

OVERVIEW RnD OTTIMMO INTERNATIONAL

Batasan:

1. Produk baru tidak pernah dibuat sebelumnya di Indonesia dan akan difilter dengan *database* OTTIMMO.
2. Bahan utama dari produk baru berasal dari Indonesia.
3. Jikalau bahan utama bukan berasal dari Indonesia, maka produk baru harus benar-benar baru dan tidak pernah dibuat sebelumnya.

Proposal:

1. Students harus membuat *recipe* untuk diajukan sebelum memulai membuat proposal R & D.
2. Isi dari *recipe*:
 - a. Informasi singkat mengenai bahan utama, contoh: Red Beet.
 - b. Hasil olahan dari bahan utama, contoh: Red Velvet Cake.
 - c. *Cooking technique* yang diaplikasikan, contoh: *folding technique, baking*.
 - d. Alasan kenapa memilih *ingredients* tersebut, contoh: karena warna merah yang cerah dan kuat dimiliki oleh bit merah.
3. Dilakukan uji coba *recipe* beserta dengan gambar dari produk hasil olahan dan hasil olahan aslinya dibawa pada waktu konsultasi.
4. Jikalau *Students* terlambat mengajukan *recipe*, maka kehilangan hak untuk konsultasi dan harus *retake* pada semester berikutnya.
5. Jikalau sebelum deadline uji R & D, *recipe* boleh dimodifikasi atau diperbaiki.
6. Nilai F berlaku bagi *Students* yang tidak mengumpulkan *recipe* dan laporan sama sekali.
7. Nilai F juga berlaku bagi *Students* yang terlambat mengumpulkan laporan akhir maupun laporan hasil revisi sidang.

Konsultasi:

1. Setelah *recipe* disetujui, *Students* diberikan kartu konsultasi oleh Akademik OTTIMMO. Kartu harus dibawa setiap kali *Students* melakukan konsultasi dengan Advisor yang bersangkutan dan ditandatangani setelah konsultasi selesai.
2. *Students* harus menyerahkan kartu tersebut pada saat penyerahan hasil laporan R & D.
3. *Students* pada saat menyerahkan laporan R & D harus menggandakan sebanyak 4 copyan untuk diberikan pada *Examiner*.
4. *Students* diberikan waktu untuk konsultasi dengan dosen yang bersangkutan berdasarkan jadwal yang sudah ditentukan oleh OTTIMMO.

Ujian R & D

1. Ujian akan diadakan sesuai jadwal yang ditentukan Akademik. *Students* akan dibagi menjadi beberapa kelompok dan setiap kelompok akan dijadwalkan untuk sidang R & D.
2. Pada saat sidang di *kitchen*, *Students* diberikan waktu 15 menit untuk mempersiapkan presentasi, 15 menit berikutnya akan digunakan untuk presentasi dan mendemokan proses pembuatan produk olahan dan menyediakan tester untuk 3 *Examiner*.
3. Bagi para *Students* yang produknya membutuhkan waktu lama untuk pembuatannya, tidak diperbolehkan pulang sebelum bisa menunjukkan kepada tim *Examiner* bahwa hasil olahannya sudah jadi sesuai dengan yang ditesterkan.
4. Jikalau *Students* tidak dapat membuat produk seperti yang ditesterkan/dipresentasikan, maka dianggap *failed*.
5. Setelah *Students* mempresentasikan produknya, akan ada sesi tanya jawab dari *Examiner* berdasarkan revisi yang dilakukan. Kemampuan *Students* menjawab akan berpengaruh terhadap penilaian *Examiner*.
6. Pada saat ujian, *Examiner* mencatat setiap revisi atau komentarnya yang harus diserahkan ke *Students* sebagai landasan untuk memperbaiki laporannya. Setelah fix baru diijinkan untuk digandakan dan dijilid, serta diserahkan ke Akademik OTTIMMO.
7. Jika *Students* mengumpulkan laporan yang sudah dijilid (sesudah sidang) melebihi batas waktu yang sudah ditentukan, maka akan ada pengurangan nilai akhir yang signifikan.
8. Kriteria Penjurian:
 - *Taste*/rasa dari produk olahan
 - Tekstur dari produk olahan
 - Presentasi produk (bentuk fisik luar produk dan packaging)

