# Food, Culture, and the Environment NUSCTX W104 Summer 2018

3 Units, Session C: June 18 – August 10, 2018

Please note that this syllabus is subject to change.

### **Course Description**

Food plays a pivotal role in both connecting us as a species and distinguishing between cultures and groups, but *why* do we eat what we eat? This course will broadly address the historical, ecological, socioeconomic, biological, political, and cultural environments impacting the human diet in addition to individual health and consumer protection. It is a nutrition course with an anthropological slant that examines diet and cuisine and contributes to the pursuit of degrees in the fields of nutrition, public health, and beyond. If you are currently not in a food-related major, but are interested in food and looking for a broad survey course on the many different factors affecting food intake and health, this is the course for you.

As an American Cultures course, we will discuss cuisines from a variety of different countries and regions and examine how race and ethnicity affect diet, food access, and the human relationship with food, specifically in the United States.

Additionally, this summer online version incorporates content from Edible Education 101, the unique UC Berkeley course founded by Alice Waters that explores the future of food and its diverse systems and movements. Edible Education content includes online presentations by renowned experts who will share their visions, research, and experiences about food and its critical role in our culture, well-being, and survival.

Through exposure to these concepts, NUSCTX W104 aims to inspire you to become more aware, informed, and intentional about your role and participation in the food system.

This course fulfills the American Cultures and Social and Behavioral Sciences breadth requirements.

# **Prerequisites**

Introduction to Human Nutrition (NST10) is recommended as a prerequisite.

## **Course Objectives**

After successfully completing this course, you will be able to:

- 1. Understand how socio-cultural, economic, political, and physical environments impact food intake.
- 2. Compare food-producing technologies used by industrial and non-industrial societies.
- 3. Articulate the interconnected relationships and disciplines of the food system.
- 4. Observe the environmental impact and sustainability of industrialized agriculture.
- 5. Analyze the impact of social structure, socioeconomics, and culture on food practices and how this interacts with race and ethnicity.
- 6. Identify the food disparities that exist in the United States.
- 7. Understand how marketing and labeling impact food practices and individual nutrition.
- 8. Identify nutrition-related traditional health beliefs and how they affect food intake.
- 9. Develop intervention strategies for enhancing wellness in diverse populations by using knowledge of the environment, food, and lifestyle choices.
- 10. Summarize the food practices of diverse cultural and religious groups in the US and around the world.
- 11. Expand understanding of how food practices relate to the environment, religion, and politics.

# Instructor Info, Contact, Office Hours, and Communication

# **Course Instructor**

Professor Kristen Rasmussen de Vasquez

# Graduate Student Instructors (GSIs)

While the instructor will interact with the whole class and will oversee all activities and grading, as well as be available to resolve any issues that may arise, the GSIs will be your main point of contact. Your GSIs are responsible for assisting you directly with your questions about assignments and course requirements, as outlined in the Assignments and Calendar. The GSIs will also facilitate ongoing discussion and interaction with you on major topics in each module.

- Name of GSI and assigned discussion sections (TBD)
- Name of GSI and assigned discussion sections (TBD)

## Course Mail

Make sure to check the Course Mail for messages from the instructor. You can access course email within the Learning Management System by clicking on the Inbox link or choose to have your course mail forwarded to your personal email account or your cell phone.

Also remember that the Open Discussion Forum is a great place to communicate questions with a larger audience that may be able to respond faster than your GSI or the instructor.

### **Office Hours**

Students can make office hours requests with the instructor or GSIs by sending them a message through bCourses. Office hours will take place using the "Zoom Meeting" setting in Canvas.

The Instructor and GSIs will be available each week at specific times. Students can access the instructor and GSI directly from their course to ask questions about assignments, exams, lectures, readings, or any topics pertaining to the course. Weekly online office hours will provide students the opportunity to engage in dialogue with the instructors and other students in "real time." Day and times for weekly office hours are posted in your course under "Online Office Hours."

# **Course Materials and Technical Requirements**

# **Educational Approach**

In this course, students will learn via video lectures, discussion forums, and projects using virtual software, activity-based assignments, digital quizzes, and online office hours.

In order to make the most of your experience, we encourage you to participate as much as possible in the discussion forums and partake in the online office hours.

# **Technical Requirements**

This course is built on a Learning Management system (LMS) called Canvas, or bCourses, and you will need to meet <u>these computer specifications to participate within</u> <u>this online platform</u>.

### Optional

Canvas allows you to record audio or video files of yourself and upload them in the course. Although doing so is not required for any of the activities, using these features will enhance your engagement in the course. If you would like to use these features, you will need to have a webcam and a microphone installed on your computer.

## **Technical Support**

If you are having technical difficulties please alert your GSI immediately. However, understand that neither the GSIs nor the professor can assist you with technical problems. You must call or email tech support and make sure you resolve any issues immediately.

In your course, click on the "Help" button on the bottom left of the global navigation menu. Be sure to document (save emails and transaction numbers) for all interactions with tech support. Extensions and late submissions will not be accepted due to "technical difficulties."

# Accessing Library Materials Off-Campus

To access certain materials through the UC Berkeley library off-campus, such as Kanopy videos, you will need to set up either VPN (Virtual Private Network) or EZproxy on your browser. You are welcome to choose either of these options. If using VPN, make sure that the AnyConnect settings include the library rather than just the campus. When you are on-campus, you will automatically have access to these materials.

**VPN** allows users to access networks and services over a secure connection. When using VPN, your off-campus computer is dynamically assigned a UCB IP address, which allows you access to UCB's IP restricted resources. To download and install the campus VPN client, visit <u>http://www.lib.berkeley.edu/using-the-libraries/vpn</u>.

**EZproxy** is a web proxy server used by libraries to give access outside the library's computer network to restricted-access websites that authenticate users by IP address. This allows library patrons at home or elsewhere to log in through their library's EZproxy server and gain access to materials to which their library subscribes. To ensure that EZproxy enabled links work for you, visit <u>http://guides.lib.berkeley.edu/ezproxy</u>.

If you are having issues setting up either of the above, refer to the help indicated on the relevant webpage (links above).

# **Learning Activities**

You are expected to fully participate in the course activities described below. This course is designed to provide you with insight into the diverse factors impacting the human diet and the food system. A variety of learning activities will be utilized to accommodate different learning styles to build a community of learners.

This course consists of 8 modules of study outlined at the end of this syllabus. Each module includes the following learning activities:

- 1. Watch and listen to video/audio lectures led by instructor and review accompanying slides focused on the learning theme for that module.
- 2. Watch and listen to any other videos posted including interviews or presentations by guest speakers.
- 3. Read the assigned readings posted to bCourses or available online. Additionally, each week submit two questions based on assigned readings and respond to the two questions that you evaluated.
- 4. Participate in GSI-moderated discussion forum by answering two weekly prompts and commenting on the responses of two other students.
- 5. Complete the module quizzes.
- 6. Complete four written research assignments.
- 7. Participate in a digital group presentation and interact with other group presentations using the Whiteboards tool.
- 8. Complete the midterm exam and final exam. The final exam is cumulative and must be completed in person. You must score at least 70% on the final exam to pass the course.

