5. Drawing conclusions: Is drinking milk healthy for humans?

Draw your own conclusion based on the evidence:

- 1. Read all of the arguments in favor of (PRO) and against (CON) human milk consumption.
- 2. Decide which side presents the strongest evidence. In other words, which side do you consider more convincing?
- 3. Share, discuss and justify your decision with classmates.

PRO	CON
Milk is one-stop shopping for nutrition. It contains nearly all the basic nutrients that a growing child needs: fats, carbohydrates, proteins, vitamins and minerals (except iron). While it is true that most of the nutrients in milk can be gotten easily from other sources, such as vegetables, legumes, and seafood, milk puts them all together in a convenient package. Realistically, children eat or drink dairy products in greater amounts and more consistently than other foods. While whole milk is not the only way to get calcium in a child's diet, it's the most practical way ~Bill Sears, MD Associate Clinical Professor of Pediatrics at the University of California Irvine "Milk" on askdrsears.com 2006	Several studies have been published showing a high positive correlation between milk consumption in different countries and rates of death a few years later from CHD [Coronary Heart Disease]. One investigation showed that countries which reduced milk consumption later had reduced rates of CHD death, while the only country studied which increased its milk consumption [Portugal] had an increased rate of CHD death. ~Margaret Moss, MA Director of the Nutrition and Allergy Clinic in Manchester, UK "Does Milk Cause Coronary Heart Disease?," Journal of Nutritional & Environmental Medicine Sep. 1, 2002
The men with the greater consumption of milk experienced a reduction in the risk of ischaemic [inadequate blood flow] stroke and a possible reduction in ischaemic heart disease risk. Explanations of these results other than a beneficial effect of milk would seem to be unlikely. The present perception of milk as harmful, in increasing cardiovascular risk, should be challenged and every effort should be made to restore it to its rightful place in a healthy diet. ~Peter Elwood, MD Professor of Epidemiology at Cardiff University "Milk Consumption, Stroke, and Heart Attack Risk: Evidence from the Caerphilly Cohort of Older Men," Journal of Epidemiology and Community Health 2005	Studies have suggested that some of the nutritional benefits of milk may be lost when a lactase-deficient [lactose intolerant] individual consumes milk. Not only does this person fail to receive the calories normally supplied by the undigested carbohydrates; resultant diarrhea may lead to loss of protein as well. Two studies were conducted in groups of children with 'recurrent abdominal pain of childhood,' one study preformed in Boston and the other in San Francisco, came to a similar conclusion. The conclusion was that about one-third of such children had their symptoms on the basis of lactose intolerance. The simple solution was to remove all milk and milk- containing foods from the diet. ~Frank Oski Former Director of the Department of Pediatrics at Johns Hopkins University Don't Drink Your Milk! 1996

