

REPORT ON SUMMER SCHOOL “TRENDS IN NUTRITION EPIDEMIOLOGY”

Institution	Heidelberg Institute of Global Health at the University Hospital Heidelberg
A. General Information	
1. Title of Summer School	SUMMER SCHOOL “TRENDS IN NUTRITION EPIDEMIOLOGY”
2. Course Coordinator	Prof. Ina Danquah
3. Date	07.08.2023 – 11.08.2023
4. Location	Dr. Rainer Wild-Stiftung Conference center
5. Number of participants	18
6. Description of the summer school	The course covered 5 days of training with 40 academic hours (equivalent to 2 ECTS). A group of experts in various areas of nutrition epidemiology delivered the course using interactive and participatory teaching methods. The course also included two group activities with presentations and an educative excursion on sustainable food production in Heidelberg.
B. Objectives/Learning Objectives	
1. General objective	To provide participants with in-depth understanding of nutrition epidemiology with a focus on sustainable diets in vulnerable population groups
2. Specific objectives	<ul style="list-style-type: none"> • To familiarize participants with culture-specific assessment methods of dietary intake and the food environment • To guide participants on novel approaches to model dietary exposures • To provide knowledge to the participants about healthy and environmentally friendly diets in specific population groups • To present methodological approaches to optimize the sustainability of diets • To introduce approaches for deriving dietary guidelines

C. Teaching	
1. Teaching strategies for intended learning outcomes.	Comprehensive lectures, group exercises individual exercises self-study
2. Major topics that covered during the summer school	<ul style="list-style-type: none"> • Essential concepts of nutrition epidemiology • Determinants of Food Choices • Dietary Assessment Methods • Derivation of dietary patterns and nutritional classes • Introduction to plant-based diets among different population groups • Understanding environmental aspects of plant-based diets • Development of context-specific plant-based diet pyramid • Operationalization of Sustainable Diets • Methodological approaches to develop food-based dietary guidelines (FBDGs)
3. Session Objectives	
Day 1:	<ul style="list-style-type: none"> • Introducing essential concepts of nutrition epidemiology • Familiarizing participants with common and novel dietary assessment methods • Adapting an FFQ to a geographic context
Day 2:	<ul style="list-style-type: none"> • Modelling dietary habits and nutritional status as exposure • Derivation of dietary patterns and nutritional classes • Identification of biomarkers of intake • Group work: Presentation of culturally adapted FFQs
Day 3:	<ul style="list-style-type: none"> • Introduction to plant-based diets among different population groups • Understanding environmental aspects of plant-based diets • Group work: Adapt the plant-based diet pyramid to a geographic context
Day 4:	<ul style="list-style-type: none"> • Present context-specific plant-based diet pyramid • Familiarize with approaches to develop sustainable diets • Networking and excursion with dinner in Heidelberg
Day 5:	<ul style="list-style-type: none"> • Familiarize with methodological approaches to develop food-based dietary guidelines (FBDGs) • Consider context-specific peculiarities in sustainable FBDGs • Course evaluation

