Nutri-Economics for Public Health

PhD course 2026-27

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The course aims to provide specific knowledge and skills in the field of nutri-economics, with a particular concern for public health. It is primarily based on health and nutritional sciences and introduces links to economics with an interdisciplinary approach. At the intersection of health/nutrition and economics, the course introduces theories (both from nutritional sciences and social sciences, and their combination), methodologies, and a review of databases, which are all necessary to study the topic of nutri-economics and its challenges. A specific focus will be given to environmental sustainability and specific populations.

Course structure: 6 2-hour lectures over a period of 6 weeks. The evaluation will consist of a brief presentation of a paper related to the course material.

Course structure:

1. Dietary factors in public health issues and their translation into evidence for food policy (OT; 6h)

    - A brief introduction of nutritional sciences: what are the main characteristics and definitions of human nutrition
    - A history of nutritional sciences: and overview of measurement types, methods and recommendations
    - Definition of health-protective and health-promoting dietary factors, Global Burden of Disease
    - Quantification of dietary factors applied in regulation: Food-Based Dietary Guidelines, Recommended Dietary Intakes, etc.
    - Environmental burden and “true cost” of food production and consumption
    - Cultural acceptability as a prerequisite aspect of nutrition
    - Food labeling: food metrics to communicate information to consumers
    - Food taxes and subsidies: the concept of “soda” and “carbon” taxes

2. Methods to evaluate nutritional and dietary quality in microeconomic studies (OT; 4h)

    - Metrics of the sustainable food system: focus on economic indicators
    - Metrics of the healthy and sustainable foods and diets: focus on economic indicators
    - Cost of healthy and sustainable diets
    - Connecting microeconomics with sustainable diet modelling
    - How to measure dietary quality and nutritional status in microeconomic studies at the household level

- How to consider social, cultural and gender aspect in dietary analysis
- How to measure dietary quality and nutritional status in microeconomic studies among hard to reach populations / minorities

3. Behavioral economics applied to food choices (BV; 2h)

- The traditional consumer theory applied to food choices, a reminder
- Applying behavioral insights to encourage healthy eating*:* the principles
- Traditional public policies, successes and failures; *and* their contrasts with private marketing strategies
- Policy interventions based on behavioral theories, a critical review

Bibliography and textbooks:

Atkin D., Colson-Sihra E., and Shayo M. (2020) How Do We Choose Our Identity? A Revealed Preference Approach Using Food Consumption. NBER Working Paper No. 25693, March 2019, Revised June 2020, JEL No. D12,D74,D91,O1,Z1).

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Colson-Sihra, Eve and Bellet, Clement, Does Inequality Affect the Needs of the Poor? (March 1, 2024). Available at SSRN: https://ssrn.com/abstract=3270814 or http://dx.doi.org/10.2139/ssrn.3270814

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Harrison, M. R., Palma, G., Buendia, T., Bueno-Tarodo, M., Quell, D., & Hachem, F. (2022). A scoping review of indicators for sustainable healthy diets. Frontiers in Sustainable Food Systems, 5, Article 822263. https://doi.org/10.3389/fsufs.2021.822263

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Perignon, M., Rollet, P., Tharrey, M., et al. (2023). The revised Healthy Purchase Index (r-HPI): A validated tool for exploring the nutritional quality of household food purchases. European Journal of Nutrition, 62, 363–377. https://doi.org/10.1007/s00394-022-02962-4

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Tobi, R. C. A., Harris, F., Rana, R., Brown, K. A., Quaife, M., & Green, R. (2019). Sustainable diet dimensions: Comparing consumer preference for nutrition, environmental and social responsibility food labelling — A systematic review. Sustainability, 11(23), 6575. https://doi.org/10.3390/su11236575