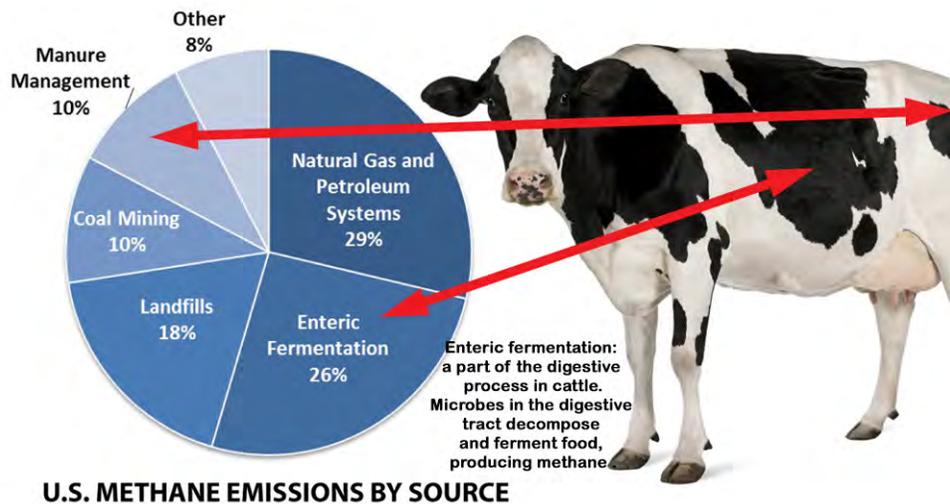


University of Lake Berryessa Promotes Solutions to Climate Change,
Global Food Security, and Animal Cruelty Prevention
by Peter Kilkus

Sometimes problems are connected and complicated. But comprehensive solutions may be available to address multiple concerns. Such is the case with the above issues. The Department of Genetic Physics and the Berryessa Underground Research Program in Action (BURPA) at the University of Lake Berryessa (ULB) are seeking to solve multiple problems with linked research projects. One major project described in this article involves the development of the meat grape, steak potato, chicken nugget bush, and braunschweiger avocado. Two other advanced genetic manipulation projects are the “Grass-Fed People” and the “REALLY Green people” initiatives described in the accompanying articles.

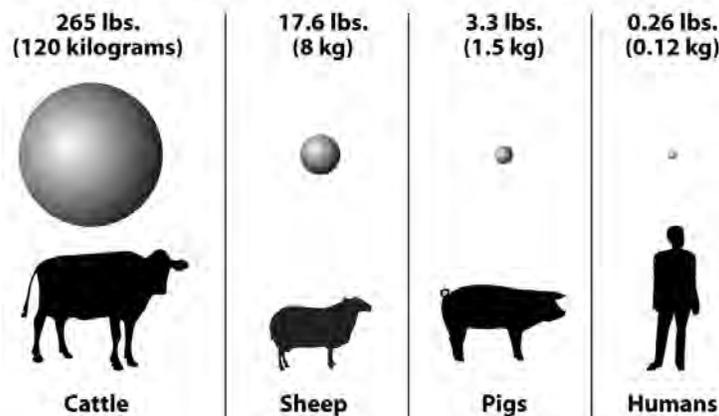


Cattle and other ruminants are significant producers of the greenhouse gas methane—contributing 37 percent of the methane emissions resulting from human activity. Worldwide, there are about 1.5 billion cattle. Cows’ methane emissions are an important reason for greenhouse effect. Also, cattle farming is increasing the deforestation of the tropical rain forests (Brazil has the second largest cattle population in the world), thus accelerating the global warming. Methane pollution causes one quarter of the global warming that we’re experiencing right now.



When some people hear the word “methane,” they immediately think about cow farts. But in reality, cow burps are much more problematic: 90 to 95 percent of the methane released by cows comes out of their mouths, while 5 to 10 percent is released in the form of manure and flatulence.

METHANE EMITTED PER ANIMAL PER YEAR



Eighty years ago, Winston Churchill looked forward to the day when "we shall escape the absurdity of growing a whole chicken in order to eat the breast or wing, by growing these parts separately under a suitable medium." Churchill thought this would take only 50 years. We are still not there, but today we will reach a milestone on the road to the future that Churchill envisaged: the first-plant based meat (PBM). This astonishing announcement and demonstration is scheduled to take place on April 1, 2020 at the University of Lake Berryessa Advanced Research Projects laboratory. The intent is to create products that can be easily grown, harvested and eaten to provide a solution to climate change, international food security, plant-based meat alternatives, and the elimination of the cruel conditions under which good animals are now grown and processed. The main beneficiaries of these products will be humans, cows, chickens, pigs and goats.

Napa Valley - Lake Berryessa Connection

The meat grape industry will be a boon to the Napa Valley which has seen bulk grape prices drop because of a glut in production of wine grapes and world wide decrease in consumption of wine. Several of these new plant-based meat (PBM) were designed to grow well in the areas around Lake Berryessa and will contribute significantly to the revitalization of the Lake Berryessa community and economy.

In order to commercialize this new genetic breakthrough the DABURPA consortium has been formed between the Defense Advanced Projects Agency (DARPA) and the Berryessa Underground Research

Program in Action (BURPA) to be designated DABURPA (with apologies to Chicago's DABEARS superfans). DABURPA also includes the Lake Berryessa News, UC Davis Agricultural Research Department, Loma Linda Foods, a leader in sustainable plant-based proteins, and the McDonald's International Corporation. First round venture capital funding has been completed. Additional stock offerings will be made through the Lake Berryessa News Wealth Management Division.

There are important ethical reasons why we should replace animal meat with in vitro meat, if we can do it at reasonable cost. One is to reduce animal suffering. Another reason for replacing animal meat is environmental. Using meat from animals, especially ruminants, is heating the planet and contributing to a future in which hundreds of millions of people become climate refugees.

9 BILLION land animals are raised and killed on U.S. factory farms every year, including 8.8 billion chickens. 100 Animals Annually could be spared a painful life on a factory farm by those people who choose to stop eating animal-based meat and eat plant-based meals (and future plant-based meat) instead.

**PETA (People for the Ethical Treatment of Animals) and
VEGA (Vegarians Eating Grass Association) Launch
CAPAPAC (Climate Action Plan and
Prevention of Animal Cruelty) Campaign**





Some vegetarians and vegans may object to plant-based meat, because they don't see the need for meat at all. That's fine for them, and of course they are free to remain vegetarians and vegans, and choose not to eat plant-based steak, chicken, pork and other future plant-based meats (PBM). My own view is that being a vegetarian or vegan is not an end in itself, but a means toward reducing both human and animal suffering, and leaving a habitable planet to future generations. I have friends who have not eaten meat for 40 years and are unsure about this deep philosophical issue. But if Plant Based Meat becomes commercially available, I will be pleased to eat it.

The Ice Cream Conundrum



People like ice cream. Ice cream comes from very cold cows. Cows need to produce baby cows to be able to provide milk and cream. Baby cows become big cows that continue to contribute to climate change. Milk substitutes that taste like real milk and cream are needed to close this climate-affecting loophole.

Real milk's ingredient list is short and sweet: milk and vitamins A and D. If it's not in milk then it's because nature left it out. However, some available plant-based alternative options have more than 10 ingredients, including added salt and sugar, stabilizers and emulsifiers like locust bean gum, sunflower lecithin and gellan gum. Creating a plant that can produce real cow-type milk is a major goal of ULB research. So far genetically manipulated variations of milk weed and milk thistle have proven unsuccessful.