Individuals vary in their degree of lactose intolerance, but even children and teenagers with primary lactose intolerance can usually consume 8 to 12 ounces (1 to 1.5 cups) of milk without experiencing symptoms. Although the degree of lactose intolerance varies, most people with lactose intolerance do not require a completely lactose free diet. Milk and milk products should not be completely eliminated because they provide key nutrients such as calcium, vitamins A and D, riboflavin, and phosphorus. -National Institute of Child Health and Human Development "Lactose Intolerance: Information For Health Care Providers" Jan. 2006	There is much debate over whether long-term consumption of dairy products helps bones at all. A good deal of evidence suggests that it does not. Several studies of teenagers have found that their adult bone health is related to their physical activity level earlier in life, but not to the amount of milk or calcium they consumed. Milk consumption is apparently no help later in life either. ~Physicians Committee for Responsible Medicine "Parents' Guide to Building Better Bones," on www.pcrm.org June 21, 2007
This is the first clinical trial to show that boosting vitamin D status can affect the overall risk for cancer - a proposition that has tremendous public health potential. By choosing vitamin-D rich foods like milk and taking a supplement Americans can help improve their vitamin D levels and potentially impact their cancer risk. ~Joan Lappe, PhD Director of Clinical and Pediatric Studies at Creighton University "Vitamin D and Calcium Supplementation Reduces Cancer Risk: Results of a Randomized Trial," American Journal of Clinical Nutrition June 2007	There was a time when it [milk] was considered very desirable, but research has forced us to rethink this recommendation Dairy products contribute to a surprising number of health problems. They can impair a child's ability to absorb iron and in very small children can even cause subtle blood loss from the digestive tract. Combined with the fact that milk has virtually no iron of its own, the result is an increased risk of iron deficiency ~Benjamin Spock, MD Pediatrician and best selling author "Good Nutrition for Kids" in Good Medicine Magazine Spring-Summer 1998
Findings from ongoing studies indicate that four to five servings/day of calcium-rich foods such as milk and other dairy products are needed to optimize peak bone mass during adolescence. Osteoporosis is a pediatric disease with geriatric consequences. With low calcium intake levels during important bone growth periods, today's youth faces a serious public health problem in the future. -Connie M. Weaver, PhD Distinguished Professor of Food and Nutrition, Purdue University "Bone Health Hazards: The Make-It-Or-Break- It Teenage Years" (in "Calcium Summit II:	Nearly half of American women say that they have heard that dairy foods help people lose weight. If only there were sufficient evidence to back up the claim There's no evidence to support the milk industry's claim that 'more than a dozen research studies now support the finding that drinking 24 ounces of milk every 24 hours will help people lose more weight than just reducing their caloric intake.' None of Zemel's [a leading advocate of the theory that milk consumption helps with weightloss] studies instructed people to drink 24 ounces of milk a day. And MilkPEP, the industry's non-profit Milk Processors Education Program couldn't

Agenda for Action," on the National Dairy Council website Jan. 2002	point us to a single study in which people did ~David Schardt Senior Nutritionist at the Center for Science in the Public Interest "Milking the Data: Does Dairy Burn More Fat? Don't Bet Your Bottom on It," Nutrition Action Healthletter
Unflavored milk is lower in sugar than flavored milk. However, given the importance of calcium, vitamin D and other key ingredients in the diet of children and adolescents, flavored milks could be a nice alternative since the contribution of added sugars to the overall diet of young children is minimal. ~American Academy of Pediatrics "Clearing Up Confusion on Role of Dairy in Children's Diets" AAP News June 2000	Sep. 2005 One reason milk consumption may lead to cancer risk is insulin-like growth factor, IGF-1 (not to be confused with bovine growth hormone, rBGH). Milk contains IGF-1 for good reason: milk is designed for babies, and IGF-1 helps us grow. IGF-1 affects growth, as well as other functions, and is normally found in our blood. Higher levels of IGF-1, however, appear to stimulate cancer cells. ~Alison Stewart Editor of the Consumer Health Journal "Hormones in Milk Are Linked to Cancer" Consumer Health Journal Mar. 2004
Mounting research indicates that consuming more calcium in the diet - particularly from calcium-rich dairy foods - can speed up weight loss and reduce body fat, particularly abdominal fat. Consuming dairy products appears to help prevent body weight and fat gain in children and adults, Caucasians and African-Americans, males and females. In addition, dairy foods have proven to be more effective than calcium alone in moderating body weight/fat gain and accelerating weight/fat loss The mix of essential nutrients in dairy foods, including calcium and protein, appears to speed up metabolism and improve the body's ability to burn fat, especially abdominal fat. ~Dairy Council of California California Milk Marketing Organization	Flavored milks are not a particularly healthy beverage option for children or teens. As with unflavored cow's milk, flavored cow's milk is a significant source of fat, saturated fat, and cholesterol in children's diets. The naturally occurring sugar in cow's milk is lactose, a type of sugar that is not well-digested by many children after about age 4. Flavored milks also have sugar added, often to the point where, ounce for ounce, they contain the same amount of total sugar as soda ~Amy Lanou, MD Senior Nutrition Scientist for the Physicians Committee for Responsible Medicine Sep. 25, 2007
"Calcium and Dairy Products: New Weapons in the War on Obesity," www.dairycouncilofca.org Aug. 2004	

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