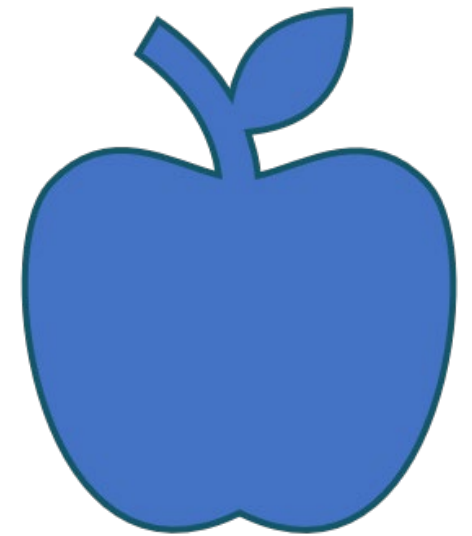


***CAREER'S IN
NUTRITION &
WELLNESS:
PEDIATRIC
NUTRITION***

BY CELINA CHAN RD, LDN, CLC



CELINA CHAN



- Born and raised in Newton, MA
- Chinese American
- Grew up with Mom, Dad, & one older brother
- Fun Fact: recently got married! 2020 COVID wedding



COLLEGE

- Amherst, MA
- Bachelor's Degree in Nutrition
- Minor: Food Science



Keene

STATE COLLEGE



DIETETIC INTERNSHIP

- Keene, NH
- 16 Dietetic Interns (5 distance, 11 on-site)
- Community Nutrition focus
- Rotations in Clinical, Community, Food Service, & Independent Study
- Total ~1,320 hours of experience



CLINICAL ROTATION

ROTATIONS:

- 2 weeks: General Adult- diabetes, renal, BMT, CHF, T2DM, etc.
1 week: OB & Tube feeds
- 2 weeks: In-patient Pediatrics (***CHAD- Children's Hospital at Dartmouth; PICU- Pediatric Intensive Care Unit***)
- 1 week: Gastroenterology- pancreatitis, whipple procedures, colostomy, ileostomy, IBD, etc.
- 2 weeks: Outpatient Clinics: Bariatrics, Cardiology, Transplant, Endocrinology, Norris Cotton Cancer Center
- 1 week: ICU Tube feeds
- 1 week: TPN
- 2 weeks: Staff Relief

Final Case Study

Pediatric Nutrition: Management of SBR, dehydration, & high ileostomy output- The Influential Role of a Clinical Dietitian

COMMUNITY ROTATION

Community Experience

Please click on the button tabs below to learn more about my experience with each age group.



