UBC Food Services: Menu Engineering

UBC SEEDS Project

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Introduction and Background

- Student-led CBEL project in collaboration with SEEDS to establish guidelines for UBC Food Services recipe development
- Initiative aims to improve health and nutrition of students living at UBC residence
- Target audience is UBC students, secondary audience is chefs

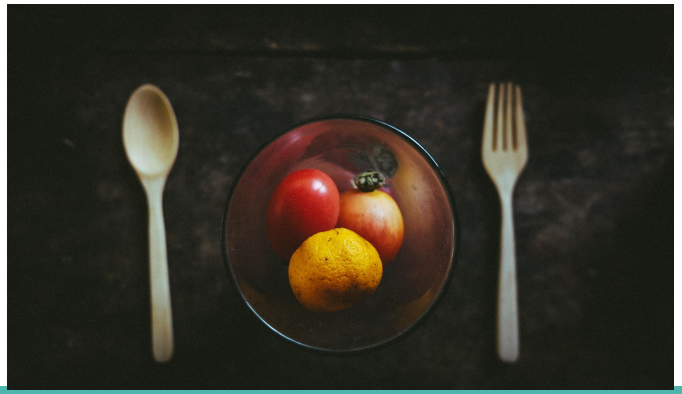


Photo by Kawin Harasai on Unsplash

Program Goals and Objectives

GOALS:

- Translate UBC's Food Vision and Values into an infographic that will help guide the UBC Food Services chefs in planning healthy menus

OBJECTIVES:

- Improve the health and nutrition of UBC students and the broader community

Theoretical Frameworks

HEALTH BELIEF MODEL:

- Self-efficacy
- Perceived benefits

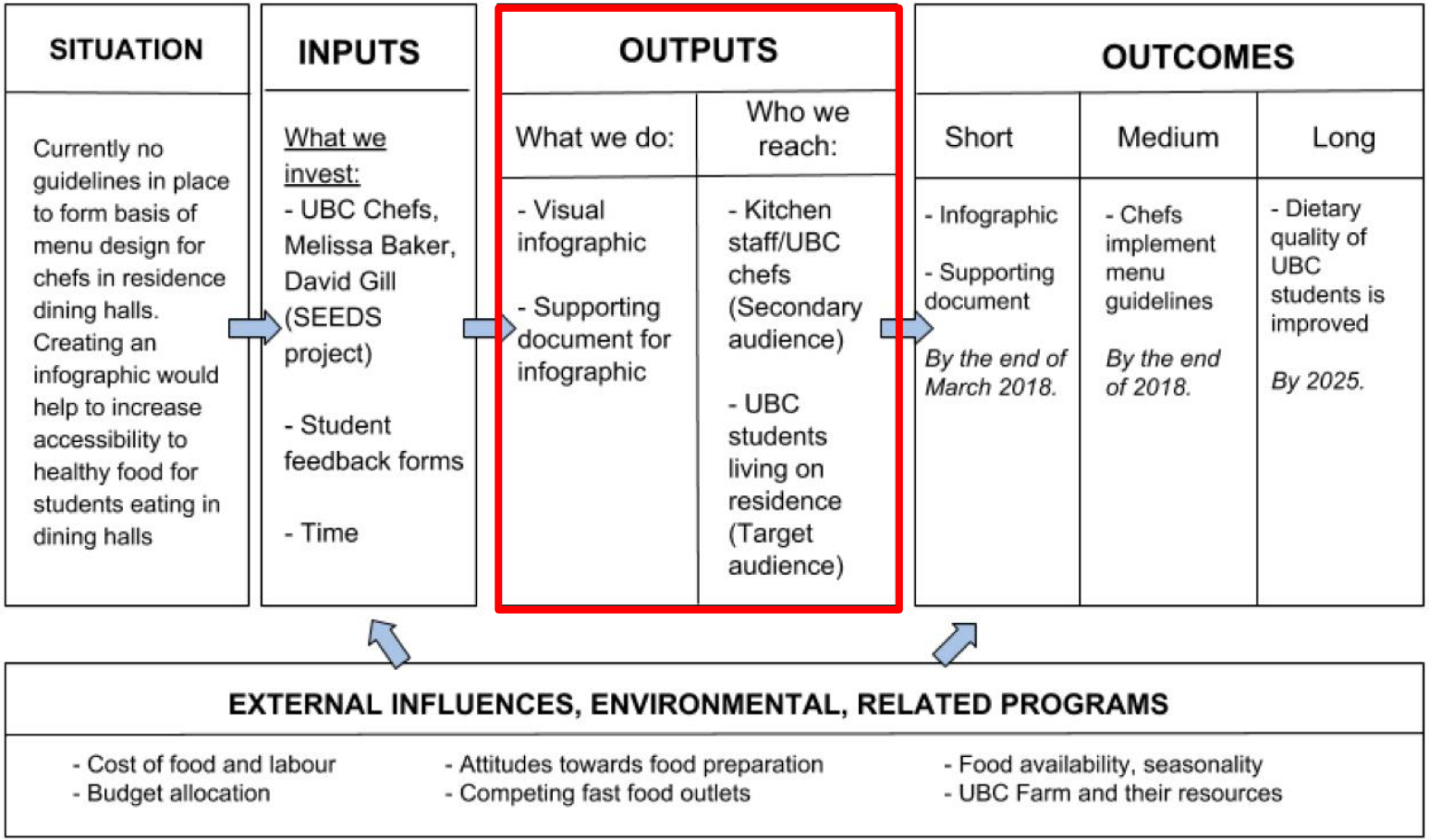
DIFFUSION OF INNOVATION:

