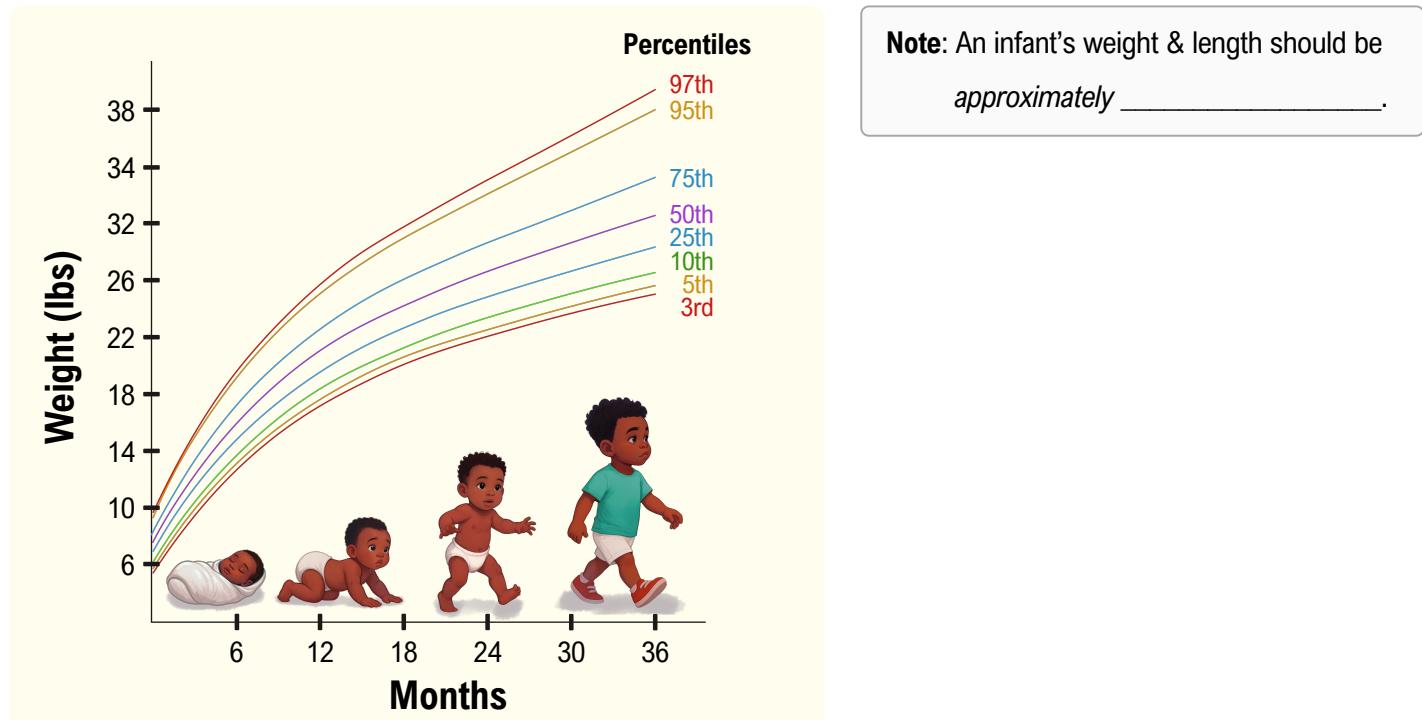


## **CONCEPT: NUTRITIONAL NEEDS FOR INFANTS**

### **Infant Nutrition & Growth**

- ◆ An infant's *growth* is a key indicator of their *overall* \_\_\_\_\_.
- ◆ Infants *triple* birth weight by ~12 months - the \_\_\_\_\_ *growth rate* through any stretch of life.
  - Infants need \_\_\_\_\_ - \_\_\_\_\_ kcal per pound of body weight per day (~3x more than adults).



## **CONCEPT: NUTRITIONAL NEEDS FOR INFANTS**

### **EXAMPLE**

Baby James' height & weight are taken by the doctor at his 8-month well-check. His length is in the 30<sup>th</sup> percentile, and his weight is in the 75<sup>th</sup> percentile, the same values as his last two appointments. What actions should his parents take to optimize his health?

