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# Culinary social media content and consumer purchase intention: the role of visual hunger among Algerian consumers

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**Abstract :**
This study investigates the influence of exposure to culinary content (ECC) on social media on purchase intention (PI) among Algerian consumers through the mediating role of visual hunger (VH), conceptualized as a stimulus-induced desire triggered by food-related visual cues. Using PLS-SEM and survey data from 412 respondents, the relationships among ECC, VH, and PI are examined. Results indicate that ECC significantly increases VH, which in turn positively affects PI, confirming partial mediation, while the direct effect of ECC on PI remains significant. Stronger effects are observed on Instagram and TikTok than on Facebook. The findings extend sensory marketing theory to digital contexts and provide managerial implications for food brands in emerging markets.

**Keywords:** visual hunger, culinary content, social media, purchase intention, Algerian consumer.
**Jel Classification Codes:** M31, M37, D12

## Introduction :

The proliferation of visual food content on social media platforms has fundamentally transformed consumer food experiences worldwide. Food imagery, short-form videos, and culinary narratives circulate across platforms at unprecedented scale, creating what Spence, Okajima, Cheok, Petit, and Michel (2016) termed a 'food porn' phenomenon; an aesthetic idealization of food designed to trigger emotional and physiological desire responses. This phenomenon has been operationalized in consumer psychology as 'visual hunger,' defined as the desire to consume food stimulated by its visual representation rather than physiological need (Spence et al., 2016).

Algeria presents a particularly compelling -and underexplored- research context for studying this phenomenon. With approximately 28 million active social media users

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as of 2024, predominantly accessing platforms via mobile devices, and with food-related content among the highest-engagement categories across all major platforms, the Algerian digital food environment is both substantial and culturally distinctive (DataReportal, 2024). Algerian culinary culture represents an intersection of Amazigh, Arab, Andalusian, and Mediterranean traditions, producing a food identity of exceptional richness and emotional significance. Dishes such as couscous, chakhchoukha, rechta, berkoukes, and a diverse array of regional pastries carry deep intergenerational and community meanings that are increasingly transmitted and reactivated through social media.

Several features of the Algerian consumer context differentiate it from the Western settings in which most visual hunger research has been conducted. First, Algeria exhibits strong collectivist cultural values (Hofstede score: 35 individualism), meaning that food decisions are frequently embedded in family and communal dynamics rather than purely individual preferences (Hofstede, 2001). Second, the platform landscape differs markedly from Western markets: Facebook retains dominant reach across all age groups, while Instagram and TikTok have surged among younger cohorts, creating a tri-platform ecosystem with distinct demographic and behavioral profiles. Third, price sensitivity and purchasing power constraints - household monthly incomes concentrated in the 30,000–80,000 DZD range- shape the nature of visual hunger's translation into actual purchase behavior, particularly for restaurant dining versus home cooking ingredients. Fourth, the relationship between local and international food content is asymmetric: local and traditional content, including home-cooking influencers and regional restaurant pages, commands higher emotional engagement among Algerian audiences than imported global fast-food content.

Against this backdrop, this study pursues three specific objectives: (1) to examine the effect of exposure to culinary content on social media on visual hunger among Algerian consumers; (2) to test the mediating role of visual hunger in the relationship between culinary content exposure and purchase intention; and (3) to compare these effects across the three dominant platforms in the Algerian digital landscape; Facebook, Instagram, and TikTok.

Despite the theoretical richness of this context, the relationship between culinary social media content, visual hunger, and purchase intention has received limited empirical attention in North African markets. This study addresses this gap by testing a mediated model in which visual hunger transmits the effects of culinary content exposure onto purchase intention, using PLS-SEM with 412 Algerian consumers and systematic cross-platform and cross-content-type comparisons.

The primary research question is: *How does exposure to culinary content on social media influence purchase intentions of Algerian consumers, and to what extent is this relationship mediated by visual hunger, with platform type and content origin as boundary conditions?*

**Sub-research questions:**

1) To what extent does culinary content exposure on different social media platforms intensify visual hunger among Algerian consumers, and does the cultural origin of content (local vs. international) moderate this relationship?

2) How does visual hunger translate into purchase intention in the Algerian market, and do product type (traditional food, fast food, restaurant dining, home ingredients) and price sensitivity moderate this relationship?
3) How do the relative strengths of the desire-arousal and cognitive-informational pathways to purchase intention vary across Facebook, Instagram, and TikTok in the Algerian context?

