Clinical Policy Bulletin:
Nutritional Support

Number: 0061
(Replaces CPB 144)

Policy

Notes:

1. For members with such a plan benefit, specific nutritional support is considered to be a medical item only when it is administered enterally (i.e., by feeding tube) or parenterally (i.e., by intravenous administration) where the member has either (a) a permanent non-function or disease of the structures that normally permit food to reach the small bowel; or (b) disease of the small bowel that impairs digestion and absorption of an oral diet, either of which requires enteral or parenteral feedings to provide sufficient nutrients to maintain weight and strength commensurate with the member's overall health status. Note: Not all benefit plans cover nutritional support even in the circumstances stated above. Please check benefit plan descriptions.

2. In general, Aetna Better Health does not consider oral nutrition a medical item. However, Aetna Better Health covers nutritional support that is taken orally (i.e., by mouth) in cases of severe diseases such as End Stage Renal Disease (ESRD), cancers and chronic medical conditions with low Body Mass Index (BMIs). Oral nutrition is not considered a medical item. See section on Special Medical Foods below.

3. Regular food products are not considered medical items. Regular food products include baby food, gluten-free food products, high protein powders and mixes, low carbohydrate diets, normal grocery items, nutritional supplement puddings, weight-loss foods and formula (products to aid weight loss), or other regular grocery products that can be mixed in blenders and used with an enteral system regardless of whether these regular food products are taken orally or parenterally. However, food thickeners are covered up to 72 ounces. Amounts exceeding the 72 hours are considered on a case by case basis.

Determinants of the route of administration of nutritional support include the functional status of the gastrointestinal tract and the anticipated duration of therapy.
1. **Enteral Tube Feedings**

Enteral nutrition is the provision of nutritional requirements through a tube into the stomach or small intestine.

The short-term methods of enteral tube feedings include nasogastric, nasoduodenal and, less frequently, nasojejunal tubes. Long-term enteral feedings are best administered by a percutaneous gastrostomy or jejunostomy tube.

Aetna considers enteral tube feedings medically necessary when the member has either (a) permanent non-function or disease of the structures that normally permit food to reach the small bowel; or (b) disease of the small bowel that impairs digestion and absorption of an oral diet, either of which requires tube feedings to provide sufficient nutrients to maintain weight and strength commensurate with the member's overall health status.

The member's condition could be either an anatomic abnormality (e.g., obstruction due to head and neck cancer or reconstructive surgery, etc.) or a motility disorder (e.g., severe dysphagia following a stroke, neuromuscular or disease of the central nervous system that interferes with the ability to chew or swallow, etc.). Enteral nutrition is not considered medically necessary for members with a functioning gastrointestinal tract whose need for enteral nutrition is due to reasons such as anorexia or nausea associated with mood disorder, end-stage disease, etc.

The member must require tube feedings to maintain weight and strength commensurate with the member's overall health status. Adequate nutrition must not be possible by dietary adjustment and/or oral supplements. Enteral nutrition may be considered medically necessary for members with partial impairments (e.g., a member with dysphagia who can swallow small amounts of food or a member with Crohn's disease who requires prolonged infusion of enteral nutrients to overcome a problem with absorption).

**Note:** Enteral nutrition products that are administered orally and related supplies are not covered.

**Note:** The member must have a permanent impairment. Permanence does not require a determination that there is no possibility that the member's condition may improve sometime in the future. If the judgment of the doctor, substantiated in the medical record, is that the impairment can reasonably be expected to exceed 3 months (90 days), the test of permanence is considered met. This is consistent with Center for Medicare and Medicaid Services (CMS) guidelines.

Formulas consisting of semi-synthetic intact proteins or protein isolates (e.g., Enrich, Ensure, Ensure HN, Ensure Powder, Isocal, Lonalac Powder, Meritene, Meritene Powder, Osmolite, Osmolite HN, Portagen Powder, Renu, Sustacal, Sustagen Powder, Travasorb) are considered medically necessary for enteral feeding of the majority of older members who meet criteria for enteral feeding. Formulas consisting of natural intact proteins or protein isolates (e.g., Compleat B, Compleat B Modified, Vitaneed) are considered medically necessary for enteral feeding of members with an allergy or intolerance to semi-
synthetic formulas. Calorically dense formulas are also considered medically necessary for enteral feedings if they are indicated. The medical necessity for special formulas for enteral feedings must be justified in each member.

**Infant Formula**

*Note:* Infant formulas and breast milk additive to prevent necrotizing enterocolitis in premature infants are only covered if administered via the tube-feeding route and the criteria for coverage of enteral feedings are met. Infant formulas given orally are not covered.