# **Discussion Sections**

For grading purposes, each of you has been assigned to one of the course GSIs and placed within his/her section. Your particular GSI will grade all of your work, as well as that of your section-mates, and engage with you in the course discussions. You can see whose section you've been placed in by exploring the "Section" column within the "People" page or by examining your discussion group's title, which includes your GSI's name.

There are two types of discussions in this course: graded and ungraded.

- The graded discussions are listed in your module assignments. Your participation in these discussions contributes to your course grade.
- Ungraded discussions include the Open Discussions Forum. If you have general questions regarding the course, procedures, etc., use this ungraded forum to share them with your course mates and instructor. The instructor and GSIs will review this discussion regularly and will help whenever possible; however, please feel free to offer leads and suggestions to comments and questions that other students have made.

In Module 1 you have the opportunity to introduce yourself to your instructor, GSI, and course mates by joining and contributing a bit about yourself on the Introduction Discussion in the Open Discussions Forum. You may also click on your name at the top of the course and upload a photo so that your course mates and instructor can get a better sense of you.

## Modules

A module is a grouping of topics related to one area of study, typically with readings, lectures, and various kinds of assignments. Each module contains a list of Learning Outcomes for the module. Your assignments reflect the learning activities to perform to reach those outcomes. For an at-a-glance view of due dates and projects, refer to the course calendar.

# **Multimedia Lectures and Other Videos**

Recorded lectures and other videos contain material that may be included in the exams. Each lecture has been broken into sections. You are expected to take notes while viewing the lectures and other videos as you would in a regular classroom.

# **Reading Assignments**

Each module includes assigned readings relevant to each topic covered in that module. You are responsible for all readings – content from the readings will be included in discussion forums, quizzes, and will be on the exams. Additionally, each week you are expected to do the following:

- 1. Develop and post two questions related to that week's readings. Questions should require a respondent to write reflectively and critically about the topic (avoid yes or no questions).
- 2. Choose two questions that have been posted by a classmate. Answer the questions (3-5 sentences for each answer) and submit both the original questions and your answers.

## **Discussion Forums**

Each module contains a group discussion with two prompts. You are required to answer both prompts (one paragraph per response) and respond to the answers posted by two other students. Responses and interaction will count toward your class participation grade. This is your opportunity to exchange views with your peers and group-mates, share experiences and resources, and ensure your understanding of the course material.

### A Note on Discussion Threads and Responses:

Some of the content that we will address in the Discussion Threads in this course can be sensitive. Remember for all Discussion Threads to be professional and respectful in your posts and responses.

Discussion groups are pre-assigned and include other members of your GSI section. When you navigate to a discussion forum, you will automatically be taken to your group's instance of that discussion and to your group's space within the course.

# **Module Quizzes**

All modules include a quiz that must be completed and submitted within by the assigned due date. Refer to the Calendar for all due dates. You may take the quiz only once and have a set period of time to complete each quiz. (See each quiz for details.) If you miss a quiz, you will be allotted 0 for that quiz, and there are no make-up quizzes.

Module Quizzes should be completed on your own, NOT in collaboration with other students and are open book/notes. However, you are encouraged to attempt the quizzes without referencing your notes or other materials, as this will better test your understanding of the material and prepare you for the final, which is closed book/note.

Please keep the campus Honor Code in mind: "As a member of the UC Berkeley community, I act with honesty, integrity, and respect for others."

## **Research Assignments**

There will be four assignments over the semester that are intended to broaden your understanding of the course material. The assignments will be research-based, will include a short write-up, and may include an activity. Assignments must be submitted electronically in word (.doc, .docx) or PDF (.pdf) format on bCourses by the deadline. Any emailed assignments will NOT be accepted. For each day that your assignment is late, 1 point will be deducted. Software will be used to check for plagiarism on all assignments.

# Foods Around the World Digital Group Project

In groups, you will investigate the cuisine from a specific country or region and publish a digital "poster" about your findings using the collaborative Whiteboards tool in bCourses. You are also expected to field questions from other students and interact with them on their projects for full credit. There will also be a peer evaluation component to this project. More information about this project, including instructions for signing up, will be provided on bCourses.

## Exams

There will be two exams for this course – a midterm and final exam. Exams will cover information from lectures and lecture slides, other videos, assigned readings, and discussion questions and are closed book. Your final exam is a proctored exam.

# Midterm Exam

You will complete a midterm in Module 5 that covers Modules 1 through 4. You will have 2 hours to complete the midterm exam and the exam must be completed before moving onto Module 6. The exam is to be taken WITHOUT reference to book and notes (closed book and no notes), and it cannot be taken collaboratively with other students. The learning management system keeps detailed records of logins and submissions. Consider reviewing the Academic Integrity information in the Orientation Module for this online class, and keep the Campus Honor Code in mind: "As a member of the UC Berkeley community, I act with honesty, integrity, and respect for others."

## Final Exam

The final exam will be held on Wednesday, August 8th from 8:00am - 10:00am in Lewis Hall, room 361. The exam will be cumulative, will cover course material from Modules 1-8, and includes multiple-choice, fill-in-the-blank, and short answer questions. It is a 2hour proctored, pencil and paper/scantron, comprehensive exam that must be completed IN PERSON. In order to pass this course, you must pass the final exam with a grade of 70% or higher. That is, passing the final exam is necessary in order to receive a satisfactory passing grade for the class. The final exam, like the midterm exam, is closed book and notes; thus textbooks and notes should NOT be consulted.

### Note:

We will not change the days and times for the final exam and there will be no make-up exam. If you miss taking the final or try to take it in a manner for which you have not received permission, you will fail this class automatically.

If you are unable to make it onto campus for your final exam, you may have the option to take it under the supervision of a proctor to receive credit for the course. Review the Proctor Info on the left navigation menu. Off-site proctor applications must be submitted prior to July 13, 2018.

# **Reminder: Your Course End Date**

Your course will end on August 10, 2018. As you work through the course, please keep

the end date in mind, and if you want to save any commentary or assignments for future reference, please make sure to print or copy/paste those materials before your access ends.

# **Grading and Course Policies**

Your final course grade will be calculated as follows. Cheating and plagiarism on assignments and exams is not tolerated and can result in failing the course and expulsion from the university. All policies found in the Campus Code of Student Conduct will be enforced. Your grade will be based on a percentage of 240 points. There is no curve and no rounding of points.

Component	Percent	Points
Reading Assignment (questions and responses)	8.33%	20 pts
Discussion Forum (class participation – prompt answers and responses)	8.33%	20 pts
Module Quizzes	25%	60 pts
Research Assignments (x4)	16.66%	40 pts
Foods Around the World Digital Group Presentation	8.33%	20 pts
Midterm Exam	12.5%	30 pts
Final Exam	20.83%	50 pts
Total	100%	200 pts

Grading will be based on the following percentages:

You must pass the final exam with at least 70% to pass the course.

