

Analysis of consumers' preference for low-glycaemic-index (GI) pineapple granola snacks

[Analisis keutamaan pengguna terhadap snek granola indeks-glisemik-rendah (IG)]

Suhana Safari¹, Muhammad Syafiq Ahmad Dani¹ and Khairunizah Hazila Khalid²

Keywords: consumer preference, sensory evaluation, granola, low-glycaemic-index (GI), pineapple, purchase intention, price sensitivity

Abstract

This study examines consumer preferences and purchase decisions for MARDI's pineapple-based low-glycemic-index (GI) granola, a product developed to encourage healthier snacking and increase the value-added utilisation of MD2 pineapples. Specifically, it focuses on key product attributes that influence consumer acceptance and evaluates the likelihood of purchase to assess the product's future market potential. A structured questionnaire survey was conducted among 301 respondents in the Klang Valley using simple random sampling. The survey covered demographics, consumer awareness, purchasing experience, sensory evaluation and price sensitivity. Results showed that 61.5% of respondents were aware of granola products, yet only 35.9% had purchased them, with supermarkets being the most common point of purchase. Consumers reported consuming granola primarily as a meal replacement (36.5%), followed by curiosity to try new products (32.9%) and as an additional dietary source (29.2%). The main drivers of purchase were taste and texture (23.9%), ingredients and health value (20.4%) and price (19.8%). Sensory evaluation revealed favorable ratings across all attributes, with crisp texture receiving the highest score ($M = 4.23$). Correlation analysis confirmed that texture and pineapple flavour were the strongest predictors of overall acceptance. Chi-square analysis indicated significant associations with gender ($p < 0.05$) and marginal associations with age ($p < 0.1$), while income showed no significant effect. Price sensitivity analysis revealed that the most acceptable price range was RM9.50 – RM12.00 per 80 g pack, while willingness to purchase declined sharply beyond RM13.00. These findings highlight that although consumer awareness is relatively high, purchase decisions are strongly shaped by sensory quality, affordability and demographic factors. The study concludes that MARDI's pineapple-based granola has strong market potential in Malaysia, particularly among health-conscious consumers, provided that producers prioritise texture optimisation, competitive pricing and effective health-focused marketing strategies.

¹Socio-Economy, Market Intelligence and Agribusiness Research Centre, MARDI Headquarters, Persiaran MARDI-UPM, 43400 Serdang, Selangor

²Food Science and Technology Research Centre, MARDI Headquarters, Persiaran MARDI-UPM, 43400 Serdang, Selangor

e-mail: suhanasafari@mardi.gov.my

©Malaysian Agricultural Research and Development Institute 2026

Introduction

Granola began gaining visibility in the Malaysian market around 2012 as a relatively new product category, where the segment remained small and largely led by imported brands such as *Nature Valley*, *Uncle Tobys*, *Kellogg's* and *Quaker*. At that time, the category recorded an estimated annual growth rate of around 4% (Rashilah et al. 2014). Since then, the market has expanded substantially and the broader cereal segment is forecast to grow at a compound annual growth rate (CAGR) of 6.4% between 2025 and 2034 (Expert Market Research 2025). This continued growth reflects evolving consumer preferences favouring healthier, convenient and ready-to-eat snack options.

Granola is a cereal-based snack made primarily from nutritious whole grains such as oats and rice, combined with nuts and naturally sweetened with honey and dried fruits. The mixture is baked until crispy and can be produced in uniform bars, clusters, or loose forms. Granola is considered a “healthy” food due to its nutrient-dense ingredients, including dietary fibre, protein from nuts and antioxidants from fruits. In addition, low-GI formulations can help support blood sugar control, making them suitable for health-conscious consumers. Over the years and with notable innovations in the food industry, granola products have evolved toward protein enrichment, reduced sugar content, clean-label ingredients and unique flavour profiles.

