

BE HEALTHY.. DRINK MILK DAILY..

MILK AND MILK PRODUCTS CONSUMPTION: FINDINGS FROM THE NATIONAL HEALTH AND MORBIDITY SURVEY 2022 (ADOLESCENT HEALTH SURVEY)

Syafinaz Mohd Sallehuddin, Lai Wai Kent, Suhaila Abdul Ghaffar, Chong Chean Tat, Nurul Huda Ibrahim, Lim Kuang Kuay
Institute for Public Health, National Institutes of Health, Ministry of Health Malaysia

INTRODUCTION

1. Despite growing evidence that consuming dairy products offers numerous health advantages, there has been an alarming decline in these food groups consumption globally in recent decades.
2. According to the World Health Organization (WHO)¹, the adolescent years are a time of fast growth, hormonal changes, and sexual maturation. Additionally, there are fresh motivations, challenges and nutritional alters, some of which last throughout adulthood².
3. Moreover, the years between infancy and adolescence are important for growth and development, and milk and milk products are healthy, sufficient providers of a wide range of important nutrients³.

OBJECTIVE

The objective of this study was to determine the prevalence of milk and milk products consumption among adolescents in Malaysia.

MATERIALS & METHODS

1. A cross-sectional survey among secondary school students was conducted in the year 2022.
2. The sampling frame included both public and private schools under the Ministry of Education (MOE) and Rural and Regional Development (MARA).
3. Final sample sizes for adolescents at national and state levels were 36,000 and 2250, respectively, with 240 schools being randomly selected
4. As per Malaysia's school classification system, the target population for this study was adolescents aged 13 to 17 who were enrolled in form 1 through form 5 classes.

DISCUSSION

Recent research indicates that Malaysian adolescents drink less milk than is recommended, and this finding is further supported by a study that found that the percentage of plain milk drinkers declined with age, from 52.9% among 2- to 3-year-olds to 10.9% among 14- to 18-year-olds⁴.

CONCLUSIONS

1. Consuming milk and milk products may promote bone health and lower the incidence of fractures in old age.
2. This can be accomplished by strengthening school-based nutrition programmes, utilising social marketing techniques, and engaging the support of communities.

ACKNOWLEDGEMENT

The authors would like to thank the Director General of Health for permission of publication of this study. We also thanked all the individuals who directly or indirectly have contributed to the success of this study.

KEY WORD

Milk, Milk product, consumption, NHMS 2022, Adolescent Health

REFERENCES

1. WHO (World Health Organization). 1999. Technical Report Series 886. Programming for adolescent health and development
2. Forbes, E. E., & Dahl, R. E. (2010). Pubertal development and behavior: hormonal activation of social and motivational tendencies. *Brain and cognition*, 72(1), 66-72.
3. Moore, L. L., Bradlee, M. L., Gao, D., & Singer, M. R. (2008). Effects of average childhood dairy intake on adolescent bone health. *The Journal of pediatrics*, 153(5), 667-673.
4. Fayet-Moore, F., Cassettari, T., McConnell, A., Kim, J., & Petocz, P. (2019). Australian children and adolescents who were drinkers of plain and flavored milk had the highest intakes of milk, total dairy, and calcium. *Nutrition Research*, 66, 68-81.

RESULTS

1. Overall, 23.2% of adolescents (95% CI: 22.39, 23.98) reported to consumed milk or milk products at least twice daily in the past 30 days.
2. Johor had the lowest prevalence of adolescents' milk/milk product intake (20.7%, 95% CI: 18.52, 23.10) and WP Putrajaya had the highest prevalence (28.3%, 95% CI: 26.96, 29.77).
3. Results showed that girls (23.5%, 95% CI: 22.46, 24.58) consumed milk and milk products at an amount that is slightly higher than boys (22.9%, 95% CI: 21.83, 23.90), however, the difference was not significant. There was also no significant difference in milk and milk products consumption across ethnicities.

Table 1: Prevalence of milk and milk products of at least twice daily in the past 30 days among Malaysian adolescents in year 2022

Socio-demographics characteristics	Count	Estimated population	Prevalence % (95% CI)
Malaysia	8047	480850	23.2 (22.39, 23.98)
State			
Johor	409	53874	20.7 (18.52, 23.10)
Kedah	502	33334	22.9 (20.37,25.70)
Kelantan	456	23499	21.1 (19.10, 23.30)
Melaka	511	16721	25.9 (23.56,28.30)
Negeri Sembilan	579	22812	26.1 (23.19, 29.31)
Pahang	538	25233	24.8 (22.43, 27.27)
Pulau Pinang	435	22437	21.4 (18.27, 24.97)
Perak	483	37529	22.6 (20.21, 25.21)
Perlis	501	4902	25.3 (22.86, 27.91)
Selangor	471	89811	22.9 (20.11, 26.01)
Terangganu	507	22238	22.9 (21.36, 24.43)
Sabah	439	43419	21.0 (19.27, 22.81)
Sarawak	594	52733	27.1 (25.25, 28.93)
WP Kuala Lumpur	543	27229	26.0 (23.25, 28.96)
WP Labuan	514	1668	25.7 (22.97, 28.56)
WP Putrajaya	565	3414	28.3 (26.96, 29.77)
Sex			
Male	3672	236998	22.9 (21.83, 23.90)
Female	4375	243853	23.5 (22.46, 24.58)
Forms			
Form 1	1849	111717	24.8 (23.46, 26.15)
Form 2	1721	103509	23.9 (22.08, 25.60)
Form 3	1553	96674	23.1 (21.60, 24.74)
Form 4	1552	87484	22.4 (20.87, 23.93)
Form 5	1372	81465	21.4 (20.04, 22.72)
Ethnicity			
Malay	5719	314444	24.1 (23.27, 24.90)
Chinese	909	62381	16.6 (15.04, 18.29)
Indian	470	38201	30.9 (27.75, 34.21)
Bumiputera Sabah	383	24811	21.2 (18.64, 24.01)
Bumiputera Sarawak	350	29679	28.1 (25.37, 30.93)
Others	216	11335	24.5 (20.75, 28.61)

