

**(RE)INTRODUCING RESEARCH METHODS THROUGH EXAMINING
POPULAR DIETARY MESSAGES**

1. GENERAL

SCHOOL	SCHOOL OF SOCIAL SCIENCES		
ACADEMIC UNIT	DEPARTMENT OF PSYCHOLOGY		
LEVEL OF STUDIES	Undergraduate		
COURSE CODE	Ψ4613	SEMESTER	Spring/Fall
COURSE TITLE	(Re)introducing research methods through examining popular dietary messages.		
COURSE INSTRUCTOR	Cleo Protogerou Assistant Professor of Health Behaviours		
INDEPENDENT TEACHING ACTIVITIES	WEEKLY TEACHING HOURS	CREDITS	
Lectures; active/experiential learning in the form of in-class small and large group discussions and individual activities; research project.	3	6	
COURSE TYPE:	Skills development (workshop)		
PREREQUISITE COURSES:	None, although good command of the English language will be helpful.		
LANGUAGE OF INSTRUCTION and EXAMINATIONS:	English		
IS THE COURSE OFFERED TO ERASMUS STUDENTS	YES		
COURSE WEBSITE (URL)			

2. LEARNING METHODS AND OUTCOMES

Learning instructional strategies.

This workshop combines traditional and active/experiential learning instructional strategies to examine popular dietary messages, as a “vehicle” to understand principles of research methods.

Traditional learning involves typical face-to-face learning, occurring in a physical location (e.g., university classroom); the provision of lectures, whereby content is introduced and elaborated upon by the teacher; the provision of Question and Answer (Q & A) and discussion opportunities in class; the provision of homework/reading material; and student assessment and grading by teacher.

Active/experiential learning includes a wide range of activities that share the common element of involving students in **doing things and reflecting on the things they are doing**. Specifically, active learning activities engage students in thinking critically and creatively; discussing with a partner, in a small group, or the entire class; writing activities; exploring personal attitudes and values; and reflecting upon the learning process. These learning activities happen in-class and out-of-class, with students working individually and in groups. Active/experiential learning methods imply that the teacher will invest a great deal of time helping students develop in-depth and critical understanding of the material, as well as providing opportunities for students to reflect upon their learning, applying their learning in class, their personal lives, and other courses.

Learning outcomes.

Students will advance their:

- **Knowledge base**, through understanding of research methods used in the intersection of psychology, nutrition, and allied health sciences, and findings of said sciences.
- **Research skills**, through: (a) (re)introduction to principles of research methods; (b) reading scientific and popular articles and focusing on similarities and differences between the two; (c) learning to distinguish between sources of high and low quality of evidence; and (d) conducting a research project (Evidence Synthesis, in the form of a Stand-alone Literature Review).
- **Reasoning skills**, through learning to approach prevalent dietary messages critically. This will involve appraisals of the history and evidence behind the message. Students will also form their own dietary messages, based on their own literature review.
- **Communication skills**, through exchanging ideas, explaining, and persuading in written and verbal form.
- **Cultural and global awareness**, through exploring dietary topics emanating from different countries and varied points of view.
- **Citizenship awareness/contribution to the common good**, through discerning whether popular dietary messages communicated by (so-called) experts, media sources, and laypeople hold up to empirical scrutiny. This critical approach to information has important implications for the common good, as it raises students’ awareness of their rights, privileges, and duties on becoming good, responsible, citizens.

General Competences

This workshop will enable students to:

- **Generate** questions, identify problems, and formulate answers by applying appropriate theoretical, evidentiary, analytical, and ethical frameworks from multiple intellectual perspectives.
- **Understand** the nature of knowledge and discovery, and the ambiguity and uncertainty entailed in knowledge and discovery.
- **Understand** themselves as learners, identifying their values, strengths, and talents, as well as areas of improvement.
- **Identify and evaluate** sources of information.
- **Use written and verbal modes** of communication to explore and convey ideas, adjusting their communications on occasion, purpose, and audience.
- **Work** independently and collaboratively.
- **Translate/transfer** knowledge learnt in workshop to personal life and other courses.