- Communication channels
- Social system

STAGES OF CHANGE:

- Population entering at a variety of stages of the model

Logic Model of UBC Food Service Menu Engineering Project



RECIPE DEVELOPMENT GUIDELINES

UBC FOOD SERVICES

This is a student-led collaboration with faculty and staff through the SEEDS Sustainability Program.

FRUITS & VEGETABLES

- Use a colourful array, especially green and orange vegetables
- Aim for 1/2 the dish to be fruits or vegetables (refer to **Healthy Plate Model**)
- Incorporate seasonal produce to maximize flavour and budget

APPLICATION

Try adding more vegetables to:

- Pasta sauces
- Sandwiches
- Stir-fries
- Pizza toppings

SPINACH:

Rich in folic acid and other vitamins.
Great addition to soups, salads, and burgers!

GRAINS

At least **70%**

Variety of whole grain options

APPLICATION

Try using whole grains in:

- Pasta
- Entree dishes
- Pizza dough

MILLET:

A nutrient-dense, gluten-free option!

PLANT & ANIMAL PROTEIN

- Choose more fish and limit use of red meat
- Increase variety of plant-based proteins

APPLICATION

- Reduce use of processed meats (e.g. bacon and sausages)
- Use plant-based proteins often such as: soy products, beans, and lentils in place of red meat
- Offer omega-3 rich foods each day (e.g. salmon, flaxseed)

LENTILS:

High in protein, fibre, B vitamins and minerals. Add them to soups, pasta and more!

PLANT & ANIMAL MILK

- Provide unsweetened milk and yogurt options
- Use less cheese by choosing sharper varieties

APPLICATION

- Offer fortified milk alternatives, such as: soy, almond, cashew, etc.
- Limit use of heavy cream, substitute with lighter options, such as milk and half and half

SOY MILK:

Fortified soy milk is nutritionally equivalent to cow's milk, as it is the only alternative with comparable protein.

DECREASE PROCESSED FOODS WITH ADDED SALT, FAT, SUGAR

- **Salt**: Incorporate herbs and spices for more flavour
- **Fat**: Limit the use of oil when cooking foods with high fat ingredients (e.g. avocado, seeds, nuts, cheese)
- **Sugar**: Use naturally sweetened ingredients
- Use cooking methods that require little or no added fat (e.g. baking and steaming)

Use the Healthy Plate Model portions as a basis when developing nutrient-dense recipes.

Image from: HealthHub

Program

HEALTH BELIEF MODEL:

- **Self-efficacy:** Increase chefs' knowledge & skills
- **Perceived benefits:** Promote benefits of healthy food

STAGES OF CHANGE:

- Students in any stages of change will benefit from availability of healthy food.

Photo from Adaptive Path

Program

DIFFUSION OF INNOVATION:

- **Innovation:** infographic and supporting documents for a healthy menu guideline
- **Communication channel:** UBC Dietitian, chefs, dining hall staffs and students
- **Social system:** Other universities in BC
- **Time:** 2 years for implementation, 6 years for changing students' dietary habits

Photo from SM Mirror

Evaluation

- **Process Evaluation:**
  - Complete creation of visual infographic and supporting documents
  - Meetings with Stakeholders to discuss whether our outputs are delivered to target population

- **Impact Evaluation:**
  - Implementation of menu guidelines
  - Review the top sales food items from dining halls
  - Measurements of students' dietary intake by a validated FFQ

Lessons Learned

- Recognition of context/environment
  - Understanding key stakeholders and the environment they work in
- Budget shapes the whole project and the direction
- Communication is important

Photo from Pixabay

What we would do differently?

- Limited time to complete project
  - More time → more thorough research and outputs
  - Connections with community partners

- More in depth preliminary research/surveys
  - Student feedback → dietary intake/habits

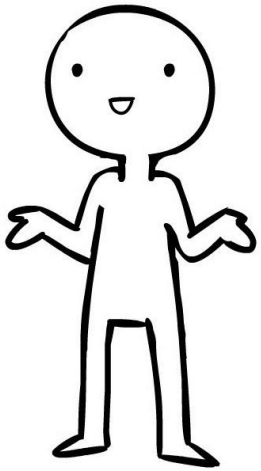
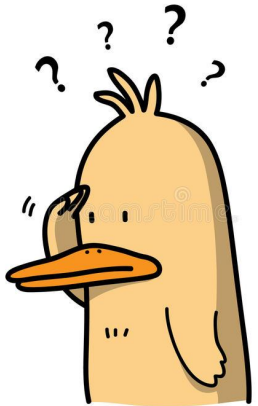


Photo from Domics

Thank you!

Questions?



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