

PACKED CELL VOLUMES IN HEALTHY BANGKOK SCHOOL CHILDREN

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OBJECTIVE : To define the normal range of hematocrits among healthy Bangkok children.

BACKGROUND AND METHODS : As a public health service, during the June 1980 blood collection at the Phibunprachasan School, packed cell volumes were determined on fresh antecubital blood specimens from all subjects. Children with significant anemia were identified and their parents were advised to seek medical treatment for the child.

RESULTS : The mean and standard deviation of PCV's for each grade level are presented in Table 1. The mean for females is constant over the approximate age range 4 to 15, (grade levels Anuban - 1 through Matayom Suksa - 1), around 39%. Values are similar to males until the ages of 12 and up (grade levels Matayom - 1 and higher) when the mean PCV increases to 43-45%.

Table 1. Packed cell volume data, Phibunprachasan School, June 1980

	Class	Sex	N	Mean	Variance	Mean +/- 2 S.D.
Anuban	An-1	M	49	39.61	5.176	(35.05-44.17)
		F	70	40.09	6.478	(35.01-45.17)
	An-2	M	42	39.02	5.499	(34.34-43.70)
		F	48	40.10	4.927	(35.66-44.54)
Pratom	P - 1	M	93	38.80	6.076	(33.86-43.74)
		F	102	38.57	5.970	(33.69-43.45)
	P - 2	M	99	38.95	6.109	(34.01-43.89)
		F	113	38.99	6.681	(33.83-44.15)
	P - 3	M	122	38.97	6.802	(33.75-44.19)
		F	110	39.05	6.288	(34.03-44.07)
	P - 4	M	100	39.42	10.404	(32.98-45.86)
		F	102	39.35	11.209	(32.65-46.05)
	P - 5	M	105	40.87	5.898	(36.01-45.73)
		F	115	40.63	5.762	(35.83-45.43)
	P - 6	M	93	40.62	4.815	(36.24-45.00)
		F	88	40.69	6.417	(35.63-45.75)
Matayom	M - 1	M	53	42.09	7.368	(36.67-47.51)
		F	60	41.48	7.183	(36.12-46.84)
	M - 2	M	51	43.61	8.199	(37.89-49.33)
		F	63	41.29	7.188	(35.93-46.65)
	M - 3	M	31	42.87	8.629	(36.99-48.75)
		F	66	40.70	5.787	(35.88-45.52)
Matayom Suksa	M.S.-1	M	18	45.78	7.839	(40.18-51.38)
		F	31	40.67	3.379	(36.99-44.35)