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- a) Feed him more breastmilk.
- b) Increase his daily caloric intake.
- c) Reduce James' Calorie intake by cutting out high-Calorie, low-nutrient foods (e.g. concentrated fruit juice).
- d) Feed him more food rich in vitamin D & calcium to help his bones grow longer.

### **PRACTICE**

Which of the following statements is true?

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- a) When a doctor is checking an infant's growth, they're looking for the weight percentile to be approximately half of the length percentile (e.g. 50<sup>th</sup> percentile for length & 25<sup>th</sup> percentile for weight).
- b) Between birth & 12 months old, an infant's weight should approximately double.
- c) An infant's length and weight should be checked by a doctor at least once every year.
- d) A healthy infant's length & weight should increase approximately proportionally to each other.

## **CONCEPT: NUTRITIONAL NEEDS FOR INFANTS**

### **Dietary Requirements for Infants: 0-6 Months**

- ◆ Breastmilk & formulas typically meet \_\_\_\_\_ hydration & nutritional needs of infants in their first 6 months of life.
  - Exception: exclusively breastfed infants are typically recommended vitamin \_\_\_\_\_ supplements.
- ◆ 40-50% of an infant's energy should come from \_\_\_\_\_ in the first year of life.



### **Dietary Requirements for Infants: 6-12 Months**

- ◆ By ~6 months of age, some \_\_\_\_\_-solid foods may be introduced when the baby is **physiologically ready**:

Has head/neck control. 	Can sit up with support. 	Can turn head to indicate fullness. 
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- ◆ Introduce new foods *one-at-a-time* to test for *allergies*; prioritize \_\_\_\_\_-rich semi-solid foods (e.g. pureed meat).
- ◆ Some foods & beverages are \_\_\_\_\_ safe for infants:

<b>Honey:</b> may contain <i>Clostridium botulinum</i> .	<b>Choking Hazards:</b> grapes, nuts, raw carrots, hot dogs.	<b>Animal/Plant Milk:</b> lack the nutrient profile suitable for infants.	<b>Juice:</b> high in sugar, can lead to excess Calorie intake.

## CONCEPT: NUTRITIONAL NEEDS FOR INFANTS

### EXAMPLE

Mark each food with a  if it's safe, or with a number (1–4) to indicate why it's unsafe for physiologically ready infants around 6 months old.

Honey _____	<input checked="" type="checkbox"/> Safe.
Fruit juice _____	1 Unsafe: Contains lots of sugar which can lead to excess Calorie consumption.
Pureed meat _____	2 Unsafe: Choking hazard.
Cow's milk/plant-based milk _____	3 Unsafe: May contain <i>Clostridium botulinum</i> , a pathogen that can be extremely harmful to an infant (due to under-developed immune system).
Hot dog slices, nuts, grapes _____	4 Unsafe: Does not have a nutrient profile that meets an infant's needs.
Yogurt blended w/ strawberries _____	

### EXAMPLE

Fill in the interactive blanks to complete the table & review key concepts:

	Preconception	During pregnancy	First 12 months (Lactation)
<b>Father</b>	_____ teratogens. Achieve a healthy weight via a balanced diet & exercise.	Do not smoke if regularly around mother.	Do not smoke if regularly around mother or baby.
<b>Mother</b>	Avoid/limit teratogens. Achieve a healthy weight via a balanced diet & exercise. Consume 400 µg _____ /day.	Avoid/limit teratogens. Light exercise for >150 min/week. Consume 3L fluid & an extra 350-450 kcal per day in 2 <sup>nd</sup> & 3 <sup>rd</sup> trimesters.	Avoid/limit teratogens. Consume 3.8L fluid & an extra _____ -400 kcal per day. _____ iron intake to 9 mg/day.
<b>Baby</b>	N/A	N/A	_____ or formula is primary source of nutrition. _____ honey, choking hazards, cow's/plant milk, & juice.

## **CONCEPT: NUTRITIONAL NEEDS FOR INFANTS**

### **PRACTICE**

Which of the following is the most appropriate semi-solid food to start feeding an infant at 6 months old?

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- a) Raisins/grapes.
- c) Yogurt & honey.
- b) Pureed meat.
- d) Nuts & seeds.

### **PRACTICE**

Which of the following is NOT a requirement to start feeding a 6-month-old baby solid foods?

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- a) They have head & neck control.
- b) They have mature swallowing ability.
- c) They can sit upright.
- d) They have all their teeth.