

**Food and Nutrition Programs and Policies  
in Low- and Middle-Income Countries  
(PH 206D)**

**UC Berkeley, School of Public Health  
Fall 2019, 3 units**

**Meetings  
Location**

**Wednesdays 2-5pm  
1213 BWW**

**Instructor**

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**Office Hours:** Thursdays 12:30-2pm (starting Sept 3) at 6132 Berkeley Way West. **These are not drop-in hours.** You need to sign up for appointment in advance at <https://www.wejoinin.com/sheets/kfwri>. **NOTE:** If you sign up for an appointment, please make sure to come to it. It is okay to cancel, but please cancel as far in advance as possible (at least 24 hours) and make sure to remove your name from the wejoinin website so that someone else can have your slot.

## Goals and objectives

This course will use a case-based approach to examine the ways in which governments in developing countries design and implement policies and programs that affect food production and access to safe, affordable, and nutritionally adequate diets. In the course we will analyze, assess, and evaluate ways to take action to ameliorate the major nutritional problems facing vulnerable populations in developing countries. We will cover nutritional deficiencies (macro- and micronutrients), the role of nutrition in infectious diseases, and the impact of nutrition throughout the lifespan (pregnancy, infancy, childhood and adulthood). It will also address how stakeholders in the food system—consumer, health, industry, government, and other groups—interact with each other to affect policy design and implementation; the historical, social, economic, environmental, and political factors that determine stakeholder positions on policy issues; and the ways in which these factors promote or act as barriers to achieving a functional and sustainable food system that promotes optimal food, nutrition, and health.

Upon completing this course, students will be able to:

1. Identify the prevalence and trends of public health nutrition issues faced by mothers and children living in developing countries, ranging from undernutrition to overweight and obesity.
2. Discuss political, environmental, cultural, and socioeconomic factors underlying a wide range of nutrition issues in developing countries.
3. Identify the ways in which historical, social, cultural, economic, commercial, and institutional factors promote or act as barriers to the design and implementation of agriculture, food, and nutrition policies and programs, and the ways in which these policies and programs affect health.
4. Integrate knowledge of nutritional issues and policy levers to analyze methods through which stakeholder groups affect the design and implementation of food and nutrition policies.

These objectives will allow students to gain the following competencies:

- Critical analysis of issues in public health nutrition relating to the context of a developing country;
- Understanding of the biological and social roles of nutrition in health, particularly as they relate to issues of poor nutrition in a global context;
- Demonstration of effective organizational skills and the ability to communicate with and enlist the support of potential participants and stakeholders; and
- Participation in making policy related to health and nutrition within services, programs, and projects.

## Course texts

### **Required**

Leathers, H.D. and Foster, P. *The World Food Problem: Toward Ending Undernutrition in the Developing World*. 5<sup>th</sup> edition. Lynne Rienner Publishers, 2017.

### **Recommended**

Brown JE, Isaacs J, Krinke UB, Lechtenberg E, Murtaugh M. *Nutrition through the Life Cycle, Sixth Edition*. 2017.

***Copies of the required texts will be on 2-hour reserve at the Sheldon Margen Public Health Library. Copies for purchase available at the Cal student store.***

You must also enroll in on-line training course “Programming for Infant and Young Child Feeding; Topic 1: Essentials of IYCF & Topic 2: Programming”, prepared by UNICEF and Agora <https://agora.unicef.org/course/view.php?id=16009&section=2>

### **Course management**

The course will run on the UC Berkeley bCourses system; course handouts, announcements, correspondence, and other class matters are online. You should check the site regularly to obtain updated course information.

### **Newspapers**

Students are expected to read a national daily newspaper influential in policy matters—the *New York Times* ([www.nytimes.com](http://www.nytimes.com)), *Wall Street Journal* ([www.wsj.com](http://www.wsj.com)) or *Washington Post* ([www.washingtonpost.com](http://www.washingtonpost.com)) - as a basis for discussion of policy events as they occur and in order to see how these papers cover such events in comparison to coverage in other outlets.

