

Response to: “The Dairy Industry and Public Health: Which comes First?”

By Mark Winne

Published in: NM Public Health Association, Association News, Winter 2005

In response to the article written by Mark Winne, a free lance writer from Santa Fe, NM, I feel strongly motivated to educate your readers on many of the issues discussed in the article. Mr. Winne’s article seems to be emotionally loaded with lopsided argumentation directly aimed at the heart of the reader, who because of a possible lack of factual understanding of agriculture in general and animal production in particular, may not be able to dissociate between factual and unbiased reporting and misleading persuasion. Unfortunately, in today’s society, most consumers are so far distanced from the actual food production system and understanding of modern agriculture, that they may be misled by unsubstantiated claims lacking scientific data and credible information sources, and be unable to distinguish fact from fiction.

General claims (e.g. “*manure is also responsible for groundwater nitrates*”, and “*a former NMED employee states*”) without substantiating what it is being talked about (with no disrespect to the individual, was this employee a receptionist or a person qualified to make such statement?), are useless and misleading in the discussion of the issues at hand, and only lead themselves to fuel misconceptions in the mind of the reader and extenuate unrealistic fears.

Yet at the same time, the article by Mark Winne, even though it does “advocate policy changes”, as one of NMPHA’s mission statements reads, it also contradicts the second mission statement; “to serve as a forum (or interchange) for professionals to share approaches, research and applications that promote health of individuals and populations”. This publication contains no interchange and seems to be a relentless, one sided attack on an industry sector, which is constituted on the basis of the family farm, stewardship of the land and its resources, and the principles of sustainability as defined as meeting current production goals without compromising the future in terms of resource degradation or depletion.

Case in point Winne states; “*several area residents told me they can’t have outdoors picnics during warm weather due to the flies*”. I would like to know where in this country, or anywhere else in the world, for that matter, where you can have an outdoor picnic in the summertime without being interrupted by one insect or another? Where is the relation to the dairy industry? Do you think the author is correct in the implication that outdoor picnics in eastern New Mexico were devoid of flies prior to the expansion of the dairy industry?

Winne talks about “*labeling*” of dairies by the EPA as CAFO’s. CAFO, stands for “confined animal feeding operations” and is a definition under the 1972 Clean Water Act of dairy operations milking more than 700 cows, swine operations with over 2,500 sows, or a feedlot with over 1,000 cattle. Under this designation these operations are required to manage manure in accordance with a National Pollution Discharge Elimination System

(NDPES) permit. This is a form of regulation under which EPA mandates the handling of manure from these operations in an environmentally friendly and sustainable manner.

Another quote from Winne's article: "*one reason for the growth in dairy farms in New Mexico is that many California dairy farms were effectively forced out of the Chino Valley when environmental and health officials determined that they were a major source of that region's air pollution*". Air pollution in Southern California and in the Chino Valley is caused by smog produced by the million's of cars on California's freeway system, and subsequently blown by the prevalent westerly winds to the Inland Empire (read Chino Valley)! To be more specific, according to the California Air Resources Board, dairy waste contributed only about 12% of the Total Organic Gases (TOG), 2% of the Reactive Organic Gases (ROG), and 0.3% of the Particulate Matter (PM), (<http://www.arb.ca.gov/app/eminsinv/t25cat/display.php>). To put this in perspective, landfills alone in California emit about twice that amount of Total Organic Gases. Go and visit sunny Southern California on a day the Santa Ana winds are blowing (easterly winds coming from the mountains), and the air in the Chino Valley is clear as a bell! In addition, I have yet to meet the first official of any kind that has "effectively forced" a dairy out of California. The "sucking sound" produced by the stream of companies leaving California in recent years, has been well documented in the media and is due to the extremely high cost of doing business in California, and the California business exodus is most certainly not unique to the dairy industry. Why else would the "Governator" be seen in neighboring states appearing in TV commercials trying to lure companies to return to the Golden State, under the promise of tempting incentives and tax breaks? Another incentive for dairies to sell their farm land in recent years has been the incredible boom in the California real estate market facilitated by record low interest rates, which has drawn another stream of people from every corner of the world to come and live in Southern California because of its mild climate and easy access to amenities.

In another statement Winne implicates the dairy industry's "*political and financial power*" as a deterrent to conducting environmental research at well respected institutions such as NMSU, except for one researcher who reportedly encountered sufficient pressure "*to cause him to curtail his dairy-related research*" because of said power pressure. I honestly don't know what to think of that statement, other than terms previously mentioned "fueling of public perception and fear", or "boogie man tactics". A closer look by Mr. Winne would have shown there is a collaborative working relationship between environmental scientists and the dairy trade organizations. It is because of the need for sound scientific data related to environmental concerns such as air and water quality, that universities all over the nation and in many other parts of the world, have acquired scientists, with both the knowledge and understanding of the dairy industry and its impacts on the environment, to perform the complex studies required to obtain relevant data. It is in conjunction with the EPA that dairymen all over the U.S. have signed consent agreements, and have made a payment to the EPA effectively funding this environmental research, in which well respected researchers in the field are asked to perform the field studies, to enable the EPA to establish levels of acceptable emissions from animal waste, and to find environmentally friendly and sustainable ways to deal with the increased concentrations of animal numbers and subsequent manure. These

guidelines and developing technologies will effectively deal with what is perceived as an environmental problem, but furthermore will lead to ways to generate what is referred to as “green energy” or energy from renewable sources which in turn decreases our dependency on fossil fuels. This movement in the animal industry is not only pro-active, but as stated before, is in conjunction and collaboration with regulatory agencies such as EPA, and NMED (New Mexico Environmental Department). It is funded by the industry, performed on existing commercial dairies with the consent of its owners, and promoted and supported by dairy trade associations and cooperatives. This is really what “*political and financial power*” will do for you!