## 1. Literature review and hypotheses development

### 1.1 Culinary content on social media and visual hunger

Food-related visual content has become a dominant engagement driver across social media platforms. However, its marketing impact extends beyond mere exposure. Emerging evidence indicates that the structural and aesthetic characteristics of food imagery significantly shape consumer engagement and purchase-related outcomes (Hu et al., 2014; Abell & Biswas, 2023). Culinary content should therefore be conceptualized as a strategically designed sensory stimulus rather than passive entertainment.

The influence of such content can be explained through the construct of *visual hunger*, defined as a consumption desire elicited by visual exposure independent of physiological need (Spence et al., 2016). Drawing on food cue reactivity research, visual food stimuli activate reward-related motivational systems and trigger mental simulations of eating experiences (Rangel, 2013; Elder & Krishna, 2022). Through these simulations, individuals anticipate taste, texture, and pleasure, thereby intensifying approach motivations.

Importantly, the persuasive strength of culinary imagery depends on its aesthetic execution. High color saturation, vivid texture cues, and perceptual realism enhance freshness and tastiness perceptions, which in turn increase purchase intention (Liu et al., 2022). Similarly, visually complex food advertisements generate arousal and pleasure responses that translate into stronger behavioral intentions (Farhat et al., 2025). Digital platforms amplify these effects by enabling immersive visual experiences that approximate real consumption contexts (Petit et al., 2022).

Beyond sensory activation, culturally embedded food imagery may intensify visual hunger through autobiographical and identity-related associations (Belk, 1988). In the Algerian context, where traditional cuisine is closely tied to family rituals and cultural memory, exposure to local culinary content is expected to produce stronger affective and motivational responses than exposure to decontextualized international food imagery. Furthermore, social media algorithms in Algeria disproportionately promote locally generated food content due to its high engagement rates (DataReportal, 2024), thereby increasing repeated exposure to culturally resonant stimuli.

Accordingly, it is hypothesized that:

**H1:** Exposure to culinary content on social media positively influences visual hunger among Algerian consumers, with local/traditional content generating stronger effects than international food content

### 1.2 Visual hunger and purchase intention

Purchase intention reflects an individual's subjective probability of engaging in a purchasing act (Fishbein & Ajzen, 1975). Within the present framework, visual hunger functions as a motivational trigger that translates affective desire into

approach-oriented behavior. Consistent with incentive salience theory, activation of desire lowers resistance to consumption-related actions, including purchase decisions (Berridge et al., 2009).

Empirical evidence from social media environments supports this affect-driven pathway. Emotional pleasure—closely aligned with visual hunger—has been shown to mediate the relationship between hedonic value perceptions and purchase intention on platforms such as TikTok (Zhang et al., 2023). Likewise, systematic evidence indicates that exposure to food-related social media content consistently increases food consumption intentions across cultural contexts (Ventura et al., 2023). Influencer-generated food content that emphasizes experiential and hedonic cues produces significantly stronger purchase intentions than purely informational appeals (Barta et al., 2023), reinforcing the primacy of affective activation in digital food marketing.

However, the translation of visual hunger into purchase intention is not context-neutral. In the Algerian market, rapid growth in food delivery and restaurant digitalization has strengthened the immediacy of stimulus–response conversion, particularly for ready-to-consume categories. Yet economic constraints introduce important boundary conditions. In emerging market settings characterized by moderate purchasing power, desire does not always translate directly into financially feasible behavior (Amine, 1998). Thus, price accessibility is expected to moderate the strength of the visual hunger–purchase intention relationship, with stronger effects for affordable and culturally familiar food categories.

Additionally, food consumption in Algeria is strongly embedded in communal and family-oriented practices. Purchase decisions stimulated by visual exposure often involve shared consumption contexts rather than solitary indulgence. In collectivist-oriented settings, purchase intentions are frequently validated through social endorsement mechanisms, amplifying the influence of electronic word-of-mouth (eWOM). Evidence suggests that eWOM credibility and information adoption significantly shape purchase intentions, particularly where social validation norms are salient (Leong et al., 2022). Accordingly, communal consumption orientation constitutes a second contextual moderator in the visual hunger–intention pathway.

Therefore, it is hypothesized that:

**H2:** Visual hunger positively influences purchase intention among Algerian consumers, with the strength of this relationship moderated by price accessibility and communal consumption orientation

### 1.3 The mediating role of visual hunger

Grounded in the Stimulus–Organism–Response (S-O-R) framework (Mehrabian & Russell, 1974), culinary social media content can be conceptualized as an environmental stimulus that activates visual hunger as an internal organismic state, which subsequently shapes purchase intention as the behavioral response. Within this structure, visual hunger functions as the affective–motivational mechanism translating sensory exposure into approach-oriented consumption outcomes.

Empirical research in digital commerce contexts consistently supports the mediating role of internal affective states between online stimuli and purchasing behavior. Studies demonstrate that pleasure, arousal, and related internal responses significantly mediate the relationship between social media stimuli and buying intentions (Singh et al., 2023; Huo et al., 2023). Extending this logic, visual hunger

represents a domain-specific affective state particularly relevant in food marketing contexts, integrating sensory activation, motivational salience, and anticipatory pleasure into a unified explanatory pathway.

However, in the Algerian market, this mediation is expected to be complementary rather than exclusive. Alongside affect-driven mechanisms, direct cognitive routes—such as promotional information processing, brand recognition, and social proof evaluation—may simultaneously influence purchase intention. Platform characteristics are likely to shape the relative dominance of these pathways: visually immersive platforms (e.g., Instagram and TikTok) primarily stimulate affective desire through aesthetic intensity, whereas more information-rich platforms (e.g., Facebook) facilitate cognitive-evaluative processing. This platform-contingent dynamic aligns with prior findings that visually oriented advertising environments generate stronger affective involvement relative to informational formats (Arora et al., 2023).

Accordingly, the following hypothesis is proposed:

**H3:** Visual hunger mediates the relationship between culinary content exposure and purchase intention among Algerian consumers, with partial (complementary) mediation expected.

### 1.4 Direct effects of culinary content exposure on purchase intention

While visual hunger constitutes a central affective pathway, culinary content may also exert a direct influence on purchase intention through informational and normative mechanisms. In emerging market contexts characterized by price sensitivity, promotional cues—such as pricing information, delivery availability, and time-limited offers—can independently stimulate purchase-related decisions (Amine, 1998). Systematic evidence indicates that informational food content on social media consistently generates purchase intentions independent of sensory desire activation (Ventura et al., 2023).

Electronic word-of-mouth (eWOM) further strengthens this direct pathway. Information credibility, quality, and adoption significantly shape purchase intention beyond affective arousal mechanisms (Leong et al., 2022). In collectivist-oriented consumption settings, where social validation carries normative weight (Hofstede, 2001), visible peer endorsement on food-related posts may directly reinforce restaurant visit and delivery intentions. Additionally, exposure to food-related content has been shown to influence consumption intentions through cognitive impulsivity and automatic evaluative processes, independent of purely hedonic activation (Filippone et al., 2022).

In the Algerian urban context, social media increasingly serves as a primary channel for restaurant discovery and food delivery promotion. Consequently, content exposure may enhance brand awareness, perceived accessibility, and behavioral intention even in the absence of heightened visual hunger.

Therefore:

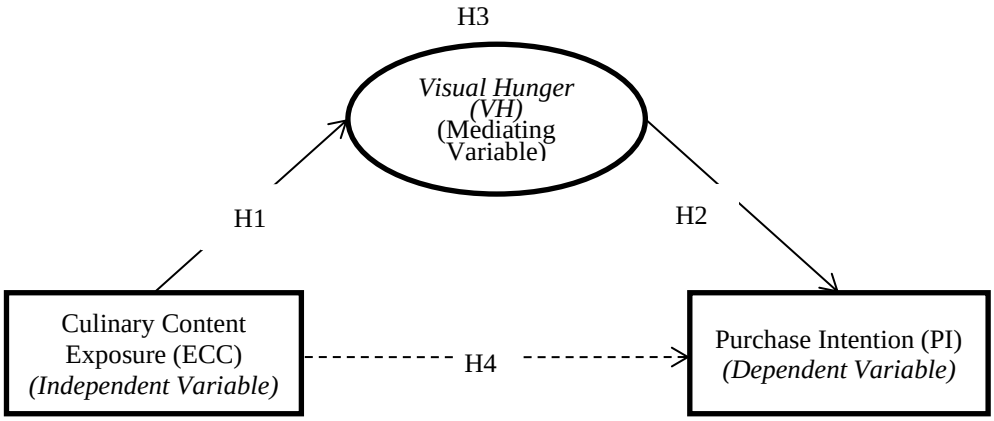
**H4:** Culinary content exposure on social media directly influences purchase intention among Algerian consumers beyond its indirect effect through visual hunger.