### **Reference websites**

- Nutrition Country Profiles (The World Bank) – provide excellent summary information on the extent, causes, and costs of malnutrition for 36 countries identified as accounting for 90% of the world’s stunted children, and 32 smaller countries with prevalence of stunting and/or underweight greater than 20%: [Nutrition Country Profiles](#).
- WHO’s website for health and nutrition, which has a lot of interesting information about nutrition in the developing world: [www.who.int/nut](http://www.who.int/nut).
- WHO’s eLENA (e-Library of Evidence for Nutrition Actions) website has updated guidelines, recommendations, and information for nutrition interventions: <http://www.who.int/elena/en/>.
- The International Food Policy Research Institute website ([www.ifpri.org](http://www.ifpri.org)) is frequently updated with readings relating to international nutrition and related policies.
- UNICEF’s website: [www.unicef.org](http://www.unicef.org).

- CODEX alimentarius, FAO/WHO food standards: [http://www.codexalimentarius.net/web/index\\_en.jsp](http://www.codexalimentarius.net/web/index_en.jsp).
- USDA Nutrient Database provides information on nutritional content of specific foods: <http://ndb.nal.usda.gov/>.
- FAO's International Network of Food Data System (INFOODS): <http://www.fao.org/infoods/infoods/en/>.
- *Food and Nutrition Bulletin* produced by the Nevin Scrimshaw International Nutrition Foundation and United Nations University: <http://inffoundation.org/publications/fnb.htm>.
- Development Impact blog at the World Bank: <http://blogs.worldbank.org/impacetevaluations/>

## Classroom expectations

### ***Attendance Policy***

- Class begins on time: please arrive on time (if you arrive more than 10 minutes late, you will be considered absent).
- Attendance is required. Because your active participation is required in this class, you may not have more than 2 unexcused absences; absences will be excused for a health or personal emergency. If you miss class, please provide a reason for your absence and email the professor or reader within 48 hours of your absence to discuss how you can make up the coursework.
- Please note, that as governed by UC policy, students with conflicts with any assignment due dates or other scheduling concerns are responsible to notify the professor in writing by the second week of the semester (before September 6) of any potential conflict(s) and to recommend a solution, with the understanding that an earlier deadline or date of examination may be the most practicable solution. Complete guidelines are available on the Academic Senate website: <http://tinyurl.com/schedconflictguidelines>

### ***Electronics Policy***

- Turn off all cell phones and electronic devices. No texting or emailing is permitted in class.
- Laptops are not permitted in class. (Here's why: <http://www.vox.com/2014/6/4/5776804/note-taking-by-hand-versus-laptop>)

### ***Policy for Late Assignments***

- Please complete assigned work on time.
- Most late assignments will receive a **zero**.
- For every day that you are late in turning in written work for the final project, **a full letter grade will be deducted from your final project grade**.

### ***Communications Policy***

- Before emailing the professor or reader, please be sure to consult the course syllabus to see if your question can be answered.

- While procedural questions (i.e. yes/no) may be answered over email, please avoid asking content questions over email. Instead, please raise these questions in class or office hours where others will benefit from hearing the answer.
- Please be advised that questions asked within 24 hours of a due date may not receive an answer prior to that date.

### **Other**

- Complete required reading in advance of assigned class periods.
- Check bCourses regularly for messages regarding class assignments and scheduling.
- Your voice matters: participate!

### **Written work**

Formatting requirements for all written work:

- Clearly marked with your name and student ID
- Titled with the topic of your paper, double spaced
- All text, double spaced
- 12 pt font
- Times New Roman, Cambria or Calibri Font
- 1-inch margins
- Do not exceed space or word limits
- Work must be written clearly; please use grammar and spell checks.

### **Evaluation**

Attendance, participation*	20%
Written analysis of case study**	30%
Oral presentation of case study**	30%
Brief case write-ups in class – 2 assignments (5% each)	10%
UNICEF/Cornell online learning session quizzes	10%

*\* Your attendance/participation grade will include both an evaluation by the instructor and a self-assessment examining how often you did the reading, how much you participated, how many days were you late, how many classes you missed, etc.*

*\*\* Oral presentation and written analysis should be of two different case studies. Although it may be tempting to select cases from countries where you have a familiarity with the context, culture, etc., or on topic areas that are familiar, it is also important that you stretch yourself in countries/topics that are less familiar to you.*

## Assignments

The class will be **case-based**, which means that each week – beginning in the 4<sup>th</sup> week of the semester – there will be discussion of a case study relating to a nutrition/food policy issue in a developing country. The expectation throughout the semester is that you will read the cases in anticipation of class.