CHILDREN



TEENS



Phoenix House
Rising Above Addiction

ADULTS



TAKE OFF POUNDS SENSIBLY

SENIORS



ELECTIVE



COUNSELING

FOOD SERVICE



Menu Planning



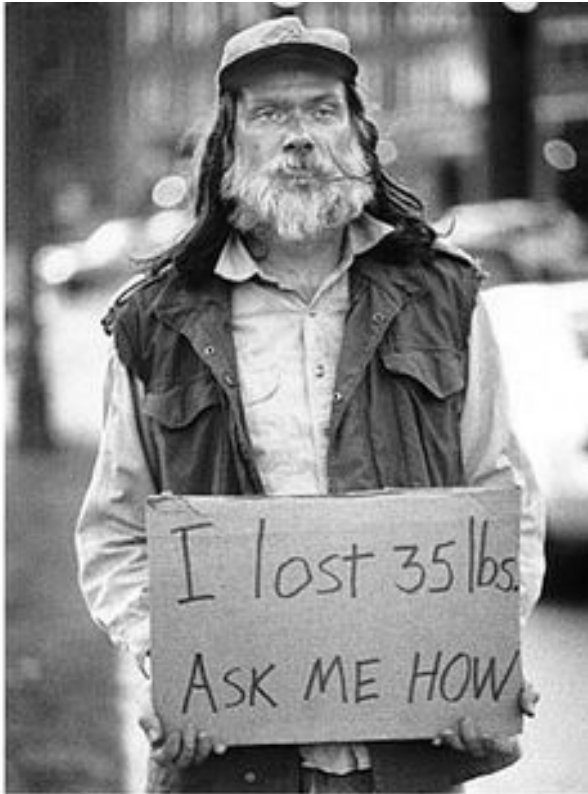
Working with Chefs



Allergens



INDEPENDENT STUDY



NO AGENDA HERE: Ensminger



- Nutrition & Homelessness
 - Community Breakfast
 - Men's Shelter
 - Women's Shelter
 - Transitional Housing
 - UNH Cooperative Extension
 - Community Kitchen
 - Food Bank of Western MA
 - Future Project Example

PASSED RD EXAM!

