

When it comes to health, weight of course is not everything, but since there are so many health complications from being overweight or obese, it's safe to say that Japan with an obesity rate of 3.5% is generally healthier than America with an obesity rate of 30%.

Japan isn't perfect, it has found itself on the 2012 top 50 list for cancer rates, but it comes in near the [bottom of the list](#) at rank #48 while America is at rank #6. Maybe other countries would make better comparisons, but I'm contrasting Japan with America simply because these are the two countries I've lived in.

Last time, I argued that convenient access to reasonably healthy food in Japan helps people stay thin. But what else contributes to health?

In my last video, a lot of comments pointed out that in Tokyo you end up walking everywhere, which is true and should help people stay lean. Also, walking while eating in Japan is generally taboo unless you're in a tourist spot, so more walking should also lead to less snacking.

Public transportation is impressively convenient and reliable - if you're traveling around Tokyo, your destination is almost always within a 20 minute walk from that area's train, subway or bus station. Not only is it convenient to just walk or bike everywhere and use the train or bus, it's usually more inconvenient to go by car - The parking isn't easy to find, and isn't cheap - for an hour it's give or take 800yen (about 7 dollars and fifty cents), and the parking is scattered around so it's rare that you find a spot right next to your destination, so you're going end up walking around after you park anyways.

However, this is just Tokyo. Such a population dense part of Japan with highly organized public transportation unsurprisingly has the [lowest rate of car ownership](#) in Japan. What's interesting is that [average body mass index](#) doesn't change too drastically prefecture to prefecture, and higher car ownership doesn't particularly correlate to higher body mass index. In fact,

if you look at [obesity rate](#) versus [car ownership](#) in *America* state to state, there's not a particularly strong correlation there either. That said, more walking surely helps people stay leaner and healthier, but it's just one piece of a bigger puzzle.

Next, the portion sizes in Japan are definitely smaller. Here's what some typical lunches look like. *[Show clips]* When I first came to live in Japan in 2010, I remember always being a little disappointed with the size of the meals. Of course bigger portions and even all you can eat places are available, but since food is more expensive here, I had to just get used to eating less food. [In 2014](#), Japanese people spent on average about 13.5% of their income on food, which is more than twice what people in America spent. In 2013, 3682 calories were consumed per person per day in America, but it was only 2726 calories per day in Japan.[\[S\]](#) So Japanese people typically spend more money for less calories. Although, cheap calories from the sugar in soda is probably a factor here as Americans consumed more than 5 times the amount of soda Japan did in 2011.

Next, the *type* of food being eaten over here is of course different. You may have noticed in the clips I just showed that everything comes with rice. The Japanese diet is by no means low carb, but while Japan and America eat about the same amount of the two grains Wheat and Rice combined, Japan eats about half as much wheat as America.[\[S1,S2,S3,S4\]](#) Cutting out wheat or gluten is usually suspected to be only a fad, but gluten, found in wheat and not rice, has been shown to have some unique properties. [This 2012 Brazilian rodent study](#) for example, found that putting just 4.5% wheat gluten in the diet increases body fat, inflammation, and insulin resistance.

Work by Dr. Alessio Fasano and his team has shown that the gliadin protein of gluten, through the stimulation of a protein called Zonulin, opens up the spaces between the epithelial cells in your gut. This allows gliadin fragments to leak through the gut into the bloodstream, provoking an immune response and inflammation. However, since the reaction to gluten

differs person to person and the science is relatively new and complex, it's hard to say by what degree wheat is worse than rice or how much wheat is too much. [Fasano, Alessio. *Gluten Freedom*. Turner Publishing Company. 2014]

Next is the regular consumption of fermented foods in Japan.

Elie Mechnikov, winner of the 1908 Nobel Prize in Medicine, was the first to propose the theory that lactic acid bacteria are beneficial to human health. He suggested that "[*oral administration of cultures of fermentative bacteria would implant the beneficial bacteria in the intestinal tract.*](#)"

As research on the gut microbiome develops, the health effects of certain gut microbes and bacteria are becoming clearer. [A transplant of the microbes](#) from one overweight woman to another woman caused the receiving woman to become obese, and it's been found that transplanting microbes from a confident mouse to an anxious mouse will make that anxious mouse more confident. It's estimated that there are [500 to 1000 species](#) of bacteria just in your gut, and it's important to take care of the right species of these bacteria. There's even [research](#) showing that certain microbes produce certain neurotransmitters. And, fermented foods are supposed to support the microbes that we do want to have.

Plenty of fermented foods have been part of the Japanese diet for a very long time. There's Natto, soy sauce, miso, fermented fish and tsukemono which is pickled vegetables. Kimuchi, a fermented food traditionally from Korea, is also widely available in Japan. Fermented foods like these are very easy to find at the supermarket, and it's common to get a side of Japanese pickles with your meal.

