

What's Ahead for Dairy Policy in the 2020s?

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5 March 2019

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Dairy Policy? Ask yourself?

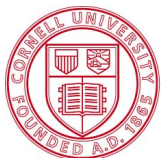
WHAT WILL BE?



WHAT SHOULD BE?



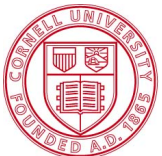
WHAT DO "YOU" WANT?



The “New Policy” Formula

The creation of a new economic policy or government program is driven by 3 key factors:

$$\text{New Policy} \leq \frac{(\text{Economic Event x Political Will)}{\text{Financial + Social Cost}}$$



The New Policy Formula

The magnitude of an economic event drives our attention. Was it very expensive? Was it very wide spread? How many people were impacted?

Political will is influenced by who is impacted (my constituents, a cohort I care about especially) and whether the nature of the event is something I am especially interested in (climate change, transportation systems, terrorism, food security, etc).

The cost to fix a problem weighs against a solution. This could be a cost to taxpayers or a less direct cost – cost to economic growth, jobs, personal freedom.

Dramatic changes to programs generally require large economic events the solution of which coincide with a public agenda and for which the cost of the solution is less onerous than the cost of repeated events. Various combinations of the three factors will influence the strength of a policy. We may do things to fix small problems that aren't that big a public priority if the cost of the fix is low enough, for example.

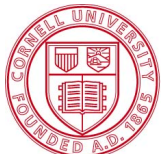


Policy Discussions

Public policy discourse tends to be dominated by debate about solutions (cap and trade, publicly funded abortions, fences, product formula pricing).

Less often we debate and discuss the problem - what it is, how bad it is (climate change, unwanted pregnancies, public costs for illegal immigrants, volatile prices)

Almost never do we talk about our values or how we might bridge the gaps between our values (the long run can't be sacrificed for the short run, we should have a very open society, personal freedom is more important than personal safety, small is beautiful, work for what you get)

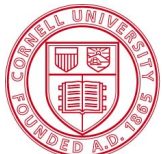


How we achieve a solution vs. What outcome we seek?

Degrees of Control in Markets and Governments (behaviors vs. results)



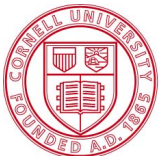
To the extent we have a choice, a fundamental question, explicitly or implicitly, is how much control can we tolerate - how much freedom are we willing to give up in order to achieve the desired results.



Desired Objectives, Objectionable Methods, and Unintended Consequences

In evaluating alternative policy solutions, it is well to keep in mind:

- To what degree is the solution likely to solve the problem, to achieve the desired solution?
- Is the medicine worse than the illness?
- Are there side effects that we can anticipate?
- What is the distribution of benefits and side effects?



Pay me now or Pay me later?

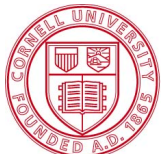
Usually, it does not take a government program to get us to do something we want to do anyway.

So, why are we talking about programs to make us do something we don't want to do?

