

Ten thousand years of yoghurt

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One of the great puzzles of human evolution is that although all of us obviously thrive on milk as babies, most adult humans are lactose intolerant. They can't digest milk, which gives them all sorts of grief if they try.

Neolithic people were lactose intolerant too, their DNA tells us that. But most people from Northern Europe can drink milk as adults, and indeed they probably have to get the calcium they need through the dark days of winter. So how did that happen?

Possibly with the help of yoghurt, which is naturally fermented milk. The fermentation converts lactose — which causes the intolerance — to lactic acid. And there's evidence that people were eating yoghurt as far back as 10,000 years ago.

That's the somewhat speculative deep background to yoghurt. But the start of the modern yoghurt era can be dated quite precisely, to the 8th of June, 1904. That's the day on which Élie Metchnikoff, gave a public lecture on Old Age in Paris. Yoghurt, he said, and specifically the bacteria that turn milk into yoghurt, were the reason that there were so many people who lived to a hundred and more in Bulgaria. The bacteria in question had recently been identified by a Bulgarian called Stamen Grigorov, who named it *Lactobacillus bulgaricus* in honour of the country.

Metchnikoff's lecture kick started a craze for yoghurt and lactobacilli that is going stronger than ever today, and still letting lactose intolerant people get the nutritional benefits of milk. June Hersh filled me in on the background to Metchnikoff's lecture.

June Hersh: He was involved in studying bacteria and he got the idea almost at the same time. I think one has to wonder, who sparked the other? Did one steal the other's thunder? If that's the case, then Metchnikoff stole the thunder of Grigorov because he became the person associated with yoghurt. Both men nearly at the same time in

the very early 1900s, started to investigate why was it that the people who lived in the Bulgarian region [who] were poor, they ate a peasants' diet yet were outliving most other people. What was it? What were they doing? What was their secret?

Metchnikoff began calling it the elixir of life and he began publishing works that proposed that it was the yoghurt that they were eating and, most specifically, the bacteria in yoghurt, that was causing these remarkable results of longevity. Grigorov, who was of Bulgarian descent, he's the one that began investigating most specifically the strains of bacteria that were present in Bulgarian yoghurt.

The two of them shared their information and Metchnikoff, he ran with it. He became almost simultaneously, a revered scientist and charlatan, which is not an easy thing to do. He was believed by many. He was embraced by the masses. He began probably crossing the line when he lent his name, whether he did it intentionally or just because he was lax and didn't follow up on it, but there were lactobacillus pills and there were articles saying, "If you want to live to a hundred, drink Metchnikoff's elixir of life".

He wrote a book called *The Prolongation Of Life* and in it — it was an optimistic view on how to increase your lifespan — and in it, he talked very specifically and almost exclusively about yoghurt.

Jeremy: Was it mostly a European phenomenon or did it get taken up in America and elsewhere?

June: I think the Europeans have been ahead of us on the curve on many of the, what we would call, food innovations. Yoghurt was enjoyed in Europe well before it was enjoyed in America.

Jeremy: As far as Metchnikoff and Grigorov were concerned, people made yoghurt and they made it in their homes mostly.

June: Correct.

Jeremy: Very few people do that now. I know you do, I do, but how did commercial yoghurt get its start?

June: It took a long time and, again, it started in Europe well before. When Metchnikoff made this great leap and explained to people that yoghurt was good for you, the Europeans embraced it and they began eating it really robustly. Americans, not so much. If you look at some

of the articles from the 1920s, America did not embrace it. Why? It didn't taste so good, they were saying things like, "If you could stand the taste, try to eat it. If you don't mind eating something that tastes like it has spoiled a week ago, try yoghurt." It really was not gaining any traction.

That did not stop those in Europe from realizing that you could make the leap from producing it in small batches in your home, using the same strains, using the same starter, using the same bacteria that had been passed down from, truly, generation to generation, but it wasn't available to the average person who didn't have a clue. Now you have this foodstuff that was touted and you didn't have a way for people to get it.

Enter those people who had the vision, one of them being Isaac Carasso. He was a Sephardic Jewish family. They were a Sephardic Jewish family who had been resettled in Greece after the inquisition. In Greece, yoghurt was something that people just ate routinely and the Carassos, in the early 1900s and 1912 specifically, made their way back from Greece to their homeland in Spain in Barcelona. When they got there, Isaac brought with him the method of making yoghurt. He said, "Let me start to make it and sell it as a pharmaceutical product". He began making small batches.

