

APPA Webinar: VITAMIN D SUPPLEMENTATION - Is There A Need For It In Asia?
Vitamin D Levels Among Asian Children

Vitamin D Levels among Asian Children

Prof Dr Poh Bee Koon
Nutritional Sciences Programme
Centre for Community Health Studies (ReaCH)
Faculty of Health Sciences
Universiti Kebangsaan Malaysia
Kuala Lumpur

1

Vitamin D status in Adults

Source: IOF

Wahl DA, Cooper C, Ebeling PR, Eggerstoner M, Hilger J, Hoffmann K, Jones R, Kanis JA, Mitchell A, Poryazov D, Stewart J. A global representation of vitamin D status in healthy populations. Archives of Osteoporosis. 2012 Dec;7:153-72.

Vitamin D level (nmol/L)
 < 25 25-50 50-75 > 75

2

Vitamin D status in Children and Adolescents

Source: IOF

Wahl DA, Cooper C, Ebeling PR, Eggerstoner M, Hilger J, Hoffmann K, Jones R, Kanis JA, Mitchell A, Poryazov D, Stewart J. A global representation of vitamin D status in healthy populations. Archives of Osteoporosis. 2012 Dec;7:153-72.

Vitamin D level (nmol/L)
 < 25 25-50 50-75 > 75

3

Prevalence of vitamin D deficiency in Asia

Deficiency (%)

Country

Source: van Schoor N, de Jongh R, Lips P. 2024. Worldwide vitamin D status. In: Feldman and Pike's Vitamin D. 2024 Jun 1: 47-75.

4

Vitamin D Deficiency* in SEA by Age group

Prevalence of VDD with 95% CI

Study

Under five years old (<5 years)

5-17 years old

Older than five years (>5 years old)

*Cut-off <50 nmol/L

Source: Ohtsuka Y, Puri DA, Hyatt J, Zulu M, Sathiyasivam DC, Poh BK, Danchin M, Marui IK. Vitamin D deficiency in South-East Asian children: a systematic review. Archives of Disease in Childhood. 2022 Nov 1;107(11):986-7.

6

25(OH)D levels in SEA children

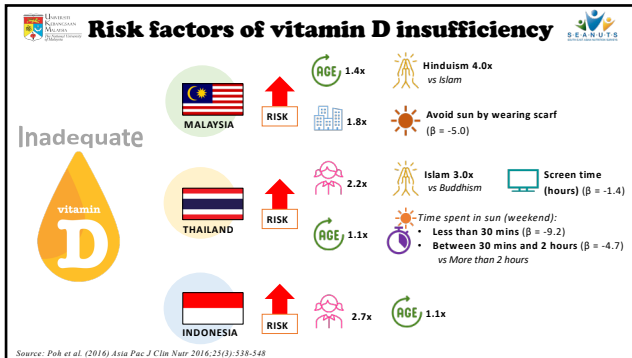
Deficient Insufficient Inadequate Desirable

Deficient: 25(OH)D <25 nmol/L; Insufficient: 25(OH)D level <50 nmol/L; Inadequate: 50 nmol/L < 25(OH)D level <75 nmol/L; Desirable: 25(OH)D >75 nmol/L

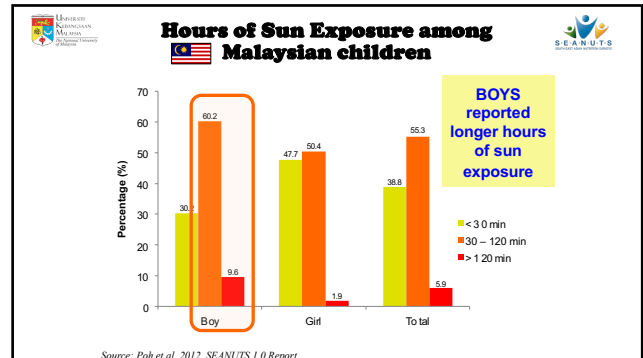
Source: Poh BK, et al. 25-OH-vitamin D biomarkers and the risk of vitamin D deficiency in the South-East Asian Nations Surveys (SEAN7S). Asia Pacific Journal of Clinical Nutrition. 2016 Jun;25(3):338-46.

7

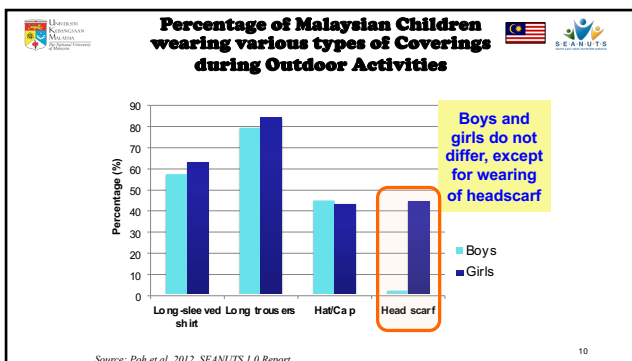
APPA Webinar: VITAMIN D SUPPLEMENTATION - Is There A Need For It In Asia?
 Vitamin D Levels Among Asian Children



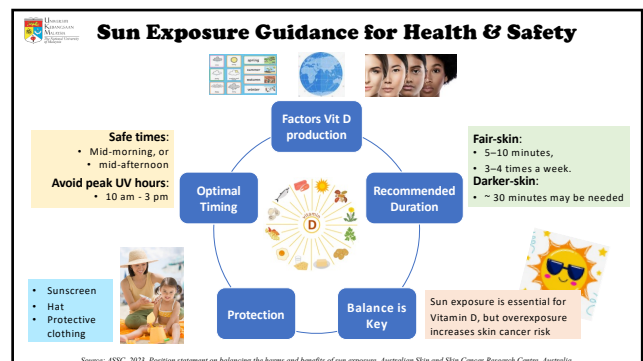
8



9



10



11



12