<p>4. Course Lecturers</p>	<p>Prof Dr Ina Danquah, Heidelberg Institute of Global Health (HIGH), Heidelberg University</p> <p>Dr Cecilia Galbete, University of Navarra Navarra, Spain</p> <p>Dr Barbara Vizmanos, Centre for Health Sciences, University of Guadalajara, Guadalajara, Mexico</p> <p>Dr Francis Oduor, Alliance Bioversity-CIAT, Nairobi, Kenya</p> <p>Dr Franziska Jannasch, Molecular Epidemiology, German Institute of Human Nutrition PotsdamRehbruecke (DIfE), Nuthetal</p> <p>Prof Clemens Wittenbecher, Food and Nutrition Science, Chalmers University of Technology, Gothenburg, Sweden</p> <p>Dr Daniel Borch Ibsen, Steno Diabetes Center, Aarhus University Hospital, Aarhus, Denmark</p> <p>Dr Markus Keller, Research Institute for Plant-Based Nutrition (IfPE), Gießen</p> <p>Mr Derrick R Tanous, University College of Teacher Education Tyrol, Innsbruck, Austria</p> <p>Dr Ujué Fresan, Instituto de Salud Global Barcelona Barcelona, Spain</p> <p>Dr Marcelo Tyszler, Blonk Sustainability Tools Gouda, The Netherlands</p> <p>Dr Alice Achieng, Department of Human Nutrition and Dietetics, Technical University of Kenya, Nairobi, Kenya</p> <p>Anne Carolin Schäfer, Institute for Nutrition and Food Sciences, University of Bonn, German Society of Human Nutrition</p> <p>Ms Grace Wothaya Kihagi, Climate Change, Nutrition and Health, Heidelberg Institute of Global Health (HIGH)</p>
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D. Funding/sponsors	
1. Main supporter	Dr. Rainer Wild-Stiftung
2. Other funding sources	The course participation fee was €100,00 (one hundred euros) which covered coffee-breaks and lunches during the course
E. Course Evaluation	
Course Evaluation results	The course evaluation based on 7 questions in the evaluation form given to the participants.
F. Planning for Improvement	
G. Attached files	Course programme Course evaluation results

TRENDS IN NUTRITION EPIDEMIOLOGY

07 – 11 August 2023

Course Lecturers

ID	Prof Dr Ina Danquah Heidelberg Institute of Global Health (HIGH), Heidelberg University	CG	Dr Cecilia Galbete University of Navarra Navarra, Spain
BV	Dr Barbara Vizmanos Centre for Health Sciences, University of Guadalajara, Guadalajara, Mexico	IJ	Dr Francis Oduor Alliance Bioversity-CIAT, Nairobi, Kenya
FJ	Dr Franziska Jannasch Molecular Epidemiology, German Institute of Human Nutrition Potsdam- Rehbruecke (DIfE), Nuthetal	CW	Prof Clemens Wittenbecher Food and Nutrition Science, Chalmers University of Technology Gothenburg, Sweden
DBI	Dr Daniel Borch Ibsen Steno Diabetes Center, Aarhus University Hospital Aarhus, Denmark	MK	Dr Markus Keller Research Institute for Plant-Based Nutrition (IfPE) Gießen
DT	Mr Derrick R Tanous University College of Teacher Education Tyrol Innsbruck, Austria	UF	Dr Ujué Fresan Instituto de Salud Global Barcelona Barcelona, Spain
MT	Dr Marcelo Tyszler Blonk Sustainability Tools Gouda, The Netherlands	AA	Dr Alice Achieng Department of Human Nutrition and Dietetics, Technical University of Kenya, Nairobi, Kenya
CS	Anne Carolin Schäfer Institute for Nutrition and Food Sciences, University of Bonn, German Society of Human Nutrition	GWH	Ms Grace Wothaya Kihagi Climate Change, Nutrition and Health, Heidelberg Institute of Global Health (HIGH)



Objectives of the course

The **summer school “Trends in Nutrition Epidemiology”** aims to provide participants with in-depth understanding of nutrition epidemiology with a focus on sustainable diets in vulnerable population groups.

More specifically, this course will:

- Familiarize participants with culture-specific assessment methods of dietary intake and the food environment,
- Guide participants on novel approaches to model dietary exposures,
- Provide knowledge to the participants about healthy and environmentally friendly diets in specific population groups,
- Present methodological approaches to optimize the sustainability of diets,
- Introduce approaches for deriving dietary guidelines.