Observations among Malaysian children and university students points to similar dietary patterns characterised by high snack consumption and irregular eating habits. Among Malaysian Chinese primary school children, snacks contributed approximately 21 – 23% of total daily caloric intake, with sweet and energy-dense items such as ice cream and yoghurt being the most frequently consumed (Ong et al. 2023). Similarly, a study among university students reported that 74.6% skipped breakfast at least three

times/week, 40.7% consumed juices daily and only 8.6% met the recommended daily vegetable intake, while 30.6% snacked at least three times a week (Baharuddin & Aminudin 2025). Taken together, these findings indicate ongoing dietary concerns across age groups, characterised by irregular meal patterns, frequent consumption of energy-dense snack foods and insufficient vegetable intake. Snacking is prevalent not only among children but also widely practiced by adults. In line with rapid urbanisation and broader dietary transitions, this pattern underscores a growing shift toward processed food consumption within Malaysia's nutrition landscape (Goh et al. 2020).

This study examines consumer preferences and purchase decisions for MARDI's pineapple-based low-glycaemic-index (GI) granola, a product developed to encourage healthier snacking and increase the value-added utilisation of MD2 pineapples. To address existing dietary challenges, MARDI introduced the innovative low-GI “*Ananas Granola*” as a healthier snack alternative. By aligning the product with local taste preferences and incorporating functional ingredients, the initiative aims to promote healthier dietary practices and reduce the risk of diet-related health conditions. Specifically, this study focuses on key product attributes influencing consumer acceptance and evaluates purchase intention to determine the product's potential in future markets.

Literature review

In this study, consumer preference was assessed based on several dimensions, awareness and knowledge of the product, past purchasing experience, sensory evaluation of product attributes and price sensitivity. Together, these indicators provide a comprehensive view of how consumers perceive and value the product in the market.

Awareness and purchasing experience

Awareness plays a critical role in the consumer decision-making process, as a product's visibility and consumer knowledge directly influence the likelihood of trial and adoption. Conoly (2023) noted that intrinsic and extrinsic cues such as familiarity, branding and packaging shape consumer perceptions and engagement with new food products. Similarly, Verbeke (2008) highlighted that clear communication of product attributes and benefits reduces perceived risk, increases consumer confidence and encourages trial. Evidence from the Malaysian market also supports this relationship; Ng et al. (2021) found that consumers were more willing to try healthier snack products when they were familiar with the ingredients and nutritional claims, emphasising the role of awareness-building strategies in promoting acceptance. In the Southeast Asian context, Pham and Nguyen (2022) reported that prior positive experiences with similar functional foods strengthen trust and repeat purchase intention. Collectively, these studies underscore that awareness and previous purchasing experience shape expectations regarding taste, quality and value and contribute to more confident and informed decision-making when evaluating new products.

Sensory evaluation and products attributes

Sensory attributes are among the strongest determinants of consumer preference. They provide direct, experiential information about a product and often outweigh other considerations. Fiorentini et al. (2020) noted that sensory evaluation methods such as hedonic scales and Just-About-Right (JAR) scales help capture consumers' perceptions of taste, aroma, texture and appearance. These attributes have a strong influence on liking and subsequently, purchase intent. Keefer (2021) highlighted that sensory analysis engages multiple senses, contributing to a product's overall perception and acceptance. Sensory qualities

are especially critical for new or functional products, such as granola enriched with additional health benefits. Consumers are open to innovation but still expect familiar and enjoyable sensory characteristics (Ruiz-Hernández et al. 2025). Studies show that even slight deviations in expected taste or texture can reduce acceptance, regardless of the health or sustainability benefits claimed by the product. Moreover, sensory attributes are closely linked to emotional responses. Positive sensory experiences create satisfaction and trust, leading to brand loyalty. In contrast, unpleasant sensory experiences can undermine even strong health or sustainability claims. Thus, sensory evaluation is not just a measure of liking, it is a key predictor of behaviour.

