

Joe-Thinking Sideways is not brought to you by jerked pork sausage. Instead, it's supported by the generous contributions of people like you, our listeners, on Patreon. Visit patreon dot com slash thinking sideways to learn more.

[Intro]

Steve-Hey there everybody and welcome to another episode of Thinking Sideways. And the cat runs through the room (All laughing). I am Steve. As always, I am joined by...

J-Joe.

Devin-Uh, I'm Devin. He was pointing at me!

J-Oh, was he?

D-Yes.

J-He was sort of pointing in between us, so I just assumed he meant me.

D-No, he was pointing at me.

S-As always, we have another mystery for you. This is a listener suggestion, before I get too far in, because we seem to be trying to forget mentioning that they're listener suggestions lately.

D-There's just too many suggestions. Sometimes you just miss that it's a suggestion.

S-Yeah. Well this was suggested by Joel.

D-Oh yeah.

S-So.

D-Joel.

S-Joel suggested the topic today, which is the Glasgow Effect.

J-Hm.

S-Or you may see it referred to as the Scottish Effect.

D-Hm.

J-Yeah, but it's more Glasgow than anywhere else, right?

S-It is.

D-And we're a hundred percent sure we're saying that right?

J-Glasgow?

S-I'm pretty sure.

D-Glasgow.

S-I'm pretty sure.

D-It's not "Glasgo" or (makes guttural noise in throat).

J-"Glas-Gow". You want me to check?

S-Listen, do we have to go and start angry emails in the first two minutes, you two?

D-Yes.

S-(Whispers) Damn it (laughing). All right. This mystery is a little bit different than normal. It's not a murder mystery. It's, uh...

J-There's a lot of death in it, though.

S-There's a lot of death. It's more of an unknown health situation, socio-economic mystery, maybe. I, I don't know how to classify it.

D-Steve Special.

S-It's a Steve Special.

D-Uh huh.

S-There we go.

J-Actually, it doesn't really appear to be that socio-economic.

D-Sh, sh, sh. Spoilers! Spoilers!

J-Yeah.

S-As we'll find out. All right. Well, let's start out by explaining the Glasgow Effect.

D-Yeah.

S-Starting somewhere in the early 2000s, a bunch of studies started cropping up that were talking about the unexplained poor health and below average life expectancy of the residents of Glasgow, Scotland. The Glasgow Effect is, and I quote, "a term used to describe the higher levels of mortality and poor health experienced in Scotland over and above that explained by socio-economic circumstances. Evidence of this excess being concentrated in west central Scotland has led to discussion of the more specific Glasgow Effect." Unquote.

D-If anybody driving home is hoping for something, you know, to keep them awake (Steve laughing), this might not be it. It's definitely more academic.

J-Well, if you're living in Glasgow, this is probably going to scare the crap out of you.

D-Or you're already dead.

J-Yeah.

S-One of the two.

D-Yeah.

S-But yeah, this is definitely much more of an academic mystery than our normal fare.

D-So it's a good one for people who listen and run at night.

S-Yes.

J-Yeah.

S-The, that quote...

D-Before I interrupted you. Sorry.

S-Yeah. Well, I was just going to say that the quote really doesn't do a good job of explaining it, so let me try and break this down into a little more of a layman's terms situation.

D-Hm.

S-Glasgow's mortality rates are considered, easily, the highest in Britain. And they're among the highest in Europe, whether it's death from things like cirrhosis, drug abuse, cancer, murder, suicide. Life expectancy at birth in Glasgow is lower than average, and for men that means they, men will live to be an average of 71.6 years, whereas everywhere else in the UK, they would normally live to an average of 78.2 years.

J-Yeah.

S-So basically a six year difference.

J-Yeah. Also, it's...

S-Or seven almost.

J-It's concentrated in certain areas in Glasgow, too.

S-Correct.

J-There's areas of Glasgow where white male life expectancy is 54.

S-Uh huh.

J-Yeah. And other areas where life expectancy is actually like 83.

S-Correct.

D-Uh huh.

S-So it's all over the map. But that's, you know, that's the thing about statistics. You gotta average the whole thing.

J-Yeah.

S-But let's get back to this. So, now, if we talk about women...

D-Yeah!

S-...then (laughing) the average for women is four years below the national average. So, in Glasgow women will, are expected to average 78 years compared to, in the UK, the average of 82.3.

D-Hm. And these are, just to help frame it, that's, these are significant, right? It's not, I mean, they must be. They must be significant enough that there's a total effect named after it, but, you know, when you talk about the difference of four years life expectancy, that doesn't sound that outrageous.

S-Ok, well let me...

D-You know?

S-So let me try to break this down in a, so it makes a little more sense, then.

D-Uh huh.

S-All right. You've got a city that on it's own people, and this is, you know, in the developed world. We've got a city where people in general aren't living as long. Now, the easy thing, and this is something that will come up in the theories, is people say, "Oh, well it's the impoverished, it's the poor. They don't live a good life style, they don't eat right, so no wonder they die earlier."

J-Plus they stab each other a lot.

S-Well it turns out that the upper ten percent of the, of Glasgow, the people who are in that upper ten percent of the economic bracket...

D-Uh huh.

S-They also die younger than their cohorts.

D-That significantly as well?

S-Yeah. Than in other cities.

D-Interesting.

S-So it's not as if it's this one demographic that's pulling all the numbers down. And that's what's got everybody kind of scratching their head is, wait a minute! It's all across the board. It's all walks of life.

D-Ok.

S-It's not just one group.

J-Huh. They should do some research on this.

S-They have, Joe.

J-They're supposed to try to find out.

D-I was going to say, I bet they have (Joe laughing). Pretty sure I read some of it, actually.

J-I have too (Steve laughing).

S-Yeah. Well, no, actually that's a good point to bring up. There is a bunch of research on it, and one of the places that I will cite because they put out so much great information, is the Glasgow Centre for Population Health. They have study after study after study. If you want some good night time reading, I have a couple of reports that...

D-That put you right to sleep.

S-...are 80 to 100 pages long.

J-Oh goody.

S-That are, they will just, they're riveting (laughing).

J-So, the people who are maintaining this site, are they still alive?

S-Yeah (laughing).

J-I guess the site probably won't be up that much longer, right?

D-Yeah.

S-Yeah. No, it's going to be up for a long while. Now that we've kind of explained the mystery, there's some details we should probably give some people. First of which, for folks who don't know, Glasgow is in Scotland.

D-We've said that.

S-And Scotland is part of the UK. It's, what would you say, it's about the upper third of the island?

J-I guess.

S-It's ballpark that. But some people, you know, the geography isn't their gig, so I always try to point

that out.

J-The island you're talking about is not the UK though, right? It's Britain.

S-Britain.

J-Yeah, ok.

S-Oh yeah, no, you're right. It would be Britain.

J-Some stickler for detail is going to point that out to us on Facebook.

S-Yeah, you're absolutely right. You're right. I would have got us all on that one. For some...I pulled census data, cause I figured this would probably be important. It didn't turn out, in the long run, to be as much as I wanted, but there's something to keep in mind, which is Glasgow is a really big city.

J-Yeah.

S-It, the city itself, it is 68 square miles, which is 175 square kilometers. But there is also the greater Glasgow urban area, that means just all the area around the city of Glasgow.

J-Yeah. What we call the metro area in the United States.

S-Yeah.

D-What you would call a metropolitan area.

S-And that's 142 square miles, or 368 square kilometers.

D-So it's not, not nothing.

S-No. It's a big, big place. And according to the last census in Glasgow, which when I pulled it was from 2015, there's 600,000 people in the city. Now the census that I pulled for the urban area was from 2001, but at that point it was 1.2 million people. So it's a big city. It's not the biggest city in the world in terms of population density.

J-Uh huh.

S-There's, what did I figure it out here, there's like 8900 people per square mile or something like that. But, it is 44% of Scotland's population lives in that city.

D-Hm.

S-So it's kind of the major city.

D-Yeah.

J-Huh. So, that is a lot.

S-Uh huh. Now I pointed out that there's the city of Glasgow and then there's the Glasgow greater urban area.

D-Uh huh.

S-That's kind of important to know because if you do ever go dig into the studies, you'll see some studies refer to just the city of Glasgow, and some of them that pull from the greater urban area.

D-Ok.

S-Now that's important because, are they using the smaller pool of people or the larger pool of people to get their data and to get their results?

J-Hard not knowing.

