

July 22, 2015

Yesterday potatoes, today corn. [Smithsonian Magazine](#) with the lowdown on corn. Corn has a bad rap. Think of those 90 million U.S. acres growing the stuff, and what comes to mind? Monocrops, perhaps? Cheap meat and processed foods? Ethanol? Subsidies? Polenta might not even make your list.

But let's separate corn, the plant, from corn, the cog in the industrial machine. There's a strong case (which I'm going to make) that field corn, used as a grain, is the single most important food crop on the planet. That case is based on what I'll contend is the most underappreciated metric in agriculture. I am, singlehandedly, going to try to change that. Yes, I am going to try to make you care about an arcane agricultural metric to which, heretofore, you probably have given not a moment's thought.

That metric is calories per acre.

Calories matter because every last one of us needs about 1 million of them each year. They certainly aren't the only thing we need; we also need vitamins and minerals, fats and protein. But if we don't have those 1 million calories, other needs fade into the background. There's not much point in talking about phytonutrients if people are starving.

In the calorie department, corn is king. In 2014, average yield in the United States was 171 bushels per acre. (And the world record is an astonishing 503 bushels, set by a farmer in Valdosta, Ga.) Each bushel weighs 56 pounds and each pound of corn yields about 1,566 calories. That means corn averages roughly 15 million calories per acre. (Again, I'm talking about field corn, a.k.a. dent corn, which is dried before processing. Sweet corn and popcorn are different varieties, grown for much more limited uses, and have lower yields.) If you had taken our 2014 corn harvest of 14.2 billion bushels and used it to feed people, it would have met 17 percent of the entire world's caloric needs.

By contrast, wheat comes in at about 4 million calories per acre, soy at 6 million. Rice is also very high-yielding, at 11 million, and potatoes are one of the few crops that can rival corn: They also yield about 15 million (although record corn yields are much higher than record potato yields).

City Journal with a post on what ails shopping malls and how they might be cured.

... Many of today's shopping malls maintain a ghostly presence on the fringes of America's urban spaces. Nearly 15 percent of malls are between 10 and 40 percent vacant, up from just 5 percent in 2006. Another 30 million square feet of mall retail space are in the throes of what real estate analyst D.J. Busch of Green Street Advisors terms a "death spiral."

Shoppers are increasingly making purchases from home; Internet sales reached 6 percent of total retail spending in the fourth quarter of 2013, nearly doubling their share from 2006. Many parts of America are "over-malled," suffering from nineties-era overbuilding that left a glut of retail space that's hard to fill. Older malls are feeling the pinch. Though the bulk of shopping malls remain healthy to an accountant's eye, they're fast becoming cultural dinosaurs. Many shoppers feel alienated by their concrete brutalism and aging, introverted atmosphere. "Within ten to fifteen years," says mall developer Rick Caruso, "the typical U.S. mall, unless it is

completely reinvented, will be a historical anachronism—a sixty-year aberration that no longer meets the public's needs, the retailers' needs, or the community's needs."

Is it possible to breathe life into dead malls? "Sometimes a mall goes out of business because it has lost its economic reason for being," architect Victor Dover notes, but "almost every community needs something." We need to "stop thinking about these as failed shopping center properties and start thinking about them as potential mixed-use properties." Reinventing shopping malls won't be easy. They are large and inflexible spaces. Yet, as Victor Gruen knew, we have always needed gathering places. That is why we should look back to Gruen's original vision of the mall to find its purpose for the decades ahead. ...

The Guardian says researchers are finding ways to combat memory loss.

Researchers may have found a way to slow down or prevent memory problems that arise in old age and which can become devastating in patients with dementia.

The fresh hope comes from a series of studies in humans and mice that identified a protein which causes memory impairment when it builds up in the blood and brain with age.

Scientists found that injections of the protein made young animals' memories worse and reduced the growth of new neurons in their brains. Further studies showed that blocking the protein prevented memory loss in older animals, making them smarter than untreated animals of the same age.

The findings are the latest to come from researchers in the US who have shown in previous work that blood plasma taken from young animals can rejuvenate the muscles, brains and other tissues of older animals.