# **Grading Information**

Letter Grade	A	A-	B+	В	B-	C+	С	C-	D+	D	D-	F
Percentage	100-	93-	89-	85-	82-	79-	75-	72-	69-	65-	62-	<
	94	90	86	83	80	76	73	70	66	63	60	60

Final grades follow the UC Berkeley grading system:

To <u>view your final grade</u>, go to the UC Berkeley Extension page and login via the "My Enrollment History" link.

Written assignments are graded based on their content, organization, and mechanics and are worth a total of 10 points each. Please keep the following criteria in mind:

Quality of Written Assignments	Poor	Needs Improvement	Meets Expectations	Exceptional
Content (4)	Poor writing style with little or no specific details, no evidence of having studied the material, and/or off topic.	Adequately written; some points elaborated but with minimal use of concepts from the material.	Well written, most points elaborated with clear and detailed information that supports thoughts and ideas and uses concepts from the material.	Well written and original, fully elaborates points. Clear and detailed information supports thoughts and ideas and shows full acquisition of concepts from the material.
Organization and Mechanics (3)	Little or no structure present. Grammatical errors interfere with comprehension.	Organization present but awkward. Some grammatical errors present.	Good organization with few statements out of place. Minor grammatical errors.	Clearly organized and remains focused. Few or no grammatical errors.

Quality of Written Assignments	Poor	Needs Improvement	Meets Expectations	Exceptional
Evidence & Analysis (3)	There are no citations or all are listed incorrectly. Analysis of evidence has no relationship to the topic and the writing does not attempt to relate.	Minimal use of proper citations and/or reference styles inconsistent. The analysis of evidence stretches its meaning to support the paper.	Most points are clearly cited properly, references are almost always appropriate, and a consistent reference style is used. The analysis explains how the evidence supports the paper and meets the assignment guidelines in most cases.	Points are cited properly, references are appropriate, and a consistent reference style is used. The analysis shows a strong relationship between the evidence and assignment concepts.

Your participation in Discussion Assignments will be evaluated as follows:

Quality of online discussion	Poor	Needs Improvement	Meets Expectations	Exceptional
Characteristics of posted messages	Messages are either missing or reflect almost no evidence of having attempted to address the discussion prompt.	Messages attempt to address the prompt, but reveal clear shortcomings: e.g., partially incomplete, limited to repetition of course materials, display only superficial understanding and thought, etc.	Messages fully address all aspects of the discussion prompt.	In addition to fully addressing the prompt, messages exceed expectations: e.g., uniquely insightful contributions, critical reflection, strong connections to other posts and course content, integration of outside materials and experiences, etc.

# **Course Policies – Promptness**

Assignments, reading question submissions, module quizzes, discussion forum postings, and exams all have specific final due dates and times. You will not receive full credit if items are submitted after the indicated due date.

## **Late Work Policy**

It is your job to complete class readings, assignments, and writings on time. All assignment due dates are listed in the course Calendar, and you are expected to work on only that week's assignments. You may not lag behind or work ahead. Instructors have up to 1 week to grade and return assignments. The instructor must approve any late work ahead of time.

Each online activity must be submitted through the course website by the due date. Fax or email submission will not be accepted. Students who wait until the final hours prior to a submission deadline risk having problems with their ISP, hardware, software, or various other site access difficulties. Therefore, it is advisable to submit assignments and tests through the course website early. The multiple days allowed for submission are to accommodate the busy schedules of working professionals, not to accommodate procrastination. Students should plan accordingly and get into the habit of checking the course website several times each week, and submitting and posting early.

### Honor Code

The student community at UC Berkeley has adopted the following Honor Code: "As a member of the UC Berkeley community, I act with honesty, integrity, and respect for others." The expectation is that you will adhere to this code.

#### **Collaboration and Independence**

Reviewing lecture and reading materials and studying for exams can be enjoyable and enriching things to do with fellow students. This is recommended and peer-to-peer discussion sections are available for this purpose. However, unless otherwise instructed, homework assignments, quizzes, and exams are to be completed independently and materials submitted should be the result of one's own independent work.

#### Cheating

Anyone caught cheating on a quiz or exam in this course will receive a failing grade in the course and will also be reported to the University Center for Student Conduct. Exams are to be completed without the assistance of other people, and without reference to texts, notes, and other materials. The expectation is that you will be honest in the taking of exams.

#### Plagiarism

To copy text or ideas from another source without appropriate reference is plagiarism and will result in a failing grade for your assignment and usually further disciplinary action. For additional information on plagiarism and how to avoid it, explore the resources linked below. Homework assignments will be submitted through plagiarism software.

- UC Berkeley Library Citation Page, Plagiarism Section
- GSI Guide for Preventing Plagiarism

# Incomplete Course Grade

Students who have substantially completed the course but for serious extenuating circumstances, are unable to complete the final exam, may request an Incomplete grade. This request must be submitted in writing or by email to the GSI and course instructor. You must provide verifiable documentation for the seriousness of the extenuating circumstances. According to the policy of the college, Incomplete grades must be made up within the first three weeks of the next semester.

# **Students with Disabilities**

Any students requiring course accommodations due to a physical, emotional, or learning disability must contact the <u>Disabled Students' Program (DSP)</u>. They will review all requests on an individual basis.

- Request your Disabled Student Program Specialist to send the instructor a formal request before the official course start date by email
- In addition, notify the instructor and your Online Learning Support Specialist, which accommodations you would like to use.
- You can contact your Online Learning Support Specialist by emailing: <u>summer\_online\_support@berkeley.edu</u>

# Academic Integrity, Research, and Proper Citation

As an online student, you are encouraged to reach out to your fellow students in the online classroom to discuss materials and ask each other questions, but there are limits to this collaboration. Reviewing lecture and reading materials and studying for exams can be enjoyable and enriching things to do with fellow students. This is recommended. However, unless otherwise instructed, homework assignments are to be completed independently, and materials submitted as homework should be the result of your own independent work.

As a UC Berkeley student you are bound by the <u>Academic Integrity, Research and Proper</u> <u>Citation policies</u> outlined in the <u>UC Berkeley Extension Code of Student Conduct Policy</u> <u>Statement</u> dated July 11, 2011 that clearly defines what constitutes cheating, as well as plagiarism and other forms of academic misconduct.

You must review all sections of the Academic Integrity Pledge and Course Policies Module within your Canvas course and complete the following item prior to gaining access to course content: Take the Pledge to Academic Integrity.

# **Course Evaluation and Course End Date**

# **Course Evaluation**

Before your course end date, please take a few minutes to participate in the **Course Evaluation** to share your opinions about the course.

The evaluation does not request any personal information, and your responses will remain strictly confidential. A link to the evaluation will be made available via bCourses on July 24<sup>th</sup>, 2018 and will be available until August 8th, 2018. You will also be emailed a link to the course evaluation.

- 1. To access the course evaluation via bCourses:
- 2. Enter the course in bCourses
- 3. Choose **Course Evaluation** from the left-hand navigation menu.
- 4. Complete evaluation and submit.

### **Course End Date**

Your access to the online classroom will expire on August 10<sup>th</sup> at midnight, which is indicated in the initial e-mail you received when you enrolled.

