

United Nations Sustainable Development Goals Open Pedagogy Fellowship

Mapping Contrasts in the Health Guidance and Food Industry Landscapes

Kimberley B. Naqvi, PhD, Thompson Rivers University (BC, Canada); Casiana Pascariu, Maricopa Community Colleges (Arizona) 2021-2022

Introduction:

You are a part of a collegewide effort to increase access to education and empower students through "open pedagogy." Open pedagogy is a "free access" educational practice that places you - the student - at the center of your own learning process in a more engaging, collaborative learning environment. The ultimate purpose of this effort is to achieve greater social justice in our community in which the work can be freely shared with the broader community. This is a renewable assignment that is designed to enable you to become an agent of change in your community through the framework of the United Nations Sustainable Development Goals (SDGs). For this work, you will integrate the disciplines of Geography and Anthropology to achieve SDG #3: Good Health and Well-Being with a focus on Target 3.4: Reduce by one third mortality from non-communicable diseases.

Learning Objectives:

Practice basic field research

Measure and illustrate the difference between what foods are promoted by government health policy and what foods are most available in the consumer food landscape,

Purpose/Rationale:

This field work assignment reinforces the awareness of corporate food control identified in assignment one, and the importance of the local landscape identified in assignment two. It raises awareness of how the food industry literally shapes the cultural landscape and human behaviour with strategically positioned food items within stores. By contrasting the proportion of highly processed foods visible on shelves with the food types and proportions recommended by health policy, students can see the difference in social influence between corporate actors and elected governments and health professionals. Because sustainable development goals seek to lower impact on the natural environment, and raise the status and well-being of ordinary people, the role of unregulated profit in promoting the unhealthy food needs to be challenged – first by awareness,

and then by action. This assignment is designed to raise awareness. Assignment 2 has introduced possible venues for action.

Instructions:

In order to be able to complete this assignment, you will have studied the geography of agriculture and learned the concepts of globalisation of agriculture and food, food secirity, food regime, agribusiness, and the basics of popultion geography and development geography, including health indicators, the epidemiological transition, modernisation theory, dependency theory and world systems theory, and sustainable development.

Part 1. Identifying the key definitions and actors

Read three background articles and watch one video which introduce 1) the level of corporate control in the food system in the United States (as one example country), and 2) the corporate dependency on high profit, low nutrition foods. Both are written from critical perspective and reject the ability of a dominant or exclusive focus on the profit motive to meet the social and economic goals of the whole population.

Bittman, M. (27 May 2021) Interview, CBC The Current, available from https://www.cbc.ca/radio/thecurrent/the-current-for-may-27-2021-1.6041443 (full transcript also available at this site)

Evans, J. (2021 May 31). Nestlé says majority of its food portfolio is unhealthy, The Irish Times [origin, The Financial Times], available from https://www.irishtimes.com/business/agribusiness-and-food/nestl%C3%A9-says-majority-of-its-food-portfolio-is-unhealthy-1.4579814

Lakhani, N., Uteunova, A. and Chang, A. (2021 July 14) Revealed: the true extent of America's food monopolies, and who pays the price, available from

https://www.theguardian.com/environment/ng-interactive/2021/jul/14/food-monopoly-meals-profits-data-investigation

Peretti, J. (2012) The Men Who Made Us Fat, episode 2, BBC, available at https://www.dailymotion.com/video/xrrffw

a) The references mention processed and ultra processed foods. What are they? There is a good Harvard Health Publishing article from 9 January 2020,

https://www.health.harvard.edu/blog/what-are-ultra-processed-foods-and-are-they-bad-for-our-health-2020010918605

and the Canada Food Guide website also has explanations

https://food-guide.canada.ca/en/healthy-eating-recommendations/limit-highly-processed-foods/

b) According to the references, what proportion of available supermarket food is ultraprocessed?

Part 2 Field Work to Estimate the Proportion of Ultra Processed Food to Recommended Foods

The Canada Food Guide (https://food-guide.canada.ca/en/) defines and lays out recommended foods and proportions. Click on each category on the plate graphic for more detail on each food and acceptable variations, preparations, and modifications. These may not be exactly your views, but the guide sets a useful baseline for comparing ideals and practice within one political entity.