### 1.5 Conceptual framework

Figure 1 presents the conceptual model. Culinary content exposure influences purchase intention through two pathways: an indirect desire-arousal pathway

mediated by visual hunger (H1, H2), and a direct cognitive-informational pathway (H4). The overall mediation (H3) is tested with platform type and content cultural origin as moderating boundary conditions. The framework integrates sensory marketing theory (Krishna, 2012), the S-O-R model (Mehrabian & Russell, 1974), and the collectivist consumer behavior literature (Hofstede, 2001) to provide a culturally grounded account of digital food marketing effects in Algeria.

**Figure 1. Conceptual model visual hunger as mediator between culinary content exposure and purchase intention**




Source: Developed by the author

H1 = ECC → VH; H2 = VH → PI; H3 = Mediation (ECC → VH → PI); H4 = Direct Effect (ECC → PI). Boundary conditions: Platform type (Facebook / Instagram / TikTok), Content origin (Local-traditional / International).

## 2. Methodology

Data were collected from Algerian consumers between May and August 2025 using a dual sampling strategy combining online questionnaires (Facebook, Instagram, WhatsApp) and structured face-to-face intercept surveys in commercial areas, university campuses, and food markets. This approach ensured inclusion of both digitally active users and those with lower online engagement. Following the PLS-SEM "10-times rule" (Hair et al., 2017), a minimum of 90 observations was required; after removing 31 incomplete responses (7.0%), the final sample comprised 412 valid respondents. The sample was relatively gender-balanced (54.4% female), predominantly young (68.9% aged 18–35), highly educated (73.8% with at least a bachelor's degree), and mainly middle-income (41.7% earning 30,000–60,000 DZD/month; 26.5% earning 60,000–100,000 DZD/month, **Table 1**). Facebook was the most used platform (38.8%), followed by Instagram (33.7%) and TikTok (27.4%)

**Table 1. Demographic profile of the sample (N = 412)**

| Variable | Category | Frequency | Percentage (%) |
|---|---|---|---|
| Gender | Female | 224 | 54.4 |
| | Male | 188 | 45.6 |
| Age | 18–25 years | 156 | 37.9 |
| | 26–35 years | 128 | 31.1 |

| | | | |
|---|---|---|---|
| | 36–45 years | 84 | 20.4 |
| | 46 years and above | 44 | 10.7 |
| Education Level | High school or below | 108 | 26.2 |
| | Bachelor's degree | 196 | 47.6 |
| | Graduate degree | 108 | 26.2 |
| Monthly Household Income (DZD) | Below 30,000 | 62 | 15.0 |
| | 30,000–60,000 | 172 | 41.7 |
| | 60,000–100,000 | 109 | 26.5 |
| | Above 100,000 | 69 | 16.7 |
| Primary Social Media Platform for Food Content | Facebook | 160 | 38.8 |
| | Instagram | 139 | 33.7 |
| | TikTok | 113 | 27.4 |

Source: Authors' survey data (May–August 2025)

To capture authentic digital behaviors, an open-ended approach was employed where respondents indicated their primary social media platform for food content and the type of culinary content most frequently encountered. Participants also provided examples of content that recently triggered a desire to purchase or consume, enriching quantitative data with culturally specific visual hunger insights. Constructs were measured using validated scales from sensory marketing, digital consumer behavior, and food psychology, translated into Arabic and French, and pilot-tested with 30 Algerian respondents to ensure clarity and cultural relevance (**Table 2: Measurement Scales**)

**Table (2): Measurement scales**

| Construct | Code | Measurement Items | Source |
|---|---|---|---|
| Exposure to Culinary Content (ECC) | ECC1 | I frequently encounter food or restaurant photos/videos on my social media feed. | Coelho et al. (2016); Hu et al. (2014) |
| | ECC2 | Food-related content is among the most common types of content I see on social media. | |
| | ECC3 | I spend a considerable amount of time viewing culinary content on social media. | |
| | ECC4 | I regularly follow food influencers, restaurant pages, or cooking accounts on social media. | |
| Visual Hunger (VH) | VH1 | When I see food images on social media, I feel a strong desire to eat. | Spence et al. (2016); Petit et al. (2016) |
| | VH2 | Food images on social media often make my mouth water. | |
| | VH3 | Viewing culinary content makes me crave specific foods even when I am not hungry. | |

| | | | |
|---|---|---|---|
| | VH4 | After viewing food content on social media, I feel a strong urge to obtain that food. | |
| | VH5 | Food visuals on social media strongly stimulate my appetite. | |
| Purchase Intention (PI) | PI1 | After seeing food content on social media, I am likely to purchase or order the depicted food. | Fishbein & Ajzen (1975); Hajli (2014) |
| | PI2 | Social media food content motivates me to visit restaurants or food outlets that I see promoted. | |
| | PI3 | I often purchase or order food products that I initially discovered through social media. | |

