| 科目ナンバリング | U-LAS40 10009 LE26 | | | | | | |
|---|---|---|---|---|---|---|---|
| 授業科目名<英訳> | Nutrition and Health-E2<br>Nutrition and Health-E2 | | | 担当者所属職名・氏名 | 医学研究科　助教 | AKHMETZIANOVA, Renata | |
| 群 | 健康・スポーツ科目群 | 分野(分類) | 健康・スポーツ科学(基礎) | 使用言語 | 英語 | | |
| 旧群 | | 単位数 | 2単位 | 週コマ数 | 1コマ | 授業形態 | 講義（対面授業科目） |
| 開講年度・開講期 | 2026・後期 | 曜時限 | 木3 | 配当学年 | 全回生 | 対象学生 | 全学向 |

**[授業の概要・目的]**

Did you know that the foods and beverages you consume every day play a powerful role in the maintenance of your health? From heart disease and high blood pressure to type 2 diabetes and certain cancers, many lifestyle diseases are closely linked to unbalanced dietary choices. Increased consumption of processed foods, rapid urbanization, and changing lifestyles have significantly altered traditional eating habits, contributing to the growing prevalence of lifestyle-related diseases. Understanding the relationship between food and health is essential for achieving lifelong wellness and preventing many health conditions.

This course provides an overview of the fundamental knowledge of food and nutrition. Through a step-by-step approach, students will explore the physiological processes of digestion, core nutritional concepts, and the role of diet in the development and prevention of diseases. The course also analyses international dietary guidelines and emphasizes critical evaluation of scientific evidence to support informed decision-making related to health outcomes.

To bring the learning experience to a practical level, we will develop skills in nutritional assessment and designing a healthy, well-balanced diet. Finally, we will address nutritional considerations for special populations and diverse food cultures worldwide. Classes are highly interactive and include lectures, group discussions, peer Q&A exchanges, and other activities to enhance learning and engagement.

**[到達目標]**

1. Understand the physiology of food digestion and absorption
2. Explore the role of macronutrients and micronutrients
3. Identify nutrition-related diseases and their dietary risk factors
4. Analyze international dietary guidelines
5. Develop practical skills in assessing the nutritional composition of foods and designing a healthy, well-balanced diet
6. Discover global food cultures and dietary patterns

**[授業計画と内容]**

Week 1: Course introduction. The physiology of food digestion and absorption.
Week 2: Macronutrients: carbohydrates, proteins, fats
Week 3: Micronutrients: vitamins and minerals
Week 4: Hydration and beverage choices
Week 5: Nutritional assessment and diet analysis
Week 6: Designing a balanced diet
Week 7: Health products and supplements
Week 8: Food preparation and safety
Week 9: Eating behaviors
Week 10: Nutrition-related diseases
Week 11: Diseases related to eating behaviors
Week 12: Nutrition in special populations. Dietary strategies for lifestyle disease management
Week 13-14: Global food cultures and dietary patterns

**Nutrition and Health-E2(2)へ続く↓↓↓**

**Nutrition and Health-E2(2)**

Week 15: Feedback

Changes in order and/or content may occur

**[履修要件]**

Open to students from all majors. This course provides evidence-based strategies for using nutrition to promote health, prevent lifestyle-related diseases, and meet dietary needs.

**[成績評価の方法・観点]**

Students are expected to complete regular assignments (quizzes and homework assessments). Evaluation will be based on the following criteria:

Attendance and active participation: 30%
Assignments: 30%
Final Self-Reflection Report: 40%

**[教科書]**

Barrett, Kim E., Susan M. Barman, Heddwen L. Brooks & Jason X.-J. Yuan. 『Ganong’s Review of Medical Physiology (26th ed.)』（McGraw-Hill Education, 2019）ISBN:978-1260122404

**[参考書等]**

**（参考書）**
『Carbohydrate intake for adults and children: WHO guideline』（Geneva: World Health Organization; 2023）（Licence: CC BY-NC-SA 3.0 IGO）
『Saturated fatty acid and trans-fatty acid intake for adults and children: WHO guideline』（Geneva: World Health Organization; 2023）（Licence: CC BY-NC-SA 3.0 IGO）
『U.S. Department of Agriculture and U.S. Department of Health and Human Services. Dietary Guidelines for Americans, 2020-2025. 9th Edition』（December 2020）（Available at DietaryGuidelines.gov）
Additional literature and references will be introduced during the lectures.

**[授業外学修（予習・復習）等]**

Self-study outside of class is key to understanding and remembering course material. Reviewing lecture slides, completing quizzes, and doing homework will enhance understanding and reinforce learning in class. Lecture slides will be provided.

**[その他（オフィスアワー等）]**

If you have any questions, please feel free to email me or schedule a time to meet in person.

**[主要授業科目（学部・学科名）]**