Hiya folks, thanks for joining us for this week's episode of AgriCast Digest. I hope you're having a good day wherever you are.

Thought I'd share with you the gleanings from the news I've read recently.

Dr. Mercola published an article on his website about the Avian Flu. His opinion is that the antibiotics they use in the factory farms creates resistant superbugs. I think I even mentioned that last week or the week before. I totally agree. He notes that they use the antibiotics as a preventative instead of a cure, which is even worse. So you've got really sick chickens being forced to lay in horrible conditions with artificial light to control their laying in an unnatural way. He does note that there are 23,000 deaths a year from antibiotic resistant microbes. How many of these are being exacerbated by the antibiotics folks are eating in their chicken and beef? The antibiotics people are flushing down their toilets that gets into the water supply? The runoff from factory farms? This is something to think about.

He mentions that food producers use chlorine baths, irradiation, and pasteurization to 'fix' our food and make it supposedly cleaner. So if this is the case, how then do over 9 million people sicken from food-bourne illnesses every year? It can't all be improperly handled food on the consumer end. I'd say perhaps a 1/4 can be attributed to that from my own experiences working in kitchens when I was younger. I think most of it comes from the factory side. I mean, I don't want to gross anyone out too much here, but I remember back in Florida watching the migrant workers pull their pants down and hose the strawberries because they didn't feel like running to the port-a-john. Or they'd do worse. Right there on the plants. And sure, okay, I suppose that's probably something our ancestors did, but ew? That's literally crapping where you eat. Almost every year there were high instances of people getting sick from hepatitis and whatever else these folks had from people who attended the strawberry festival. Or people who get sick eating spinach. You shouldn't get sick eating spinach! You shouldn't be able to catch hepatitis from a strawberry! You also shouldn't have to eat eggs laid by sick chickens or eat a drumstick that is full of antibiotics. It messes with your gut flora. Which is one of a myriad of reasons why I think people today are getting sicker and sicker. Speaking of vegetables, though, the other article I was reading comes from The Healthy Home Economist. She highlights the growing trend to make quick organics by growing the vegetables and fruits hydroponically. No chance of someone peeing on your strawberries at least that way, huh? haha

But, I have to agree with her sentiments. I'm not a fan of hydroponic vegetables since they are so low on nutrients. I'll throw some facts at you folks: did you know most produce has between 5-40% less nutrients than the same produce did in 1950? There are a number of factors to consider, but the biggest is just that we've taken SO much out of the soil and put so little back into it. In fact, there's a fella who specializes in this that I'm trying to get on the show, but I'll update y'all more on that later.

Now I noticed a long time ago when we first started eating organic veggies, about ten years ago, that there was a huge difference in taste between organic and non-organic vegetables. Collard greens was what I noticed first. They weren't bitter! I didn't have to toss sugar or bacon or a carrot in there to 'soak up the bitterness' because they were naturally sweet! I could, and did, eat them raw.

I grew curious about why this was and figured it was just the lack of pesticides but I was wrong. It's the whole way the plant is grown. The soil is amended to add nutrients.

So when my husband and I started our first garden, we wanted to do it right. I researched and researched until I found an article on the Weston A Price Foundation website about Brix levels. Plants that have a naturally high brix, or sugar level, will not only taste sweeter but they are more nutritious and are naturally healthy. The plants are healthy to the point that they repel insects all on their own!

I remember googling about how to raise the brix levels and could only find articles from potheads at the time. Apparently they like their crops to be sweet, too! haha Now it's a lot easier to find information, but back then we had to sort of wing it.

So we took the heavy Kentucky clay we had and amended it with topsoil, compost in the form of aged horse manure, and added bone, blood, and kelp meal to it. We tacked it down with plastic to let it all marinate while it was still winter and then first thing in the spring we ripped off the plastic (probably should have left it on if we were smart) and started planting. Occasionally we'd foliar feed the growing vegetables. The only bug problems we really had were squash beetles, but a healthy dose of wood ashes got rid of them right quick. We had zucchini that were the size of baseball bats and still tender. The sweet potatoes were almost shooting out of the ground and grew as big as our heads. The plenty we had was amazing. But the weeds drove us insane, so I heartily recommend using black plastic and mulch as a way to control the little devils. Or eat them. But we could only eat so many lambs quarters and dandelions. Eventually we figured out how to keep the weeds under control without having to resort to herbicides.