***There are two assignments related to the cases:***

- **Oral presentation.** On the second or third week of class, you will select a case for oral presentation. For one of the cases that you select, you will be responsible for presenting the material to the class and leading the discussion. You will do this by yourself, or with one or two other students, depending on the number of students in the class.
- **Written report.** For another case, you will be responsible for preparing a written analysis, due at or near the end of the semester.

### 1. Oral presentation of case

Description of assignment: An **oral presentation** (individual or in pairs depending on how many students are enrolled in the class) of the case is required from each student and should include the background of the case, key issues raised in the case, a stakeholder analysis, and a review of relevant issues (see below for sections recommended to be included in all case analyses). The presentation of the cases is scheduled to correspond with the topics covered in any given week, and will be linked to the reading assigned for the same week. The oral case report should not simply be a review of the existing case, because the expectation is that students will have read the case. The oral presentation will be graded on comprehensiveness of the case review, thoughtfulness of the case analysis, incorporation of themes of course, and integration of issues raised by the case with class readings and issues.

Length & Format: The presentation will be **30-45 minutes** (depending on number of students in the class), and must include a **didactic portion**, estimated to last no longer than 50% of the time allocated, and an **interactive portion** for the remaining 50% of the time. These guidelines are likely to change according to the number of students in the class.

- The **didactic presentation** of the case could include a brief summary of the problem, some background and contextual information (e.g. social, cultural, economic), and other important information, such as key stakeholders and their interests, media coverage, historical context or other relevant material. You can use PowerPoint or Prezi for the didactic portion of the presentation if you want, but this isn't required.
- The **interactive portion** of the presentation is a chance to actively engage the class in key issues raised by the case study. This is your opportunity to be creative! Examples of possible formats for the interactive portion include organizing a class debate, designing a role play activity, organizing small group discussions followed by a class debriefing, designing a game that emphasizes key points in the case study, or other options – your choice!

References: State the sources you used for this project on the last slide of your presentation. If you are choosing not to use Powerpoint or an equivalent program for the presentation, please print out

a copy of your references to distribute to the class. If you are using Powerpoint or an equivalent presentation program, it is expected that you will upload your presentation to bCourses after the day that you present.

Additional topics: There are many topics not covered in class that would be great topics for a case presentation! If you would like to present a case that is not in the syllabus, please confer with instructor to figure out the best day to schedule the presentation.

Grading: The oral report will be graded on comprehensiveness and thoughtfulness of the case analysis, integration of issues raised by the case with class readings and issues, integration of the interactive portion of the class with the didactic, and engagement in the interactive portion of the class. Your grade will reflect both parts of the presentation.

## **2. Written case report**

Description of assignment: The purpose of this assignment is to critically review a case of your choice. To review the case, you will be expected to conduct a case analysis (as described below), as well as to extend your analysis of the case beyond what is presented in the case to further explore a topic of interest as it relates to the case chosen. In doing this, you will be expected to integrate what you have learned in class and through course readings to broaden your commentary on the case and potential solutions. In this format, the case analysis should be concise, approximately 2-3 pages, with your extended analysis allowing you to delve more deeply into a related topic in the remainder of the paper. The written case report should not simply be a 10-page review of the existing case.

Alternatively, you may write your own case study. If you choose this option, you will select a problem and location of interest and create sections analogous to the other case studies read in class (i.e. Executive Summary, Background, Policy Options, etc.) for your topic. A good model to follow will be the model used in the Cornell Food Policy cases, many of which we read during the semester.

Length & Format: Limited to **ten** pages. Double-spaced, font 11 or 12, one-inch margins. Please use grammar and spell checks and do not exceed space or word limits.

References: State the sources you used for this project as you would in an original paper, using the style for the American Journal of Public Health. You are encouraged to use a citation manager and cite-while-you-write function to facilitate the organization of references (e.g. Mendeley, Zotero, EndNote, RefWorks). Some of these are available free from the library and open source programs. Please consult a reference librarian in the School of Public Health Library if you are confused about how to write a paper with citations.