- Kemampuan presentasi (teknik presentasi yang digunakan selama presentasi dan demo)
 - Pemahaman materi (kemampuan *Students* menjawab pertanyaan dari *Examiner*).
9. Tenggat Waktu
- Week 1 intro & guideliness
 - Week 2-3 pengajuan *recipe*
 - Week 4-14 konsultasi dan trial produk (maksimal 10x konsultasi)
 - Week 15 sampai selesai 5 hari berturut-turut uji di kitchen
 - Week 18-20 revisi laporan akhir
 - Week 21 penyerahan laporan setelah revisi

Rincian Isi Laporan R&D

1. Cover (Tittle Page)
2. Approval
3. Acknowledgement
4. Executive Summary
5. Table of Contents
6. List of Table
7. List of Figures
8. Chapter 1 - Introduction
 - a. Background of Ingredients (Latar belakang singkat bahan utama)
 - b. Reason for Selection of Ingredients (Alasan pemilihan bahan utama)
 - c. The Main Material Processing Reason (Alasan pengolahan bahan utama sesuai judul laporan R & D)
 - d. The content of Nutrients and Health Benefit (Kandungan nutrisi dan manfaat kesehatan dari bahan utama)
 - e. Description of New Product Features (Penjelasan singkat tentang karakteristik produk baru)
9. Chapter 2 – Ingredients and Utensils Overview
 - a. Description of The Material to be Used (Penjelasan mengenai bahan yang akan dipakai selama proses, dalam segi kuantitas dan gambarnya)

- b. The Tools Used During The Processing (Penjelasan mengenai alat-alat yang dipakai selama proses pengolahan, dalam segi ukuran, material, dan fungsinya beserta gambar)
- 10. Chapter 3 – New Product Processing Sequence
 - a. The Processing Product by Using Flowchart (Penjelasan mengenai proses pengolahan – dijelaskan dengan menggunakan flowchart dari awal hingga packaging)
 - b. Complete Recipe Attached (Resep lengkap dilampirkan)
- 11. Chapter 4 – New Product Overview
 - a. The Facts of Nutrition (Fakta tentang nutrisi – produk dites di Dinas Kesehatan untuk mendapatkan nilai AKG berdasarkan per sajian/per packaging)
 - b. New Product Characterstic (Karakteristik New Produk yang lebih mendetail – lebih mendetail dari penjelasan yang di chapter 1)
- 12. Chapter 5 – Business Plan
 - a. Identification of Investment Opportunities – SWOT Analysis (Identifikasi kesempatan investasi – Analisa SWOT produk baru)
 - b. Marketing Aspect (Aspek Pemasaran – marketing plan yang digunakan)
 - c. Technical Aspect (Aspek Teknis – lokasi tempat penjualan produk, kapasitas produksi)
 - d. Legal Aspect (Aspek Legal – pengurusan ijin dan hak paten)
 - e. Financial Aspect (Aspek finansial – arus kas dan pricing produk)
- 13. Chapter 6 – Conclusion
 - a. Conclusion (Ringkasan berdasarkan chapter 1-5)
 - b. Suggestion (Saran dan masukan dari penulis untuk produk yang diolah)
- 14. Bibliography
- 15. Appendix
 - a. Desain packaging
 - b. Daftar supplier bahan utama, pendukung dan packaging
 - c. Gambar logo, produk (sebelum dan sesudah di packing)

Writing Guideliness:

- 1. Font
 - TNR 12, kecuali untuk cover dan penulisan chapter baru tidak lebih dari 14
- 2. Margins

- Kiri, atas = 4 cm
 - Kanan, bawah = 3 cm
3. Spacing
- Spasi 1,5
 - Kecuali executive summary, table of content, reference, dan tabel, keterangan pada penulisan dalam menggunakan spasi 1
4. Numbering of Page
- Halaman cover sampai dengan executive summary menggunakan angka romawi yaitu i, ii, iii, iv, dst
 - Mulai dari chapter 1 halaman menggunakan angka arab yaitu 1, 2, 3, dst
 - Halaman diletakkan di bawah dan letaknya di tengah