He then saw that it was catching on and that there was a commercial use for yoghurt. He began producing it in larger quantities, eventually moving their industry to France, where they settled. He named the company Danone. Danone means little Daniel in Castilian. That's where the name Dannon Yoghurt comes from.

Jeremy: Hang on. ... You said his name was Isaac Carasso.

June: Yes, but he named it for his son, Daniel.

Jeremy: I see.

June: I'm sorry. He named it for his son, Daniel. And Danone means little Daniel. They moved it to France in the 1940s. The son, now Daniel, the namesake of the company, saw that it was no longer safe for French Jews in France and he took that cue and moved his family to New York. That's how Dannon Yoghurt made its way across the pond and came from France into New York.

Jeremy: Was it Dannon, when they got to the United States — which didn't like this sour taste of yoghurt — was it Dannon that introduced sugar and fruit?

June: No. Dannon yoghurt remained relatively pure yoghurt, really just having the basic ingredients of milk, bacteria, and the fermentation process. It really wasn't until you had some of the more newcomers like Yoplait, which was a French concern that they began flavouring the yoghurt and the most popular flavour is strawberry. It was then, and it is today. They're the ones who really changed the process of how yoghurt tasted, adding fruit, some adding fruit in the bottom, some adding fruit that was already mixed in. That now made it more palatable.

Jeremy: And much sweeter. Dating myself again, in England, I can remember Ski yoghurts actually being too sweet.

June: Yes. It's funny that you mentioned Ski because Ski in 1972, actually in England they sold a hundred and fifty million pots of yoghurt. They had close to 50% of the share of yoghurt sales in Europe, but yes, it became very sweet. I think that those who really missed the purity of yoghurt really lamented that fruit was now added and that it almost turned it into a sugary confection rather than a healthful food product.

Jeremy: Even the plain vanilla flavour was, to me, horribly sweet. Anyway, let's leave that aside. Let's talk about another change more recently, which is the rise of Greek yoghurt. I was surprised, I came back from a holiday in Greece determined to make my own Greek yoghurt and I read up on it, and it's just strained. There's no extra process apart from getting rid of some of the liquid.

June: Correct. It's fascinating to think that this was an innovation that truly launched yoghurt, at least in the United States. Hamdi Ulukaya, who was a Turkish-born yoghurt maker, acquired a plant in upstate New York. He wasn't even going to make yoghurt. He was going to make feta cheese. He basically did exactly what you're saying. He took the yoghurt and he strained it.

Now, people in the Middle East have been straining yoghurt for thousands of years in Israel, in Turkey, in the Middle East, but Ulukaya said, "Why don't I try to make it healthier? Let's get it back to where it was, to its healthy roots." He did that by straining it. When you

strain it, you do strain out the sugar. He did it in an industrial fashion. He now sold under the name of Chobani yoghurt and that is truly what revolutionised yoghurt, at least in the United States. It was the game-changer.

Jeremy: There was a huge fight between Chobani, the newcomer, and, well, I call it Fage, but I don't know how you pronounce it in Greek, probably Fayeh.

June: It is.

Jeremy: There was a huge fight between these two titans of Greek yoghurt. What was that about?

June: Basically it really was about as to who would have the rights to call Greek yoghurt, Greek yoghurt, and in some of the world, Greek yoghurt can be called Greek by some, and in other countries, they could not call it Greek yoghurt.

Fage won the right to call it Greek yoghurt in Britain. They can call their yoghurt and Britain authentic Greek yoghurt, whereas Chobani can call it Greek yoghurt in the United States. It's just fascinating to think that Fage who truly — I'm not going to say they invented Greek yoghurt, but they certainly popularised Greek yoghurt long before anybody in the United States — did not have the forethought, the vision to trademark that term.

Jeremy: It's particularly strange because the Bulgarian yoghurt, which is where we started with Grigorov and Metchnikoff, Bulgarian yoghurt is in fact protected as a name, isn't it?

June: It is because the strain of bacteria is protected by the Bulgarian government. Yes.

Jeremy: Leaving aside basically what we've been talking about yoghurt. Yoghurt, as I used to call it. What about the other fermented milks? Fermented milk is fairly widespread in many cultures, certainly in Europe. I myself, I've got kefir going. There are others that I haven't tried like skyr. How are they changing? And what are they in fact?

June: Let me first make a distinction. Skyr is yoghurt. It's a yoghurt that has its roots in more of the Scandinavian countries. That is a yoghurt, a pure yoghurt that is made from skimmed milk, very high in protein, very low in sugar, very low in fat. It's tart. It's thick. It happens

to be my yoghurt of choice. If you gave me a choice, I would eat Skyr over any of the other yoghurts. I just like it, it has a little bit of a funky flavour to it. You feel like you're eating the pure substance.