Those studies have led scientists to suspect that blood plasma contains a cocktail of factors that either drive or counteract the natural ageing process. ...

Discovery reports one migration from Siberia peopled the Americas.

Native American ancestors reached the New World in a single, initial migration from Siberia at most 23,000 years ago, only later differentiating into today's distinct groups, DNA research revealed Tuesday.

Most scientists agree the Americas were peopled by forefathers who crossed the Bering land and ice bridge which connected modern-day Russia and Alaska in Earth's last glacial period.

And it is known through archaeological finds that humans were already present in the Americas 15,000 years ago.

But there was a long list of outstanding questions.

When did the migration take place? In one or several waves? And how long did these early pioneers spend in Beringia — the then-raised land area between Asia and America?

On Tuesday, analysis of Native American and Siberian DNA, present-day and ancient, sought to fill in some of the blanks with two studies carried simultaneously in the journals Science and Nature. ...

NY Times reports on vitamin expiration dates.

Vitamins and dietary supplements are not required to carry expiration dates on their labels. This is one area where supplements differ from prescription drugs and over-the-counter medications, which are subject to more stringent regulations.

If companies want to print a “use by” or “best by” date on their supplement labels, they can do so voluntarily. But they are then required to honor those claims, said Tod Cooperman, the president of ConsumerLab.com, a popular independent testing company.

“If you see some type of expiration date,” he said, “the manufacturer is legally required to have stability data demonstrating the product will still have 100 percent of its listed ingredients until that date.”

Washington Post

[In defense of corn, the world’s most important food crop](#)



Rows of corn wait to be harvested in a field in Illinois. In the United States, 90 million acres are planted in corn every year.

Corn has a bad rap. Think of those [90 million U.S. acres growing the stuff](#), and what comes to mind? [Monocrops](#), perhaps? Cheap meat and [processed foods](#)? Ethanol? Subsidies? Polenta might not even make your list.

But let's separate corn, the plant, from corn, the cog in the industrial machine. There's a strong case (which I'm going to make) that field corn, used as a grain, is the single most important food crop on the planet. That case is based on what I'll contend is the most underappreciated metric in agriculture. I am, singlehandedly, going to try to change that. Yes, I am going to try to make you care about an arcane agricultural metric to which, heretofore, you probably have given not a moment's thought.

That metric is calories per acre.

Calories matter because every last one of us needs about 1 million of them each year. They certainly aren't the only thing we need; we also need vitamins and minerals, fats and protein. But if we don't have those 1 million calories, other needs fade into the background. There's not much point in talking about phytonutrients if people are starving.

In the calorie department, corn is king. In 2014, average yield in the United States was 171 bushels per acre. (And the world record is an astonishing [503 bushels](#), set by a farmer in Valdosta, Ga.) Each bushel weighs 56 pounds and each pound of corn yields about 1,566 calories. That means corn averages roughly 15 million calories per acre. (Again, I'm talking about field corn, a.k.a. dent corn, which is dried before processing. Sweet corn and popcorn are different varieties, grown for much more limited uses, and have lower yields.) If you had taken our 2014 corn harvest of 14.2 billion bushels and used it to feed people, it would have met 17 percent of the entire world's caloric needs.

By contrast, wheat comes in at about 4 million calories per acre, soy at 6 million. Rice is also very high-yielding, at 11 million, and potatoes are one of the few crops that can rival corn: They also yield about 15 million (although record corn yields are much higher than [record potato yields](#)). Other vegetables, while much more nutritious than corn, wheat or potatoes, are far less energy-dense. Broccoli yields about 2.5 million calories per acre, and spinach is under 2 million. We all need those vegetables, but we get our full day's worth of nutrition from them in a fraction of the 2,000 daily calories we need to get by, leaving plenty of room for inexpensive, easily grown calories that aren't as nutrient-dense.



Dent corn — also known as field corn — takes its name from the small indentation that is visible in the mature kernels.

