

FORMULA FIRST

The University of Washington PKU Clinic has a “formula First” approach to PKU management. Why this approach? What does this mean for your infant? What does this mean as my child gets older? Read on...

What does “formula first” mean?

Formula provides the majority of the nutrient needs for an individual with PKU. For most people, this means roughly 85% of total protein and 90% of energy (calories) will come from formula. We encourage all individuals with PKU to think of formula as the mainstay of their diets, and food as supplemental. Parents offer formula to their children before offering other foods, both to meet nutritional needs and to satisfy appetite.

Why “formula first”?

The “formula first” approach makes sense from two perspectives: PKU management and nutritional adequacy.

1) *PKU Management: Formula First = Good Blood Levels*

Over the past 30 years, we have found that those infants and children who receive a consistent daily intake of phenylalanine-free formula (again, about 85% of protein needs and 90% of energy needs) have the most stable and appropriate serum phenylalanine levels.

2) *Nutritional Adequacy*

The formula prescribed for your child is nutritionally complete (except for phenylalanine). It provides appropriate amounts of vitamins, minerals, phenylalanine-free protein, carbohydrate, and fat for your child’s age and size.

Because foods high in protein are the primary source for some nutrients (for example, calcium in milk and iron from meat), these nutrients are “of concern” for individuals who follow a low-protein diet. People who do not use formula must also manage a complicated vitamin and mineral supplement regimen or risk deficiency.

Complete formulas (for example, Phenyl-Free and Phenex) provide vitamins and minerals in amounts appropriate for you child.

What does this mean for my infant?

Practically-speaking, “formula first” for an infant with PKU is not much different than a formula and food pattern for an infant without PKU. You will offer formula to your infant



Cristine M. Trahms Program for Phenylketonuria
University of Washington - CHDD - Box 357920, Seattle, WA 98195

(206) 598-1800, Toll Free in Washington State 877-685-3015
<http://depts.washington.edu/pku>

until he or she is 6 months old—just as you would offer formula or breastmilk to an infant without PKU. The introduction of solids, during months 6-12, is primarily about experience with new tastes and textures, and formula remains the primary source of nutrition; this is the case for infants with and without PKU.

What does this mean as my child gets older?

Again, we have found that children whose nutritional needs are primarily met by formula have the “best” serum phenylalanine levels. This enables them to reach their full intellectual and physical potential. Some observations about the “formula first” approach:

During the toddler and preschool years...

As your child goes on “food jags” (grapes and applesauce again?!), you can rest assured that her nutrient needs are being met by her formula.

During the school-age years...

Your child has learned that formula satisfies his appetite. He will probably ask for more formula when he is hungry, instead of reaching for high protein food.

During adolescence...

The protein and energy in formula will support your teenager’s growth spurts – and help her to maintain appropriate serum phenylalanine levels. If she is involved in athletics or other physical activity she may find that formula is a convenient energy-boost.

The amount of formula prescribed for your child is based on a number of factors, including your child’s age and size (to estimate nutrient needs), appetite, serum and phenylalanine levels. The University of Washington PKU Clinic will work closely with your family to develop a food and formula plan that meets your child’s needs.



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