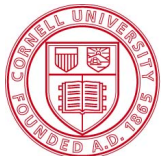
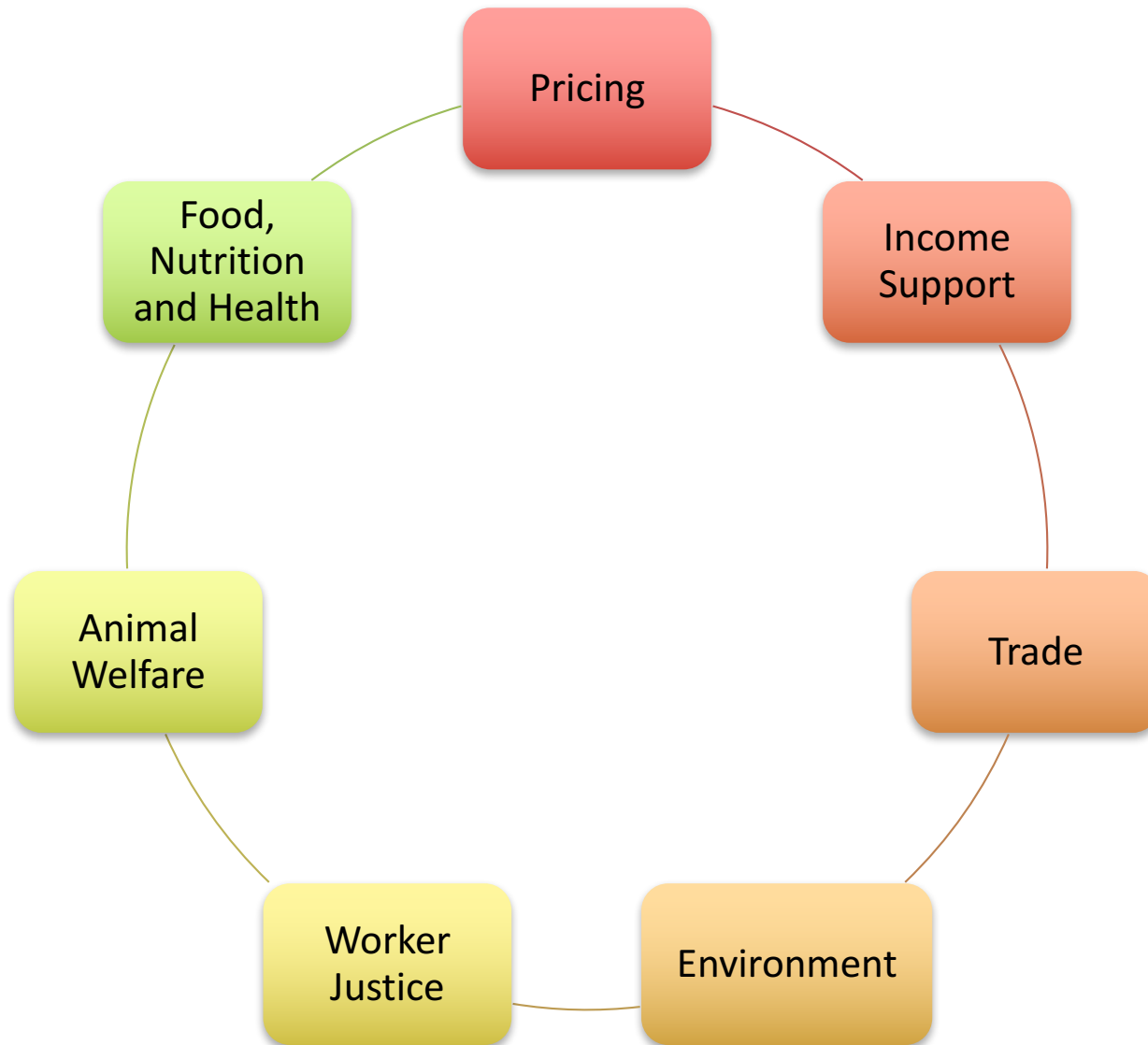
Justice – the big/bad guys are beating up the little/good guys?

Efficiency – we all know we should, but no one wants to be first (e.g., reduce waste)?

Timing - Gains are long term, costs are short term (e.g., climate change, open trade, environmental protections, many et ceteras)



Dairy Policy isn't just Pricing and Prices

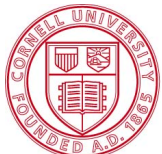


Getting the price of milk right.

The first policy initiatives were about getting the price of milk “right” – fair to farmers, stable

In late 1800s and early 1900s,
Industry/cooperatives

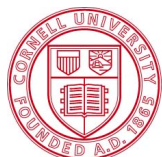
- Motivated by sense of lack of market power but strong position in the marketplace
- Focused on
 - classified pricing and pooling as a way to get the most for milk and
 - “growth management” with marginal pricing as a way to reduce growth at the expense of price



We're Still Talking About this Stuff.

Federal Order Pricing

- The devil you know
- What is the reference price(s)?
- Does it make sense to charge more for a struggling category?
- Pooling – at all? Over what area/group?
- Calming markets vs. constraining creativity
- What does this have to do with market structure, or number of farms and their size?
- Is it just about us (dairy) or do we need to think about a bigger set of competitors?



Adapting to prices instead of trying to fix them

We kind of gave up on “fixing” the price of milk in the 1990s.

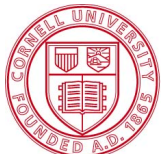
Focus since then has been on:

- Risk management (price volatility)
- Income subsidies (income volatility)

Hedging and the like doesn't fix prices

Fixing income is more expensive than fixing price

DMC will be a very interesting and informative test or how much we can do and how much we are prepared to do

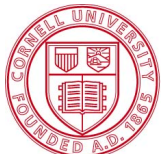
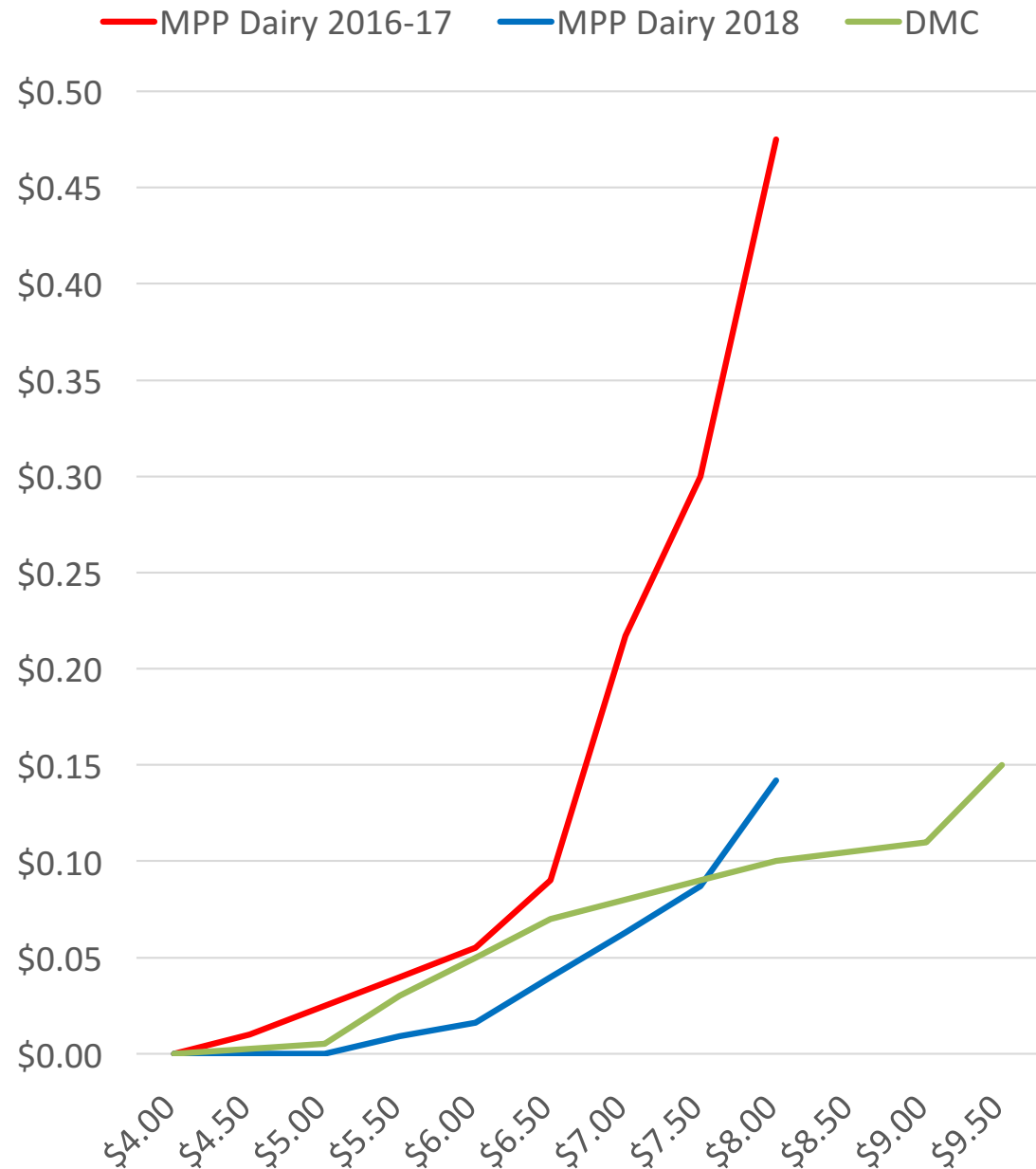


MPP-Dairy 3.0 = Dairy Margin Coverage

The Agricultural Improvement Act of 2018 is signed and ready to go, but waiting for USDA to get back to work so that rules can be written.

“New” dairy program is a serious revision of MPP-Dairy that is much more generous to average sized or smaller farms in terms of

1. premiums (costs less)
2. Coverage Level Threshold (pays more often)



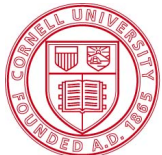
DMC Premium Rise Sharply above 5 Million Pounds per Year

Every farmer in the US can enroll in DMC but now almost every farmer can limit his enrollment to Tier 1, because the minimum enrollment is now 5% of PH.

