K-STATE Research and Extension | Meadowlark District

December 4, 2020

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Warning-Don't Read this While Eating

In these turbulent times with COVID-19 and election troubles, some things might not be making the news cycle. Fake meat has been around for a while now, most of which is plant-based, created in laboratories somewhere. But now there's a new company, called Ouroborus Steak," which will allow customers to grow their own meat using their own cells and donated blood. Cannibalism is here, are we surprised? Here's a couple of headlines on this new company, along with a few others with updates on the general fake meat movement. Check them out and let me know what you think.

"Ouroborus Steak grow-your-own human meat kit is 'technically' not cannibalism" by Jennifer Hahn for Dezeen

"A group of American scientists and designers have developed a concept for a grow-your-own steak kit using human cells and blood to question the ethics of the cultured meat industry."

Ouroboros Steak could be grown by the diner at home using their own cells, which are harvested from the inside of their cheek and fed serum derived from expired, donated blood." 2. "You are what you eat: DIY human steak installation ignites debate around the ultimate taboo - cannibalism" by Laura Brehaut for the National Post

Brehaut writes, "Human cells, mycelium, paper, plastic. This story starts benignly enough. A DIY meat kit is the crux of the debate — but this isn't just any protein. "Instead of using animal cells to produce chicken nuggets, meatballs or slices of steak, Ottawa scientist Andrew Pelling, industrial designer, and scientist Grace Knight, and interdisciplinary artist, designer, and researcher Orkan Telhan cultured human cells in human serum to grow blobs of, you guessed it, human meat." 3. "1,000 years of fake meats" featured on Grist. In a video series, Grist features video footage of fake meat products. Here's a description of the video: "We prepared six faux meat dishes from the past 1,000 years, ranging from mock lamb chops in 965 to the 'bleeding' Impossible Burger in 2016."

"The other side of climate-friendly foods" by Vibha Varshney for Down To Earth. Varshney writes, "Eating is intrinsic to every living organism. We eat what is around us, be it plants or animals, as long as we eat moderately. But now, making good food choices is progressively becoming difficult.

"Consider this. Managing the food system is now part of the new formula for fighting climate change. The food systems — that includes cultivation, storage, processing, and managing waste — produce somewhere between 21-37% of greenhouse emissions." "In a global first, lab-grown chicken nugget will soon be on the menu in Singapore" by Rasha Aridi for Smithsonian Magazine. "This is a historic moment in the food system," Josh Tetrick, Eat Just's chief executive, tells Mike Ives of the New York Times. "We've been eating meat for thousands of years, and every time we've eaten meat, we've had to kill an animal."

Only in 2020 would this not shock me!

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Plan Now…Order Soon…Plant Later…

When we think planting, we typically think spring. While spring works for many crops or plants, trees are one planting that needs advance planning. If you've ever considered a windbreak, the time for planning isn't late spring or during the first winter cold snap. It's now.

The wind chill with a temperature of 10 degrees and a15 miles per hour wind is negative 18 degrees. That 10-degree temperature feels 28 degrees colder than it actually is. The same combination of temperature and wind *behind* an established windbreak: seven degrees. Just three degrees cooler feeling than the actual air temperature and 25 degrees *warmer* than being in the wind directly. That difference would make outdoor work a lot nicer and life outside for pets and livestock a lot easier. It can also help reduce home heating fuel costs by 15 to 25 percent.

Because they are a long-term investment, windbreaks must be designed to ensure the desired benefits to homes, livestock, and fields. Make a sketch of your site and potential locations, giving consideration to the following design principles:

Wind eddies will form around the ends of a windbreak. To avoid, extend windbreaks at least 100 feet beyond the area to be protected.

Gaps will funnel wind and reduce effectiveness. Locate driveways around the ends of windbreaks or situated at an angle perpendicular to prevailing winds to prevent this funneling.

Windbreaks are more attractive following the land's natural contour. Rows don't have to be straight in one direction, but should be generally perpendicular to the prevailing winds.

Avoid plantings where the windbreak will block a driver's vision at intersections. Don't make plantings closer than 200 feet north or west and 80 feet south or east of the centerline of a road to prevent creating snow drifts across the road.