S-I've seen some conflicting reports, but most of them, even when they pull it from the greater urban area, the effect still seems to be present. But it's something to be aware of if you do the reading. Statistics, you gotta love 'em.

D-Yeah.

S-You can work them however you need to.

D-That's true.

S-The other bit of technical information that you need to know here if you do go in any of the reporting, you're going to see a phrase which, believe it or not, took me a while to figure out. And that is "excess deaths." I didn't understand that. I was like "isn't every one of them just an excess?"

J-That's what I thought.

S-Yeah. No, it turns out that is the number above and beyond what the expected average is going to be.

J-Yeah.

S-So, we're going to get into some more sexy numbers here.

D-Ooh.

S-I can see the look on Devin's face. She is excited about percentages.

D-So excited right now.

J-Yeah, her eyes are just glazed with anticipation (Steve laughing).

S-All righty. So, what I'm going to give you here is the percent of excess deaths in the Glasgow area, above and beyond what the national average is. And this is going to be for all age groups, so from 0 to 100.

D-Or more.

S-I guess it's 1 day to 100, but...

D-Yeah. Well probably...

S-I guess it could be over a hundred, yeah. But you get the point. So we have above the average deaths of cancer is 23.2%. The above...

D-So it's, sorry. So it's that much above average?

S-Yes.

D-Right, so average is 0 in this case.

S-Let's say the average was 1000...

D-Right.

S-Ok, so there's, the average of 1000 deaths a year from cancer is expected normally. Then it would be 232, because that's 23.2% more.

D-More. Right, so yeah, I guess I was saying, like, you put average at 0 so the 23.2% is above average.

S-Correct.

D-Got it.

S-Yep.

D-Ok.

S-All right. So then we have deaths from circulatory issues, which I would take to mean things, uh, anywhere from heart attacks to strokes.

D-I think that's fair.

S-But that is 27.5%. I never actually got a good explanation of what they meant by that. And then alcohol related, that is 20% higher than expected.

D-So that'd be alcoholism and cirrhosis and stuff like that.

S-Any deaths related to alcohol, yes, exactly.

D-Ok. Does that, I'm sorry, does that include, like, car crashes while under the influence? You don't know.

S-To be quite honest, that is one of the things...so there's a bunch of phrases used that are never the same from one report to the next, so sometimes it's a little difficult to know if you're comparing apples

to apples or apples to oranges.

D-Ok.

S-So I can't answer exactly what it is.

D-Sure.

S-But if we do, if we look at the numbers and we were then to remove anybody who is 65 and over, as our British friends like to say, the pensioners.

D-Yeah.

S-You take them out, and we have people who die from alcohol related issues only, it's 32% higher.

D-Hm.

S-So it's seems like the younger generation maybe is boozing it up more.

D-Uh huh.

S-And the other thing that's notable for that group is drug related issues. Which is 17% higher than expected.

D-Hm. Interesting.

J-Yeah. Although, you know, I've read that they've done studies in other comparable, like, British towns...

S-Uh huh.

J-There's actually no more drinking in Glasgow than in other towns.

S-No, actually it turns out in Glasgow they actually drink, they have less binge drinking, and it seems like there's less drinking there than the other towns. The towns that you're talking about, that are in the reports in the research, that's going to be Liverpool and Manchester.

J-Yeah. Those seem to be the favorites.

S-Uh huh. Yeah, cause they, well they seem to, through the data somehow, they seem to match up in terms of, I'm guessing, something to do with population size, and then the spectrum in terms of...

D-Population demographic.

S-Population demographics from way below the poverty line to making x amount or more a year.

D-Yeah.

J-Yeah.

D-Probably similar, you know, male female ratios, minorities...

S-Yeah, all that demographic stuff. Yeah, I mean, I've got to presume that's why they would be selected otherwise it wouldn't make any sense.

D-Yeah.

S-To select them.

D-Yeah.

S-That right there, though, believe it or not, that's one of our shortest mysteries. That is the mystery, that we've got all these people who are just dying younger than they should.

D-And we don't know why.

S-And we don't know why.

J-There are, I don't know if you mentioned this. This whole thing actually started in about 1950. It, uh...

S-We haven't got to that, but you're absolutely right, yeah.

J-Oh, you're going to mention that later on?

S-We can talk about that now, that's not a problem at all. You're right, Joe.

J-One of the things that I'm kind of intrigued by, since we're heading into theories anyway, and probably somebody has thought to check this, but were there any major population movements starting about 1950?

S-So there...

J-Did a whole bunch of people move away, or a whole bunch of people move in?

S-So there have been migrations. Glasgow itself, it's always been, or traditionally it was a large industrial city, and they were known for a couple of things. One of which was ship building. That's what brought a lot of people to the city. There was a huge migration push in the 1800s there. A lot of people came in, and when you're in that, what is that era called?

J-The Industrial Revolution.

S-Thank you, that word just skipped right out of my head as soon as I wanted it. When the Industrial Revolution hit, you know, it's kind of that typical growing city situation. Everybody came in, and it was a dirty, jammed, gross place, but they made a lot of stuff.

D-Uh huh.

J-Yeah.

D-But also one can presume not much more, I mean it wasn't more dirty or jammed than many other major cities in the same day.

S-No, it wasn't in any way that I could tell in the research, crazier or more dangerous or dirtier or anything like that, and it was kind of average, you're right, until as Joe was saying, in the '50s. And at that point, that's when they started to see that people were dying younger there than they should have. At the same time, there was migration out of the area, but there's also been migration into the area, because, like I said, it started with ship building.

D-Uh huh.

S-And then they had chemical processing, and then, I can't remember. I want to say it's textile. I've got it somewhere in my notes here, I'll find it in a bit.

D-Ok.

S-I can't remember what the third industry was, but there was three industries.

J-I thought there was, like, plutonium mining and handling or something like that.

S-No (laughing). It wasn't that.

D-I think that would just be the answer then.

J-Yeah, there you go.

S-But they weren't clean industries, so it makes sense that their workers are likely to be sicker, except that over time things clean up.

J-Well...

S-But it's no worse than any other industrial, it shouldn't be any worse than in other industrial towns.

J-Well, yeah.

S-And that's again the problem. Those industries started moving away, so as these people who are now dying in their 50s and 60s, they were probably born at a time when those industries were just getting out of town...

D-That doesn't necessarily mean, I mean so much of that stuff...

S-So they shouldn't have been breathing, or anything that these plants would have been spitting out.

D-No, but like the genetic donor that created them...

J-Uh huh.

D-...had something like that, that caused their, you know, the DNA that they were given to reproduce...

S-Uh huh.

D-That's something that they do know. But I mean...again, this is like, we're probably way into your theories at this point.

S-No. Actually no, this is actually, I'm glad Joe brought it up. I hadn't thought about the fact that this probably should be talked about in the onset of this before we get into theories.

D-Yeah.

J-Uh huh.

S-But, yeah, no, just so people know is that, yeah, people were coming in. The cultural demographic of the area has changed over time, so...

D-As with any city.

S-As with any city, it's changed over time, so it's a completely different gene pool now than it was 50 and 100 years ago.

D-At least statistically significant.

S-Yeah. Significant enough that I would say it's noticeable.

D-Enough that it would change these numbers.

S-So that stuff has happened. And then, yeah, you know, the economy's changed. All of the big industries, most of the big industries, I think it's sixty-some percent of it, started leaving as of, I think, 1960 or '61 they started leaving, and it's, you know, thirty-some or forty percent of what they originally had, it's industrial jobs, is what's still there.

D-Yeah, they so like to put those industries in places where the governments care a little less about regulations.

S-Yeah (laughing). That's one reason.

D-Uh huh.

S-So yeah, that's had an effect on it, which is why you see cultural migrations.

J-Yeah.

S-Cause if I am a ship builder, and there's no more ship building jobs, I'm going to go somewhere else where I can build ships.

J-Yeah.

S-And make that money for building ships, rather than flipping burgers at a McDonald's or something.

J-And here's the deal, is that the people that migrated out might have actually been, uh, might have actually been a little smarter, a little more hard working. I don't want to offend anybody from Glasgow, but...

S-I don't think that would have any effect on it.

J-I don't know. You know, actually, it would be a fascinating thing to study.

S-And it seems like it's mostly a health issue.

J-Well, it, you never know, it might be a genetic issue, who knows.

S-True.

J-But it would be interesting to track down all the people who left Glasgow and see how long they lived.

S-Uh huh.

J-See if leaving Glasgow extends your life span.