Grading: The written report will be graded on comprehensiveness and thoughtfulness of the case analysis, incorporation of themes of the course and integration of issues raised by the case with class readings and issues, and extension of the case analysis in an interesting and relevant direction. Referencing readings completed as part of the course will be expected, as will the inclusion of other references.

### 3. What ALL CASE ANALYSES should include (whether written or oral)

The case analysis, *whether written or oral*, should consider the following components. Note: not all cases will have answers to all of these questions, but you are expected to attempt to answer all relevant questions relating to your case.

#### 1) **Background and significance:** What is the problem or issue?

- Related questions to consider: How is it defined? How is it diagnosed or assessed? What is the prevalence of the problem? Why is the problem important? What are the barriers (or what have been the barriers thus far) to finding solutions to the problem?

#### 2) **Context of problem:** What is the historical, socio-political, cultural, and economic context of the problem?

- Related questions to consider: What continent/country? What are the relevant cultural, economic, political, and geographical considerations to be considered when assessing potential policy solutions? What are the historical factors that contributed to the problem? How has the media portrayed the problem and/or played into framing the problem?

#### 3) **Stakeholder analysis:** Who are the key players? Who is affected?

- Related questions to consider: What are the perspectives/interests/concerns of the stakeholders? Which stakeholders have the most power and/or which ones are likely to be the most influential? What aspects of the problem do different people, groups, government departments, NGOs, etc. face? Have the stakeholder concerns been considered when addressing the problem?

#### 4) **Current policies and interventions:** What existing policies or interventions are in place to address this problem?

- Related questions to consider: Have there been any governmental initiatives or interventions? Are there any major NGOs or non-profits working to address this issue? What are the pros/cons of effectiveness of existing policies/interventions? In one of the proposed policy better than other options? If so, why? If not, why? Whose perspective is favoured by the various policy solutions?

#### 5) **Your proposed solution:** Discuss your proposed initiative to address this problem.

- Related questions to consider: How does your intervention alleviate the problem at the individual, community, and/or policy level? What are the potential limitations of your initiative? What are proposed policy solutions and how likely are they to be effective?

### 4. Brief case write-ups

On two class days selected by the instructor, there will be 10-15 minutes allocated at the beginning of class for a brief case write-up. You will be given a piece of paper with the headings: 1) background and significance; 2) context of the problem; 3) stakeholder analysis; and 4) policy solution, and will be asked to write as much as you can related to the case in the allocated time. You may refer to the case or your own notes during the case write-up. The write-ups will be graded using a 5-point scale based on their comprehensiveness, accuracy, and thoughtfulness. Please use only your student ID number and do not put your name on any documents that you submit to be graded.



**5. Quizzes for UNICEF online learning sessions (see due dates on syllabus) (2019 – optional)**

As a supplement to the course, you are required to watch videos prepared by UNICEF, and these will cover five topics over the course of the semester.

**SPH Policies** Descriptions of and relevant campus links to SPH school wide course policies on Disability Support Services, Accommodation of Religions Creed, Course Evaluations, Academic Integrity can be found at: <https://berkeley.box.com/s/knh3rbk9ikgvmca4ymy93msgi9bkebg5>

## Class Schedule

Topics and assignments (Readings must be completed by the day listed)