Source: Adapted from Coelho et al. (2016), Spence et al. (2016), Fishbein and Ajzen (1975), and Hajli (2014). All items: 5-point Likert scale (1 = strongly disagree; 5 = strongly agree). Translated and validated for the Algerian context using forward–backward translation (Brislin, 1970).

Procedural and statistical remedies minimized common method bias, including variable separation, respondent anonymity, bilingual survey administration, Harman's single-factor test (36.1% variance), and VIF values (1.41–2.29).

Data analysis followed a three-stage procedure: (1) SPSS 28 was used for screening, descriptive statistics, internal consistency (Cronbach's alpha), and correlations; (2) SmartPLS 4 evaluated the reflective measurement model (CR, factor loadings, AVE, discriminant validity via Fornell–Larcker and HTMT); (3) the structural model was tested with 5,000 bootstrap resamples for direct (H1, H2, H4) and indirect effects (H3). Cross-platform comparisons (Facebook, Instagram, TikTok) employed PLS-MGA after establishing measurement invariance with MICOM. PLS-SEM was preferred due to suitability for prediction-oriented, complex models with heterogeneous subgroups and minimal distributional assumptions (Hair et al., 2019)

## 3. Results

Preliminary screening of the 412 responses indicated no missing data; minor univariate (1.7%) and multivariate (1.2%) outliers were retained. Normality was acceptable (skewness −0.94 to −0.31; kurtosis −0.67 to 1.28). Cronbach's alpha confirmed reliability: ECC = 0.881, VH = 0.906, PI = 0.878. Descriptive means were high for visual hunger (M = 5.19, SD = 1.21) and content exposure (M = 4.87, SD = 1.29), while purchase intention was more variable (M = 4.63, SD = 1.42), reflecting budget constraints. Hierarchical regression showed demographics explained 7.4% of PI variance, increasing to 61.2% after including ECC and VH ($\Delta R^2 = 0.538$, $p < 0.001$). Qualitative insights identified four key visual hunger triggers: traditional dish cues, social context, price-accessibility, and time-of-day effects, underscoring sensory, cultural, social, and economic influences (**Table 3, Table 4**)

**Table (3): Descriptive statistics and correlations**

| Variable | Mean | SD | 1 | 2 | 3 |
|---|---|---|---|---|---|
| 1. Exposure to Culinary Content (ECC) | 4.87 | 1.29 | 1 | — | — |
| 2. Visual Hunger (VH) | 5.19 | 1.21 | 0.672** | 1 | — |
| 3. Purchase Intention (PI) | 4.63 | 1.42 | 0.619** | 0.701** | 1 |

Source: Author's own data. N = 412. **p < 0.001. Mean scale range: 1–7.

**Table (4): Platform distribution and content type profile**

| Platform | n | % | Top Content Types | Dominant Age Group | Mean VH Score |
|---|---|---|---|---|---|
| Facebook | 160 | 38.8% | Home-cooking videos, restaurant pages, delivery offers, community food groups | 26–45 years | 4.94 (SD=1.31) |
| Instagram | 139 | 33.7% | Restaurant aesthetics, food photography, influencer reviews, traditional dish reels | 18–35 years | 5.41 (SD=1.14) |
| TikTok | 113 | 27.4% | Cooking tutorials, food challenges, street food discoveries | 18–25 years | 5.53 (SD=1.09) |
| **Total / Overall** | **412** | **100%** | — | — | 5.19 (SD=1.21) |

Source: Authors' survey data (May–August 2025). VH = Visual Hunger mean score (1–5 scale). Platform differences in VH scores are statistically significant (ANOVA: $F(2,409) = 9.41$, $p < 0.001$).