3. SYLLABUS

OVERVIEW:

“Dietary fat is bad for you.” “Red meat is bad for you.” “Bulk on fiber.” “Breakfast is the most important meal of the day.” “Eat many, small, meals throughout the day.” “Eat Less and Move More (aka, calories in-calories out).” “Organically-grown foods are better for you”...

In most countries, these types of messages are advocated by experts, media sources, and laypeople, who assume that the messages are factually correct and will result in health benefits. These messages started to appear in the 1970s, as a response to US and UK guidelines promoting a low-fat, high-starch type of eating. Adherence to these messages and resulting dietary behaviours has been relatively high, but the expected health benefits did not ensue. For example, between 1971 and 2011 in the US alone, fat consumption dropped from 45% to 34% and carb/starch consumption increased from 39% to 51% of total caloric intake, with a coincidental increase in cardiovascular disease, diabetes, and obesity. Meanwhile, the public has been bombarded with dietary messages that are contradictory and confusing: One day eggs are deadly, the next day eggs are healthy!! Are these popular dietary messages facts or slogans??

This workshop puts popular dietary messages under the microscope to see how well they hold up to science. To that aim, we will get reacquainted with principles of scientific inquiry; explore the history and research behind popular dietary messages; read/discuss popular and scientific articles; watch/discuss videos; critique and synthesize evidence relating to popular dietary messages, which is at the interface of psychology, nutrition, and allied health sciences.

SCHEDULE/CONTENT:

- Week 1.** Introducing each other; introducing the workshop, teaching/learning methods; assessment/grading strategies.
- Week 2.** Introduction to research methods; hierarchy of evidence; topics, aims, and research questions; workshop research topics.
- Week 3.** Scholarly versus popular articles; how to read a scholarly article; dietary message #1: “Organically-grown foods are better for you”.
- Week 4.** Dietary message #2: “Fat is bad for you”; [submission of research topic, aim and question worksheet](#); [submission of scholarly versus popular article comparison worksheet](#).
- Week 5.** Dietary message #3: “Eggs (especially the yolks) are bad for you”.
- Week 6.** Dietary message #4: “Meat (especially red meat) is bad for you”; [assignment 1 submission](#).
- Week 7.** Dietary message #5: “Our body (and especially our brain) needs sugar/glucose/carbs”.
- Week 8.** Dietary message #6: “Bulk on fibre for digestive health”; [assignment 2 submission](#).
- Week 9.** Dietary message #7: “You need to go on a detox diet/cleanse.”
- Week 10.** Dietary message #8: “You shouldn’t skip breakfast”.
- Week 11.** Dietary message #9: “Eat everything in moderation”; [assignment 3 submission](#).
- Week 12.** Dietary message #10: “You should eat less and move more (aka, calories in-calories out)”.
- Week 13.** Workshop closure; reflective group activities.
- Final exams period:** [Submission of research project](#).

4. METHODS OF TEACHING, LEARNING, AND ASSESSMENT

DELIVERY	Face-to-face. In each meeting, students will be working in small groups, addressing concepts, methods, and issues relating to the weekly topics and articles.		
USE OF INFORMATION AND COMMUNICATIONS TECHNOLOGY	Use of ICT in teaching. Use of e-class for the support of teaching and the achievement of learning outcomes, and for communicating with students.		
TEACHING METHODS	Teaching methods	Workload	ECTS Credits
	Lectures/meetings/in-class group and individual work.	13 meetings x 3h = 39	1,56
	Studying the material, preparing for class/worksheets	60	2,4
	Writeup of small-scale assignments and research project.	35	1,4

