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Utilization Of Pigeon Meat In Making Shredded Meat (Abon)

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ABSTRACT

The research objective is to explore what's of unique about Abon. Abon is a food made from animal meat fibers. Indonesians, must be familiar with this type of food. Its appearance is usually light brown to blackish in color as it is seasoned with soy sauce and palm sugar. From a distance, it looks like cotton fibers because it is dominated by dried muscle fibers that are shredded. Dry and with almost no residual moisture content, this food is generally shelf-stable for a fairly long period of time as long as it is in an airtight package. In this research, the author replaces beef with pigeon meat in making shredded meat, aiming to innovate in processing pigeon meat. The research method used is experimental, with researchers using quantitative data collection techniques. Data collection is conducted through interview, questionnaire, and observation. The measurement scale used by researchers in data collection is an ordinal scale. The Likert scale is used to measure the attitudes, opinions and perceptions of a person or group of people about social phenomena. Based on the comparison of nutritional values discussed earlier, it can be seen that the shredded meat comparison has more nutritional content than the experimental shredded meat.

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1. INTRODUCTION

Abon is a food made from animal meat fibers. As someone who lives in Indonesia, you must be familiar with this type of food. Its appearance is usually light brown to blackish in color because it is seasoned with soy sauce and coconut sugar. In Indonesia, the meat commonly used to make abon comes from beef, hence the term "abon sapi". The centers of abon sapi making in Indonesia are currently in Boyolali, Surakarta, Ngawi, Nganjuk, Salatiga, Magelang and several other surrounding areas. Abon also has nutritional content that is good for the body. Abon is considered to increase the production of red blood cells because of its iron content. Abon beef can prevent anemia. In addition, the content of shredded beef can help regulate body temperature and carry carbon dioxide to the dump. Shredded beef is also believed to maintain endurance, help muscle development and building, and is a good energy intake.

Culinary tourism must be related with the local potential of each region based on its natural resources. Tourism research has undergone a paradigm shift, highlighting the importance of local food in enhancing destination attraction (Hsu and Scott, 2020). Innovation and creativity are needed in food services and tourism to differentiate themselves in a competitive environment and to work with scarce resources (Bessi, V. G., Schmitz, P. T., Weschenfelder, S. & Almeida, T. V., 2022; C. Ningsih, 2016). In this research, the authors aim to replace beef with pigeon meat in making shredded meat, introducing new innovations in processing pigeon meat.

Pigeons are commonly kept as pets. Pigeons are a livestock commodity that is not yet in great demand, but if this business is diligently cultivated, it can yield considerable profits due to their high market price and the relatively short production period and cutting age (Cavalli SV et al, 2008).

Local pigeons have orange and yellow eye color, red shanks and a variety of feather color patterns (Salis, 2002; Jiang H et al, 2022). In general, pigeon farming can be attributed to its role as a protein food provider, although it is less popular, but if studied further, pigeon farming actually has considerable potential in raising the income of farmers who raise pigeons as meat producers. Young pigeon meat has its own characteristics compared to other poultry, namely red meat color, fine meat fiber, protein content of 16.42%-18.02% and fat content of around 5.9%. In addition, the distinctive flavor of the meat makes pigeon meat a luxury dish in Chinese restaurants and in several other big cities (Nurwitasari, 2006; Chang L et al, 2023). The problem that often arises is that pigeon meat in Indonesia is rarely consumed. Based on the above background, the author raised the research title "Utilization of pigeon meat in making Abon".

2. LITERATUR REVIEW

2.1. Overview of Pigeon Meat

The tradition of pigeon meat consumption dates back to ancient civilizations. Pigeon meat is popular as an ingredient in fine cuisine in China, North America, North Africa and some European countries (Pomianowski et al., 2009; Kokoszyński et al., 2020). As with other poultry species, each pigeon breed has specific carcass production characteristics. In the following we present a comparison of production characteristics of postal and King breed pigeons observed during three reproductive seasons which include several components such as carcass weight and size, carcass composition, physicochemical characteristics, texture, rheological (physical) properties and microstructure of meat, and some biometric characteristics of the digestive system based on the results of research presented by Kokoszyński et al. (Kokoszyński et al.,

2020). Pigeon meat is generally obtained through the slaughter of young birds or squabs. Squabs are ready for slaughter at 28-30 days of age and 400-700 g body weight, depending on the breed and rearing method (Islam et al., 2021).

Table 1. Nutrient Content of Pigeons

Item	Calori (Kcal)	Fat (g)	Colesterol (mg)	Protein (gr)
Pigeon	142	7,5	90	17,5

Sumber : Fat secret Indonesia; Samudera, R., S. Dharmawati dan S. Prasetyo, 2016

2.2. Comparison of the Nutritional Content of Pigeon Meat with Beef

Meat is one of the food ingredients of livestock origin that contains high nutritional substances that are very suitable for human consumption. The nutritional content of meat is mostly composed of 65-80%, protein (16-22)%, fat (1.5-13)%, carbohydrates and minerals of 1.0% (Cavali et al., 2006). Fresh meat normal pH range: 5.4 to 5.9 (Subagyo, Suwiti, & Suarsana, 2015; Gisslen, 2011).

