

## EFFECT OF COLORFUL FOOD PHOTOGRAPHY AND CONSUMER INTENTIONS TO PURCHASE FOOD AND BEVERAGES

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### ABSTRACT

*This study intends to look into how consumers are affected differently by food advertising utilizing monochrome and colorful images in terms of pleasure, arousal, and buy intention. A design study was carried out randomly with 101 participants from various residences in Jabodetabek Area (Jakarta, Bogor, Tangerang, Bekasi), Indonesia. Participants voluntarily exposed themselves to food advertisements. According to this study, employing either monochrome or colourful food photography can positively influence customer's intentions to purchase foods and beverages. The results demonstrate that colourful food photography increases customer buy intentions by making food products more enticing and beautiful. One of the few research projects comparing the effect of colorful food photography as an advertising and consumer intentions to purchase food and beverages. The previous understanding of the significance of visuals in social media advertising is also expanded by this research.*

**KEYWORDS** *Food Photography; Customer Attitude; Purchase Intention; Pleasure; Arousal*



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### INTRODUCTION

Eating is a behaviour to which we attach a great lot of value, even beyond the pleasures and nourishing food it provides (Bianchi et al., 2017; Korsmeyer, 1999; SATI & KAZANÇOĞLU, 2020). The adage "the eye eats before the mouth" emphasizes how important food presentation is. While our eating habits provide

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information about things like gender, ethnicity, social status, and moral principles (Andersen et al., 2021; K. L. Burton, 2016; S. Burton et al., 1998) and the present study also intends to investigate our aesthetic appreciation of food (Hagen, 2021; Kemp, 2021).

Beyond only how it looks, food has aesthetic value because of how we serve it at the table and how it affects how we connect with others (Alhelaili, 2015; Melumad et al., 2019; Paakki et al., 2019; Woolley & Fishbach, 2017). Our visual systems and brains have evolved to help us find food. Along with our innately "hungry eyes" which motivates us to consume food, the media contributes to our enjoyment of observing food. Recipe books, cooking programs, and travel-themed television series all allow viewers to partake in the culinary experience as a sort of culinary tourism and to influence consumer tastes (Belanche et al., 2017; Bianchi et al., 2017; Woolley & Fishbach, 2017).

Technology development over the past few decades has made it possible for food marketers to influence consumers' buying decisions using visual signals (such as food photos) before the actual consumption (Ranteallo & Andilolo, 2017; Velasco et al., 2018). The presentation of images has a beneficial impact on consumers' opinions of the food suppliers and may help with menu engineering to maintain revenues, as a photo conveys a lot more information than a short word explanation (Hou et al., 2017; Lin, 2016; Yan et al., 2016).

Given how frequently pictures are used in marketing messaging, visual information processing has received a lot of attention in studies of consumer behaviour. The initial wave of research showed that adding images to spoken communications generally has a good effect (K. L. Burton, 2016; Childers & Houston, 1984; Haslehurst et al., 2016). For instance, using images can help people remember brand names and product details (Paakki et al., 2019; Ryu & Jang, 2007). Recent studies also indicate that images might influence customers' views and buying intentions. For example, Mitchell and Olson (1981) assert that commercials with images affect brand attitude more favourably than those without (Liu & Jang, 2009; Thang & Tan, 2003).

Today, consumers are drawn to mouth-watering food imagery from a variety of sources, including owned and paid media (such as advertising), menus at restaurants, product packaging, and currently even earned media, for instance, social networking sites (Coary & Poor, 2016; Poor et al., 2013). Recent surveys indicate that in addition to just interacting with businesses and brands, people are now thinking about making online purchases on social media (Haslehurst et al., 2016; Ibrahim, 2015; Ting & de Run, 2015). Businesses will use social media platforms more strategically as sales channels as well as marketing communication tools as consumers use social media more often. Consequently, using food photographs properly in advertising plays a crucial role (Olney et al., 1991; Rolls et al., 2002; Solomon, 2010).

There seems to be disagreement on colours. Numerous theories about colour have been developed in light of the lack of definitive scientific evidence. Although the research was conducted by businesses in the colour consultancy sector, there have been some advancements (Floh & Madlberger, 2013; Hsieh et al., 2014; Singh, 2006). Study results that every marketing manager need to be aware of how colours

are interpreted and given meaning in a particular region (Aghekyan-Simonian et al., 2012; Pieters et al., 2010).

Colour can be a significant, controllable marketing variable for managing image standardization because it can quickly indicate a product's brand, quality, and price, for instance, in Hong Kong, a golden soup may indicate high quality, while black on white labelling typically conveys a generic or inferior quality (Bakalash & Riemer, 2013; Singh, 2006; Vieira, 2013).

This study aims to determine the effect of colours in food photography in its relationship with customer's attitude and purchase intention. In order to ascertain how they impact customer purchase intention; this study investigates random users' participation in Jabodetabek area for the research study's aims.