Dietitians



What my friends think I do



What society thinks I do



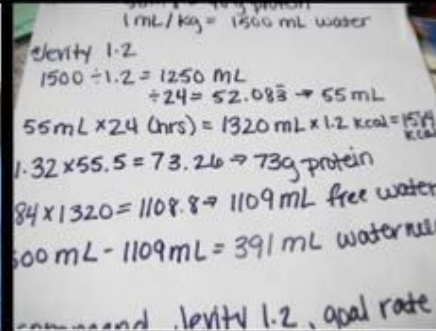
What my patients think I do



What doctors think I do



What I think I do



What I actually do

ONE DOES NOT SIMPLY



"LEARN NUTRITION"
IN A MONTH

When employers want you to have 10 years of work experience before the age of 22



**To get a job,
I need experience**



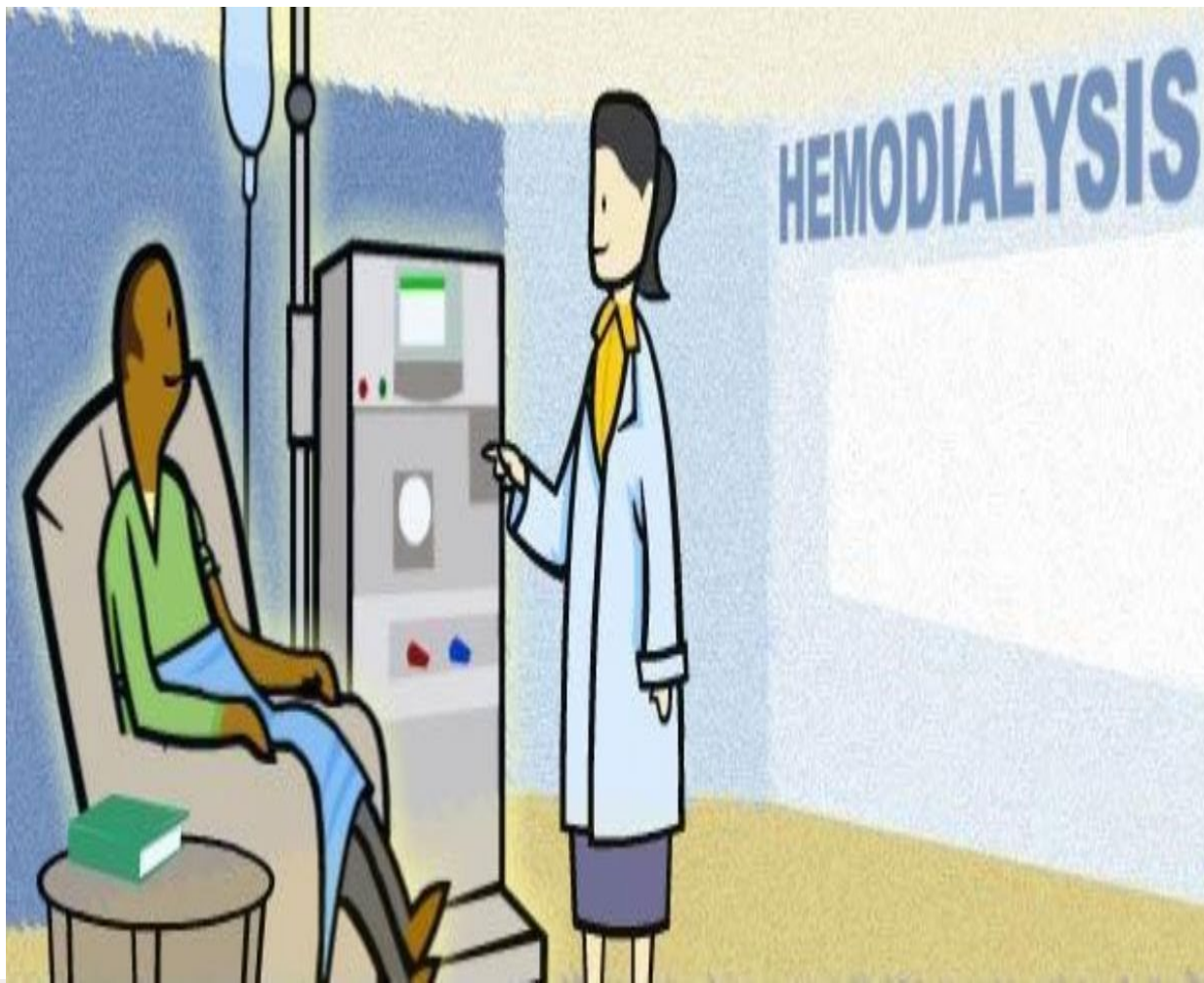
**To gain experience,
I need a job**



FIRST JOB

- Long term acute care hospital
- Per Diem
- 56 bed hospital
- Medical Nutrition Therapy
- Enteral and Parenteral nutrition
- Diet education

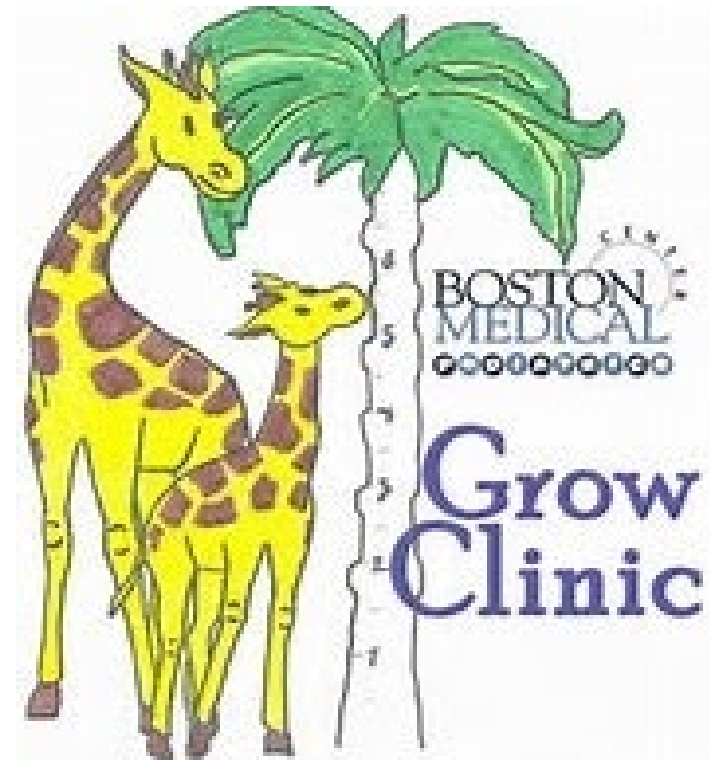




JOB #3: "I'VE NOT FAILED. I'VE JUST FOUND 10,000 WAYS THAT WON'T WORK"- THOMAS EDISON

BOSTON MEDICAL CENTER

- The Grow Clinic (Failure-to-Thrive clinic)
 - An outpatient sub-specialty clinic that provides comprehensive specialty medical, nutritional, developmental and social services and home visiting to children from the Greater Boston area referred with Failure To Thrive (FTT)
- Baby Steps Clinic (NICU follow up clinic)
 - Provides developmental evaluations, nutritional assessments, and home visiting to former premature infants or term infants with complicated newborn courses (ex. NAS, feeding difficulties, FTT, NICU)