Think diversity of species. This will increase insect and disease resistance as well as wildlife habitat. However, you shouldn't mix species within the row unless in a specially designed wildlife habitat planting. Plants of the different species grow at different rates and suppression of slower growing species may be seen.

For additional planting tips and tricks, check out Windbreaks for Kansas, available from any District Office, or online at: https://bookstore.ksre.ksu.edu/pubs/MF2120.pdf .

After the design, you'll need trees. Next week we'll talk about the Kansas Forest Service Conservation Tree and Shrub sales program.

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Food, Nutrition, Health, and Safety

Going Gluten-Free for the Holidays

From time to time, I've been getting questions about gluten-free foods and baking. So I thought this was a timely topic for this time of year. Holidays can be a rough time for folks who can't tolerate gluten. Many people enjoy sharing their love of baking during the holidays, and gluten-free eaters can feel left out. However, while gluten contributes essential properties to baked goods, there is a wide variety of gluten-free flours, starches, and baking aids that can be used to produce high-quality products.

Although there are many pre-made gluten-free products available for purchase, gluten-items are not very shelf-stable. They require many preservatives, which can affect the taste, nutrition, and price. Fortunately, made-from-scratch gluten-free items can be very delicious. Usually, the most challenging thing about gluten-free baking is replacing the all-purpose flour ingredient. In many grocers' health food departments, gluten-free baking is readily available for purchase. Bakers can also mix a gluten-free flour blend to substitute for all-purpose flour. Recipes for gluten-free flour may require the purchase of specialty items, but because they take only a small amount of each to blend, these ingredients can last a long time.

It's essential to be aware that gluten may be hiding in other products besides baked goods. Read the label carefully and contact the manufacturer if you are unsure about a food product's gluten status. The FDA requires all foods containing significant allergens to be labeled, but keep in mind that other gluten-containing grains, like barley and rye, are not required to be labeled. So, "wheat-free" is not necessarily the same as "gluten-free."

With a little awareness, precaution, and experimentation this holiday season, even gluten-free eaters can "have their cake and eat it too." Just make sure you're using a gluten-free flour blend!

Gluten Free Flour Blend

1 ¼ cups brown rice flour
¾ cup sorghum flour
2/3 cup cornstarch
¼ cup potato starch
1 Tablespoon + 1 teaspoon potato flour
1 teaspoon xanthan gum

Combine all the ingredients and store in an airtight container in the refrigerator. Makes about 3 cups.

Flourless Chocolate Cake with Chocolate Ganache Cake

½ cup water
¾ cup sugar
¼ teaspoon salt
1 cup (2 sticks) salted butter
6 eggs
16 ounces bittersweet chocolate (about 2 ¾ cups chips or pieces)
1 teaspoon gluten-free vanilla extract

Chocolate Ganache:
¾ cup heavy cream
6 ounces semisweet chocolate, cut into small pieces (about 1 cup chips/pieces)

1. To make the cake: Preheat the oven to 300◦F. Grease a 10-inch spring form pan.
2. In a medium saucepan, stir together the water, sugar, and salt. Add the chocolate and butter and set over medium-low heat, stirring until the chocolate and butter are completely melted.
3. Whisk the eggs in a separate bowl. Slowly mix the chocolate mixture into the eggs, constantly mixing until well blended.
4. Pour the batter into the prepared pan. Bake for 45 minutes, or until it is almost set. Let cool completely.
5. Remove the outside ring of the spring form pan and refrigerate the cake until chilled. (Leave the base of the spring form pan beneath the cake.)
6. To make the ganache: Heat the heavy cream in a heavy saucepan over medium heat. Remove from the heat and whisk in the chocolate, stirring until the chocolate is completely melted and the ganache is shiny and smooth.
7. Keeping it on the spring form pan base, place the chilled cake on a wire rack with waxed paper underneath. Pour the ganache over the cake and spread to cover, allowing any excess to drip off onto the wax paper. Place the cake (and base) on a serving plate. For food safety, be sure to refrigerate leftovers and not let the cake sit out for more than 2 hours. The food safety concern here is the dairy product in the ganache.

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Nancy Nelson
Meadowlark Extension District
Family Life

No News from Nancy this week