As you work through the course, please keep August 10<sup>th</sup> in mind, and if you want to save any commentary or assignments for future reference, please make sure to print or copy/paste those materials before your access ends.

# Canvas Tech Support and UC Berkeley Extension Student Services

## Canvas Tech Support

The learning management system (LMS) used in this course is Canvas, which has convenient mobile apps for phones and tablets. Part of the orientation materials in your course will help you make sure that your computer is at par with Canvas specifications. Any time you are in Canvas you can report problems, get support, and search Canvas user guides from the Help link on the top menu bar. If you are having technical difficulties please alert one of the GSIs immediately. However, understand that neither the GSIs nor the professor can assist you with technical problems. In your course, click on the "Help" button on the bottom left of the global navigation menu. **Extensions and late submissions will not be accepted due to "technical difficulties".** 

Other options:

- Canvas Support 24/7 Hotline: 855-308-2758
- Email: <u>support@instructure.com</u>

# **Course Outline**

### Week 1: Our Interaction with Food

This week we are going to introduce the biocultural framework that outlines how socioeconomic, physical, and sociocultural environments contribute to cuisine, diet, and ultimately, individual nutritional status. The biocultural framework will be used throughout the course as a method of analysis, and includes factors such as population-level differences, ideology, and social organization.

We will dissect food values in the United States, introduce the "decolonizing foodways" movement of Native Americans, and examine the importance that food played for African Americans in the civil rights movement. Additionally, Edible Education as a concept at Berkeley and beyond will also be discussed.

We will also use Scandinavia as an example of a specific culture's cuisine, paying attention to the research that surrounds salt intake and disease risk in both the United States and Scandinavia.

### Course Objectives Covered in this Module: 1, 3, 4, 5, 9, 11

### Learning Objectives

- Understand the biocultural framework that provides an outline for how the socio-cultural, economic, and physical environments impact food intake
- Recognize how food practices of different populations and the agro-industrial food system relate to the physical environment and other biocultural factors
- Discuss the relationship between sodium consumption, physical environment, sociocultural environment, and chronic disease risk in Scandinavia as compared to the United States
- Identify a few factors that have contributed to the current health status of the Native American population
- Identify critiques to the public conversation on obesity
- Discuss the concept of edible education at Berkeley and beyond

### Reading

- Thorough review of the NSTW104 Syllabus (you will be tested on it)
- Guthman, Julie. *The Food Police: Why Michael Pollan makes me want to eat Cheetos.* UTNE, 2008.
- Institute of Medicine. *Sodium Intake in Populations: Assessment of Evidence.* Report Brief, 2013.
- Kuhnlein H., *Receveur O., Dietary Change and Traditional Food Systems of Indigenous Peoples.* Annu Rev Nutr, 1996, pages 417-436.
- Petrini, C. Forging a New Global Network of Sustainable Food Communities, Terra Madre, 2010.
- Shute, *Cooking up Change: How food fueled the civil rights movement,* NPR, 2012.
- Taylor, Kevin. *Eating indigenously changes diets and lives of Native Americans,* Aljazeera, 2013.

#### Supplemental Reading

- Latham, Johnathan, *Why the Food Movement is Unstoppable*, Independent Science News, 2016.
- Strom, S, 7-Eleven Shifts Focus to Healthier Food Options. New York Times, 2012.

#### Lectures and Interviews

- The Biocultural Framework
- Scandinavia and New Nordic Cuisine

#### Videos and Podcasts

- Edible Education: External Factors Motivating Food Choices from 54:00-59:00.
- Edible Education-Fast Food Values Watch from 35:00-48:00.
- In The Black Panthers: Vanguard of the Revolution. Watch minutes 22:30-29:30.
- A Secret Civil Rights Kitchen, The Kitchen Sisters
- Edible Education and The Edible Schoolyard Project.
- Increasing perceived deliciousness of insects
- Visit Denmark New Nordic Cuisine

#### **Graded Assignments**

- Reading assignment: Post two questions related to reading and respond to two questions posted by another student.
- Discussion forum: Answer two prompts and respond to 2 answers posted by other students.
- Module quiz (15 questions, 30 minutes)
- Research Assignment 1 assigned: The Biocultural Framework of a Chosen Food

### **Discussion/Participation**

Answer weekly forum prompts and respond to 2 answers posted by other students

# Week 2: Evolution of the Human Diet

Are humans meant to eat meat? Think about what you have eaten so far this week--is it equally divided between vegetables, fruit, grain, meat, and other animal products or does it include only some of these food categories? This week we are going to explore why humans have evolved to eat what we eat, and how the role of cooking has possibly changed the way our brains developed. We will also begin to explore how culture defines our diet and the potential for the inclusion of foraging and wild foods in the context of our current food practices.

What we eat plays a large role in health and many of the diseases we see today are dietrelated. Unfortunately, there are many disparities in chronic disease rates and premature morbidity across cultures and social groups in the world. Explanations for these disparities have focused on socioeconomic inequality and related mechanisms as the causal factors, yet even when such factors are taken into account, unexplained racial gaps in health still exist.

Additionally, this module will introduce the role of the microbiome in regard to human health. How do differences in health of the microbiome link to ethnic and racial disparities?

This week's highlights: An interview on foraging with Phillip Stark, UC Berkeley's Associate Dean of the Mathematical and Physical Sciences division.

### Course Objectives Covered in this Module: 1, 3, 5, 6, 8, 9

### Learning Objectives

- Discuss how the food intake of humans has evolved over time and how the contribution of cooking and the agricultural and industrial revolutions have shaped who we are today.
- Explain our symbiotic relationship with the gut microbiome and its potential for the future of personalized nutrition.
- Describe the perspective of race as a biological category.
- Define "wild and feral" foods and, their benefits, and challenges to using them to their full potential.

#### Reading

- Leonard W., Robertson M. Evolutionary Perspectives on Human Nutrition: The Influence of Brain and Body Size on Diet and Metabolism. American Journal of Human Biology, 1994 pages 77-88.
- Manoff-Velasquez, Moises. How the Western Diet has Derailed our Evolution. Nautilus, 2015.
- O'Keefe, JH et al. Cardiovascular Disease Resulting From a Diet and Lifestyle at odds With Our Paleolithic Genome: Become a 21st Century Hunter-Gatherer. Mayo Clinic, 2004 pages 101-108.
- Pollan, M. Some of my Best Friends are Germs. The New York Times, 2013.
- Reynolds, G. Exercise and the Ever-smarter Human Brain. The New York Times, 2012.
- Roberts, D. Debating the Cause of Health Disparities. Cambridge Quarterly Healthcare Ethics, 2012, pages 332-34.
- Sonnenburg JL, Fischbach MA. Community Health Care: Therapeutic Opportunities in the Human Microbiome. Science Translational Medicine, 2011

### Supplemental Reading

• Sonnenburg, J. *The Extinction Inside Our Guts.* Los Angeles Times, 2016.

