Get Started

NutriNibbles, a leading biscuit manufacturing company based in Bangalore, is launching a new line of ragi biscuits. The introduction of these nutritious biscuits aligns with the increasing consumer demand for health-focused snack options. With solid market research and clear cost estimates, you're tasked with conducting a break-even analysis for the new shop, factoring in sales forecasts, variable costs, and fixed costs

Details

NutriNibbles will produce ragi biscuits in 150-gram packs. Below are the key details:

Pricing

The selling price per pack is ₹80.

Sales Quantity and Growth

The sales of the ragi biscuits in the first 2 months are expected to be 3,300 units per month, followed by a 15% month-on-month growth from the 3rd month onwards.

Raw Material Details

To produce these ice cream packs, the following raw materials are required:

Ragi - 25%

Wheat - 25%

Jaggery - 25%

Baking Soda -1%

Ghee - 20%

Nuts - 4%

The price of raw material per kg in Rs. is provided as below:

Ragi - 100 Wheat - 60 Jaggery - 80 Baking Soda -200 Ghee - 600 Nuts - 1000

Labor and Packing Costs

The labor and packaging cost per unit is ₹20.

Fixed Costs

The factory expenses include a monthly rent of ₹80,000 and Administration costs of ₹20,000.

The marketing budget starts at ₹50,000 for the first two months, with a planned 5% increase each subsequent month.

Objective

Develop a financial model for the first 12 months to perform a break-even analysis for NutriNibble's new product. Use the provided sales forecasts, variable costs, and fixed costs to evaluate how various factors might impact profitability.

Packet Size (in gms)			
Item	Packet (in gms)	Price (in Rs. per unit)	
Ragi Biscuit	150	80	
Material Details for Each Ragi Biscuit			
Item	Price/kg in Rs.	Material	
Ragi	100	25%	
Wheat	60	25%	
Jaggery	80	25%	
Baking Soda	200	1%	
Ghee	600	20%	
Nuts	1000	4%	
Sales Quantity and Growth	1st Month (in units)	Month on Month Growth %	
Ragi Biscuit	3300	15%	from 3rd month onwards
Labour and Packing Cost	1 unit		
Ragi Biscuit	20	Rs. per Week	
Factory Expenses (in Rs.)			
Factory Rent	80000	per month	
Administration Cost	20000	per month	
Marketing Cost (in Rs.)	1st Month	Month on Month Growth %	
Marketing Cost	50000	5%	from 3rd month onwards

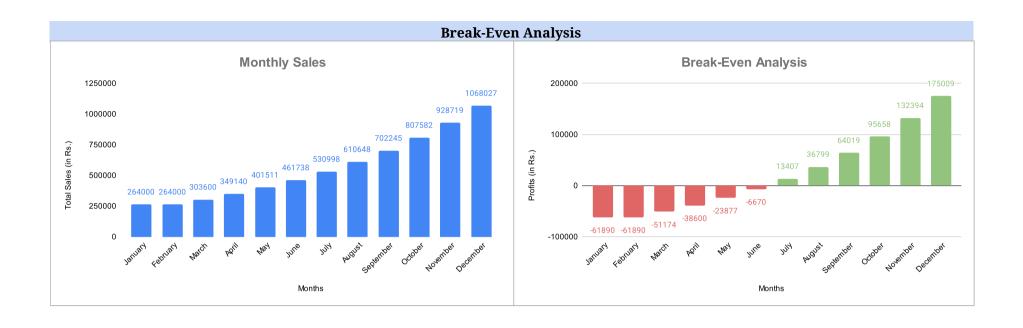
Sales (in unit)	January	February	March	April	May	June	July	August	September	October	November	December
Ragi Biscuit	3300	3300	3795	4364	5019	5772	6637	7633	8778	10095	11609	13350
Unit Sales Price (in Rs.)	January	February	March	April	May	June	July	August	September	October	November	December
Ragi Biscuit	80	80	80	80	80	80	80	80	80	80	80	80