The reflective measurement model demonstrated strong reliability (CR > 0.90; α > 0.87), convergent validity (loadings 0.812–0.863; AVE 0.682–0.776), and discriminant validity (Fornell–Larcker and HTMT < 0.85, **Table 6**). Structural analysis showed ECC strongly influenced VH (β = 0.672, $f^2 = 0.820$), which in turn predicted PI (β = 0.548, $f^2 = 0.341$), with a significant direct ECC→PI effect (β = 0.264, $f^2 = 0.079$). Mediation analysis confirmed that VH partially mediated the ECC→PI relationship, consistent with desire-arousal and cognitive-informational pathways (**Table 7–8**). ECC explained 45.2% of VH variance, and together with VH accounted for 58.4% of PI variance; predictive relevance was confirmed ($Q^2VH = 0.303$; $Q^2PI = 0.453$)

**Table (6): Measurement model results**

| Construct | Items | Loading Range | CR | AVE | α |
|---|---|---|---|---|---|
| Exposure to Culinary Content (ECC) | 4 | 0.817–0.853 | 0.921 | 0.744 | 0.881 |
| Visual Hunger (VH) | 5 | 0.812–0.863 | 0.938 | 0.682 | 0.906 |
| Purchase Intention (PI) | 3 | 0.827–0.854 | 0.912 | 0.776 | 0.878 |

Source: Author's own data. All outer loadings exceed 0.708. CR = Composite Reliability; AVE = Average Variance Extracted; α = Cronbach's alpha. HTMT values (not shown) are all below 0.85.

**Table (7): Structural model results and hypothesis testing**

| Hypothesis | Path | β | t-value | p-value | $f^2$ | Decision |
|---|---|---|---|---|---|---|
| H1 | ECC → VH | 0.672 | 17.831 | <0.001 | 0.820 | Supported |

| | | | | | | |
|---|---|---|---|---|---|---|
| H2 | VH → PI | 0.548 | 12.467 | <0.001 | 0.341 | Supported |
| H4 | ECC → PI (Direct) | 0.264 | 5.812 | <0.001 | 0.079 | Supported |

Source: Author's own data. Bootstrap based on 5,000 resamples. β = standardized path coefficient; $f^2$ = Cohen's effect size (0.02 = small, 0.15 = medium, 0.35 = large).

**Table (8): Mediation analysis results**

| Effect | Path | β | t-value | p-value | VAF |
|---|---|---|---|---|---|
| Direct | ECC → PI | 0.264 | 5.812 | <0.001 | 41.7% |
| Indirect | ECC → VH → PI | 0.368 | 11.342 | <0.001 | 58.3% |
| Total | ECC → PI (Total) | 0.632 | 17.214 | <0.001 | 100% |

Source: Author's own data. 95% CI for indirect effect: [0.302, 0.436] (bias-corrected). VAF = Variance Accounted For. Complementary partial mediation confirmed.

Cross-platform analysis (Facebook, Instagram, TikTok) revealed heterogeneity in mediation pathways: Facebook had the strongest direct effect on PI (β = 0.317; VAF = 51.1%), Instagram exhibited the most visually intensive VH pathway (VAF = 64.8%), and TikTok produced the highest VH→PI coefficient (β = 0.611). Total PI effects were stable across platforms (MGA p = 0.881, **Table 9**)

**Table (9): Path coefficients and mediation effects across platforms (pls-mga)**

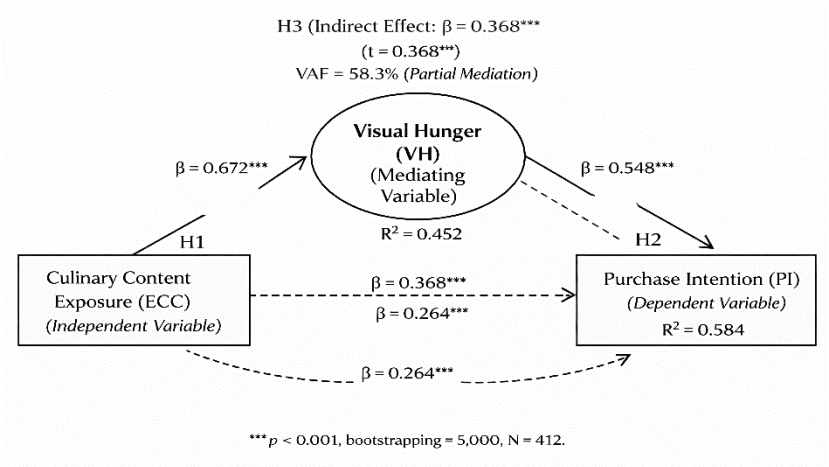
| Path / Indicator | Facebook (n=160) | Instagram (n=139) | TikTok (n=113) |
|---|---|---|---|
| ECC → VH | 0.627*** | 0.694*** | 0.718*** |
| VH → PI | 0.501*** | 0.571*** | 0.611*** |
| ECC → PI (Direct) | 0.317*** | 0.241** | 0.219** |
| Indirect Effect (ECC → VH → PI) | 0.314*** | 0.396*** | 0.439*** |
| VAF (% Mediation) | 49.8% | 62.2% | 66.7% |
| $R^2$ (Visual Hunger) | 0.393 | 0.482 | 0.516 |
| $R^2$ (Purchase Intention) | 0.571 | 0.579 | 0.584 |
| Mean VH Score on Platform | 4.94 | 5.41 | 5.53 |

