Something Important for Asian Health

52 messages

Kewei Zhou <keweizhou1996@gmail.com> Fri, Feb 7, 2025 at 8:52 PM
To: wuj95@mcmaster.ca

Hey Jianhan,

I found something that might be important for Asian health, but I don't have the credentials to get this published in a paper, nor the language abilities to write an article about this in Chinese language, & the guy I used to publish stuff with went inactive years ago. I think this could be pretty big. It would take maybe a day or two for you to write this in more formal language & get it either published in a paper, or on Zhihu like the other guy did. I found your email by looking you up on Google.

It boils down to this. East & Southeast Asians (who eat soy proteins & have vitamin B12 deficiencies) have significantly smaller testicles than other races. Hispanics have the largest testicles. East & Southeast Asians (who etc.) produce less testosterone & sperm as a result. But Mongolians & Buryats have the same testicular size & function parameters as White Russians, & they're very similar to East & Southeast Asians genetically, so it's probably not genetic. So I compared East & Southeast Asians' (who etc.) lifestyles & diets to that of other groups, & I think it might have something to do with soy & tea, which are really the only things that consumptively differentiate us from other groups. (Vitamin B12 deficiency is another major factor that I came across, but you can say that about any nutrient really. If you don't get enough of any one thing, you won't grow as well as you could have. It's not hard to sit down & figure out what you need to get to fulfill your daily nutrient & vitamin & mineral requirements. What's really important is figuring out what not to eat. You can eat alot of most things & your testicles won't shrink, but if you eat alot of soy & drink alot of tea, either green or black, your testicles will shrink. I think, based on what I've read.) TCM (traditional Chinese medicine) plants are also a factor. Many of them are 5a-reductase inhibitors (https://en.wikipedia.org/wiki/List_of_5%CE%B1-reductase_inhibitors). But East & Southeast Asians aren't eating TCM plants on a regular basis. So it's really just soy & tea, (& nutrient & vitamin & mineral deficiencies, which are even now a few times more prevalent in China than in the West).

(1) Siberian Asian Testis Weights

> https://pmc.ncbi.nlm.nih.gov/articles/PMC8596582/
>
> In 2021, Buryats & Russians both had a median total testicle weight of 40g, & Yakuts had a median total testicle weight of 36g.
> Russians & Buryats & Yakuts were all very similar in terms of semen volume & sperm count & sperm concentration & motility & morphology, as well as LH & FSH & Testosterone & Estradiol & Inhibin B.
>
> https://www.researchgate.net/figure/PCA-of-the-native-populations-of-Sakha-in-the-context-of-other-Eurasian-and-American_fig5_239941273
>
> You can see Buryats & Mongolians & Yakuts tightly clustered in the bottomright of the rectangle cutout below the PCA plot. (They're basically East Asians, with about 10% to 15% Ancient North Eurasian input. ANEs were like 75% West Eurasian & 25% East Eurasian.)
>
> Buryats & Yakuts do not eat soy products.

(2) East & Southeast Asian Testis Weights

> https://gwern.net/doc/biology/1986-diamond.pdf
>
> Hong Kong Chinese in 1986 had a mean testicle weight of either 8g or 9g.
>
> https://onlinelibrary.wiley.com/doi/pdf/10.1002/j.1939-4640.1998.tb02015.x
> https://pubmed.ncbi.nlm.nih.gov/9639052
>
> This is from 1998. (Dietary deficiencies were very common in China, & it makes a difference in testicle weight. But still, the gap is pretty big.) The Chinese from China had a mean testicle weight of 13.7g. Hispanic Americans,

25.9g. White Americans, 21.0g. The Chinese had about half or less sperm production & leydig cell count compared to Hispanics or Caucasians.

https://pmc.ncbi.nlm.nih.gov/articles/PMC5904753

> The mean testicular volumes (average of the left and right testis) of normal Korean men, fertile Chinese men, fertile Thai men, and normal Chinese men were 19.4, 17.7, 17.2 and 17.0 mL, respectively. These values are smaller than those from a European study showing that the mean testicular volumes in fertile men from four European cities were 23.5 mL (Copenhagen), 23.0 mL (Edinburgh), 22.5 mL (Paris) and 23.0 mL (Turku). In our study of fertile Japanese men, the mean testicular volume was 21.5 mL.

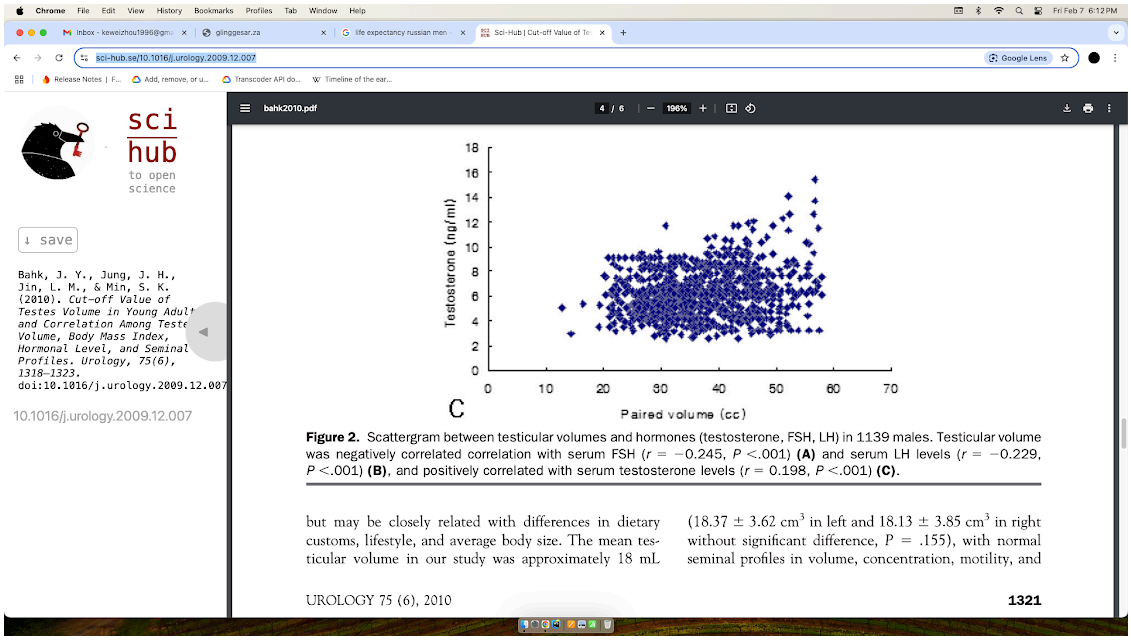
> According to our comparison of the results from different Asian studies, the mean semen volumes of China (north/south/central), Thailand, Singapore and India were 3.0/2.9/2.4, 2.5, 2.4 and 2.5 mL, respectively. In contrast, semen volume of the fertile Japanese men was 3.2 mL; which is the highest value among the Asian men examined here. These values from Asian men appear to be lower than those from European men (4.2, 4.1, 3.9 and 3.8 mL for French, Finnish, Scottish and Danish men, respectively).

This study of fertile Japanese men was from 2007. The European study was from 2001 (https://sci-hub.se/10.1093/humrep/16.5.1012). The studies for the other East & Southeast Asian men were all from the 1980s. The Chinese men in the first quoted paragraph are Hong Kong Chinese.

https://sci-hub.se/10.1016/j.urology.2009.12.007

> During 54 months from January 2004, 1139 normal young men, 19-27 years old in military service were enrolled.

The mean testicle weight for Korean military conscripts in 2009 was 18.2g.



https://sci-hub.se/10.1111/j.1745-7262.2008.00340.x

Here's a 2008 Japanese study that also shows a marked increase in testosterone average & standard deviation beginning at 50g, & a marked decrease beginning at 20g. The average **total** testicle weight for the men in this study was 36.8g.

Notably, men with 20g or less total testicle weight produce almost no sperm.

https://www.researchgate.net/publication/357379208_Ultrasonic_testicular_size_of_24440_adult_Vietnamese_men_and_the_correlation_with_age_and_hormonal_profiles

The mean testicle weight for Vietnamese adult men in 2021 was 13.6g.

(3) Soyfood Consumption by Country

https://www.researchgate.net/publication/316876299_Soyfood_and_isoflavone_intake_and_risk_of_type_2_diabetes_in_Vietnamese_adults

Vietnamese adults in 2017 consumed an average of 20g of isoflavones per day.

https://pubmed.ncbi.nlm.nih.gov/17951484/

This study was from 2007. It looked at Hong Kong women.

> Results indicated that the daily intake of total isoflavones was 7.8 +/- 5.6 mg in the study population. Non-Cantonese women had a higher intake of 10.7 +/- 7.6 mg compared with 7.3 +/- 5.0 mg in Cantonese women (P = 0.04).

https://pubmed.ncbi.nlm.nih.gov/15228989/

This study was from 2004. It looked at rural adult women in mainland China.

> Soy food consumption and information on age, education and medical history were collected on 1,188 subjects in Gansu Province and Hebei Province, China using a food frequency questionnaire to gather data on food intake over the past year. Weight and height were simultaneously measured. The results showed that 1139 (95.9%) rural women consumed soy foods in the past year. The average intake of soy foods and isoflavones was 38.7 +/- 58.2 (median = 23.5) g/d and 17.7 +/- 26.6 (median= 8.9) mg/d, respectively.

https://pubmed.ncbi.nlm.nih.gov/16965235

This study was from 2006.

> The results indicate that older Japanese adults consume approximately 6-11 g of soy protein and 25-50 mg of isoflavones (expressed as aglycone equivalents) per day.

https://pmc.ncbi.nlm.nih.gov/articles/PMC7043982

This study was from 2019.

> According to the Korean National Nutrition Survey, daily mean intake of total genistein and daidzein in the Korean population is estimated to be 21.0 mg per person.

https://pubmed.ncbi.nlm.nih.gov/12725653/

This study was from 2003.

> The isoflavone intake in Ireland, Italy, The Netherlands and the UK is on average less than 1 mg/d.

Generally, the only people in the world who eat significant amounts of soy products are East & Southeast Asians, & not Mongolians & Siberian Asians.

(4) The Effects of Soy Consumption on the Testes

https://www.saspublishers.com/article/9701/download/

Rats who ate for 8 weeks a diet that was 20% soy flour experienced an 80% drop in testosterone, & a 60% drop in testicle weight.
This isn't even soy isoflavones. This is just regular soy flour, as a proportion of their total diet that is similar to how East & Southeast Asians eat.

https://sci-hub.se/10.1097/01.ju.0000046780.23389.e0

5mg/kg of genistein is just as bad or even sometimes worse than 300mg/kg of genistein when it comes to maternal diet. Suppression of pubertal markers (80% deficit), testis length & width (10% deficit), penis length (10% deficit), testosterone (50% deficit), & sexual activity (50% deficit) was equal or worse in male rats born to mothers who ate 5mg/kg of genistein vs. male rats whose mothers ate 300mg/kg of genistein. East & Southeast Asians eat about 10mg/kg to 20mg/kg of genistein, & convert alot of that into equol.

These male rats didn't even eat genistein after they were born, as the title of the title of the study states.

https://pmc.ncbi.nlm.nih.gov/articles/PMC4076408/

This study shows something relevant to what (10) (& the Zhihu post on animal fat & soy & height) discusses. Rats born to mothers who ate soy vs. rats born to mothers who didn't, & who didn't eat soy in their life, experienced average to slightly above androgen production in the early stages of their life & puberty, but this production declined to half that of the control rats in the later stages of puberty. Meanwhile, their estrogen production followed the opposite development, in which they experienced half the estrogen production of that of control rats in the early stages of their life & puberty, but up to 30% more estrogen production in the later stages of puberty. This is reflected in the development of their testes, in which the control rats had slightly smaller testes in the early stages of their life & puberty, but somewhat larger testes in the later stages of puberty.

https://www.researchgate.net/publication/342246524_The_effect_of_pre-_and_postnatal_exposure_to_a_mixture_daidzein_and_genistein_on_the_reproductive_system_of_male_rats

This study confirms the previous studies.

