

## Failure to Thrive in Premature Babies

James Rodrigues

Failure to thrive is defined as a lack of growth, or a failure to gain weight/grow in height. FTT (Failure To Thrive) is also known as postnatal growth failure. FTT affects different babies in different ways but, especially evident in premature babies, there is a lack of growth based on the normal average. Usually soon after birth the condition creates hardships for the baby to overcome such as, increased monitoring and nutritional intake, and studies have suggested that children affected by failure to thrive were shorter, lighter, and scored lower on measures of psychomotor development than normal values throughout the population.

There is no objective consensus on what exactly FTT is defined as due to the fact that of the fact that you can objectify it, into something such as a measurement, mainly due to the fact that of the fact that no single measurement can identify nutritional growth delay. Weight-for-age is the most common and simplest parameter to quantify the magnitude of the FTT in that particular baby. Other measurements that help are height-for-age and weight-for-height. As stated in the previous paragraph there is no concrete definition for FTT. Although, despite that, the medical community has attempted to quantify magnitude of of the effects of FTT. In one study they measured IQs of people that have been affected by FTT and people that haven't. This is also exemplifying some of the long term effects of the condition on the baby. Some other quantified values that doctors have come up with to diagnose a baby as having FTT is their weight being below the 2nd percentile on an applicable growth chart, with

decreased velocity of weight gain that is disproportionate to their increase in height. Others include, a weight decrease in two or more major percentile lines. These percentile marks include, the 90th, 75th, 50th, 25th, 10th, and 5th. Another study came up with a different classification system for the severity of FTT "In Gomez classification, mild, moderate, and severe FTT is equivalent to 75-90%, 60-74% and less than 60% of standard weight, respectively, and in Waterlow classification, for height, the corresponding values are 90-95%, 85-89% and less than 85%, and for the weight for height, the values are 81-90%, 70-80% and less than 70%". This quote explains the severity ranking system to quantify the magnitude how much FTT that has affected the baby. Despite all of this evidence, It will be very hard to ever come up with an accurate, quantifiable, scale that is applicable to every baby. This is for the reason that emotions cannot be quantified and difficult emotional situations can induce FTT and also vary person to person.

Failure to thrive can be caused by specific medical problems or different factors in the child's environment, such as abuse or neglect. There are many medical causes of failure to thrive. One of these include gene-based conditions, such as down syndrome. There can also be organ-based or hormonal causes for FTT. Another is damage to the brain or central nervous system, which may cause feeding difficulties in an infant. One last cause is heart or lung problems. These can create difficulties in how nutrients flow through the body, which is crucial for an infant. All of these listed causes, among a multitude of other conditions, can all cause a baby to be diagnosed as having FTT. Despite all of this; all of these possible causes, in particular cases the precise cause

cannot be determined. This is mainly for the reason that that it can be multiple causes. In addition, negative emotional situations that the baby is put in can also cause FTT to occur. Some of these include lack of the emotional support from the parents or caretakers, especially in early stages of development right after birth. In addition, In the event that the child lives in poverty, or a disadvantaged neighborhood or city, they are much more susceptible to FTT purely for the reason that the lack of money for food and medication. Some other causes are parents not understanding the dietary needs of the baby, and exposure to infections, parasites, or toxins.

Preemies are defined as babies that are born with only 37 weeks or less of pregnancy. A full-term pregnancy is 40 weeks. When a preemie is born it usually needs special care to get through the first through months of their life. This is due to the fact that they haven't fully developed parts of their bodies, such as their immune system. Since they haven't grown enough, they usually weigh a lot less than normal babies. The effect of being a preemies can impact the rest of their life and that impact is only increased in magnitude when they are affected by FTT. This is normally caused by the preemies not getting the care they need to survive for those first few months, and those first few months are crucial to their life. If someone is a preemie and majorly affected by FTT then they can end up in a very bad situation for the rest of their life if nothing is done about it. For example, if you are a preemie you can end up with a multitude of different conditions as a result of that, but let's say they now have cerebral palsy. Even though this condition isn't curable, if you add the effects of FTT onto that then it

becomes a lot to manage. In the event that the condition is not managed, and the FTT not treated, then the baby could end up dying within a few months.

