- Adults admitted to the ICU due to ischemic stroke

**Results**
- Individuals who received Peptamen achieved more clinical benefits than those who received intact casein. Peptamen was associated with a decrease in IL-6 (p=0.04) and an increase in glutathione peroxidase (p=0.03) in elderly patients admitted to the ICU secondary to ischemic stroke.

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### Authors and Journal
**Bandini M et al. Minerva Anestesiologica. 2011;77, suppl 2.**

**Study Objective**
- To compare the effects of early EN 7 days per week with pharmacotherapy vs. a standard localor, isonitrogenous formula on blood visceral proteins and plasma and clinical expression of inflammatory and immune parameters.

**Formulas Studied**
- Peptamen AF vs. standard formula and a protein modular

**Patient Conditions**
- Critically ill with subachrondial hemorrhage

**Results**
- Compared to control group, Peptamen AF group had more SIRS-free days (p=0.01), decrease in SOFA score (p<0.01), reduced IL-6 levels (p<0.05), reduced CRP levels (p=0.05), more marked increase in pre-albumin. In addition, enhanced Peptamen AF tolerance resulted in improved calorie delivery as compared to the control group.

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### Authors and Journal

**Study Objective**
- To compare tolerance and length of stay (LOS) in patients on Peptamen vs. a free amino acid diet.

**Formulas Studied**
- Peptamen vs. free amino acid diet

**Patient Conditions**
- Adult surgical (post-operative) patients

**Results**
- The Peptamen group had significantly fewer stools than the free amino acid group (p=0.02). Both groups had equal tube-feeding intake. The LOS was 45 days in the Peptamen group (23 +/- 8 days in the ICU) vs. 54 days in the free amino acid diet group (28 +/- 9 days in the ICU). NS improved N2 balance was seen in the Peptamen group (p<0.001).

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### Authors and Journal
**Donald P et al. Nutrition Research. 1994;15:3-13.**

**Study Objective**
- To compare the ability of peptide-based vs. free amino acid-based enteral products in improving nutritional status and feeding tolerance in surgical patients.

**Formulas Studied**
- Peptamen vs. free amino acid diet

**Patient Conditions**
- Adult surgical (post-operative) patients

**Results**
- Statistically significant improvements occurred in serum prealbumin (p=0.04) and cholesterol (p=0.02) in the Peptamen group; declines occurred in the free amino acid group. There was no significant increase in serum transferrin levels in the Peptamen group.

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### Authors and Journal

**Study Objective**
- To compare the effects of Peptamen vs. an intact casein-based feeding in pediatric burn patients.

**Formulas Studied**
- Peptamen vs. standard formula

**Patient Conditions**
- Pediatric patients with burns exceeding 20% TBSA

**Results**
- Peptamen is better tolerated than the casein-based feeding in pediatric burn patients. Peptamen promoted more rapid progression to goal feeding and a decrease in incidence of diarrhea (p=0.03).

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### Authors and Journal
**Fried MD et al. Journal of Pediatrics. 1992;120:569-72.**

**Study Objective**
- To determine gastric emptying times and incidence of refeeding syndrome in children with documented delayed gastric emptying.

**Formulas Studied**
- 1 casein-predominant vs. 3 whey-predominant (including Peptamen)

**Patient Conditions**
- Pediatric patients with documented delayed gastric emptying

**Results**
- Patients on whey-based formulas had a significant reduction (p=0.00) in vomiting (2.5±2.0) compared with those on the casein-based formula (12±11). Whey-based formulas in Peptamen reduce the frequency of vomiting by improving the rate of gastric emptying (p<0.001).

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### Authors and Journal
**Herzog D et al. Gastroenterology. 1997;112:A395.**

**Study Objective**
- To assess growth velocity and relapse frequency in children with quiescent Crohn’s disease and growth failure.

**Formulas Studied**
- Peptamen vs. high calorie diet

**Patient Conditions**
- Pediatric patients with Crohn’s disease and growth failure

**Results**
- Peptamen fed exclusively for 28 days every 4 months for children with Crohn’s disease significantly reduced relapse frequency (p=0.03) and permitted normalization of growth velocity (p=0.005) and bone density (p=0.001) in quiescent pediatric Crohn’s disease with severe growth failure.

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### Authors and Journal

**Study Objective**
- To determine the effect of the enhanced protein energy provision via the enteral route on inflammatory markers, combined with a nursing educational intervention on nutritional status, as compared to usual care.

**Formulas Studied**
- Peptamen 1.5

**Patient Conditions**
- Mechanical Ventilation

**Results**
- In ICU’s with low baseline nutritional adequacy, the PEPU protocol results in a statistically significant increase in protein (p=0.005) and calorie provision (p=0.004) in critically ill. With greater attention to the implementation of this novel feeding protocol, ileogastro underfeeding, which is so prevalent in ICUs around the world, can be significantly reduced.

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### Authors and Journal
**Hussey TA et al. Journal of Pediatric Gastroenterology and Nutrition. 2003;37:341.**

**Study Objective**
- To observe tolerance and efficacy of a six-week tube feeding regimen of Peptamen with Prebio.

**Formulas Studied**
- Peptamen with Prebio

**Patient Conditions**
- Pediatric patients with Crohn’s disease

**Results**
- To evaluate the tolerance of a peptide-based formula with insoluble and prebiotic fiber in children with compromised gut function.

**Study Objective**
- To determine if a hypocaloric, hypotonic whey-based hydrolyzed formula empties the stomach as efficiently as an iso-osmolar formula of lower energy density.

**Formulas Studied**
- Peptamen 1.5 vs. Peptamen

**Patient Conditions**
- Pediatric gastrostomy-dependent children with volume intolerance

**Results**
- To determine whether EN can protect ICU pts on MV from mucosal injury and GI bleeding.

**Formulas Studied**
- Peptamen 1.5 vs. Critical Care

**Patient Conditions**
- Provision of EN incurred no deleterious effects. Despite slightly higher risk (older age and greater endoscopically evident score, patients receiving EN showed evidence of less GIB than controls on no stress pylargraphy. This protective effect appeared unrelated to control of pH or meeting caloric requirements.

**Formulas Studied**
- Peptamen vs. parenteral nutrition

**Patient Conditions**
- Critical Ill with Obesity

**Results**
- Peptamen fed jejunally was as effective as TPN in the nutritional management of patients with pancreatitis. Peptamen patients had significantly greater improvement in Ranson criteria (p=0.002) score and a non-significant trend toward improvement in LOS. ICU stay, days to PO diet, and days to normal amylase. Nutrition support with Peptamen is significantly less costly than PN (p=0.005).

**Formulas Studied**
- Peptamen Intense VHP

**Patient Conditions**
- Critical Ill with Obesity

**Results**
- Patients experienced weight gain and maintained albumin during the change to the fiber containing formula. Three months of oral or enteral intake of Peptamen with Prebio may induce weight gain in patients with intestinal failure undergoing intestinal rehabilitation.

**Formulas Studied**
- Peptamen with Prebio

**Patient Conditions**
- Adult patients with intestinal failure undergoing intestinal rehabilitation

**Results**
- To describe the outcome from switching from a polymeric or semi-elemental formula to Peptamen with Prebio.

**Formulas Studied**
- Peptamen with Prebio

**Patient Conditions**
- Adult patients with intestinal failure undergoing intestinal rehabilitation

**Results**
- All patients showed an improvement in all indices of Crohn’s disease activity. The patients’ response to Peptamen and to steroids was equivalent. Peptamen can be efficacious in the nutrition support of active Crohn’s disease.