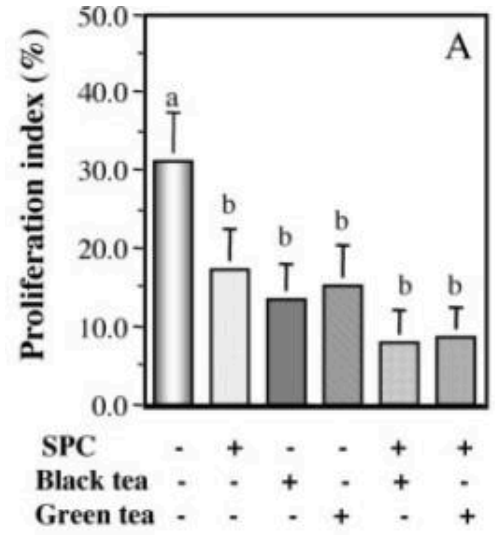
(5) The Effects of Tea Consumption on the Testes

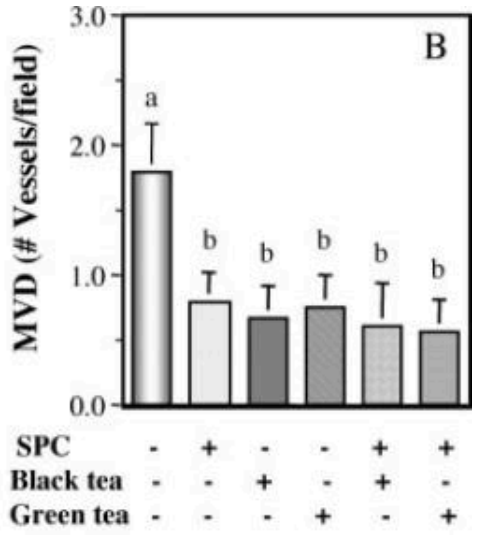
I discounted studies that used unreasonable amounts of green tea.

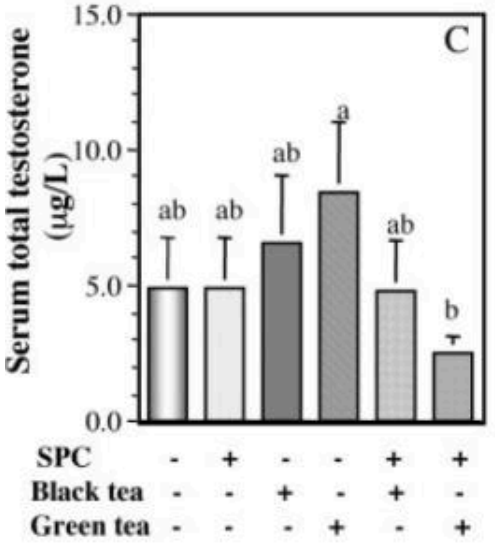
https://pmc.ncbi.nlm.nih.gov/articles/PMC3058706/

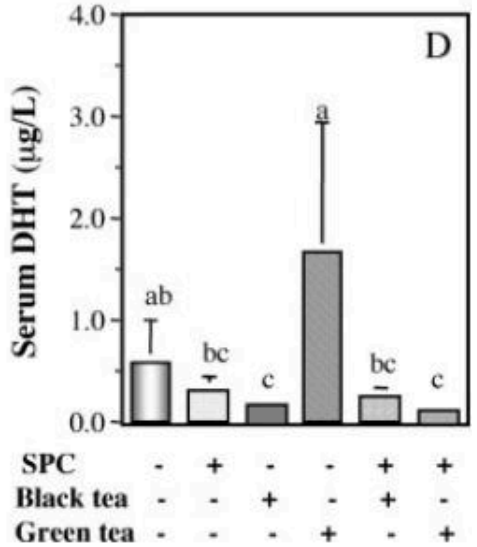
Green tea blunts androgen receptor function in rats.

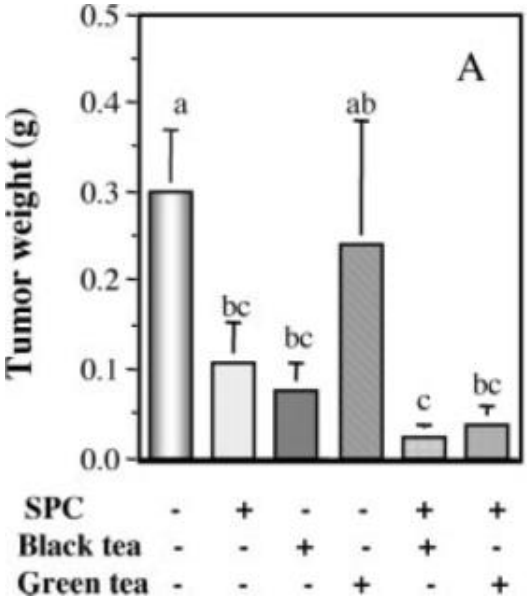
https://pmc.ncbi.nlm.nih.gov/articles/PMC2683253/

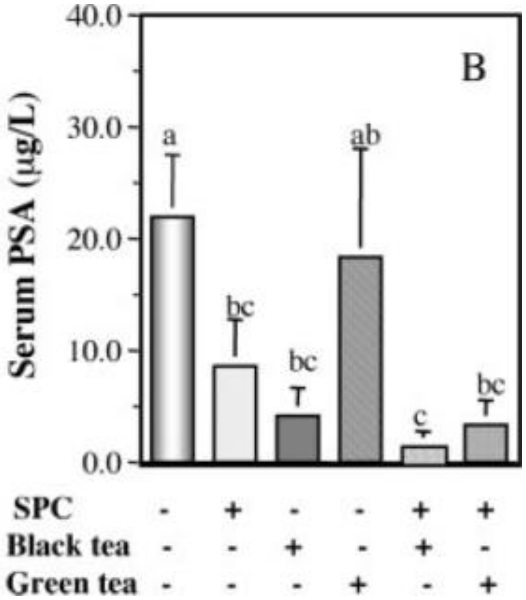












Androgenically, green tea is pretty good on it's own, & black tea & soy isoflavones are pretty bad on their own, & combining black tea & soy isoflavones doesn't seem to be much worse than just eating soy isoflavones, but, somehow, for some reason, combining green tea with soy isoflavones produces, not a result that is as equally bad as just eating soy isoflavones, but a result that is much worse. & many East & Southeast Asians tend to eat both together.

https://nopr.niscpr.res.in/bitstream/123456789/12615/1/IJEB%2049%289%29%20689-697.pdf

Higher doses of green tea extract are bad for all testicular parameters. The testicles of the high dose rats (20 cups of tea a day), after 26 days, shrank by 20%. The high dose rats also experienced an 80% decrease in serum testosterone levels.

This seems contradictory with the previous result, but maybe it's like how steroids shrink your balls. Green tea consumption might be mimicking the effects of steroids. I'm not sure. But you generally don't want to be eating something that flipflops your hormone profile.

https://www.ijtsrd.com/papers/ijtsrd42471.pdf

This study has similar results as the previous study.

https://www.ijcep.org/index.php/ijcep/article/view/318/457

Another study showing the testicular degeneration following green tea consumption.

(6) The Effects of Vitamin B12 Deficiency & Soybean Consumption (180g per kg of feed) on the Testes

https://www.jstage.jst.go.jp/article/jnsv/53/2/53_2_95/_pdf

Control rats had 2.6g testes. B12 deficient rats had 0.8g testes. (It's not about a single vitamin. It shows the importance of eating enough of everything.)

https://www.researchgate.net/figure/Prevalence-of-deficiency-in-vitamin-B12-and-folate-among-Chinese-women-in-Shaanxi_fig3_268232713

46% of Chinese women in Shaanxi in 2014 had Vitamin B12 deficiency. This percentage probably used to be much higher just a few decades ago.

> Vitamin B12 deficiency affects about 12.5% of adults in the United States who are 19 years of age and older. It affects about 12.3% of adults who are 60 years of age and older.

(7) The Effects of Different Fats & Nonsoy Proteins on the Testes

https://pmc.ncbi.nlm.nih.gov/articles/PMC4752153/

High fat diets (doesn't matter whether it's SFAs or PUFAs or both) all increase rat testis weight by like 3% after 16 weeks. So they don't really do anything.

https://sci-hub.se/10.1016/j.fct.2007.08.045

SFAs & PUFAs (even soybean oil) & nonsoy proteins have no effect on rat testicle weight. So it seems to be a soy protein AKA isoflavones thing. Soybean oil has no isoflavones.

(8) The Effects of Soy Sauce on the Testes

https://aunj.journals.ekb.eg/article_276887_15c679d97d02834519a0a11f82b05341.pdf

Even soy sauce is bad for your testicles, despite not having isoflavones. There are other phytoestrogens & substances in soy products that don't bind to the estrogen receptors nearly as strongly as genistein, daidzein, equol, etc. But they probably have other effects on other receptors & hormones that we haven't measured.

(9) The Effects of Caloric Restriction on the Testes

https://journals.sagepub.com/doi/full/10.1177/0192623308320275#t2-0360687

https://journals.sagepub.com/cms/10.1177/0192623308320275/asset/images/large/10.1177_0192623308320275-fig2.jpeg

Rats who ate 35% less than rats who ate ad libitum, over the course of 6 weeks, didn't lose any testis weight, relatively. So caloric restriction, the sort that Chinese people experienced relative to Europeans & Americans, a few decades ago, probably doesn't explain the gap.

(10) The Effects of Soy Isoflavones on Bone Growth

https://pmc.ncbi.nlm.nih.gov/articles/PMC8652289/

I've read that small to medium variations in epiphyseal growth plate height don't really have an effect on growth rate.

This study is in line with the Zhihu post on animal fat & soy & height. Rats who ate soy proteins AKA isoflavones grew most in their early puberty but their growth rate slowed down in their later puberty. Rats who ate whey protein didn't grow as fast in their early puberty but their growth rate accelerated in their later puberty & they eventually caught up to & then overtook in bone length the rats who ate soy proteins, & with about 20 days (or 20%) of growth left, & despite starting with a bone length deficit. & their bones were also larger & denser & betterformed. They started with a 4% bone length deficit, but ended with a 0.5% to 2% bone length advantage. Urban Beijing Chinese are about 177cm tall as of a few years ago. 177*1.045=185. 177*1.06=188.

Refer to (4) & to the Zhihu post on animal fat & soy & height.

(11) Conclusion

Chinese diet staples, such as soy products & tea products, semicastrate both the men & women? that consume them as a staple. & 5mg of Genistein a day is all it takes. The combination of soy products & tea products is also worse than either alone.

Chinese people are also severely lacking in basic dietary knowledge.

We might see alot more Daniel Dae Kims, Bayarbaatars, and Hu Bings, after eradicating soy products from our societies.

(12) Miscellaneous

My testicles are each a little more than 2 inches long.

I once took 5mg of a drug a day for some months. According to studies, it shouldn't have had any effect on my androgens, but I was no longer able to maintain an erection or visually imagine sexual fantasies, and I was no longer tired after waking up or after masturbating. I used to pass out after masturbating, but not anymore after getting on this drug. After getting off this drug, all these effects went away, and I was able to get erections that were harder & lasted longer than then the erections I used to get, before taking that drug regularly. Soy contains many phytoestrogens, many of which convert to more potent phytoestrogens, such as equol, in specifically East & Southeast Asians, due to the specialized bacteria in our stomachs. So the effects you see in those rats, many of whom probably don't have those bacteria, are only a fraction of the effects we might be experiencing from being born to mothers who ate soy, and from eating soy throughout our lives. Our bodies might have changed at an age too young for us to remember, too young for us to be able to compare to something before the change.

Kewei Zhou <keweizhou1996@gmail.com> Fri, Feb 7, 2025 at 9:13 PM
To: wuj95@mcmaster.ca

It's possible that eating soy as much as we have for the past 3000 years has culled smallballs genes from our gene pool, & that once we remove soy from our diets & societies entirely, our testicles will turn out to be the largest in the world.

It'd be like how Rock Lee took off his leg weights in his fight with Gaara.

Buryats & Yakuts are just East & Southeast Asians who haven't gone through this selection process.

But it's also possible that our balls might shrink after removing soy from our diets & societies.

So we'd better do controlled studies in mainland China.