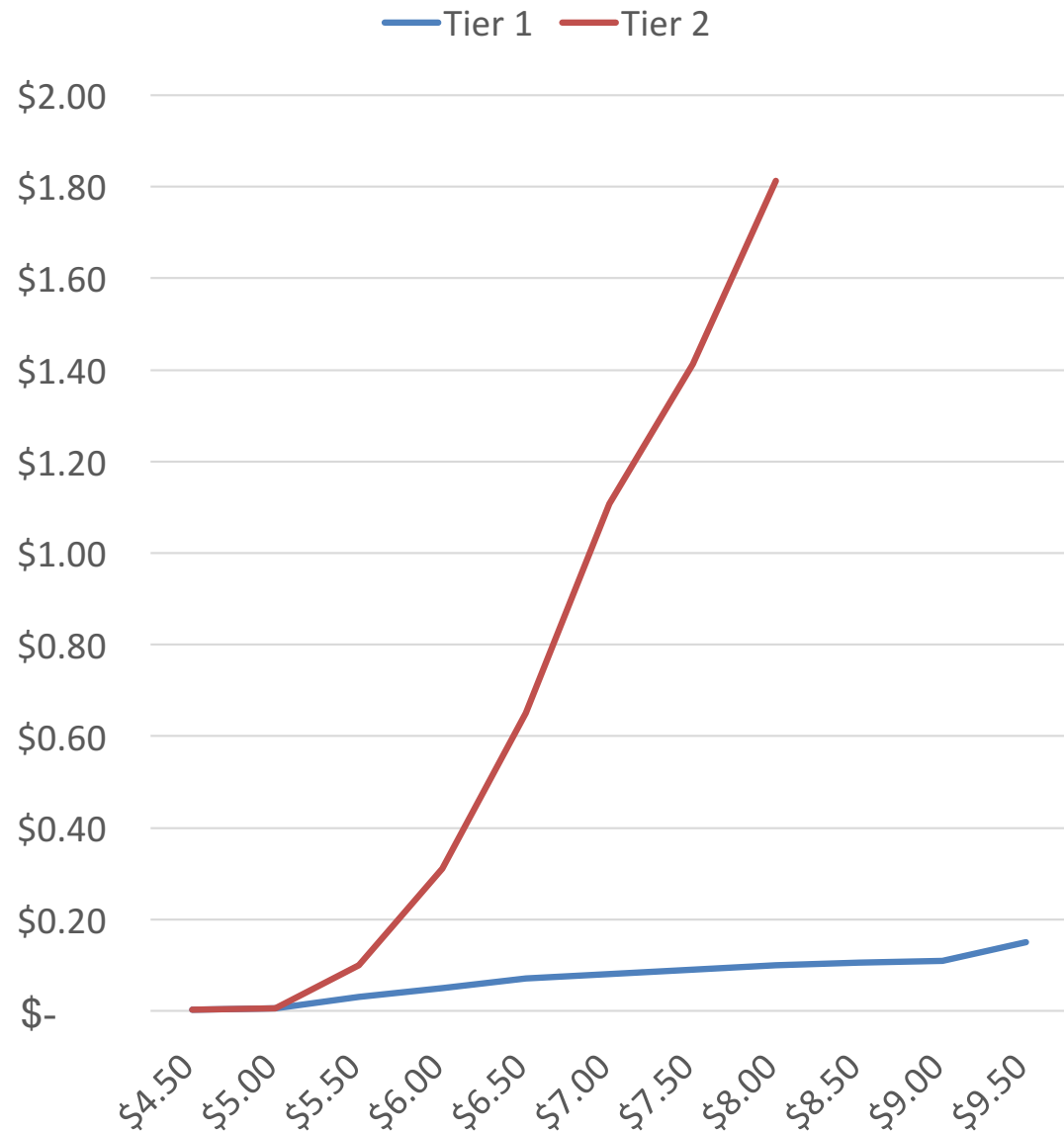
Farmers may also now choose a different margin coverage in Tier 2 for milk in excess of 5 million pounds. Thus, you can take \$9.50 coverage for the first 5 million and drop it to, say, \$5 for the remainder of your enrollment.

You may never get a payment for milk in Tier 2, but the cost is very small – just in case, or if your 5% exceeds 5 million pounds.

Whatever you do in DMC, you can also enroll in DRP or LGM-D.



DMC Premiums for Tiers 1 and 2



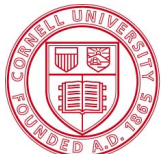
Refunds, Discounts and other Special Deals

Knowing that MPP-D 1.0 was an unmitigated disappointment, Congress decided to allow refunds of net premiums for farms enrolled in 2015-2017.

You can choose to take 50% of the net in cash, right away, or

You can use 75% of the net as a credit towards premiums under DMC

In addition, if you choose to elect one time coverage (same percentage enrolled and same margin), you will get a 25% discount on your premiums.



Takeaways from DMC So Far

Sign up starts in June, payments apply from January.

With the new premiums, it probably makes sense to enroll at \$9.50 (Tier 1, max amount of milk)

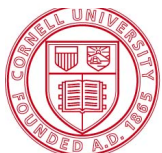
With the 25% discount, it probably makes sense to select it for all 5 years at the gitgo.

Very large farms that must enroll more than 5 million pounds might well consider \$4 to \$5 coverage, simply because the cost is so low (> 100 million pounds).

Larger farms, in particular, should (also) consider Dairy RP

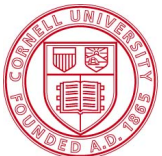
Table 1. Estimated impact, DMC Payments on Milk Production Profit, \$9.50/cwt. Margin, US, 2014-18

	50 or fewer cows	50-99 cows	100 - 199 cows	200-499 cows	500-999 cows	1000 or more cows
average profit over total cost, 2014-17	-\$15.80	-\$9.03	-\$4.37	-\$1.65	\$1.41	\$2.74
DMC payment / cwt. produced, 2014-2018	\$0.79	\$0.79	\$0.79	\$0.67	\$0.26	\$0.08
percent change in average profit, 2014-2017	5.0%	8.7%	18.0%	40.6%	18.4%	2.9%



Trade Policy is one of the most important policy discussion in the world today.

