

definition of FTT, some advocate for a change in terminology; thus, terms such as *growth failure* and *pediatric undernutrition* are used in the literature for FTT. According to [Cole and Lanham \(2011\)](#), approximately 5% to 10% of children in primary care in the United States have FTT with the majority presenting before 18 months old.

Some experts suggest that the previously used classifications of *organic FTT* and *nonorganic FTT* are too simplistic because most cases of growth failure have mixed causes; they suggest that FTT be classified according to pathophysiology in the following categories ([Cole and Lanham, 2011](#)):

Inadequate caloric intake: Incorrect formula preparation, neglect, food fads, lack of food availability, breastfeeding problems, behavioral problems affecting eating, or central nervous system problems affecting intake

Inadequate caloric absorption: Food allergy, malabsorption, pyloric stenosis, GI atresia, inborn errors of metabolism

Excessive caloric expenditure: Hyperthyroidism, malignancy, congenital heart disease, chronic pulmonary disease or chronic immunodeficiency

The cause of FTT is often multifactorial and involves a combination of infant organic disease, dysfunctional parenting behaviors, and/or poor parent-infant bonding ([Cole and Lanham, 2011](#)). However, the primary etiology is inadequate caloric intake, regardless of the cause.

Infants who are born preterm and with VLBW or ELBW, as well as those with intrauterine growth restriction (IUGR), are often referred for growth failure within the first 2 years of life because they typically do not grow physically at the same rate as term cohorts even after discharge from the acute care facility. Catch-up growth has been shown to be much more difficult to achieve in ELBW and VLBW infants. As young adults, former VLBW infants are more likely to have small stature (both height and weight) and lower rates of tertiary education than term cohorts ([Darlow, Horwood, Pere-Bracken, et al, 2013](#)).

Other factors that can lead to inadequate caloric intake in infancy include poverty, health or childrearing beliefs such as fad diets,