D-That would be interesting. That's true.

S-Yeah.

J-Yeah.

D-It seems like something that they should have done at some point, but.

S-I don't know how easy that is, though.

J-It would be tough to track all...what you need to do is you'd have to, like...

D-Go on ancestry dot com (Steve laughing).

J-Yeah, exactly (laughing). You could do that.

D-It's really easy.

S-Devin's like "For fifty bucks!" Or whatever it is (Devin laughing). "We could figure this out!"

D-It's more than fifty, I think.

S-Oh, it probably is.

D-I'm charging, I'm charging \$25 to read the Wikipedia page of, you know, different cases right now, so I think we'd charge more than \$50 to solve this one.

S-True.

J-Yeah, that sounds fair.

D-Yeah.

S-Let's, now that we've gone through that, let's get into the theories.

D-Yeah.

S-Cause I think that's the next logical step for us.

D-I guess.

J-Yeah.

S-So we're going to start with the first theory, which is poverty, because as I said, that's the big one that you will see people point at, is that people who are in a lower economic station in life, they don't have the money, so they're not going to eat as well, they're going to do things that aren't good for them, so...

D-They're going to work in those ship yards or in the plutonium holding...

J-Plutonium, yeah. Holding facilities.

D-Holding facilities.

S-We've got Homer Simpson here.

D-Yeah. I mean, that is just a reality that we know exists.

S-Uh huh. Yeah. Things have changed, yeah.

D-And also, just this stuff of, you know, the different stresses and the incredible toll that can take on your lifespan if, you know, you're living paycheck to paycheck in unstable housing or whatever.

S-Or if you're on the dole, as they say, because here's something to keep in mind, is that in Glasgow, one out of five people are out of work.

J-That's a lot.

S-And one out of four are getting assistance.

D-That's a lot.

S-So that's a lot of joblessness. And that means that's a lot of people, as we said, who are kind of scraping by.

D-Yeah.

J-Yeah.

D-And the added stress on that, I know, they've done so many studies all over the world on how that stress significantly affects the health levels.

S-Uh huh.

D-Like you'll see...

S-Yeah, we've got some stuff on that too.

D-And generations down even.

S-Yeah.

D-Actually, interesting fun side fact, I think I heard this on NPR or something like that, so I may have my facts wrong. I'm just recalling, so please don't tell me that I'm lying or anything like that. But I'm pretty sure that they've done studies on the stress levels of pregnant mothers, and how it affects the obesity rate of their children.

S-Yes.

D-Which is so interesting.

J-Uh huh.

S-I have some of that at this point.

D-Oh great.

S-So that's, but you're on track.

D-Yeah.

S-It does make a huge difference. So let's talk about...

J-But...

S-We've talked about...

D-So that...

S-Go ahead.

D-Sorry. So I just mean that's something to keep in mind when you say, well even if the families are doing better and better, just because that's the case doesn't mean...

S-Today, it doesn't mean a generation or two ago, yeah.

D-You know, they're not inheriting something, yeah.

S-So if we take a look at the history in Glasgow, you remember I told you there was that big cultural migration in the 1800s?

D-Yeah.

S-Well in the 1950s, there was this thought that we need to build the city, we need to change the city, and so the government actually built a bunch of high rise tenement housing.

J-Kind of like we did here in the States.

S-Yeah. Chicago's the one that comes to mind for me, and it was a situation where it was government owned, and these people were living in it, and conditions weren't always healthy. They weren't clean. I'm not blaming anybody for this, it's just what happened sometimes as we've seen all over the globe with this kind of housing situation.

J-Well, yeah.

D-So we're saying, just to be clear, the comparison is that this kind of housing would be the projects?

J-Yeah.

S-Essentially, yeah.

D-Ok.

S-Yeah. It's a slum...

D-For Americans.

S-It becomes a slum.

D-Uh huh.

S-In a way. You know, they've gone, they've now come back, I think in the last 20 or 30 years they've started tearing those buildings down.

D-Uh huh.

J-Oh yeah. All of them are gone, I think.

S-Trying to fix things up. Unfortunately it's left this poverty stricken area. Because if you can afford not to live in that building...

D-You're not going to.

S-You're going to escape, you know.

D-Yeah.

S-People flee that. People who can't, can't.

D-Yeah.

S-And so this is something that gets pointed at, it's more of a, you see it pointed at, more than anywhere else, in the news reporting of this.

D-Yeah. That doesn't surprise me.

S-When you get into the actual data, it's actually admirable. The amount of work that every researcher does to just kick the living crap out of this theory.

D-Yeah.

S-Because they've taken, if they take what they, it's referred to as a socio-economic factor...

D-Uh huh.

S-That means your station in life, your income level against the poverty line, and when they balance for that and they take it out of the equation, people in that area are still dying sooner than people in similar cities at the same time when they take it and they put it on an even playing field.

D-Uh huh.

J-Yeah, the thing about this particular mystery is policy advocates usually, you know, use it as an excuse to ride their own little hobby horse. So if you're a big anti poverty advocate, well you're going to jump right on this thing.

S-Uh huh.

J-You know.

D-Well, and it seems like a really easy thing to blame it on.

S-Oh yeah!

D-You know. Really easy.

S-Oh yeah. I'm sorry, but the impoverished, or what is it that they get referred to? Disenfranchised I think is one of the words that I've seen used. And there's another one...

J-I think disenfranchised is kind of inappropriate though. Because disenfranchised...

S-Disenfranchised isn't the word I'm looking for. It's in here, but there's a couple of different terms that are used, but it is just basically it's pointing at...

J-Poor, deprived, all that stuff.

S-Deprived, thank you. That was the word I was looking for.

J-Oh, ok.

S-They call it a deprived neighborhood.

D-Yeah, the term that you use in social work, at least in America, is you say that these people are experiencing this.

S-Uh huh.

D-Not that they are this.

S-Oh. That's a good point.

D-Yeah. That somebody is experiencing homelessness or experiencing poverty, not they are the poverty, or they are homeless.

S-Uh huh.

J-That's like those people that are experiencing stab wounds and stuff like that, yeah.

D-Uh huh, kind of, yeah. You are not a stab wound.

J-You're not dead, you're just experiencing a stab wound or two.

D-Yeah.

J-Yeah, ok.

D-It's equally painful probably (Steve laughing). But, you know, just as a point of interest. Yeah. And just because somebody's poor doesn't, I mean.

S-No. Just because...

D-They're not going to die early.

S-...you don't make that much money. One of the things, as Joe said, is when you're an advocate of these things, and you really want to go after something, one of the things that you'll see pointed at a lot, is you'll see, you'll see behavior. So eating behaviors get pointed at. Drinking behaviors, alcohol is what I'm getting at here.

J-Yeah.

S-Will be pointed at. And smoking.

D-And drugs.

S-And drugs. So those are things that get pointed at a lot as, well, it's this group that does that, which is not right, but that's why I say that I like so much every researcher that just went so far to just obliterate this thing.

D-Yeah. That's good, you know, because it is so easy to just say, even as somebody who's just trying to deal with this in their city, to say "Well, it's just those poor people. It's their fault. We don't have to do anything. There's not actually anything wrong. It's just these poor people. It's all their fault."

S-Yeah.

D-"And it's their life style. They just live that way and they die early and that's fine."

J-Uh huh.

D-So I'm glad to hear that most researchers think that's bunk.

S-Yeah.

J-It is bunk.

S-Speaking of some bunk, can we get on to the next theory?

J-I just wanted to point out the other instance where this kind of association gets made is in the link between poverty and crime.

D and S-Uh huh.

J-Which is a very popular theory.

S-Oh yeah.

D-Uh huh.

J-Absolutely not based on anything.

D-Yeah.

J-Yeah. I mean, not at all. I mean, there ain't no link. No causal link anyway.

D-Yeah.

J-But, yeah.

D-I agree.

J-Yeah. It's just a bunch of people wanted to come up with a reason so they could, you know, get the government to throw a bunch of money at poverty.

D-Uh huh.

S-So theory number two...

J-Yeah.

S-(Whispering) I love this. I actually put this, I put some of the theories in here in very specific orders because I figured we'd have a lot of fun with them.

D-I like this one because I think it might apply to us too (Steve laughing).

J-Yeah.

S-So, the next theory that we have is that it is due to Vitamin D deficiency.

J-Yeah?

S-Meaning, ok well, if you ever look at the weather for that area, you hear about...

J-It's a little gloomy.