But I want you to think for a minute, folks, about the difference between the junky, watery tomatoes you get in the supermarket and the fat, red, juicy tomatoes you can get at the farmer's market. Most farmer's markets. Some of them I've found go down to Florida and Georgia and buy a bunch of stuff and haul it back to wherever. No, no, you need to get the stuff grown right nearby. The giant striped Germans, green zebras, purple cherokees. The good ones. Eat one of those and then try eating some of the crap at the supermarket. There's just no comparison. It doesn't have to be labelled organic, but you want something that's been organically grown. That doesn't mean just pesticides, it means that they gave the soil back something in order to get a return themselves. And off time. good it pays big

There was some ridiculous study done a couple of years ago that tried to say that there was no nutritional difference between organics and conventional produce. There are a lot of studies out there. You could get a study to say anything you want it to if you grease the right palms. If you're looking at those organic hydroponic tomatoes versus conventional hothouse tomatoes then they probably are the exact same nutrient profile. It all comes down to the way it's been grown, which doesn't mean an organic label. This makes it harder for us as the consumer to find the pearl of truth in the pig pen.

For what we don't grow ourselves, I make a point to always buy the dirty dozen organically. One thing a lot of people don't know is that the dirty dozen changes every year, so you have to keep on top of what's going on and not just assume that because apples are dirty now that they'll be dirty next year. But I buy the dirty dozen organically and the clean fifteen I will buy conventionally. Sometimes, the selection is so small that I just buy what's available, period.

And by the way, before I go to the Q&A section, I thought I'd mention that we got a comment from a listener who described me as sounding like this:

(play Leave Brittany Alone)

It gave me a real chuckle. I hope I don't sound like that. I'm just passionate about this stuff. I felt like my blinders fell off around 2006 and since then I see a whole different world. And I want other people to see it, too. I don't want it to all be negative all the time. But sometimes you need a shock to get your head out of the sand. I know that we did.

Now, let's go to the Q&A for today.

Hans Schmelzer wrote to us because he read somewhere that some chickens have been bred purely for looks and not to lay eggs. He mentions the silver laced wyandotte and asks if it's true that they aren't layers.

Ah, I love the internet. You get some of the best stuff. It is true that some chickens are bred more for their looks, or their feathers. You'll hear these referred to as "ornamental breeds". But all chickens, being birds, do lay eggs. It's just that some breeds lay more prolifically than others...The Silver Laced Wyandottes are actually known as good, dependable layers, averaging about 200 brown eggs a year. Some of the breeds known to be "poor layers" are Araucana, Buttercups, Cochins, Cornish, Dorking, Hamburg, Lakenvelder, Orloff and Sebright. You could check out Hendersons Chicken Chart (created by a professor at Ithaca) which rates the laying production of most breeds. Don't forget other factors that will cause your egg production to vary, like day length, the age and health of your flock, disease and diet.

Mishel writes: I have a chicken who is laying shell-less eggs. I make sure they have oyster shell and the proper "lay crumble" and various scraps (leafy greens, watermelon, and fruit stuff). Are there nutrients that I should be adding to their diet?

Thank you, POWER TO THE CHICKEN!!! First, you're awesome, Mishel. Power to the chicken, indeed. Love it. As for your egg problem, part of it could be from a layer who is too young or too old which I covered in a previous broadcast. But let's dig deeper for a moment. You're correct, Mishel, in pointing out that you offered ground oyster shell. Chickens need calcium to produce egg shells. And feeding oyster shell is one of the best ways to provide that. It doesn't spoil, it's inexpensive, it's easily absorbed and palatable to the birds. But make sure you feed it separately, as a free choice – not mixed in with their feed. If your birds start eating less because of hot weather or too many treats, they're going to get less calcium if the oyster shell's mixed in with the feed. And some hens just need more calcium than others. Put it in a dish by your feeders and let them help themselves. They'll eat what they need. It's your choice, but this is what we do.

Another thing that can cause shell-less eggs is too much salt in your water. Something else you may want to check out. But, if this is the only hen who's having this problem, then you can pretty much rule out these as causes.

It's not unusual for older hens or hens just starting their laying cycle after a period of non-laying. It can take some time for the hen to "restart" her internal system. Stress can be a possible cause but this too would be a temporary thing.

The last thing to consider is disease. There's certain diseases that can affect the oviduct function such as infectious bronchitis, Mycoplasma gallisepticum or Egg Drop Syndrome (called EDS) that will result in shell-less eggs.

EDS causes apparently healthy birds to lay soft-shelled and shell-less eggs, frequently at times of peak production. It's caused by an adenovirus that is widely distributed in wild and domestic geese and ducks so free range birds are most likely to be at risk. Layers of brown eggs are more prone to it than white egg layers. All eggs can be affected. The first symptoms are usually weak egg shells and loss of shell pigmentation, followed by the production of thin, soft and shell-less eggs. Although infected birds may appear depressed for about 48 hours, you won't really notice any other change in their health – the bird suffers little. EDS does cause a reduction in laying but a lot of times you won't even notice this because hens often eat thin shelled or shell-less eggs. Eventually, the bird recovers but will still occasionally produce shell-less eggs from the previous infection. Unfortunately, there's no cure.

That's all I've got for today. Please send in new questions for us by email or using the form on the podcast main page. Thanks again for listening, folks. Good night and God bless.