Price sensitivity and purchase behaviour

Price remains a decisive factor in food purchasing decisions. It communicates perceived value and can reinforce or override other cues such as quality or health claims. Hurgobin et al. (2020) found that price expectations significantly influence willingness-to-buy. Interestingly, Goldsmith et al. (2010) observed that hedonic enjoyment and social context can reduce price sensitivity. Consumers are also often willing to pay more for products that bring pleasure or align with social norms. Price sensitivity is also affected by consumer values. Lehtola et al. (2008) emphasised that when products align with values such as sustainability, wellness, or ethical sourcing, consumers are less price-sensitive. This is highly relevant in premium snack markets, where added benefits (e.g., low-glycaemic-index, organic certification) can justify higher prices. Conversely, if the price is perceived as too high without clear added value, purchase intention decreases sharply. These four dimensions are interdependent. Awareness and experience create a baseline for expectations; sensory qualities fulfil or challenge those expectations; and price frames the perceived value. Zaripova et al. (2023) demonstrated this integration in

their study on honey products, showing that sensory drivers such as taste intensity and aftertaste directly impacted willingness-to-pay. Even with favourable sensory evaluations, price could still influence purchasing decisions, indicating that value judgment is a balancing act between sensory pleasure and economic considerations. This holistic view is particularly important for niche or functional products, such as low-GI granola. Consumers may be interested in the health benefits, but sensory appeal and affordability ultimately determine whether the product succeeds.

Methodology

This study employed a quantitative, cross-sectional survey design targeting Malaysian consumers in the Klang Valley. Data were collected on 20th September 2024 using a structured questionnaire and a simple random sampling approach to ensure representativeness and reduce bias, with a total of 301 adult respondents who were available and willing to participate. According to the EdTech Books (n.d), a sample size of 300 – 400 respondents is generally considered reliable for a large-population at a 95% confidence level and 5% margin of error. The questionnaire comprised four sections: (1) demographic information, including age, gender, education, occupation and income to profile respondents; (2) consumer knowledge and market potential, focusing on awareness of granola products, purchasing experience, preferred brands and perceptions of novelty and health benefits; (3) sensory evaluation of product attributes such as taste, aroma, sweetness, texture, crunchiness and overall acceptability, measured using Likert scales and hedonic rating methods; and (4) price sensitivity analysis, assessing willingness to pay, acceptable price range and perceived value. Data collection was conducted through a combination of face-to-face interviews and self-administered surveys to enhance completeness and reliability, with all respondents fully briefed on the

study objectives and provided informed consent. Data analysis was performed applying descriptive statistics to summarise demographic profiles, consumer knowledge, purchasing experience and key buying factors of MARDI's pineapple-based granola, while inferential techniques included correlation analysis to examine the relationships between sensory attributes and overall acceptance and Chi-Square tests to identify associations between demographic factors and purchase intention; additionally, consumer acceptance was analysed in relation to the suggested price range to determine market feasibility.

Results and discussion

Respondents' profiles

Table 1 presents the demographic characteristics of the respondents (n = 301) who completed the online questionnaire. Of the total respondents, 69.8% (210 individuals) were female, while 30.2% (91 individuals) were male. In terms of age, the largest group was between 30 and 39 years old (33.2%), followed by those aged 18 – 29 years (27.2%) and 40 – 49 years (26.6%). The remaining respondents were aged 50 – 59 years (10.3%) and 60 years and above (2.7%). By ethnicity, the majority were Malay (90%), followed by Chinese (4.0%), Indian (3.0%) and Bumiputera (3.0%), broadly reflecting Malaysia's population composition, particularly in the target area. Regarding occupation, more than half of the respondents were government employees (53.1%), followed by private sector employees (17.9%), students (13.3%), self-employed individuals (9.6%), retirees (3.0%) and those who were unemployed or homemakers (2.7%). In terms of income, most respondents fell within the lower- and middle-income categories. A total of 26.3% reported earning less than RM2,500, while 25.6% earned between RM2,501 and RM4,800, resulting in 51.9% of the population falling into the B40* group.

Table 1. Respondents' profiles (n = 301)

Parameter	Category	%	n
Gender	Female	69.8	210
	Male	30.2	91
Age (years)	18 – 29	27.2	82
	30 – 39	33.2	100
	40 – 49	26.6	80
	50 – 59	10.3	31
	60 and above	2.7	8
Ethnicity	Malay	90.0	271
	Chinese	4.0	12
	Indian	3.0	9
	Bumiputera (other Indigenous groups)	3.0	9
Occupation	Government employee	53.2	160
	Private sector employee	18.0	54
	Student	13.3	40
	Self-employed	9.6	29
	Retired	3.3	10
	Unemployed (including housewife)	2.6	8
Monthly income (RM)	Less than 2,500	26.3	80
	2,501 – 4,800	25.6	77
	4,801 – 7,000	18.9	57
	7,001 – 10,000	17.6	53
	10,001 and above	11.6	34

Note: Source of household income group from Economic Planning Unit
 B40 income category: ≤ RM4,850
 M40 income category: RM4,851 – RM10,970
 T20 income category: ≥ RM10,971

The remaining respondents were in the M40** and T20*** groups, with incomes of RM4,801 – RM7,000 (18.9%), RM7,001 – RM10,000 (17.6%) and above RM10,001 (11.6%).