[Quoted text hidden]

Kewei Zhou <keweizhou1996@gmail.com> Fri, Feb 7, 2025 at 9:17 PM
To: wuj95@mcmaster.ca

So it's not that soy causes epiphyseal growth plates to close earlier by direct action (or maybe it does, on top of all this), it's that soy changes the way the body produces hormones. Without soy, you produce more testosterone as you grow older, and less estrogen. With soy, you produce more estrogen as you grow older, and less testosterone. One of the ways

this shows itself is in testis weight development, another way in which this shows itself is in bone length development, and yet another way in which this shows itself is in direct hormone measurements.
[Quoted text hidden]

Kewei Zhou <keweizhou1996@gmail.com> Fri, Feb 7, 2025 at 9:18 PM
To: wuj95@mcmaster.ca

And it's not the soy you eat, but the soy your mom eats.
[Quoted text hidden]

Kewei Zhou <keweizhou1996@gmail.com> Fri, Feb 7, 2025 at 9:18 PM
To: wuj95@mcmaster.ca

The soy you eat just compounds this.
[Quoted text hidden]

Kewei Zhou <keweizhou1996@gmail.com> Fri, Feb 7, 2025 at 9:31 PM
To: wuj95@mcmaster.ca

ive also noticed that east asian faces tend to soften faster than other races as they get older

https://en.wikipedia.org/wiki/It%C5%8D_Hirobumi
https://en.wikipedia.org/wiki/Kido_Takayoshi
https://en.wikipedia.org/wiki/%C5%8Ckubo_Toshimichi

look at their young & old photos
their wikipedia pages provide both

i think it has to do with the soy
[Quoted text hidden]

Kewei Zhou <keweizhou1996@gmail.com> Sat, Feb 8, 2025 at 6:10 AM
To: wuj95@mcmaster.ca

(10.5)

https://veterinariamexico.fmvz.unam.mx/index.php/vet/article/view/364/pdf_15

The male rats were injected with 20 uL of soybean oil an hour after birth, then returned to their mothers & fed the same diet as the control rats, so no soy. Rats weigh about 5g at birth. So this is like 200g of soybean oil for the average person. The average East & Southeast Asian person eats like 20g of soybean oil a day. But that's linear scaling. If you allometrically scale things, then you have to divide 200g by like 20, so the same effect in humans is maybe achieved by just 10g of soybean oil. (There's a study above where they show that 5mg/kg of feed is just as bad as 300mg/kg of feeds. For humans this would be more like 0.25mg/kg of feed.)

The male rats who were injected with soybean oil, but fed the same diet as the control rats otherwise, at the end of the 90 days, had 5% larger testes but 80% impaired sperm parameters, despite having mostly unchanged leydig cell parameters. They had only 20% as many spermatids, which are the precursors to sperm production. If you'll look at this study @ https://pmc.ncbi.nlm.nih.gov/articles/PMC4076408/ @ (4), you'll see that male rats born to mothers whom ate soy in amounts comparable to humans, while pregnant, at 96 days, produced only half as much testosterone in their leydig cells as the control rats, despite having similarly sized testes.

> In this study, both substances were administered in the first hour after the birth of male rat pups, which is close to the critical time for hypothalamus sex differentiation; thus, the morphological changes observed in the testicles could be attributable to the effects of the treatments on hypothalamic nuclei controlling tonic gonadotropin secretion, with an additional effect on testicular steroidogenesis. The role of testosterone in testicular function and spermatogenesis is well documented. However, it is worth mentioning that in models of soy phytoestrogen administration in adult rodents, the disruption of testicular function can be independent of the circulating concentrations of gonadotrophins and testosterone.

> At 21 days after birth, the offspring exhibited permanent demasculinization: a reduction in sperm cells, testosterone and aggressive behavior and an increase in defensive behavior.

If you look at the tables in the first fat & nonsoy protein consumption study in (7) you'll see that, after 16 weeks of feeding, sperm production is impaired by about 30% in the high SFAs (lard) group, 10% in the high PUFAs (canola oil) group, & 15% in the mixed fats group. & that testosterone is impaired by about 15%, 22%, & 7% respectively. So eating some fats but not too much is probably best for you, & it's probably best to eat a mix of fats. The mixed fat diet seems to result in the least impairments. Which kind of makes sense. It would be strange if any one fat was especially bad for you. We ate many different subsets of fats as we evolved, for hundreds of millions of years each, mostly PUFAs in the ocean, & mostly MFAs & SFAs on land. But soy proteins & fats are an exception. & soy proteins I can understand, but not soy fats. Soy fats have the same amount of phytosterols as canola oil does. But I guess it's like that drug I took, which by any measurement shouldn't have had an effect on my androgenic functions, but it knocked out my erection while I was taking it.

The second study in (7) doesn't have a control. It uses the casein diet as the control.
[Quoted text hidden]

Kewei Zhou <keweizhou1996@gmail.com> Sat, Feb 8, 2025 at 7:08 AM
To: wuj95@mcmaster.ca

I'm not 100% sure about my allometric conversions, because I'm not educated, but even with just linear conversion, the only study that would have to be reinterpreted is the (10.5) soybean oil study. Every other study has rats consuming things in the proportions humans would. I didn't include studies that had rats eating way more as a proportion than humans would.

But if you consider everything allometrically, it becomes clear that even a single cube of tofu, that even a single cup of either green or black tea, are both toxic; & if you consider that even soy sauce or soybean oil, none of which have phytoestrogens, & none of which are measurably (emphasis on measurably) different from other plant PUFAs (like canola oil) or sauces, are somehow still toxic; it becomes clear that we should just eradicate all soy products & tea products from East & Southeast Asia, (& the whole world, but especially from East & Southeast Asia).

But, even if we totally eradicated soy from our societies, the changes would probably take at least 2 or more generations to take effect. Men & women born to mothers who ate soy before & during pregnancy, & who ate soy growing up, probably didn't have the best hormone profiles while having their own kids, even if they ate no soy while having those kids, or before. So those kids, while they'd probably have better hormone profiles than their parents, still wouldn't have the best hormone profiles. & their somewhat but not overly suboptimal hormone profiles would probably result in less so but still suboptimal hormone profiles in their own kids. So on.

It would be interesting to measure the ovarian or testicular parameters & hormone profiles & sexual or other physical activity of male & female rats born to fathers whom ate isoflavones or other soy products leading up to the impregnation event, but whom don't consume any isoflavones or other soy products throughout their lives. Then the same of the children of those rats, but without any consumption of isoflavones or other soy products on any of their parts. & then repeat for just mothers, & then repeat for both mothers & fathers. Doing this, we would be able to get an idea of how many generations it would take to undo the effects of soy product consumption.

(10.75)

We need some human studies. The problem with rat studies is that while they give us an idea of how much things could be affecting us as a whole, they're ultimately not conducted on humans. The problem with human studies is that they don't give us nearly as much an idea of how much things could be affecting us as a whole, because we can't do things like make people only eat a certain amount & type of food, under controlled conditions, (& then maybe kill people a few years, several years, tens of years, into an experiment,) & then measure their testicles & whatnot. Mostly, we just measure their hormones several weeks into an experiment. But that's like two days for a rat. Rats live way shorter lives than humans. The rat studies above, on the other hand, some of them terminate at 100 days. So you'd have to stretch these human studies out to a decade or two, & not just any decade or two, but the decade or two from their birth to the end of their puberty. This would be considered unethical.

https://www.tandfonline.com/doi/full/10.1080/19381980.2015.1063751#d1e186

DHT decreased in humans by half after eating 160mg/day of isoflavones for 12 weeks, about 5x as much as is normally eaten in East & Southeast Asia, whereas in controls it rose by 33%. The two groups had the same DHT at the beginning of the experiment, but the controls had 240% more DHT at the end of the experiment.

https://sci-hub.se/10.1093/jn/135.3.584

1mg of isoflavones a day, about 20x less than is normally eaten in East & Southeast Asia, causes a 12% drop in DHT & a 9% increase in estrones & a 4% increase in estradiol after 57 days. The controls experienced no changes to DHT, & a 5% decrease in estradiol after 57 days. The people who ate 1mg isoflavones a day started off with the same estrones & estradiol as the controls but ended up with 10% more of both relative to the controls after 57 days.

https://www.spandidos-publications.com/10.3892/mco.2018.1792

It's a good read but not many simple numbers or percentages.

(10.875)

https://www.mdpi.com/1422-0067/24/1/396

> Soy Isoflavones Induce Feminization of Japanese Eel (Anguilla japonica)

> In the control group, 92.6% (n = 50) of the eels were males, and 7.4% (n = 4) were undifferentiated (Figure 1A). In the soy isoflavone-treated group fed the low dose of soy isoflavone (2 g/kg feed), 9.3% (n = 5) were females, whereas in the groups fed the medium and high doses of soy isoflavone (10 and 50 g/kg feed), 91.6% (n = 65) and 96.6% (n = 85) were females (Figure 1A).

That's like 100x more than humans eat, but then you do some allometrics & yeah.
[Quoted text hidden]

Kewei Zhou <keweizhou1996@gmail.com> Sat, Feb 8, 2025 at 7:34 AM
To: wuj95@mcmaster.ca

> It would be interesting to measure the ovarian or testicular parameters & hormone profiles & sexual or other physical activity of male & female rats born to fathers whom ate isoflavones or other soy products leading up to the impregnation event, but whom don't consume any isoflavones or other soy products throughout their lives. Then the same of the children of those rats, but without any consumption of isoflavones or other soy products on any of their parts. & then repeat for just mothers, & then repeat for both mothers & fathers. Doing this, we would be able to get an idea of how many generations it would take to undo the effects of soy product consumption.

You would repeat this for their children, grandchildren, etc. (& none of them consuming any isoflavones or soy products, ever) until their hormone levels return to that of the controls, if they ever do. & if they don't make any progress after a several generations, well.
[Quoted text hidden]

Kewei Zhou <keweizhou1996@gmail.com> Sat, Feb 8, 2025 at 7:35 AM
To: wuj95@mcmaster.ca

You would repeat this for their children, grandchildren, etc. (& none of them consuming any isoflavones or soy products, ever) until their **measurements** return to that of the controls, if they ever do. & if they don't make any progress after several generations, well.
[Quoted text hidden]

Kewei Zhou <keweizhou1996@gmail.com> Sat, Feb 8, 2025 at 9:05 AM
To: wuj95@mcmaster.ca

> TCM (traditional Chinese medicine) plants are also a factor. Many of them are 5a-reductase inhibitors (https://en.wikipedia.org/wiki/List_of_5%CE%B1-reductase_inhibitors). But East & Southeast Asians aren't eating TCM plants on a regular basis. So it's really just soy & tea, (& nutrient & vitamin & mineral deficiencies, which are even now a few times more prevalent in China than in the West).

We should also study the effects of infrequent TCM consumption on rats. For starters, we should measure (1) how eating major TCM products a few times during pregnancy changes their children's measurements, & (2) how eating major TCM products a few times shortly after birth changes for the rest of their lives the children of parents who didn't infrequently eat major TCM products prenatally, & (3) other variations on the idea of measuring the effects of infrequent major TCM product consumption on rats & their children.

Soy & tea turned out to be toxic, so I wouldn't be surprised if TCM also turned out to be toxic.

I'm thinking maybe most of Chinese culture is toxic. Not just the food. Mao was probably right to destroy the Four Olds, minus Chinese religions. This would be the Fifth Old, Chinese diet.

(10.9375)

https://academic.oup.com/endo/article-abstract/152/11/4395/2457100

Genistein feminizes men & masculinizes women. I can find more studies on how soy products impair ovarian function, but I don't think it's necessary. The intersection of soy products & ovarian function is also relatively understudied. Partly because people in general don't care that much about women's health, partly because it's more difficult to extract ovaries from sacrificed rats, partly because most of these scientists are men & so they're mostly concerned with things that might be affecting their cocks & balls, I think. But that's maybe just projection. Cause I really only hypothesized & contributed to the writing of two posts on that Zhihu, the first one on erectile hardness, & this one on testicular function. The rest I only outlined.

> To examine androgen-modulating activity of genistein in vivo, male mice received daily doses of genistein (10 mg/kg) for 5 d. In intact males, genistein was antiandrogenic in testis, prostate, and brain, and it attenuated reporter gene activity by 50–80%. In castrated males, genistein exhibited significant androgen agonistic activity in prostate and brain by increasing reporter gene activity over 2-fold in both tissues. No antiandrogenic action was seen in lung or skeletal muscle of intact males. Gene expression profiling of the murine prostate under the same experimental conditions revealed that genistein modulates androgen-dependent transcription program in prostate in a fashion similar to that observed in reporter mice by luciferase expression. In conclusion, genistein is a partial androgen agonist/antagonist in some but not in all mouse tissues and should be considered as a tissue-specific AR modulator.