<p><b>AUGUST 28. Introduction to nutrition-related issues in low- and middle income countries.</b></p>
<p><b>SEPTEMBER 4. Defining and measuring undernutrition, and assessing consequences.</b></p> <p><b>Required readings:</b></p> <ul style="list-style-type: none"> <li>• <i>World Food Problem</i> Chapter 1: “Introduction”, Chapter 3: “Defining Malnutrition”, Chapter 4: “Measuring undernutrition”, Chapter 5: “Why does it matter?”</li> <li>• Victora et al. Maternal and child undernutrition: consequences for adult health and human capital. <i>The Lancet</i>. 2008 371: 340-357.</li> <li>• The State of Food Security and Nutrition in the World (2017). Pages 1-28</li> </ul>
<p><b>SEPTEMBER 11. Introduction: addressing global food and nutrition issues in a global context.</b></p> <p><b>Assignment due:</b> Test results from Module 1 video</p> <p><b>Required videos:</b></p> <ul style="list-style-type: none"> <li>• Module 1: Essentials of Malnutrition- UNICEF/Agora Video &amp; Test</li> <li>• “Understanding the causes of undernutrition in Satkhira, Bangladesh” <a href="https://www.youtube.com/watch?v=bN1if4j5YBM">https://www.youtube.com/watch?v=bN1if4j5YBM</a></li> </ul> <p><b>Required readings:</b></p> <ul style="list-style-type: none"> <li>• <i>World Food Problem</i>: Chapter 6: “Who, When, Where?”, Chapter 15: “An important aside: the question of health”, Chapter 16: “Philosophical approaches to food policy” (265-282)</li> <li>• UNICEF. Improving Child Nutrition Chapters 1 and 2 (1-6). 2013.</li> <li>• Bhutta et al. Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost? <i>Lancet</i> (2013)</li> </ul>
<p><b>SEPTEMBER 18. Pregnancy, breastfeeding and low birthweight.</b></p> <p><b>Assignment due:</b> Test results from UNICEF/Cornell videos</p> <p><b>Case:</b> <i>Harvard Business School Case “Nestlé Alimentana S.A. – infant formula”</i></p> <p><b>Required videos:</b></p> <ul style="list-style-type: none"> <li>• Module 3: Essentials of Breastfeeding UNICEF/Agora Video &amp; Test</li> <li>• Module 7: Selected Interventions for Improving Breastfeeding UNICEF/Agora Video &amp; Test</li> </ul> <p><b>Required readings:</b></p>

- Balogun, O.O., et al. Factors influencing breastfeeding exclusivity during the first 6 months of life in developing countries: a quantitative and qualitative systematic review. 2015. *Maternal & Child Nutrition*. 11(4):433-51.
- World Health Organization (WHO). WHO Low Birthweight Policy Brief 2014 (1-8).
- Howson, C. P., Kinney, M. V., McDougall, L., & Lawn, J. E. (2013). Born too soon: preterm birth matters. *Reproductive health*, 10(1), S1.

## SEPTEMBER 25: Weaning and complementary feeding.

**Assignment due:** Test results from UNICEF/Cornell videos

**Case:** Choose 1) “Dads can do that: Strategies to involve fathers in child feeding”; or 2) “Research to Action: Designing communication on child feeding in Bangladesh”

(<http://www.aliveandthrive.org/category/resources/case-studies>):

### Videos:

- Module 4: Essentials of Complementary Feeding UNICEF/Agora Video & Test
- Module 8: Selected Interventions to Improve Complementary Feeding UNICEF/Agora Video & Test

### Required readings:

- Dewey, K.G. and Adu-Afarwuah, S. Systematic review of the efficacy and effectiveness of complementary feeding interventions in developing countries. *Maternal and Child Nutrition*. 2008. 4: 24-85.
- Stewart, C. P., Iannotti, L., Dewey, K. G., Michaelsen, K. F., & Onyango, A. W. (2013). Contextualising complementary feeding in a broader framework for stunting prevention. *Maternal & child nutrition*, 9(S2), 27-45.
- Fabrizio, C. S., Liere, M., & Pelto, G. (2014). Identifying determinants of effective complementary feeding behaviour change interventions in developing countries. *Maternal & child nutrition*, 10(4), 575-592.
- Dewey, K. 2001. Guiding Principles for Complementary Feeding of the Breastfed Child. World Health Organization. <http://whqlibdoc.who.int/paho/2003/a85622.pdf>

## OCTOBER 2. Child growth and stunting

**Case:** *Harvard Business School Case: “Reducing child malnutrition in Maharashtra, India”* (This case will be distributed in class the previous week).

### Required readings:

- World Health Organization. “The WHO Multicentre Growth Reference Study (MGRS): Rationale, planning, and implementation.” Mercedes de Onis (WHO) et al. *Food and Nutrition Bulletin* 2004;25 (supplement 1):S3-S84.
- Habicht et al. Height and Weight Standards for Preschool Children: How Relevant are Ethnic Differences in Growth Potential? *The Lancet*. Volume 303, Issue 7858, 6 April 1974, Pages 611-615.

