

An Exploration Research about Sourdough Bread as Delight Culinary

Odelia Valda Ichwan¹, Priscilla Patricia Budi Darma², Ni Wayan Ari Astiti Putri³, Ni Putu Putri Padma Wulandari⁴, Irfan Maulana⁵, Johnatan Christian Emmanuel⁶, Ni Desak Made Santi Diwyarthi⁷

^{1,2,3,4,5,6,7} Politeknik Pariwisata Bali and santidiwyarthi@yahoo.com

ABSTRAK

Tujuan dari penelitian ini adalah untuk menyelidiki roti Sourdough. Menggunakan metodologi kualitatif dengan penelitian deskriptif. Penelitian ini melakukan wawancara mendalam dengan tiga dosen senior dari Politeknik Pariwisata Bali, observasi partisipan, dan studi literatur mengenai roti Sourdough. Analisis yang dilakukan menggunakan triangulasi data yang menggunakan beberapa sumber data, teknik pengumpulan data, atau teori untuk memvalidasi dan memperkuat temuan penelitian. Roti Sourdough memiliki beberapa kualitas khas yang membuatnya menjadi favorit di antara banyak orang. Ini termasuk rasa dan aromanya yang kompleks, tekstur yang unik, proses pembuatannya yang alami, manfaat kesehatan, sejarah dan tradisi yang kaya, elemen personal dan artistik, serta daya simpan yang lama. Penelitian tentang roti penghuni pertama sangat penting untuk memahami preferensi konsumen, mendorong inovasi, dan beradaptasi dengan permintaan pasar.

Kata Kunci: Roti, Kuliner, Kenikmatan, Eksplorasi, Sourdough

ABSTRACT

The objective of this study is to investigate Sourdough bread. Employing a qualitative methodology with descriptive research. The research conducted depth-interview with three senior lecturers from Politeknik Pariwisata Bali, participant observation, and literature study regarding Sourdough bread. The analysis conducted utilizes the data triangulation that uses multiple data sources, data collection techniques, or theories to validate and strengthen research findings. Sourdough bread possesses several distinctive qualities that make it a favorite among many people. These include its complex flavor and aroma, unique texture, natural preparation process, health benefits, rich history and tradition, personal and artistic elements, and long shelf life. Research on sourdough bread is essential for understanding consumer preferences, driving innovation, and adapting to market demands.

Keywords: Bread, Culinary, Delight, Exploration, Sourdough

INTRODUCTION

Sourdough is a type of bread produced through the natural fermentation of dough using lactic acid bacteria and wild yeast. This fermentation process imparts a distinctive sour taste to the bread and helps extend its shelf life without the use of instant yeast or other leavening agents. Sourdough starter only requires a mixture of flour and water to initiate fermentation and can be kept alive by feeding the bacterial organisms daily (Maligan *et al.*, 2018) and (Indra and Rukmayadi, 2019). One of the main characteristics of sourdough is its unique sour taste, which develops during the fermentation process, providing a different and enjoyable flavor profile. The texture of sourdough is also notable, with a chewy and airy structure produced by the activity of yeast and bacteria during the fermentation process. Additionally, its long shelf life makes sourdough more durable than regular bread, adding practical value. The production process involving starter creation allows room for creativity, enabling bread makers to experiment with various flour blends and techniques. With

its distinctive aroma and ability to align with healthy food trends, sourdough not only offers a special dining experience but also demonstrates flexibility in flavor and shape variations, making it one of the most enticing bread options in the culinary world.



Picture 1. Sourdough Bread by Odelia

Sourdough has a long history spanning various cultures worldwide. For thousands of years, humans have relied on natural fermentation to produce bread. This practice can be traced back to ancient Egypt and the Roman Empire. Sourdough became a common bread-making method during the colonial period in the United States, as bread makers relied on a mixture of water and flour contaminated with airborne yeast and natural bacteria. In the late 19th century, sourdough became a staple food for gold miners in Alaska and Canada. Settlers carried their sourdough starters in bottles around their necks as the sole source of yeast for making bread. This became a popular narrative in the history of North America.