So, I'm going to describe more fully what I experienced within the first day of eating like 5mg of a certain drug, which was considered to be a relatively weak drug of the class, & which according to most studies I read, shouldn't have had any effects on my androgenic functions, & the effects of which were mostly sustained after maintaining that consumption for almost a year, & most of which disappeared or even rebounded after getting off of that drug. Within the first day, I was unable to maintain an erection, & while my erections would be hard enough to penetrate, they weren't rock hard, they were like half as hard, & I almost totally lost my ability to visualize sexual fantasies, & masturbating didn't feel nearly as good, & cumming didn't feel like anything at all, unlike how it was before I got on that drug, when it felt orgasmic, & I could only cum like once every hour & not repeatedly & up to like 10 times within an hour or two like I used to, & my ejaculate became watery (but returned to solidity within a few days), & I slept a few hours more than usual that day (& every day after, while I was on the drug), & when I woke up I wouldn't feel tired, & after cumming I wouldn't feel tired or pass out, & the taste of water became metallic, & I lost my allergic reactions. But my intelligence was intact. These effects mostly stayed with the continuous consumption of the drug, neither getting better nor getting worse.

After getting off that drug, my ability to maintain erections improved to something better than before I got on that drug. I was able to get hard more easily, & get harder, & feel more, & last longer, & cum harder, & cum more times in the same short time frames. When I cum these days, I shake like 10x more than I used to, before etc. I also cum more (& make more sperm) each day than I used to, despite eating alot less & not eating any supplements at all, before etc. My ability to visualize sexual fantasies similarly improved compared to before, etc. Everything else either returned to normal or similarly improved. But one effect stayed with me. I still don't get tired when I wake up, & I don't get tired or pass out after cumming. These changes stayed even after the first few months of getting off that drug, & now they're my default.

Then I got on another drug, brexpiprazole, very mild, and it made me, while I was taking it, read like 25% to 50% slower, & misread every few hundred words. But it improved my sexual functioning by even more. I actually have to avoid exercising these days to avoid getting sometimes painfully hard erections. It's kind of being a preteen again. I'm taking less brexpiprazole now, 1mg a day, & I don't have reading difficulties anymore, but the enhanced sexual functioning is still there.

https://pmc.ncbi.nlm.nih.gov/articles/PMC7643790/

But anyway, the first drug was designed to target a few receptors, and it had a strong effect on those receptors, but it also affected many other receptors unintentionally, such as histamine receptors, with an equal or stronger effect. & you would have been able to get an idea of those effects by studying the pharmacodynamics (sites & binding affinities & intrinsic activities & action, etc.) of that drug. But for some reason, we don't have anything like that for soy or tea or TCM products, as far as I know.

https://en.wikipedia.org/wiki/Brexpiprazole#Pharmacodynamics

> Our bodies might have changed at an age too young for us to remember, too young for us to be able to compare to something before the change.

But even studying pharmacodynamics doesn't replace actual experience, & it would be unethical to make people who've never consumed soy or tea or TCM products before, to consume those products, just to see what it does to them. But, based on my experience, it's best to just not eat any food that comes with hormones that are not naturally found in animals. If you eat beef or eggs, you're getting hormones that work well with your body. If you're eating fish, like they're more distant, but they still have hormones that'll mostly work well with your body. If you're eating bread slices, they're mostly just carbs, etc.

So, I eat 3 eggs, 5 hard dry cheese slices, 3 bananas, 2 whole wheat bread slices, 28g of walnuts, 28g of almonds, 1 orange, & 1 apple daily. I also eat salmon a few times a week. This diet & lifestyle has all the minerals & nutrients you need. (I would eat more of each if I were a growing child.) None of these things, besides the nuts, have hormones that aren't naturally found in the human body, or they're necessary to the human body but the human body can't make them & probably because human ancestors as marine animals evolved to consume them in an environment abundant with their sources but not to produce them (DHA, EPA, DPA, etc.) due to the lack of evolutionary necessity in such an environment, or they only contain very little exotic hormones, like the fruits. We usually pick fruits after they've mostly stopped growing, at which point they're no longer full of hormones guiding their growth. They're mostly just sugar & water at that point. But even in the middle of their growth, they don't have anywhere nearly as many hormones as the plants that they grow from do, as far as I know. You might be thinking, well, aren't soybeans like fruits? But actually, they're more like the seeds of those fruits. Fruits are mostly alot of meat enclosing a small amount of seeds, often just a few, whereas soybeans are just those seeds. Seeds usually come with more than enough hormones to carry on their growth & survival as they grow. Those hormones are also designed by evolution to survive for a long time without any external input, and are protected by many mechanisms against external shock, hence the indigestibility of PUFAs associated with plant seeds, seed oils, etc. (The only issue with this diet might be the nuts. They're more seeds than fruits, especially after they've been shelled. I will briefly study them later today.) This is also why even most vegetables (alongside fruits) are not as bad as soy (& bean) products, despite being plant products, because vegetables as a whole, (minus their seedlike products, if any, though I don't know of any vegetables that have seedlike products), are not designed by evolution along the same lines. You just need to cook out their antinutrients.

I repeat, but slightly rephrased. You don't want to be consuming any seedlikes, or any plant products that are packed with hormones (that are not natural or necessary to the human body).

[Quoted text hidden]

Kewei Zhou <keweizhou1996@gmail.com> Sat, Feb 8, 2025 at 9:56 AM
To: wuj95@mcmaster.ca

> This diet & lifestyle has all the **vitamins** & minerals & nutrients you need.

> But even studying pharmacodynamics, **or in the manner of the studies I've mentioned in this email**, doesn't replace actual experience

> Cause I really only hypothesized & contributed to the writing of two posts on that Zhihu, the first one on erectile hardness, **& the one on soy & height**. The rest I only outlined.

So, some vegetables have seeds, but they're very small and not noticeable for the most part. & some vegetables reproduce asexually, & you might want to avoid them on the same principle. Potatoes, onions, & garlics reproduce asexually. I never eat them. I see no reason to eat them. Leafy vegetables on the other hand, they have no hormones, just some antinutrients that mostly go away after some cooking, & they boost your nitric oxide levels. I've noticed that my erections are always harder a few hours after I eat them, but like, I don't need my erections to be that hard.

(10.96875)

https://sci-hub.se/10.1016/s0955-2863(00)00085-1

Here's a study that measures the isoflavone profiles of many fruits & nuts. Soybeans have an isoflavone concentration of like 3 million ug/kg. The only things that break the 1000 ug/kg barrier on that list are currants & raisins. Nuts are mostly fine on those terms. Almonds & walnuts notably do not have any isoflavones. But nuts still have alot of lignans (phytoestrogenic) & phytosterols (not really hormones). So I'm going to look at that now.

> This seems contradictory with the previous result, but maybe it's like how steroids shrink your balls. Green tea consumption might be mimicking the effects of steroids. I'm not sure. But you generally don't want to be eating something that flipflops your hormone profile.

Another thing is, alot of people who have no even slightly deep knowledge of nutrition & diet, when they read something in the news, like, this food increases this hormone by this amount, they go and eat way too much of that food, but it doesn't do them any good. Because they don't realize that what's actually happening could be something like, the receptors are

blocked, or the conversion into another hormone such as DHT is blocked, or something has gone wrong somewhere else in the body, and now more of this hormone must be created to compensate, or all of these altogether & more, as is the case with soy product consumption, etc.

You mostly just want to get just your daily requirements for vitamins & minerals & nutrients & not much more than that, & avoid anything that flipflops your hormones.

Similarly, some people are like, I'm just going to get like 10x more of this vitamin or mineral than I should on a daily basis, and then it wrecks the balance of their body chemistry, because too much of one thing can cause huge deficits in other things in the body.

& while you don't want to eat things that increase your testicle size, because that might not be indicative of something wholly good, as was the case with (10.5), you at the least don't want to eat things that shrink your testicles.
[Quoted text hidden]

Kewei Zhou <keweizhou1996@gmail.com> Sat, Feb 8, 2025 at 10:00 AM
To: wuj95@mcmaster.ca

> & while you don't want to eat things that increase your testicle size **relative to a normal diet free of plant hormones**, because that might not be indicative of something wholly good, as was the case with (10.5), you at the least don't want to eat things that shrink your testicles.

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Kewei Zhou <keweizhou1996@gmail.com> Sat, Feb 8, 2025 at 10:09 AM
To: wuj95@mcmaster.ca

I've noticed that drinking green tea calms me down. It reduces my sexual urges. Never did I think to associate that sensation with semicastration. But that's Chinese culture for you. There's way too much of an emphasis on social harmony, peace of mind, calm, etc. So we eat things that create that feeling in us, & alot of what does create that feeling in us, amounts to semicastration. & that's tea culture, TCM culture, soy, etc.
[Quoted text hidden]

Kewei Zhou <keweizhou1996@gmail.com> Sat, Feb 8, 2025 at 10:10 AM
To: wuj95@mcmaster.ca

Alot of TCM products promote mental & physical calmness.
[Quoted text hidden]

Kewei Zhou <keweizhou1996@gmail.com> Sat, Feb 8, 2025 at 12:45 PM
To: wuj95@mcmaster.ca

Reposting a study link.

https://www.spandidos-publications.com/10.3892/mco.2018.1792

> Dietary legumes, including black beans, lentils, lima beans, mung beans, and soybeans are sources of a variety of isoflavones, but only the soybean contains nutritionally relevant amounts of isoflavones

I might've said something like this earlier, but I'm going to say it again. It doesn't mean they don't have other things that couldn't be messing up our bodies. It just means we haven't been able to measure or detect them. There's also stuff in that paper about how isoflavones have weak estrogenic properties, & I'm like, your paper was great in almost every other way, but you're overfocusing like everyone else before you on this topic on just their estrogenic properties. Isoflavones very likely do alot more things that we haven't measured or detected. That's the main problem with just about every study out there on isoflavones, it's always about estrogen, estrogen receptors, etc. & not much about how they could be interacting with other systems in the body in complex ways. Hence my emphasis earlier on their pharmacodynamics. They're culturally sanctioned, but they're still basically drugs, & should be studied as drugs. & not just isoflavones but possibly lignans too.

(a)

Walnuts and almonds have phytosterols, & phytosterols do compete with cholesterols. & 50g of almonds & walnuts, which is about what I eat a day, contains about 150mg of phytosterols. The average human body has something like 5g to 10g of

cholesterols in at any given time, & makes about 1g of cholesterols a day, so 150mg of phytosterols is significant. But the bioavailability of phytosterols is about 10% or less than that of cholesterols, & their halflife at about a day is similarly less than that of cholesterols, but still quite long. So I'm eating something like 15mg of direct cholesterol competitors a day. Eating them on a regular basis, after about a month, I would probably have about 30mg of cholesterol competitors a day at any given time, which is like 1% of my total natural cholesterol.

In comparison, women make something like 200 picograms of estrogen per mL of blood a day, so about 0.001 mg of estrogen a day. & East & Southeast Asian women eat about 20000 times that amount in isoflavones daily. & isoflavones have about 20% bioavailability. So they're eating about 4000 times that amount in (isoflavone derived) estrogen competitors daily. & estrogen & isoflavones have similar halflives. & while isoflavones have a weaker affinity for estrogen receptors than estrogen at about 10%, which means they're eating about *only* 400 times that amount in (isoflavone derived) direct estrogen competitors daily, the remaining (isoflavone derived) estrogen competitors, not directly bound to estrogen receptors, are still floating around, interacting with other parts of the body, other hormones, other receptors, etc.

But I'm going to look at the measured effects of consuming some nuts & phytosterols anyway.

https://www.pps.org.pk/PJP/15-4/Irum.pdf

Rats that ate almonds for 3 months had 7% heavier testis than the control rats.

https://pmc.ncbi.nlm.nih.gov/articles/PMC6928307/

Rats that ate almonds as 10% of their feed & a medication that reduced testicular cholesterol were 50% more sexually active, & had 25% more testosterone than control rats. Rats that ate almonds as 20% of their feed & a medication that reduced testicular cholesterol were 100% more sexually active, & had 100% more testosterone than control rats. Rats that ate almonds as a percentage of their feed & the medication experienced less testicular cholesterol deficits, relative to, not the control rats, but to rats that ate the medication but no almonds.

https://jbiochemtech.com/storage/files/article/bf5207de-b7a9-4e18-9fe8-1badf5c9095b-22JVF9lHqxyjeS49/8z8Nh3KtRsIvPQw.pdf

Similarly themed study as previous.