S-In England, it is gloomy, it is gray, it is rainy. You don't hear about how sunny and warm it is all the time.

D-Uh huh.

S-So it's an easy, it's a very easy anecdote to make, and you actually only every see it referred to anecdotally. You always see "or it could be this!" and then they go on to the next thing. They don't ever actually explain it. My total problem with this theory is, if it was Vitamin D deficiency, we should see this in other places, namely where we live.

D-Or like parts of Russia.

S-Yeah. Where, this should be happening all the time where it's cold and cloudy and cruddy weather.

J-Oh yeah.

S-A lot of the time.

J-You know, I think they could answer this one. They would need to, like, select a thousand residents of Glasgow and just grab them, you know, and put them into cattle cars and take them somewhere sunny and just make them live there for 50 or 60 years.

D-No, you know how they do it, is they just put Vitamin D in the drinking water.

J-That's what, that'd be another thing to do, yeah.

D-I think you can do that, right?

S-They do it with fluoride (laughing).

J-Yeah.

D-Well, they're, I mean, they're different molecules. And also, they don't do that here, so calm down.

S-That's what's wrong with my teeth.

D-I like Vitamin D deficiency because I once had a doctor who said “Well, if you're going to live in Portland, you should definitely take at least 500 milligrams of Vitamin D a day. Year round.”

J-Really? (Steve laughing).

D-And I thought, ok. I guess I can do that (laughing).

S-Oh. Ok.

J-Yeah, ok, I'm down on the whole vitamin thing. I'm not buying it.

S-Ok, so let's move to the next theory, which is poor diet equals poor health. Which logically makes sense.

J-Didn't we kind of talk about that under poverty?

S-Well we did, um...

D-But in a different way, right?

S-But in a different way, because this does actually come to some of the stuff, this is where some of the stuff that Devin was talking about actually comes in. And there's a couple of different ways that this can be turned. It is a known fact that people in Glasgow do have greens available to them, but they don't eat them as often. So in other words, it's not that the healthy food isn't available, it's that it is not chosen.

D-Interesting. And that's across all different socio-demographics?

S-As an average.

D-Ok. Well, we are talking in averages.

S-Uh huh.

J-So, that would be something interesting to check out, if you go to grocery stores in Glasgow and check out the vegetable department, you'd expect it to be smaller, significantly smaller than in other cities.

S-Uh huh.

D-Because of supply and demand.

J-Is it?

D-And then you would also expect that that would probably have, like, a cause and effect sort of situation, where people would buy it less, so there'd be less available, so people would buy it less, because it's less available.

J-Uh huh.

S-So it's diminishing returns.

D-Yeah, pretty much.

S-Dwindle, dwindle, dwindle. Yes. No, absolutely. And then there's the flip side, which is what everybody points at, where you shouldn't be eating so many processed foods. Don't buy the frozen pizzas and the burritos just cause they're fast. Yeah, it says that it's a veggie egg roll, but it's still processed to the nth degree.

D-Uh huh.

S-So that is one of the things that gets pointed at, is that this is what's happening, and if that was such a problem, then we should have huge rates of obesity and diabetes in that region. In Glasgow.

D-Uh huh.

S-Except that, again, it's not anywhere above and beyond what would be expected of the average.

D-Hmm.

S-As a matter of fact, the obesity rate is actually lower in Glasgow than in other cities in Britain. That doesn't pan out. The math on that doesn't work.

J-The diet's not necessarily any worse. Ok.

D-I guess, yeah. It's probably true, yeah. I mean, I struggle with that. Then it's like on the flip side, does that mean you actually have a lot of malnourished people? Right? If you don't have a lot of obese people, but we know that they aren't eating well, does that mean that actually the people who should be obese are just malnourished?

J-It's possible.

D-And so that's something else that's going on there. But that seems like that would be a first thing that you would do as a research scientist is saying "Oh, look at how malnourished these people are." Although...

S-I would agree with that.

D-To argue against myself (all laughing), I also don't think that a lot of people realize that they're malnourished, necessarily. I think, in terms of mild cases of malnourishment, obviously, right. We're not talking, like, African children who are literally starving to death. We are talking about adults who are just living on food they shouldn't be living on, not getting the nutrients they should be. You just feel kind of tired and run down and grumpy.

S-Yeah.

D-And you know, all that stuff. But I don't know that you would necessarily go to the doctor and the

doctor would say, "Well, what exactly are you eating? Oh, you might be malnourished."

S-So, that would be the kind of thing that would come out in, uh, it's self reported happiness, is one of the things. Is one of the things that you'll see...

D-And they are, they study that?

S-It's one of the things that's studied, and it's one of the things that is asked. But, the funny thing about self reported happiness, is that people almost always, as an average, unless there's, you know, a giant meltdown in the area, I think they report on average, something like a six and a half to eight.

D-Yeah.

S-It's a known range.

D-Uh huh.

S-So unless the city has just burned down, everybody's like, "Yeah, I'm a seven."

D-So, ok, this is, like, I'm going to use some anecdote that has nothing to do with this to prove a point.

S-Ok.

D-I have had tinnitus my entire life.

S-Uh huh.

D-I hear ringing in my ears.

J-All the time?

D-Yeah, all the time. For literally as long as I can remember. And I thought, literally until, like, five years ago, that was a thing that everybody had (Steve laughing). No, I genuinely did. I thought everybody...

S-No, we've had this conversation.

D-We have had this conversation. So I think there's also some argument to be made that I think that's a bit of human nature. I think a lot of people kind of feel that way, especially awkward people, especially, uh, people from the United Kingdom who are stereotypically awkward. I'm kidding. I'm sorry (Joe laughing). No, but I think that's a human part, too, is to just say "well, maybe I feel tired, but maybe this is just how people feel."

S-Uh huh.

D-I don't know. And if a lot of people around you are feeling that way. I don't know.

S-Yeah.

D-I'm just going to keep arguing against myself until you guys stop me.

J-Ok, go for it.

S-That's all right.

J-I think they just need to give them all a lot of vitamins.

S-Yeah.

J-That'll clear it all up.

D-It's possible.

J-But is there any evidence that actually people in Glasgow eat worse than people in, say, Chicago or London or Manchester or anything like that?

S-Not that I can see.

D-Yeah.

J-Yeah.

S-No. I mean, again, if they were eating that badly, it should show up in other very easy to identify health issues.

D-It should, yeah.

S-But those things that they're looking for specifically aren't showing up.

D-Uh huh.

S-So that's why it appears to not be such a poor diet issue.

D-Sure.

S-Now part of the diet is, of course, like we talked about, there is the consideration of how much do people drink and smoke. We talked about the fact that people in Glasgow appear to actually drink less than other British cities.

D-Uh huh.

J-Maybe they should drink more.

D-Maybe that's the problem.

J-Yeah, that's it.

S-We also have in there something we briefly touched on in the beginning, and this is also, it kind of

got lumped into the diet, but that's drug use.

D-Hm.

S-Turns out the drug of choice is, of all things, heroin.

J-Yeah, that's a good one.

D-What do you mean, "of all things?" It's like literally the most addictive thing you could ever do.

S-It's the worst damn thing that you could ever do. Because people who...

J-I don't know, meth is right up there.

S-Well, I don't know. People who get on heroin have a hard time, and it rides them for a lot longer. People can go a lot longer falling down the well to hit bottom. At least in the people that I've known, than people on meth, cause tweakers are easy to spot, and they usually burn out and get themselves caught pretty fast.

J-Yeah.

S-Whereas people on heroin, it's kind of, you know, chasing the dragon, I believe is what they refer to it as.

J-Yeah.

S-But either way, I mean, both of those drugs, they kill people.

J-Oh yeah, all the time.

S-They do terrible things to them.

D-Oh, absolutely.

J-Oh yeah.

S-And that's one of the things that gets looked at.

J-Is there any evidence that people in Glasgow do more heroin than other people?

S-Not that I can find. I mean, drugs are an issue. If we go back to that stat from the beginning, the excess deaths.

D-Yeah, 17%.

S-Yeah. 65 and under. It was 17%.

D-I know.

S-She's got a good memory.

D-Sometimes.

S-I mean, obviously there's something going on.

D-Well, it is true. I mean, heroin is widely touted as literally the most addictive drug. I'm not, I'm not just saying that, as a thing.

S-Uh huh.

D-They do studies on it. You know, people get addicted way faster to heroin than they do to most other drugs.

S-Uh huh.