**Equipment**

Appropriate nutrients, administration supplies, and equipment are considered medically necessary for persons who meet criteria for enteral feedings. Tube feedings are usually given by gravity feedings or syringe. Pumps are considered medically necessary durable medical equipment (DME) only where gravity feedings or syringe feedings have caused complications or are otherwise not indicated (e.g., gravity feeding is not satisfactory due to reflux and/or aspiration, severe diarrhea, dumping syndrome, administration rate less than 100 ml/hr, blood glucose fluctuations, circulatory overload, gastrostomy/jejunostomy tube used for feeding). More than 3 nasogastric tubes or 1 gastrostomy/jejunostomy tube every 3 months is rarely considered medically necessary.

*Note:* Some Aetna plans exclude coverage of DME and supplies. Please check benefit plan descriptions.

2. **Parenteral Nutrition/Total Parenteral Nutrition (TPN)**

Parenteral nutrition involves the delivery of micronutrients and macronutrients through catheters in central or peripheral veins. In most instances, the central venous route is utilized; for long-term total parenteral nutrition (TPN), a central catheter (e.g., Hickman, Broviac, PIC) is burrowed through a subcutaneous tunnel on the anterior chest.

Generally, the parenteral approach is considered medically necessary only if adequate nutritional intake is not possible via the oral or tube-feeding route.

Aetna considers parenteral nutrition medically necessary for members who meet any of the following criteria:

1. Documentation of a failure of enteral (i.e., oral or tube feeding) nutrition, as defined by *either* of the following:
   1. A non-edematous or post-dialysis documented loss of greater than 10% of body weight over a 3-month period; or
   2. Total protein less then 6 g/dL or serum albumin less than 3.4 g/dL;  
2. A condition in which it is necessary for the gastrointestinal tract to be totally non-functioning for a period of time;  
3. Evidence of structural or functional bowel disease that makes oral and tube feedings inappropriate;  
4. Hyperemesis gravidarum (only in cases of failed medical management or when
used in a step-therapy program);
5. Member is peri-operative (regardless of disease state) and unable to tolerate oral or tube feedings.

Parenteral nutrition may be either “self-mixed” (i.e., the member or family caregiver is taught to prepare the nutrient solution aseptically) or “pre-mixed”. The doctor must justify the need for pre-mixed parenteral nutritional solutions.

Parenteral nutrition is not considered medically necessary for members with a functioning gastrointestinal tract whose need for parenteral nutrition is only due to:

6. A physical disorder impairing food intake such as the dyspnea of severe pulmonary or cardiac disease;
7. A psychological disorder impairing food intake such as depression;
8. A side effect of a medication;
9. A swallowing disorder;
10. A temporary defect in gastric emptying such as a metabolic or electrolyte disorder;
11. Disorders inducing anorexia such as cancer;
12. Renal failure and/or dialysis.*

*Members receiving intra-dialytic parenteral nutrition must meet the criteria for total parenteral nutrition set forth above.

Aetna considers intra-peritoneal nutrition experimental and investigational. Aetna considers intra-peritoneal amino acid (IPAA) supplementation medically necessary for members on peritoneal dialysis when all of the following criteria are met:

13. Inability to administer or tolerate adequate oral protein nutrition, including food supplements, or enteral tube feeding; and
14. The combination of some oral or enteral intake that, when combined with IPAA, will meet the individual's nutritional goals; and
15. There is evidence of inadequate dietary protein intake and protein malnutrition.

Equipment

If the criteria for parenteral nutrition are met, medically necessary nutrients, administration supplies, and equipment are considered medically necessary.

3. Special Medical Foods Taken Orally

Note: Aetna covers special medical foods only when mandated by state law.

Special medical foods are used for the treatment of inborn errors of metabolism (histidinemia, homocystinuria, maple syrup urine disease [MSUD], phenylketonuria [PKU], and tyrosinemia). The special oral formulas are designed to restrict intake of one or more amino acids. Some states now have mandates requiring coverage of these dietary formulas.
Aetna does not cover banked breast milk, food supplements, specialized infant formulas, vitamins and/or minerals taken orally (i.e., by mouth).

Food supplements, specialized infant formulas (e.g., Alimentum, Elecare, Neocate, and Nutramigen), lactose-free foods, vitamins and/or minerals may be used to replace intolerable foods, for lactose intolerance, to supplement a deficient diet, or to provide alternative nutrition in the presence of such conditions as allergies, gastrointestinal disorders, hypoglycemia, and obesity. Food supplements, lactose-free foods, specialized infant formulas, vitamins and/or minerals taken orally are not covered, even if they are required to maintain weight or strength and regardless of whether these are prescribed by a physician.