	Out-of-class activities	15	0,6
	Total	149 hours	5,96
<p style="text-align: center;">STUDENT PERFORMANCE ASSESSMENTS</p>	<p>(1) Two worksheets (5% each = 10% of total grade).</p> <p>(2) In-class graded participation (5% each = 10% of total grade).</p> <p>(3) Three small-scale assignments (10% each = 30% of total grade).</p> <p>Each assignment will address a component of your research project, which will be an Evidence Synthesis, in the form of a Stand-alone Literature Review. In assignment 1 you will provide an overview of the origin a dietary message of your choice, the evidence surrounding the message, and the way you identified and approached the evidence (<i>introduction and method</i>). In assignment 2 you will present your analysis of the evidence and where you lean on the evidence (<i>findings</i>). In assignment 3 you will present your <i>conclusions and public health recommendations</i>, which could be a reformulated dietary message. Each assignment should be between 400 and 500 words. Assignments deviating from upper or lower limits by 50 words will receive a penalty of minus 0.5 grade.</p> <p>(4) Research Project (50% of total grade). Stand-alone Literature Review regarding a dietary message, building upon the three small-scale assignments. The project will have five components: (1) <i>Abstract</i> (200 words max); (2) <i>Introduction and Method</i>, covering an overview of the dietary message of your choice, focusing on the evidence surrounding the message (400-500 words); (3) <i>Findings</i>, providing a summary of the new evidence you have collected and an indication of where you lean on the evidence and an assessment of the quality of the evidence (400-500 words); (4) <i>Conclusions and Public Health Recommendations</i>, i.e., a statement of your conclusions about the dietary message based on your findings, and your own recommendations to the public on the dietary message, which could be reformulation of the message in your own words (400-500 words); and (5) <i>References</i>.</p> <p>Research project should be written in Word, double-spaced, Time New Roman or Arial fonts, and have a 1200–1500-word count excluding References. A project deviating from upper or lower limits by 50 words will receive a penalty of minus 0.5 grade. The project will be submitted during the June/ September exams period.</p> <p>Assignment rubrics and additional instructions will be uploaded in the e-class.</p>		

5. WORKSHOP CONTENT/MATERIAL

The below is the weekly reading and viewing material that you are expected to study **before each meeting**. In-class group activities will be based on the weekly material. Through your in-class participation you are expected to demonstrate in-depth, critical, understanding of the material, and ability to translate/transfer knowledge to areas of your life and other courses. **All material is important** for your learning and there is **no optional/unimportant material**. Videos, blog posts and media articles introduce, clarify, and enhance understanding of scholarly article content.

Week 1. Getting to know each other and the workshop.

Video: [How to introduce yourself | Kevin Bahler | TEDxLehighRiver - YouTube](#)

Week 2. Introduction to research methods; hierarchy of evidence; topics, aims, and research questions; workshop research topics.

Worksheets (to be provided).

Blogs/Videos: [Research is a process - YouTube](#); [Developing a Research Question - YouTube](#); [How to use Google Scholar to find journal articles | Essay Tips - YouTube](#)

Week 3. Scholarly versus popular articles; how to read a scholarly article; dietary message #1: “Organically-grown foods are better for you.”

Articles: Hudson-Barr, D., & Hudson-Barr, D. (2004). How to read a research article. *Journal for Specialists in Pediatric Nursing*, 9(2), 70-72. <https://doi.org/10.1111/j.1088-145X.2004.00070.x>

Olson, E. L. (2017). The rationalization and persistence of organic food beliefs in the face of contrary evidence. *Journal of Cleaner Production*, 140, 1007-1013.

<https://doi.org/10.1016/j.jclepro.2016.06.005>

Blogs/videos: [Anatomy of a Scholarly Article](#); [The Anatomy of a Scientific Article - YouTube](#); [4 Science-Backed Health Benefits of Eating Organic | Time](#)

Week 4. Dietary message #2: “Fat is bad for you.”

Article: Tanskanen, A., Hibbeln, J. R., Tuomilehto, J., Uutela, A., Haukkala, A., Viinamäki, H., ... & Vartiainen, E. (2001). Fish consumption and depressive symptoms in the general population in Finland. *Psychiatric Services*, 52(4), 529-531. <https://doi.org/10.1176/appi.ps.52.4.529>

Blogs/videos: [The Brain Needs Animal Fat | Psychology Today](#); [Dietary fat surprise - YouTube](#)

Week 5. Dietary message #3: “Eggs (especially the yolks) are bad for you.”

