

## *Kimchee*

*Purpose:* The purpose of this lesson is to teach about Korea through its cultural food of Kimchee. Science aspects relating to kimchee will also be examined.

*Target Grade Level:* 7

*Topic:* How Kimchee is a cultural food of Korea

*Concepts:* *Food as Identity for cultures*

*Legend of Kimchee*

*History of Kimchee*

*Varieties of Kimchee*

*Nutritional Value*

*Science Connections-Fermentation, Anti-Bacterial*

*Benefits of Kimchee*

*Globilization*

*Materials:* *ingredients to prepare Kimchee*  
*materials for Science Labs*

*Key Idea:* *The delicacy of Kimshee has bonded Korea as a culture and continues to have an influence on the world.*

*Skills:*

*Application:* Given the nutritional content of Kimchee, students will determine how this food effects the health of Koreans today.

*Synthesis:* Students will examine foods from other cultures to determine how that particular food plays an important in their development as a people.

*Procedures:*

1. Ask students to think of foods that symbolize the American culture (french fries, ice cream, hamburgers, etc.) Ask how food can be a cultural symbol? Koreans would feel that something was missing from their diet if they did not have kimchee. Would Americans react the same way if they did not have access to “American Food”?

2.. Introduce the students to Kimchee by showing them the Kimchee Korean cartoon from the Korean Agricultural and Fishery Marketing Corporation and the definition for kimchee (<http://kimchi.or.kr/>, [dictionary.com](http://dictionary.com)) A good introduction to Kimchee can be found in this site-[www.kimcheekiller.com](http://www.kimcheekiller.com).

3. Review the Legend of Kimchee when a farmer tried soaking a head of cabbage in sea water to make it heavier so he would have more bulk to feed his family ( “Things Korean” by Jang Lee Yun)

4. Review the history of Kimchee since the Koryo Dynasty recorded its existence by Lee Kyo Bo (1168-1241). It was supposedly eaten by Genhis Khan in the 12th century and was adapted by the British Navy to prevent scurvy in the 18th century. Builders of China’s Great Wall also ate fermented cabbage (“Kimchee” by Heather Davis, [www.drwhitey.com/ecology/kimchee.htm](http://www.drwhitey.com/ecology/kimchee.htm))

5)Review the migratory history of the foods which are used to make Kimchee-cabbages from China, etc. (<http://facweb.furman.edu/~liaomin-ken/BIO31%20kimchee.htm>) and how fermentation was a primary method of food preservation to prepare for the cold season.

6) Discuss Korea as a region and how the place, food type and time of year and time period in history influences the type of kimchee eaten. For example, People in the north use less salt than those in the south. In addition the amount of Kimchee eaten is influenced

by the seasons with 150-200 grams eaten a day in the winter and 50-100 grams eaten during the warmer months.

(<http://www.stopkorea.com/index.htm.cooking-kimchi.htm>, [kimshi.or.krcooks.com](http://kimshi.or.krcooks.com)) Use a map of Korea to distinguish between geographic areas and access to various ingredients.

6. Discuss and read accounts of the community preparation of kimchee. Discuss any examples of food preparation that are communal for Americans ; cookouts, Thanksgiving. (“The Kimchee Way of Life”, the Los Angeles Times by Linda Burum January 7, 1993, [www.kimcheekiller.com](http://www.kimcheekiller.com))

7. Compare and Contrast the nutritional content of kimchee using a variety of different kimchee ingredients. Which variety gives the most amount of Calcium? of phosphorus? of vitamin A? and Vitamin C? (<http://facweb.furman.edu/~liaomin-ken/BIO31%20kimchee.htm>).

8. Study a variety of ways to make Kimchee and the recipees. Determine which region in Korea matches which recipee. ([community-2.webtv.net/junghun\\_Lee/kimchee/page9.html](http://community-2.webtv.net/junghun_Lee/kimchee/page9.html)), “The Kimchee Cookbook” by Kim Man-Jo, Lee Kyou Tae and Lee OYoung)

10. Study the benefits of eating Kimchee. How is this prevention of disease helping the Korean nations be a strong people? How is it that Kimchee traditionally became a necessary staple in Korea? (<http://facweb.furman.edu/~liaomin-ken/BIO31%20kimchee.htm>)

11. Discuss the scientific aspect of Fermentation. How is Lactobacillus created? What variables can effect fermentation (amount of salt, temperature). What other types of foods are fermented? What are the climatic reasons that Korea found it necessary to ferment foods?

(<http://www.cas.muohio.edu/~mbiws/foodmicro/framekraut.html>,

*facweb.furman.edu/liaomin-ken/BIO31%20Kimchee.htm*)

12. Complete the lab on the website where Kimchee is proven to kill bacteria. How does this factor play into the health of Korean people? (“*Does Kimchee Kill Germs on Contact?*” *home.hawaii.rr.com/mejung/sf-kimchee.html*).

13. Examine the globalizing role that Korea plays in introducing Kimchee to the world as a delicious food and a possible aid to health (Mark Magnier, “*In the Age of SARS, Koreans Tout Kimchi Cure*” Los Angeles Times, June 17, 2003). Have students examine various websites that sell kimchee and other Korean products (*asianfoodgrocer.com, www.kimcheedepot.com*).

14. For an evaluation, have students use directions from websites and recipes to make kimchee to enjoy. Have them complete this activity as a large group so that they can acquire some sense of communal togetherness in the process. If possible, check the pH levels of the kimchee at various stages of fermentation. (*http://www.calacademy.org/research/anthropology/tap/ARCHIVE/2000/2000-06-kimchi.html, www.kimcheedepot.com/recipes.html, ramencity.com*).