Walnuts are probably similar to almonds in composition & effect, so I'm not going to bother studying walnuts in isolation.

(b)

Flaxseed is by far the richest dietary source of lignans, in the way soybeans are by far the richest dietary source of isoflavones. They have 100x to 1000x more lignans than walnuts or almonds. An ounce of flaxseed contains about 50 mg of lignans, so eating 50g of flaxseed, which is about the amount of soy products East & Southeast Asians eat daily, you're getting about 200mg of lignans. & lignans have about 1% to 10% bioavailability, & most lignans have about 1% binding affinity, so 200mg of lignans is the equivalent of 0.02mg to 0.2mg of estrogen competitors. But most people will never eat that much flaxseed on a regular basis. So, 50g of walnuts & almonds have the equivalent in lignans of 0.002mg to 0.00002mg of estrogen competitors, but about 100 times that amount in free lignans, interacting with other parts of the body, other hormones, other receptors, etc.

https://pmc.ncbi.nlm.nih.gov/articles/PMC6018172/

Rats who ate normal food for 30 days while in a hypoxia chamber experienced a 25% to 50% decline in sperm parameters, & a 250% increase in sperm abnormalities, & a 15% decrease in testis weight, relative to rats who ate normal food for 30 days but not in a hypoxia chamber. Rats who ate flaxseed for 30 days while in a hypoxia chamber experienced no changes in sperm parameters, & a 10% increase in testis weight. So their testicles aren't working as well as before, but at least they're growing to compensate for the hypoxic environment. There is no testis weight data in that study but there is seminiferous tubule size, and seminiferous tubules are like 85% of the total testis volume in rats, so based on that, we can infer an increase or decrease in testis weight.

https://sci-hub.se/10.1016/s0278-6915(00)00080-6

Rats who ate flaxseed for 70 days experienced an 8% decline in testis weight, but a 10% increase in leydig cell concentration & a 3% increase in absolute leydig cell count. Rats who ate flaxmeal for 70 days experienced a 10% decline in testis weight, & a 10% decline in absolute leydig cell count. The control rats were the heaviest. The rats who ate flaxseed were the lightest.

https://pmc.ncbi.nlm.nih.gov/articles/PMC10623424/

Flaxseed doesn't seem to affect hormones in humans, besides slightly increasing SHBGs.

Overall, I couldn't find many studies on flaxseed & testis weight, but the results don't seem to be as extreme as what you see with the soy product studies. & flaxseed has alot of lignan, so the effects of lignan in almonds & walnuts should be even less.

(c)

Neither flaxseed nor almonds nor walnuts seem to have nearly as significant an impact on the testes, or rat or human hormone profiles, as soy does.

(d)

Our bodies know how to deal with foreign hormones that are of the same type, kind, etc. as those naturally produced within our bodies, as long as they're not excessive. The effects of consuming, for example, trace amounts of estrogen in beef, are basically within the acceptable range of optimal functioning. But plant hormones are very different. We may have evolved some adaptations to deal with some of these hormones, but probably nowhere nearly enough to properly handle them all. (Which might be why they seem to mess up our bodies so much, doing a bunch of random things everywhere, the effects of which are not within the acceptable range of optimal functioning, but which also don't overly impede our ultimate survival & reproduction. & you can say that about stuff like lead or asbestos, but we made them illegal anyway.) For example, again, some of us can break down genistein & daidzein into equol, thanks to some bacteria in some of our stomachs, (mostly East & Southeast Asian stomachs).

> Seeds usually come with more than enough hormones to carry on their growth & **ensure their** survival as they grow. Those hormones are also designed by evolution to survive for a long time without any external input, and are protected by many mechanisms against external shock, hence the indigestibility of PUFAs associated with plant seeds, seed oils, etc.

> I repeat, but slightly rephrased. You **probably** don't want to be consuming any seedlikes, or any plant products that are packed with hormones (that are not natural or necessary to the human body).

[Quoted text hidden]

Kewei Zhou <keweizhou1996@gmail.com> Sat, Feb 8, 2025 at 12:55 PM
To: wuj95@mcmaster.ca

Reposting a study link, again.

https://www.spandidos-publications.com/10.3892/mco.2018.1792

> The binding affinity of genistein has been reported to be 4% for ER-α and 87% for ER-β compared with estradiol.

> An et al (76) demonstrated that genistein is >1,000-fold more potent at triggering transcriptional activity with ER-β compared with ER-α.

> Furthermore, it was demonstrated that all equol isomers had a higher affinity for both ERs compared with the biosynthetic precursor daidzein, which exhibited little ER subtype selectivity. A later study by Setchell et al (78) also demonstrated that S-equol binds ER-β at ~20% of the affinity exhibited by 17β-estradiol (equol: Ki=0.7 nM; 17β-estradiol: Kd=0.15 nM), whereas the R enantiomer is relatively inactive.

So I was wrong about below.

> In comparison, women make something like 200 picograms of estrogen per mL of blood a day, so about 0.001 mg of estrogen a day. & East & Southeast Asian women eat about 20000 times that amount in isoflavones daily. & isoflavones have about 20% bioavailability. So they're eating about 4000 times that amount in (isoflavone derived) estrogen competitors daily. & estrogen & isoflavones have similar halflives. & while isoflavones have a weaker affinity for estrogen receptors than estrogen at about 10%, which means they're eating about only 400 times that amount in (isoflavone derived) direct estrogen competitors daily, the remaining (isoflavone derived) estrogen competitors, not directly bound to estrogen receptors, are still floating around, interacting with other parts of the body, other hormones, other receptors, etc.

So instead of "400 times that amount in (isoflavone derived) direct estrogen competitors daily", it's still about 4000 times that amount for ER-β, but around 200 times that amount for ER-α.

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Kewei Zhou <keweizhou1996@gmail.com> Sat, Feb 8, 2025 at 1:09 PM
To: wuj95@mcmaster.ca

Here's a good study that's a bit beyond me. But I know enough to know that it's good.

https://sci-hub.se/10.1210/endo.139.10.6216

> In fact, at high concentrations (1000 nm) the estrogenic potency of genistein was greater than that of E2.

So that's about 1.3 mg of genistein in 5 L of blood. That's significantly less than what most East & Southeast Asian women are putting into their blood a day, even with bioavailability accounted for.
[Quoted text hidden]

Kewei Zhou <keweizhou1996@gmail.com> Sat, Feb 8, 2025 at 1:10 PM
To: wuj95@mcmaster.ca

Imagine what must be happening to East & Southeast Asian men.
[Quoted text hidden]

Kewei Zhou <keweizhou1996@gmail.com> Sat, Feb 8, 2025 at 1:38 PM
To: wuj95@mcmaster.ca

Actually, thinking about green tea's interactions with soy products, I'd say, we have to study foods in combination. You can't just study them separately & then add them up. It's not arithmetic, it's a very complex system, where 1 + 1 could result in -10 or -100.

So, for example, nuts with soybeans, nuts with green tea, nuts with fruits, etc. & then groups of 3 foods, 4 foods, 5 foods, etc. & not just in a single generation, but in the rat children of mothers & fathers who ate those things but who themselves either did or did not eat those things, & their children, etc.

So there's pharmacodynamics of plant hormones, which needs to be studied, not more thoroughly, but at all. & there's dietary combinations, which has rarely if ever been studied. I'm lucky to have found that green tea & soy rat study. & there's generational studies.

& most importantly, we have to study as many biological markers as possible, & every time. For example, if you just look at testosterone, without looking at DHT, you might be in position to see something like a 10% increase in testosterone, & you'd think something like, that's good. But actually, you might've missed something like a 50% decrease in DHT, or more, without a similar increase in testosterone, implying a reduction in testosterone production, or precursors, or whatever, as well as a reduction or inhibition of 5-a reductase or something like that. Or you might see a decrease, & think that's not good, but actually, everything else rose up by way more & the decrease has something to do with balancing everything else. Something like that.

Basically, more exhaustive science. & those are the 4 things we can do, & which either aren't being done or are being done but very infrequently & or limitedly, & which I can think of, off the top of my head, But, doing this more exhaustive science is impractical. The better thing to do would be just to eliminate all plant foods from our diets, except for wheat & rice.

> So, I eat 3 eggs, 5 hard dry cheese slices, 3 bananas, 2 whole wheat bread slices, 28g of walnuts, 28g of almonds, 1 orange, & 1 apple daily. I also eat salmon a few times a week.

I'm going to take out the nuts, & replace them with something else that can fill the dietary requirement gaps. Then I'll send one last email with my new diet.
[Quoted text hidden]

Kewei Zhou <keweizhou1996@gmail.com> Sat, Feb 8, 2025 at 2:43 PM
To: wuj95@mcmaster.ca

https://nutritionsource.hsph.harvard.edu/vitamins/

So looking at that website, & knowing stuff like DHA, EPA, DPA, etc. The best diet seems to be, 3 eggs, 5 hard dry cheese slices, 3 bananas, 2 whole wheat bread slices, 28g of walnuts, 28g of almonds, 3 oranges, & 1 apple daily. & 100g of salmon a few times a week. & 30 minutes of sunshine. I wasn't able to take out the nuts but whatever. I think this diet

should be studied in the 4 ways I mentioned. It's not that complicated of a system, I think. (& also, I didn't consider fluoride. It's toxic.)

The only thing is chromium. It's rare in all foods, not just the ones above. This diet gives you like 20% of your daily needs according to that website. But according to this website, it's not a big deal. https://lpi.oregonstate.edu/mic/minerals/chromium#deficiency

> Flaxseed is by far the richest dietary source of lignans, in the way soybeans are by far the richest dietary source of isoflavones. They have 100x to 1000x more lignans than walnuts or almonds. An ounce of flaxseed contains about 50 mg of lignans, so eating 50g of flaxseed, which is about the amount of soy products East & Southeast Asians eat daily, you're getting about 200mg of lignans. & lignans have about 1% to 10% bioavailability, **so 200mg of lignans is the equivalent of 2mg to 20mg of estrogen competitors**, & most lignans have about 1% binding affinity, so 200mg of lignans is the equivalent of 0.02mg to 0.2mg of **direct** estrogen competitors. But most people will never eat that much flaxseed on a regular basis. So, 50g of walnuts & almonds have the equivalent in lignans of 0.002mg to 0.00002mg of **direct** estrogen competitors, but about 100 times that amount in free lignans, interacting with other parts of the body, other hormones, other receptors, etc.

Another concrete example I can give, in support of my no plants at all diet (except for wheat & rice), is that you don't know how lignans will combine with other plant hormones to achieve an effect similar to or worse than the green tea + soy combination. & you can say the same for all plants & their hormones, many of which have actually not been detected. But you can say the same for whatever might be in fruits, so I don't know.

I'm done.

[Quoted text hidden]

Kewei Zhou <keweizhou1996@gmail.com> Sat, Feb 8, 2025 at 2:53 PM
To: wuj95@mcmaster.ca

Also, give this a shot.