- Around the world, people and governments seem to be questioning the merits of open economies, with viewpoints returning to notions of Mercantilism and Protectionism, as opposed to Comparative Advantage and Globalism.
- USMCA (NAFTA 1.1)
- Sec. 232 (national security protectionism)
- Multilaterals vs bilaterals
- Current sales vs mutual benefits from integrated economies.



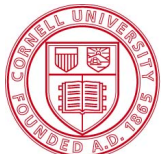
National and Global Concerns

Current Administration is unwinding some regulations with the belief that we have 1) worried about stuff that doesn't need worrying about and 2) stifled short term economic growth.

Contrast with the Green New Deal – yes, this is about different political philosophies and beliefs but also a generational difference (the clock is ticking).

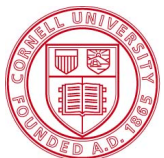
Growing global concerns about environmental issues, including climate change, cf. U.N. Sustainable Development Goals

Implications of increased traceability (cf. Block Chain)



External Factors Complicating Labor Policy Decisions

Animal Welfare and Worker Justice will only grow in importance – part of the Millennial social contract



US Immigration Law

Acceptable solutions to the use of immigrants for seasonal and year around labor in agriculture are not especially contentious, per se, BUT

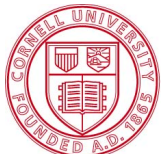
Some insist on linking a solution to larger issues of immigration and “border security”,

Path to citizenship is a very contentious issue, plus

There are plenty of other political tensions to thwart a solution.

Although it would depend on the specific rules, if improved guest worker programs means increased labor mobility, it will increase the cost of immigrant labor.

We are teetering on the edge of substituting more capital for labor, which ultimately may be inevitable.



A national survey of dairy farms was conducted during Fall 2014, with responses from all regions of the United States and all herd sizes.

Dairy farms employed an estimated 150,418 workers in 2013. An estimated 76,968 of those are immigrants, accounting for 51 percent of all dairy labor and dairies that employ immigrant labor and producing 79 percent of the U.S. milk supply.

Dairy farm workers are paid an average wage of \$11.54/hour and with non-wage benefits included, an annual equivalent compensation of \$34,443. Dairy farms that hire immigrant labor pay hire average wages than farms that do not hire immigrants.

Eliminating immigrant labor would reduce the U.S. dairy herd by 2.1 million cows, milk production by 48.4 billion pounds and the number of farms by 7,011. Retail milk prices would increase by an estimated 90.4 percent.

Eliminating immigrant labor on dairy farms would reduce U.S. economic output by \$32.1 billion and reduce employment by 208,208 jobs

Approximately 64 percent of the losses noted above would occur in input supply sectors and services provided to U.S. dairy farms.

Labor Policy

The Economic Impacts of Immigrant Labor on U.S. Dairy Farms

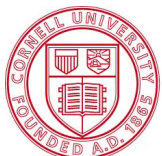


CNAS Report 2015-1

June 2015

Flynn Adcock, David Anderson, and Parr Rossini¹
Research Support Provided by Ivan Hanecka

Prepared Under Contract for National Milk Producers Federation



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Implications of Changing Ag. Exemption in NYS

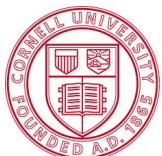
Potential Impacts of Minimum Wage Increases on New York Dairy Farms

Jennifer Ifft & Jason Karszes

This study considers the impact of minimum wage increases on New York dairy farm labor costs and net farm income, under two wage compression scenarios.

Average net farm income could decrease by at least one-third and labor costs could increase by at least 34 percent under the new minimum wage law, compared to an expected 10 percent decline in net farm income and a 13 percent increase in labor costs based on historic wage increases.

Under the current short term outlook for low milk prices, increasing wage pressure may accelerate the decades-long trends towards (1) larger and more productive dairy farms and (2) capital-intensive or labor-saving production methods.

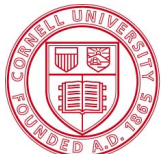


How, not if.

Dairy farmers are acutely aware that there are gross misperceptions about how animals are treated, but 1) we are not unblemished and 2) some people simply don't like using animals for food. This concern won't just go away.

A key question here is who will provide assurance:

1. Industry self-regulation
2. Government regulation
3. Third party certification



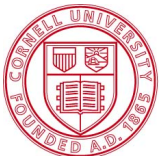
Consumer Attitudes and Market Environment

What do consumers want?

