



**DE LA SALLE UNIVERSITY-DASMARINAS COLLEGE OF
BUSINESS ADMINISTRATION AND ACCOUNTANCY
BUSINESS MANAGEMENT DEPARTMENT**



A Business Plan

Presented to the Faculty of the

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De La Salle University - Dasmariñas

In Partial Fulfillment

Of the Requirements for the Degree

Bachelor of Science in Business Administration

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CHAPTER III

PRODUCTION PLAN

1. Product Description

The new oral care process from EggCelent Smiles demonstrates its ability to effectively bleach teeth and enhance their strength. EggCelent Smiles contain a composition of powdered eggshell combined with hydrogen peroxide, xylitol, coconut oil, baking soda, peppermint extract, soak clitoria ternatea and sodium lauryl ether sulfate. Eggshell contains high amounts of calcium that people need for developing bones along with healthy teeth. Observation demonstrates that eggshells contain calcium carbonate which boosts tooth enamel strength thus it becomes more protective against acid attacks and erosion. Furthermore, hydrogen peroxide is recognized as one of the most adaptable cleaning agents used today. Marcus Torpey (n.a.) describes hydrogen peroxide as a versatile cleaner because it represents a safe oxidizing agent which acts on organic materials. Through its oxidizing reaction the substance generates free radicals that remove unneeded organic materials. The substance functions as a chemical yet most individuals without proper expertise avoid handling it. The correct supervision and control measures must exist because improper hydrogen peroxide usage creates dangerous side effects.

Each of the ingredients xylitol, coconut oil, baking soda, peppermint extract, soak clitoria ternatea and sodium lauryl ether sulfate provides different benefits for the consumer. Baking soda helps to add some for a whitening effect and reduces acidity and plaque. Coconut Oil attracts bacteria. Xylitol functions as a toothpaste flavoring agent. Peppermint tricks the brain, sending a signal that creates a sensation that you have ice in your mouth. It's a refreshing and clean taste.

According to Yanti, Setiawan, T. and Lay, BW (2021) determined the potential use of clitoria ternatea could be applied for oral care functional foods and oral health care product as an alternative therapeutic strategy for combating dental caries. Last, sodium lauryl ether sulfate helps create foam, aids in removing food particles and plaque, and enhances the effectiveness of active ingredients like fluoride.

EggCelent Smiles enters the market by providing new organic toothpaste which addresses the needs of health-oriented consumers and people dealing with oral sensitivity issues.

2. Production Process

Powdered Eggshell Process:

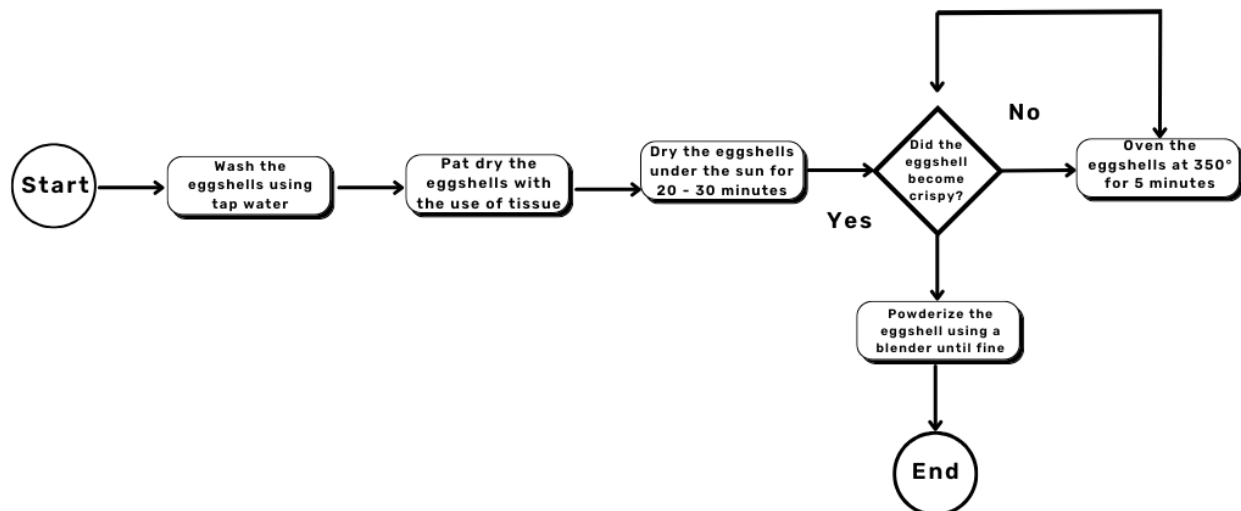


Figure 2

The flowchart demonstrates an effective production process for preparing eggshell powder which should be utilized in toothpaste development.

Eggshell Toothpaste Process:

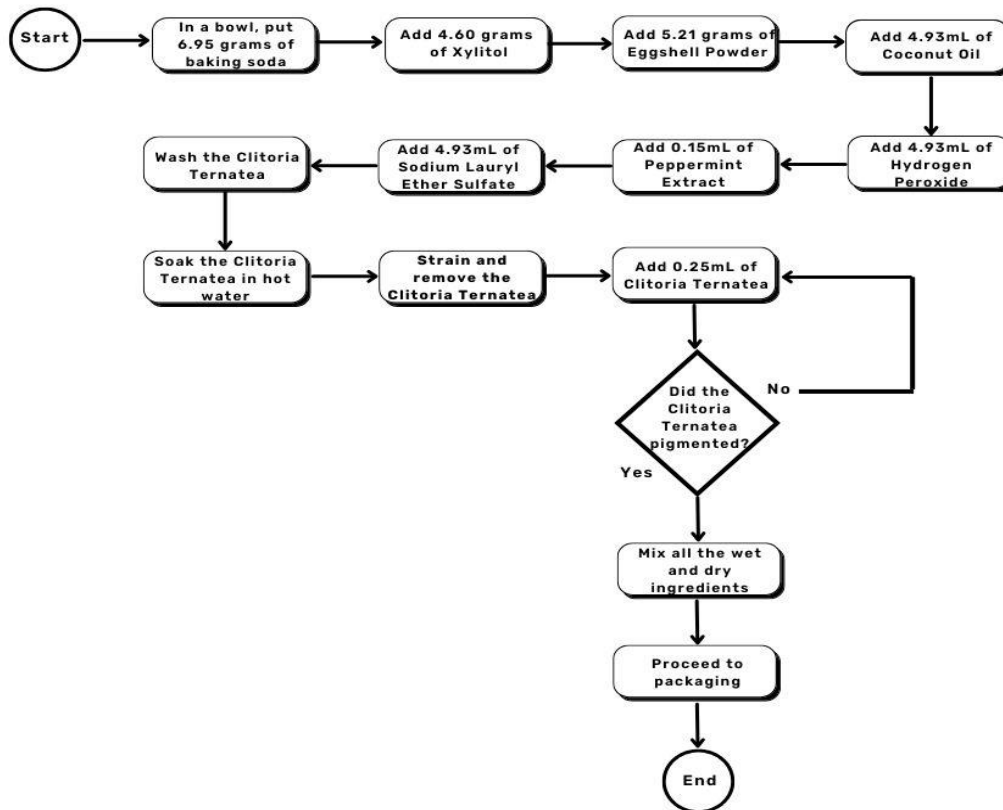


Figure 3

The production process at EggCelent Smiles includes a well-manufactured system that produces high-quality sustainable organic toothpaste products.

