

READING BETWEEN THE LABELS: GENDER VARIATION IN SALT LABEL READING PRACTICE AMONG MALAYSIANS

Komathi A/P Perialathan¹, Ain Aqiela Azamuddin¹, Teresa Yong Sui Mien¹, Manimaran A/L Krishnan Kaundan¹, Hamdan bin Mohamad², Mohammad Zabri Johari¹, Masitah Ahmad¹, Juhannis Idris¹

1 Institute for Health Behavioural Research, Ministry of Health, Malaysia
2 Disease Control Division, Ministry of Health, Malaysia
NMRR ID-22-00689-JLC



INTRODUCTION

Excessive dietary salt intake has remained a pressing subject in Malaysia that contribute to the rising prevalence of hypertension and cardiovascular diseases. Despite the national efforts in nurturing and increasing the awareness by introducing the Malaysian Salt Reduction Strategy, many individuals still consume well above the recommended daily limits of 5 grams of salt (Ambak, 2025; MOH, 2019). In the Malaysian context, research focusing on the gender discrepancies in salt-related label reading practices is still scarce where understanding these differences is crucial to design targeted interventions that promote equitable health outcomes and support national goals to reduce salt consumption. Therefore, this study aims to explore the gender-based variations in salt-related label reading practice among Malaysians.

METHODS

This nationwide cross-sectional survey was carried out from July to September 2023 involving Malaysians aged 18 years and above across all states and federal in Malaysia with ethical approval from the Medical Research Ethics Committee (MREC), Ministry of Health Malaysia (NMRR ID-22-00689-JLC). The inclusion criteria in this study being those who gave their consent and were able to read and understand Malay or English language where the final sample involved 4400 respondents. Study instrument applied in this study is an adapted and validated salt literacy instrument for Malaysian population (MySALT) (Perialathan et al., 2024)

RESULTS

Table below shows the sociodemographic background of the respondents that participated in this study:

Table 1: Sociodemographic Characteristics of Respondents

Variables	n (%)
Age	
≤25	1828 (41.5)
26-59	2497 (56.8)
≥60	75 (1.7)
Gender	
Male	1554 (35.3)
Female	2846 (64.7)
Locality	
Urban	1948 (44.3)
Rural	2452 (55.7)
Education Level	
No formal education	17 (0.4)
Primary education	51 (1.2)
Secondary education	1949 (44.3)
Tertiary education	2383 (54.2)
Marital Status	
Single	2610 (59.3)
Married	1790 (40.7)
Household Income (based on DOSM, 2022)	
B40 (<RM4,850)	3409 (77.5)
M40 (RM4,850-RM10,959)	709 (16.1)
T20 (>RM10,959)	282 (6.4)

Based on table below, female respondents (2446; 55.6%) shows higher label reading habit than male respondents (1275; 29%). Results also shows that both female and male respondents prioritise reading the “Expiring date of the food product” when making purchasing decisions, with 60.8% of female and 30.5% of male respondents identified it as a critical consideration. While, the “Protein content” was the least prioritised label among respondents with only 13.9% of female and 7.9% of male respondents consider it during their food purchasing decisions.

Table 2: Label Reading Habits By Gender

Variables	Male n (%)	Female n (%)
Label Reading Habit		
Yes	1275 (29)	2446 (55.6)
No	279 (6.4)	400 (9.1)
Frequency of Label Reading		
Never	279 (6.4)	400 (9.1)
Rarely	248 (5.6)	434 (9.9)
Sometimes	503 (11.4)	982 (22.3)
Often	232 (5.3)	358 (8.1)
Always	292 (6.6)	672 (15.3)
Priorities in Label Reading		
Expiring date of the food product	1134 (30.5)	2259 (60.8)
Ingredients in the food product	654 (17.6)	1496 (40.3)
Energy value	295 (8.8)	559 (15.1)
Carbohydrate content (including Sugar)	346 (9.3)	780 (21)
Protein content	291 (7.9)	516 (13.9)
Fat content (Trans and Saturated Fat)	330 (8.9)	741 (20)

DISCUSSION

The findings from this study underscore the gender-based variations in food label reading behaviour and preferences for nutritional information where the results aligned with previous research indicating that women are more likely to read and understand food labels as they prioritise health-related information more than men (Ambak et al., 2018). These discrepancies may be influenced by traditional gender roles in food purchasing and preparation, where women often assume greater responsibility and thus develop stringer nutritional awareness (Gunawan et al., 2024). Although, female showed greater interest in label reading, the actual behaviour such as “Always” choosing low-sodium products were still limited, suggesting that knowledge alone may not be sufficient to drive healthier choice. Further emphasising on the need for gender-sensitive interventions that not only raise awareness but also facilitate behaviour change.

CONCLUSION

This study highlights the clear discrepancies in salt-related food label reading practices among Malaysians with women consistently demonstrating higher engagement and awareness than men. Henceforth, future interventions need to strengthen food literacy, simplify label presentation, and foster culturally relevant education that incorporate targeted message and behaviour change strategies tailored to both men and women.

Result below reveals gender-based discrepancies in attention to salt-related practices when buying food products. Across all three practices, female respondents consistently reported higher levels of engagement compared to males.

Table 3: Practise of Reading Sodium Related Labels

Variables	Male n (%)	Female n (%)
Pay attention whether the food is labelled as “No added salt” or “Low in Sodium/ Reduced Sodium”		
Never	652 (14.8)	984 (22.4)
Sometimes	699 (15.9)	1454 (33.0)
Always	203 (4.6)	408 (9.3)
Read the sodium content stated on the Nutrition Information on food label		
Never	712 (16.2)	1168 (26.5)
Sometimes	667 (15.2)	1344 (30.5)
Always	175 (4.0)	334 (7.6)
Purchase foods with low sodium content as stated on the Nutrition Information		
Never	724 (16.5)	1165 (26.5)
Sometimes	661 (15.0)	1385 (31.5)
Always	169 (3.8)	296 (6.7)



REFERENCES

- Ambak, R., Tupang, L., Hasim, M. H., Salleh, N. C., Zukafly, N., Salleh, R., ... & Naidu, B. M. (2018). Who do not read and understand food label in Malaysia? Findings from a population study. *Health Science Journal*, 12(1), 1-7.
- Gunawan, K., Say, Y. H., Chia W. X., Lee, K. H., Ng, J. Y., Cheng, M. H., Chia, Y. C. Knowledge, Attitude, Practice (KAP) of Salt Intake, and Perception, Barriers and Enablers (PBE) of Salt Reduction: A Cross-Sectional Study Among Students and Staff of a Malaysian College/University. Preprint (Version 1) available at Research Square <https://doi.org/10.21203/rs.3.rs-6900606/v1> (2025).
- Ministry of Health Malaysia (2019). Reducing Salt Intake in Malaysia: An Interim Evaluation of What Works (2019). <https://www.moh.gov.my/moh/resources/Penerbitan/Rujukan/NCDC/Garam/CaseStudy-SALT-low-web.pdf?form=MC0AV3>
- Perialathan, K., Azamuddin, A. A., Mien, T. Y. S., Krishnan, M., Johari, M. Z., Ahmad, M., ... & Canapathy, S. S. (2024). Adaptation and validation of the Chinese Health Literacy Scale for Low Salt Consumption—Hong Kong (CHLSalt-HK) for Malaysian Population. *Global Journal of Health Science*, 16(8), 37-47.