There's one very good reason corn is so inexpensive and easily grown, but understanding it requires you to hark back to grade school, or wherever it was that you first learned about photosynthesis, the miraculous process by which plants turn energy from the sun into energy we can eat. For me, it was Mrs. Weiss's seventh-grade biology class. But because my odds of tracking down Mrs. Weiss to explain all this were pretty slim, I asked Ricardo Salvador instead. Salvador, a prominent voice in the movement for sustainable food and a plant scientist with a specialty in corn, directs the food and environment program for the Union of Concerned Scientists. Safe to say he's got a better understanding of all this than Mrs. Weiss. (Although, to her credit, she performed a memorable experiment on how we become inured to even very strong smells.)

"Corn has a particular kind of metabolism shared only with 5 percent of flowering plants," Salvador told me. He explained that those plants (called C4, for a four-carbon molecule that's part of the photosynthesis process) have special cells that make them up to three times as productive as the unfortunate 95 percent.

Here's how. Plants process both carbon dioxide and oxygen, but they can make sugar only from the CO₂. When they get an oxygen molecule instead, it's a double whammy; not only do they not make sugar, they release one of those valuable CO₂ molecules. C4 plants get their edge from cells that act as gatekeepers, keeping oxygen out and allowing only CO₂ to get into the system. It's all photosynthesis, all the time

Not only that, but C4 plants use water more efficiently in photosynthesis; C4 developed as a response to dry climates. So, as water becomes an issue in more of the crop-growing world, C4 plants (corn, but also sorghum, sugar cane and millet) play an important role.



Corn is among a group of flowering plants that can grow prolifically because they are especially efficient at photosynthesis, which turns energy from the sun into energy we can eat.

Moreover, according to Salvador, “Corn has adapted to just about every climate that humans have adapted to. Tropical and temperate, dry and rainy, cool and warm.” Which means there’s a huge gene pool to choose from when changing conditions make further adaptation necessary.

Fifteen million calories per acre. Adapted to all kinds of climates. Well-suited to dry conditions. Genetically malleable. Pass the polenta!

I realize it’s hard to get excited about field corn when you know that, instead of feeding 17 percent of the world, it’s going into pigs and cars and Twinkies.

There’s a lot of bathwater in that system, but there’s a baby, too. Take animal feed. Even though there’s a strong case that [we should eat less meat](#), as long as we eat any, it makes perfect sense to make feed out of corn. You could raise a dozen 250-pound hogs on one acre’s worth (assuming that’s all they ate). They’d add up to almost 2 million calories, which means that corn-fed pork has the same calorie-per-acre yield as spinach. That in no way excuses a system where animals are kept in ever-smaller spaces to provide ever-larger quantities of ever-cheaper meat, but it does mean that corn-based animal feed can be a responsible part of our agriculture.

Likewise, high-fructose corn syrup. It’s a perfectly reasonable alternative to sugar. But its virtues — it’s cheap and easy to incorporate into processed foods — have made it all but synonymous with the cheap, processed food we all should be eating less of. (Subsidies, both for ethanol and for corn itself, are also part of the bathwater. Have I mentioned crop-neutral insurance?)

And then there’s the issue of genetic modification, and the loud public argument over whether GMOs are baby or bathwater. I’d argue that corn’s GM-ness isn’t relevant to its value as food, as genetically modified corn is all but identical to the non-GM version (i.e., perfectly safe to eat). But the arguments about every aspect of industrialized agriculture are always going to play out over corn, for the simple reason that it’s the most widely grown crop in the United States, and

therefore the first crop any new technology will be applied to (more acres = more sales = faster recouping of investment).

There's a long list of things we ought to be doing to help address the problem of feeding a growing population. Some, like reducing food waste, are a clear win. Others, like buying organic, are more questionable. But the math on crop productivity is persuasive. If you eat a plant that yields twice the number of calories per acre, you halve the amount of land required to feed you. So, yes. Pass the polenta.

Haspel writes about food and science and farms oysters on Cape Cod. Unearthed, winner of a 2015 James Beard Foundation award for best food column, appears monthly. On Twitter: [@TamarHaspel](https://twitter.com/TamarHaspel). She'll join Wednesday's Free Range chat at noon: live.washingtonpost.com.