Most Aetna plans do not specifically include coverage of infant formulas when taken orally. In the absence of a specific inclusion or state mandate, specialized infant formulas are not covered.

**Background**

Parenteral nutrition involves the delivery of micronutrients and macronutrients through catheters in central or peripheral veins. In most instances, the central venous route is utilized, and for long-term total parenteral nutrition a central catheter (e.g., Hickman, Broviac, PIC) is burrowed through a subcutaneous tunnel on the anterior chest.

Enteral nutrition can be administered via a small catheter placed through the nose into the stomach or by a surgically placed catheter into the stomach or intestines. Enteral nutrition therapy may supplement protein and calories in a variety of situations where oral nutrition is not adequate, with the intention of providing part or all of the daily requirements. Specialized diets for specific diseases or pathophysiologic situations may be administered via enteral nutrition. These specialized diets may involve restricting a particular element of the diet (e.g., fat, lactose), adding a particular nutrient that may be required in larger amounts than are available from a regular diet (e.g., calcium, potassium), or altering the consistency of the diet (e.g., high-fiber, full-liquid).

The need for specialized foods is very common, and for most conditions, the specialized food is needed for the person's entire lifetime. For example, in Europe and the United States, the prevalence of lactose intolerance is 7 to 20% in Caucasians, and is as high as 80 to 95% among Native Americans, 65 to 75% among Africans and African Americans, and 50% in Hispanics (Scrimshaw et al, 1988). The prevalence exceeds 90% in some populations in eastern Asia.

Another example of a common medical condition requiring a specialized diet is celiac disease (also called gluten-sensitive enteropathy and non-tropical sprue), with a prevalence of almost 1% of the population (Fasano et al, 2003). There are many other examples where specialized diets are prescribed, which could extend to specialized diets for hypertension, diabetes, or cardiovascular disease.

Sullivan et al (2010) evaluated the health benefits of an exclusively human milk-based diet compared with a diet of both human milk and bovine milk-based products in extremely
premature infants. Infants fed their own mothers' milk were randomized to 1 of 3 study groups. Groups HM100 and HM40 received pasteurized donor human milk-based human milk fortifier (HMF) when the enteral intake was 100 and 40 ml/kg/day, respectively, and both groups received pasteurized donor human milk if no mother's milk was available. Group BOV received bovine milk-based HMF when the enteral intake was 100 ml/kg/day and preterm formula if no mother's milk was available. Outcomes included duration of parenteral nutrition, morbidity, and growth. The 3 groups (total n = 207 infants) had similar baseline demographic variables, duration of parenteral nutrition, rates of late-onset sepsis, and growth. The groups receiving an exclusively human milk diet had significantly lower rates of necrotizing enterocolitis (NEC; p = 0.02) and NEC requiring surgical intervention (p = 0.007). The authors concluded that for extremely premature infants, an exclusively human milk-based diet is associated with significantly lower rates of NEC and surgical NEC when compared with a mother's milk-based diet that also includes bovine milk-based products.

Ganapathy et al (2012) evaluated the cost-effectiveness of a 100 % human milk-based diet composed of mother's milk fortified with a donor human milk-based HMF versus mother's milk fortified with bovine milk-based HMF to initiate enteral nutrition among extremely premature infants in the neonatal intensive care unit (NICU). A net expected costs calculator was developed to compare the total NICU costs among extremely premature infants who were fed either a bovine milk-based HMF-fortified diet or a 100 % human milk-based diet, based on the previously observed risks of overall NEC and surgical NEC in a randomized controlled study that compared outcomes of these 2 feeding strategies among 207 very low birth-weight infants. The average NICU costs for an extremely premature infant without NEC and the incremental costs due to medical and surgical NEC were derived from a separate analysis of hospital discharges in the state of California in 2007. The sensitivity of cost-effectiveness results to the risks and costs of NEC and to prices of milk supplements was studied. The adjusted incremental costs of medical NEC and surgical NEC over and above the average costs incurred for extremely premature infants without NEC, in 2011 US$, were $74,004 (95 % confidence interval [CI]: $47,051 to $100,957) and $198,040 (95 % CI: $159,261 to $236,819) per infant, respectively. Extremely premature infants fed with 100 % human-milk based products had lower expected NICU length of stay and total expected costs of hospitalization, resulting in net direct savings of 3.9 NICU days and $8,167.17 (95 % CI: $4,405 to $11,930) per extremely premature infant (p < 0.0001). Costs savings from the donor HMF strategy were sensitive to price and quantity of donor HMF, percentage reduction in risk of overall NEC and surgical NEC achieved, and incremental costs of surgical NEC. The authors concluded that compared with feeding extremely premature infants with mother's milk fortified with bovine milk-based supplements, a 100 % human milk-based diet that includes mother's milk fortified with donor human milk-based HMF may result in potential net savings on medical care resources by preventing NEC.

