FAILURE TO THRIVE

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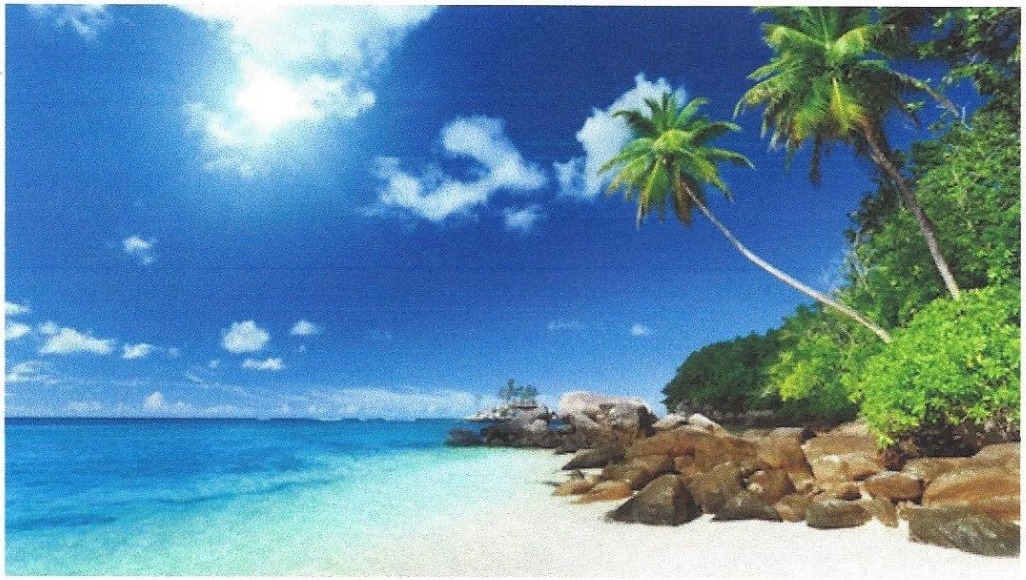
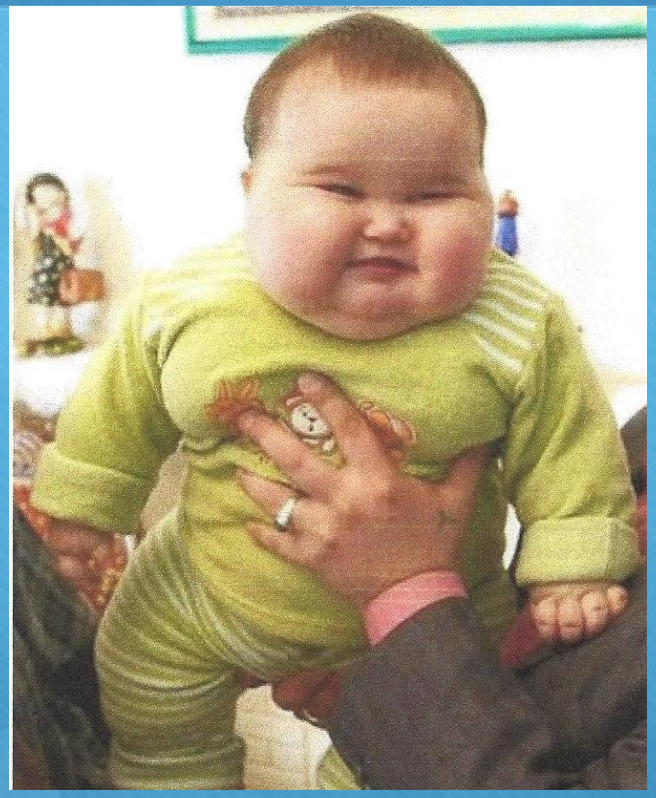
Health Delivery, Inc.

Soon!!!???

Ahhhhh!!!