Knowledge, purchasing experience and factor of buying granola

Table 2 presents respondents' knowledge of granola snacks in the market and their purchasing experience. The findings show that most respondents (61.5% – 185 individuals) were aware of granola snacks, while 38.5% reported having no prior knowledge. However, despite this relatively

high level of awareness, only 35.9% (108 individuals) of respondents had purchased granola snacks, compared with 64.1% who had never made a purchase. These results indicate that awareness of a product does not always translate into actual purchasing behaviour. While many consumers may be familiar with granola as a concept, challenges such as price, taste preferences, accessibility, or limited understanding of its nutritional benefits can discourage purchase. This finding is consistent with consumer behaviour theory, which suggests that awareness is only the first stage in the adoption process, while actual purchase depends on factors such as perceived value, affordability and social norms.

Table 2. Knowledge and purchasing experience (n = 301)

Category	%	n
Knowledge of granola snacks in the market	61.5	185
Have experienced purchase	35.9	108
Not answer	2.6	8

Table 3 describes the main purposes for which consumers purchased granola. The most frequently reported reason was to use granola as a meal replacement (36.5%), indicating that consumers perceive it as a nutritious alternative to heavier meals. This reflects its role as a convenient, energy-dense option that aligns with modern busy lifestyles. The second most common reason was curiosity or the desire to try granola (34.9%). This suggests that consumer trial is influenced by novelty and exploratory behaviour, with granola perceived as a relatively new or innovative product in the local market. Such curiosity may also be driven by marketing cues, global health trends and social influence, encouraging consumers to experiment with granola even though it is not yet a habitual food choice.

In addition, about 27.3% of respondents consumed granola as an additional dietary source, highlighting its

role as a supplementary food item that complements existing diets, particularly due to its nutritional value such as fibre, protein and vitamins. Lastly, only a very small proportion of respondents (1.3%) reported consuming granola as a light snack. Overall, these findings suggest that among consumers who purchase granola, the product is more commonly perceived as a meal replacement because it provides a sense of satiety and helps them feel full.

Table 3. Purpose of purchased granola (n = 301)

Category	%	n
Meal replacement	36.5	110
Desire to try	34.9	105
Additional dietary source	27.3	82
Consuming as light snack	1.3	4

Table 4 presents the key purchasing factors prioritised by respondents when deciding to buy granola. The results show that taste and texture were the most important factors, agreed by 23.9% of respondents. This was followed by ingredients and health value (20.4%), highlighting the role of perceived nutritional benefits in influencing consumer decisions. Price was also considered a significant factor, with 19.8% of respondents indicating it as their main determinant, while promotional offers influenced 11%. Other factors, although less prominent, still contributed to consumer choices, including packaging (9.4%), brand reputation (7.9%) and food labelling (7.5%). Overall, these findings emphasise that consumer purchase decisions for granola are driven mainly by sensory appeal (taste and texture), functional health value and affordability, with marketing-related elements such as promotions, branding and labelling serving as complementary influences. This suggests that granola producers and marketers should prioritise product quality (taste and health benefits) while maintaining competitive pricing strategies, complemented by effective promotions and packaging innovations to attract consumer interest.