Aetna's policy on parenteral and enteral nutrition is similar to Medicare policy. Medicare provides reimbursement under the part-B prosthetic-device benefit for parenteral and enteral nutrition. Consistent with its policy of covering supplies necessary for use of prosthetics, Medicare will generally cover medically necessary supplies, equipment, and nutrients associated with parenteral and enteral nutrition if the coverage requirements for enteral or parenteral nutritional therapy are met under the prosthetic device benefit provision.
CPT Codes / HCPCS Codes / ICD-9 Codes

CPT codes covered if selection criteria are met:

99507
99601
+ 99602

Other CPT codes related to the CPB:

36555 - 36571
43246
43510
43653
43752
43760
43761
43810 - 43832
+ 44015
44372
44373
44500
49440
49441
49446
49450
49451
49452
74340

HCPCS codes covered if selection criteria are met:

B4087 Gastrostomy/jejunostomy tube, standard, any material, any type, each
B4088 Gastrostomy/jejunostomy tube, low-profile, any material, any type, each
B4102 Enteral formula, for adults, used to replace fluids and electrolytes (e.g., clear liquids), 500 ml = 1 unit
B4103 Enteral formula, for pediatrics, used to replace fluids and electrolytes (e.g., clear liquids), 500 ml = 1 unit
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>B4104</td>
<td>Additive for enteral formula (e.g., fiber)</td>
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<tr>
<td>B4149</td>
<td>Enteral formula, manufactured blenderized natural foods with intact nutrients, includes proteins, fats, carbohydrates, vitamins and minerals, may include fiber, administered through an enteral feeding tube, 100 calories = 1 unit</td>
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<tr>
<td>B4034 - B4086, B4102 - B9999</td>
<td>Enteral and Parenteral Therapy (except food thickener)</td>
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<tr>
<td>S5497</td>
<td>Home infusion therapy, catheter care/maintenance, not otherwise classified; includes administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment (drugs and nursing visits coded separately), per diem</td>
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<tr>
<td>S5498</td>
<td>Home infusion therapy, catheter care/maintenance, simple (single lumen), includes administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment (drugs and nursing visits coded separately), per diem</td>
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<tr>
<td>S5501</td>
<td>Home infusion therapy, catheter care/maintenance, complex (more than one lumen), includes administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment (drugs and nursing visits coded separately), per diem</td>
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<tr>
<td>S5502</td>
<td>Home infusion therapy, catheter care/maintenance, implanted access device, includes administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment (drugs and nursing visits coded separately), per diem (use this code for interim maintenance of vascular access not currently in use)</td>
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<tr>
<td>S5517</td>
<td>Home infusion therapy, all supplies necessary for restoration of catheter patency or declotting</td>
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<td>S5518</td>
<td>Home infusion therapy, all supplies necessary for catheter repair</td>
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<tr>
<td>S5520</td>
<td>Home infusion therapy, all supplies (including catheter) necessary for a peripherally inserted central venous catheter (PICC) line insertion</td>
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<tr>
<td>S5521</td>
<td>Home infusion therapy, all supplies (including catheter) necessary for a midline catheter insertion</td>
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<tr>
<td>S5522</td>
<td>Home infusion therapy, insertion of peripherally inserted central venous catheter (PICC), nursing services only (no supplies or catheter included)</td>
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<tr>
<td>S5523</td>
<td>Home infusion therapy, insertion of midline central catheter, nursing services only (no supplies or catheter included)</td>
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<tr>
<td>S9342</td>
<td>Home therapy; enteral nutrition via pump; administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment (ental formula and nursing visits coded separately), per diem</td>
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S9343  Home therapy; enteral nutrition via bolus; administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment (enteral formula and nursing visits coded separately), per diem

S9364  Home infusion therapy, total parenteral nutrition (TPN); administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment including standard TPN formula (lipids, specialty amino acid formulas, drugs other than in standard formula and nursing visits coded separately), per diem

S9365  Home infusion therapy, total parenteral nutrition (TPN); 1 liter per day, administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment including standard TPN formula (lipids, specialty amino acid formulas, drugs other than in standard formula and nursing visits coded separately), per diem