Corn is planted in a field in the Midwest. In 2014, an acre of corn in the United States yielded 171 bushels on average.

City Journal

[The Mall Rises Again](#)

How to breathe new life into America's much-maligned indoor shopping centers.

by Michael Hendrix

In 1952, Austrian architect Victor Gruen dreamed of building the perfect downtown on an immense plot of windswept prairie grass, just south of Minneapolis. Residents would walk through mixed-use developments, flush with greenery and eateries. Public spaces would flourish amidst the amenities of urban life, from apartments to townhouses and clinics to schools. Gruen's paradise never materialized. Instead of fashionable promenades and village

greens, the city of Edina, Minnesota got the Gruen-designed Southdale Center—the original shopping mall.

Southdale Center was revolutionary for its time. It was a two-storied monument to shopping in a single-story world. Shoppers walked in air-conditioned bliss from one anchor tenant to the next past ten acres of glistening shop fronts. In the middle of the complex sat Gruen's verdant town square. Sunlight poured through the skylight onto a garden court of sculpted magnolias, koi ponds, and hanging ferns. Shoppers relaxed with their loot and downed meals from the food court. Then, just as quickly as they came, shoppers walked out to their cars and drove away.

In 2004, *The New Yorker's* Malcolm Gladwell [reflected](#) on just what Southdale meant to shoppers:

Until then, most shopping centers had been what architects like to call “extroverted,” meaning that store windows and entrances faced both the parking area and the interior pedestrian walkways. Southdale was introverted: the exterior walls were blank, and all the activity was focused on the inside. Suburban shopping centers had always been in the open, with stores connected by outdoor passageways.

These elements should seem familiar to us today, since they were copied across America. “The shopping center is one of the few new building types created in our times,” Gruen stated in his 1964 book, *The Heart of Our Cities*.

Southdale Center opened on October 8, 1956, at a cost of \$20 million, or what would be roughly \$174 million today. (By contrast, the nearby Mall of America cost over \$1 billion.) Forty thousand visitors visited on its first day. By all accounts, they were amazed. “The splashiest center in the U.S.,” declared *Life*. “Part of the American way” and an “imaginative distillation of what makes downtown magnetic,” sang others.

Southdale Center sat like a city on a hill, drawing shoppers from the Twin Cities and beyond. It became a destination address all by itself. But Southdale was never meant to end at its walls. “Gruen's original vision was to foster community,” said D. Jamie Rusin, an architect and planner speaking [recently](#) to *The Wall Street Journal*. “He originally saw the mall as a place you could go to shop, eat, see the doctor, have an office—a community center for people who didn't have one.”

What Gruen imagined for Southdale was a not-too-distant cousin to today's New Urbanist vision. It was really just an old-fashioned town square dressed up in modern clothes. Around it were to be clusters of walkable mixed-use developments, built with an eye toward providing life and space for community to flourish. Gruen recognized that postwar American suburbs were being built to conform to the arterial highway system. The traditional Main Street was fading. Gruen's mall would be the new urban core. The goal was to encourage families to cluster in residential communities off the highway, where they could walk and talk with their neighbors as they shopped.

No wonder then that as copycat malls popped up across the country—like distant islands floating in a sea of parking—Victor Gruen began to sour on Southdale Center. What was once a vision for new urbanism became to him the original sin of suburbanism. Gruen called these developments “shopping machines,” accusing them of blighting the natural landscape, corroding city centers, dissolving social connections, driving small merchants out of business, and marring the city aesthetic with “ugliness and discomfort.” Needless to say, he spared the mall little mercy.

Yet it was these same “shopping machines” that proved immensely popular features of postwar American life. Roughly 1,500 malls were [built](#) from the mid-1950s to 2005. “Shopping plazas sprouted like well-fertilized weeds,” said urban [historian](#) Thomas Hanchett, thanks in part to generous [changes](#) to the tax code. At their peak in the mid-1990s, malls were [popping up](#) at a rate of 140 a year. Culturally, the mall gave two generations their memories of youthful independence. The children and grandchildren of the Baby Boom met up with their friends, watched movies, snacked on soft pretzels, and pursued faint flickers of romance.

