

Worksheet 26-1: Calculation of Nutrition Needs for a Child with PKU

Using the information in Table 26.7, calculate the nutrition needs for P.H., a female with PKU, during the various stages of her life.

Age	Weight	^{mg/kg} PHE	^{mg/kg} TYR	^{g/kg} Protein	^{kcal/kg} Energy	^{ml/kg} Fluid
1 month	10#	125-96.8	300-350	3.5-3.0	120 (145-95)	100-135
4 months	12#	20-45	300-350	3.5-3.0	120 (145-95)	100-130
6 months	14#	95-77	1590-1908	19.1-15.9	999 (922-804)	922.2-795
10 months	18#	82-287	2090-2400	24.54-20	95858	921-1107
2 years	24#	200-400	1.72-3.09	≥ 30	1300 (900-)	900-1800
5 years	35#	210-450	2.25-3.50	≥ 35	1700 (1300)	1300-2300
9 years	52#	220-500	2.55-4.09	≥ 40	2400 (1050)	1050-3300
12 years	75#	250-750	3.45-5.09	≥ 50	2200	1050-3300
16 years	105#	230-700	3.45-5.09	≥ 55	2100	1050-3300
21 years	115#	220-700	3.45-5.09	≥ 60	2100	1050-3300

- When is the need for protein the highest for P.H. (grams/kg)? Why?

The need for protein is the highest for 0 months and 1-4 years for adequate growth.
- When is the need for phenylalanine highest for P.H. (milligrams/kg)? Why?

0-6 mo & 1-4 years for growth needs.
- Why are the needs for protein and phenylalanine higher in males than in females after age 11?

Males have a higher lean muscle mass.