Development of Veggie Noodles

Rose de Beth A. De Guzman

Pricilla Faye C. Cuadra, Kenneth L. Gonzales

Jenny L. Doroja, Jessica D. Lavandero, James Noe S. Santos

College of Industrial Technology

Email: rdbeth02@yahoo.com

Tel. No. (02)301-3001 loc 207

Background of the Study

Causes	Problems	Effects
Some of the ingredients used are unhealthy including the method of production	Most of the noodles available has insufficient nutritional value	Lacks nutrients and associated with the development of abnormal health conditions

Perceived Solution:
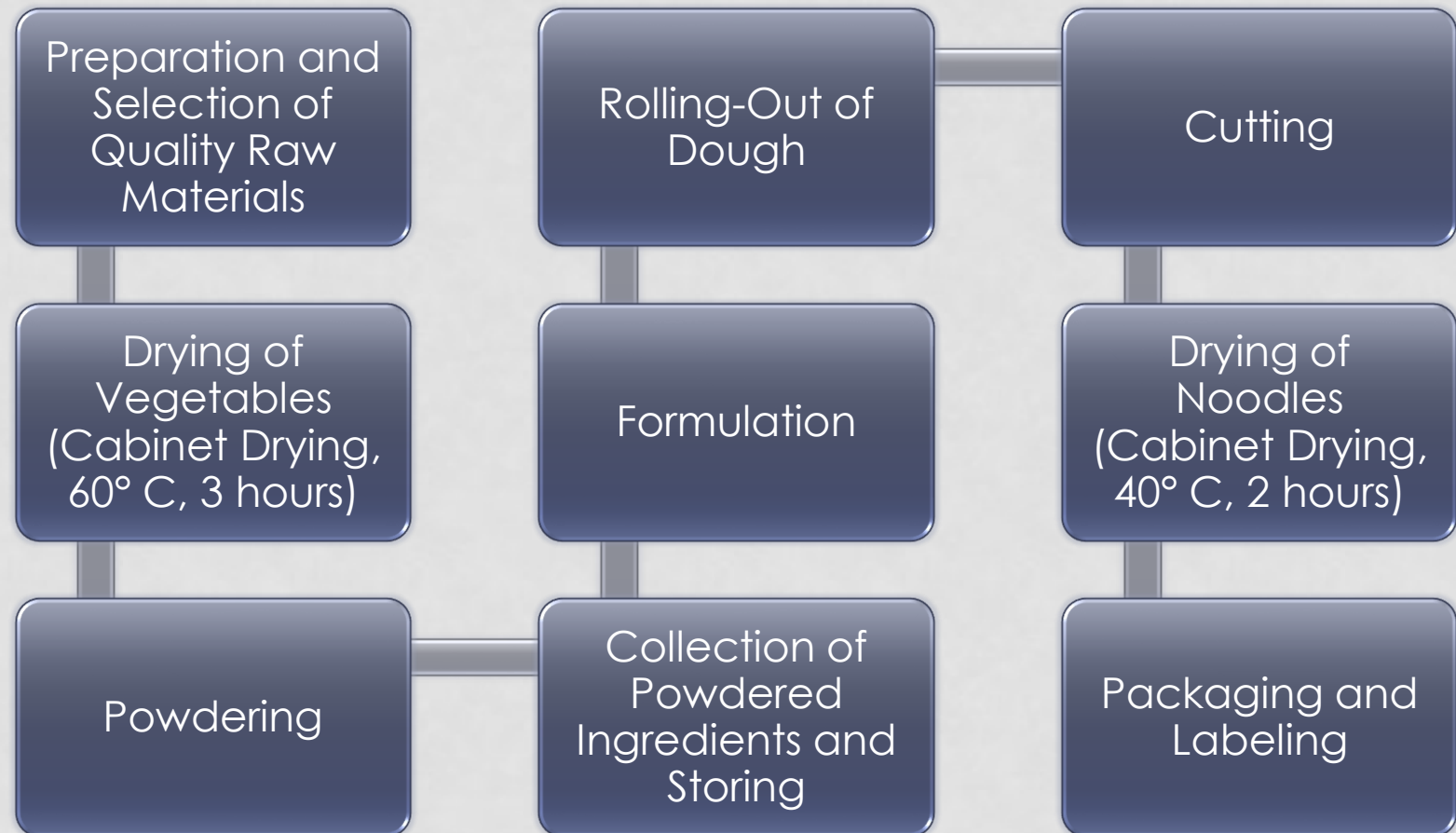## Development of Veggie Noodles

Objectives of the Study

1. Formulate a Veggie Noodles with the following characteristics:
   a. It contains Fiber, Iron, Potassium, and Protein.
   b. Soft, smooth and no artificial preservatives.
   c. Pack in Polyethylene Sheet; and
   d. Pack in 250 grams per pack
2. Apply standard test for nutrient, proximate, metal and microbial analyses.
3. Evaluate the products general acceptability through sensory evaluation

Methodology

Preparation and Selection of Quality Raw Materials	Rolling-Out of Dough	Cutting
Drying of Vegetables (Cabinet Drying, 60° C, 3 hours)	Formulation	Drying of Noodles (Cabinet Drying, 40° C, 2 hours)
Powdering	Collection of Powdered Ingredients and Storing	Packaging and Labeling

VEGGIE NOODLES

Test Results

Proximate and Nutritional Analysis Results of Veggie Noodles

Analysis	Result	Unit	Method
Ash	2.69	%	Gravimetric
Moisture	10.52	%	Air-Oven
Crude Fat	Not Detected	---	Soxhlet
Crude Protein	17.62	%	Extraction
Crude Fiber	1.68	%	Kjeldahl
			Wendee
Iron	0.11	%	Spectrophotometric
Potassium	0.295	%	Flame Photometry

Test Results

Results from Metal and Microbial Analyses of Veggie Noodles

Analyses	Results	Units	Methods
Heavy Metals	**<5**	**mg/kg**	USP-Colorimetric
E.Coli	**<3**	**MPN/g**	BAM Chapter 4
Salmonella	**Negative**		Rapid Test
Staphylococcus aureus	**< 1 x 10**	**CFU/g**	BAM Chapter 12

Evaluation Results

Summary of Overall Mean Values of the Evaluation on Veggie Noodles

Attributes	Mean	Descriptive
Appearance	4.08	Moderately Appealing
Aroma	4.24	Moderately Pronounced Vegetable Aroma
Texture	4.02	Slightly Soft
Flavor	3.86	Moderately Pronounced Vegetable Flavor
General Acceptability	4.38	Like Moderately

Conclusions

1. Veggie noodles attained the desired characteristics.

2. The product consists of indispensable nutrient such as protein, iron and potassium. It is guaranteed safe for human consumption.

3. Veggie Noodles is much healthier than commercial instant noodles as the evaluation results revealed that it was "Acceptable".

Recommendations

1. It is suggested to improve the color to an appealing one.

2. It was recommended to undergo more nutritive test to know more and determine other health benefits of the product.

3. It was suggested that the product undergoes stability test to determine the extent of quality and safe for consumption.

TECHNOLOGICAL UNIVERSITY OF THE PHILIPPINES

113 YEARS OF PROVIDING QUALITY TECHNOLOGY EDUCATION