Abstract Title: Meeting Nutritional Needs With Reformulated Adult Tube Feeding Formulas

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Introduction: Enteral nutrition (EN), is a mainstay in the management of individuals unable to meet nutritional requirements orally. As science and clinical practice evolves, enteral formulas must also. Four standard EN formulas were reformulated with an updated micronutrient profile supporting DRI recommendations with 2/4 having a new fibre and 2/4 a new protein blend.
Objectives: Primary objective was to assess the ability of the formulas to meet energy goals. Secondary objectives included ability to meet protein goals, symptoms of intolerance and adverse events.
Methods: Clinically stable, tube-fed adults (> 18 years), currently tolerating EN and anticipated to require ≥ 90% of nutritional needs via EN for 21 days, were recruited.
Subjects underwent baseline observation on current EN for 3 days before initiation of study formulas: Isosource Fibre 1.2 (Formula A), Isosource Fibre 1.5 (Formula B), Isosource 1.2 (Formula C) or Isosource 1.5 (Formula D). Subject were fed 14 -21 days. Energy and protein intake was recorded daily. Gastrointestinal tolerance parameters including abdominal distension, vomiting, nausea, abdominal pain, increased irritability and stool frequency/consistency and adverse events were monitored.
Results: Enrollment was: Formula A&B; 18 subjects each, Formula C; 13, Formula D; 16. Age range 22-92 years (71% male). The average daily % of caloric and protein goals achieved were 89.9% and 88.5% (Formula A), 94.0% and 98.0% (B), 87.4% and 79.8% (C) and 85.8% and 79.5% (D). In the four trial arms, 12 (18.5%) subjects total experienced gastrointestinal symptoms. For any formula, there were no statistically significant differences in stool frequency or pattern between baseline and study periods, nor were there differences in tolerance. There were no product-related serious adverse events reported.
Conclusions: Consumption of reformulated EN formulas resulted in intake of 85.8% - 94% of prescribed calories and 79.5% - 98% of prescribed protein and were shown to be well tolerated by stable tube fed patients.