Assessment of the course

The course will be assessed as:

40% in-person participation

60% individual and group assignments in practical sessions / group work

Monday, 07 August 2023

Day 1

ID / CG / BV / FO

Introduction, Dietary Intake and Food Environments

Lecture, Group Work

09:00 – 10:00	Nutrition Epidemiology: Introduction	ID
10:00 – 11:30	Dietary assessment in migrant populations	CG
11:30 – 12:00	<i>Coffee Break</i>	
12:00 – 13:30	Assessment of food choices in Latin America	BV
13:30 – 14.30	<i>Lunch Break</i>	
14:30 – 16:00	Food environment assessment in sub-Saharan Africa	FO
16:00 – 17:00	Group work: Adapting an FFQ to a geographic context	ID

Session Objectives

- Introducing essential concepts of nutrition epidemiology
- Familiarizing participants with common and novel dietary assessment methods
- **Adapting an FFQ to a geographic context**
- Networking

Key Readings

- The list of key readings and further recommended literature will be provided closer to the course begin.

Tuesday, 08 August 2023

Day 2	ID / FJ / CW / DBI	
	Modelling dietary exposure	
	Lecture, Group Work	
09:00 – 10:30	Group work: Presentation of adapted FFQs	ID
10:30 – 11:00	<i>Coffee Break</i>	
11:00 – 12:30	Transferability of dietary patterns across populations	FJ
12:30 – 13:30	<i>Lunch</i>	
13:30 – 15:00	OMICS approaches to identify biomarkers of intake	CW
15:00 – 15:30	<i>Coffee Break</i>	
15:30 – 17:00	Treelet transform for dietary pattern extraction	DBI
Session Objectives		
<ul style="list-style-type: none"> • Modelling dietary habits and nutritional status as exposure • Derivation of dietary patterns and nutritional classes • Identification of biomarkers of intake • Group work: Presentation of culturally adapted FFQs • Networking 		
Key Readings		
<ul style="list-style-type: none"> • The list of key readings and further recommended literature will be provided closer to the course begin. 		



Wednesday, 09 August 2023

Day 3

MK / DT / UF / ID

Plant-based diets in specific population groups

Lecture, Group Work

09:00 – 10:30	Plant-based diets among pregnant women and children	MK
10:30 – 11:00	<i>Coffee Break</i>	
11:00 – 12:30	Plant-based diets among athletes	DT
12:30 – 13:30	<i>Lunch</i>	
13:30 – 15:00	Plant-based diets among alumni of a Spanish University	UF
15:00 – 15:30	<i>Coffee Break</i>	
15:30 – 17:00	Group work: Adapt the plant-based diet pyramid	ID

Session Objectives

- Introduction to plant-based diets among different population groups
- Understanding environmental aspects of plant-based diets
- **Group work: Adapt the plant-based diet pyramid to a geographic context**
- Networking

Key Readings

- The list of key readings and further recommended literature will be provided closer to the course begin.



Thursday, 10 August 2023

Day 4	ID / AA / MT	
	Optimizing sustainability of diets	
	Lecture, Group Work, Excursion	
09:00 – 10:30	Group work: Presentation plant-based diet pyramid	ID
10:30 – 11:00	<i>Coffee Break</i>	
11:00 – 12:30	Weight-loss approaches with sustainable diets	AA
12:30 – 13:30	<i>Lunch</i>	
13:30 – 15:00	Optimizing dietary sustainability using OPTIMEAL©	MT
15:00 – 15:30	<i>Coffee Break</i>	
15:30 – open	Excursion: Sustainable food production in and around Heidelberg	
Session Objectives		
<ul style="list-style-type: none"> • Present context-specific plant-based diet pyramid • Familiarize with approaches to develop sustainable diets • Networking and excursion with dinner in Heidelberg 		
Key Readings		
<ul style="list-style-type: none"> • The list of key readings and further recommended literature will be provided closer to the course begin. 		