The study aims to show how's the effect of colourful food photography positively influence consumer's purchase intention and to buying food products. Knowing the influence of these elements may help marketing professionals for food businesses design promotional plans for establishing a favourable approach by providing effective understandings of customer behaviour.

The following research questions are the main focus of the study, RQ1 : Do customer's attitude towards colourful food photography impact purchase intention? RQ2 : Will a colourful food photography positively influence consumer's to buying food products?

## **RESEARCH METHOD**

### **Research Design**

The current study used an experimental design to examine the hypotheses. This study used a between-subjects design that contrasted black and white or monochrome photos with colorful photos. Participants were shown an advertisement-related food photo of a food business, presented with monography and colorful of visual pictures.

### **Procedures**

One of the two prepared stimuli was randomly allocated to each participant. A survey was created using Google Form (Eroglu et al., 2001). Participants filled out a permission form and read a brief research introduction before viewing one of the experimental stimuli. Participants were required to fill out a questionnaire after briefly analyzing the data from the stimuli. The participants were briefed after completing the survey, and they were acknowledged.

### **Manipulation check**

To make sure that participants saw the desired advertising, manipulation checks were carried out for the two sorts of food advertisements using two distinct types of visuals, monochrome and colorful. To confirm that the data was obtained as intended, a manipulation check was carried out using the same questionnaire but with different community sharing and in several sets of Google forms.



Figure 1. (a) The stimuli-monochrome advertisement, (b) The stimuli-colorful advertisement

### Research Instruments

There were two sections to the participant survey. The first section was designed to gather data on participants' food purchase habits as well as demographics like gender, age, and places of work. The second section of the survey consisted of stimuli and inquiries that assessed participants' consumer attitude and purchase intention.

The pleasure and arousal surveys, which were derived from Holmqvist & Lunardo (2015) each contained four items. In the meantime, five questions that were modified from (Aghekyan-Simonian et al., 2012; Chen, 2007). were used to measure purchase intention. The scores for each item ranged from strongly disagree (1) to strongly agree (7) on a seven- point Likert scale.

The Cronbach's  $\alpha$  for the monochromatic commercial for pleasure, arousal, and buy intention measures was 0,951, and the Cronbach  $\alpha$  for the color advertisement for pleasure, arousal, and purchase intention measures was 0,914. Accordingly, demonstrating strong construct reliability.

Factor loadings for all items were close to or greater than 0.50 and significant ( $p \leq 0.05$ ) establishing convergent validity. Additionally, the reported average variance extracted (AVE) values were below 0.5, indicating that the relationships between the measures and the underlying dimensions are negligible (Andersen et al., 2021; Cacioppo et al., 1999; Enrique Bigné et al., 2008).

### Sample & Data Collection

A single-cross-sectional data gathering process and a non-probability sample technique were used to arrive at the study's decisive results. With the aid of Google Forms, responses were gathered. People who reside in the Jabodetabek area and

make one or more purchases of restaurant-based foods throughout the course of the year were the sample for the study. In order to conduct the poll, judgmental sampling was used, and participants were chosen based on whether they had purchased any food products that featured food photographs in their advertising. Respondents were questioned about whether they had ever ordered or bought a food item after becoming aware of it through an advertisement that used a food photograph.

Purposive sampling was used to compile a total of 101 valid replies, consist of 47 responses from monochrome advertisement and 55 responses from colorful advertisement. All of those respondents who acknowledged having done so after having at least a year prior exposure to either a monochrome or colorful food photography advertising were asked to complete the survey. Males (21,25%) and females (78,75%) aged 15 to 44 made up an equal percentage of the sample. Of the participants, more than 50% claimed to have an Instagram account, and 98% of them had several social media accounts. (Facebook, Twitter, Tiktok, Pinterest, Whatsapp). Furthermore, more than 95 percent had purchased food after seeing these foods advertised on social media within the past year and 35% of them often search for or see food advertisements on social media from certain diners, cafés, restaurants, and food vendors. Additionally, every participant indicated that they were pleased toward. Overall, the sample was made up of a group of people who had been exposed to food advertisements before making a purchase.

## RESULT AND DISCUSSION

In order to determine how food advertisements affect consumer pleasure arousal and purchase intention, two independent factorial ANOVAs were performed.

