

Sources/useful websites/resources

<https://github.com/MaximilianKohler/HumanMicrobiome/wiki/FMT>

(my personal favourite)

<https://www.healthrising.org/blog/2021/09/27/fecal-transplants-chronic-fatigue-syndrome/>

My own blogposts:

- FMT: a great opportunity for soon-to-be parents
https://www.lesswrong.com/posts/jt47HsikDuBAYKhGS/fmt-a-great-opportunity-for-soon-to-be-parents-1#Here_are_some_quotes_I_came_across
- Being a donor for Fecal Microbiota Transplants (FMT): Do good & earn easy money (up to 180k/y)
<https://www.lesswrong.com/posts/i48nw33pW9kuXsFBw/being-a-donor-for-fecal-microbiota-transplants-fmt-do-good>
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FMT companies

companies that sell stool for FMTs commercially

Human Microbes.org

<https://www.humanmicrobes.org>

1000\$ per stool. Very high donor criteria

Max Kohlers website

Where I ordered my poop.

Microbioma

(Kohler was involved : calls them unethical scumbags blatantly lying to its costumers

https://www.reddit.com/r/Microbioma/comments/oxsgys/microbiomaorg_has_hired_a_lawyer_to_threaten_me/

)

I'm inclined to believe that they are indeed unethical and sometimes lying. I have weak proof for that. Many of their positive reviews seem fishy, and according to some reports they pay people to write negative reviews about other FMT companies.

<https://microbioma.org/en/home-eng/>

Microbiome offers:

- ASD package: ca. 10.000 €, includes 16 weeks of a few FMT pills for each day.

- Full FMT program supply:

1500 € + 250 Shipping

FMT preparation includes 6 full bottles of 150ml each, ready to use, simply let thaw and use.

Their solution comes in liquid form, to perform an enema easily.

gezonde darmflora

<https://gezonde-darmflora.nl/en/>

500\$ per stool

The Gut Brain Coach

<https://www.thegutbraincoach.de/>

1500€ for 10 stools.

FMT donor criteria

long version

FMT donor criteria are (most important ones first, but all are somewhat important):

* very good digestion and excellent poop consistently most of the time (> 90%) for 2+ years.

This means:

– regular stool, usually around once per day

– stool usually looks fairly dark and is firm & relatively dry. Not soft and mushy.

- no visible signs of indigestion/food in stool except rare exceptions like tomato skin
- your stool is usually a solid “Type 3 or 4” on the https://en.wikipedia.org/wiki/Bristol_stool_scale

* You feel and are very healthy (and have been for a few years):

- no chronic illnesses
- no food intolerances. You can eat pretty much anything without problems.
- no allergies. E.g. no hay fever, dog or cat allergies, etc.
- no digestive problems: In general no bloating, acid reflux, feeling unusually full after meals, no unusually smelly or very frequent flatulence, etc.
- You are physically good looking according to “mainstream criteria”: clear healthy looking skin with no pimples, rashes, acne, etc; fairly low body fat & muscular.
- good dental & gum health. No bad breath, little caries, no gum inflammation. No teeth pressing or clenching at night.
- You are rarely ever sick with infections like the flu or similar, and if you are it’s usually only for a short time. There is nothing that hints at a bad immune system. No urinary tract infections or similar.

* no antibiotic use for many years. Ideally never.

* You have lots of physical and mental energy. Just 6-8 hours of sleep are usually enough for you. You are regularly physically bursting with energy. Rarely ever are you physically low-energy, sluggish, or weirdly fatigued for no apparent reason.

* You have a decently healthy lifestyle: healthy diet, exercise, etc.. You feel and look physically fit. Not overweight & decently muscular.

* You are as young as possible: under 30, ideally between 1-18. Even young babies are suitable (and actually have many advantages!)

* natural birth, no cesarian.

* few months no COVID

* You have decently good mental health. You are usually relaxed, not chronically stressed. No ADHD, autism, etc. You are usually decently happy.

Additional criteria for babies:

- born via natural birth, or at least did a “vaginal seeding”, i.e. a wiping of the baby's mouth, face and skin with its mother's vaginal fluids after C-section
- exclusively breastfeed for a long time
- For babies especially, and children as well, the health of the mother is extremely important. To a somewhat lesser degree also that of father and other household members. So all of the above criteria also apply to the parents.

short version: donor criteria

just the gist of it:

Criteria for an ideal FMT donor:

- very good digestion & excellent poop almost always consistently for at least a few years, i.e. your poop is regular about once per day, of normal brown-ish colour, & fairly firm and dry, not mushy. A solid "type 3 or maybe 4" on the [Bristol scale](#). This is the most important requirement.