- More than one kind of consumer (worldwide)
- Because of the product itself
- Because of something related (believed to be related to the product)
- Because of me, my values, my beliefs

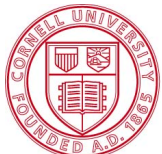
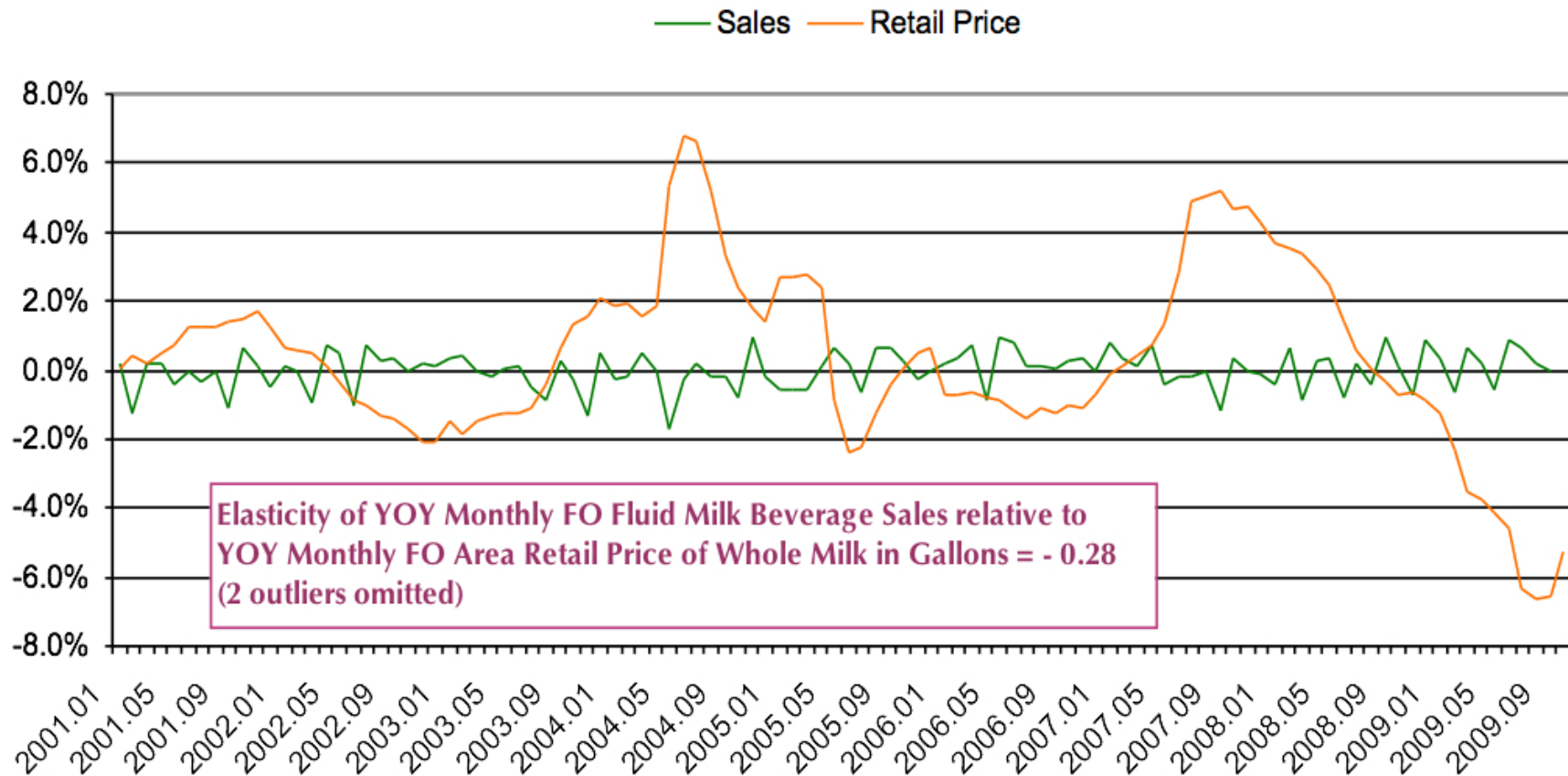
Implications for

- Sales trends
- Product development
- Marketing strategies
- Public regulation

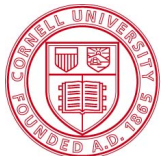


Does consumption respond to changes in price?

Comparison of YOY Monthly Percentage Changes in Fluid Milk Sales and Retail Price of Whole Milk Gallons



Attitudes about “milk is good for you” have changed **DRAMATICALLY** over time

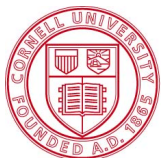


Children's Nutrition, Childhood Obesity, Subsidized Food Consumption, and Consumer Choice

First Lady, and First Mom, spearheaded the Obama Administration's effort to shape how kids eat by what schools had to serve them (to qualify for federal cafeteria subsidies). Kids were served healthier meals, but were they eating them?