CENTER
BOSTON
MEDICAL

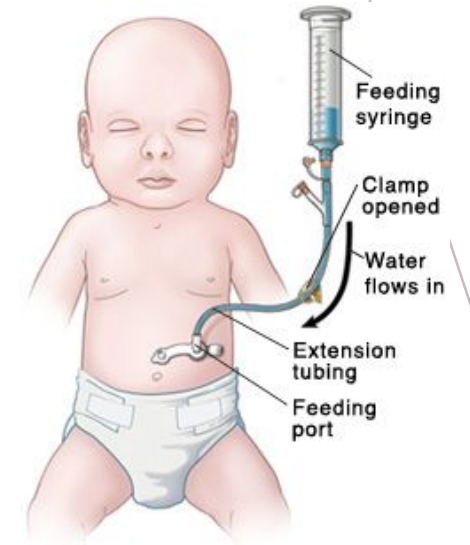
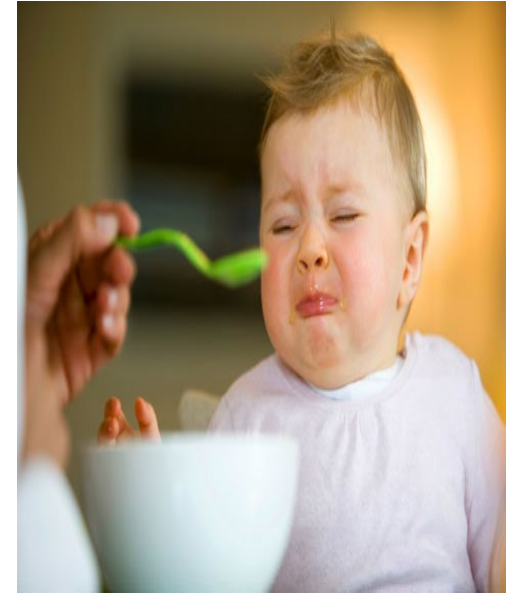
EXCEPTIONAL CARE. WITHOUT EXCEPTION.

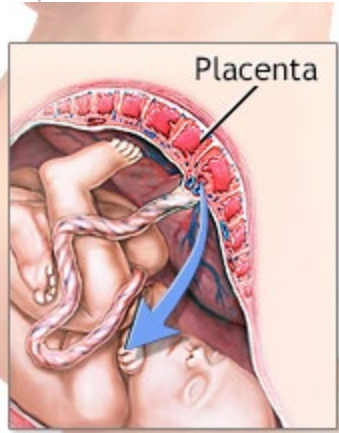
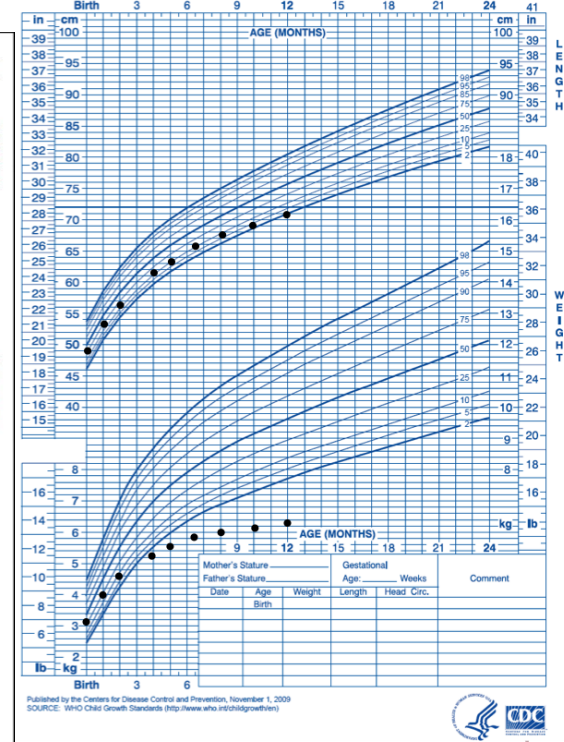
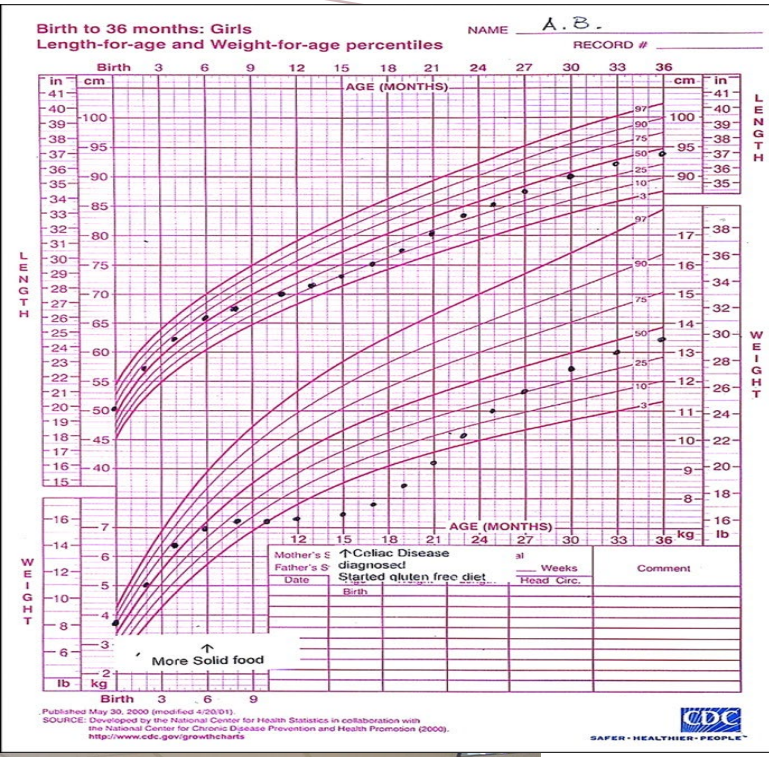
THE GROW CLINIC