- incredibly healthy: No chronic illnesses, no allergies, no hay fever or anything like that, good skin, good oral health, rarely ever being sick. Nothing that hints at a suboptimal immune system.
- Rarely ever do you have gut health issues like bloating, acid reflux, stomach pain, etc.
- No food intolerances. You can eat everything without any problems.
- lots of physical and mental energy, exercising regularly, fairly muscular and thin, with good mental health. You are usually "bursting with energy". You physically look and feel fit and healthy.
- healthy lifestyle: healthy diverse diet, exercising, good sleep, not usually stressed, no smoking, etc.
- as young as possible: under 30, ideally even between 0.3-18.
- no antibiotic use for many years. Ideally never.

Rationale & epistemic status of these criteria

The epistemic status (e.g. existence of good evidence) of most of these criteria is actually pretty low. I'm taking a "better safe than sorry" approach.

Most of this criteria are taken from various FMT companies, blog posts, and my intuitions from reading a lot on this topic. There is no scientific consensus and donor criteria other than making sure they don't have any pathogens.

Many of these criteria I've simply chosen because they correlate with good microbiome.

They may not be strictly necessary for being a good donor.

medical screening & testing

It is usually recommended by public health officials to do all sorts of medical tests to make sure you as a donor don't have any pathogens (viruses, STDs, parasites, harmful gut bacteria, etc.) that you might infect the FMT recipient with.

Are all of these tests really necessarily?

If you fulfil most or all of the criteria above, it's somewhat unlikely that you have any kind of parasites, pathogen, viral infection, etc, that would exclude you as a donor. So I'm considering to skip all those tests and save the money and hassle.

Reasons for and against doing these tests:

- Even someone with a really good microbiome might still have a few bad bacteria that the recipient not yet has. That might be fine for the healthy donor, but not for the sick recipient. There is more harm to be done by adding bad bacteria than good by adding good bacteria. Maybe some donor has only one bad bacterial strain that is easily kept at bay by his

otherwise stable healthy microbiome. That strain could still cause a lot of problems in the recipients disbalanced microphone.

- Many parasites are asymptomatic. Or they might be asymptomatic in the donor, but become symptomatic in the immuno-compromised recipient.
- But also: with many asymptomatic parasites is not executed if they are even harmful. There some papers about benefits of certain so-called parasites..

Personally, I've taken the risk in the past and used FMTs from a donor where I knew they had asymptomatic B.hominis (a "so-called" parasite).

Personally, I'm willing to take the risk and skip certain tests, because I believe that the benefits of FMTs will still outweigh the harms of getting certain pathogens.

Also, many of these pathogens I already have (and have been having for years...).

If you wanted to do these tests:

Above being said, it is better if you do some tests. Here is what you can do if you want (lowest hanging fruits first):

Donate blood:

You'll automatically get tested for all sorts of viruses, infections, STDs, etc. for free! This is the lowest hanging fruit by far when it comes to FMT donor testing.

comprehensive stool tests:

for parasites & pathogens in your gut. If you have German insurance, you can just go to a gastroenterologist and tell them you've been having various sudden unexplained gut health issues, especially diarrhoea. Then tell your doctor you'd like to do a test for various parasites.

test for STDs:

Can be done for free with German insurance. Just go to any doctor and tell them you'd like to

Do a bunch of more tests.

These would probably have to be bought on amazon and are often expensive. Here I have more info on medical screening for potential FMT donors:

https://docs.google.com/document/d/1_yUyW1ik0RwXn3hMrlbOljxzDi39yDKeFGC0Rax5ifQ/edit

Infos from others

from Jennie Brumm (deutsche FMT Expertin):

"Here is the stool test you want to do (info from Jenni Brumm):

[Leistungsverzeichnis \(ganzimmun.de\)](http://Leistungsverzeichnis.ganzimmun.de)

Im Suchfenster "Transplantation" eingeben. Das sind die Tests 8301, 8302 und 8303
Man braucht Arzt zur Testanforderung", oder man kann sie über Jenni Brumm direkt anfordern.

Kostet 195€. Testet alles übliche: Viren, pathogene, parasiten im Stuhl

from monkeymind (discord server):

Würde als erstes einen biomesight Test machen. Code „remissionbiome“ für 50% Rabatt & das Stäbchen in verschiedene Stellen vom Stuhl stecken

Hier in Tabelle 1 sind die Tests, die gemacht werden müssen

<https://www.bfarm.de/SharedDocs/Risikoinformationen/Pharmakovigilanz/DE/RI/2019/RI-FMT.html?nn=702360>

Die kannst du alle beim IMD Berlin testen lassen - alle stuhltests von der Tabelle zsm kosten circa 1000€ - wegen der hohen Kosten testen Banken eben „Pools“ also Proben (mind. 3 pro Stuhl) von mehreren spenden (5 bis maximal 20) und mischen diese Proben zu EINER Probe, die dann getestet wird