- Victora, C.G., de Onis, M., Hallal, P.C., Blossner, M. and Shrimpton, R. Worldwide timing of growth faltering: revisiting implications for interventions. *Pediatrics*. 2010. 125:e473-e480.
- Kristof, N. "Half the kids in this part of India are stunted." *New York Times*.  
<http://www.nytimes.com/2015/10/15/opinion/half-these-kids-are-stunted.html>

## OCTOBER 9. Acute and moderate protein energy malnutrition

### Case:

*Harvard Business School Case: "Treating Malnutrition in Haiti with Ready-to-use-Therapeutic Foods.*

**Video:** 60 minutes report "Plumpynut"

<http://www.cbsnews.com/stories/2007/10/19/60minutes/main3386661.shtml>

### Required reading:

- André Briend, Claudine Prudhon, Zita Weise Prinzo, Bernadette M. E. G. Daelmans, and John B. Maso. "Putting the management of severe malnutrition back on the international health agenda" *Food and Nutrition Bulletin*, vol 27, no 3. Pg S3-S6.  
[http://www.who.int/nutrition/publications/severemalnutrition/FNB\\_0379-5721.pdf](http://www.who.int/nutrition/publications/severemalnutrition/FNB_0379-5721.pdf)
- Rice, A. "The Peanut Solution" *The New York Times*, September 2, 2010.  
<http://www.nytimes.com/2010/09/05/magazine/05Plumpy-t.html>
- Masset, E., et al., Effectiveness of agricultural interventions that aim to improve nutritional status of children: systematic review. *BMJ* (2012). 344.

## OCTOBER 16. Food security, women's status, indigenous populations

**Assignment due:** Case/topic and outline of case analysis due

### Cases (choose one of the following):

- *Cornell FPDC Case "Food security, nutrition and health in Costa Rica's indigenous populations"* by Anna Herforth, 2007. <http://tinyurl.com/FPDCcostarica>
- *Oxfam Case Study: "Improving food security for vulnerable communities in Nepal."* 2011.  
<http://tinyurl.com/j6ccc2m>

### Required readings:

- *World Food Problem* - Chapter 2: "Famines: the historical context" (7-23)
- *The State of Food Security and Nutrition in the World* (2017). Pages 29-73
- Smith, L.C., Ramakrishnan, U., Ndiaye, A., Haddad, L., and Martorell. *The importance of women's status for child nutrition in developing countries*. IFPRI Report 131. 2003.  
<http://www.weforum.org/pdf/gendergap/report2010.pdf> Summary, pp. 1-14, pp. 117-136
- Are womens' movements a force for change? <https://www.theguardian.com/global-development/2014/mar/05/women-movements-force-change-podcast-transcript>
- Imagine a world free from hunger, *Lancet* editorial (2017):  
[http://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(17\)32549-7/fulltext?elsca1=etoc](http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(17)32549-7/fulltext?elsca1=etoc)

**OCTOBER 23. Micronutrients: Iodine deficiency and vitamin A deficiency****Cases (choose one of the following):**

- *Cornell FPDC Case* “Developing a national food fortification program in the Dominican Republic” by Sunny Kim, 2008. <http://tinyurl.com/FPDCfoodfortification>
- *Cornell FPDC Case* “Biofortification as a Vitamin A deficiency intervention in Kenya” by Angela Mwaniki, 2007. <http://tinyurl.com/FPDCvitaminA>
- *Cornell FPDC* “Zambia and Genetically Modified Food Aid.” By Alexandra Lewin. 2007 <http://tinyurl.com/FPDCZambia>
- Charles, D. “In a grain of golden rice, world of controversy over GMO foods.” 2013. *National Public Radio*. <http://www.npr.org/sections/thesalt/2013/03/07/173611461/in-a-grain-of-golden-rice-a-world-of-controversy-over-gmo-foods>

**Required readings:**

- Anderson et al. “Global Iodine Status in 2011 and Trends over the Past Decade.” *J Nutri*: 744-750. 2012
- Mayo-Wilson et al. “Vitamin A supplements for preventing mortality, illness, and blindness in children aged under 5: systematic review and meta-analysis.” *BMJ*. 2011 (1-19)

**OCTOBER 30. Micronutrients: Iron and zinc deficiency.***Guest lecture: Christine McDonald***Cases (choose one of the following):**

- *Cornell FPDC Case* “Iron Deficiency in Bangladesh” by Angela Mwaniki, 2007. <http://tinyurl.com/FPDCironbangladesh>
- *Cornell FPDC Case* “The black Bengal goat as a tool to promote sustainable livelihoods in rural West Bengal” By Subhasish Biswas, 2010. <http://tinyurl.com/FPDCgoat>