The next point is balanced meat consumption. In 2017, total meat consumption [in the U.S. per capita was 98.4 kg](#) where [51.4kg of meat](#) per capita were consumed in Japan. American people per capita ate only [7](#)

[kilograms of](#) seafood in 2015, while Japanese people ate [27.3 kilograms of fish](#) and fish products in 2014. If the meat everyone was eating was antibiotic free grass fed meat, high meat consumption might not be a bad thing, but in any case we can agree that a higher fish intake is generally good for you. And I don't think it would surprise you to hear that it's really easy to get fish wherever you are in Japan - that could be raw fish at a sushi place or cooked fish at a variety of other restaurants.

But there's another kind of balance that might be a factor - it's the muscle meat to organ meat ratio. Organ meats have not usually been much of a component of the American diet. During World War 2, people were encouraged to eat organ meats as part of the food rationing effort. Articles like this one in this [1943 issue of Time Magazine](#) sold organ meats as highly nutritious and explained how to cook them. [The effort had some success](#) in changing people's views on organ meats, but the effect, didn't last much longer than the war itself.

This is unfortunate because, as the time magazine issue shows, organ meats are rich in certain vitamins that muscle meat is not. And, glycine, an amino acid found in skin, cartilage and connective tissue has several important health benefits- from being an [anti-inflammatory](#) to [improving skin elasticity](#), [improving insulin response](#), and it has been shown to [ameliorate oxidative stress and lower blood pressure](#).

[This study](#) found that you could get a 30% increase in lifespan in rodents by restricting methionine, an amino acid found in muscle meat, or you could get a 30% increase in lifespan by supplementing glycine. Glycine supplementation also reduced fasting blood sugar, fasting insulin and even triglycerides. So it looks like the potential negative effects from eating too much muscle meat can be counteracted by simply consuming more of things like skin, cartilage, connective tissue, and bone broth.

Now in America you can surely find organ meats at some supermarkets, but in my 20 years in America, organ meats were rarely on the menu, though chicken skin is easy enough to find but it's usually fried. Over in Japan, organ meats aren't eaten every day of course, but they are more common. You can find them at the supermarket, or at Barbeque places and *Horumon Yaki* places specialize in organ meats, and you can also get them on skewers at *Yakitori* places. Pork is a big part of Okinawan cuisine and they don't waste much of the animal.

Another thing is green tea consumption. Green tea has been found to have [anti-inflammatory, antioxidant and anti-cancer effects as well as](#) blood sugar lowering effects thanks to the catechins in it. I'm betting green tea being healthy isn't new information to you. But back when I lived in the states, the reason drinking it didn't become a habit was that it was simply annoying to have to buy it at the supermarket and then come home and make it. Here, pretty much any restaurant serves it, sometimes for free, and you can always buy it from one of the many many vending machines prevalent throughout the country. **What might be an even bigger benefit from regularly drinking green tea and other teas is that it keeps people from drinking sugary sodas.** I rarely see people here drinking soda with their meal, but I see people drinking tea all the time.

One last point is the food being served to young children. In Japan, school meals are planned out by a nutritionist, cooked mostly from scratch from local ingredients, then served in the classroom by the students and eating manners are taught by the teacher. The only drink allowed is milk, so students can't be drinking juice or other sweet drinks. The meals aren't always perfect, but they're a lot better than what I remember getting from the cafeteria in grade school in the states.

~~Another factor to health could be hot baths. There are *onsen* which are hot springs and *sentou* which are commercial bathhouses peppered all throughout the country. It's rare for a house not to have a bathtub, and~~

taking a hot bath every night is very common. [While some studies](#) suggest that heat can decrease testosterone levels, a [Finnish study on 2300](#) middle aged men found that fatal cardiovascular disease was 27% lower in men that used the sauna 2 - 3 times a week and 50% lower in men that used the sauna 4 - 7 times a week compared to those using it only once a week.

There's plenty more things about Japan I haven't mentioned here, some that I even expect would be bigger determinants of health like consumption of Processed Foods, Sugar and processed corn, seed and soy oils. In short, it seems that people in Japan eat a lot more food rather than food like products. Japan's food culture has contributed a lot to health over here, and I expect a lot more could be learned from looking at other countries' food environments.

This video was sponsored by Audible... which is actually something I use almost every day. I've gotten a lot comments before asking about my research process. And, honestly most of it is just reading all the time and taking notes. Most of my reading is actually listening to non-fiction books on Audible. I usually set the playback speed to twice as fast and when I come across a bit that sounds important, I use the bookmark function to leave a note so I can come back to that point later. Of course Audible isn't just for non-fiction, they have an unmatched selection of all kinds of audiobooks, original audio shows, news, comedy, and more. I particularly enjoyed the book "Missing Microbes" by Dr. Martin Blaser. This book really came in handy while working on my last video on the Microbiome, and it was just a really interesting and enjoyable listen about the repercussions of using antibiotics too much. If you'd like to check it out, go to www.audible.com/whativelearned or text 'whativelearned' to 500-500 to get an exclusive 30 day free trial and one free book.