Friday, 11 August 2023

Day 5	JC / GWK / ID	
	Approaches to develop food-based dietary guidelines	
	Lecture, Group Work, Feedback	
09:00 – 10:30	German Food-Based Dietary Guidelines	JC
10:30 – 11:00	<i>Coffee Break</i>	
11:00 – 12:30	Mother, Infant, and Young Child Nutrition (MIYCN) guidelines	GWK
12:30 – 13:30	<i>Lunch</i>	
13:30 – 15:00	EAT-Lancet Planetary Health Diet	ID
15:00 – 15:30	<i>Coffee Break</i>	
15:30 – 17:00	Wrap-up and feedback session	ID
Session Objectives		
<ul style="list-style-type: none"> • Familiarize with methodological approaches to develop food-based dietary guidelines (FBDGs) • Consider context-specific peculiarities in sustainable FBDGs • Course evaluation 		

Attachment 2: Course evaluation results

1. The relevance of the chosen topics for the participants.



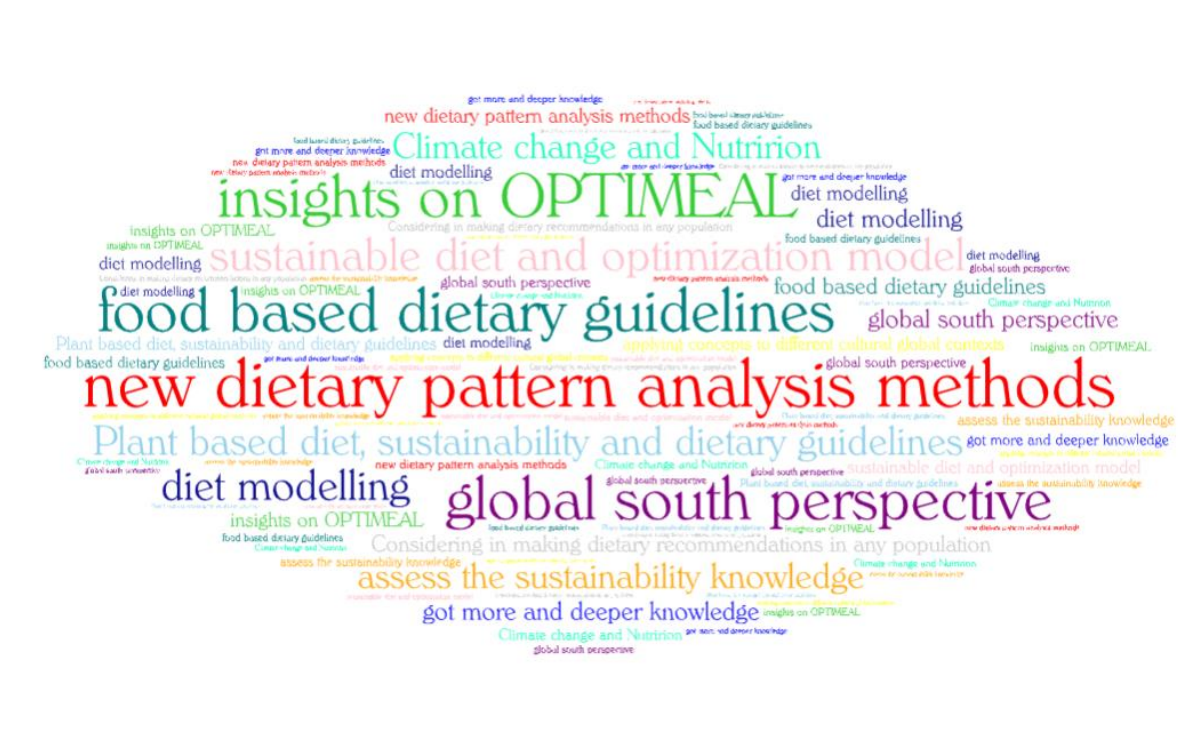
2. The overall level of scientific quality of the contributions/presentations



3. How interactive and applied was the course for the participants.



4. Thematic and methodological expertise gained from the summer school



5. The aspects of the summer school found most appealing and the aspects found least appealing



6. The benefits from the social programme