- <https://www.youtube.com/watch?v=NtNk7HOkaRI&t=151s>



PEDIATRIC NUTRITION





Placenta

Drugs pass to baby from the placenta

After birth, baby suffers from withdrawal



ADAM.



HOME VISITS

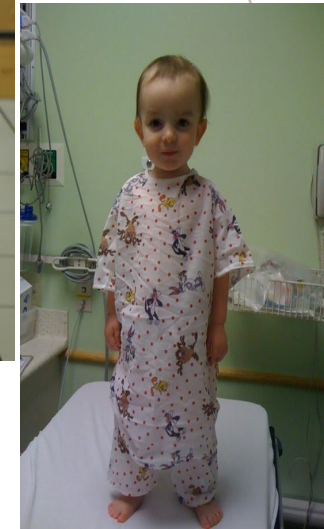


DAY IN THE LIFE



Clinic Days

- Anthropometrics
- Medical Nutrition Therapy
- Nutrition Counseling (high calorie diet)
- Collaboration with multidisciplinary team (SW, MD, R)



Home/School visiting

- Building trust
- Collaboration with multidisciplinary team (SW, RD)
- What is going on at home/shelter/rehab? Resources
- Grocery Deliveries
- Highchairs
- Collaborating with teachers and care



HOME VISITS



CERTIFIED LACTATION COUNSELOR



- Boston Breastfeeding Coalition
- Vital Village
- Scholarship
- Volunteer at Baby Café
- Training Course & Exam



**EASTIE BABIES GROUP
FREE INFOSHOP!**

**NOURISHING MOMS:
BREASTMILK, THE ORIGINAL SUPERFOOD!**

Join us as registered dietitian, *Celina Chan*, leads a nutrition infoSHOP for expecting moms and new moms with babies!

WHEN
Friday
December 8th
9:30-11:00

WHERE
Paris Street BCYF
112 Paris St.
East Boston

Participants will learn:

1. What to eat/not to eat while breastfeeding!
2. Healthy food choices for mom and baby!
3. Why breast milk is nutritionally important for babies and how it stacks up to formula!