Table 4. Factors buying granola (n = 301)

Category	%	n
Taste and texture	23.8	72
Ingredients and health value	20.3	61
Price	19.7	60
Promotion	11.4	34
Packaging	9.4	28
Brand reputation	7.9	24
Food labelling	7.5	22

Sensory evaluation of MARDI's granola

The descriptive statistics of the sensory evaluation for Pineapple Granola Bites are presented in Table 5. Across all sensory parameters, the product achieved favorable mean ratings ranging from 3.95 – 4.23 on a 5-point hedonic scale, indicating a generally positive level of consumer acceptance. Sweetness was rated positively (M = 4.09, SD = 0.79), showing that the level of sweetness was generally well accepted by respondents. Aroma received a moderate score (M = 3.95, SD = 0.80), reflecting moderate liking for fragrance, which was perceived less strong compared to other attributes. Pineapple flavour scored 4.00 (SD = 0.83), indicating that consumers could clearly identify the fruit taste, although responses were slightly more variable than for sweetness. Crisp texture recorded the highest mean score at 4.23 (SD = 0.86), highlighting crunchiness as the most appreciated sensory attribute of the product; however, this attribute also showed the greatest variation, suggesting differing preferences among respondents regarding the degree of crispness. Overall acceptance achieved a high mean score of 4.20 (SD = 0.75), confirming that the product was well received by consumers, with the relatively low standard deviation further supporting consistent positive evaluations.

Table 5. Sensory evaluation of MARDI’s pineapple granola

Category	Mean	Std. Deviation
Sweetness	4.09	.787
Aroma	3.95	.796
Pineapple flavour	4.00	.827
Crisp texture	4.23	.856
Overall acceptance	4.20	.750

Note: Five-point scale 1 – 5 (Strongly dislike; Dislike; Neutral; Like; Strongly like)

Table 6 presents the Pearson correlation coefficients between sensory attributes and overall acceptance of Pineapple Granola Bites. All sensory attributes were positively and significantly correlated with overall acceptance ($p < 0.001$), indicating that each attribute contributed to consumer liking of the product. Among the attributes, crisp texture showed the strongest correlation with overall acceptance ($r = 0.657, p < 0.001$), suggesting that product crunchiness is the most influential factor driving consumer preference. This was followed by pineapple flavour ($r = 0.485, p < 0.001$) and aroma ($r = 0.484, p < 0.001$), both demonstrating moderate yet meaningful relationships with overall acceptance. Sweetness ($r = 0.453, p < 0.001$) was also significantly correlated, although it exhibited the weakest association compared with the other attributes. These results suggest that, in producing granola, crisp texture and crunchiness should be prioritised by producers, as they exert the strongest influence on consumers’ overall acceptance.

The chi-square analysis examined the association between demographic factors (gender, age and monthly income) and purchase intention for granola, as presented in Table 7. The results showed a significant association for gender ($p = 0.034$), indicating that purchase intention differed between male and female respondents. Age was marginally significant ($p = 0.096$), suggesting that purchase intention varied slightly across age groups.

Table 6. Correlation between sensory attributes and overall acceptance of MARDI’s pineapple granola

Sensory attribute	Correlation with overall acceptance (r)	Significance (p-value)
Crisp texture	0.657	0.000***
Pineapple flavour	0.485	0.000***
Aroma	0.484	0.000***
Sweetness	0.453	0.005***

Note: Pearson correlation coefficients (r) were calculated between sensory attributes and overall acceptance. *** $p < 0.01$

However, monthly income did not show a significant effect ($p = 0.378$), indicating that income level was not a determining factor in purchase intention. These findings highlight that gender particularly among women and increasing age are more influential than income in shaping consumers’ likelihood of purchasing granola.

Table 7. Chi-square analysis between respondent profile and intention to purchase MARDI’s pineapple granola

Category	Significance (p-value)
Gender	0.034**
Age	0.096*
Monthly income	0.378

* $p < 0.1$, ** $p < 0.05$

The results in Table 8 indicate that consumer acceptance of MARDI’s Pineapple Granola is highly price-sensitive. While willingness to purchase was evenly split at RM9.50, nearly half of the respondents remained willing to buy at RM10.00 – RM12.00, suggesting that this range is the most realistic pricing strategy. In contrast, purchase intention declined sharply at RM13.00 – RM15.00, indicating that premium pricing may not be feasible for the broader market.