3. Plant Location and Layout

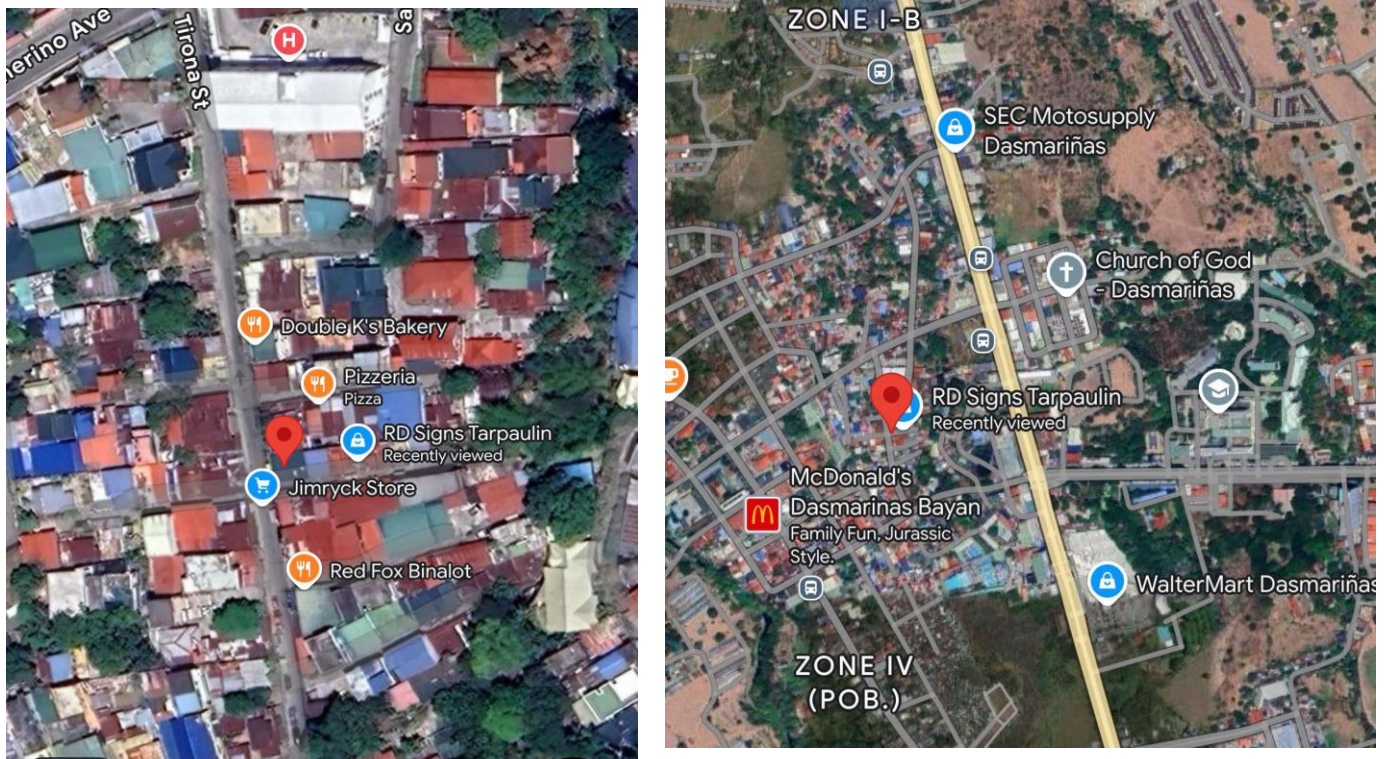
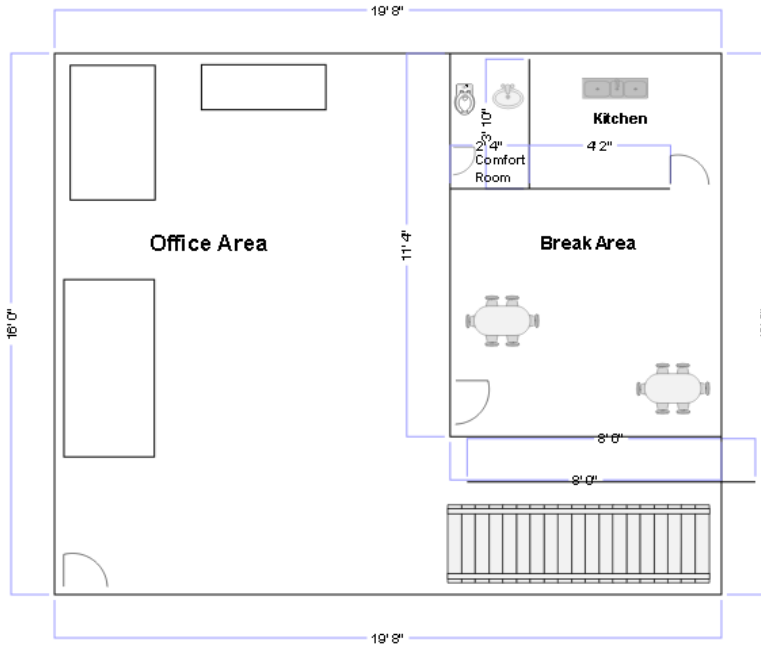