Conducting research on sourdough bread is important to make this product well-known and easily accessible because consumer preferences toward sourdough bread, driving product innovation in bread, enhancing product quality, developing effective marketing strategies, expanding distribution networks, adapting to existing market demand on bread. This description drove motivation in exploring sourdough bread as delight culinary.

LITERATURE REVIEW

The Black Swan theory, as explained in the research by Paolo F. Ricci and Hua-Xia Sheng (2017), refers to unforeseen and rare phenomena that have significant impacts. The term "Black Swan" is used as a metaphor to describe unexpected events, akin to the discovery of black swans that contradicted the prior belief that all swans were white. In the context of disasters or other significant events, a Black Swan describes situations were.

The origin of bread can be traced back thousands of years ago, to the Neolithic era when humans first began practicing agriculture and grinding grains. Bread has been a crucial part of the history of human civilization as it was one of the first products derived from agricultural and food processing practices. The history of fermented beverages, including the assumption that bread first appeared when flour dough accidentally fermented, resulting in a different outcome than expected. Govern (2017) explored the relationship between bread and alcoholic beverages in the early development of human agriculture (Iskandar *et al.*, 2021).

Maguelonne Toussaint-Samat (2009) delves into the origins of various types of food, including bread, by examining historical records and archaeology. They explained the evolution of bread-making techniques from prehistoric times to modern times, and its influence on human life ('Foccaccia-B9780123808868100054', no date). Carla V. Zulianello et al. (2015) discussed recent findings in archaeological research and chemical analysis related to the origins of bread. Zulianello and colleagues examine archaeological evidence and chemical compound analysis to trace ancient fermentation techniques and bread-making (Dan *et al.*, 1945).

Wahba's theory about bread and the development of early agriculture in Egypt (2012) explained the role of bread in the early agricultural development in ancient Egypt. He examined archaeological evidence, artifacts, and historical writings to depict how bread became a crucial part of the dietary and social life of ancient Egyptian society (Pasqualone, Delcuratolo and Gomes, 2011). Rubel (2011) traced the history of bread from various cultures around the world. He explored the cultural, economic, and social aspects of bread production, as well as detailing various traditional bread types from different regions (Dan *et al.*, 1945). From this theoretical study, it can be concluded that the origin of bread is highly complex and closely related to the development of agriculture, food processing technology, and human social dynamics across various historical periods. Bread not only serves as a staple food but also reflects humanity's long journey in harnessing natural resources to meet nutritional and cultural needs.

METHODS

Participant observation, in-depth interviews, and literature studies are three different complementary methods in qualitative research on a product such as sourdough bread. Each method has its benefits. Participant observation allows researchers to gain a deep understanding of the practices and contexts related to sourdough bread (Putri, 2019). In-depth interviews provide direct perspectives from various stakeholders, such as chefs, restaurant owners, food critics, or loyal customers (Pratiwi, Kamila and Haifa, 2023). Literature studies enable researchers to understand the historical, cultural, and culinary contexts surrounding bread, especially sourdough breads. By combining these methods, researchers can gain a richer and deeper understanding of the uniqueness and aesthetic value of sourdough bread, as well as the cultural and practical contexts surrounding it. This research approach provides a structured and comprehensive framework for optimizing the potential of Sourdough bread (Moleong, 2005) and (Lj Moleong, 2017).

RESULT AND DISCUSSION

Migration and immigration have brought sourdough traditions to various communities, creating regional variations in techniques and flavors of this bread. The name "sourdough" itself arises from this practice. There is different process on making sourdough bread, in each region and each company.