But as with some memories, time hasn’t been kind. Many of today’s shopping malls maintain a ghostly presence on the fringes of America’s urban spaces. Nearly 15 percent of malls are between 10 and 40 percent vacant, up from just 5 percent in 2006. Another 30 million square feet of mall retail space are in the throes of what real estate analyst D.J. Busch of Green Street Advisors [terms](#) a “death spiral.”

Shoppers are increasingly making purchases from home; Internet sales [reached](#) 6 percent of total retail spending in the fourth quarter of 2013, nearly doubling their share from 2006. Many parts of America are “over-malled,” suffering from nineties-era overbuilding that left a glut of retail space that’s hard to fill. Older malls are feeling the pinch. Though the bulk of shopping malls remain healthy to an accountant’s eye, they’re fast becoming cultural dinosaurs. Many shoppers feel alienated by their concrete brutalism and aging, introverted atmosphere. “Within ten to fifteen years,” says mall [developer](#) Rick Caruso, “the typical U.S. mall, unless it is completely reinvented, will be a historical anachronism—a sixty-year aberration that no longer meets the public’s needs, the retailers’ needs, or the community’s needs.”

Is it possible to breathe life into dead malls? “Sometimes a mall goes out of business because it has lost its economic reason for being,” architect Victor Dover [notes](#), but “almost every community needs something.” We need to “stop thinking about these as failed shopping center properties and start thinking about them as potential mixed-use properties.” Reinventing shopping malls won’t be easy. They are large and inflexible spaces. Yet, as Victor Gruen knew, we have always needed gathering places. That is why we should look back to Gruen’s original vision of the mall to find its purpose for the decades ahead.

Many of these shopping centers are ideal sites for transit-oriented, mixed-use developments that include housing, retail, office, services, and public space. Infusing malls with new life means following a few basic ideas. Outward-looking shop fronts will need to be carved into malls’ blank faces. Large parking lots will have to be replaced by regularized street patterns that connect with surrounding communities. Mixed-used developments around the mall should sit flush with roads and offer residents and shoppers walkable, public spaces. Non-retail activity, such as office space and housing, will need to be integrated directly into malls.

Innovative policymakers should also consider malls as self-contained zones for experimenting with new ideas. Devens, a 4,400-acre redevelopment of a former military base on the outskirts of Boston, implemented a 75-day, one-stop permitting regime that helped turn the once-derelict space into one of Massachusetts’s most thriving commercial centers. Other cities have turned ghost malls into low-cost co-working and “maker” hubs—a boon in particular for poorer entrepreneurs who can’t afford flashy commercial space. New ideas can be tried out in old malls, trusting that the best ones will trickle out to the rest of the city. Ultimately, the aim should be to turn malls into a space for individual flourishing in the midst of community.

Southdale Center still sits as a fading testament to Victor Gruen’s vision for a new downtown. Its owners renovated the building a few years back, moving around the food court and adding a few dabs of fresh paint. It didn’t do the trick. Southdale remains roughly a third vacant. Some of the

mall's anchor tenants closed up shop years ago. But in early summer of 2013, just as the last touches of winter faded away, developers [broke ground](#) on a new housing development on the corner of the old Southdale Center. They [gushed](#) over its "stunning urban amenities" and particularly pointed to its easy walkability to restaurants and green space. In a small way, Gruen's original vision is actually coming to life.

Michael Hendrix is director for emerging issues and research at the U.S. Chamber of Commerce Foundation. The views expressed here are his own.

The Guardian

[Memory loss in old age breakthrough offers dementia hope, say researchers](#)

Breakthrough linking protein in blood to memory loss raises hopes for dementia treatment, and could be key to keeping people healthy for longer in old age

by Ian Sample

Researchers may have found a way to slow down or prevent memory problems that arise in old age and which can become devastating in patients with dementia.

The fresh hope comes from a series of studies in humans and mice that identified a protein which causes memory impairment when it builds up in the blood and brain with age.

Scientists found that injections of the protein made young animals' memories worse and reduced the growth of new neurons in their brains. Further studies showed that blocking the protein prevented memory loss in older animals, making them smarter than untreated animals of the same age.