Nutritional content is information about what substances are contained in food or drinks that are suitable for consumption. Nutrition is substances as a building component of the human body in order to maintain and repair tissues so that the function of the human body itself can run properly. A comparison of the nutritional content in the two meats is contained in the following Table.

Table 2. Nutritional Content of Pigeon and Beef

Item	Calori (Kcal)	Fat (g)	Colesterol (mg)	Protein (g)
Pigeon	142	7,5	90	17,5
Beef	288	19,54	87	26,33

Sumber: Fatsecret

3. METHODS

3.1. Methods

The research method used is experimental. Where this method explains the engineering/manipulation of products/materials/methods/tools, compared to aspects that have been done before. The description of research and development in this writing is described through an experimental approach, where according to Putra (2019) "that research and development is closely related to experiments, because research and development is very focused on effectiveness, efficiency and productivity". This is in line with Creswell's (2013) opinion which states that "experimental writing as a systematic, systemic, structured, rigorous and accurate writing stage in explaining procedures and ensuring certainty of results due to control, measurement and consistency that accompany the implementation of the writing stages (Sugiyono, 2018). The experimental research method is a research method used to find the effect of certain treatments on others under controlled conditions. This means that the control of conditions or control in question is usually carried out through direct comparison of something that is not given treatment. Thus, direct comparisons can be made between treated and untreated subjects.

3.2. Data Collection Techniques: Used Observation, Literature Study, Panelist Rating

Data collection techniques are a top priority that has strategic value in research, this is expressed because the purpose of research is to obtain data, either primary or secondary

data. Sugiyono (2013) With various types of data collection techniques, researchers use quantitative data collection techniques. According to Sugiyono (2020) quantitative research methods can be interpreted as research methods based on the philosophy of positivism, used to research on certain populations or samples, data collection using research instruments, data analysis is quantitative / statistical, with the aim of testing predetermined hypotheses. Quantitative research has three characteristics in the field, namely research from beginning to end is fixed, so that it will experience the same title of the research report. Developing problems that have been found before. And the problem will be different when in the field because it has been confirmed by the reality found (Nurwulandari and Darwin, 2020). Data collection can be done through questionnaire, observation, literature study. Panelists, who have sensory advantages, are used to analyze and assess the characteristics of food ingredients studied by the authors (Tjutju, Betty 2008).

a. Literature Study

According to Sugiyono (2017) Literature study is a link to theoretical studies and other references related to the values, culture, and norms that develop in the social situation under study. Research results will also be more credible if supported by photographs or existing academic and artistic papers. It can be said that literature study can affect the credibility of the results of the research conducted.

b. Questionnaire

According to Hardani (2020), questionnaires assist in measuring and simplifying respondent behavior and attitudes. A questionnaire is a list of characteristics, behaviors, or other entities that the researcher wants to know. According to Sugiyono (2017) a questionnaire is a data collection method that is carried out by giving a set of questions or written statements to respondents to answer.

c. Interview

Sugiyono (2016) state that "Interviews are used as a data collection technique if the researcher wants to conduct a preliminary study to find problems that must be researched, and also if the researcher wants to know things from respondents that are more in-depth".

3.3. Population & Sample

This study uses a population divided into several parts, including for the organoleptic test 15 people who are expert panelists. In the second stage, namely the consumer acceptance test, the population used at this stage is 100 people based on the criteria for the number of consumer panels from 25-100 people. This test uses a preference test. The results of the favorability test to determine whether a type of food is acceptable to the public (Erliana, 2016).

3.4. Measurement Scale and Data Analysis Techniques

a. Measurement Scale

An ordinal scale is a measurement scale that not only states categories, but also states the rank of the construct being measured (Sugiyono, 2014). The measurement scale used by researchers in data collection is an ordinal scale. The ordinal scale is a scale that is the second level of measurement, which is tiered something that becomes 'more' or 'less' than the others, this measure is used to rank objects from lowest to highest and vice versa, which means that researchers have taken measurements of the variables under study.

The Likert scale is used to measure the attitudes, opinions and perceptions of a person or group of people about social phenomena. Sugiyono, (2014), "And the type of measurement scale that researchers use is a Likert scale. The Likert scale is used to measure the attitudes,

opinions, and perceptions of a person or group of people about social phenomena.

b. Data Analysis Technique

Data analysis technique is an activity in research that is carried out by reviewing all available data from research instruments, consisting of notes, recordings, documents, tests, and so on (Moleong, 2007).