A. The Process to Make Sourdough Bread

Sourdough bread is relatively easy for the beginner to produce. Creating Sourdough step by step, mix natural yeast for sourdough, flour and water. then let it sit for 24 hours. Sourdough dough preparation by mix the fed starter with flour, water, and salt. Then knead and let it ferment for 4 hours. Shaping the bread and letting it rest for 15 minutes. Proofing process for 2 hours. Then preheating the oven and baking: Preheat the oven to 220°C. Bake the dough for 35-45 minutes until the crust is golden brown.

This support theory of Chairunissa ('Brioche-1.pdf', no date), producing sourdough bread boasts the challenges include the time-consuming process and consistency issues. Research on sourdough bread is essential for understanding good treatment in producing sourdough bread and adapting to market demands.

B. The Uniqueness of Sourdough

The Sourdough bread has several unique qualities that make it beloved by many people. Some of these unique features include: complex flavour and aroma, interesting texture, natural making process, health benefits, rich history and tradition, personal and artistic quality, long shelf life.



Picture 2. Sourdough Bread

<https://www.theclevercarrot.com/2014/01/sourdough-bread-a-beginners-guide/>

1. Complex Flavor and Aroma:

Sourdough bread has a more complex and deeper flavor compared to bread made with commercial yeast. This is due to the natural fermentation process involving various microorganisms, including lactic acid bacteria and wild yeast, which give it a characteristic tangy taste and unique aroma.

2. Interesting Texture:

Sourdough has a distinctive texture, with a crunchy crust and a soft, chewy interior. This unique crumb structure comes from the long, slow fermentation process that produces large air pockets in the dough.

3. Natural Making Process:

Sourdough is made with a natural starter (levain), which is a mixture of water and flour fermented by natural microorganisms from the surrounding environment. This process does not require additional commercial yeast, making it more natural and traditional.

4. Health Benefits:

The natural fermentation process in sourdough can enhance the nutritional value of the bread, such as increasing mineral availability and reducing phytic acid content that inhibits nutrient absorption. Additionally, some people who are sensitive to gluten find that sourdough is easier to digest compared to regular bread.

5. Rich History and Tradition:

Sourdough has a long history involving various cultures around the world. Each sourdough starter can have unique characteristics depending on the location and environment where it is developed, making each sourdough bread distinctive.

6. Personal and Artistic Quality:

Making sourdough requires more skill and attention compared to regular bread. Each baker can adjust techniques and fermentation time to produce bread with specific characteristics, giving a personal and artistic touch to each loaf made.

7. Longer Shelf Life:

Sourdough generally has a longer shelf life compared to bread made with commercial yeast. The acids produced during fermentation act as natural preservatives, helping the bread stay fresh longer.

These unique qualities make sourdough bread a favorite choice for many bread lovers around the world, who appreciate not only its taste but also its traditional and authentic making process. Sourdough production includes distinctive flavour, chewy and hollow texture, long shelf life, and easy to produce. The distinctive flavour because sourdough is known for its unique sour taste, which differ from regular bread and adds value in terms of taste. Chewy and hollow texture, because the natural fermentation process creates a chewy and hollow texture, providing a unique eating experience. Long shelf life due to the natural preservative nature of lactic acid gives sourdough a longer shelf life, enhancing the convenience and longevity of the product. Creative bread making, because the sourdough-making process involving starter creation and variations in flour types allows bread makers to express their creativity.

Sourdough bread production needs such as time, patience, and consistency. The natural fermentation process of sourdough takes longer compared to conventional bread, which can be a drawback in mass production. The consistency uncertainty, due to reliance on wild yeast and natural bacteria, consistency in taste and texture may vary between productions, which may be challenging to maintain on a large scale. This description support Vurro et al. that explained the process of making a bread had impact on the product. (Vurro *et al.*, 2022).

Sourdough bread production includes healthy food trend and product innovation. Consumers are increasingly seeking healthy and natural foods. Sourdough, with its lactic acid content and natural fermentation process, can meet the needs of consumers looking for healthier food options. Product innovation make the opportunities to develop various sourdough varieties by exploring flour blends, toppings, and derivative product development, such as sourdough sandwiches or pastries.