S9366  Home infusion therapy, total parenteral nutrition (TPN); more than 1 liter but no more than 2 liters per day, administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment including standard TPN formula (lipids, specialty amino acid formulas, drugs other than in standard formula and nursing visits coded separately), per diem

S9367  Home infusion therapy, total parenteral nutrition (TPN); more than 2 liters but no more than 3 liters per day, administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment including standard TPN formula (lipids, specialty amino acid formulas, drugs other than in standard formula and nursing visits coded separately), per diem

S9368  Home infusion therapy, total parenteral nutrition (TPN); more than 3 liters per day, administrative services, professional pharmacy services, care coordination, and all necessary supplies and equipment including standard TPN formula (lipids, specialty amino acid formulas, drugs other than in standard formula and nursing visits coded separately), per diem

**HCPCS codes not covered for indications listed in the CPB:**

A9152  Single vitamin/mineral/trace element, oral, per dose, not otherwise specified

A9153  Multiple vitamins, with or without minerals and trace elements, oral, per dose, not otherwise specified

B4100  Food thickener, administered orally, per oz

**Other HCPCS codes related to the CPB:**

S9123  Nursing care, in the home; by registered nurse, per hour (use for general nursing care only, not to be used when CPT codes 99500-99600 can be used)
S9124  Nursing care, in the home; by licensed practical nurse, per hour
S9433  Medical food nutritionally complete, administered orally, providing 100% of nutritional intake
S9434  Modified solid food supplements for inborn errors of metabolism
S9435  Medical foods for inborn errors of metabolism
S9810  Home therapy; professional pharmacy services for provision of infusion, specialty drug administration, and / or disease state management, not otherwise classified, per hour (do not use this code with any per diem code)

**ICD-9 codes covered if selection criteria are met (not all inclusive):**

- **140.0 - 154.8** Malignant neoplasm of lip, oral cavity, pharynx, esophagus, stomach, small intestine including duodenum, colon, rectum, rectosigmoid junction, and anus
- **195.0** Malignant neoplasm of head, face, and neck
- **260, 261, 262** Kwashiorkor, nutritional marasmus or other severe, protein-calorie malnutrition
- **263.0 - 263.9** Other and unspecified protein-calorie malnutrition
- **438.82** Late effect of cerebrovascular disease, dysphagia
- **530.5** Dysphagia of esophagus
- **643.00, 643.01 & 643.03** Mild hyperemesis gravidarum, unspecified as to episode of care, delivered, with or without mention of antepartum condition, or antepartum condition or complication
- **643.10, 643.11 & 643.13** Hyperemesis gravidarum with metabolic disturbance, unspecified as to episode of care, delivered, with or without mention of antepartum condition, or antepartum condition or complication
- **643.20, 643.21 & 643.23** Late vomiting of pregnancy, unspecified as to episode of care, delivered, with or without mention of antepartum condition, or antepartum condition or complication
- **643.80, 643.81 & 643.83** Other vomiting complicating pregnancy, unspecified as to episode of care, delivered, with or without mention of antepartum condition, or antepartum condition or complication
- **643.90, 643.91 & 643.93** Unspecified vomiting of pregnancy, unspecified as to episode of care, delivered, with or without mention of antepartum condition, or antepartum condition or complication
- **787.20 - 787.29** Dysphagia
- **V44.1** Gastrostomy status
- **V44.4** Other artificial opening of gastrointestinal tract
ICD-9 codes not covered for indications listed in the CPB:

290.0 - 319 Mental disorders
584.5 - 586 Renal failure
V45.1 Renal dialysis status

Other ICD-9 codes related to the CPB:

270.1 - 277.9 Disorders of amino-acid transport and metabolism, carbohydrate transport and metabolism, lipoid metabolism, plasma protein metabolism, mineral metabolism, calcium metabolism, fluid, electrolyte, and acid-base balance, and other and unspecified disorders of metabolism
358.0 - 358.9 Myoneural disorders
536.0 - 536.9 Disorders of function of stomach
555.0 - 564.9 Noninfectious enteritis and colitis, intestinal obstruction without mention of hernia, diverticula of intestine, and functional digestive disorders, not elsewhere classified
579.0 - 579.9 Intestinal malabsorption
777.1 - 777.9 Perinatal disorders of digestive system
779.3 Feeding problems in newborn
783.0 Anorexia
783.21, 783.22 Abnormal loss of weight and underweight
783.3 Feeding difficulties and mismanagement
783.41 Failure to thrive
783.7 Adult failure to thrive
786.09 Other dyspnea and respiratory abnormalities
V10.00 - V10.09 Personal history of malignant neoplasm of gastrointestinal tract

The above policy is based on the following references:

15, 2002.