D-And especially if there is a higher usage. Again, we're saying we don't actually know if there is a higher usage or not, but it seems like, you know, if four of your friends are doing it and they seem fine, well maybe you'll try it too, cause, you know, your life's not going so great and you want a high. So that addiction can kind of snowball a little bit.

S-Yeah.

J-That'll make your life start to go so much greater.

S-Yeah. No, I've known several people who've managed to kick it.

D-Yeah.

S-And both of them were deathly afraid of it. One of them to the point that, of getting addicted to anything, that for years she wouldn't take any medication.

D-Yeah.

S-And it turned out, years later, she, you know, found out through health issues, what it had actually done, and I mean, you know, she was on it for only a couple of years.

D-Uh huh.

S-So. That stuff does, and that's part of the reason I bring up heroin, is that it can have a long range of effects. So even if somebody does it for a couple years and then is lucky enough to kick it...

D-Uh huh.

S-Gets the help they need and gets off of it, it still can have done the damage that nobody knows right away.

J-Uh huh.

S-And then five, ten, twenty years down the line, those effects rear their ugly head.

D-Yeah. But again, it does seem like you would, I mean, they know. They do demographic studies on, is this area, you know, the Scotland capital of heroin? It may very well be, but that seems like something they would mention.

J-Yeah. I don't see any evidence of that, the whole heroin thing.

S-No, I don't either. But it's the drug that you get, that always gets brought up. So that's why I wanted to bring it up, so that we're not leaving anything behind.

D-No stone left unturned.

J-Ok. Another thing that seems to be killing a lot of people is murder.

S-Yeah.

J-It used to be the murder capital of western Europe, I heard.

S-It was at one point, yeah.

J-Yeah, but now, so murders gone down I understand quite a bit.

S-Yeah, and it was murders that were, guns are illegal, so they can't have a gun there, so it was knifings, or beatings and stuff like that. So it's like, for people in the US, when you hear murder capital, we always automatically assume that they were shooting everybody, which is not the case. I just want to get that on the table so we know what we're talking about, and put it in the proper context.

J-Yeah. Well, people can get illegal guns. There are some gun murders there.

S-That's true...

D-You saw my sarcastic air quotes.

S-It's not as rampant.

D-Yeah.

S-Gun ownership, or possession I should say. Possession of a firearm is not nearly as rampant or prevalent as it is here.

J-Oh yeah.

D-I think two of the three of us have guns in our home.

S-Oh yeah.

J-Yeah.

D-So that's a pretty strong statistic. Not to say that, you know, all Americans are like “Yeah, guns, ahhh!”

S-Well, there's Texas.

D-But, yeah (all laughing) there's Texas.

J-Yeah, there's Texas.

D-And then there's the rest of the United States.

J-Yeah.

D-But I mean, I think that's a pretty fair statistical thing.

J-Yeah. If you're in the West, I mean, a lot of people own guns. I know tons of people that own guns.

D-Yeah.

J-Yeah.

S-But, I mean...

J-That's kind of off topic.

D-Yeah.

J-Let's move on to another theory.

D-What?

S-Let's move on to an awesome theory.

D-This is another one you just kept in here for fun, isn't it?

S-I did. Totally did.

D-Yeah.

S-And that is that the theory is the cause is an environmental factor. And that's temperature.

J-I'm not buying this one.

S-Let me tell people about it first, Joe. Come on, man!

J-Oh, ok.

S-Don't, don't...build it up and then tear it down is what you told me before.

J-Oh, ok. Ok.

S-So it turns out that it is actually pretty chilly in Glasgow. In the winter the highs as an average are five degrees Celsius or 44 degrees Fahrenheit.

J-Five degrees Celsius?

S-Uh huh.

J-I'm just doing a little arithmetic. That sounds right, yeah.

S-I put it into Google (Joe laughing). I put it into the Google calculator.

D-He did Google.

J-I know how to convert from Celsius to Fahrenheit.

S-I don't (laughing).

D-Did you do it on March Fool's Day?

J-Yeah.

S-Ok, so that's the winter highs. And the summer time average temperature is 19 degrees C or 66 degrees F.

D-Yeah, but like, what is it in Moscow? Like...

S-It's colder.

J-Yeah.

D-Let's talk about, so, right? And Moscow is much larger, so...

S-Yep.

D-I'm sorry, not to tear this down before you've built it up.

S-Oh no, I've built it up as far as I could. Two bricks.

D-But if you, if you're going to argue that it's an environmental factor and that it's just too cold all the time, there are so many other places that you would be seeing things like this happening.

J-Yeah, I checked...

D-I mean it's possible that people just don't notice in Russia.

J-Yeah.

D-It's possible.

S-I completely agree with your point that, again, this is just like the Vitamin D.

D-Yeah. It's silly.

J-Yeah, I know. I checked just three countries randomly that are way north and colder, Iceland, Norway and Finland. And yeah, Iceland life expectancy is 83 years old. Norway I think it was about 82 and a half. And Finland I think it was about 82.

S-Well, they use saunas.

J-Is that what it is?

S-I have no idea (laughing).

J-Ok, yeah. So temperature? No.

D-It's cause their women are also more beautiful.

S-That could be it.

D-I'm sorry. I'm trying really hard not to offend anyone. I didn't mean that in an offensive way.

J-No, Scottish women are very beautiful, too.

D-Scottish women are very beautiful.

J-I mean, every country has the most beautiful women.

D-That's true.

J-Yeah.

S-Let's get a move on now.

J-Ok.

S-After that debacle. To the next...we actually have two environmental factors theories. The second one is pollution.

J-Yeah.

S-So as we talked about, we had the ship yards, we had the chemical processing. And it looks like, you know what, I was right. It was textiles. They don't specify exactly what the textiles were in some of the stuff I was reading, but we talked about this. They're not exactly clean. They're not really good about keeping the city around them nice. They dump everything into the river. I'm saying historically, not today.

J-Yeah.

D-I'm sorry. Can I share a Today I Learned?

S-Ok.

D-Today I learned that Victoria doesn't have a waste treatment plant. Victoria, BC.

J-It doesn't?

D-No, they just dump it right into the river.

S-Are you serious?!

D-Yeah.

J-Uh, they dump it into the harbor or what?

D-Yeah.

J-The harbor?

D-Yeah. Apparently.

J-Are you kidding?

D-Yeah. Apparently the state of Washington is considering, like, a no travel ban on them to say, like, "You have to start treating this stuff!" Anyway, that's my Today I Learned.

J-I, uh, I...

S-That's some crazy poop.

D-Yeah, it is.

J-I know. I was going to say, I find that hard to believe because I've been to Victoria quite a few times and I've never seen poop floating in the harbor.

S-Yeah, but you can't smell anything, Joe.

J-Well, you've been there. Did you smell anything?

S-No, but I was drunk.

J-Oh, ok.

S-No, actually I wasn't.

J-Yeah.

S-That's just my go to excuse. Ok. Well, let's keep on going with this pollution. So if that was, if pollution was responsible for the higher mortality rate, then you would expect that we would see higher levels of cancers. Which, cancer does kill at a higher level than the average expected. One of the things I kept seeing called out is they always said lung cancers, but they never said exactly what it was. So I was always curious if that might be something to do with it.

D-Lung cancers? Plural. Or lung cancer?

S-Ah, you know, that's, now that you specify, I'm not sure which it was. Let's just say lung cancer.

D-Yeah.

J-I believe there is one more, more than one breed of lung cancer.

S-There is multiple cancers that can be in your lungs.

J-Yeah.

D-Uh huh.

S-And that might be, as much as I love our British friends, they have different ways of phrasing things sometimes, and so I'm not always sure if it's just phrasing for the way I would normally expect it to be, or if it's something slightly different.

D-Uh huh.

S-So I wasn't positive.

J-Again, do we have any evidence that pollution there is stronger than anywhere else?

S-No, not really.

D-Yeah.

J-Yeah.

D-Certainly not more than southeast Portland.

J-That's a good point (laughing).

S-Yeah, no. Well, I mean London at one time was considered one of the filthiest cities in the world.

J-Oh yeah.

S-And it's super clean now.

D-China.

J-Oh yeah.

S-Well, I'm just thinking about in the UK.

D-Oh yeah.

S-And then you go up to Glasgow, and it's pretty clean.

J-Yeah, no, I'm sure pollution back in the day was a lot worse.

S-Yeah.

J-Than it is today.

S-Yeah, if we look at the 19th Century, or even the 20th Century.

D-They didn't care.