### Lectures and Interviews

• The Evolution of the Human Diet

- Agriculture and Industrial Revolutions
- The Cooking Hypothesis
- Foraging and Berkeley Open Source Food with Philip Stark

#### Videos and Podcasts

- Edible Education: Evolution of the Gut Microbiome (watch minutes 1:03 1:24)
- *Microbirth, the Origins of the Microbiome*(3:44-5:47 and 9:03-17:50)
- CNN's Dr. Gupta: 'Fruitarian' eats 25 lbs of fruit
- G-word Dumpster Diving

#### Graded Assignments

- Reading assignment: Post two questions related to reading and respond to two questions posted by another student.
- Discussion forum: Answer two prompts and respond to 2 answers posted by other students.
- Module quiz (15 questions, 30 minutes)
- Research Assignment 2 assigned: Nutrition Policy Perspective
- Foods Around the World Digital Group Project assigned

### Week 3: Nutrition Efforts, Policy, and Transparency in the U.S.

How is it that at one point in a person's life a food is considered to be a healthy part of the diet, and then at another point, the same food can be deemed detrimental to a person's health? Is it possible to view soda the same way as we view cigarettes? Are there differences in community characteristics and the purpose of food policy, particularly between large, urban, lower-income Latino and African American communities and smaller, suburban, relatively affluent majority-white communities? These are some of the questions we are going to try and answer this week. This week we are going to review how nutrition has changed over time--specifically nutrition recommendations and theories as well as food policies in the United States and their impact on different populations. We will begin to question why there are few widely known women and underrepresented minorities in the history of nutrition and the food movement. We will address the transparency in our current food system in the U.S. and its relationship with fair labor practices by examining the quality of life for the foodservice population and the immigrant Latino farmworker.

Some fun highlights this week: a guest lecture with Sophie Egan, where we will address "selling absence" in our food culture, and the interview with Kristine Madsen and Saru Jayaraman about food policy in the United States.

### Course Objectives Covered in this Module: 1, 3, 4, 5, 7, 9, 10, 11

#### Learning Objectives

- Understand how nutrition recommendations and theories on public health nutrition have changed over time and what diet trends reveal about who we are.
- Explore important historical food policies in the United States and their impact on different populations including those that eat the food and the people that get it to the table.
- Analyze why there are few widely known women and underrepresented minorities in the history of food policy.

#### Reading

- Barnhill A. Impact of excluding sweetened beverages from the SNAP program. American Journal of Public Health, 2011.
- Bittman, Mark. Stop Subsidizing Obesity. The New York Times, 2012.
- Bittman, Pollan and Salvador. How a national food policy could save millions of lives. The Washington Post, 2014.
- Carroll, Abigail. How Snacking Became Respectable. The Wall Street Journal, 2013.
- Confessore, How School Lunch Became the Latest Political Battleground. The New York Times, 2014.
- Egan, Sophie. Devoured: From Chicken Wings to Kale Smoothies How What We Eat Defines Who We Are. Harper Collins: NY, 2016.
- Garsd, Jasmine. Taking the Heat: Is foodie culture making room for female chefs? National Public Radio, 2015.
- Nixon, Laura. Fast Food Fights in sleepy villages and urban jungles: the importance of community characteristics and policy purpose over fast food zoning. American Journal of Public Health, 2015.
- Pollan, M. Why did the Obamas fail to take on corporate agriculture? The New York Times, 2016.
- Robinson, Jo. Breeding the Nutrition Out of Our Food. The New York Times, 2013.
- The Food Chain Workers Alliance. *The Hands that Feed Us.* 2012

### Supplemental Reading

- Price, Catherine. Vitamins Hide the Low Quality of Our Food. New York Times, 2015
- Ruhlman, Michael. No Food is healthy. Not even kale. The Washington Post, 2016

#### Lectures and Interviews

- A Brief History of Nutrition
- US Nutrition Efforts
- Guest Lecturer Sophie Egan: Selling Absence
- Interview with Kristine Madesen and Saru Jayaraman: The Importance of Nutrition and Food Policy

#### Videos and Podcasts

- Edible Education: The Promise of Transparency in the Food System. Watch minutes 8:30-25:00.
- Nutrient Guidelines Over Time
- Fighting for our Lives The United Farm Workers' 1973 Strike and the Wrath of Grapes. Watch minutes 12:15-15:45 and 23:30-36:30.
- Edible Education: Food workers and the Food System, watch 22:00 36:30.
- Miss Representation. Watch minutes 14:45-20:45.
- Edible Education: Food Policy and Action- The Future of Food

### Graded Assignments

- Reading assignment: Post two questions related to reading and respond to two questions posted by another student.
- Discussion forum: Answer two prompts and respond to 2 answers posted by other students.
- Module quiz (15 questions, 30 minutes)
- Research Assignment 1 due: The Biocultural Framework of a Chosen Food

# Week 4: Subsistence Strategies and the Sustainability of Modern Agriculture

Food intake is directly affected by attitudes and behaviors particular to locally situated cultures. What happens when people migrate? How do factors like globalization affect nutrition-related choices and health status? This week we will examine various subsistence strategies in both developing economies and industrialized nations and discuss the pros and cons of these strategies.

We will also be introduced to different methods of food production in industrialized nations, specifically in the United States, including industrial agriculture, organic agriculture, and genetically modified organisms (GMOs). The debate surrounding these methods is ongoing - how might different factors related to these practices play a role in nutrition, safety, fair treatment of humans and animals, sustainability, and food experience? What are some key characteristics of a diet that is optimally nutritious with minimal environmental burden? Where do the values and practices of nutritious and sustainable diets *not* overlap?

By highlighting group-based experiences of Latin-American farmworkers' that occur through exposure to particular farming and food system practices, we will examine the effects of industrial agricultural methods on the diet and health status of populations that often produce the food. Where do we see racial justice movements developing within such food system analyses and how do they fit within some of the emerging food justice platforms, such as 'food deserts' or 'non-GMO' foods? **Course Objectives Covered in this Module: 1, 2, 3, 4, 5, 6, 8, 9, 11** 

#### Learning Objectives

- Identify key characteristics of subsistence strategies for developing economies and industrialized nations and the pros/cons of each.
- Understand the effects of globalization on health status.
- Discuss the effects of agricultural food systems within a racial justice framework.
- Explain the debates surrounding different industrial agricultural methods and describe characteristics of a diet that is both nutritious and sustainable.

#### Reading

- Carrington, Clear differences between organic and non-organic food. The Guardian, 2014.
- Chang, Kenneth. Stanford Scientists cast doubt on advantages of organic meat and produce. The New York Times, 2012.
- Macdiarmid, J., Kyle, J., Horgan, G., & et al. Sustainable diets for the future: can we contribute to reducing greenhouse gas emissions by eating a healthy diet? The American Journal of Clinical Nutrition, 2012.
- Masumoto, David Mas. Working with Ghosts in the Field of American Agriculture. Food and Society Policy Fellows, 2008.
- McMillan, Tracie. 'Forked' Rates Restaurants on How They Treat Their Workers. NPR, 2016.
- ReFed. A Roadmap to Reduce U.S. Food Waste by 20 Percent. ReFed, 2017.
- Smith-Spangler, Crystal & et al. Are Organic Foods Safer or Healthier Than Conventional Alternatives? A Systematic Review. Annals of Internal Medicine, 2012.
- Verza, Maria. The "Coca-Colaization" of Mexico, the Spark of Obesity. Human Journalism, 2013.
- Vidal, John. UN warns of looming worldwide food crisis in 2013. The Guardian, 2012.