Figure 4

Plant/factory operations of EggCelent Smiles take place at 35# F. Tirona St, Brgy Zone IV, Dasmariñas City, Cavite which adjoins one of the member's family home. The plant/factory operates in the center of Dasmariñas City while also serving suppliers at Waltermart Dasmariñas through an easy reach. The chosen site benefited the business strategy because it allowed access to all operational requirements as well as target clients and supplier materials and protected against nearby competition.

Plan Layout

1st Floor



2nd Floor

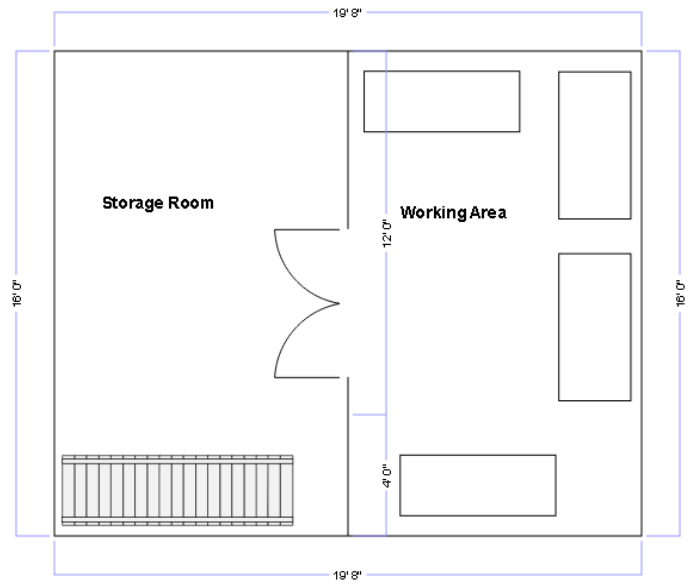



Figure 5

The two-story plant of EggCelent Smiles is designed to provide an efficient and productive workspace for all employees. The layout strategically separates administrative and operational areas. The first floor serves as the administrative and support zone, encompassing a comfort room, kitchen, and break area. The second floor features a spacious working area and a storage room.

4. Raw Material Requirements and Supplies

Raw Materials	Image	Model/ Specification	Supplier	Unit Cost	Quality Needed	Total Cost
Egg Shell		Locally sourced, powderized				
Clitoria Ternatea		Liquid coloring				
Coconut Oil		Pure coconut oil	Waltermart Supermarket - Dasmarinas, Cavite	₱57.50	330mL	₱57.50
Baking Soda		Powderized	Waltermart Supermarket - Dasmarinas, Cavite	₱13.75	125g	₱13.75
Peppermint Extract		Premium quality spice adds	Waltermart Supermarket - Dasmarinas, Cavite	₱47	20mL	₱47
Xylitol		Powderized	Jedders Greendahan - Quezon City	₱159	150g	₱159