S-There was stuff everywhere. It was the coal snow. I believe it was the ash, was so thick it was like snow.

J-Yeah.

S-But I don't think it's that dirty anymore.

D-And I guess it feels, this feels like an easy to prove or disprove theory. You just take some samples of the air, and if it's super contaminated, you can start to say "Well, that might be a reason." Or, it's not super contaminated so that may not be a reason.

S-Uh huh.

D-You know?

S-Yeah.

D-But also it's not (sighs).

S-There's not strong evidence.

D-There's not.

J-There's no evidence really.

D-And also it's not as though lung cancer is the thing that is killing this many more people.

S-I mean, it's cancer in general, is higher, but if it's cancer in general...

D-But there's other things that are higher in general, too. Like alcoholism.

S-Well, yeah, but I was going to say, if it's cancer in general, then you can't find as easily a specific cause. Certain things tend to cause certain kinds of cancers. And other things tend to cause other kinds

of cancers. But if it's cancers in general, then it makes me think it might not just be from one factor, which in the theory would be the pollution.

J-But also, the other thing is people aren't just dying of cancer more.

D-Right.

J-They're dying of a whole lot of other stuff too. So.

S-Correct.

D-Yeah. And even if, I mean, I guess I don't know how you necessarily could find this out, but you know, there is certainly the idea that just because you have cancer you couldn't die of something else, right?

S-Oh yeah.

D-You have cancer and your heart gives out.

S-Uh huh.

D-You die of that heart attack, so your cause of death is the heart attack, but you still had cancer.

S-Right.

D-But I don't know if that's tracked in these records, so I don't know if that's taken into effect that these people also had cancer.

S-I think cause of death is cause of death, so if you crash your car and die, and you just happen to have a terminal disease, they say your cause of death is a vehicle.

D-Right. In that case, yes. But doesn't that seem like that would be a really important factor to find out for Glasgow in terms of the Glasgow Effect?

S-If somebody were able to...

D-Even if you crashed your car at 17 and you had a terminal case of cancer, it's important that you had the terminal case of cancer, just as much as it is that your cause of death was a car crash.

S-But that's the problem.

D-Right.

S-And this is what's now starting to go on, is that they're starting to have to do like what you're suggesting, is they're having to go deeper. Because they've got the surface data, the easy numbers, and the easy numbers aren't making sense.

D-Right.

S-And so yeah, I mean that is one of the things. There's a, there was a report that was due out at the beginning of 2016. It's one of the reasons I actually held off on this story for a while because I wanted to get that report.

D-Uh huh.

S-And as of, this is March now when we're recording, and the report's still not out.

D and J-Yeah.

S-So I, you know, I was really hoping there was going to be that shining answer in the middle of it.

D-Well Steve, I think it's likely that the report will come out next week.

S-Probably. After we're done.

D-Uh huh.

J-We'll follow up. We'll do a short.

D-Uh huh.

J-Ok, so, pollution I think is out.

S-Yeah.

D-Yeah.

S-I think you're right. So let's go ahead and let's move on down the line to our next one, which is...

D-My favorite.

S-...again, this is a Devin Special. It is food scarcity and then the stress levels.

J-Which are notably higher in this town than elsewhere?

S-Ok. Well, the reason that this is brought up is because we just talked about earlier, is the amount of people who are unemployed and who are on public assistance. So chances are, if they have any other reason, things that they want to spend their money on, whether it be booze, smokes, naked women, whatever the case may be, if they've got some other vice...

D-Books. CDs (laughing).

S-Yeah, some other vice, then they are going to be spending money on that, so therefore they're not going to be spending as much on food. And that's going to then cascade down through a household. Cause if the household doesn't have as much money, then everybody's, you know, a little unsure of where their next meal is going to come from.

J-Yeah.

S-So that's where this, that's what this is based on.

J-Yeah. I'd have to say that being on the dole is not healthy in any sense. In a sense it's not good for your self esteem, and it's not, uh...the thing about having a job that's good, besides having an income, is that it gives you reason to sort of stay on top of yourself, you know? I mean, you can't be sleeping in till three in the afternoon every day. And you can't be starting drinking at ten in the morning. You know? You got to keep yourself in order.

S-Negative cycles can manifest, you're absolutely right.

D-Well, and then the other thing, too, that happens often, I know that I've gone through this when I've been un- or underemployed.

S-Uh huh.

D-You know, right now I have a steady job, however much I like it or not.

S-Uh huh.

D-But I wake up at the same time every day. I go to sleep about the same time every day. I have a routine. When I'm not employed, I wake up whenever, I go to sleep whenever. It starts to mess with the sleep cycle. And there's a lot of that...

S-Suddenly you're going to sleep at 11, 12, then 1 o'clock in the morning.

D-Yeah, and there are a lot of studies about how a messed up circadian rhythm can really mess with your body.

S-Uh huh.

J-Yeah.

D-And that's another thing too, is if you don't have the schedule that you need to stick to, at least me, I think you guys would agree, it's really easy to just slip out of that.

S and J-Oh yeah.

D-And it just starts to mess with your body.

J-Yeah. I know the last time I was out of work, it was quite a while back. But it was amazing how quickly I adapted to staying up till two every night and then sleeping in till ten every morning.

S-Yeah.

J-It happened in no time at all.

S-It's easy to do.

J-Oh yeah.

D-Yeah, so easy.

S-Well, let's talk about the, I've got some stuff here about the food shortage cycle. Actually, since I've been yammering on this whole time, Devin, do you mind reading this quote?

D-"The cycle of having enough food followed by food shortage is thought to play a direct role in dietary compromise, accumulation of visceral fat, and weight gain. Inadequate nutrition and weight gain play a direct role in the development of chronic diseases. Stress plays an active role in metabolism chronic disease. Animal models suggest mice exposed to stress conditions in the presence of high fat, high sugar foods secrete stress hormones and insulin, which lead to a subcutaneous fat and weight gain."

J-Just by being near the high fat, high sugar food?

D-I don't know. I guess (Joe laughing).

S-Being exposed to means they're eating it.

J-Yeah, ok.

D-Ok. Quote "Food insecurity is inconsistently associated with overweight and obesity among women. However, several studies have found a significant association between food and security, and diabetes or diabetes management. For example, a significantly higher percentage of adults with diabetes from food insecure households report difficulty following a diabetic diet, decreased confidence in their ability to manage their diabetes, and a higher score for emotional distress related to diabetes. Food insecurity during pregnancy is associated with higher levels of stress, anxiety, and depression, gestational weight gain, and over twice the risk of developing gestational diabetes compared with low income food secure women." Unquote.

S-Thank you.

D-You're welcome.

S-But that does play into some of the stuff that you were bringing up earlier, about...

D-Uh huh. It's the more articulate way to say all the things I was just saying.

S-See. I wanted you to sound more smarter.

D-Aww. More smarter.

S-Yes.

D-Thank you.

S-It was more better.

D-Steve, aww (Steve laughing).

J-Yeah.

D-Awwwww.

S-All right. So, let's, I mean, we already know as we talked about, that excess amounts of stress is bad.

D-Yeah.

S-Your body is meant to deal with stress to a certain degree, but if you go ahead and add in lots and lots of it, you're in, let's just say what I would call "fight or flight" mode all the time...

D-Uh huh.

S-High blood pressure's going to happen. Heart attacks are going to happen. Circulation and breathing issues. I mean, these are just kind of a handful of things that are going to happen. It plays havoc on the body and the immune system.

D-Yeah.

S-I mean, it's very well known. Scientifically they've looked at it and figured it out, and yeah, it's a bad thing for you.

J-But has anybody done any surveys on food insecurity in Glasgow?

S-Uh, so the reports that I read, it's kind of presumed that there's a portion of the households that are food insecure and there's a portion that are food secure. What the ratio is and what those numbers are, I didn't see that specifically called out, but that may have been because I didn't, I wasn't on page 68 in one specific table. I don't know.

D-It's also hard since we're talking about cross generational stuff, right. We're talking about how a parent's food insecurity can affect a child, for instance.

S-Uh huh.

D-That data certainly probably wasn't really...I mean, that wasn't a thing that people really thought about in previous generations. Especially if we start talking about a couple generations back. I mean, so I'm second generation from my grandma, right?

S-Uh huh.

D-And she was born in, like, 1900, and that's a long time ago.

S-Yep.

D-And there's one person in between me and her, and when she was growing up, they just called it "being hungry." It wasn't food insecurity and stress levels and all that stuff.