The findings are the latest to come from researchers in the US who have shown in previous work that blood plasma taken from young animals can [rejuvenate the muscles, brains and other tissues](#) of older animals.

Those studies have led scientists to suspect that blood plasma contains a cocktail of factors that either drive or counteract the natural ageing process. Major efforts are now underway to identify the different components at work in the hope of turning them into a therapy. A human trial to test the effects of young plasma on Alzheimer's patients is already underway.

If scientists can work out which substances in blood affect the ageing process, and prove that they work in humans, they could potentially create a mixture that slows down the ageing process, at least partially. The therapy might not make people live longer, but it could keep them healthy for longer, by staving off conditions of old age, such as dementia.

"I think there are two ways we can improve or reverse the hallmarks of ageing," said Saul Villeda, the lead author on the study at the University of California, San Francisco. "One of them is to administer pro-youthful factors, but the other is to target these pro-ageing factors."

Writing in the journal [Nature Medicine](#), the scientists describe how they noticed an age-related rise in the levels of beta-2-microglobulin (B2M), a protein in the blood of mice and humans. Scores of proteins go up and down in the blood as organisms age, but Villeda found evidence

from other studies that B2M might play a role in age-related disorders. For example, patients on long-term kidney dialysis can have raised levels of B2M in their blood, and these people tend to suffer the worst cognitive decline.

To test the effect of B2M, Villeda and his colleagues injected young mice with the protein and had them perform different tasks. In the first set of experiments, mice were trained to find a platform hidden just below the surface in a water maze. Mice put into the maze were out of their depth, but used visual clues, including triangles and heart shapes around the room, to find their bearings and then make their way to the platform, which they could climb up onto.

“Young animals are really good at this. They will make perhaps one or two mistakes over the course of three trials. But when you give them B2M, they’ll make perhaps five mistakes. It’s a striking difference,” Villeda said. The effect was stronger when B2M was injected directly into the brain.

In a second set of experiments, mice were put in a chamber and after two minutes given a small electric shock through a grille on the chamber floor. The mice were then removed from the chamber, but returned the next day.

Young mice typically explored the chamber for a few moments before they froze: their natural reaction to remembering where they were. But mice given B2M froze much less, because their memories were not as sharp.

“A normal young mouse will freeze about 50 to 60% of the time in the first minute. But after B2M, they will freeze for about half that time,” said Villeda. The B2M seemed to impair the animals’ memories of the electric shock, making them respond like much older mice. When animals were tested a month after injections of B2M, it had no effect. That is good news, said Villeda, as it means that the harm caused by B2M is not permanent.

The scientists followed up with tests on mice that had been genetically modified to ensure they did not produce B2M. Young animals that had no B2M seemed perfectly normal. But as the animals aged, their memories did not decline at the same rate as other mice. “When we looked at the older animals, they were much smarter. They did not develop the same kinds of memory impairments. I was really surprised,” said Villeda.

The study went found that B2M works alongside a protein complex called MHC1. Villeda suspects that a drug that stopped the two working together could help reduce memory loss. “If we block the interaction between B2M and MHC1, could that either prevent memory loss with old age, if we take it when we are younger? Could it reverse memory loss if we start when we are old?” Villeda said.

But that may not be necessary. “Perhaps we can just get rid of it in old people’s blood”, says Villeda.

Clare Walton at the Alzheimer’s Society said: ‘This research has identified an age-related protein in mice that damages an area of the brain that is important for memory. This interesting study highlights the importance of basic research in helping to find new targets for drugs to help stop cognitive decline.

“As this study is only at the early stages, we first need to see whether the protein causes similar effects in the human brain before the research can be taken forward into potential treatments.”

Discovery

One Migration from Siberia Peopled the Americas: Study

Native American ancestors reached the New World in a single, initial migration from Siberia at most 23,000 years ago, only later differentiating into today's distinct groups, DNA research revealed Tuesday.

Most scientists agree the Americas were peopled by forefathers who crossed the Bering land and ice bridge which connected modern-day Russia and Alaska in Earth's last glacial period.