 Celina Chan, RD, LDN, has been a registered dietitian at Boston Medical Center since June 2016, working in Baby Steps and Grow Clinics. She is trained as a CAPP Lactation Educator and has been providing breastfeeding support in East Boston as a volunteer through Vital Village. She is dedicated to working alongside families, providing nutritional support.

Facebook.com/EastieBabiesGroup
EastieBabies@gmail.com
BostonBreastfeeding.weebly.com



GROW CLINIC TEAM



BOSTON CHILDREN'S HOSPITAL

- Martha Eliot Health Center
- Division of Gastroenterology, Hepatology, and Nutrition
- Growth & Nutrition Program
- Open Clinic
- Jimmy Fund Clinic



Boston Children's Hospital

Until every child is wellSM

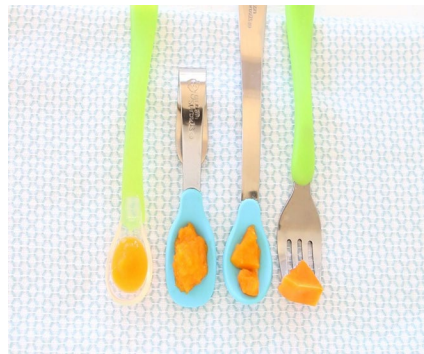
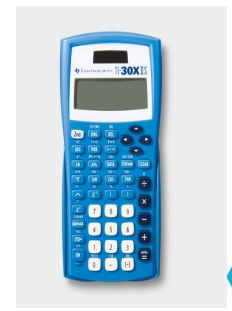
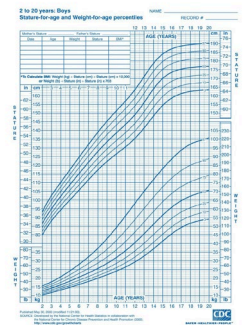
Growth & Nutrition Program Team

- Gastroenterologist
- Dietitian
- Speech Language Pathologist
- Social Worker
- Behavioral Psychologist
- GI Nurse Practitioner
- Premies, infants, toddlers, children, school age, teens, young adults



OPEN CLINIC:

- Autism
- FTT/Malnutrition
- Overweight/Obesity
- Enteral Nutrition (+ Home blended Tube Feedings)
- Congenital Malformations/defects (cerebral palsy, heart defects, down syndrome, neural tube defects, etc.)
- Multiple Food Allergies
- ARFID
- CHF
- BPD
- EoE
- Oncology
- IBS/Low FODMAP diet
- International patient
- Genetic Disorders
- Feeding difficulties
- Picky Eating



ChooseMyPlate.gov

SAMPLE VISIT

- Patient History (birth history, family history, medical history)
- Diagnosis/Reason for Referral
- Allergies
- Assessment
- Parents main concerns? Vs Provider concerns
- Diet recall/typical intake
 - Beverages
 - Foods
 - Mixing recipes
 - Enteral/PO nutrition
- Mealtimes (how long, where, what, who)
- Nutrition Supplements
- Anthropometrics (height, weight, BMI, weight for length, head circumference)
- Growth Curve (rate of weight gain ex. 6g/day)
- Vitamins/Minerals
- Nutrition Related Medications
- Labs
- PES statement (Problem, Etiology, Signs/symptoms)
- Nutrition Focused Physical Findings
- Nutrition Prescription
- Nutrition Intervention
- Collaboration of Care
- Monitoring and Evaluation
- Follow up

CONSTANT CHANGE...GROWTH!

Table 2: Recommended Dietary Allowances (RDAs) for Vitamin D [1]

Age	Male	Female	Pregnancy	Lactation
0-12 months*	10 mcg (400 IU)	10 mcg (400 IU)		
1-13 years	15 mcg (600 IU)	15 mcg (600 IU)		
14-18 years	15 mcg (600 IU)	15 mcg (600 IU)	15 mcg (600 IU)	15 mcg (600 IU)
19-50 years	15 mcg (600 IU)	15 mcg (600 IU)	15 mcg (600 IU)	15 mcg (600 IU)
51-70 years	15 mcg (600 IU)	15 mcg (600 IU)		
>70 years	20 mcg (800 IU)	20 mcg (800 IU)		