Hydrogen Peroxide		Concentration level	TGP - Dasma Bayan Branch	₱32	120ml	₱32
Sodium Lauryl Ether Sulfate			Wise Cleaner Tiktok Shop -	₱45	250g	₱45

Table 8: Raw Material Requirements and Supplies

5. Machinery, Equipment and Tools

Tools:







Tools	Model/ Specification	Name & Address of Suppliers	Unit Cost	Qty	Total Cost
Mixing Containers		YKY Supercenter - Imus, Cavite	₱175	3pcs	₱525
Plastic Spatula		Flody Shop - Bacoar, Cavite	₱36	3pcs	₱108
Plastic Gloves		Flody Shop - Bacoar, Cavite	₱13	1box (50pair)	₱13
Measuring Spoon		Flody Shop - Bacoar, Cavite	₱48	1set	₱48

Table 9: Tools

Equipment:

Equipment	Model/ Specification	Name & Address of Suppliers	Unit Cost	Qty	Total Cost	Estimated Useful Life	Annual Depreciation
Oven	Hanabishi Heo023 23L 	Abenson Waltermart - Dasmariñas, Cavite	₱2,952	1	₱2,952	10	₱295.20
Blender	Hanabishi HJB327 1.5L 	Abenson Waltermart - Dasmariñas, Cavite	₱1,060	1	₱1,060	5	₱212

*Table 10: Equipment***6. Direct Labor Requirements**

Role	Responsibility	No. of Worker Needed	No. of Hours Needed	Estimated Labor Cost per Worker (day)	No. of Working days per Week	No. of Working days per Month	Estimated Labor Cost per Worker (month)
Business Owner or Founder	Sets mission, vision, and goals. Manages the overall operations of the business and is	1	8	Owner	5	20	Owner

	responsible for making strategic decisions.						
Production Staff	Manages daily operations from buying raw materials up to packaging.	2	8	PHP 560.00	5	20	PHP 22,400.00
Sales and Marketing Staff	Develop marketing strategy, promotional campaigns, and pricing strategies. Manages overall finances of the business.	1	8	PHP 560.00	5	20	PHP 11,200.00
TOTAL							PHP 33,600.00

Table 11: Direct Labor Requirements

Table 11 shows the labor force roles that are needed for the operation of the business. Eggcelent Smiles has a total of four dedicated workers and the responsibilities per role. Each

employee will comply with the mandatory contributions, which are PHP 1,160 for SSS, PHP 224 for Pag-IBIG, and PHP 560 for PhilHealth. These amounts are calculated based on the updated SSS contribution table, Pag-IBIG contribution table, and PhilHealth Circular No. 2019-0009.

7. Utilities

Eggcelent Smiles' requires electricity, internet connectivity, and water to support its daily operations. The table below shows the monthly utility expenses, which are calculated based on estimated monthly consumption of the business to ensure regular functioning. The business anticipates a total monthly utility expense of PHP 3,069.00 to sustain its operations effectively, though this amount may vary based on changes in consumption and supplier charges.

Type of Utilities	Supplier	Estimated Consumption	Estimated Monthly Cost
Electricity	Meralco	101 kWh	PHP 1,369.00
Internet	Fiberblaze Dasmaringas	1 month bill	1,500.00
Water	Maynilad	7 cubic meters	200.00
Total			PHP 3,069.00

Table 12: Utilities Expense

6. Waste Disposal System

A proper waste disposal system is essential for maintaining a sustainable and environmentally responsible business operation. EggCelent Smiles dedicates itself to minimize waste production while finding environmentally sustainable ways to handle all substances resulting from production along with finding cost-effective reuse possibilities. A strategic waste management process enables us to lower our environmental impact and manage costs effectively.