Article: Herron, K. L., & Fernandez, M. L. (2004). Are the current dietary guidelines regarding egg consumption appropriate? *The Journal of Nutrition*, 134(1), 187-190.

<https://doi.org/10.1093/jn/134.1.187>

Video: [Egg yolk: Nutrition and benefits](#)

Week 6. Dietary message #4: “Meat (especially red meat) is bad for you.

Articles: Neumann, C. G., Murphy, S. P., Gewa, C., Grillenberger, M., & Bwibo, N. O. (2007). Meat supplementation improves growth, cognitive, and behavioral outcomes in Kenyan children. *The Journal of Nutrition*, 137(4), 1119-1123. <https://doi.org/10.1093/jn/137.4.1119>

Blogs/videos: [Red Meat Webisode on Vimeo](#); [Should I eat red meat? Confusing studies diminish trust in nutrition science](#)

Week 7. Dietary message #5: “Our body (and especially our brain) needs sugar/glucose/carbs.”

Article: Westover, A. N., & Marangell, L. B. (2002). A cross-national relationship between sugar

consumption and major depression? *Depression and Anxiety*, 16(3), 118-120.

<https://doi.org/10.1002/da.10054>

Blogs/videos: [Study Explains Relationship Between Sugar And Cancer](#); [Report: Sugar industry funded research to blame fat for heart disease - YouTube](#)

Week 8. “Bulk on fibre for digestive health.”

Article: Ho, K. S., Tan, C. Y. M., Daud, M. A. M., & Seow-Choen, F. (2012). Stopping or reducing dietary fiber intake reduces constipation and its associated symptoms. *World Journal of Gastroenterology: WJG*, 18(33), 4593. <https://doi.org/10.3748/wjg.v18.i33.4593>

Blogs/videos: [Is Adding Fiber To Food Really Good For Your Health? : The Salt : NPR](#)

Week 9. Dietary message #7: “You need to go on a detox diet/cleanse.”

Article: Makkapati, S., D’Agati, V. D., & Balsam, L. (2018). “Green smoothie cleanse” causing acute oxalate nephropathy. *American Journal of Kidney Diseases*, 71(2), 281-286.

<https://doi.org/10.1053/j.ajkd.2017.08.002>

Blogs/videos: [Do Detox Diets Work For Fat Loss & Health? \(What The Science Says\) - YouTube](#)

Week 10. “You shouldn’t skip breakfast.”

Article: LeCheminant, G. M., LeCheminant, J. D., Tucker, L. A., & Bailey, B. W. (2017). A randomized controlled trial to study the effects of breakfast on energy intake, physical activity, and body fat in women who are nonhabitual breakfast eaters. *Appetite*, 112(1), 44-51.

<https://doi.org/10.1016/j.appet.2016.12.041>

Blogs/videos: [Is Skipping Breakfast Really a Bad Idea? - YouTube](#)

Week 11. Dietary message #9: “Eat everything in moderation.”

Article: vanDellen, M. R., Isherwood, J. C., & Delose, J. E. (2016). How do people define moderation? *Appetite*, 101(1), 156-162. <https://doi.org/10.1016/j.appet.2016.03.010>

Blogs/videos: [Why "everything in moderation" is terrible diet advice - Diet Doctor](#)

Week 12. Dietary message #10: “You should eat less and move more (aka, calories in-calories out).”

Article: Westenhoefer, J., Von Falck, B., Stellfeldt, A., & Fintelmann, S. (2004). Behavioural correlates of successful weight reduction over 3 y. Results from the Lean Habits Study. *International Journal of Obesity*, 28, 334-335. <https://doi.org/10.1038/sj.ijo.0802530>

Blogs/videos: [‘Eat Less, Move More’ Perpetuates Myths About Weight Loss – Science of Us](#); [Counting Calories Is A Ridiculous Way To Try And Lose Weight | Think | NBC News – YouTube](#)

Week 13.

No new material.