

BIO-498 Entrepreneurship in Food & Nutrition Science 2025

Instructions for Final Report

Part A: product & research plan (group report)

This part should be common to the whole team
Materials from progress reports can be re-used

Title

- Should cover the topic of interest and help the reader understand the topic.
- It can be an acronym, or it can provide a perspective on the topic of interest.

Target consumers & business context (200 words)

- Description of target consumers
- Description of opportunity: what is already existing in the target market, pain points

Product solution (100 words):

- Description of the product: main characteristics (nutritional composition/ingredients), bioactive ingredient, product format
- Target communication
- Target price

Introduction (500 words)

- Scientific background: existing knowledge on the topic/ingredient
- Research gap: what remains to be discovered?
- Research objective (1-2 sentences)
- Link to target communication: how generating such data will help to generate data to substantiate the target communication?

Research outline: materials & methods (1000 words)

This section should clearly describe the research & product development plan in more detail

- The product needs to be described in sufficient detail (product category, format, composition). Also, product development steps that are needed for a minimal viable product that can be sure for your research plan and subsequent development needs to be included.
- What is the required use of the product to address a specific need or nutrition / health benefit?
- What does your research plan look like: think about the type of studies (lab or clinical, consumer studies), intervention or experimental details, the type of measurements with related outcomes study power, subjects and inclusion and exclusion criteria, ethical considerations.
- Description of methods/measurements
- The proposed research approach should be suitable to answer the problem or opportunity.
- A statistical section should be included. Provide some insights on the required study power for instance. Also, what type of data needs to be collected and how will the data be analyzed?

Describe specific go / no go's for the project, e.g. which outcomes in the project do you need to enable successful introduction of your product in the market.

If you need help with statistics, read the article 'Ten Simple Rules for Effective Statistical Practice: Ten Simple Rules for Effective Statistical Practice' on <http://journals.plos.org/ploscompbiol/article?id=10.1371/journal.pcbi.1004961>

Technical feasibility & quality safety (200 words)

- What processing / production methods do you envision
- What are the technical challenges that you foresee
- What are the potential safety/quality watch-outs (e.g. shelf life, need for refrigeration, ...)
- What are the main drivers for product costs (raw materials, process) and can this fit the target product positioning and sales price?

IP and regulatory evaluation & strategy (200 words + image of label)

- What is the freedom to operate around your concept (ie not infringing any competitor patents)
- How will you make your product unique and prevent others from copying?
- Will you differentiate/compete with other means than patent protection, get access to existing patents through partnership or file you own patents based on your experimental strategy?
- What is the regulatory category of your product for the intended geography?
- How will you declare the ingredients, allergens, nutritional composition
- What claims/communication will you include on pack?
- Will you include nutritional quality label on pack (nutriscore, health star rating...)? Explain how you will make this decision.

On top of the text, **provide an image of the label** you will use to market your product including all the label elements (see slide 50 of the regulatory session)

Timeline & budget (300 words)

- What are the big steps in order to launch your product? How long will it take ?
- Please provide sufficient detail in your plans to provide clarity on feasibility of the proposed testing strategy, including a realistic evaluation of activities that are doable from a cost and timing perspective in a typical innovation cycle of 2-3 years for a startup.

Part B: Implications & executive summary (individual report)

This part should be written individually

Discussion (750 words)

- The first paragraph states the aim and summarizes the main project approach without comment or interpretation.
- Provide a clear perspective of the proposed product and its use in context of existing scientific knowledge. What will your product change and how will it improve health / nutrition status / manage disease / etc.
- Theoretical and societal relevance are discussed, in what way is the product innovative.
- The discussion should cover strengths and limitations of the project. Consider information bias, selection bias and confounding. What are the shortcomings of your proposed approach? Provide a clear description of the anticipated risks of the project (factors that may lead to failure / success).
- In case of negative outcome of your research, what are the consequences on your product launch? (delayed launch due to negative data, cancellation, need of more data, ...)

Implications (500 words)

- Provide a short description of your role and contribution in the project: which elements were you responsible for / did you work on and how did you organize the teamwork (what worked well or not)
- Provide your personal reflection on the project and the group work. Provide some insights on what you learned by doing this course.
- Consider ending this section with specific recommendations for further studies in this area, both from a scientific and a product/business/public health perspective.

Executive Summary (250 words)

An executive summary should be prepared to complete the report. This should summarize the project in a short and impactful way independent and should be understandable as a standalone without the other sections.

Consider this as your pitch to convince the relevant stakeholders to believe in the success of this project, the product you propose to develop and the relevance for the specific target group / market. In particular ask yourself how and what you would do to convince a potential investor to support you.

INSTRUCTIONS FOR CONTENT & FORMAT:

Research question: The main research question should be clearly specified, and its importance explained. A good research question can be described in a few sentences.

- The first sentence should summarize the main content.
- A clear main objective should be stated (additional minor objectives can be added).
- The problem should be clearly explained in the context of the research field.
- Appropriate scientific literature should be used to introduce the main research question. What does your product / research add to what has been done before?
- Your story should be balanced (i.e., consider all relevant opinions).

Tables and Figures

- Figures and tables highlight key points in the text and should be numbered sequentially.
- Each figure and table should have a clear legend and a title.
- The sources for figures and tables must be acknowledged appropriately in the bibliography.
- The words in the table do not count for the total number of words.

Terminology, abbreviation, and symbols

- Difficult terminology should be defined.
- Abbreviations must follow the first unabbreviated version of the term avoid abbreviations if possible.
- It is encouraged to minimize the use of symbols in the text. *References* Include key references to scientific literature consulted websites or legal documents in the thesis where relevant All cited references should follow standardized format author(s) – title – publishing and/or website details.

Lay out

- Line spacing: 1.5
- Font Calibri, font size: 11
- Margins: head, foot, left, right 2.5 cm; page headers and footers 1 cm from the edge
- Justify text (aligned to right margin)
- Page numbers should be added sequentially from the first page of the thesis
- Header should be added with the title of the project
- Include important references. Use references for statements. A maximum of 15 references should be included. The references should be cited according to the Vancouver system.
- Footnotes present material which elaborates on the main text but which would unnecessarily interrupt its flow. Footnotes are indicated in the text by consecutive superscript in Arabic numerals. The footnote itself is placed at the bottom of the page on which it is cited but should not invade the bottom margin. Footnote entries should be single-spaced.