Table 8. Price sensitivity for an 80 g per pack of MARDI's Pineapple Granola

Price/pack (80 g)	Yes (%)	n
RM9.50	50.0	151
RM10.00 – RM12.00	48.5	145
RM13.00 – RM15.00	1.5	5

Conclusion

In conclusion, the study shows that MARDI's pineapple-based low-GI granola is generally well accepted and has good purchase potential. The findings indicate that while awareness of granola snacks was relatively high (61.5%), actual purchasing experience was lower (35.9%), suggesting that awareness does not always translate into purchase behaviour. Consumers primarily consumed granola as a meal replacement, driven by its uniqueness as a newer food option and its perceived nutritional value. Taste and texture were the strongest factors influencing purchase decisions, followed by health benefits and price considerations. Sensory evaluation results indicated positive acceptance across all attributes, with a crisp texture being the key contributor to overall liking. Correlation analysis reinforced the importance of texture and pineapple flavour in shaping consumer preference, while chi-square analysis revealed that gender and age were more influential factors than income in purchase intention preference, underscoring the role of demographic characteristics in consumer behaviour. Price sensitivity analysis indicated that the optimal price range for market acceptance is RM9.50 – RM12.00 per 80 g pack, as willingness to purchase declined sharply above RM13.00.

The findings of this study provide several implications for product development and marketing strategies for MARDI's pineapple-based low-GI granola. First, producers should prioritise maintaining the product's crisp texture and distinct pineapple flavour, as these attributes were found to be the strongest determinants of consumer acceptance. The product may be positioned as a convenient and nutritious meal replacement, particularly targeting health-conscious consumers with busy lifestyles. Pricing strategies should align with the identified acceptable range of RM9.50 – RM12.00 per 80 g pack to encourage trial and repeat purchases, as willingness to buy declined substantially beyond this point. Marketing communications should emphasise the product's health benefits, functional ingredients and low-GI formulation to reinforce its value as a healthier snack choice.

Reference

- Baharuddin, M. Y., & Aminudin, S. N. A. (2025). Dietary Habits among University Students in Malaysia. *American Journal of Sciences and Engineering Research*, 8(5), 86–91.
- Conoly, Y. K., & Lee, Y. M. (2023). Intrinsic and extrinsic cue words of locally grown food menu items and consumers' choice at hyper-local restaurants: An eye-tracking study. *Sustainability*, 15(17), 12733. <https://doi.org/10.3390/su151712733>.
- EdTech Books. (n.d.). Retrieved from https://edtechbooks.org/designing_surveys/sampling?utm_source=chatgpt.com.
- Expert Market Research (2025). Malaysia Cereal Bars Market Report and Forecast 2025-2034. Retrieved from <https://www.expertmarketresearch.com/reports/malaysia-cereal-bars-market>.
- Fiorentini, M., Kinchla, A. J., & Nolden, A. A. (2020). Role of sensory evaluation in consumer acceptance of food. *Foods*, 9(9), 1334. <https://doi.org/10.3390/foods9091334>.

- Hurgobin, Y., Le Floch, V., & Lemerrier, C. (2020). Effect of multiple extrinsic cues on consumers' willingness to buy apples: A scenario-based study. *Food Quality and Preference*, 81, 103860.
- Goldsmith, R. E., Flynn, L. R., & Kim, D. (2010). Status consumption and price sensitivity. *Journal of Marketing Theory and Practice*, 18(4), 323–338.
- Goh, E. V., Azam-Ali, S., McCullough, F., & Roy Mitra, S. (2020). The nutrition transition in Malaysia: Key drivers and recommendations for improved health outcomes. *BMC Nutrition*, 6, 32. <https://doi.org/10.1186/s40795-020-00348-5>.
- Keefer, H. R. (2021). Sensory Methods to Investigate Consumer Perception of Food Products. North Carolina State University.
- Lehtola, K., Luomala, H. T., Kauppinen-Räsänen, H., Kupiainen, T., & Tuuri, H. (2008). Consumers' experience of food products: effects of value activation and price cues. *Journal of Customer Behaviour*, 7(1), 19–29.
- Ng, M., Chia, J., & Tan, S. (2021). Consumers' acceptance of healthy snack products in Malaysia. *Journal of Food Products Marketing*, 27(5), 331–348.
- Ong, S. H., Arasu, K., Lim, J. X., & Yang, W. Y. (2023). Snacking and weight status in Malaysian Chinese primary school children. *Human Nutrition & Metabolism*, 33, 200209.
- Pham, T., & Nguyen, H. (2022). Consumer attitude and adoption of functional foods in Vietnam. *Asia Pacific Journal of Marketing and Logistics*, 34(3), 587–606.
- Rashilah, M., Nur Fazliana, M. N., & Sharifah Samsiah, M. (2014). Consumer preferences and purchasing intention towards a new healthy snack product. *Economic and Technology Management Review*, 9(b), 123–132.
- Ruiz-Hernández, A. A., Rouzaud-Sáñez, O., Valenzuela-González, M., Domínguez-Avila, J. A., González-Aguilar, G. A., & Robles-Sánchez, M. (2025). Antioxidant/Anti-Inflammatory Potential and Sensory Acceptance of Granola Bars Developed with Sorghum Sprout Flour Irradiated with UV-A LED Light. *Foods*, 14(10), 1787.
- Verbeke, W. (2008). *Impact of communication on consumers' food choices*. *Food Quality and Preference*, 19(8), 776–783.
- Zaripova, J., Chuprianova, K., Polyakova, I., Semenova, D., & Kulikova, S. (2023). The impact of sensory characteristics on the willingness to pay for honey. arXiv preprint arXiv:2311.18269.