Table 1. ANOVA of Food Advertising B&W

ANOVA <sup>a</sup>						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1159,933	1	1159,933	80,588	,000 <sup>b</sup>
	Residual	633,306	44	14,393		
	Total	1793,239	45			

a. Dependent Variable: Purchase Intention B&W  
b. Predictors: (Constant), Food Advertising B&W

Table 2. ANOVA of Food Advertising Colour

ANOVA <sup>a</sup>						
	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	948,531	1	948,531	53,556	,000 <sup>b</sup>
	Residual	920,969	52	17,711		
	Total	1869,500	53			

a. Dependent Variable: Purchas Intention Colour  
b. Predictors: (Constant), Food Advertising Colour

Table 3. Coefficients of Food Advertising B&W

Coefficients <sup>a</sup>		Std. Error	Standardized Coefficients Beta	t	Sig.
Unstandardized Coefficients					
Model B					
1 (Constant)	-1,148	1,547		-,742	,462
Food Advertising B&W	,379	,042	,804	8,977	,000
a. Dependent Variable: Purchase Intention B&W					

Table 4. Coefficients of Food Advertising Colour

Coefficients <sup>a</sup>		Std. Error	Standardized Coefficients Beta	t	Sig.
Unstandardized Coefficients					
Model B					
1 (Constant)	-4,762	3,095		-1,538	,13
Food Advertising Colour	,449	,061	,712	7,318	,00
a. Dependent Variable: Purchase Intention Colour					

From these calculations a statistical test was carried out using SPSS version 25.

Variable	Constant	Regression Coefficient
B&W	-1.148	0.379
Colour	-4.762	0.449

The outcomes of the study's various linear regression equations can be summarized as follows:

1. Food Advertising B&W

$$Y = -1.148 + 0.379X + e$$

- a. The constant value is -1,148, which means that if there is no variation in Food Advertising B&W, it is equal to zero (0), then Purchase Intention increases by -1,148
- b. The regression coefficient for Food Advertising B&W is 0.379, which means that for every 1% increase in the level of Food Advertising B&W, Purchase Intention increases by 0.379
- c. The regression coefficient value of Food Advertising B&W is positive so that Food Advertising B&W has a positive effect on Purchase Intention

## 2. Food Advertising Color

$$Y = -4.762 + 0.449 + e$$

- a. The constant value is -4,762, which means that if there is no variation in Food Advertising Color, it is equal to zero (0), then Purchase Intention increases by -4,762.
- b. The regression coefficient for Food Advertising Color is 0.449, which means that for every 1% increase in the level of Food Advertising Color, Purchase Intention increases by 0.449
- c. The regression coefficient value of Food Advertising Color is positive so that Food Advertising Color has a positive effect on Purchase Intention

The significance of each study variable can be summarized as follows:

Variable	Sig.
B&W	0.000
Colour	0.000

The significance value used is  $\alpha = 0.05$ . Where the decision rule is that  $H_0$  is rejected if the p-value  $< \alpha = 0.05$ . The following outcomes are derived via data processing through the SPSS version 25 application:

- a. B&W food advertising variables

The B&W food advertising variable has a sig (0.000) less than 5% (0.05). This can be interpreted that the food advertising variable B&W influences purchase intention.

- b. Colorful food advertising variable

The food advertising color variable has a sig (0.000) less than 5% (0.05). This can be interpreted that the variable food advertising color affects purchase intention.

The results of the R Square each variable of this study can be compiled as follows:

Variable	R	R Square
B&W	0.804	0.647
Colour	0.712	0.507

Based on the table above, the coefficient of determination (R-Square) value for the food advertising B&W variable is 0.647, this shows that the food advertising B&W variable has an influence of 64.7% on purchase intention. While the remaining 35.3% is influenced by other variables not tested in the study. While the value of the coefficient of determination (R-Square) on the food advertising color variable is 0.507, this indicates that the food advertising color variable has an influence of



50.7% on purchase intention. While additional factors that were not examined in the study have an impact on the remaining 49.3%.

## CONCLUSION

In conclusion, food photography is a growingly well-liked and significant component of the digital era. It has been discovered through research that seeing pictures of fatty foods can make people hungry and generate mental simulations, but it can also make people feel full in a way that is individual to their senses. Food photography can improve visual appeal and overall experience satisfaction, but it shouldn't get in the way of enjoying what you're eating. Social media food photography sharing may have a detrimental impact on what people eat and how much they like it. But with careful application, photography can promote a happier and healthier relationship with food. This is consistent with the findings made by Andersen et al (2021) that if utilized appropriately, photography can foster a better and more fulfilling relationship between us and food.

The results of this study imply that using either monochrome or colorful food photography can affect customer intentions to buy food and beverages in a favorable way. The findings show that colorful food photography makes food goods more appealing and beautiful, which raises consumer buy intentions. The study also highlights how important it is to incorporate appealing food photography into marketing and advertising efforts because it has a significant influence on how customers act and make decisions. The efficacy of colorful food photography will rely on the target market and the kind of food product being sold; it is crucial to keep in mind. Future studies should examine the impact of additional variables, such cultural differences, on the efficacy of colorful food photographs in advertising. Overall, this research offers beneficial information for marketers and advertisers that want to enhance their marketing plans and boost consumer engagement. Overall, the results indicate that vibrant food photography can be a useful tactic for food businesses to raise customer intentions to buy their products, but it should be applied in a responsible and transparent way.

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