*Adequate Intake (AI)

Table 1: Recommended Dietary Allowances (RDAs) for Iron [5]

Age	Male	Female	Pregnancy	Lactation
Birth to 6 months	0.27 mg*	0.27 mg*		
7-12 months	11 mg	11 mg		
1-3 years	7 mg	7 mg		
4-8 years	10 mg	10 mg		
9-13 years	8 mg	8 mg		
14-18 years	11 mg	15 mg	27 mg	10 mg
19-50 years	8 mg	18 mg	27 mg	9 mg
51+ years	8 mg	8 mg		

* Adequate Intake (AI)

Growth Velocities
The following growth velocity charts were created based on infants and children growing at the 50th percentile. For infants and children growing at higher or lower percentages, they may have different growth than this standard. Use <http://www.peditools.org/> to determine the appropriate growth velocity for their percentile.

Mean Increments in Weight and Length Gain for Boys and Girls using Fenton Growth Charts

Gestational age (weeks)	Boys			Girls		
	Weight g/day	Weight g/week	Length cm/week	Weight g/day	Weight g/month	Length cm/week
23-24 weeks	11	80	1.4	10	69	1.3
24-25 weeks	13	90	1.4	13	88	1.3
25-26 weeks	14	100	1.4	14	98	1.4
26-27 weeks	16	111	1.4	15	107	1.4
27-28 weeks	18	126	1.4	17	119	1.4
28-29 weeks	21	144	1.4	19	135	1.4
29-30 weeks	24	165	1.4	22	154	1.4
30-31 weeks	27	189	1.4	25	177	1.4
31-32 weeks	30	212	1.4	28	199	1.4
32-33 weeks	33	228	1.4	31	216	1.4
33-34 weeks	34	236	1.3	33	229	1.3
34-35 weeks	34	238	1.3	34	237	1.3
35-36 weeks	33	233	1.2	34	239	1.2
36-37 weeks	32	221	1.1	33	234	1.1
37-38 weeks	30	209	1.0	31	215	1.0
38-39 weeks	29	205	1.0	27	190	1.0
39-40 weeks	30	207	0.9	25	176	0.9
40-41 weeks	31	217	0.9	26	181	0.9
41-42 weeks	33	229	0.9	27	192	0.8
42-43 weeks	34	237	0.9	29	200	0.8
43-44 weeks	34	240	0.9	29	205	0.8

Based on Data Table for Boys and Girls growing at the 50th percentile of the Fenton Growth Charts. Values calculated based on www.peditools.org by taking weekly weight and length gain to maintain 50th percentile using the Fenton Growth Chart.

Mean Increments in Weight and Length Gain for Boys and Girls using WHO Growth Charts

Age (months)	Boys			Girls		
	Weight g/day	Weight g/month	Length cm/month	Weight g/day	Weight g/month	Length cm/month
0-1	37.4	1124	4.8	31.3	955	4.5
1-2	36.5	1096	3.7	33.7	940	3.3
2-3	27.1	808	3	23.9	717	2.7
3-4	20.5	626	2.5	19.2	577	2.2
4-5	16.9	508	2	15.8	474	1.9
5-6	14	423	1.7	13.3	398	1.7
6-7	11.9	363	1.5	11.5	345	1.5
7-8	10.5	318	1.4	10.3	306	1.4
8-9	9.5	286	1.3	9.1	276	1.3
9-10	8.6	263	1.3	8.4	254	1.3
10-11	8.1	247	1.2	7.8	239	1.2
11-12	7.8	235	1.2	7.7	228	1.2
12-24	6.7	208	1.1	6.7	210	1.0

Based on Data Table for Boys and Girls growing at the 50th percentile of the WHO Growth Charts. Values were listed by month and for weight and length, and then extrapolated by 30 to obtain the per day values. http://www.cdc.gov/growthcharts/who_charts.htm

DAY IN THE LIFE

- Varies depending on the day and clinic
- Open Clinic- Solo
- Growth & Nutrition- Team visits





THANK
YOU!!!



QUESTION
S???