Abstrak

Kajian ini meneliti keinginan pengguna dan keputusan pembelian terhadap granola indeks-glisemik-rendah (IG) berasaskan nanas keluaran MARDI yang dibangunkan bagi menggalakkan pengambilan snek lebih sihat dan meningkatkan nilai tambah penggunaan nanas varieti MD2. Secara khusus, kajian ini memberi tumpuan kepada atribut produk utama yang mempengaruhi penerimaan pengguna dan menilai kebarangkalian pembelian bagi menentukan potensi pasaran produk ini pada masa hadapan. Satu tinjauan soal selidik berstruktur telah dijalankan ke atas 301 responden di Lembah Klang menggunakan pensampelan rawak mudah. Tinjauan meliputi demografi, tahap kesedaran pengguna, pengalaman pembelian, penilaian deria dan sensitiviti harga. Keputusan menunjukkan bahawa 61.5% responden mengetahui tentang produk granola, namun hanya 35.9% pernah membelinya, dengan pasar raya menjadi lokasi pembelian yang paling kerap. Pengguna melaporkan bahawa granola kebiasaannya dimakan sebagai pengganti makanan (36.5%), diikuti oleh keinginan untuk mencuba produk baharu (34.9%) dan sebagai sumber pemakanan tambahan (27.3%). Faktor utama yang mempengaruhi pembelian adalah rasa dan tekstur (23.8%), ramuan serta nilai kesihatan (20.3%) dan harga (19.7%). Penilaian deria menunjukkan skor positif bagi semua atribut dengan tekstur rangup mencatat skor tertinggi (min = 4.09). Analisis korelasi mengesahkan bahawa tekstur dan rasa nanas merupakan peramal terkuat terhadap penerimaan keseluruhan. Analisis chi-kuasa dua menunjukkan hubungan signifikan dengan jantina ($p < 0.05$) dan hubungan marginal dengan umur ($p < 0.1$), manakala pendapatan tidak menunjukkan kesan yang signifikan. Analisis sensitiviti harga mendapati julat harga yang paling boleh diterima adalah antara RM9.50 – RM12.00 bagi setiap pek 80 g, manakala kesediaan untuk membeli menurun dengan ketara apabila harga melebihi RM13.00. Dapatan ini menegaskan bahawa walaupun tahap kesedaran pengguna adalah agak tinggi, keputusan pembelian sangat dipengaruhi oleh kualiti deria, kemampuan harga dan faktor demografi. Kajian ini merumuskan bahawa granola berasaskan nanas keluaran MARDI mempunyai potensi pasaran yang kukuh di Malaysia, khususnya dalam kalangan pengguna yang mementingkan kesihatan dengan syarat pengeluar memberi keutamaan kepada pengoptimuman tekstur, penetapan harga yang kompetitif dan strategi pemasaran berorientasikan kesihatan.