4. RESULTS AND DISCUSSION

The author will calculate the panelists' assessment to find out the opinions and values given by professional and non-professional panelists to each appearance, aroma, taste and texture of shredded pigeon meat. Meanwhile, the panelists that the author uses are 15 professional panelists and 25 non-professional panelists with a total of 40 panelists. A questionnaire, defined by Ir. Armein Syukri Arbi, M.Si. (2016), is a tool in the form of a list of questions that must be filled in by the respondent.

Table 3. Research Description

Aspects	Information				
	(5)	(4)	(3)	(2)	(1)
view	Very interesting	interesting	Interesting enough	Less Attractive	Not Attractive
Aroma	Very tasty	tasty	Tasty enough	Less tasty	Not tasty
Flavour	Very good	good	Enough	Less tasty	Not Good
Texture	Very moist	moist	Soft enough	Lest Soft	Not soft

Sources: Processed by the Author, 2023

The following are the results of professional panelists totaling (15) people on Comparative Abon.

Table 4. Panelist Assessment Results for Comparative Shredded Meat (Abon)

Aspects Assesment	(5)	(4)	(3)	(2)	(1)	Total
Aroma	12	2	1	0	0	15
Flavour	11	4	0	0	0	15
Texture	12	3	0	0	0	15
Appearance	12	3	0	0	0	15

Sources: Processed by the Author, 2023

From the results of the assessment of 15 professional panelists:

- The aroma aspect, there were 12 panelists stated that it was very delicious, 2 panelists stated that it was delicious, 1 panelists stated that it was quite delicious.
- The aspect of taste, 11 panelists stated that it was very good, and 4 panelists stated that it was good.
- Texture aspect, 12 panelists stated that it was very soft, and 3 panelists stated that it was soft.
- The appearance aspect, 12 panelists stated that it was very attractive, and 3 panelists stated that it was attractive.

Table 5. Assesment Results of non- Professional Panelists on Comparative Shredded Meat

Assessment	(5)	(4)	(3)	(2)	(1)	Total
Aroma	9	12	4	0	0	25
Taste	13	9	3	0	0	25
Texture	12	10	3	0	0	25
Appearance	14	10	1	0	0	25

Sources: Processed by the Author, 2023

From the results of the assessment of non-professional panelists totaling 25 consumers:

- The aroma aspect, there were 9 panelists who stated that it was very tasty, 12 panelists stated that it was tasty, and 4 panelists stated that it was quite tasty.
- The flavor aspect, 13 panelists stated that it was very good, 9 panelists stated that it was good, and 3 panelists stated that it was quite good.
- Texture aspect, 12 panelists stated that it was very soft, 10 panelists stated that it was soft, and 3 panelists stated that it was quite soft
- Appearance aspect, there were 14 panelists stated that it was very attractive, 10 panelists stated that it was attractive, and 1 panelist stated that it was quite attractive.

Table 6. Assesment Results of non- Professional Panelists on Shredded Comparison Pigeon

Assessment	(5)	(4)	(3)	(2)	(1)	Total
Aroma	14	9	2	0	0	25
Taste	16	8	1	0	0	25
Texture	15	9	1	0	0	25
Appearance	12	10	3	0	0	25

Sources: Processed by the Author, 2023

From the results of the review of non-professional panelists totaling 25 consumers above that:

- The aroma aspect, there were 14 panelists stated that it was very delicious, 9 panelists stated that it was delicious, and 2 panelists stated that it was quite delicious.
- The taste aspect, there were 16 panelists who said it was very good, 8 panelists said it was good, and 1 panelist said it was quite good.
- Texture aspect, there were 15 panelists stated that it was very soft, 9 panelists stated that it was soft, and 1 panelist stated that it was quite soft.
- Appearance aspect, there were 12 panelists stated that it was very attractive, 10 panelists stated that it was attractive, and 3 panelists stated that it was quite attractive.

5. CONCLUSION

Based on the results of data processing in the research, the authors make conclusions regarding the use of pigeon meat in making shredded meat, as follows:

Taste of Abon Pigeon Meat and Comparative Abon

- Based on the results obtained according to the author, professional panelists and non-professional panelists regarding the Aroma aspect, the experimental shredded is more preferred and the most delicious compared to the comparison shredded.
- Based on the results obtained according to the author, professional panelists and non-professional panelists regarding the aspect of Taste, namely the experimental shredded is the most delicious compared to the shredded comparison.
- Based on the results obtained according to the author, professional and non-professional panelists recognize the aspect of Texture, namely the experimental shredded meat and the comparative shredded meat are both soft. However, according to professional and

non-professional panelists, the experimental shredded meat was softer than the comparison.

- d. Based on the results obtained according to the author, professional and non-professional panelists regarding the appearance aspect, the comparative shredded meat is more attractive than the experiment shredded meat.

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