**Required:**

- Stoltzfus, R.J., “Iron interventions for women and children in low-income countries” *J Nutr* 141: 756A-762S, 2011.
- WHO. *WHA Global Nutrition Targets 2025: Anemia Policy Brief*. 2015. [http://www.who.int/nutrition/topics/globaltargets\\_anaemia\\_policybrief.pdf?ua=1&ua=1](http://www.who.int/nutrition/topics/globaltargets_anaemia_policybrief.pdf?ua=1&ua=1)
- Nutrient deficiencies: Shining a light on hidden hunger. <https://www.theguardian.com/global-development-professionals-network/2014/nov/05/hidden-hunger-nutrient-deficiencies-vitamin-a-iron-zinc>

**NOVEMBER 6. Obesity, overweight and chronic diseases.****Assignment due:** First draft of case analysis**Case:**

- *Cornell FPDC Case* “The nutrition transition and obesity in China” by Fuzhi Cheng, 2007 <http://tinyurl.com/FPDCobesitychina>
- The Economist: “Chubby little emperors.” 2014. <http://www.economist.com/news/china/21604221-why-china-under-and-over-nourished-same-time-chubby-little-emperors>

**Required reading:**

- Roberto, Christina A., et al. 2015. “Patchy progress on obesity prevention: emerging examples, entrenched barriers, and new thinking.” *The Lancet*.
- McNeil, Jr., D.G. “Food habits getting worse around the world.” *New York Times*. February 23, 2015. <http://www.nytimes.com/2015/02/24/health/food-habits-getting-worse-around-the-world.html>
- How big business got Brazil hooked on junk food <https://www.nytimes.com/interactive/2017/09/16/health/brazil-obesity-nestle.html>

**NOVEMBER 13. The nutrition transition in developing countries****Case:**

- *Cornell FPDC Case* “The nutrition transition in Chile” by Fernando Vio del Rio, 2007. <http://tinyurl.com/FPDCobesitychile>.
- Obesity was rising in Ghana. Then came KFC. <https://www.nytimes.com/2017/10/02/health/ghana-kfc-obesity.html>

**Required readings:**

- Baker, P., & Friel, S. 2014. Processed foods and the nutrition transition: Evidence from Asia. *Obesity Reviews*, 15(7), 564-577.
- Steyn, N. P., & Mchiza, Z. J. 2014. Obesity and the nutrition transition in Sub-Saharan Africa. *Annals of the New York Academy of Sciences*, 1311(1), 88-101.
- Birrell, I. Obesity: Africa’s new crisis. September 21, 2014. The Guardian. <http://www.theguardian.com/society/2014/sep/21/obesity-africas-new-crisis>

**NOVEMBER 20. Broader strategies: Poverty alleviation****Case:**

- *Cornell FPDC Case* “PROGRESA: An integrated approach to poverty alleviation in Mexico”, by Leigh Gantner (2007) <http://tinyurl.com/FPDCprogres>
- Harvard Business School Case: Give Directly (2018). <https://www.hbs.edu/faculty/Pages/item.aspx?num=54016>

**Required reading:**

- Fernald, L.C.H., et al. Ten-year effect of *Oportunidades*, Mexico’s conditional cash transfer programme, on child growth, cognition, language, and behaviour. *The Lancet* 374 (2009)
- Fernald, L.C.H., Hidrobo, M., and Gertler, P.J. Conditional cash transfer programs and child health: a review. Oxford: Oxford University Press. (2013)
- Give Directly – Not So Fast. [https://ssir.org/articles/entry/givedirectly\\_not\\_so\\_fast](https://ssir.org/articles/entry/givedirectly_not_so_fast)

**NOVEMBER 27. No class – Happy Thanksgiving!**

**DECEMBER 4. Assessing costs and making practical decisions**

**Required:**

- World Bank. *Scaling Up Nutrition: What Will it Cost?* 2010.  
<http://tinyurl.com/SUNWorldBank>
- Gillespie et al. The politics of reducing malnutrition: building commitment and accelerating progress. *Lancet* (2013)

**DECEMBER 11. No class**

**Assignment:** Final case analysis due