And it is known through archaeological finds that humans were already present in the Americas 15,000 years ago.

But there was a long list of outstanding questions.

When did the migration take place? In one or several waves? And how long did these early pioneers spend in Beringia — the then-raised land area between Asia and America?

On Tuesday, analysis of Native American and Siberian DNA, present-day and ancient, sought to fill in some of the blanks with two studies carried simultaneously in the journals *Science* and *Nature*.

The first, led by the Center for GeoGenetics at the University of Copenhagen and published in *Science*, found there was only one initial migration, no more than 23,000 years ago.

This ancestral pool split into two main branches about 13,000 years ago, coinciding with glacier melt and the opening of routes into the North American interior, researchers found.

These became the groups which anthropologists refer to as Amerindians (American Indians) and Athabascans (a native Alaskan people).

Previous research had suggested that Amerindian and Athabascan ancestors had crossed the strait independently.

"Our study presents the most comprehensive picture of the genetic prehistory of the Americas to date," said Maanasa Raghavan, one of the study's lead authors.

"We show that all Native Americans, including the major sub-groups of Amerindians and Athabascans, descend from the same migration wave into the Americas."

This was distinct from later waves which gave rise to the Paleo-Eskimo and Inuit populations, she added.

Given that the earliest evidence for the presence of humans in the Americas dates to 15,000 years ago, the first ancestors may have remained in Beringia for about 8,000 years before their final push into the New World, the team said.

This is much shorter than the tens of thousands of years of isolation theorized by some earlier research.

But diversification into the distinct tribes we know today, happened only after arrival in the Americas, not before.

The second study showed that, surprisingly, some Amazonians descend from forefathers more closely related to the indigenous peoples of Australia, New Guinea and the Andaman Islands than present-day fellow Native Americans.

“Present-day groups in South America have a small but distinct genetic link to Australasians,” co-author Pontus Skoglund of the Harvard Medical School told AFP of the research published in Nature.

This may explain a long-standing riddle: why, if Native Americans came from Eurasia, do some early American skeletons share traits with present-day Australasians?

But how and when this forefather came to the Americas remains “an open question,” said the study.

NY Times

Ask Well: Vitamin Expiration Dates

How should ‘use by’ dates on vitamins be interpreted? (After the date, do vitamins lose potency? Do they become unsafe?)

by Anahad O'Connor



Vitamins and dietary supplements are not required to carry expiration dates on their labels. This is one area where supplements differ from prescription drugs and over-the-counter medications, which are subject to more stringent regulations.

If companies want to print a “use by” or “best by” date on their supplement labels, they can do so voluntarily. But they are then required to honor those claims, said Tod Cooperman, the president of ConsumerLab.com, a popular independent testing company.

“If you see some type of expiration date,” he said, “the manufacturer is legally required to have stability data demonstrating the product will still have 100 percent of its listed ingredients until that date.”

The vast majority of ingredients in supplements decompose gradually over time, which makes them less potent, but not necessarily unsafe — unless, for example, they happen to grow mold. Dr. Cooperman said that to account for the inevitable disintegration, many companies add more than the amounts of ingredients listed on the label, especially vitamins that decompose quickly, like B12 and C.

If stored away from heat, light and humidity, supplements generally last about two years after the date of manufacture before the concentrations fall below 100 percent of the amounts listed on the label. But the window is only about a year for probiotics, liquids and oils, which are more fragile.

“If a probiotic label suggests refrigeration, do so,” Dr. Cooperman said. “Then return the bottle quickly back to the refrigerator before moisture gets in, as this will activate the organisms, causing them to briefly live and then die.”



So, let me get this straight ...

If I like these black men,

but I don't like this one



I'M A RACIST?

The Current Truth Flash!

(Subject to change without notice)



Sen. Elizabeth Warren (D-MA)



Gov. Bobby Jindal (R-LA)

**GREED AND THE LUST FOR MONEY IS
WHATS WRONG WITH THE UNITED STATES**

**NOW GIVE ME 90% OF YOUR INCOME OR I'LL SEND
MEN WITH GUNS AFTER YOU AND SEND YOU TO JAIL**

imgflip.com