### Supplemental Reading

• Hawkes, Corinna. Uneven dietary development: linking the policies and processes of globalization with the nutrition transition, obesity and diet-related chronic diseases. Globalization and Health, 2006.

### Lectures and Interviews

- Subsistence Strategies in Developing Economies
- Industrialized Populations and the Sustainability of Modern Agriculture
- Concerns of Modern Industrial Practices and Alternative Strategies
- The Case for Sustainable and Equitable Food Solutions Max Cadji

### Videos and Podcasts

- Listen to or read Charles, D. Congress to Nutritionists: Don't Talk About the Environment.
- The Effects of Pesticides on Children

- Edible Education, The Hands that Feed Us. Watch 18:30- 29:45.
- The Just Food Podcast Episode 1: Harvesting Equitable Food.
- Cashing In on Imperfect Produce
- Becoming American Watch 4:45-7:00, 14:30-17:10 and 23:00-25:00.
- Polyface Farm
- Life of a Strawberry
- When fake super meat is better than the real thing

#### Graded Assignments

- Reading assignment: Post two questions related to reading and respond to two questions posted by another student.
- Discussion forum: Answer two prompts and respond to 2 answers posted by other students.
- Module quiz (15 questions, 30 minutes)
- Research Assignment 2 due: Nutrition Policy Perspective
- Research Assignment 3 assigned: A Menu for Change
- Foods Around the World Digital Group Project Sign-Up deadline

# Week 5: Food in the Family, Religion, and Healthcare

Sir William Osler (physician and writer), claimed, "It is more important to know what sort of patient has a disease, than what sort of disease has a patient." When applied to nutrition, this quote is particularly poignant, as food and diet are a big part of who we are. As we have learned, our diet is controlled in part by external forces--food access and availability, nutrition policy, and family, religious, and cultural ideological views surrounding food, etc. This week, we will pick up the pace and address many interesting concepts that impact diet and, in turn, nutritional status.

We will move through the effects of family food habits, review factors affecting diet in childhood, and cover generational dietary differences by looking at the Baby Boomer and Millennial generations. Importantly, this week we will be looking closely at the benefits of breastfeeding--highlighting beliefs surrounding breastfeeding in developing economies vs. the United States.

We will examine religious food practices and nutritional status, while learning about different religious groups and how they are connected through dietary habits. We will discuss cultural competency in nutrition practice and how integrative nutrition and Eastern medicine can play a role in our western-centric medical paradigm, even when the individual is removed directly from those cultures.

We will also discuss how ethnicity defines appropriateness of diet, nutrition-related health beliefs among U.S. immigrant and minority populations such as Latino, African, and Chinese-Americans, and how dietary patterns change with acculturation. How might culturally appropriate nutrition education and counseling help to effectively address nutrition-related disease prevention?

In one resource, we will take a look at the development of soul food as an American cuisine and its strong interaction with African American culture. How might soul food and other culturally embedded cuisines play a role in diet-related diseases? How might they play a role in cultural identity and positive change?

### Course Objectives Covered in this Module: 1, 3, 5, 7, 8, 9, 10, 11

### Learning Objectives

- Identify nutrition-related traditional health beliefs and how these affect food intake, with a specific focus on U.S. immigrant and minority populations and impact of acculturation.
- Examine how religious perspective connects with dietary habits and consider how this might lead to stigmatization or stereotyping.
- Discuss how integrative nutrition and Eastern medicine can play a role in our western-centric medical paradigm.
- Describe the pros and cons of breastfeeding from a nutritional and social perspective and explain how ideological beliefs of different populations might affect decisions surrounding breastfeeding.
- Recognize the importance of cultural competency and cultural sensitivity in nutrition practice.
- Reflect on how group dynamics of generational trends impact food practices of the individual.
- Explain how mindful eating might be a useful strategy in nutrition practice and health.

### Reading

- Academy of Nutrition and Dietetics. *Practice Application Paper. Cultural Competency: Where It Is and Where It's Headed.* Journal of the American Dietetic Association, 2009.
- Anderson-Loftin, W. et al. *Soul Food Light: Culturally Competent Diabetes Education*. Sage Publications, 2005.
- Kristoff, N. *The Breast Milk Cure*. New York Times, 2011.
- Leschin-Hoar, C. *Slice the Price of Fruits and Veggies, Save 200,000 Lives?* NPR, 2016.
- Lynch E., Kane J. *Body Size Perception Among African American Women*. Journal of Nutrition Education and Behavior, 2014.
- McDonald, C. *The Breast Milk Gap*. New York Times, 2016.
- Mushkin, S. et al. *Trouble in Aisle 5*, Jeffries Alix Partners, 2012. Read Exec. Summary (pages 1-6).
- Nan LV., et al. *Dietary Pattern Change and Acculturation of Chinese Americans in Pennsylvania*. American Diabetes Association, 2004.

- Otokiti, et al. *Impact of Acculturation and Diverse Ethnomedical Beliefs on Health care Delivery to recent New York Immigrants*. Journal of Medical Education Perspectives, 2014.
- Patwardhan, B. et al. *Ayurveda and Traditional Chinese Medicine: A Comparative Overview*. Oxford University Press, 2005.
- Perez-Escamilla, R. *Acculturation, nutrition, and health disparities in Latinos*. American Journal of Clinical Nutrition, 2011.
- Timmerman, G., Brown, A. *The Effect of Mindful Restaurant Eating Intervention on Weight Management in Women.* Journal of Nutrition Education and Behavior, 2012.
- Yong, E. *Breastfeeding the Microbiome*. The New Yorker, 2016.

#### Supplemental Reading

- Batis C., et al. Food Acculturation Drives Dietary Differences among Mexicans, Mexican Americans, and Non-Hispanic Whites. The Journal of Nutrition, 2011.
- Kesmodel, D. Hummus is Conquering America. Wall Street Journal, 2013.
- Kraft, Dina. Jewish and Muslim, Bonding Over Dieting. The New York Times, 2013.
- Kuruvila, K. Mormon Food Bank a Private Welfare System. SF Gate, 2009.
- Lynch, G. For Centuries These Asian Recipes Have Helped New Moms Recover from Childbirth. NPR, 2017. (Links to an external site.)Links to an external site.
- Rosin, Hanna. The Case Against Breast-Feeding. The Atlantic, 2009.
- Shatenstein B., Ghadirian, P. Influences on Diet, Health Behaviours, and Their Outcome in Select Ethnocultural and Religious Groups. Nutrition, 1998.

#### Lectures and Interviews

- Food in the Family and Across Generations-
- Religious Food Practices Integrative Nutrition Strategies

### Videos and Podcasts

- Soul Food Junkies. Watch: 0-5:30, 10:00-15:15, 21:00-29:00, 35:15-42:30
- The Wisdom and Science of Traditional Diets. Watch from 4:45-22:45.
- *Mindfulness Movie* Watch from 41:00-44:58.

