**Failure to Thrive**

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* FTT is a description and not a diagnosis
* Sub optimal weight gain and growth in infants and toddlers
* Growth below the 3rd centile or
* Change in growth that has crossed 2 major growth centiles
* Remember 3% normal kids fall below 3rd centile

**Why?**

* Failure of a parent to offer adequate calories
* Failure of child to take sufficient calories
* Failure of child to retain sufficient calories

**Causes:-**

* Organic Causes
* Non-Organic Causes
* Both may co-exist

**Organic Causes Of Failure To Thrive**

* Organic can be approached logically starting at the top and working down.
* Poor calorie input
* Vomiting
* Inadequate absorption of food
* Organ failure - including cardiac, renal, neurological, and serious chronic disease
* Metabolic or endocrine abnormalities
* Persistent infection Syndromes

**Poor Calorie Input**

* This area overlaps considerably with the non - organic causes of failure to thrive.
* mother may not be feeding baby, or food may be inappropriate.
* maternal milk production may be poor,
* baby may have a condition that makes it difficult to feed such as cleft palate.
* malnutrition

**Vomiting :**

\*Indicator of general infection  **\***Pyloric stenosis  **\***Gastro-oesophageal reflux

\*Hiatus hernia \*Esophageal in coordination \*UTI

**Inadequate Absorption Of Food**

* Intrinsic Reasons:

\* Coeliac Disease \*Lactose Intolerance

\* Pancreatic Insufficiency, As Caused By Cystic Fibrosis \*Inflammatory Bowel **Disease**

* Extrinsic Reasons: Parasitic Infestation , for example giardiasis

**Serious Chronic Disease** These include:

\* Cerebral palsy \*Hepatic failure \*Renal failure \*Degenerative disorders

**Persistent Infection**

\* Recurrent infection of tonsils and adenoids \*TB

\*Parasitic or Bacterial infections of GIT \*HIV

**Metabolic Or Endocrine Abnormalities**

\* Hyperthyroidism \* Hypothyroidism \* Diabetes mellitus

\*Growth hormone deficiency \*Inborn errors of metabolism

**Syndromes**

There Are A Massive Number Of Syndromes Which Result In Failure To Thrive.

They Include:

* + [Down's Syndrome](http://gpnotebook.co.uk/simplepage.cfm?ID=-1744437248&linkID=62859&cook=yes)
  + [Foetal Alcohol Syndrome](http://gpnotebook.co.uk/simplepage.cfm?ID=-442892282&linkID=62860&cook=yes)
  + [Congenital Infections](http://gpnotebook.co.uk/simplepage.cfm?ID=1765081110&linkID=62861&cook=yes)
  + [Skeletal Dysplasias](http://gpnotebook.co.uk/simplepage.cfm?ID=-1684406195&linkID=62862&cook=yes)
  + [Turner's Syndrome](http://gpnotebook.co.uk/simplepage.cfm?ID=-1865416697&linkID=62863&cook=yes)
  + [Bartter's Syndrome](http://gpnotebook.co.uk/simplepage.cfm?ID=624230402&linkID=62864&cook=yes)

**Non-organic Failure To Thrive**

* Commonest Cause
* One of the earliest indications of serious parent/child interaction dysfunction.
* It is a form of neglect in which the child's growth is inhibited in the home environment while showing a normal or above growth velocity when placed out of home.

**Risk Factors**

* These Can Be Subdivided Into Characteristics Of:
* The Child
* The Parent
* The Society

**Parental Characteristics**

These are generalizations, but helpful features may be as follows:

* Low intellect combined with lack of knowledge, judgement and motivation
* Severe depression/neurotic disorders
* Angry, hostile mothers who feel persecuted by infants
* Chaotic lives and relationships
* Chronic medical problems
* Substance abuse

**Child Characteristics**

Some helpful features include:

* Mental alertness to surroundings - at the extreme described as frozen watchfulness
* Absent exploration but sustained vigilance
* Increased appetite and disturbed feeding behaviors
* Forming indiscriminate attachments in hospital
* Seeking attention
* Demonstrating aggressiveness
* Immature play
* Decreased inter-personal interaction
* Dull, pale skin
* Physically apathetic
* The mentally handicapped may be at greater risk of abuse

**Socio-cultural Factors**

These are generalisations, but there can be interactions of:

* Parental isolation
* Poor parental functioning
* Lack of resources - for example poverty
* Cultural understanding of what is appropriate

**Investigations**

* The following is a rough outline of the important preliminary investigations that may be initiated:
* Stool and urine microscopy and culture
* Full blood count and film, followed by serum and ferritin, B12 and folate as indicated
* Hospitalize and observe feeding
* Creatinine and electrolytes, plus liver and bone function
* Thyroid function and other endocrine investigations
* Sweat test
* Chromosomal analysis
* Metabolic analysis

**Prognosis**

* In the 1st year of life is ominous
* 1/3 children with psychosocial FTT are developmentally delayed and have social and emotional problems
* Variable prognosis in organic FTT