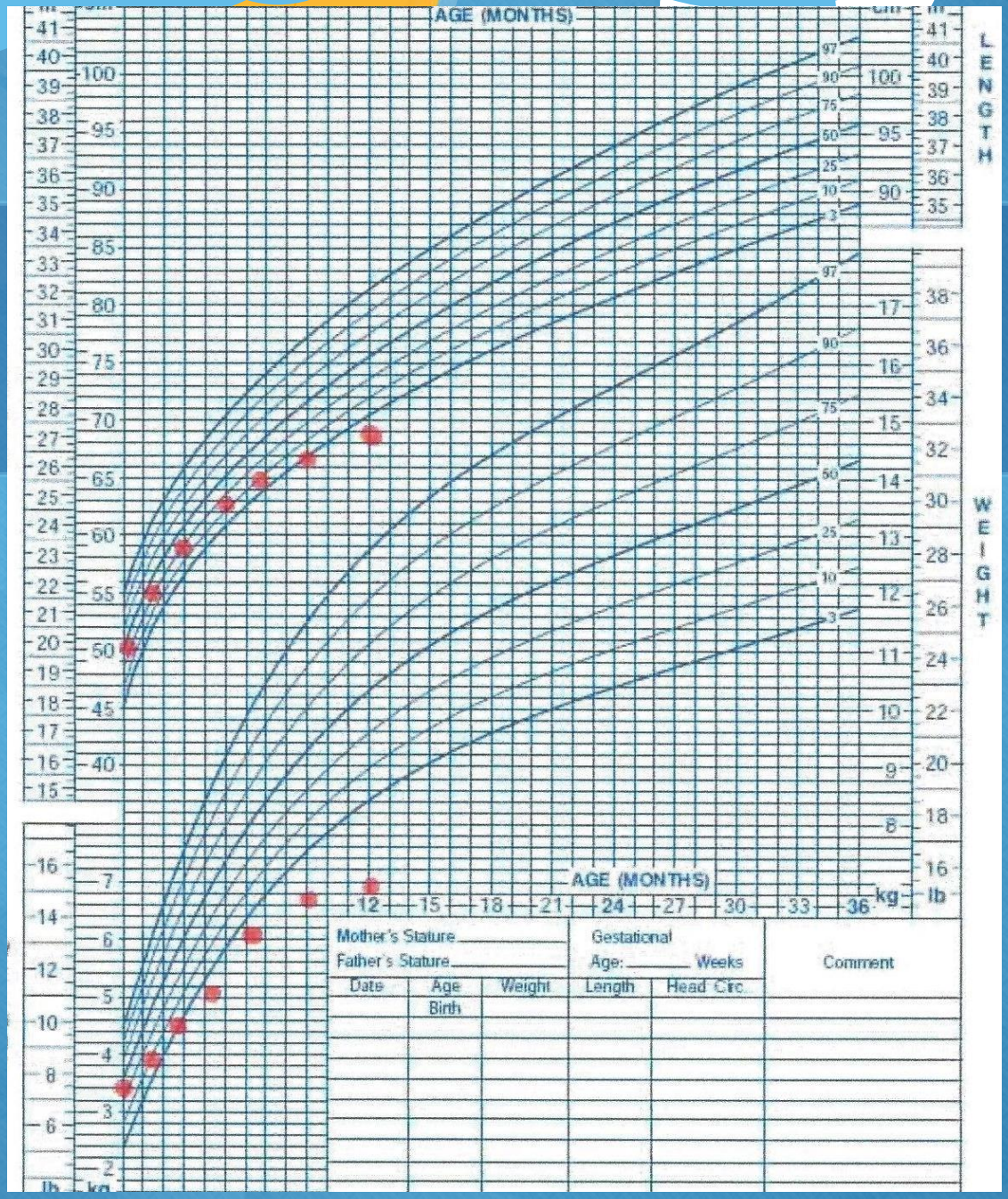


Bigger Problem!!!

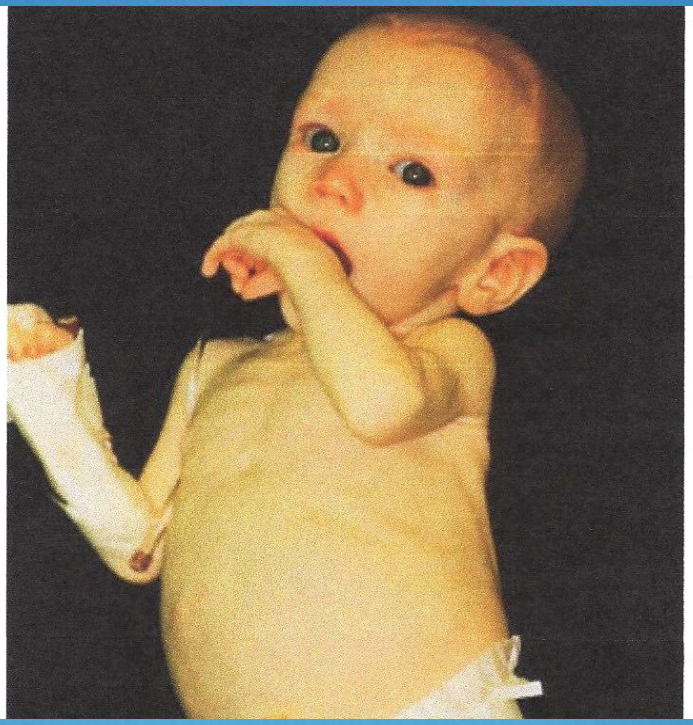


DEFINITION

- Significant interruption in the rate of Growth of weight during early childhood
- End result of inadequate usable calories required for normal growth
- Weight less than 3-5%tile or falling 2 or more major percentile lines on standardized growth chart