Per Unit Material Consumption (in gms)	January	February	March	April	May	June	July	August	September	October	November	December
Ragi	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5
Wheat	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5
Jaggery	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5	37.5
Baking Soda	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Ghee	30	30	30	30	30	30	30	30	30	30	30	30
Nuts	6	6	6	6	6	6	6	6	6	6	6	6
Sales Qunatity (in Units)												
Ragi Biscuit	3300	3300	3795	4364	5019	5772	6637	7633	8778	10095	11609	13350
Raw Material Consumed (in kg)												
Ragi	123.7500	123.7500	142.3125	163.6594	188.2083	216.4395	248.9055	286.2413	329.1775	378.5541	435.3372	500.6378
Wheat	123.7500	123.7500	142.3125	163.6594	188.2083	216.4395	248.9055	286.2413	329.1775	378.5541	435.3372	500.6378
Jaggery	123.7500	123.7500	142.3125	163.6594	188.2083	216.4395	248.9055	286.2413	329.1775	378.5541	435.3372	500.6378
Baking Soda	4.9500	4.9500	5.6925	6.5464	7.5283	8.6576	9.9562	11.4497	13.1671	15.1422	17.4135	20.0255
Ghee	99.0000	99.0000	113.8500	130.9275	150.5666	173.1516	199.1244	228.9930	263.3420	302.8433	348.2698	400.5102
Nuts	19.8000	19.8000	22.7700	26.1855	30.1133	34.6303	39.8249	45.7986	52.6684	60.5687	69.6540	80.1020

Cost (in Rs.)	January	February	March	April	May	June	July	August	September	October	November	December
Ragi Biscuit												
Ragi	12375	12375	14231	16366	18821	21644	24891	28624	32918	37855	43534	50064
Wheat	7425	7425	8539	9820	11292	12986	14934	17174	19751	22713	26120	30038
Jaggery	9900	9900	11385	13093	15057	17315	19912	22899	26334	30284	34827	40051
Baking Soda	990	990	1139	1309	1506	1732	1991	2290	2633	3028	3483	4005
Ghee	59400	59400	68310	78557	90340	103891	119475	137396	158005	181706	208962	240306
Nuts	19800	19800	22770	26186	30113	34630	39825	45799	52668	60569	69654	80102
Total Cost	109890	109890	126374	145330	167129	192198	221028	254182	292310	336156	386579	444566
Cost of Material (per unit)	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3	33.3

Amount (in Rs.)	January	February	March	April	May	June	July	August	September	October	November	December
Sales												
Ragi Biscuit	264000	264000	303600	349140	401511	461738	530998	610648	702245	807582	928719	1068027
Total Sales	264000	264000	303600	349140	401511	461738	530998	610648	702245	807582	928719	1068027
Variable Cost												
Material Cost	109890	109890	126374	145330	167129	192198	221028	254182	292310	336156	386579	444566
Labour Cost	66000	66000	75900	87285	100378	115434	132750	152662	175561	201896	232180	267007
Total Variable Cost	175890	175890	202274	232615	267507	307633	353778	406844	467871	538052	618759	711573
Contribution (Sales-Variable-Cost)	88110	88110	101327	116525	134004	154105	177221	203804	234374	269531	309960	356454
Contribution Per Unit	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7	26.7

Amount (in Rs.)	January	February	March	April	May	June	July	August	September	October	November	December
Sales												
Ragi Biscuit	264000	264000	303600	349140	401511	461738	530998	610648	702245	807582	928719	1068027
Total Sales (in Rs.)	264000	264000	303600	349140	401511	461738	530998	610648	702245	807582	928719	1068027
Contribution	88110	88110	101327	116525	134004	154105	177221	203804	234374	269531	309960	356454
Fixed Expenses												
Factory Rent	80000	80000	80000	80000	80000	80000	80000	80000	80000	80000	80000	80000
Administration Cost	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000	20000
Marketing Cost	50000	50000	52500	55125	57881	60775	63814	67005	70355	73873	77566	81445
Total Fixed Expenses	150000	150000	152500	155125	157881	160775	163814	167005	170355	173873	177566	181445
Profits (in Rs.)	-61890	-61890	-51174	-38600	-23877	-6670	13407	36799	64019	95658	132394	175009



Report for management

- 1 Sales: Sales are increasing fromm the 3rd month onwards which is resulting in increased total contribution per month from the newly launched product, Ragi Biscuit.
- 2 **Break-even Point**: Company will be able to achieve the break-even point in month of july and then the profits will continue to rise the month of december as per data provided foe forecast.