Type of Waste	Waste Management Procedure	Estimated Qty	Estimated Cost
Eggshell Residue (Unusable Fragments & Powder Waste)	Collected and repurposed for other eco-friendly projects or donated to local farmers for composting.	1 kg/month	₱0 (Donated)
Plastic Packaging Waste (Damaged or Excess Materials)	Sorted and sent to local recycling centers or repurposed for DIY projects.	2 kg/month	₱100
Used Paper (Labels, Packaging, & Print Materials)	Recycled through a paper waste collection service or reused for internal documentation.	500g/month	₱70
Chemical Waste (Leftover Ingredients from Production)	Stored in sealed containers and properly disposed of following local waste disposal guidelines.	1000mL/month	₱120

Table 13: Waste Disposal System

The company's waste is categorized into four main types: eggshell residue, plastic packaging waste, used paper, and chemical waste. Since eggshell waste can be donated for

composting or repurposed for eco-friendly projects, there is no disposal cost for this waste. Plastic packaging waste, such as excess or damaged materials, will be sent to local recycling centers or repurposed, with an estimated ₱100 monthly allocation for minor recycling costs. Used paper waste, including packaging labels and printed materials, will either be reused or recycled, with an estimated ₱70 cost per month for waste collection or repurposing. Lastly, chemical waste, such as leftover production ingredients, requires proper storage and disposal according to local regulations, with an estimated ₱120 monthly allocation to ensure safe handling.

In conclusion, EggCelent Smiles waste disposal system has an estimated monthly cost of ₱290. These strategies ensure that EggCelent Smiles operates responsibly, reduces unnecessary waste, and promotes sustainability within the community.

7. Quality Control System

To ensure the highest standards of quality in the production of EggCelent Smiles, the following Quality Control System are implemented:

Quality Objectives	Quality Procedure
Raw Material Quality Control	Inspect all incoming raw materials to ensure they meet established safety and quality standards. Conduct supplier assessments and maintain records of compliance certifications.Keep ingredients stored in suitable environmental conditions that maintain their quality and effectiveness throughout storage.
Manufacturing Process Quality	Production must use standard operating procedures (SOPs) and in-process checks of viscosity and pH measurements for maintaining product consistency. Proper mixing methods should be employed to

	achieve uniform distribution of active ingredients throughout the production process.
Packaging and Labeling Quality	Inspect packaging materials for durability and compliance with branding requirements. All product labels must have accurate information including all ingredients present and expiration date availability. Perform visual assessments together with functional tests before completing the final sealing operation.
Financial Accuracy and Accountability	Regular financial audits together with transparent accounting records should remain active in the company. Utilize accounting software to track production costs, expenses, and revenue. The implementation of internal controls must exist to avoid financial discrepancies.
Finished Product Quality Assurance	The final batch inspection checks must verify that all safety standards together with quality requirements are met. Perform microbiological testing if necessary. Random testing of finished products must be conducted to check for any defects that would cause distribution issues.

Table 14: Quality Control System

The Quality Control System for EggCelent Smiles incorporates a framework that upholds high production criteria throughout the manufacturing process. Raw materials undergo quality checks which are then stored according to proper standards to ensure their effectiveness. Production processes at EggCelent Smiles include rigorous procedures alongside testing protocols which help maintain consistency. Quality checks of packaging materials along with label accuracy occur prior to product sealing. Regular audits of financial records serve to preserve transparency in the company. The distribution of finished products begins only after they successfully pass both quality measurements and safety standards through random assessment and conclusion. This

system functions as a quality assurance mechanism to preserve product reliability along with consumer faith.

8. Estimated Production Cost

EXPENSES AND COST	MONTHLY
Raw Materials	49,266.85
Labor Cost	
Employee	33,600
Mandatory Contributions(SSS, Pagibig, PHIC)	5,832
Overhead Cost (<i>excluding kitchen utensils and equipment</i>)	
Electricity	1,369
Internet	1,500
Water	200
Waste Disposal	290
Total Cost	
Production Volume	3,500 units
Cost per unit	27.53
Mark up rate	100%

EggCelent Smiles Selling Price	55.06
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Table 15: Estimated Production Cost