J-Yeah.

D-And so when we start talking about getting just a couple generations back, those studies weren't being done, so we probably don't have that data.

S-And records are not there.

D-Right. And frankly, it's kind of an embarrassing thing, to have to say to somebody, yeah, we don't always have food.

S-To a point. Yeah. No, I mean as an adult, yeah, it's just not something that you're typically going to talk about, yeah.

D-I can't provide for my family as much as I want to.

S-No, people don't want to talk about that.

D-Or, you may think you are.

S-You may not realize it.

D-You may say "I'm doing the best I can, and yeah, it's enough." But it turns out it's, you know, mac and cheese from a box every night.

S-Or a half portion every other day. "Listen, that's what we've got. Just be happy we have food." There's a whole, I mean, I don't want to go too far down this cause there's a whole number of ways that can play out.

D-Uh huh.

S-But that does have, as you're pointing out, a long term effect. One of the long term effects that I actually saw brought up in some of the research is epigenetics. I don't know if you guys, do you guys know much about epigenetics?

D-No.

J-No, not really.

S-Cause I read it, and I...ok.

D-Sorry.

S-I took the reading and I've boiled it down here (laughing), because it's DNA stuff, and that is above my pay grade. I admit this right now. But the way that I understand it is that in the super simplified explanation, is epigenetics would be the study of environmental effects on the body and whether or not it influences certain genes to turn on or off.

D and J-Uh huh.

S-So, in other words, how does, at a base level, how does the body react, and then what does that do to it and it's future generations.

J-Uh huh.

D-That's interesting, actually.

S-Well, and it's interesting, because I've seen some studies that say at times it can make people prone to obesity and diabetes, and then other studies that say if it's timed correctly, and that by the way, is not for necessarily that person, but for their offspring or second generation forward. Or, it can, if it hits in the right time, it can actually make their offspring, or as well as the second generation have factors that make them healthier individuals, so they're less prone to overeating, or more prone to overeating. It's really, for me, it's kind of a gray area.

D-But also, it's not just that, right? I mean, it affects literally every part.

S-Uh huh. Well when you look at how it reacts, so I mean, we all, I've done this. I've gone and eaten something and said "Well, that's all I need to eat." And then I've gone and said "I've eaten that and that's all I needed to eat, but I'm gonna eat more anyway."

D-Uh huh.

S-And there are, because of some genetic predispositions, times when there will be people who always feel like they need to eat more. I mean, I've got a cat who always sits by the cat bowl, even though she gets enough food every day. Sits at the cat bowl for six hours, or the food bowl, staring at me like "Dude, I totally need more food." But that is, to a degree, can be dictated at the genetic level.

J-Yeah.

D-Uh huh.

S-And that's where this is coming from.

D-Yeah. Like I was kind of saying, it's not just obesity. It's not just that, you can also predisposition kids to almost anything, right? I mean, one of the things they talk about too, is to be less able to handle stress.

S-Yeah.

D-You know, just because of the way, which is one of those scary things as a woman, right. You're kind of like "Oh my God, I could literally ruin my child's life by just breathing something."

J-Well, you probably will (Steve laughing).

D-You know? But that's terrifying, but it's also a thing.

S-Don't smell the daffodils. They might get ya.

D-Yeah, they might.

J-Yeah. This is...

D-But that seems like the sort of thing that would also come out in studies, no?

S-But that's the problem, is that epigenetics, they're just learning how to study some of this stuff.

D-Uh huh.

S-So it's very difficult to say "Well, let's just look back." Because we can't.

D-Yeah. And as we said, it's really hard to go historically and say "Well, this family was suffering from food insecurity or extra stress levels or whatever." And you were saying that there is a really high unemployment rate in Glasgow?

S-Uh huh.

J-It's extremely high there, but yeah. And also, again, the murder rate. That'll stress you out a little bit too.

S-Yeah.

D-Especially murders like that.

S-Well, and I think the thing that we need to look at, you actually were starting to talk about this a little bit, Devin, is the effect, if we look at the current generation of children, and maybe how that's going to play going forward on them. Because if, uh...I pulled some stats on children.

D-Uh huh.

S-In 2006, more than 26% of the children in the greater Glasgow area were from families that were out of work. So that's, as we talked about, the insecurity, the stress there. Between 1996 to 2008, there was a trend in what they refer to as "looked after children," which means that that is children who are under the care of...

D-Nannies, nurseries, going to preschool.

J-Or are we talking foster care?

S-Foster care.

D-Oh.

S-This is "looked after children." This means...

D-Wards of the state.

S...the parents aren't able to take care of them, and basically the state has taken them in and taken them away from their family.

D-That's a lot.

S-Yeah, so that, well no, the 26%...

D-Sorry, I'm looking ahead. That's a lot.

S-Oh, yeah, the number. So in 2008 there were 4500 looked after children in the greater Glasgow area. So this is a generation that is, they're children, so we don't know if, once they go into that situation, does that mean they're no longer food insecure because they're being looked after? Whereas in the past maybe that wasn't available, so they just had to...I...

D-I guess my, I know I just rolled my eyes at you (Steve laughing), but I think that that comes from, just at least the system in America, I don't know how it is in Glasgow, I don't know how it is in Scotland.

J-What system are you talking about?

D-Just the foster care system or social services in America, that just because a child is in foster care doesn't mean that they are no longer food insecure.

S-Or that they're getting looked after better. No, I understand that.

D-It just means that that parent is deemed to be more able to take care, but that doesn't necessarily mean that they are going to be out of the woods with that sort of stuff.

S-Uh huh.

D-But again, I don't know how it works in Glasgow. I don't know if it means they actually are getting three square healthy meals a day, and the help they need, and the sleep they need, and they're also not stressed out about the fact that they aren't with their parents anymore. There's so many factors there.

S-Really, the only way to find that out, is the boots on the ground, you know, the people who are there and in those situations, those are the only ones who can answer that. And I imagine that that is, again, this is where I feel like the next step in the research process is that they're probably going to start drilling into these things, because again, they're doing the high level numbers.

J-They don't need to drill down that deep. I mean, ok, if it really is stress from, you know, food insecurity and all that stuff, just look at the family history of people who die young. That's all you gotta do.

S-But that's not that easy to find.

J-Yeah, and especially after they've died.

S-Yeah.

J-You need to get to them right before they die (S and J laughing), and then interview them.

D-Well, I mean, I think that...

S-He's always got the simplest answers.

D-I guess the good news about this is that we're aware of it, and they are taking care of the data right now, right. There's a lot more tracking happening right now.

S-They're trying to figure out what's going on.

D-They're really trying to figure out what's going on. They'll probably do all the testing that would be required from day 1.

J-Yeah.

S-But it's taken 8 to 10 years to get to the understanding level that we have at this point, so it's hard to say how long it's going to take before...

D-Generations.

S-Before it gets...

D-No, I mean...

S-Before it's like "Uh, let's try this. That worked, or crap that didn't work."

J-This will probably be an industry, yeah.

D-But it will be. You have to study that generation as they come up and see if that generation also continues to die on average young.

S-Right.

D-And if they do, then you start saying, "Ok, we've tracked all of this stuff, so what's the, you know, common thread here?"

J-Yeah.

S-Which means if you've got a bunch of children who are under, let's say 12 and under, that means we've got to wait another 70 or 80 years before we're going to see if any of the things that are being tried today have an influence. So it is literally an entire generation that has to go by, and I don't mean one generation to the next, or one breeds and they create their next. It's before they live their entire life cycle, and...

D-Well, the good news is that it's much shorter for them.

S-Oh (laughing).

J-Ok.

D-Don't look at me like that.

S-That was harsh.

D-It's just, I mean (laughing). Sorry.

S-I get the joke.

D-We'll get it six years earlier.

S-Well, ok, let's move forward.

J-Oh, you got another one?

S-I do have one more.

D-Oh, I thought we were done.

S-This is actually a really easy one.

J-Yeah.

S-And it's actually, it's a hard one, because A, it's hard to track, and B, it's just hard to think about, is that it's there is a certain amount of cultural alienation that goes on. And that is keep the stiff upper lip, don't tell anybody your problems. You can just handle it on your own.

D-That's very British.

S-Yeah. And I, you know, I don't reach out for help, so then people feel alienated, and they're stuck and they've got to deal with it themselves, so that could be part of it. There's also, there is an issue with suicide. And there are suicides, most of the suicides seem to be linked back to drug and alcohol problems, and I don't know if that's correct or not, but that's where the data is leading people to.

