Evidence to Date Contributing to Current ASPEN Guidelines

Meta-Analyses

Zhang et al (2010)
Significant heterogeneity of studies assessed. No significant difference in postoperative or pancreatic infections, SIRS, length of antibiotic therapy, or mortality. Reduced length of stay.

Gou et al (2014)
Significant heterogeneity of studies assessed. No significant benefits or adverse outcomes.

Significant heterogeneity of studies assessed. With the 2008 Besselink study excluded, EN inclusion of probiotic in pancreatitis lead to lower risk of mortality, organ failure, and local septic complications.

Inclusion of Probiotic May Reduce:

- Overall mortality
- Infectious complications
- Organ failure
- Surgical intervention
- Incidence of ileus
- Antibiotic usage
- Length of stay

2016 ASPEN Guidelines Recommendation L5

“We suggest that the use of probiotics be considered in patients with severe acute pancreatitis who are receiving early EN. [Quality of Evidence: Low] (1)"

- Heterogeneity and limited quantity of studies conducted contributes to low quality of evidence.
- Research suggests probiotic may result in positive outcomes in severe pancreatitis patients, however medical professionals should exercise caution.
- In sum, inclusion of probiotics in severe pancreatitis treatment should not be a first line of defense, and patients should be made aware of possible complication should facilities choose to use it as treatment.