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**National Council for
Geographic Education**

Three for Three

Week 22, Unit 5

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A SUPPLEMENT TO THE WEEKLY APHG BELL RINGERS SERIES

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Consequences of Agricultural Practices Topic 5.10



1. Identify the agricultural practice in each picture.
2. For each picture, explain an environmental impact of the practice depicted.

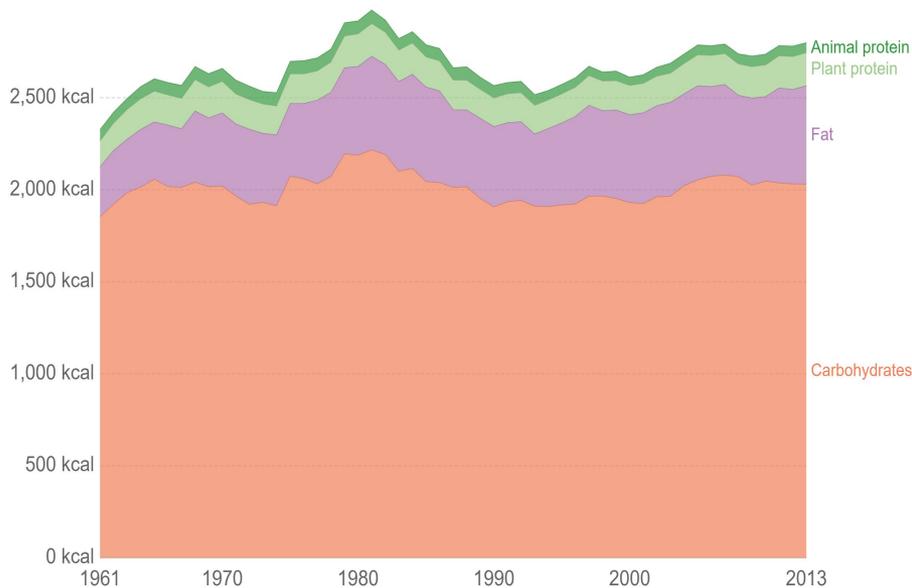
Consequences of Agricultural Practices Topic 5.10



Daily caloric supply derived from carbohydrates, protein and fat, Cote d'Ivoire



The average per capita supply of calories derived from carbohydrates, protein and fat, all measured in kilocalories per person per day.



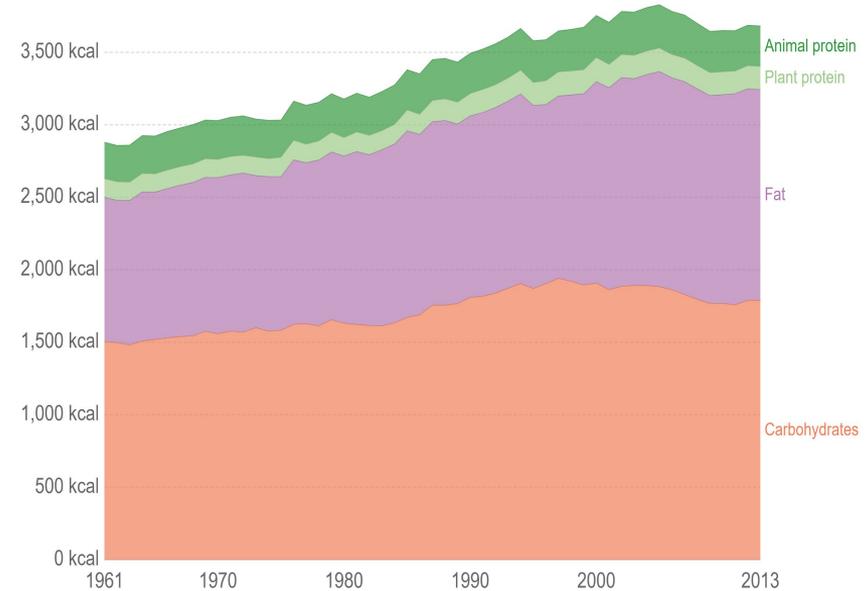
Source: OurWorldInData based on data from FAOstat

OurWorldInData.org/diet-compositions/ • CC BY

Daily caloric supply derived from carbohydrates, protein and fat, United States



The average per capita supply of calories derived from carbohydrates, protein and fat, all measured in kilocalories per person per day.