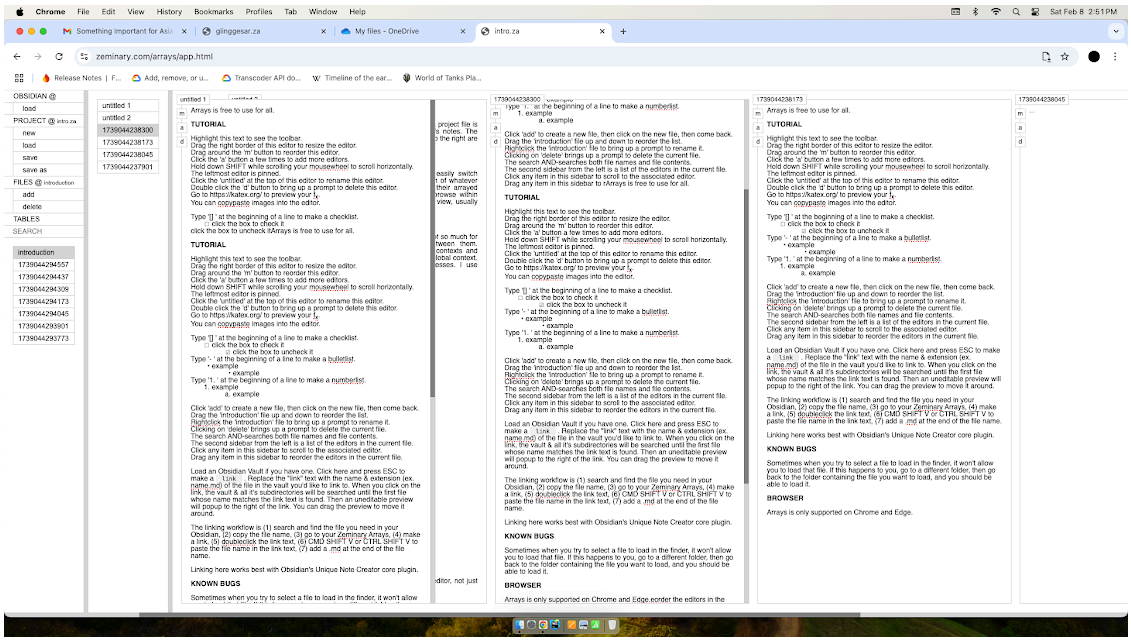
https://zeminary.com/arrays/app.html

You can write your paper or essay in the leftmost editor, while taking notes in other editors. & you can horizontally scroll through the window while keeping the leftmost editor always in view.

I made Zeminary Matrix just to write one poem. But I made Zeminary Arrays to write more typical things, like essays, academic papers, or even whole books, **while taking notes on the side**.

I'm not a fan of building knowledge bases like some people do in Obsidian or RoamResearch or whatever. I just take notes on the go while writing. I don't spend years building up a knowledgebase then write. When I started emailing you this stuff, I had done like a few hours of research on the topic in the past few years, & maybe a few days of research back in 2020.

You can create more editors (second from leftmost sidebar) within a chapter. You can create chapters (leftmost sidebar). You can rename editors within a chapter, or the chapters themselves. You can drag them either in the window or in the sidebar to move them around. I'll stop at that because I don't want to copypaste the tutorial that shows up by default when you load the page.



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Kewei Zhou <keweizhou1996@gmail.com> Sat, Feb 8, 2025 at 2:58 PM
To: wuj95@mcmaster.ca

I also polished the painting somewhat since the last time I sent it to you. & I'm going to polish it some more before calling it quits. It's attached.

& the poem that I made Zeminary Matrix just to write, for the sole purpose of writing that poem, I've also attached. The presentation is awful but I like the content.

I've shown like a few other people the poem, several other people the paintings.

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3 attachments

buddha.jpg
206K

oldbuddha2.jpg
169K

mundus.pdf
166K

Kewei Zhou <keweizhou1996@gmail.com> Sun, Feb 9, 2025 at 3:57 AM
To: wuj95@mcmaster.ca

https://pmc.ncbi.nlm.nih.gov/articles/PMC6429205/

So, walnuts & almonds both have about 0.1mg of lignans per 100g. So 50g is 0.05mg of lignans, of which 0.005mg or 0.0005mg is bioavailable. But many other foods have way more than that. Lignans are basically inescapable. I don't think we can get rid of them, practically speaking.

So, you would put a rat on the diet above, then you would decrease quantities of subsets of items, like halving (or more) the 3 nuts & breads, or halving (or more) the 3 fruits, but never getting rid of them entirely, etc. & see how their hormones & testes change. & if there are noticeable changes, you would then halve individual items instead of subsets of items. Maybe you have a different approach in mind, but the big idea is to study combinations of foods. & also you have to study this stuff generationally.

We can't live without eggs, cheese, fish, & we can't supplement for them, so no need to reduce those foods.
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Kewei Zhou <keweizhou1996@gmail.com> Sun, Feb 9, 2025 at 5:52 AM
To: nikan@163.com

THIS IS THE EXTRA RESEARCH

Alright, I calculated everything again.

6 eggs, 6 hard dry cheese slices, 3 bananas, 2 whole wheat bread slices, 1 orange, & 100g of salmon daily. & 30 minutes of sunshine.

You can toss in 2 or 3 medium sized potatoes.

You can swap the 3 bananas & 1 orange with 3 potatoes, to get your potassium & B6 & vitamin C & some manganese. They're surprisingly substitutable.

People in warmer climates can eat bananas & oranges, or just potataos. People in colder climates can just eat potatoes. Both peoples need eggs, cheese, bread, & fish.

You can't really get carbs from eating animals, only plants, so any source of carbs is going to be laced with some plant hormones. It'd be good to run tests on rats to see what carb sources shrink testes the least.
So you got something that grows underground, something that grows aboveground, and something that grows on top of something that grows aboveground.

https://www.researchgate.net/publication/376733712_The_Effect_of_Liquid_Fermented_Potato_Hash_Diet_on_Testicular_Size_Weight_and_Epididymal_Semen_Quality_of_Large_White_Landrace_Boars

This one shows that potatoes are plainly not very good for you.

https://pmc.ncbi.nlm.nih.gov/articles/PMC1859980/

This one, it's hard to say, but potatoes might be holding back the D diet. Both the C & D diets produce the same hormone profiles, despite being very different in terms of calories & other things.

But what's really noticeable is how much fats impact your hormone levels. It's not a calories issue, because C is half the calories of D, but has the same hormone profile. You could eat half of C & still experience a noticeable spike.

I would do a study based on D, but take out the potatoes & see what changes. Then add more toast & see what changes. I would also do a study based on C, but take out the coffee & see what changes.

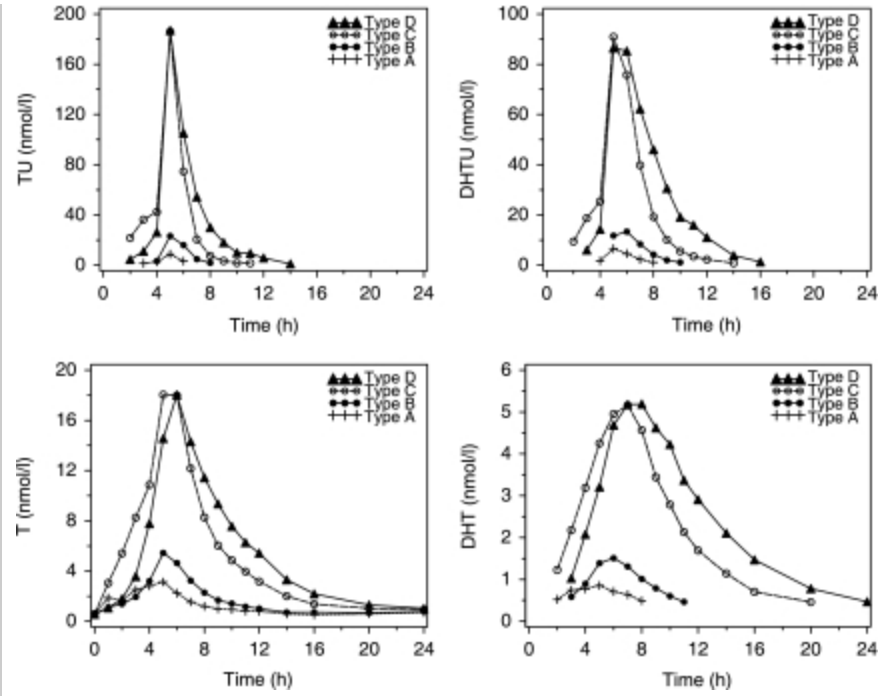
> Meal A ('fat-free' meal) consisted of yoghurt (175 ml, 0·16% lipids), 250 ml milk (0·16% lipids) and 20 g sugar. The calculated total amount of lipids was 0·7 g and the calculated caloric value was 215 kcal.

> Meal B ('low-fat' meal) consisted of yoghurt (175 ml, 1·5% lipids), 250 ml milk (1·02% lipids) and 5 g sugar. The calculated total amount of lipids was 5 g and the calculated caloric value was 215 kcal.

> Meal C ('normal' meal) contained two bread rolls, one slice of cheese (20 g, 40% lipids), one slice of ham (25 g), 20 g jam, 10 g margarine and two cups caffeine-free coffee (300 ml). The calculated total amount of lipids was 20 g and the calculated caloric value was 430 kcal.

> Meal D ('fatty' meal) consisted of two eggs fried with 5 g butter, two strips of bacon, two slices of toast with 7·5 g butter, 4 oz (113 g) hash brown potatoes and 8 oz (226 ml) of whole milk. The calculated total amount of lipids was 50 g and

> the calculated caloric value was 850 kcal.



Kewei Zhou <keweizhou1996@gmail.com> Sun, Feb 9, 2025 at 6:04 AM
To: nikan@163.com, wuj95@mcmaster.ca

https://pmc.ncbi.nlm.nih.gov/articles/PMC3521899/

Alot of the effects of C diet might have to do with the coffee, but the coffee has no caffeine.

Potatoes might not be holding back the D diet.

https://www.sciencedirect.com/science/article/pii/S1570677X16300065

Just CTRL-F for wheat, & then do it again for potatoes. Potatoes are more strongly correlated with height than wheat. But I'm not really persuaded by this kind of study.

Kewei Zhou <keweizhou1996@gmail.com> Sun, Feb 9, 2025 at 6:08 AM
To: nikan@163.com, wuj95@mcmaster.ca

So I actually emailed the both of you everything before the last few emails separately. But then I was like, that's inconvenient. One guy has a Zhihu platform but no academic credentials, & the other guy has academic credentials. In an ideal world, the first guy would publish some stuff without too much scientific rigor, & simplified for a general audience; & the second guy would either lead some studies himself, or find some people who could. It's not really the second guy's specialty though.
[Quoted text hidden]

Kewei Zhou <keweizhou1996@gmail.com> Sun, Feb 9, 2025 at 6:17 AM
To: nikan@163.com, wuj95@mcmaster.ca

Also, Nikan, I actually know this guy in real life, & I'm pretty sure he's not some kind of spy with the ability to hack our computers, though of course you never know. The guy we used to work with, I never met him in real life.
[Quoted text hidden]

Kewei Zhou <keweizhou1996@gmail.com> Sun, Feb 9, 2025 at 6:37 AM
To: nikan@163.com, wuj95@mcmaster.ca

Summarizing the purpose of all this research.

We should eliminate all soy, tea, & TCM products from East & Southeast Asian diets. (& we should probably cull other plant products.) But before we eliminate soy, tea, & TCM from etc., we should conduct generational & biometrically exhaustive studies on the children, grandchildren, etc. of rats born to mothers & fathers whom consumed soy, tea, & TCM products, to see if we wouldn't be making things worse. (We could study the pharmacodynamics of all those different plants, but that's not practical. It'd be accessory research.) The control diet for these studies would be something like this (but scaled down for rats): 6 eggs, 6 hard dry cheese slices, 3 bananas, 2 whole wheat bread slices, 1 orange, 100g of salmon, & 30 minutes of sunshine daily. & you can substitute all the fruits for 3 large potatoes, & not sweet but regular potatoes.

& a second set of studies should be done on rats who haven't consumed soy, tea, & TCM products, on the effects of increasing or decreasing their consumption of the bread, the fruits, & the potatoes, either alone or in combination (so, by 1s, by 2s, & all 3). There's no need to study things combinatorially in the first set of studies. It would make things too complicated.
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Kewei Zhou <keweizhou1996@gmail.com> Sun, Feb 9, 2025 at 6:46 AM
To: nikan@163.com, wuj95@mcmaster.ca

& Jianhan, I looked up your Google Scholar. You should not be wasting your talents on studying kidney sizes. From what I can tell from your Linkedin, you've been working on your PhD since late 2021. & you're probably graduating in 2028 or 2029. So you still have 3 or 4 more years. If you feel you're too deep into your kidney size research & don't want to change things up too much, then you can devote like, just 20% of your time to this research project that I outlined, & which I've boiled down to just 2 sets of studies, none of which would take too much of your time. But if you want out of your kidney size research, then you could go all in on this stuff, & which would be great for all of us. You, me, Nikan, & East & Southeast Asia.
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Kewei Zhou <keweizhou1996@gmail.com> Sun, Feb 9, 2025 at 6:51 AM
To: nikan@163.com, wuj95@mcmaster.ca

> But if you want out of your kidney size research, then you could go all in on this stuff, & which would be great for all of us. You, me, Nikan, & East & Southeast Asia.