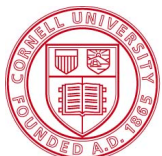
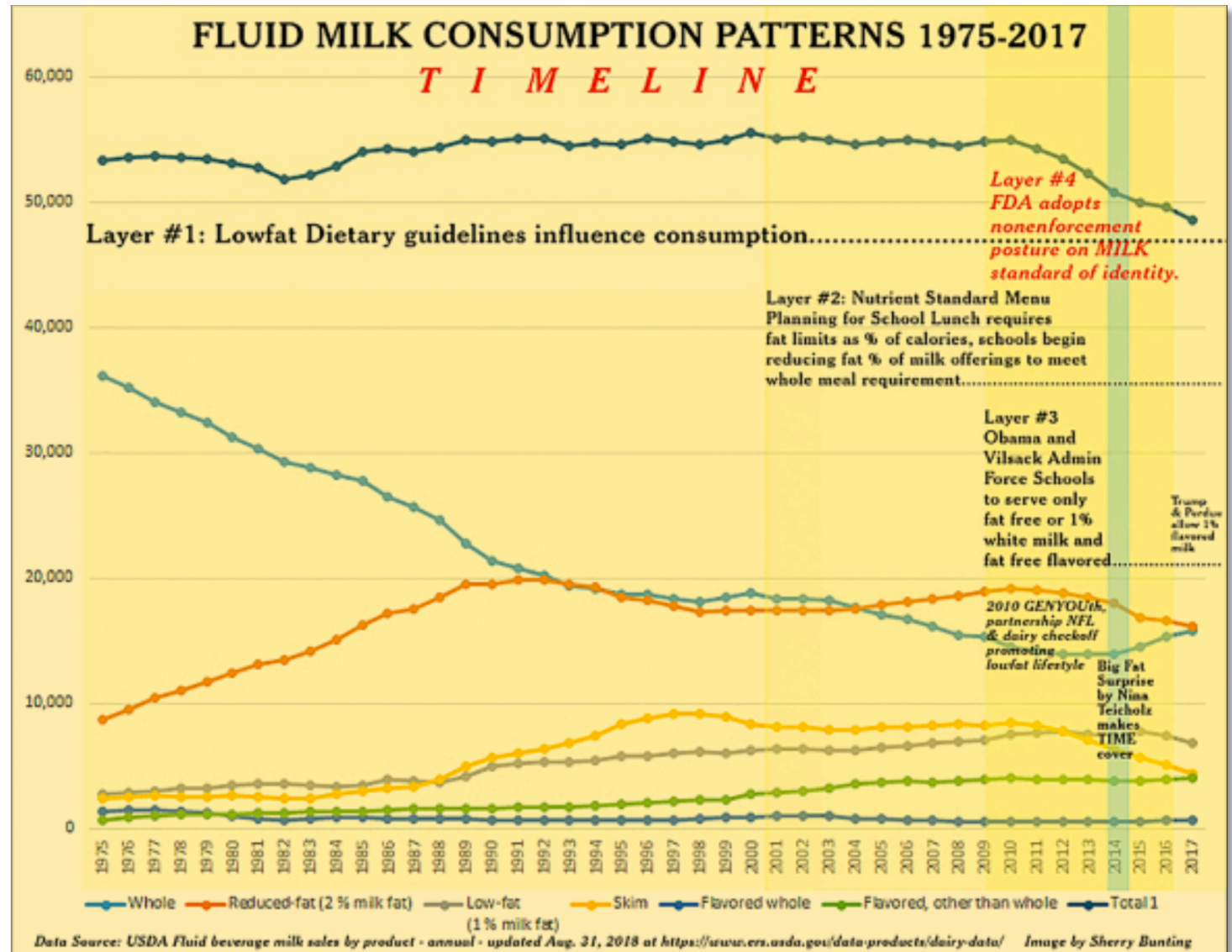
What you eat vs. how much you eat.

Secretary Perdue relaxed several requirements, permitting lowfat chocolate milk and white bread. He argues feeding kids is the first priority, then what you feed them.



Correlation or Causation?

USDA is obliged to follow its dietary guidelines, which are not especially political. Plus, schools MUST serve milk with every subsidized meal. (students aren't required to drink it)



Helping Consumers Make Food Choices

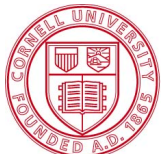
Health and Nutrition – we have a good underlying story but it is hard to change decades of teaching and beliefs

Labeling and standards – we might win the battle on what can be called milk but the victory may be Pyrrhic

Front-of-Pack (FOP) labeling is on the cusp of exploding and could be good news and bad news for dairy products

Sales of plant-based 'milk' were up 9% to \$1.6bn (whereas cow's milk sales were down 6%) and now comprise 13% of total milk sales; sales of plant-based cheese were up 43% to \$124m, yogurt sales were up 55% to \$162m, meat sales were up 24% to \$670m, and egg/mayo up 16% to \$42m.

[Intermountain Traffic Light Diet Plan](#)



Food Attitudes and Science

(what should you eat)

The latest Scientific Report of the 2015 Dietary Guidelines Advisory Committee

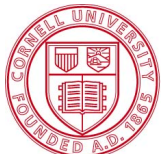
Under-consumption : vitamin D, calcium, potassium and fiber. Dairy products are good sources of vitamin D, calcium and potassium, and can be paired with fiber.