Source: OurWorldInData based on data from FAOstat

OurWorldInData.org/diet-compositions/ • CC BY

1. Identify two differences in diet composition between Cote d'Ivoire & the United States.
2. Explain how these differences might be related to economic development.

Challenges of Contemporary Agriculture Topic 5.11



PART A: Identify the food choice movement that is described. Choose from the following: *community-supported agriculture*; *fair trade*; *local food movement*; *organic*; *urban farming*; and *value-added agriculture*.

1. eating food grown within a short distance of where it is consumed
2. ensures safe, legal, working conditions with fair wages
3. eliminates the use of synthetic inputs, such as synthetic fertilizers & pesticides, veterinary drugs, & genetically modified seeds & breeds
4. crops are grown in urban areas, such as on vacant lots or rooftops
5. consumers subscribe to the harvest of a local farm/group of farms
6. a change in the state or form of a product that enhances its value

PART B: Explain which movement(s)...

1. is most related to the concept of globalization?
2. is motivated in part by a desire to use less fossil fuels?
3. is connected to increasing urbanization and loss of rural farmland?
4. strengthens social & economic ties to the local community?

IDEAS FOR SLIDES

SLIDE 1 Use this slide to discuss agricultural practices & environmental effects of agricultural land use. Suggested answers to #1: 1) irrigation; 2) pastoral nomadism; 3) deforestation Suggested answers to #2: 1) soil salinization; 2) desertification; 3) land cover change. Other answers, such as conservation efforts, are possible. See topics 5.A.1. & 5.A.2. for other answers and discussion points.

SLIDE 2 Use this slide to discuss 5.A.3. societal effects of agricultural practices include changing diets. Suggested answers: 1) much higher calorie consumption in the US than in Cote d'Ivoire; carbohydrates make up a larger portion of the diet in Cote d'Ivoire than in the US; people in the US take in more calories in the form of fat & protein; people in the US eat more animal proteins than people in Cote d'Ivoire 2) Generally speaking, people in the US have more money to spend on food, so that might increase calorie consumption. Many people in the US eat fast food, which tends to be higher in calories. Protein sourced from animals (meat, dairy) is more expensive than protein sourced from plants.

You can also ask students to consider how the role of women and economic purpose (commercial vs. subsistence) are reflected by the graphs. Would diet composition graphs from ourworldindata.org from other more developed countries look similar to that of the US? Is economic development reflected in diet composition in the same way CBR/CDR/NIR reflect economic development? If so, why? You may wish to have students research the nutrition transition, a model that considers how diets change as countries develop economically.

SLIDE 3 Use this slide to discuss 5.B.2, patterns of food production & consumption are influenced by movements relating to individual food choice. Connecting this slide to other essential knowledge in the topic is very easy and could serve as a lesson. Have students consider which agricultural innovations are related to these movements; why people might choose a particular movement; advantages/disadvantages of each; how they might help contribute a solution to a problem associated with lack of food access; and how things such as government policy can encourage or hinder each movement.

Suggested answers to part A:

1) local food; 2) fair trade; 3) organic; 4) urban farming; 5) community-supported agriculture; 6) value-added agriculture

Suggested answers to part B:

(Be sure students are practicing EXPLAINING, which means to tell how or why. Their answers should include the word *because*.)

1) fair trade; 2) local food; 3) urban farming; 4) community-supported agriculture

VOX has an excellent article about urban farming, which you can find at <https://www.vox.com/2016/5/15/11660304/urban-farming-benefits>.



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