Kuliah Tatap Muka R & D:

1. Week 1 - Overview RnD by Ms. Irra
2. Week 2 - New Product Development by Chef Zaldy/Chef Arya
3. Week 3 - Food Science & Nutrition by Ms. Heni
4. Week 4 – Food Science & Nutrition by Ms. Nia
5. Week 5 – Legal Aspect by Ms. Irene
6. Week 6 – The Art of Packaging by Ms. April
7. Week 7 – Business Management by Ms. Irra

Title Page:

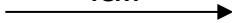
3CM



RESEARCH AND DEVELOPMENT FINAL PROJECT

.....TITTLE.....

4CM



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3CM



By:

NAME

NIM

CULINARY ARTS STUDY PROGRAM

OTTIMMO INTERNATIONAL MASTERGOURMET ACADEMY

SURABAYA

2019

3CM



Approval:

**RESEARCH AND DEVELOPMENT FINAL PROJECT
(TITLE)**

Arranged by:

NAME (NIM)

Surabaya, **DATE PRESENTATION 2019**

Approved by:

Advisor,

Examiner I,

Examiner II,

Name

Name

Name

NIP.

NIP

NIP

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International Mastergourmet Academy,**

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Acknowledgment:

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In the process of completion of this report, the Author has received much guidance and assistance from various parties. To that end, the authors express their sincere thanks to:

1. Mr/Miss as Advisor who has guided, provide guidance and suggestions until the completion of this report.
2. Miss/Mr as the examiner on the presentation.
3. Miss/Mras the examiner on the presentation.
4. Mras Director of OTTIMMO International MasterGourmet Academy Surabaya.
5. Miss..... as Head of the Culinary Arts Study Programme.
6. Other parties who wish to be referred to as parents and colleagues, etc. dst.

Finally, the Authors hope that this report can be useful for us all.

.....,

.....Name.....

**Format lembar pernyataan tidak
plagiasi**

PLAGIARISM STATEMENT

I certify that this assignment/report is my own work, based on my personal study and/or research and that I have acknowledged all material and sources used in its preparation, whether they be books, articles, reports, lecture notes, and any other kind of document, electronic or personal communication. I also certify that this assignment/report has not previously been submitted for assessment in any other unit, except where specific permission has been granted from all unit coordinators involved, or at any other time in this unit, and that I have not copied in part or whole or otherwise plagiarised the work of other students and/or persons.

On this statement, I am ready to bear the risk/any sanctions imposed to me in accordance with applicable regulations, if in the future there is a breach of scientific ethics, or you have a claim against the authenticity of my work.

(date)

(materai) +signature

(name)

Executive Summary

The dough functionality of the storage proteins in “gluten-free” grains has been studied for almost 25 years. Zein, maize prolamin, when isolated as a-zein can form a wheat gluten-like visco-elastic dough when mixed with water above its glass transition temperature. There is good evidence that its doughforming properties are related to a change in protein conformation from a-helix to b-sheet and association of the molecules into fibrils. Stabilisation of b-sheet structure and visco-elasticity can be enhanced by inclusion of a co-protein. No other isolated cereal or pseudocereal storage protein has been shown to form a visco-elastic dough. Many treatments have been applied to improve “gluten-free” storage protein functionality, including acid/base, deamidation, cross-linking by oxidising agents and transglutaminase, proteolysis, disulphide bond reduction and high pressure treatment. Such treatments have some limited positive benefits on batter-type dough functionality, but none is universally effective and the effects seem to be dependent on the composition and structure of the particular storage protein. Research into mutants where prolamin synthesis is altered appears to be promising in terms of improved dough functionality and scientific understanding. Research into how treatments affect the functionality and structure of isolated storage proteins from “gluten-free” grains other than maize is required.