By the way, let’s not forget that what we call conveniently “animal waste”, is otherwise referred to as organic fertilizer, and has been used for as long as people have walked on this earth, as a valuable source of energy and as nutrient for crop production. Farmers still prefer the organic form of animal manure over synthetic fertilizer because of the soil enhancing properties of organic manure, which is one of the reasons why dairy operations pop up in the vicinity of crop farmers who value their “waste products”. Let’s also not forget that thousands of homeowners in this country go out every spring to their local hardware stores and nurseries, to buy sacks and sacks of composted “steer manure” to add as an amendment to their flower beds and vegetable gardens, because it enhances their beauty and production!

Don’t get me wrong, in no way am I downplaying the importance of protecting our environment, or the concern for increased emissions of the so called “greenhouse” gases, and the need for a healthy food supply from a sustainable agricultural base. Environmental problems, however, are not necessarily inevitable. Broad implementation of strategies such as nutrient management, disease control, best management practices of animal waste, and site collection can lead to sustainability of intensive animal systems, as is explained in detail in H.O. Kunkel’s *Human Issues in Animal Agriculture* (2000). This concern is also shared by our elected officials who, during the 1990’s, began to recognize the scientific needs of sustainable agriculture with the passage of farm bills that emphasized environmental factors.

Neither is it my intent to downplay the serious issue of antibiotic resistance, however, the statement “*antibiotic resistance is another air-borne problem with connections to CAFO’s*” and “*Cows in factory dairy farms are subject to higher levels of stress than cows in smaller, pasture-based operations*”, has no bearing on public health issues. For the record, please let it be noted that: even though dairymen will treat sick cows with antibiotics, much like humans are treated with antibiotics, these cows however, are kept out of the milking herd till the antibiotic has cleared the animal’s system. Every tank load of milk entering dairy processing plant is strictly tested for the presence of antibiotic residues. According to the U.S. Department of Health and Human Services, Center for Food Safety and Applied Nutrition, Annual Report (February 2004), the U.S. dairy industry conducts more than 3.5 million tests each year to ensure antibiotics are kept out of the milk supply! In 2003, less than one-tenth of one percent (0.067%) of loads tested

positive for animal drug residues, including antibiotics. And any load of milk that tests positive is disposed of immediately, and never reaches the public milk supply. Mark Winne goes on to quote Dr. Manuel Varela (Assistant Professor of Biology, ENMU) who has conducted studies on soil samples from dairies in NM, and has found enteric (=belonging to the intestine) bacteria which are multi drug resistant. Dr. Varela has indicated he has plans to look at the reason why these bacteria exhibit these, not to be underestimated traits, but there is no link or suspected link made to any dairy management practice. As a matter of fact, an undergraduate student at Eastern New Mexico University, working with Dr. Varela, won a Research Award at Texas Tech's Research Day for work that shows that the same antibiotic resistance mechanisms can be modulated by exposure to the commonly used cleaning product orange oil (ENMU News Release, 4/10/2002).

I truly believe in healthy dialog at any level, and applaud those that are willing to speak out and make their views and beliefs public. However, this dialog has to be based on the facts, and not on the base of fears and perception. Knowledge and wisdom come from education, through study, observance, experience and extension, and therefore yield discussions suitable for public discussion forums such as a Public Health Association. In the interest of public health, a more balanced and productive approach might be to include dialogue about the myriad of health benefits from a diet rich with dairy products. The list of health benefits from dairy products based on sound scientific, peer reviewed research, published in well known and recognized journals is long and extensive. I would like to refer the reader to the following website for a clear and comprehensive overview: http://www.nationaldairycouncil.org/NR/rdonlyres/52EDA679-C950-4B2A-A454-2706EA050234/0/milk_milestone_color2.pdf. This should to be the topic for another article in NMPHA's newsletter, and it truly could be to the interest and benefit of the audience of the NMPHA.

In closing, the reader might be interested to know that FANSA (Food and Nutrition Science Alliance) has provided tools to help Americans gain a better understanding science and help them evaluate reports before jumping to premature conclusions (Fansa News Release. 1995. <http://www.faseb.org/ascn>). FANSA is a partnership of four professional societies representing more than 100,000 food, nutrition, and medical practitioners and scientists. This coalition identified 10 red flags that should raise suspicion about the accuracy about nutritional information:

- Recommendations that promise a quick fix.
- Dire warnings about danger from a single product or regimen.
- Claims that sound too good to be true.
- Simplistic conclusions drawn from a complex study.
- Recommendations based on a single study.
- Dramatic statements that are refuted by reputable scientific organizations.
- Lists of "good" and "bad" foods.
- Recommendations made to help sell a product.
- Recommendations based on studies published without peer review.
- Recommendations from studies that ignore differences among individuals or groups.

Marie Curie, the famous French scientist, once said “*Nothing in life is to be feared. It is only to be understood*”. It is my hope and aspiration this article has contributed to that cause.

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