

[1] “Failure to thrive (FTT) is a common condition of varying etiologies that has been associated with adverse effects on later growth and cognitive development.”

“About 25 percent of normal infants will shift to a lower growth percentile in the first two years of life and then follow that percentile; this should not be diagnosed as failure to thrive.” Babies that are born prematurely, with down syndrome, intrauterine growth retardation are known to follow different growth patterns than normal children.

### FTT

FTT is a term used to describe inadequate growth or the inability to maintain growth, usually in early childhood. It is a sign of undernutrition, and because many biologic, psychosocial, and environmental processes can lead to undernutrition, FTT should never be a diagnosis unto itself.

### Hospitalization

Hospitalization for FTT is rarely required. It will only be needed when the child's condition has become severe or is in need of immediate help

### Eating

There is no special need for food with a premature baby, it will just be important to regularly feed them, not be rushed, and not forced on the child. Starting with small amounts of food and offering more is preferable to beginning with large quantities.

[2]

### Endogenous & Exogenous

Generally causes of FTT are due to endogenous and exogenous causes. These causes are mainly grouped into results of things like inadequate caloric intake, inadequate nutrient absorption, and increased metabolism.

#### Endogenous (Organic)

[2][3]“Causes are due to physical or mental issues with the child itself. It can include various inborn errors of metabolism. Problems with the gastrointestinal system such as gas and acid reflux, are painful conditions which may make the child unwilling to take in sufficient nutrition. Cystic fibrosis, diarrhea, liver disease, anemia or iron deficiency, and coeliac disease make it more difficult for the body to absorb nutrition. Other causes include physical deformities such as cleft palate and tongue tie. Milk allergies can cause endogenous FTT. Also the metabolism may be raised by parasites, asthma, urinary tract infections, and other fever-inducing infections, hyperthyroidism or congenital heart disease so that it becomes difficult to get in sufficient calories to meet the higher caloric demands.”

#### Exogenous (Inorganic)

[2][3][4]“Caused by caregiver's actions. Examples include physical inability to produce enough breastmilk, using only babies' cues to regulate breastfeeding so as to not offer a sufficient number of feeds (sleepy baby syndrome), inability to procure formula when needed, purposely limiting total caloric intake (often for what the caregiver views as a more aesthetically pleasing child), and not offering sufficient age-appropriate

solid foods for babies and toddlers over the age of six months. A recent study on toddlers with exogenous FTT has found preliminary evidence suggesting that difficulty experienced during feeding times with this condition may in fact be impacted by pre-existing sensory processing problems. Such difficulties with sensory processing are more commonly observed in toddlers who have a history of growth deficiency and feeding problems; however, further research is required in order to determine a causal relationship between sensory processing problems and nonorganic FTT. In developing countries, conflict settings and protracted emergencies, exogenous faltering may be caused by chronic food insecurity, lack of nutritional awareness, and other factors beyond the caregiver's control."

#### Combination (Of exogenous and endogenous)

Because both of these can co-exist a child will have the ability to experience problems from both categories, for example a child that is not receiving enough nutrients could act like they are so that the caregiver does not provide them with nutrients. Or another example of this is if a child has severe acid reflux, and could appear to be in pain may cause the caretaker to hesitate to give the child proficient nutrients.

#### Treatment

Children who have issues with particular foods or have just had bad experiences eating may be hesitant to eat proper amounts. In order to help this it is good for a guardian or parent to prevent using force in order to help the child feel comfortable,

### Common Symptoms

- lack of weight gain.
- delays in reaching developmental milestones such as rolling over, crawling, and talking.
- learning disabilities.
- lack of emotions such as smiling, laughing, or making eye contact.
- delayed motor development.
- fatigue.
- irritability.

### Common Causes of FTT

- Problems with genes, such as Down syndrome
- Organ problems
- Hormone problems
- Damage to the brain or central nervous system, which may cause feeding difficulties in an infant
- Heart or lung problems, which can affect how nutrients move through the body
- Anemia or other blood disorders
- Gastrointestinal problems that make it hard to absorb nutrients or cause a lack of digestive enzymes
- Long-term (chronic) infections
- Metabolism problems

- Problems during pregnancy or low birth weight

### Sources

1. <https://www.aafp.org/afp/2003/0901/p879.html>
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3. National Guideline Alliance (UK) (2017). Faltering Growth – recognition and management. National Institute for Health and Care Excellence: Clinical Guidelines. London: National Institute for Health and Care Excellence (UK).
4. Yi S. H.; Joung Y. S.; Chloe Y. H.; Kim E. H.; Kwon J. Y. (2015). "Sensory Processing Difficulties in Toddlers with Nonorganic Failure to Thrive and Feeding Problems". Journal of Pediatric Gastroenterology and Nutrition.
5. <https://medlineplus.gov/ency/article/000991.htm>