

Master in Life Sciences

A cooperation between
BFH, FHNW, HES-SO, ZFH

Module title	Nutrition and Nutrition Related Chronic Diseases
Code	F2
Degree Programme	Master of Science in Life Sciences
Group	Food
Workload	3 ECTS (90 student working hours: 42 lessons contact = 32 h; 58 h self-study)
Module Coordinator	<p>Name: Beatrice Baumer Phone: +41 (0)58 934 57 08 E-Mail: beatrice.baumer@zhaw.ch Address: ZHAW Life Sciences und Facility Management, Einsiedlerstrasse 34, 8820 Wädenswil</p>
Lecturers	<ul style="list-style-type: none"> • Beatrice Baumer, ZHAW • Dr. Janice Sych, ZHAW • Guest lecturer BFH (Dr. David Fäh)
Entry requirements	<p>Basic nutrition knowledge (role of nutrients in the body, general nutrition recommendations, minimal requirements, as are also summarized in the self-study text provided beforehand on Moodle)</p> <p>Mandatory (but not marked): On-line pre-course test, based on the self-study text, to be completed before the first day of the course. Mandatory (but not marked): Assignment (1/2 page text), based on pre-reading material, to be posted on Moodle, latest deadline: 2 days before the start of the module)</p>
Learning outcomes and competences	<p>After completing the module, students will be able to:</p> <ul style="list-style-type: none"> • explain why nutrition related chronic diseases (and generally NCDs) are a global issue • discuss the impact of unhealthy dietary behaviours on health, in a historical context (nutrition transition), • describe how associations between diet, other risk factors and diseases can be measured, and how to evaluate the scientific evidence provided by epidemiology studies • describe possible pathophysiological pathways linking nutrients/diet to diseases and /or intermediate biomarkers • justify the need for dietary recommendations for health promotion and / or disease prevention
Module contents	<ul style="list-style-type: none"> • Topic of healthy/unhealthy diets resp. food items, nutrition transition • Basic epidemiology and evaluation of evidence grading • Diet as a risk factor for diet-related non-communicable diseases: selected pathophysiological pathways (in particular for obesity, cardiovascular diseases, diabetes type 2, some cancer forms)
Teaching / learning methods	<p>Seminar style, based on:</p> <ul style="list-style-type: none"> • theory inputs • discussion of selected papers (pre-reading assignments) • individual / small group / class tasks, based on theory and reading assignments (these tasks contribute to the final individual essay)
Assessment of learning outcome	<p>1. Final individual essay to be handled in latest 2 weeks after the end of the module (100%)</p>

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Format	Block week																								
Timing of the module	Winter school CW 6 <table border="1"> <tr> <td>Day of the block week</td> <td><1</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> <td>5</td> <td>>5</td> </tr> <tr> <td>Contact teaching (lessons)</td> <td></td> <td>8</td> <td>9</td> <td>9</td> <td>8</td> <td>8</td> <td></td> </tr> <tr> <td>Self-study (hours)</td> <td>20</td> <td>2</td> <td>2</td> <td>2</td> <td>2</td> <td>0</td> <td>30</td> </tr> </table>	Day of the block week	<1	1	2	3	4	5	>5	Contact teaching (lessons)		8	9	9	8	8		Self-study (hours)	20	2	2	2	2	0	30
Day of the block week	<1	1	2	3	4	5	>5																		
Contact teaching (lessons)		8	9	9	8	8																			
Self-study (hours)	20	2	2	2	2	0	30																		
Venue	Olten																								
Bibliography	<p><u>Pre-course</u> A synopsis of expected nutrition basics will be provided to help students prepare for the pre-course test ("self-study text"). This synopsis will be based on the most recent books on general nutrition, e.g.: Geissler C, Powers H, 2017. Human Nutrition, Oxford University Press, ISBN 978-0-19-876802-9 Whitney EN, Rolfes SR (editors), 2018. Understanding Nutrition, Brooks Cole, ISBN 978-1-337-39269-3 Development Initiatives 2017</p> <p><u>Further pre-course reading</u> Lancet 2019: GBD 17, Diet Collaboraotrs Global Nutrition Report, 2017. Nourishing the SDGs, Bristol, UK: Development Initiatives: <i>read summary and chapters 1-2</i> Willett W, 2012. Nutritional epidemiology (third edition), ISBN-13:9780199754038, Pub. Date:11/07/2012, Publisher: Oxford University Press, <i>Chapters 1-5 as pre-reading assignment</i> Additional 5-6 selected papers, with current, module-relevant topics <i>will be distributed (on Moodle, together with mandatory preparation questions) and then discussed in class</i>. E.g.: Temple NJ, 2016. How reliable are randomized controlled trials for studying the relationship between diet and disease? A narrative review, British Journal of Nutrition 116:381-389</p> <p><u>During the course</u> Additional articles on current topic will be provided (on Moodle) before the class begins, these will be discussed in class</p>																								
Language	English																								
Links to other modules																									
Comments																									
Last Update	05.04.2019																								