Source: Author's own data. ***p < 0.001, **p < 0.01. VAF = Variance Accounted For. PLS-MGA significant differences: ECC→VH (Facebook vs. Instagram p = 0.042; Facebook vs. TikTok p = 0.018). VAF differences: (Facebook vs. Instagram p = 0.013; Facebook vs. TikTok p = 0.028). Total effect differences: not significant (p = 0.881).

Figure 2 presents the final structural model with standardized path coefficients and explained variance ($R^2$). Culinary Content Exposure explains 45.2% of the variance in Visual Hunger ($R^2$ = 0.452). Together, Culinary Content Exposure and Visual Hunger explain 58.4% of the variance in Purchase Intention ($R^2$ = 0.584), indicating moderate to substantial explanatory power (Chin, 1998). Predictive relevance is confirmed by positive $Q^2$ values for Visual Hunger ($Q^2$ = 0.903) and Purchase Intention ($Q^2$ = 0.453).

The results indicate that Culinary Content Exposure positively affects Visual Hunger (β = 0.672, p < 0.001), which in turn significantly influences Purchase Intention (β = 0.548, p < 0.001). The direct effect of Culinary Content Exposure on Purchase Intention remains significant (β = 0.264, p < 0.001). The indirect effect (β = 0.368, p < 0.001; VAF = 58.3%) confirms partial mediation

**Figure 2. Final structural model with standardized path coefficients**




**Source:** Developed by the author based on PLS-SEM analysis

## 3. Discussion

This study examines how culinary social media content shapes purchase intention among Algerian consumers through the mediating role of visual hunger. The four demographic control variables (gender, age, income, education) produced no significant effects on either construct (all $\beta < 0.09$, $p > 0.05$), confirming that findings are generalizable across the sample's demographic profile.

H1 is supported ($\beta = 0.672$, $f^2 = 0.820$, $p < 0.001$; $R^2 = 0.452$). This coefficient substantially exceeds benchmarks from controlled laboratory settings ($\beta = 0.40$–$0.52$; Spence et al., 2016) and the field estimate of Coelho et al. (2016) ($\beta = 0.49$), suggesting contextual amplification specific to Algeria. The mean visual hunger score (M = 5.19/7.00) similarly exceeds M = 4.61 among French consumers (Petit et al., 2016) and M = 4.73 among Brazilian students (Coelho et al., 2016), consistent with Ventura, Cavaliere, and Iannò's (2023) systematic review confirming that social media food content reliably intensifies food craving across contexts. Three factors explain this amplification: the collectivist framing of food as shared identity and hospitality in Algerian culture (Belk, 1988; Hofstede, 2001); the high visual saturation of trending fast food content on Instagram and TikTok (Liu et al., 2022; Pancer et al., 2022); and the algorithmic personalization of locally resonant culinary stimuli (Farhat et al., 2025).

H2 is supported ($\beta = 0.548$, $f^2 = 0.341$, $p < 0.001$). This closely matches Zhang, Zhang, and Daim's (2023) TikTok estimate ($\beta = 0.53$) and exceeds Mollen and Wilson's (2010) UK benchmark ($\beta = 0.47$), confirming cross-cultural robustness of the desire-arousal pathway. However, the gap between visual hunger (M = 5.19) and purchase intention (M = 4.63) — a discrepancy of 0.56 scale points — substantially exceeds the 0.18–0.21 range reported in Western samples, suggesting that purchasing power constitutes a contextual filter in the desire–intention relationship. The study thus extends prior literature by introducing affordability as a boundary condition in emerging market contexts (Amine, 1998), a dimension systematically underemphasized in Western digital food marketing research.