AGE (MONTHS)
LENGTH
WEIGHT
AGE (MONTHS)
12 15 18 21 24 27 30 33 36
kg
lb
Mother's Stature
Father's Stature
Gestational Age: Weeks
Comment
Date
Age
Birth
Weight
Length
Head Circ.

Cachetic Infant



CLASSIFICATION

- Organic=due to pathophysiologic disease or medical disorder
- Non- organic=environmentally related,psychosocial
- Organic plus non-organic combination

PATHOPHYSIOLOGY

- Inadequate intake of calories
- Inadequate retention or absorption of calories
- Excess metabolic needs

NORMAL GROWTH

- Average birth weight term infant 3.3Kg
- Up to 10% weight loss first 2 weeks (excess fluid)
- Weight gain 0-3months=30g (1oz)/day
- Weight gain 3-9months=15g(0.5oz)/day
- Premature infant: Appropriate growth chart

ACCURATE MEASUREMENTS

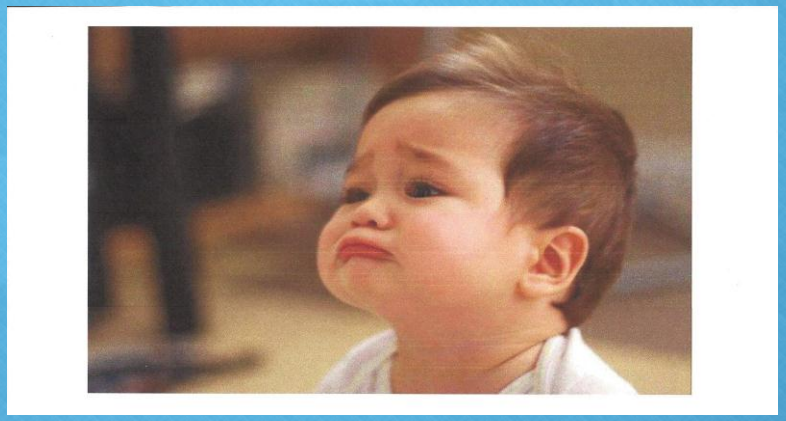
- ACCURATE MEASUREMENTS

- ACCURATE MEASUREMENTS

INCIDENCE

- Unknown, but between 1-5% of admissions to Children's Hospitals
- Highest incidence in premature infants and children with medical problems
- Higher incidence in children living in poverty, homeless, on Medicaid, living in rural areas

That Bad???



CLINICAL MANIFESTATIONS

- Poor weight growth, possible poor height growth and head size growth
- Reduced subcutaneous fat or muscle mass
- Dermatitis
- Edema (protein deficiency)

ETIOLOGY

- FIGURE 38-1
- TABLE 38-1
- TABLE 38-2

Etiology:

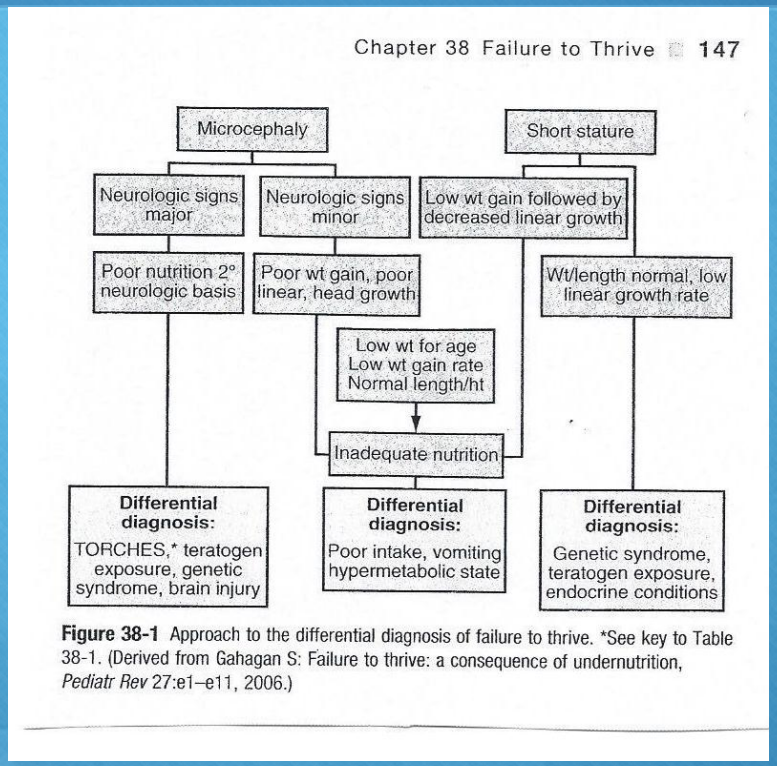
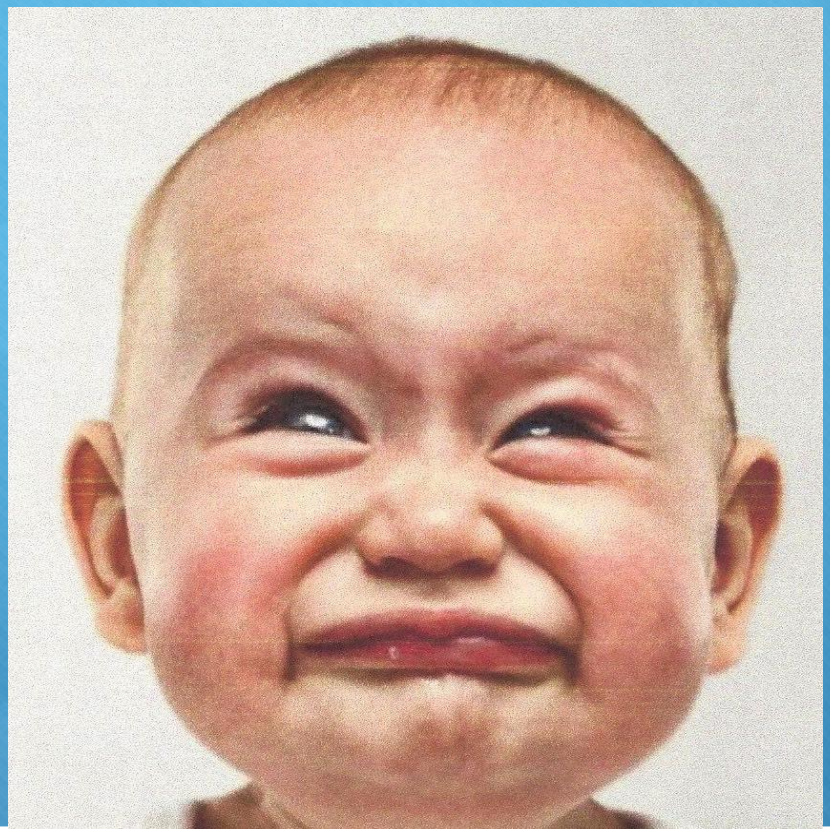


Figure 38-1 Approach to the differential diagnosis of failure to thrive. *See key to Table 38-1. (Derived from Gahagan S: Failure to thrive: a consequence of undernutrition, *Pediatr Rev* 27:e1–e11, 2006.)

Table 38-2 COMMON CAUSES OF MALNUTRITION IN EARLY LIFE

0-6 MO
Breastfeeding difficulties
Improper formula preparation
Impaired parent/child interaction
Congenital syndromes
Prenatal infections or teratogenic exposures
Poor feeding (sucking, swallowing) or feeding refusal (aversion)
Maternal psychological disorder (depression or attachment disorder)
Congenital heart disease
Cystic fibrosis
Neurologic abnormalities
Child neglect
Recurrent infections
6-12 MO
Celiac disease
Food intolerance
Child neglect
Delayed introduction of age-appropriate foods or poor transition to food
Recurrent infections
Food allergy
AFTER INFANCY
Acquired chronic diseases
Highly distractible child
Inappropriate mealtime environment
Inappropriate diet (e.g., excessive juice consumption, avoidance of high-calorie foods)
Recurrent infections

Intolerable???