Sourdough bread risks include market competition with conventional bread. Mass-produced conventional bread is often faster and more efficient, posing a threat to the sourdough market share. Perception of High Price from the consumers may perceive sourdough as a luxury or

higher-priced product. This perception will impact consumer preference. This explanation support the theories of Saeed (Saeed and Mohammad, 2021) said market competition with mass-produces conventional bread are the most threat for bread market share.

Discussion

Based on the description, appropriate strategies for the production and marketing of sourdough bread can be determined. And the strategies are conducting research on sourdough bread. Conducting research on bread holds various important interests to consider, especially in efforts to make this product well-known and easily accessible. The reasons why research on bread is important: includes understanding consumer preferences, product innovation due to sourdough bread, quality improvement, effective marketing, distribution network development, market demand fulfilment.

Understanding Consumer Preferences: Research can help understand consumer preferences and needs related to bread. By knowing what the market desires, manufacturers can produce products that align with consumer tastes and requirements, thereby increasing customer satisfaction and the likelihood of creating a more renowned brand. **Product Innovation:** Research opens opportunities to develop new bread products or update existing ones. By understanding current trends in the bread industry, manufacturers can create innovative products that stand out from competitors, thereby enhancing competitiveness and market appeal.

Quality Improvement: Through research, manufacturers can evaluate the quality of their bread products and identify areas for improvement. This can help elevate production standards and ensure that the resulting products meet consumer expectations in terms of taste, texture, and overall quality. **Effective Marketing:** Research enables companies to develop more effective marketing strategies. By understanding consumer preferences and behaviors, companies can target their marketing efforts more accurately, thereby increasing the visibility of bread products and the likelihood of consumers purchasing them.

This description support theory of Marsiti (2022) that **Quality Improvement:** Evaluation of product quality through research ensures adherence to consumer expectations. This is the need of SWOT analysis of sourdough bread, in order to prove the quality improvement and the effective marketing. Effective marketing from the research will informs targeted marketing strategies, boosting product visibility and consumer engagement. In essence, bread research is pivotal for creating widely recognized and accessible products, strengthening market position, and achieving sustainable success (Cok. Istri Raka Marsiti *et al.*, 2022).

Distribution Network Development: Research can help identify opportunities to expand the distribution network for bread products. By understanding where consumers typically purchase bread and their preferences regarding purchase locations, companies can optimize the location and distribution methods to ensure products are easily accessible to consumers. **Market Demand Fulfillment:** Through research, companies can understand existing market demand and respond to it promptly. This may involve adjusting production to meet increasing demand or developing new products that cater to emerging needs in the market.

This description support theory of Dan (2019). Research on bread is crucial for enhancing product visibility and accessibility. The research will make producer understanding consumer preferences. Research aids in aligning products with consumer preferences, enhancing satisfaction

and brand recognition. It is related with product innovation, and make clear identifies trends, about sourdough bread products to stand out in the market (Putri, 2019).

Overall, research on bread is an important step in creating products that are well-known and easily accessible. By understanding consumer preferences, product innovation, quality improvement, effective marketing, distribution network development, and market demand fulfillment, companies can strengthen their position in the market and achieve sustainable success.

Conducting research on sourdough bread is important to make this product well-known and easily accessible because consumer preferences toward sourdough bread, driving product innovation in bread, enhancing product quality, developing effective marketing strategies, expanding distribution networks, adapting to existing market demand on bread.

CONCLUSION

The Sourdough bread has several unique qualities that make it beloved by many people. Some of these unique features include: complex flavour and aroma, interesting texture, natural making process, health benefits, rich history and tradition, personal and artistic quality, long shelf life. Sourdough bread exploration is crucial to increase its popularity and accessibility because it aligns with consumer preferences, drives innovation in bread products, improves product quality, develops effective marketing strategies, expands distribution networks, and adapts to current market demand for bread.

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