### Graded Assignments

- Reading assignment: Post two questions related to reading and respond to two questions posted by another student.
- Discussion forum: Answer two prompts and respond to 2 answers posted by other students.
- Module quiz (15 questions, 30 minutes)
- Midterm Exam due (40 questions, 2 hours)

# Week 6: Socioeconomics, Hunger, and Food Security

The USDA defines a food environment in its <u>Food Environment Atlas</u> as, "factors such as store/restaurant proximity, **food** prices, **food** and nutrition assistance programs, and community characteristics and how they interact to influence **food** choices and diet quality."

With that definition in mind, how does our food environment contribute to what we eat? What disparities exist between food environments and cultures? Does the food environment affect low-income and high-income communities in the same way? Some of these questions are easier to answer than others.

This week we will examine how factors such as the food environment, including socioeconomic status and access, affect diet and how this can contribute to food insecurity. Food insecurity may develop when certain environmental conditions are not met. We will define food insecurity and discuss what disparities are observed between different cultures and communities when comparing rates of food insecurity and access to healthy food.

When both under- and over-nutrition are present, a "paradox of obesity" exists. We will be looking at the double burden of malnutrition more closely, specifically how obesity and micronutrient deficiencies can co-exist. Additionally, the United States has a varied mix of populations, but why do the minorities, specifically African American and Latino American, suffer from health disparities in greater numbers than those of European descent?

### Course Objectives Covered in this Module: 1, 3, 5, 6, 9, 11

#### **Learning Objectives**

- Define the characteristics of food insecurity.
- Examine how the food environment and socioeconomic factors contribute to diet.
- Discuss the disparities that exist between cultures and access to healthy food.
- Identify influences and potential solutions for world hunger.
- Explain the double burden of malnutrition and reasons for its rise in developing economies.
- Identify influences and potential solutions for world hunger.

#### Reading

- Block J., et al. *Fast Food, Race/Ethnicity, and Income.* American Journal of Preventive Medicine, 2004.
- De Vogil R., et al. *The influence of market deregulation on fast food consumption and body mass index: a cross-national time series analysis*. Bull World Health Organ, 2014.
- Jernigan, V., et al. Food Insecurity and Obesity Among American Indians and Alaskan Natives and Whites in California. Journal of Hunger and Environmental Nutrition, 2013.

- Hazel, AB H., et al. *Diet Quality of Americans Differs by Age, Sex, Race/Ethnicity, Income, and Education Level.* Elsevier Inc on behalf of the Academy of Nutrition and Dietetics, 2013.
- Pinsker J. Why So Many Rich Kids Come to Enjoy the Taste of Healthier Foods. The Atlantic, 2016.
- Flournoy, Rebecca, Healthy Food Healthy Communities: Promising Strategies to Improve Access to Fresh, Healthy Food and Transform Communities, PolicyLink, 2011.
- Read ONLY the Preface and Executive Summary, pages 5-9.
- Sanger-Katz, Margot. *Giving the Poor Easy Access to Healthy Food Doesn't Mean They'll Buy It*, New York Times, 2015.
- TNN, Nutrition rank gives food for thought. The Times of India, 2016.
- Walker, R., et al. *Disparities and access to healthy food in the United States: A review of food deserts literature.* Health & Place, An International Journal, 2010.

### Supplemental Reading

• Gardiner B. A Road Map for Eradicating World Hunger. The New York Times, 2015.

### Lectures and Interviews

- Guest Lecturer Laura Vollmer: The Food Environment and Socioeconomic Status
- Hunger and the Global Double Burden of Malnutrition -
- Interview with Ruben Canedo Sanchez: Food Insecurity on College Campuses and Beyond

### Videos and Podcasts

- Watch and compare CBS documentary, "Hunger in America" (1968) Watch 0:00 12:30 and The National Geographic piece, "The New Face of Hunger".
- Edible Education: Feeding the 9 Billion. Watch 18:30 35:00.
- Edible Education conversation with Michel Nischan. Watch 23:45-37:00, 43:00-53:30.
- "Vegetables or medicine?" from Food, Inc.
- In Sickness and in Wealth, watch 0-7:00, 19:00-23:30, 47:30-54:00.
- Podcast from the Kitchen Sisters, "King's Candy: A New Orleans Prison Vision"

### Graded Assignments

- Reading assignment: Post two questions related to reading and respond to two questions posted by another student.
- Discussion forum: Answer two prompts and respond to 2 answers posted by other students.
- Module quiz (15 questions, 30 minutes)
- Research Assignment 3 due: A Menu for Change
- Research Assignment 4 assigned: Taking Action in the Food Movement

• Foods Around the World Digital Group Presentation final poster due

# Week 7: Marketing, Labeling, and Food Entrepreneurship

When walking down the aisle of your favorite grocery store or market (or perhaps virtually scrolling your online food-market of preference), what do you notice? Is everything nicely stocked with labels facing outward for you to see? Do you have specific brands that you tend to gravitate toward when you shop, or do you shop local, at small stores or farmers' markets?

This week we will analyze food marketing and labeling tactics and their connection to the foods we choose to eat. How do these factors influence our perception of foods, both psychologically and physiologically? We will try and answer questions about the impact of food marketing in America and briefly touch on how marketing contributes to America's obsession with physical beauty and perfection, often leading to negative body image and unhealthy eating habits.

Food preferences are highly individualized - the food industry is very aware of this fact and uses it to its advantage. In our analysis of marketing, we will examine whether or not industry's advances are targeted to certain vulnerable populations, such as children and those living in unhealthy food environments and/or with lower socioeconomic status. How does targeted marketing connect to health disparities? Additionally, we will begin to explore the ideas behind food entrepreneurship, the opportunities involved with becoming a food entrepreneur, and current trends in the food industry. What ideals from class such as social justice and environmental sustainability do you see (or wish to see) exemplified in current businesses in the food industry?

### Course Objectives Covered in this Module: 1, 3, 5, 7, 9

### Learning Objectives

- Describe how marketing and labeling impact food choices and perception.
- Provide examples of using food labeling effectively and proposals for updates to our current nutrition labeling system.
- Discuss possible reasons for why our food preferences are so highly individualized.
- Identify principles of behavioral economics and examples of using these tactics for better health.
- Describe the "4 P's" of marketing and provide examples of creative marketing tactics in the food industry.
- Define targeted marketing and how this practice may contribute to health disparities.
- Discuss food entrepreneurship trends in the modern era.