DIAGNOSTIC WORK-UP

- HISTORY: Prenatal, Nutrition DETAILS, Development, Family,Social, Illnesses, Operations,Medications, Review of Systems

PHYSICAL EXAMINATION

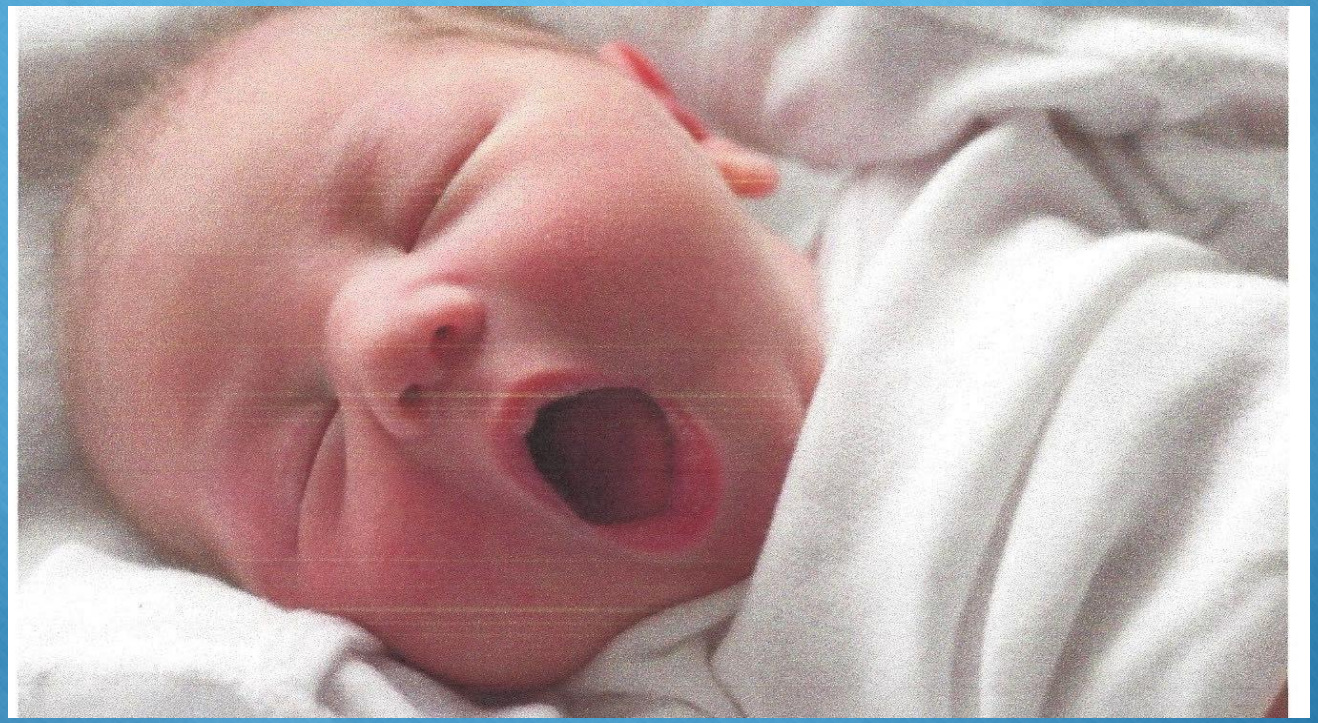
- Identifying acute or chronic illnesses
- Recognizing syndromes
- Documenting signs of malnutrition
- TABLE 38-4

Table 38-4 APPROACH TO PHYSICAL EXAMINATION

Vital signs	Blood pressure, temperature, pulse respirations, anthropometry
General appearance	Activity, affect, posture
Skin	Hygiene, rashes, neurocutaneous markings, signs of trauma (bruises, burns, scars)
Head	Hair whorls, quality of hair, alopecia, fontanel size, frontal bossing, sutures, shape, dysmorphisms, philtrum
Eyes	Ptosis, strabismus, palpebral fissures, conjunctival pallor, fundoscopic exam
Ears	External form, rotation, tympanic membranes
Mouth, nose, throat	Thinness of lip, hydration, dental health, glossitis, cheilosis, gum bleeding
Neck	Hairline, masses, lymphadenopathy
Abdomen	Protuberance, hepatosplenomegaly, masses
Genitalia	Malformations, hygiene, trauma
Rectum	Fissures, trauma, hemorrhoids
Extremities	Edema, dysmorphisms, rachitic changes, nails
Neurologic	Cranial nerves, reflexes, tone, retention of primitive reflexes, voluntary movement

Adapted from American Academy of Pediatrics: Failure to thrive. In Kleinman RE, editor: *Pediatric nutrition handbook*, ed 6, Elk Grove Village, IL, 2009, American Academy of Pediatrics, pp 601–636.

Nap Time???



TREATMENT

- TEAM APPROACH

PROGNOSIS

- MORTALITY: rare but not zero in U.S.A.
- Developmental Delay
- Academic Problems
- Behavioral problems

THANK YOU!!!

- HAVE A GREAT LUNCH: AFTER MY LECTURE, YOU DESERVE MUCH DELICIOUS CALORIES!

Let’s Party!!!!!!