Jeremy: Is it traditional product? Were they using the fat for butter and cream and things like that? Is that how it arose?

June: I'm probably not 1000% knowledgeable if that was its origin, but I can tell you that they found that when the Vikings were on their long journeys, they had access to skimmed milk. I'm going to assume that the fat was being churned and used for other substances. It is marketed as a low-fat yoghurt. I am assuming that that fat in somebody's home was going into something else because you can't ferment out the fat. First, you have to skim the milk, then you make the yoghurt. That fat is going somewhere.

Jeremy: What about kefir then?

June: Kefir it's not yoghurt. Skyr is a sibling of yoghurt, then kefir is its cousin. It's a fermented yoghurt-like product, but it is fermented from — and if you're fermenting yours and you know the grains — it is made from little grains that almost look like riced cauliflower and you allow it to ferment. It's an easy source of eating a fermented food and getting that intestinal bang for your buck by drinking it

Jeremy: Neolithic people were probably lactose intolerant and maybe fermented yoghurt was something that helped them to get the benefit of milk. Southeast Asia, where people are classically lactose intolerant, they can't drink milk, they get very upset stomachs and what have you if they drink milk, and yet yoghurt has completely taken off. India, it's always been traditional to have curd, but further east — China, Japan — yoghurt has really taken off there. How did that happen?

June: People in Southeast Asia who are discovering, no different than the Neolithic man did, that if they eat yoghurt, because it has so much less pure lactose, they can tolerate it. It is a way for them to get all of the amazing health benefits of milk, the calcium, the minerals, the vitamins, the protein without having the indigestion. That's why yoghurt is catching on.

Jeremy: Was there a pioneer Western company that started marketing yoghurt into China, Japan?

June: Honestly, I don't know of one. I know that the only part of China that really knew about yoghurt back in the day was this small little area, where the — I'm going to pronounce it wrong — but where the Uyghers reside, and they brought with them from the Silk Road, they brought with them the traditions of making yoghurt. It wasn't until they began bringing it down, that Beijing yoghurt became a thing.

It has those iconic little pots with the blue paper and straws. That became popular well before any other countries migrated yoghurt into the Asian culture. That's really how it became popularised in China. Flash forward to the 2000s when people caught on and these large companies said, "Huge market, let's start marketing to the Asian culture", and they do.

Jeremy: In the book you've got these stories about close connections, which I found fascinating, between China and Bulgaria based on yoghurt. Tell me about that.

June: There was a time where the Chinese people did not trust their milk and dairy supply, because there was an awful incident that took place with baby formula. There were fatalities linked to the supply chain in China. The Chinese said, "We need to get our milk from someplace else". They began looking for other places. A company began to realise that their yoghurt, if they made it with Bulgarian strains would be highly popular because it had an authenticity to it.

The company was called Bright Dairy and they seized on this need for the Chinese people to feel good about what they were eating again. They are the ones who discovered this town in Bulgaria, in the Rhodope Mountains, where you were able to get the true, authentic Bulgarian cultures that go back to the days of Stamen Grigorov and obviously centuries prior to that.

They made a deal with this Bulgarian community. They began marketing a product called Momchilovtsi. It is a yoghurt that is made in Bulgaria and marketed to the China and Southeastern Asian market. Every year, there is a festival in this little town, this Momchilovtsi, and they celebrate the Chinese culture and Chinese citizens come over — I guess we're talking pre-pandemic times — and they would have this enormous yoghurt festival where the two cultures come together. They actually said that many of the Bulgarian in this little town learned Chinese, almost all of the signs in the town

are in both Bulgarian and Chinese. These two cultures come together and they celebrate Bulgarian yoghurt.

Jeremy: Incredible. I know yoghurt is associated with all sorts of health claims. I don't really want to get into those, but one thing that intrigues me and you alluded to it earlier is that the kind of claim you can make for the health-giving effects of yoghurt vary between countries. You'd think that if yoghurt has demonstrable effects on health, then you could say that anywhere, but it's not true. It's regulated what you can say about what yoghurt is good for. Don't you find that a little bit odd?

June: It is very confusing because there is no set standard. The one thing I say to everyone is no matter what yoghurt you buy, the one standard you can stick by is it has to have live and active cultures. If it does not, don't eat it, don't buy it. If that's not the first two ingredients, the milk source and the live and active cultures, it's junk, don't buy it.

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