Well, about that. I think it would be best if you just spent like 20% of your time on this stuff, instead of going on all in. I don't want to be responsible for ruining your career progression by persuading you to dump everything else you've been working on.
[Quoted text hidden]

Kewei Zhou <keweizhou1996@gmail.com> Sun, Feb 9, 2025 at 6:53 AM
To: nikan@163.com, wuj95@mcmaster.ca

I don't really know how academic progressions work, but I read just now that a master's degree by itself is like the first third of your PhD. So maybe you're already done your PhD. In which case, you totally could dump everything else to work on this.
[Quoted text hidden]

Kewei Zhou <keweizhou1996@gmail.com> Sun, Feb 9, 2025 at 7:00 AM
To: nikan@163.com, wuj95@mcmaster.ca

I'm attaching a PDF containing everything in this email. I don't know if 163.com has a download email as PDF feature.
[Quoted text hidden]

Gmail - Something Important for Asian Health.pdf
1511K

Kewei Zhou <keweizhou1996@gmail.com> Sun, Feb 9, 2025 at 7:16 AM
To: nikan@163.com, wuj95@mcmaster.ca

& Jianhan, the implications of soy, tea, & TCM products in East & Southeast Asia are probably a million or a billion times greater than any of the other things you've studied as neither the first nor last author.

I'm not telling you to drop everything to study just this narrow subject 24/7 for the rest of your life. I'm asking for like maybe 20% of your working hours for a few years, maybe several. That shouldn't hinder your career progression too much.

You might also be wondering, if soy has such negative effects, why has no one bothered to do anything about it for so long. Well, that's kinda what I was thinking when I first discovered the NOS3 & erectile function stuff, & realized how it flew in the face of existing stereotypes, & that feeling only increased (& by like infinity) after Nikan finished that article. (He did like 80% of the work on that article really, maybe more.) I think it's alot like germ theory. People are just very attached to the existing order of things, & will often have violent mental reactions against anything that transgresses the existing order. They won't even have good arguments for or against it. They just don't want things to change, for either better or worse.

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Kewei Zhou <keweizhou1996@gmail.com> Sun, Feb 9, 2025 at 7:41 AM
To: nikan@163.com, wuj95@mcmaster.ca

A less handwavey take on this would be something like, 99.99% of East & Southeast Asian researchers don't want to admit they've basically been poisoning or semicastrating themselves & their children & theirs etc. for millenia, & by eating things that are basically the core of their culture, so they publish study after study on the benefits of soy, tea, TCM, etc. & most researchers outside of that region don't really care that much about food products consumed almost exclusively by East & Southeast Asians. So, nothing gets done. One side is in denial, & the other side is apathetic.

Now, I'm not a dissident or democracy activist, & I generally support the CCP on 99.99% of things, but if you read up on how the CCP treated Gao Yaojie & Chen Guangcheng, & how they imprisoned some blogger for suggesting that the Chinese casualties at Doklam might have been like a few dozen more people than reported, & how they selectively choose only the few best Chinese provinces to take the PISA (& even took Guangdong off the list because it underperformed), & how they're absurdly attached to Chinese "martial arts" & "masters" & how they punished some guy for revealing these "masters" for their fraudulence, & how the Great Famine compounded on itself when the lower ranking cadres misreported things to make themselves look better at the expense of truth & the public welfare, it becomes clear that the CCP, & that Chinese society in general, has a problem with admitting to even the slightest of flaws. It's not even face culture. Other cultures also have difficulties admitting to their flaws. It's something else. I'm pretty sure no one in the West or even in Russia even right now with the Ukraine war going on, would imprison a blogger for saying something like, maybe Russia suffered like 50 more deaths in an inconsequential skirmish in this unpopulated region very far away from the main conflict zone in southeastern Ukraine. But yeah, it's not hard to see how in such a culture, no one would speak up on the consequences of eating soy, tea, TCM, & other plant products.

I'm not saying the West is just completely superior in this regard. Try saying anything about Jews in America, or suggesting that Palestinians should be free, & you'll get cancelled even harder. But at least those Jews are cancelling you because they think you're interfering with their sovereignty or something. The CCP cancels you for suggesting they're not perfect in some way that 99.99% of people outside of China would take one look at, & say, this doesn't really matter, why is it such a big deal? Fix it & move on.

https://hongkongfp.com/2021/06/01/china-jails-blogger-who-slandered-dead-in-india-border-clash/

> Xu was sued in 2019 for calling tai chi Grandmaster Chen Xiaowang a fraud, and the Chinese court ordered him to pay Chen approximately US$60,000 in damages and to apologize for seven consecutive days on social media. Additionally, his credit rating was lowered to the point where he could not rent, own property, stay in certain hotels, travel on high speed rail, or buy plane tickets. The restrictions were lifted after he paid US$40,000 in both legal fees and the cost of placing the apology.

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Kewei Zhou <keweizhou1996@gmail.com> Sun, Feb 9, 2025 at 7:53 AM
To: nikan@163.com, wuj95@mcmaster.ca

But that Xu Xiaodong, he hangs out with guys like Chen Qiushi. So I don't think the CCP was entirely wrong there. But I don't think there's any justification for any of that other stuff.

(Also, the Soviet famines weren't manmade through incompetency. They were actually trying to genocide Ukrainians, Kazakhs, Tatars, etc. The Chinese Great Famine on the other hand, actually was manmade through incompetency, on top of the terrible climate. That's one thing off the top of my head that makes the Chinese Great Famine that much more

revealing of some flaws of Chinese society. Not even the early Communist Russians were anywhere nearly as antisocial, & they were pretty brutal people, who had just recently overthrown the upper classes.)
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Kewei Zhou <keweizhou1996@gmail.com> Sun, Feb 9, 2025 at 8:01 AM
To: nikan@163.com, wuj95@mcmaster.ca

> ~~Other cultures also have difficulties admitting to their flaws.~~

Take that sentence out of it's paragraph from two emails ago.

But yeah. Gao Yaojie is what happens to people who point out health crises under the aegis of the CCP. Chen Guangcheng is what happens to people who try to right local or regional wrongs, not even national wrongs. Xu Xiaodong is what happens to people who reveal the fraudulence of some aspects of traditional Chinese culture. PISA & the Great Famine, I don't know.

Qiu Ziming, I kind of take my words back. Russia does have a similar problem. But at least it's on the scale of tens of thousands, & not tens.

https://www.theguardian.com/world/2024/feb/21/pro-war-russian-blogger-who-revealed-huge-avdiivka-losses-dies-by-suicide

> Andrey Morozov, a prominent pro-war Russian blogger, has reportedly died by suicide following outrage over a post in which he claimed that the Russian army lost 16,000 soldiers during the capture of the eastern Ukrainian city of Avdiivka.

https://www.reuters.com/world/europe/russian-military-blogger-jailed-65-years-fake-news-2024-08-07/

> MOSCOW, Aug 7 (Reuters) - A Russian military blogger has been sentenced to six-and-a-half years in a penal colony after being found guilty of spreading false information about the armed forces, state investigators said on Wednesday.

> Andrei Kurshin ran the "Moscow Calling" Telegram channel, which supported the aims of Russia's war in Ukraine but criticised the way that its military leadership was conducting the campaign.

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Kewei Zhou <keweizhou1996@gmail.com> Sun, Feb 9, 2025 at 8:16 AM
To: nikan@163.com, wuj95@mcmaster.ca

So doing this inside China, it'd be like combining the experiences of all three of those people & more, because they'd be pointing out how traditional Chinese culture is a health crisis, & an international wrong. & there's probably alot of academic fraud or misrepresentation going on in China surrounding soy, tea, TCM, etc. & the total effect of which is probably not dissimilar to what happened during the Great Famine.

Not to mention, we'd be aiming for something like the eradication of the soy, tea, TCM, etc. industries from East & Southeast Asia. There's alot of money wrapped up in those industries. (Alot of pharmaceutical companies pay off researchers to publish favorable findings about their drugs & whatnot, & doctors then push those drugs onto their patients, & then the patients learn from experience what none of these findings will ever say. & these pharmaceutical companies at the same time probably spend alot of time & money going after & suppressing researchers who publish contrary findings, in ways not too dissimilar to how the CCP handled Qiu Ziming, Gao Yaojie, Chen Guangcheng, etc. Boeing whistleblowers have a tendency to die right before they're about to present evidence.)

I think the CCP has swung a bit too hard the other way since the days of the Cultural Revolution when they were basically destroying or dismantling anything or anyone that had anything to do with the Four Olds. They're now destroying or dismantling anyone who points out the flaws of Chinese culture.
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Kewei Zhou <keweizhou1996@gmail.com> Sun, Feb 9, 2025 at 8:21 AM
To: nikan@163.com, wuj95@mcmaster.ca

> Not even the early Communist Russians were anywhere nearly as antisocial **& in a way primarily driven by the desire to appear good or perfect or competent**, & they were pretty brutal people, who had just recently overthrown the upper classes.

I had to edit that. They were antisocial. They were actually trying to genocide whole ethnicities. But it was intentional genocide. The lower ranking cadres of the CCP collectively committed unintentional genocide for very stupid reasons.
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Kewei Zhou <keweizhou1996@gmail.com> Sun, Feb 9, 2025 at 8:24 AM
To: nikan@163.com, wuj95@mcmaster.ca

I'd say that's the biggest difference between Russian & Chinese communism. Russian communism felt directed & intentional. Chinese communism was just retarded. The bulk of the Cultural Revolution was the struggle sessions I believe. Chinese people basically verbally abused each other to death for possibly harboring capitalist sympathies.

But yeah, I'm just highlighting some issues with East & Southeast Asian societies that would make it very difficult to do anything like what I'm proposing from inside those societies.
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Kewei Zhou <keweizhou1996@gmail.com> Sun, Feb 9, 2025 at 8:36 AM
To: nikan@163.com, wuj95@mcmaster.ca

The PISA thing goes hand in hand with Qiu Ziming & the Great Famine. Forgot to say that. I don't think it's something unique to China. Other countries, when they can, or have the resources, also hide the areas they're weak in, and also put forward only their best people, numbers, things, etc. But it definitely is more intense in China in some ways than most other places. Chinese people in the mainland seem to go somewhat further in hiding their flaws, sometimes to the point where they can no longer even do anything about those flaws, because they even don't know anything about those flaws anymore, because they put out of mind & sight anything to do with those flaws.