Keywords: Beta-sheet, Co-protein, Gluten-free, Zein

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Executive Summary

Table of Contents

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- a. Background of Ingredients
- b. Reason for selection of ingredients
- c. The main material processing reason
- d. The content of nutrients and health benefit
- e. Description of new product features

Chapter II Ingredients and Utensils Overview

- a. Description of the material to be used
- b. The tools used during the processing

Chapter III New Product Processing Sequence

- a. The Processing Product by Using Flowchart
- b. Complete Recipe Attached

Chapter IV New Product Overview

- a. The Facts of Nutrition
- b. New Product Characteristic

Chapter V Business Plan

- a. Identification of Investment Opportunities
- b. Marketing Aspect
- c. Technical Aspect
- d. Legal Aspect
- e. Financial Aspect

Chapter VI Conclusion

- a. Conclusion
- b. Suggestion

Bibliography

Appendix

Contoh daftar tabel

List of Tables

Table 1
Table 2
Dst

Contoh Daftar Gambar

List of Picture

Figure 1
Figure 2
Dst

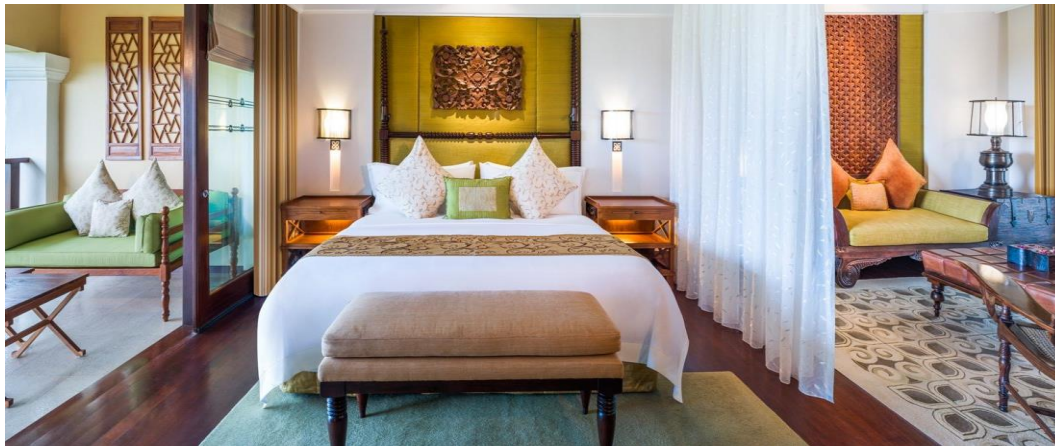
Contoh Penulisan Bibliografi

a. Rajah, Carol Selva. *Authentic Asian ingredient*. Sydney: New Holland Publishers, 2002.



b. Anonymous. 2000. [http://www.snagajob.com/job-descriptions/food- restaurant/](http://www.snagajob.com/job-descriptions/food-restaurant/). accessed on January 1st, 2017.

Contoh Penulisan Gambar



Picture 1. Kamar Hotel St. Regis Bali

Contoh Penulisan Tabel:

No	Keterangan	Jumlah
1	Gula	2 kg
2	Tepung	3 kg

Tabel 1. Kebutuhan Bahan Baku

PANDUAN PENULISAN POSTER

Poster dicetak dengan memperhatikan ketentuan sebagai berikut:

2. Poster dicetak dalam jumlah 1 lembar dengan ukuran 60x80 cm dipasang secara vertikal.
3. Poster harus terbaca dengan baik dalam jarak maksimum 2m dengan jumlah kata maksimum 250 kata.
4. Poster memuat:
 - a. Bagian atas berisi judul dan nama penulis
 - b. Bagian isi berisi latar belakang (pengantar atau abstrak), metode, hasil utama penelitian (teks dan gambar atau fotografi atau skema), kesimpulan dan referensi (tambahan)
 - c. Bagian bawah dapat disisipkan logo sponsor atau lembaga, detail kontak, tanggal dan waktu penelitian
5. Desain layout poster harus memperhatikan prinsip keseimbangan formal dan nonformal, mencakup:
 - a. Segi simetris dan asimetris
 - b. Prinsip kesatuan pengaturan elemen gambar, warna, latar belakang dan gerak
 - c. Mampu mengarahkan mata pembaca mengalir ke seluruh area poster
6. Poster dibuat menggunakan aplikasi pengolah grafik seperti corel draw, adobe photoshop, microsoft powerpoint, dan aplikasi sejenis lainnya (grafik, tabel atau hasil dokumentasi fotografi dapat ditampilkan).
7. Contoh Poster

