

PKU NUTRITIONAL MILESTONES

Infant Through Toddler Years

Infant (0-12 months)

- ▶ Birth to 4 months: Takes a 100% of prescribed PKU mixture, a combination of infant formula or breast milk and PKU formula. Every 1 – 2 weeks formula changes are made based on blood phenylalanine (phe) levels, nutritional needs and growth
- ▶ 4-6 months: Add solid food with your dietitian's approval. Here are some signs of readiness:
 - ▶ Able to sit and control his/her head and upper body with minimal support
 - ▶ Able to grasp objects (toys or spoon) and bring them to his/her mouth
 - ▶ Shows interest in foods when others are eating
 - ▶ Discuss appropriate low protein food options with your dietitian
- ▶ 8-10 months:
 - ▶ Begins eating finger foods
 - ▶ Start the transition of drinking formula from a bottle to a cup
- ▶ 9-15 months:
 - ▶ Uses the pincher grasp to pick up low protein finger foods (9 months old)
 - ▶ Holds and drinks from a cup using 2 hands (12 - 15 months old)
 - ▶ Eats food with fingers (12 - 15 months old)



Resources:

- ▶ How Much Phe? The Baby Book: <https://shop.pkunews.org/products/how-much-phe-the-baby-book>
- ▶ Introducing Low Protein Foods to your Baby by Ajinomoto Cambrooke Inc.

Toddler (2-3 years)

- ▶ PKU formula awareness:
 - ▶ Drinks formula from a cup
 - ▶ Offer praise for any formula he/she drinks
- ▶ Promote PKU food knowledge:
 - ▶ Naming low protein foods during cooking and at meals
 - ▶ Teach "YES & NO" or "red, yellow, green light" foods allowed for PKU
 - ▶ Encourage child to ask parent/caregiver permission before eating
- ▶ Help your child understand PKU through fun story books such as *Penny the Penguin has PKU*

Resources:

- ▶ My PKU Binder from National PKU Alliance: <https://www.npkua.org/portals/0/pdfs/pkubinder/PKU%20Binder%202011.pdf>
- ▶ How Much Phe? The Essentials: <https://shop.pkunews.org/products/how-much-phe-the-essentials>
- ▶ Transition booklet by Ajinomoto Cambrooke Inc.



Age Appropriate Development for Infants & Toddlers

Both your Pediatrician and Genetics clinic will monitor your child's development. The following are some of the milestones you can anticipate and discuss at your visits. **Please note all children develop at different phases and these are general guidelines:**

0–3 months old:

- ✔ Lifts head and chest while on tummy, makes arm and leg movements while lying on back or stomach
- ✔ Looks at faces, plays with hands and focuses on objects
- ✔ Quiets when picked up, smiles when given attention and shows needs through crying
- ✔ Startles at loud noises and searches for sounds

3–6 months old:

- ✔ Rolls from back to side, sits with assistance and pushes to elbow while lying on stomach
- ✔ Moves toys with hand to mouth and reaches for and grabs objects with whole hand
- ✔ Makes noise when given attention and smiles or copies facial expressions
- ✔ Looks at a person speaking, will begin to coo and gurgle and will turn to noise

6–9 months old:

- ✔ Sits without support, crawls forward on tummy (pulling with arms) and rolls over in both directions (front to back, back to front)
- ✔ Passes things from one hand to another, shakes and bangs toys and grabs hand sized object using thumb and finger
- ✔ Smiles and babbles to his/her face in a mirror and reaches for offered toy
- ✔ Responds to own name, strings sounds together like “ma ma” and will make eye contact with person speaking

9–12 months old:

- ✔ Walks while holding onto furniture, stands alone and sits down from standing
- ✔ Grabs pea-sized object with finger and thumb and uses fingers to point at things
- ✔ Reaches for people he/she knows and plays “peek-a-boo”
- ✔ Knows parents/voices, talks to others to get attention and understands simple words

12–15 months old:

- ✔ Walks alone and squats to play
- ✔ Stacks 2 or more blocks and uses both hands to make a toy work
- ✔ Looks at pictures in books and looks at toys for at least 1 minute
- ✔ Follows one-step directions (handing a toy) and begins to use words with 2 or more syllables like cracker

15–18 months old:

- ✔ Tries to run, throws large ball while standing and walks up and down stairs with help
- ✔ Pushes large buttons on toys and holds crayon in fist to scribble
- ✔ Points to show what he/she wants and knows people in photos
- ✔ Stops when told “no,” asks for food or drink with sounds or words

18–24 months old:

- ✔ Pushes or pulls toys while walking, builds toy with pieces, is able to complete 2-3 piece puzzles
- ✔ Can eat with a spoon
- ✔ Can help undress self
- ✔ Watches and copies parents playing “peek-a-boo” and watches and focuses during an activity
- ✔ Knows named objects (blanket), names pictures in books and speaks clearly

2–2½ years old:

- ✔ Jumps up and down with both feet, walks up or down stairs by self with both feet on each step and walks on tiptoes
- ✔ Matches objects together such as pairing toys
- ✔ Starts to avoid common dangers and wants to do things on his/her own
- ✔ Points to 3 body parts, talks in 2 or 3 word sentences and responds appropriately to requests

2½–3 years old:

- ✔ Kicks a ball, walks up or down stairs with 1 foot on each step and balances on 1 foot
- ✔ Folds a piece of paper in half, begins to cut with scissors and can draw or copy a vertical line
- ✔ Matches colors and images
- ✔ Learns how to take turns through playing and talking, plays near other children each doing separate activities

3–4 years old:

- ✔ Catches a large ball with two hands, pedals tricycle, and jumps over objects or off a step
- ✔ Able to draw a circle with demonstration, complete a simple puzzle, can screw lids on jars
- ✔ Will do what parents ask most of the time, shows pride in doing things without help, waits 3-5 minutes to have needs met
- ✔ Understands concepts like size, numbers and shapes, tells stories and uses “and” or “but” and can follow 3 step directions

Reference:

<http://www.cdc.gov/ActEarly>

<http://www.battlefords.ecip.ca/developmental-milestones>