J-I forget how much higher is suicide in Glasgow than everywhere else in the UK?

D-Uh oh, he doesn't have that number.

J-Oh, ok.

S-I had that number, and I don't have it anymore.

D-Hm.

J-But it is higher, right?

S-It is higher, yes.

J-Significantly higher?

S-Uh, it's...

J-Ten percent? Fifteen?

S-Let's say ten percent.

J-Ok.

S-It's a significant enough number that it gets raised. So...

D-But that's the cause of death.

S-Correct.

D-I mean, it's not that "Oh, I jumped off a bridge but my cause of death was cancer cause I had it." As previously mentioned, right?

S-Correct.

D-So, that's, it can't be enough that it's skewing the numbers.

S-Or "I was dying because I had cirrhosis, and my liver was about to give out."

D-So I took my life. Yeah.

S-So, I mean, we don't know. We don't have that, because again the data doesn't go that far down.

D-I'm sorry, I don't know the answer to this. I don't know if either of you know the answer to this, but does Glasgow have any kind of right to life, no, right to life? Right to death?

J-You mean right to die thing?

D-Yeah, right to die?

S-I have no idea, to be quite honest with you. I never even would have thought to look at that. That's really interesting.

D-Because I wonder, because it's technically suicide, but I don't know what happens with that.

S-Yeah, I don't know. I mean Europe tends to be a little more flexible about that than...

D-And a little more progressive.

S-...conservative America is, so I don't know.

D-Ok. I don't know if that would account, also, if there is this much higher instance in terminal cases of things, if the reason, you know, if you say "Well, ok. I'm going to end my life cause I don't want to deal with this." I don't know if that has something to do with the suicide rate.

J-I don't know. But it's an interesting thing, intriguing that more murder, more suicide, but also more cancer, and more just health problems in general.

S-More of everything.

J-Yeah.

D-More death.

S-That's the screwy part, is it's more of everything in general.

J-Yeah.

D-Uh huh.

J-So I would say that it could be one of two things, and I don't buy any of these theories about Vitamin D or poverty or that crap. It's all crap.

S-Uh huh.

J-Either a migration of a significantly different, a genetically different population into the area at some point, like around the turn of the 20th Century, or a change in their water supply.

D-Hm.

J-You know? They might have started sourcing their water supply somewhere else. I mean, hey. They should probably check the water.

S-I think that it's probably a combination of several of these things.

J-It could be.

S-I also that your, the migration is a good thing to point out because...

J-Yeah.

S-Until the, what was it, I mean in terms of massive migrations of people from genetically different areas, you didn't see a whole lot of that happening until, I'd guess, maybe the last hundred years, on a grand scale.

J-Yeah.

S-And so it may be that the people who are there are so genetically similar that that is part of it, and we won't see that change until after we've got, you know, I'm just going to call it the new gene pool introduction.

D-Hm.

S-It is then going to bring in the different genes that are then going to make it so that you're not as prone to getting one of these things that everybody seems to be having.

D-Yeah. But I guess when we're really talking about that, right, we're just talking about the percentages above average, right? So we're saying that population shift was about a 20% population shift. Which is significant, statistically, but realistically, I mean with a lot of the refugee migrations that are happening

right now, I'm sure that you see cities that are changing population demographics like that these days.

S-Uh huh.

D-And so it would be interesting to see, was there something like a famine or something, you know, within a hundred years of when we're seeing this that pushed 20% of the population to be genetically different that just happened to have a shorter life span anyway? Shorter anticipated life span, or you know, the fact that they were fleeing a famine, and they had food insecurity, and they passed that down to generations, and that may work itself out. I mean those are all things that I think, to us, because we're so used to having the internet and all of this information, seems like it would be really easy to find out, but I think probably that's just almost impossible.

J-Not necessarily.

S-Yeah. It's difficult, but it could go. I mean, I realize I'm about to do what you just did earlier, which is I'm about to question my own theory...

D-Uh huh.

S-Because it's been seen before, where when you get an influx of people who are genetically different, and let's say they were fleeing an area where they always had a bit of a food scarcity, so from an epigenetical level, they were inclined to acquire more body fat, because that is the way you survive.

D-Right.

S-And suddenly to be put into this food rich environment or over rich environment, that could then push them into some other unhealthy spectrum. I mean...

D-I also don't know...

S-It's one of those things I throw my hands up like "I'm damned if I do and I'm damned if I don't."

J-Yeah, I think, I think that really, the key to this is genetics.

D-Yeah.

J-They need to just, like, grab, you know, grab a bunch of these, I don't know how to call...

S-Glaswegians?

J-Glaswegians, I don't know. So I'll just say people from Glasgow (laughing).

S-Yeah, that's safer.

D-A sample size.

J-I think that they need to, like, look at, start looking at their genes and see what makes, if they're actually different.

D-Yeah.

J-Cause I'm betting they are.

D-Yeah.

S-Probably.

D-I think they must be.

J-And it's probably, like I said, due to some migration.

D-Uh huh. Uh huh.

J-Or the plutonium processing facility is altering things.

D-Yeah, it's probably that.

S-The Scottish Homer Simpson?

D-Uh huh.

S-Or no, it's uh, Cousin Willie.

D-Uh huh.

S-That's who it is.

J-Or you mean Groundskeeper Willie?

D-Groundskeeper Willie.

S-Groundskeeper Willie.

D-He didn't actually do any plutonium stuff. He took care of the school.

J-Yeah.

S-That's cause he got out of Glasgow.

D-Hm.

J-Yeah. Smart thinking, dude (Steve laughing).

D-Good point.

S-All right. Well, we uh, let's go ahead and give folks here, cause that's really all we've got in theories.

D-Yeah.

S-And our debating here. We've got some pertinent details as always. We have our website, which is thinking sideways podcast dot com. You can find this episode, any past episodes, we'll have some of our research links on there. And of course, on the right hand sidebar, we've got some other things on the website. There is the Paypal button. There is the link for merchandise and for Patreon. Paypal, one time donation, which you can totally do. We appreciate that. That would be really awesome. But it is, again, voluntary. We have shirts, coffee cups, phone cases, merchandise like that available through Zazzle. There's a link to that on the website. And then Patreon is on there, patreon dot com, so if you would like to give to the show on a reoccurring basis, that is available.

J-Phones ringing. Phones ringing.

S-Yeah, phones ringing, phones ringing.

D-Ring ring.

S-If you want to go straight to, the link will take you to it, but it's patreon dot com slash thinking sideways.

J-Strictly optional, and don't forget, when you pledge, you're not just giving us, like, five bucks. You're pledging like five bucks an episode. So remember that.

D-Yeah, we should clarify that.

S-Yeah, that's why it's on an episode basis. It is by episode. So just keep that in mind.

J-Yeah.

D-So, when you pledge fifty cents, don't feel cheap (S and J laughing), cause that's a lot of money in the long run.

J-Yeah, if you pledge fifty bucks, well (laughing).

D-That'd be great.

S-That might be a little bit more.

J-That's be great, but just be careful.

S-Now, when you find us out on the wild world of the internet, you'll find us in a number of places, one of those being iTunes. If you're on iTunes and you use it, go ahead and leave us a comment and a rating, and subscribe. We are, of course, on all of the streaming sites, so you can get us through there as well. We are on social media, so we're on Facebook. We've got the Facebook group and that Facebook page. And we're also on Twitter, which is thinkin sideways, without the 'g' in the middle.

D-Yeah.

S-And we've also got the subreddit.

D-Yeah!

S-Which is always fun and interesting.

D-You don't know, you've never been there.

J-Yeah.

S-Shush, I'm trying to make it like I totally know how to use Reddit.

D-You don't know anything.

S-I don't even know how to type the word.

D-Uh huh.

J-Anything going on out there?

S-How do you spell it?

D-Reddit? You know how to spell it.

J-Yeah, it's like r-e-a-d dash i-t.

D-Yeah, there's a silent 'h' in there. It's fine.

S-I knew it! I knew it. That's why I can't find it.

D-Yeah.

S-And of course, if you want to, you can always send us an email. Our email address is thinking sideways podcast at gmail dot com. So if you've got suggestions for stories, you've got feedback, anything like that, definitely feel free to send us an email, and I think that is all of those details, so anything else you guys?

D-No.

J-Not a thing.

S-All right. Well, that's it. Thanks everybody, we'll talk to you again next week.

J-Yeah. Bye-bye.

D-Bye guys!