I'm not bashing on China. I'd say it's even worse in the West in some ways. The West just focuses on covering up different things. Try to say anything about the Jews. It's always the Jews.
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Kewei Zhou <keweizhou1996@gmail.com> Sun, Feb 9, 2025 at 8:41 AM
To: nikan@163.com, wuj95@mcmaster.ca

Relatedly but somewhat unrelatedly, I'm probably the most flawed person I've ever met, & I've met alot of people. & I'm not saying this about myself in the way Jocko Willink talks about ownership for mistakes or whatever. I saw a 30 second clip on Youtube about him once & that's where I'm getting it from. When someone like that talks about something like that in the way he talks about it, it doesn't come across as lowering him or anything. No, I'm talking about myself in the sense of 4chan's weirdness & degeneracy. Not even weaponized autism, but just straightup weirdness or degeneracy or being constantly on the borderline of societal acceptability.
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Kewei Zhou <keweizhou1996@gmail.com> Sun, Feb 9, 2025 at 8:41 AM
To: nikan@163.com, wuj95@mcmaster.ca

4chan autists at least have work ethic. I don't.
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Kewei Zhou <keweizhou1996@gmail.com> Sun, Feb 9, 2025 at 8:53 AM
To: nikan@163.com, wuj95@mcmaster.ca

Also, my view of China & the West is this. China is a black comedy wearing the mask of horror. The West is a horror wearing the mask of black comedy.
You would have to browse communities associated with 4chan to understand this. It only took me a few days of browsing, but it changed me forever.
[Quoted text hidden]

Kewei Zhou <keweizhou1996@gmail.com> Sun, Feb 9, 2025 at 10:17 AM
To: nikan@163.com, wuj95@mcmaster.ca

One last thing. I haven't done much research on what happens to women who consume soy, but I remembered these.

https://sci-hub.se/10.1016/j.fertnstert.2007.07.943

> RESULTS: As expected, there was no difference in age between the Chinese and Caucasian donors (26.2 4.9 and 25.7 3.1). Chinese donors were much more likely to have cancelled cycles than the age-matched Caucasian donors (29% vs. 0%; RR 1.42, 95% confidence interval 1.04 to 1.9, P<0.01). Chinese donors produced significantly fewer oocytes per initiated cycle (15.3 7.1 vs. 9.34 9.7; P<0.05). When outcomes were compared for cycles that reached retrieval, this statistical difference disappeared (15.3 7.1 vs. 13.3 8.9 oocytes). Compared to control patients the baseline FSH levels were, however, significantly higher, among Chinese donors who reached retrieval (FSH, 5.1 1.7 mIU/mL vs. 7.5 1.9 mIU/mL, P¼0.004. **Nine of the 17 Chinese donors (53%) met day 3 FSH criteria for POA. Only 1 of 26 Caucasian donors met day 3 FSH criteria for POA. The odds of Chinese donors meeting criteria for POA were thirty times greater than that of age matched Caucasian donors (OR 31.5; 95% confidence interval 3.5 to 287; P<0.001).**

> CONCLUSIONS: These data for the first time provide a possible explanation for previously reported lower IVF pregnancy rates of Chinese, than Caucasian, women. Higher rates of baseline ovarian function abnormalities and cycle cancellations in young donors, in combination with higher baseline FSH levels, are suggestive of a higher prevalence of premature ovarian aging (POA) in Chinese, than White, women. Even young, and apparently normal, Chinese women should, therefore, be carefully investigated for signs of POA.

It's probably something to do with soy. Soy probably does to women's ovaries what steroids does to men's testicles.

https://academic.oup.com/jnci/article/108/10/djw223/2412589

> In the second part of the study Moore and colleagues (11 , 16) provide evidence that there are statistically significant differences not only in parent estrogen concentrations between Chinese women in China and Asian American populations but in some of the EM levels that may explain variations in breast cancer risk among women of the same ethnicity living in high- vs low-risk countries. In their study, Asian Americans had statistically significant higher mean concentrations of parent estrogens than Chinese women in China. The mean concentrations of EMs in the 2-, 4-, and 16-EM pathways were also increased in Asian American women compared with Chinese women, and the ratio of the 2-EM pathway to the total estrogen/EM was 35% lower in Asian Americans (higher ratios are associated with reduced breast cancer risk) while the mean concentration of the 16-EM pathway was 42% higher.

> When the authors expanded their comparison to multiple groups of US Caucasian women, Chinese women living in China had the lowest median ratio of total estrogens to EM while Asian Americans were similar to US whites. The observation that Chinese women living in China had lower concentrations of parent estrogens and EM but similar associations of breast cancer risk as US women, when the highest quartile of EM is compared with the lowest quartile based on the distribution in the control female group, suggests that these two populations may differ in their sensitivity to estrogen. A prospective comparison of the distribution of urinary EM concentrations in both Chinese and US women who subsequently developed breast cancer may help answer that question. One explanation for the variation in EM concentration observed across various populations is differences in lifestyle factors. Chinese women living in China and in the US probably share some lifestyle factors while others are unique to their location. Factors such as green tea and physical activity have been shown to modify urinary estrogen and/or EM levels (17 , 18). Further increased diversity of the fecal microbiome, which can be a result of different diet and lifestyle factors, can also alter total EM (19).

https://sci-hub.se/10.1093/jnci/djw103

It's a huge gap between Asian American & Shanghai women, & Shanghai women are wellfed by Chinese standards, almost as wellfed as urban Americans. Estradiol is the most potent estrogen. It's more potent than estrone by about 10 times. Even DHT is only more potent than testosterone by between 2.5 times to 10 times. Asian American women have 2.5 times more estradiol than Shanghai women, & about 2.5x more estrogen metabolites. & White American women in New York have about 2.5 times more than Asian American women, & about 6 times more than Shanghai women. These are middle aged women, but still.

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Kewei Zhou <keweizhou1996@gmail.com> Sun, Feb 9, 2025 at 10:24 AM
To: nikan@163.com, wuj95@mcmaster.ca

https://sci-hub.se/10.1080/13697130701610780

Chinese women have the lowest estradiol in East & Southeast Asia, while having similar levels of FSH & LH as other nationalities in the region.

https://www.researchgate.net/figure/SHBG-and-estradiol-levels-between-the-ethnic-groups_tbl2_236077208

Here's a study showing a comparison between young Chinese & Malaysian women, in Malaysia I think. Free estrogen is more important than total estrogen, but still.
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Kewei Zhou <keweizhou1996@gmail.com> Sun, Feb 9, 2025 at 10:24 AM
To: nikan@163.com, wuj95@mcmaster.ca

Wait that second study is of Chinese & Malaysian men.
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Kewei Zhou <keweizhou1996@gmail.com> Sun, Feb 9, 2025 at 10:45 AM
To: nikan@163.com, wuj95@mcmaster.ca

https://sci-hub.se/10.1056/nejm197412052912302

Chinese women have 50% lower estrogen than Caucasian women in Hawaii. Japanese women are in between but a bit closer to Chinese women.

https://www.nature.com/articles/6691082.pdf

Japanese women are very similar to other American women in terms of estradiol, but they have significantly more androstenedione & estrones.

So it's not genetic. It's dietary. Japanese women in America are much more westernized than Chinese women in America.

& the Japanese have been consuming soy for almost as long as the Chinese have. So if their estrogen levels can mostly recover, (although, not entirely, because they're making quite a bit more precursors to make the same amount of estradiol), there's no reason that Chinese women's estrogen levels can't recover.

https://watermark.silverchair.com/735.pdf?token=AQECAHi208BE49Ooan9kkhW_Ercy7Dm3ZL_9Cf3qfKAc485ysgAAAyUwggMhBgkqhkiG9w0BBwagggMSMIIDDgIBADCCAwcGCSqGSIb3DQEHATAeBglghkgBZQMEAS4wEQQMCqU7fW3IU8nSlUD5AgEQgIIC2DkmEeuqHM5GDttKymBWAU4JaQdmrg7-Ek3n35AnCEIaOWyfVWUw7QVYxDd_9hqD1XQFX7HqnIr-UMNyLu5HwA7XpXG1BdQdgWxtBVtgA3i2HGdeHeG4gfwNFFvqAFHHwMnfstPzwxthCQNJIn-37mARWHzHerHrN0cWRODvhRulcfkxmNH9QFHVhzbN6rlHjhQlrSULnRDJUb8EohwHnkk-UMPxqX0RInUM3KeB-NsIFhcrckqpkmXdSKTzj7nUDyF947DYjWnT6Cl8iVKjkuvVkrKyNx3Hp1hYOnQROroy-dKZRqUvrHuWHaQnzS8s1DUr-fu63_DVPVDyqbxDsEOYXCWZp02PKJ_xG3z3QST-kL8k3DOYpvmeUDHA6I7hy0vIUnotMDnqyiF2z-WqDcH-9ebkg3KM_MF-3KCMhoXp8xmf0Z_NIqbPlv7byRCpwjFr3gvOOleSDvKJdbdex4mcwsVOkZirkH9KSQ2z5Dnh28SENMSvrE8aSR2CTTeHsL9wgYTYOs9N0-1J6B8OmcygMgB3zzHIXxs5O7teJQl4Gbt3emv3RZG2ZgaR80WfRMuVNz5T85GMeN-4Le3cCdzz80oU5e10f71baLHMFVcRBAtUMmOeBiWRg2aYMGOVLxVACsjhH0wrpKC9VLeL-zwcMS-Bww3JWXZo8kSGSkAAn3z-PQYO9qAhYoPihTQVIA3LvNVRs5YBlH96cobihQz10tyR0fRony7l34cUytdawdvsCztM8s1lhukDUyQSFOEvFEfLQjcLyTHOHnVUen_QokYFX7vOLO2eyWy_598_11GSWYBwOtHIT1u0Rlm58tg4L-Yas-XlsY249Aw2wJqRGsruA2K8DAtU9F6_PfzXuynviCwdDpnIo_FOfQPeWKqNiJXp12srGcm9Izgpy0akS2n7BGvsnbDMKUZH7U4UtFl0IyFrw8k-u9CHgcza61P2uZYwDGy_

This study shows that Japanese & Chinese American men have more total, bioavailable, & free testosterone than both Blacks & Whites. & Japanese Americans have the most DHT, whereas Chinese Americans have about the same as White American men.

I remember looking up studies on ethnic differences in testosterone, but I couldn't find anything that was normed like this study.

There's a pattern here, where East Asians produce more precursors but less, I don't know what to call this, ultimate hormones?

So, soy & tea & TCM seem to be alot more harmful for women than for men. They're experiencing 50% or more drops in "ultimate" hormones, whereas the men don't really experience anything like that. Or maybe the men are experiencing something similar, but their natural ability to produce hormones is that much higher than other races'. Or maybe soy & tea & TCM together actually increase their hormones?

But the men in that study were mostly older than 60 years old, & averaged around 70 years old. & the Asian American migrants had lived in America for an average of about 25 years by the time of the study. About half of the Chinese men

were migrants, & almost no Japanese Americans were migrants.
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Kewei Zhou <keweizhou1996@gmail.com> Sun, Feb 9, 2025 at 11:02 AM
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https://www.frontiersin.org/journals/endocrinology/articles/10.3389/fendo.2022.839005/full#:~:text=In%20conclusion%2C%20the%20three%20ERs,exert%20tumor%20growth%2Dpromoting%20effects.

> In conclusion, the three ERs have distinct effects on prostate cancer, wherein ERβ and GPER1 exert tumor growth-suppressive effects (Table 1; Figure 6), and ERα, ERβ2, and ERβ5 exert tumor growth-promoting effects.

Me & Nikan were talking about this a few years ago. What makes you larger, tends to also make tumors larger. & what makes your tumors smaller, tends to also make you smaller. It's a good rule of thumb to not eat anything that has anticancer effects, while you're young or conceiving. Doesn't matter if you're male or female.

I read some articles on the internet, & this is a slightly more detailed summary of the opposing effects of the two major estrogen receptors.

ERα is the primary receptor responsible for bone closure, feminization & breast growth, & growth in general. Isoflavones don't have much of an effect on ERα. They mostly occupy them & prevent them from being acted upon by estrogens. When you knock out ERα receptors, puberty is delayed & people grow well into adulthood, & they get osteoporosis due to lack of bone maturation. So Chinese women are masculinized, or at the least, defeminized. Chinese women are stereotyped as having small breasts & butts.

& ERβ is the primary receptor responsible for moderating or inhibiting cellular proliferation. Isoflavones are about as potent as estrogens on ERβ. So, Chinese men & women are probably not growing as much as they could, not just in height, but in every other way. & when you knock out ERβ receptors, nothing happens to the bone plates, but you get alot more growth.
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> I read some **more/other** articles on the internet

> Isoflavones don't have much of an effect on ERα.

They have like a 5% effect on ERα. There's a study I posted earlier in this email conversation that has more detailed data. Just CTRL-F binding affinity. Not nonexistent, & maybe responsible for the premature bone aging we explored in that Zhihu height article.

I neglected the female dimension of this, but it's way worse for our women than it is for us. The reason is, I think, because isoflavones are to ovaries what steroids are to testicles. Our testicles aren't unaffected, but they're not ovaries.
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The Japanese are not meaningfully genetically different from other East Asians. They do have like 15% Jomon DNA, but Jomons were East Eurasian even if they didn't quite look neomongoloid. Jomons themselves were like half native & half Northeast Asian I believe, so that 15% actually indicates something like 30% Jomon admixture. Which is about what you see in their haplogroups.

https://media.springernature.com/lw1200/springer-static/image/art%3A10.1186%2Fs12859-019-2680-1/MediaObjects/12859_2019_2680_Fig1_HTML.png
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Kewei Zhou <keweizhou1996@gmail.com> Sun, Feb 9, 2025 at 11:26 AM
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I'm really done now. I just realized that I didn't look at the female side of the equation at all, & decided to do that for a bit.

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