Some of the short term effects of having FTT were mostly previously mentioned in the measuring and diagnosis of FTT. That is for the reason that most of those quantities were measured shortly after birth or only a bit later into their life. “Studies in developing countries have shown that poor nutrition in early childhood leads to problems in cognitive functioning. Attention, self-regulatory skills for self-control, organizational skills, and performance on tests of cognitive functions and academic skills all appear to be vulnerable to the effects of malnutrition.” This quote shows that poor nutrition, especially after a baby has FTT or the poor nutrition caused them to be diagnosed as affected by FTT, can have immediate effects on the baby and specifically will harm their cognitive functions which are crucial to life and especially early development. Another short term effect of FTT is the delay of the development of simple physical skills such as rolling over, walking, standing and sitting. There can also be delayed development of things along the lines of mental and social skills, which in the event of it not being taken care of then they can really not let the person live out a full life.

Some of the long term effects it has on the baby are things such as overall slowed development in later life. For example, a baby with FTT may go through puberty later than a normal baby. This is due to the fact that they had more developing to do outside of the womb rather than inside, which is what a normal full-term baby would have gotten. Some of the other effects are that the baby is put at a much higher risk of

contracting a chronic infection such as, hepatitis, herpes, etc. “The link between early, severe malnutrition and long-term deficits in emotional and cognitive development appears to extend into adolescence...” This quote shows some of the other long term effects of FTT, specifically dealing with babies that had been malnourished. It states that there are deficits in cognitive development as well as emotional development, which are both needed for life. Especially, the emotional development will be more needed in later life, or once this starts to take effect.

Once you are born there are ways to manage and deal with the effects of being born with FTT, especially in later life. “Medical conditions causing FTT should be treated or referred to a paediatrician for further investigations and management, while urgent psychosocial issues require counselling and referral to social services.” This quote shows some examples of what to do when attempting to deal with and control the symptoms and effects of living with FTT.

Failure to thrive is defined as a lack of growth, or a failure to gain weight/grow in height. FTT (Failure To Thrive) is also known as postnatal growth failure. FTT affects different babies in different ways but, especially evident in premature babies, there is a lack of growth based on the normal average. Typically, the parents have to go to extreme measures to create the correct environment for the baby, and getting the right care such as increased monitoring and nutrition. Studies have suggested that children affected by failure to thrive were shorter, lighter, and scored lower on measures of psychomotor development than normal values throughout the population.

## Bibliography:

[1] Goh, L. H., & How, C. H. (2016, June). Failure to Thrive in Babies and Toddlers.

Retrieved February 20, 2018, from

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4971446/>

[2] Premature Babies: MedlinePlus. (2017, October 19). Retrieved February 20, 2018,

from <https://medlineplus.gov/prematurebabies.html>

[3] Rudolf, M. C., & Logan, S. (2005, September 01). What is the long term outcome for

children who fail to thrive? A systematic review. Retrieved February 20, 2018, from

<http://adc.bmj.com/content/90/9/925>

[4] What is Failure to Thrive? (n.d.). Retrieved February 20, 2018, from

[https://www.hopkinsmedicine.org/healthlibrary/conditions/pediatrics/failure\\_to\\_thrive\\_90.P02297](https://www.hopkinsmedicine.org/healthlibrary/conditions/pediatrics/failure_to_thrive_90.P02297)

[5] Failure to thrive. (2017, May 9). Retrieved February 20, 2018, from

<https://medlineplus.gov/ency/article/000991.htm>

[6] Firouzeh, H. (2011). *Failure to Thrive Severity Determination by New Design Curves in Standard Growth Charts*, 49(12), 795-800. Retrieved February 20, 2018.

[7] "Failure to Thrive." International Encyclopedia of Marriage and Family. . Retrieved

February 20, 2018 from Encyclopedia.com:

<http://www.encyclopedia.com/reference/encyclopedias-almanacs-transcripts-and-maps/failure-to-thrive>