H3 is supported: visual hunger partially mediates the ECC–PI relationship (indirect β = 0.368, VAF = 58.3%, p < 0.001), establishing complementary partial mediation. The VAF exceeds prior benchmarks — 52% via engagement (Mollen & Wilson, 2010) and 44% via attitude formation (Filieri, 2015) — and aligns with Barta et al.'s (2023) TikTok estimate (>60%) and Ventura et al.'s (2023) systematic review confirming the dominance of affective mediation in social media food contexts. The partial mediation structure, consistent with dual-process models (Singh et al., 2023; Huo et al., 2023), confirms that visual hunger is the dominant but not exclusive mechanism — direct cognitive-informational pathways also operate simultaneously.

H4 is supported (β = 0.264, $f^2$ = 0.079, p < 0.001), accounting for 41.7% of the total ECC→PI effect. This direct pathway captures promotional content, price signals, eWOM, and brand awareness operating independently of desire arousal. Leong, Loi, and Woon (2022) confirm that eWOM credibility directly determines purchase intention through information adoption — a mechanism particularly salient in Algeria's collectivist consumer culture (Hofstede, 2001). The coexistence of affective and cognitive pathways supports a platform-differentiated strategy: Instagram and TikTok should prioritize sensory-aesthetic content (visual hunger VAF: 62.2–66.7%), while Facebook's informational architecture better serves direct promotional campaigns.

Instagram (VAF = 62.2%) and TikTok (VAF = 66.7%) generate stronger desire-mediated effects than Facebook (VAF = 49.8%), yet total purchase intention effects are platform-invariant (MGA p = 0.881), suggesting platforms differ in mechanism rather than ultimate impact — replicating Coelho et al.'s (2016) Brazilian pattern (platform VAF difference ≈ 12 pp vs. Δ12.5–16.9 here). The prominence of globally branded fast-food content further reflects acculturation dynamics: internationally branded imagery evokes aspirational associations among younger consumers (Cleveland & Laroche, 2007), while localized campaigns reinforce cultural resonance (Merchant & Rose, 2013). Visual hunger thus operates at the intersection of sensory stimulation and symbolic identity, highlighting the layered nature of digital food desire in emerging North African markets.

## Conclusion

This study demonstrates that culinary social media content significantly influences purchase intention among Algerian consumers, primarily through visual hunger as a mediating mechanism (VAF = 58.3%), alongside a complementary direct cognitive-informational pathway (VAF = 41.7%). The model explains 58.4% of the variance in purchase intention, indicating strong predictive relevance in a real-world consumer context.

Four key findings emerge from the analysis. First, the study confirms the cross-cultural robustness of stimulus-induced food desire: the ECC→VH effect (β = 0.672) substantially exceeds Western benchmarks, reflecting the cultural density of food imagery and the visual saturation of fast food content in the Algerian digital environment. Second, visual hunger is established as the dominant mediating mechanism, more powerful than attitude- or engagement-based mediators documented in prior literature. Third, price sensitivity constitutes a structural boundary condition between desire and purchase intention, producing a desire-behavior gap (Δ = 0.56) larger than that observed in Western markets, underlining the importance of affordability as a strategic variable in emerging markets. Fourth, platforms differ in mechanism rather than ultimate impact: Instagram and TikTok maximize the desire-arousal pathway, while Facebook sustains comparable total effects through informational and eWOM channels.

Managerial recommendations are organized by platform and objective. On Instagram and TikTok, brands should invest in high-production sensory-aesthetic content -close-up food imagery, steam and texture cues, and influencer reviews - to maximize visual hunger arousal among 18-35 year olds. On Facebook, the priority should shift to promotional, price-transparent content with clear calls-to-action, delivery platform integrations, and community-

oriented engagement to activate the cognitive-informational pathway. Across all platforms, bridging the desire-behavior gap requires integrating affordability signals directly into aesthetic content: time-limited offers, accessible price-point formats, and delivery promotions should accompany desire-arousing imagery rather than appear in separate campaigns. Finally, seasonal content aligned with Ramadan and Eid - periods of intense food engagement in Algeria- represents a high-return opportunity for visual hunger-based campaigns.

The cross-sectional design and self-reported measures limit causal inference. Future research should employ longitudinal and experimental designs, integrate physiological indicators of visual hunger (eye-tracking, skin conductance), and extend the framework to YouTube and Snapchat, which are growing among Algerian consumers. Cross-market comparisons across the Maghreb region would further advance theoretical generalizability.

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