Over-consumption: *Saturated* fat and sodium, but removed restrictions on fat consumption and dietary cholesterol.

Dairy is associated with lower risk of a number of chronic diseases and conditions, such as heart disease, diabetes and obesity

Attempting to link environmental sustainability with food choices (very Millennial)

Perdue critics cite the 2009 Study, on which M. Obama's policy recommendation was based.



The next step in Genetically Modified Organisms

Bacteria produced animal proteins (including milk!) and gene editing will refocus attention on what are acceptable technologies and why

Crop Modification Techniques



Cross Breeding

Combining two sexually compatible species to create a variety with the desired traits of the parents



The Honeycrisp Apple gets its famous texture and flavor by blending the traits of its parents.

Mutagenesis

Use of mutagens such as radioactivity to induce random mutations, creating the desired trait



Radiation was used to produce a deeper color in the red grapefruit.

Polyploidy

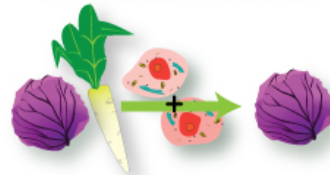
Multiplication of the number of chromosomes in a crop to impact its fertility



Seedless watermelons are created by crossing a plant with 2 sets of chromosomes with another that has 4 sets. The seedless fruit has 3 sets.

Protoplast Fusion

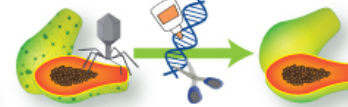
Fusion of cells or cell components to transfer traits between species



Male sterility is transferred from radishes to red cabbage by fusing their cells. Male sterility helps plant breeders make hybrid crops.

Transgenesis

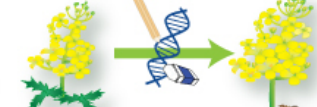
Addition of genes from any species to create a new variety with desired traits



The Rainbow Papaya is modified with a gene that gives it resistance to the Papaya Ringspot Virus.

Genome Editing

Use of an enzyme system to modify DNA directly within the cell



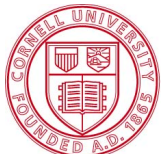
Genome editing was used to develop herbicide resistant canola to help farmers control weeds.

www.biofortified.org

Follow us on Twitter (@frankfoode) or join our Facebook Page

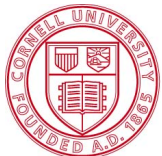
By Layla Katiraei (@BiohicaGMO) in collaboration with Karl Haro von Mogel (@kxjxm)

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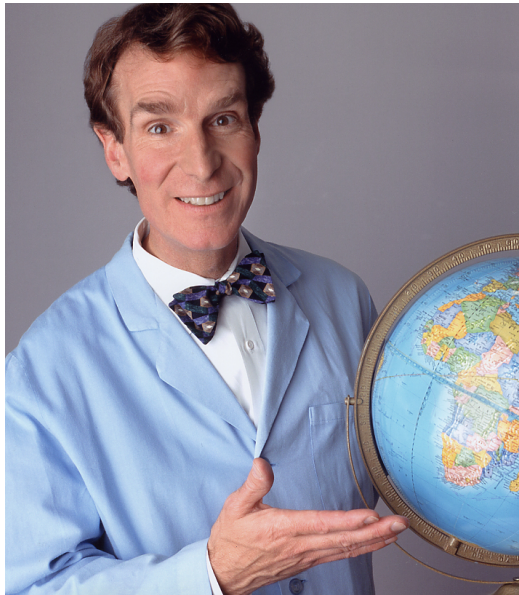


Can I figure it out? What Does Corrina Think?

The most relied upon and trusted source of information for Millennials is “Friends and Family”. Millennials use the internet to get information but they are getting it from Facebook and YouTube, not the New York Times, the American Medical Association, or USDA. (note: accuracy is obviously not as important as being “genuine”. Lack of curation)



Can I Figure It Out? Knowing vs. Believing

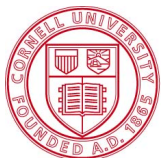


How do we communicate our stories, our rationale, our arguments to the general public?

Are we transmitting science to a receiver tuned to values?

Does science prove a truth?
(Is there a truth?)

Is it all just too complicated?
(Type I vs. Type II thinking)
=> “Therefore, everything in moderation!”



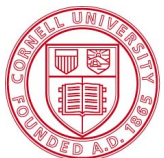
Dairy Has a Great Story – but it has to be told

Farmers, probably more than any other part of the supply chain, have to tell their story.

We won't get far by arguing with our customer, or by lecturing them. We need to build trust, confidence. Then, we can tell our story.

Dairy foods processors are challenged to move beyond the traditional strategy (C-Q-P) and figure out how to satisfy new demands.

The world is a big complex place. If you aim for one target, you'll miss 14 other ones, but aim for something.



No, Seriously, ask yourself?

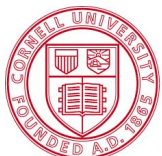
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