Die Frage ist aber was für einen Test die auf Parasiten machen beim Gastro - wenn der ein pcr Panel macht, dann gut. Wenn er kulturelle Tests macht = schlecht. Parasiten Tests sind eh häufig falsch negativ, da will man dann wenigstens pcr noch dazu oder bestenfalls beides Ich weiß nicht, was beim Blut spenden alles gemacht wird bei den Tests. Das müsstest du dann mit der Blut Tabelle vergleichen aus dem Link I-FABP im Blut für leaky gut wäre cool aber kein Muss. Sagt mehr aus als die Stuhl leaky gut tests Vom Stuhl.. Joa, wenn der gastro nur das Parasiten Panel macht, dann spart dir das vmtl nur 200€... außerdem muss man all die Erreger eigentlich in jeder Stuhlspende testen, man kann sich jeden Tag asymptomatisch irgendwas einfangen... (Deshalb Probe nehmen, Stuhl/FMT einfrieren & dann benutzen wenn die Probe negativ zurück kommt) Du kannst ja selber vergleichen was dann von der Tabelle weg kommt.. Also fürs verkaufen ist das alles in jeder Probe notwendig Wenn du es nur für dich selber machst & dir das nicht so wichtig ist (human microbes und gutbraincoach testen ja auch wenig nur) : Könntest auch ggf den a) GI map Test machen - da sind ein paar der E. coli und Multi resistenten dabei. Über Runow kann man den in DE bestellen. Musste mal googlen B) imd - Wenn dir das für deinen eigenen Gebrauch zu teuer ist, dann mMn in absteigender Wichtigkeit durchführen:

- pathogene E.Coli 1 Röhrchen (circa 100€) & c.Diff (vom mikrobiomschein & C Diff Toxin B PCR), multiresistente Erreger CRE, VRE, GRE, MRSA, EBSLs 1 Röhrchen (circa 20€ pro Erreger als Kultur) & Covid pcr
- Parasiten PCR
- Shigella & listeria
- Der Rest

Alles was nicht auf dem IMD mikrobiom Anforderungsschein steht, musst du hier von Hand drauf schreiben & oben fett Mikrobiologie drauf (2-3 Röhrchen) covid pcr macht IMD Labor leider nicht. Da kannst du 1 Haselnuss große Spende an Labor wisplinghoff in köln schicken per Express DHL oder du suchst dir ein anderes Labor in Berlin dafür

The inadequacy of current FMT research

Why am I not discouraged by poor outcomes in FMT studies.

FMTs look very promising, but there is by no means a clear scientific consensus on their efficacy. It's an active area of research with many studies currently under way.

While many scientists are very excited about FMTs, studies so far have had pretty mixed results, with poor or no results being common. Anecdotal evidence on FMTs is also often not very convincing; many recipients report no benefits.

However, I'm personally not discouraged by this, and indeed still excited about FMTs with good donors. This is because in my opinion, **the vast majority of FMT studies and FMT self-experiments are flawed**. Here's why I believe this:

1. Poor donor quality.

The typical donor criteria in most FMT studies are severely deficient. Most studies only exclude sick donors, when really they should try to select exceptionally healthy donors with fantastic microbiomes. Most studies' donor criteria are along the lines of "no antibiotics in the past 3 months, 18-50 years old, no viruses, infections, parasites, etc. in stool and blood test". In short, if you are an overweight, depressed smoker who regularly eats fast food, you often still qualify as a donor in these studies. And even those studies which do actually try to find good donors who are unusually healthy and fit, often don't go nearly far enough - not least because it is just extremely hard to find exceptionally good donors.

Find me a well-done study that uses the donor criteria described [here](#) and takes into account the points below, and if that study still shows only underwhelming results, then I'll change my mind on this.

2. Oxygen exposure.

Your colon is an anaerobic environment, i.e. very low in oxygen. Thus, most bacteria and even more of the bacteriophages (which might be especially important for FMT efficacy) in stool are anaerobes. However, the vast majority of FMT studies process the stool in various ways, such as filtering, blending, etc. - all of which heavily oxygenates the stool sample,

killing anaerobes, and thus very likely reducing efficacy. No wonder these studies show underwhelming results! Ideally, you should immediately vacuum-seal the donated stools and suck the air out, and then do all the processing in an oxygen-free environment.

3. No fresh stool, but frozen

Freezing likely kills many of the bacteria and bacteriophages in the stool, which very likely greatly reduces its efficacy. Ideally you'd use fresh stool that has been kept in a de-oxygenated vacuum bag. This is hard to do on a bigger commercial scale, but totally possible for DIY FMTs if you find a donor living in the same city.

4. Inadequate treatment protocols

For example:

- a) **Insufficient treatment length.** Many studies only do a single infusion, but for many people/conditions you might need to do transfers daily for 2+ months (Eg: ASU autism study).
- b) **Colon-only procedures.** The small intestine is very important, so completely ignoring it is probably a mistake for some conditions. When doing FMTs, I'd always combine both the rectal and oral route.
- c) **FMTs done in isolation,** instead of synergistically with other treatments. It might well be that for some diseases, even well-done FMTs from great donors won't be sufficient on their own, but when combined synergistically with many other positive microbiome interventions, they turn out to be the key ingredient to push the needle over the edge. Yet most studies don't test for this.