



## MPH-534 Assignment Guidelines

### ***a. Essay: Report on the associations between a nutrient/food (group)/dietary pattern and a diet-related non-communicable disease in epidemiological studies (20% of mark)***

#### **1. General Information**

Epidemiological research on diet-related non-communicable disease identifies determinants of diet, either specific nutrients or foods/food groups or whole dietary patterns, that are associated with an increased or reduced incidence of disease. A number of large, well-designed prospective epidemiological studies have been set up and are currently ongoing which lead to hypothesis-setting for intervention studies.

In this assignment, you are requested to write an essay of **3,000** words (+/- 10%), on an association which has been shown through important epidemiological studies currently taking place. In order to do this, you are provided with a list of **5 indicative epidemiological studies**, **5 nutrients/foods/dietary patterns** and **5 diet-related non-communicable diseases** below:

**Epidemiological studies** (you can use these 5 studies or other prospective cohort studies that you consider appropriate)

1. The Whitehall II study
2. The 1946 National Birth Cohort
3. The Lothian Birth Cohort 1936
4. The Health Professionals' Health Studies
5. The Nurses' Health Studies

**Nutrients/foods/dietary patterns:**

1. Vitamin D
2. Antioxidants and/or B Vitamins
3. Dairy products
4. Sugar
5. Mediterranean diet

**Diet-related non-communicable diseases:**

1. Cardiovascular disease
2. Cancer (choose a specific site or sites)
3. Osteoporosis
4. Dementia/cognitive decline
5. Type 2 diabetes mellitus

Each student is **free to choose a nutrient, food or dietary pattern and a diet-related non-communicable disease**, and **should use 5 epidemiological studies (either the ones provided or other similar prospective cohort studies)** to describe the associations seen, critically review the studies and comment on the public health nutrition guidelines of one Organisation that are relevant to the findings of the studies.

### Structure and Content of Essay

Your essay needs to have the following structure:

#### 1. Introduction

*Outline the exposure and the outcome assessed and give an overview of the possible mechanisms by which the exposure i.e. the nutrient/food affects the outcome i.e. the disease. Provide briefly the aims and objectives of the epidemiological studies that examined these associations.*

#### 2. Target population and sample

*Outline the target population and the sample recruited. Explain if necessary any issues with the sample such as attrition.*

#### 3. Study design and follow-up

*Describe briefly the design of the dietary assessment method and the duration and frequency of dietary assessment and outcome assessment.*

#### 4. Other exposures and outcomes

*List the exposures other than diet and the outcomes of the studies other than the main ones, if any, as well as other important covariates assessed in brief. Explain whether if other covariates (residual confounding) could have been considered and how this could have been done.*

#### 5. Main strengths and weaknesses

*List the main strengths and weaknesses of the studies in relation to the dietary assessment and the diet-related non-communicable disease outcome. Explain how, if necessary, these could have been improved.*

#### 6. Public health nutrition guidelines

*Use a European, US or World Organisation of your choice and list the Nutrition guidelines that are related to this nutrient and health outcome. Comment on the guidelines based on the research you have studied.*

### **b. Brochure: Design and presentation of a Brochure directed to the public, on the topic discussed in the essay, focusing on introduction to the topic and public health nutrition and lifestyle guidelines (10% of mark).**

#### General information:

A brochure is an informative paper document that can be folded into a pamphlet, or leaflet.

**Content:** You are required to produce and present a tri-fold brochure (i.e. with a total of 6 sides) which will contain what you consider the most important information for the general public on the area that you discussed in the first part of this coursework i.e. the Essay. For example, if your topic was on salt and hypertension, you can provide relevant easy-to-understand by the lay person information on what hypertension is, how it is diagnosed, healthy blood pressure ranges, the associations between salt intake and hypertension, food sources of salt, ways to reduce salt intake and other guidelines on nutrition e.g. the DASH diet and lifestyle e.g. exercise, body weight etc.

Ensure that in addition to provision of information on the specific food or food group e.g. in this case, salt, you also provide more general dietary and lifestyle advice so that your brochure is more well-rounded.

**Design:** In order to design your brochure, consider the audience. You are designing a brochure for the lay person to be displayed for example in waiting areas of doctors' offices. Ensure that the language is simple and easy to understand, the font size is readable, the amount of information is not too much but neither too restricted and that the brochure is colorful and attractive. It is advisable to use an online tool e.g. in Microsoft office or other freely available websites to create the brochure.

**References:** A brochure should contain relevant references in the last side, bottom section written in an abbreviated manner e.g. Maganja D et al (2022) Am Heart J. 28:15-28. Both the content and any pictures should be referenced.

**Presentation:** You are required to present your brochure to the class during a webinar session. The class will be a 'lay person' that you need to give this brochure to thus the presentation of the brochure needs to be to the level that will be understandable by that person. You are not required to produce any slides, you will only show the brochure and present to the lay person. At the end of the presentation, student-to-student feedback will be provided aiming to improve each other's brochure through constructive criticism.

## 2. Submission, assessment and feedback

- The Essay (Word document) and the Brochure (Word Document) will have to be submitted via Moodle.
- Deadline for submission:
- A Marksheet with specific marking criteria will be used to assess each student separately (Annex 1 at the end of this document).
- The total grade of the essay is 60 marks and that of the Brochure design and presentation is 40 marks, however a % grade will be provided. Written feedback will be provided.
- The Essay contributes 20% towards the overall grade of the MPH-534 (Public Health Nutrition) course.
- The Brochure design and presentation contributes 10% towards the overall grade of the MPH-534 (Public Health Nutrition) course

**ANNEX 1: Assessment - Essay****MPH Programme (Fall 2022)****Semester 3****ESSAY MARKSHEET**

<b>Course:</b>	MPH-534 Public Health Nutrition	
<b>Course Lead:</b>	Dr Elena Philippou	
<b>Student Name and Student ID:</b>		

	Good (7-10)	Average (5-6)	Poor (4-0)
<b>Essay</b>	<i>thorough description/analysis with evidence of critical thinking where applicable</i>	<i>some description/analysis with limited evidence of critical thinking</i>	<i>poor description/analysis with no evidence of critical thinking</i>
<b>1. Introduction</b>			
<b>2. Target population and sample</b>			
<b>3. Study design and follow-up</b>			
<b>4. Other exposures and outcomes</b>			
<b>5. Main strengths and weaknesses</b>			
<b>6. Public Health Nutrition guidelines</b>			
			<b>Total marks (out of 60)</b>
			<b>Total marks (out of 100)</b>

Feedback
<p><u>Overall evaluation:</u></p>
<p><u>Specific Weaknesses (areas for improvement):</u></p>

**ANNEX 1: Assessment - Brochure****MPH Programme (Fall 2022)****Semester 3****Brochure MARKSHEET**

<b>Brochure</b>	<b>Good (7-10)</b>	<b>Average (5-6)</b>	<b>Poor (4-0)</b>
	<i>Appropriate/ applicable for public audience</i>	<i>Some applicability for public audience</i>	<i>Poor applicability for public audience</i>
<b>1. Content</b>			
<b>2. Design</b>			
<b>3. References</b>			
<b>4. Presentation</b>			
			<b>Total marks (out of 40)</b>
			<b>Total marks (out of 100)</b>

**Feedback**Overall evaluation:Specific Weaknesses (areas for improvement):