Contoh Poster



RESEARCH AND DEVELOPMENT FINAL PROJECT

KIEFE

Kefir Gummies

[HEALTHY GUMMIES HIGH INNUTRIENTS MADE FROM KEFIR GRAINS WITH MANY HEALTHY BENEFITS]

BY CELINE LAURENCE



| ABSTRACT |

THERE ARE PLENTY OF HEALTHY PRODUCTS IN THE MARKETS NOWADAYS, FROM ORGANIC FOODS TO HEALTHY DRINKS. AND OVERALL, THE MAIN PURPOSE IS TO HELP US TO GET HEALTHY. THIS RESEARCH IS MAINLY TARGETING TO IMPROVE AN EFFECTIVE ALTERNATIVE HEALTHY CONSUMPTION. SINCE HOW BUSY MOST OF US NOWADAYS, WHERE WE DON'T HAVE TIME TO PREPARE PROPER CONSUMPTION FOR OUR HEALTH. KIEFE CAN HELP PEOPLE WHO HAVE SERIOUS DIGESTIVE PROBELMS SUCH AS IRRITABLE BOWEL SYNDROME AND ULCERATIVE COLITIS.

| BACKGROUND |

WHAT IS WATER KEFIR GRAINS?
WATER KEFIR GRAINS ARE, IN FACT, A BACTERIAL YEAST CULTURES THAT CONVERTS SUGAR INTO FRUCTOSE AND PRODUCE STRAINS OF HEALTHY PROBIOTIC BACTERIA AND AS THIS HAPPENED, IT SENDS GASSES INTO THE WATER WHICH CARBONATES THE WATER IN THE WATER KEFIR SOLUTION. IT CONSIST OF INDIVIDUALS BONEY-WHITE COLOR MADE OUT OF SOFT AND GELATINOUS BIOLOGICAL MASS WHICH THE BIOLOGICAL STRUCTURE OF EACH GRAINS IS CREATED THROUGH SYMBIOSIS DYNAMIC ASSOCIATION BETWEEN A VAST MIXTURE OF GOOD LACTIC ACID BACTERIA [LAB].

| CONCLUSION |

WITH HOW RICH IN NUTRIENTS AND PROBIOTICS WATER KEFIR GRAINS ARE, KIEFE IS A NEW INNOVATIVE AND ALTERNATIVE FOR HEALTHY GUMMIES. KEFIR GRAINS ARE CONSIDERED FUNCTIONAL FOOD BECAUSE THEY OFFER ENZYMES, PRE-DIGESTED NUTRIENTS, AMINO ACIDS, VITAMINS, MINERALS AND SO MANY PROBIOTICS. IN BOTH MILK KEFIR AND WATER KEFIR, PEOPLE USUALLY DRINK THE WATER BUT ACTUALLY THE KEFIR GRAIN ITSELF CAN BE CONSUMED, BUT SINCE THE GRAINS ARE NOT TASTY ENOUGH AND THE TEXTURE IS VERY MUSHY WHICH IS NOT APPETIZING TO EAT, THAT WAS HOW AN IDEA TO MAKE KIEFE CREATED, HIGH IN NUTRIENTS HEALTHY GUMMIES WITH MANY HEALTHY BENEFITS



NUTRITION FACTS		
Serving Size 70g	Amount per Serving	
Serving Per Container About 1	Calories 204,75	
	% Daily Value *	
Total Fat 0g	0%	Protein 1.85 g
Sodium 1.25mg		Vitamin A 0%
Potassium 38.75mg		Vitamin C 6.20%
Carbohydrates 95,68g		Calcium 0.20%
Net Carbs 3,8mg		Iron 0.20%
Sugar 53,8 g		
Fiber 0,45mg	1%	

* The % Daily Value (DV) tells you how much nutrient in a serving of food contributed to a daily diet. 2,000 calories a day is used for general nutrition advice.

Advisor

IRENE RATRI ANDIA SASMITA, S.T.P., M.P.

Examiner I

ARYA PUTRA SUNDJAJA, SE

Examiner II

DR. IR. FADJAR KURNIA HARTATI, MP