For this section, students will map (roughly) the food layout in one local grocery store of their choice, and compare the prevalence of available foods to recommended foods. Identify food in four broad categories, with additional details on

whether foods are minimally processed or processed (at a pre-industrial level);

whether protein is meat/fish versus non-meat/fish;

and whether carbohydrates are whole grain versus refined or prepared (bread, pasta).

These latter distinctions reflect the range of processing considered acceptable within a healthy diet, but stop short of ultraprocessing. The food guide recommends lower processing, whole grains, and less meat, but does not give proportions.

i) fruit and vegetables, minimally processed (whole or cut and packaged, uncooked),

Processed (canned or frozen, no or low sodium, sugar)

ii) carbohydrates Minimally processed (whole or rolled grains, seeds)

Processed (flours, whole grain bread with few additional

ingredients, pasta).

Check that bread is truly whole grain and not blended or coloured.

iii) Protein Minimally processed (fresh, unseasoned/breaded meat and fish;

eggs; nuts; lentils and beans)

Processed (low sodium canned; dry roasted and unsalted; frozen; low sodium and low fat cheeses; unsweetened yogurt and milk without other additives like starch or carrageenan)

iv) Ultraprocessed food Added salt, sugar, oils, preservatives, colours, flavours, texturisers; precooked, highly preserved, often highly flavoured; boxed cereals, ice cream, flavoured yogurt, prepared drinks (not pure juice), and prepared, preserved meals are all ultraprocessed foods.

To prepare, create a base map with a layout of aisles and freezers to help with recording data. This may require a preliminary trip. You may want several copies, in case you run out of room, but your recorded notes are part of your submission. Walk up and down the aisles and estimate the proportion of shelf space, including refrigerated shelves and freezers, occupied by types of food.

Compare them to the proportions of the Canada Food Guide (2:1:1 or 50%, 25%, 25%). Rough estimates are adequate for this type of exploratory study.

Notes on behaviour in the store. Usually it is not a problem to make observations in a large grocery store, especially if you combine it with a little normal grocery shopping. This also allows you to check labels naturally if you want to confirm the level of processing. However, if you are too conspicuous about taking photographs and detailed notes, you may draw unwanted attention, so be aware of how you are being perceived.

Prepare three tables (or lists). The first should compare the proportion of recommended foods only; that is, leave out the processed foods, and check how fruit and vegetables, carbohydrates and proteins match the recommended plate. The second should add the ultraprocessed food as one category and adjust the proportions of the recommended food accordingly. If the ultraprocessed foods make up 60% of the groceries, adjust the previous proportions to total 40% (you can use fractions if you hate percentages). Finally, prepare a third table or list which sorts the ultraprocessed foods into carbohydrates, proteins, prepared meals and snacks (savoury and desserts). This illustrates which food categories generate the most profit through value-added (though nutrient-subtracted) ultraprocessed foods.

Format Requirements:

Part I Answer questions a and b 20-75 words.

Part 2

- a) Field notes
- b) Two to three tables or well-labelled lists, based on the field notes, comparing food availability by categories
- c) A simple infographic which contrasts the Canada Food Guide plate with two other plates:
 - i) a plate with four portions:
 - fruit and vegetables,
 - · carbohydrates,
 - proteins,
 - ultraprocessed foods
 - ii) a plate with eight portions:
 - Low/processed fruits and vegetables vs ultraprocessed
 - Low/processed carbohydrates vs ultraprocessed
 - Low/processed proteins vs ultraprocessed
 - Desserts and savoury snacks
 - Prepared and preserved meals

d) Comment briefly on the contradiction between conceptions of development and the post industrial economy which favour value-added and knowledge intensive manufacturing and design, and one which encourages simple foods. Using the reference articles and video, identify jobs associated with ultraprocessed foods, and where they fit into the hierarchy of economic sectors identified in economic geography. How does this affect incentives to move society away from ultraprocessed foods?

Mapping Contrasts in the Health Guidance and Food Industry Landscapes is licensed by Kimberley B. Naqvi, PhD, Thompson Rivers University (BC, Canada) and Casiana Pascariu, Maricopa Community Colleges (Arizona) under the Creative Commons Attribution 4.0 International (CC BY-NC-SA)