STUDENT TEXT

PERFECTLY PICKLED: PROBIOTICS PACK A PUNCH

Long before probiotics became a health and nutrition buzz word, cultures throughout history and across the globe were celebrating fermented, or pickled, foods. Historically, the process of pickling foods was intended as a preservation method. Today, nearly every global culture includes at least one fermented food in its culinary heritage.

Russian microbiologist Elie Metchnikoff (1845-1916) was the first to associate the consumption of fermented dairy products with the good health and

longevity of Bulgarians back in 1907. He proposed that the acid-producing bacteria in fermented dairy products could prevent what he called "fouling" in the large intestine. He believed if eaten regularly, these foods could lead to a longer, healthier life.

It is increasingly understood that consuming certain types of microorganisms, also called bacteria, may have positive health outcomes.

Our bodies are home to both good and bad bacteria. They are everywhere, including the stomach. Under

Sources: Harvard Health Publishing. (2017, June 7). *The Benefits of Probiotics Bacteria*. Retrieved July 13, 2018, from https://www.health.harvard.edu/staying-healthy/the-benefits-of-probiotics

normal conditions, good bacteria in the stomach outnumber the bad bacteria. Probiotics found in pickled foods provide a boost in healthy bacteria and create a physical barrier against unfriendly bacteria.

Lactic acid fermentation, or lacto-fermentation, is among the most common methods and one of the easiest to experiment with at home. In this type of fermentation, the vegetable is soaked in a salt brine, allowing the growth of bacteria that eat the vegetable's sugars and produce tart-tasting lactic acid. Salt plays

a pivotal role in traditional fermentation by creating favorable conditions for the good bacteria, preventing the growth of bad bacteria, and adding flavor.

According to the Harvard School of Medicine, the scientific community agrees that there are potential health benefits to eating foods with probiotics. However, more research is needed to solidify the claims. Medical research-

ers affirm, "the best we can say right now is they won't hurt and may help."

GLOBAL CULTURES HAVE CRAFTED UNIQUE FLAVORS AND TRADITIONS AROUND FERMENTATION.

KIMCHI - A spicy cabbage dish popular in Korean culture.

KOMBUCHA - A tangy tea flavored with herbs and fruit that originated in China. MISO - A paste made from barley, rice, or soybeans with its roots in Japanese culture.

CHUTNEY - A spicy condiment made of fruits or vegetables originating in India.

Academy of Nutrition and Dietetics. (2017, May 17). The History and Health Benefits of Fermented Food. Retrieved July 13, 2018, from https://foodandnutrition.org/winter-2012/history-health-benefits-fermented-food/

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TEXT ANALYSIS PE	rfectly Pickled	PROBIOTICS PACK A PUNCH
1. Give two examples of fermented foods and the cultures they originated in. 2. What did Russian microbiologist Elie Metchnikoff believe about fermented foods?		PROBIOTICS MAY HELP: • Improve immune function • Protect against hostile bacteria to prevent infection
		 Improve digestion and absorption of food and nutrients.
. What is one of the most comm	on methods of fermenta	tion?
. In your own words, what are p	robiotics?	
i. What does lactic acid bacteria	do?	
6. What role does salt play in the	fermentation process?	
7 Should poorle be encouraged	to get foods with problem	ics? Why or why pot?
7. Should people be encouraged	to eat 10005 With problet	ics: Willy Of Willy Hot: