1. Issue

Approximately 10.3% of the New Zealand population is either vegan or vegetarian due to various factors including religious, health or environmental reasons. Through analysing the limited vegan meals that are currently available, along with researching the nutritional benefits of consuming products that are low in saturated fats, sugar and sodium, we have found a gap in the market for complete protein vegan meals that can be reheated after being frozen.

2. Aim

Our aim is to develop a complete protein vegan meal for one person that can be frozen then reheated in the microwave or oven. It will also have a shelf life of up to 18 months and be a healthier alternative for vegan and vegetarian people looking to enhance their current diet as it contains all 9 essential amino acids.

3. Specifications

- Health star rating above 3.0
- Vegan meal
- Low in sodium, sugar and saturated fat
- Appealing to vegans and vegetarians
- Compatible with current health trends in the market
- Affordable
- Contains all 9 essential amino acids (complex protein meal)
- Uses local ingredients

4. Method

Research and analysis existing vegan and vegetarian meals currently available, using results to identify a gap in the market and create possible product ideas.

Compare vegan and vegetarian nutritional and packaging features

Examine current food products and dietary trends in the market regarding their health statistics and evident reasons as to why they are considered healthy

Develop initial product ideas using research data of current health and food trends

Gather feedback from survey responses from the wider vegan community regarding the initial product ideas to analyse and evaluate the products that are currently on the market

Create HACCP plan to ensure that ethical safety practices will be used thoroughly

Comprehensive research and experimentation to further develop our product by analysing ingredients and their nutritional benefits, the effects of freezing and protein complementing aspects of our meal

Test for Microbial activity and determine if it is a complete protein which incorporates all 9 essential amino acids within the meal

Receive client feedback to finalise which of the three vegan meal options to proceed with

Final branding for SaucyVoodles, promotion, packaging and labels designed and created for our product including photography of the finished meal sealed into packaging

Final sensory evaluation chart to be completed by the target market and client

5. Challenges

- Creating a vegan meal that is healthy and flavoursome
- Using packaging suitable to withstand up to 18 months in the freezer and that will not affect the flavour and texture of the meal
- Designing logo and packaging that is appealing
- Using seasonal vegetables that give us nine essential amino acids
- To achieve over a three-star health rating

6. Final Outcome

We developed a complete protein vegan meal for one person that could be frozen then reheated in the microwave or oven. It has a long shelf life of up to 18 months. It is a healthier alternative meal for vegans and vegetarians looking to enhance their current diet as it contains all nine essential amino acids. After completing a sensory evaluation, it shows that our product is appealing to our target market whilst also being commended highly for its unique spicy flavour.

Nutritional Information

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>per serving</th>
<th>per 100g</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calories (kJ/Kcal)</td>
<td>365.0</td>
<td>80.4</td>
</tr>
<tr>
<td>Protein (g)</td>
<td>13.2</td>
<td>2.9</td>
</tr>
<tr>
<td>Total Fat (g)</td>
<td>45.4</td>
<td>10.0</td>
</tr>
<tr>
<td>Fat (g)</td>
<td>27.4</td>
<td>6.0</td>
</tr>
<tr>
<td>Saturated Fat (g)</td>
<td>16.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Trans Fat (g)</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Cholesterol (mg)</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Carbohydrate (g)</td>
<td>26.6</td>
<td>5.8</td>
</tr>
<tr>
<td>Sodium (mg)</td>
<td>52.0</td>
<td>11.4</td>
</tr>
<tr>
<td>Potassium (mg)</td>
<td>1023.6</td>
<td>225.0</td>
</tr>
<tr>
<td>Sugar (g)</td>
<td>8.4</td>
<td>1.8</td>
</tr>
<tr>
<td>Fibre (g)</td>
<td>5.2</td>
<td>1.1</td>
</tr>
</tbody>
</table>

Serve per container: 1
Serve size: 455g

Manufactured by:
Nature’s Goodies
Irene Road
Havelock North
Phone: 06 873 0700
Made in New Zealand

Holly Lin, Gabriella Gray, Claudia Eames.