#### Reading

- Graff, Samantha et al. Government Can Regulate Food Advertising To Children Because Cognitive Research Shows That It Is Inherently Misleading. Health Affairs, 2012.
- Grier S., Kumanyika, S. The Context for Choice: Health Implications of Targeted Food and Beverage Marketing to African Americans. American Journal of Public Health, 2008.
- Just D. and Wansink B. Smarter Lunchrooms: Using Behavioral Economics to Improve Meal Selection. Choices. 2009.
- Mikkelsen, L. et al. Where's the Fruit? Fruit Content of the Most Highly-Advertised Children's Food and Beverages. Prevention Institute, 2007.
- Nassauer, S. The Psychology of Small Packages. The Wall Street Journal, 2013.
- Powell L., et al. Racial/ethnic and income disparities in child and adolescent exposure to food and beverage television ads across the U.S. media markets. Health & Place. 2014.
- Rosenzweig, W. How Foodpreneurs are reinventing your kid's school lunch. Fortune.com, 2015.
- Tavernise, S. Calories on Menus: Nationwide Experiment Into Human Behavior. The New York Times, 2014.
- Turnwald B., et al. Association between indulgent descriptions and vegetable consumption: Twisted carrots and dynamite beets. Jama Internal Medicine, 2017.

#### Supplemental Reading

- Case, S. The Future of Food is Food. Recode, 2015.
- Schwartz, A. This startup is making real meatballs in a lab without killing a single animal. Business Insider, 2016. (Links to an external site.)Links to an external site.
- Wansink, B. How Do Front and Back Package Labels Influence Beliefs About Health Claims? The Journal of Consumer Affairs, 2003.

#### Lectures and Interviews

- Food Preferences and Labeling
- Marketing Tactics
- Interview with Will Rosenzweig: Food Entrepreneurship in the Modern Era

#### Videos and Podcasts

- Broccoli Makeover.
- Mind Over Milkshake.
- Where Calories Are Hiding.
- America the Beautiful. Watch from 21:30-24:30 and 1:25:15- 1:38:45.
- Food on the Brain. Watch from 0 8:00.
- Edible Education clips with Paul Shapiro from PETA and Gary Hirshberg from Stonyfield Farm. Watch 1:16:00 1:26:45 and 1:28:30-1:42:45.

• **Optional**: Edible Education: Entrepreneurship, Food, and Technology with Megan Mokri

#### Graded Assignments

- Reading assignment: Post two questions related to reading and respond to two questions posted by another student.
- Discussion forum: Answer two prompts and respond to 2 answers posted by other students.
- Module quiz (15 questions, 30 minutes)
- Foods Around the World Digital Group Project interaction due

# Week 8: Sensory Experience and the Future of the Food Movement

If a person working in a grocery store told you, "Food is an art and a science," would you know what they meant by that statement? Would it make more sense coming from a chef or a cook?

In this module, we will discuss how the concepts of food as art and food as science intertwine. Through an exploration of the sensory experience, and how to manipulate the sensory experience, we begin to understand how large food corporations may have us hooked into buying certain foods. Perhaps it's a type of cookie we can't stop eating or a salad we can't recreate at home--it's safe to say we have all experienced these kinds situations at some point in our lives.

Then we will ask questions like, how is this knowledge used to increase sales of unhealthy foods and how can it be harnessed to fuel positive change for all populations? What about fueling positive change specifically for populations that have been marginalized? Our genetics play a large role in food preferences and disease risk, but do they outweigh environmental factors?

At the end of this course, we will take another hard look at race, class, and history in the analytical scope of food movements. How can the food movement in the United States fully embrace justice? How are people organizing on an everyday basis to create healthy, sustainable, affordable, and culturally appropriate foods for all? We will recap concepts discussed in lecture and aspects of the biocultural framework as they relate to the development and our perception of the current food movement. We will specifically focus in this last week on how the diets of those first to the America, Native Americans have changed over time – what has contributed to the current health status of the Native American population, particularly the Pima, Tohono O'odham, and Alaskan Native tribes, and how are movements connecting culture and indigenous foods to nutritional well-being and food justice?

### Course Objectives Covered in this Module: 1, 3, 5, 10

#### Learning Objectives

- Describe how food and cooking are both an art and a science.
- Discuss the racial disparities in the local food movement.
- Explain the complexity of cultural appropriation in the culinary world.
- Discuss what action you can take to help move the food system in a positive direction.
- Discuss how people are organizing on an everyday basis to create healthy, sustainable, affordable, and culturally appropriate food for all.
- Examine the indigenous food movement of Native American populations and how it relates to history and current health status.

#### Reading

- Allen, P. *Realizing justice in local food systems.* Cambridge Journal of Regions, Economy, and Society, 2010.
- Berry, W. Wendell Berry: The Pleasures of Eating. Center for Ecoliteracy, 2009.
- Bouzari, A. *Ingredient*. Ali Bouzari, 2016. Read pages 8-13.
- Carman, T. Should white chefs sell burritos? A Portland foodcart's revealing controversy. Washington Post, 2017.
- Drewnowski A., Gomez-Carneros C. *Bitter taste, phytonutrients, and the consumer: a review.* American Journal of Clinical Nutrition, 2000.
- Guthman J. Bringing good food to others: investigating the subjects of alternative food practice. Cultural Geographies, 2009.
- Moss, M. *The Extraordinary Science of Addictive Junk Food.* New York Times, 2013. Read pages 1-10.
- Nosrat, Samin. *The Single Most important Ingredient*. The New York Times, 2017.
- Rasmussen, K. *Calibrating Flavour part 1: measuring the sense in a fast paced world*. Nordic Food Lab, 2015.
- Rosen, Y. *Shift from traditional foods takes toll on Alaska Native populations.* Anchorage Daily News, 2016.
- Schulz, L.O., et al., *Effects of Traditional and Western Environments on Prevalence of Type 2 Diabetes in Pima Indians in Mexico and the U.S.* American Diabetes Care, 2006.
- Severson, K. *Chefs Struggle Over Whether to Serve Up Politics.* New York Times, 2017.

#### **Supplemental Reading**

- Alkon, A. & McCullen, G. Whiteness and Farmers Markets: Performances, Perpetuations...Contestations?Antipode, 2010.
- Bond, S. Who owns a recipe? Race, food, and the debate over cultural appropriation. Forbes, 2017.
- Rasmussen, K. Calibrating Flavour part 2: formulae for deliciousness. Nordic Food Lab, 2015.

#### Lectures and Interviews

- The Sensory Experience
- The Food Movement in the United States
- Interview with Ali Bouzari: The Art & Science of Food

#### Videos and Podcasts

- Edible Education: A Delicious Revolution 1:01:15 1:11
- For Native Americans in Minnesota, Food is a sign of oppression
- The effects of sugar and the Western Diet on Native American population from *Bad Sugar*. Watch 2:40-11:21,15:20-18:38, and 24:46-26:40.
- Fresh: Sustainable Food Production in America Watch 41:37-50:06.
- CNN interview with Dan Barber
- Seitu Jones and Create: The Community Meal

#### Graded Assignments

- Reading assignment: Post two questions related to reading and respond to two questions posted by another student.
- Discussion forum: Answer two prompts and respond to 2 answers posted by other students.
- Module quiz (15 questions, 30 minutes)
- Research Assignment 4 due: Taking Action in the Food Movement
- Foods Around the World Digital Group Presentation peer evaluation due
- Final Exam (40 questions, 2 hours)

### Final Exam

The final exam will be held on Wednesday August 8<sup>th</sup> from 8:00am − 10:00am. See bCourses for further details.