

Notes for prospective helminth providers

Insights into the history of helminth provision

There are details on the [Helminth providers](#) page in the wiki about the service offered by each of the currently operating providers, and there's an overview of the history of helminth provision in the general [History of helminthic therapy](#).

What follows here is a closer look at the development of helminth provision, and at those who have been involved in it, written for, and provided personally to, those who are seriously considering becoming a helminth provider. **This document is not for general distribution.**

Although we may refer to each of the helminth providers in the plural, most of these "companies" are in fact operated by solitary individuals whose personal stories I've been following for well over a decade. I am therefore well acquainted with the challenges they have each faced, and continue to face, in carrying out the indispensable work they do for the helminthic therapy (HT) community.

Detlev Goj was the first provider of living helminths, introducing TSO for sale to the public in 2003, after several years of development work. His first company, Ovamed, hit the buffers as a result of its involvement - as manufacturer of the organisms used in the trials - with the bizarre [Coronado Biosciences/Dr Falk research programme](#) that was commenced in 2008.

Coronado Biosciences was created shortly before the start of the unprecedented raft of TSO trials that they mounted in collaboration with Dr Falk Pharma, and was disbanded immediately following the premature termination of the project. After examining the details of this research programme, a cynic might conclude that it was a deliberate move by Big Pharma to sink the very promising reputation of TSO in order to protect profits from pharmaceutical products, but Detlev maintains that the Coronado/Dr Falk team were entirely genuine. If he is correct about this, then the researchers involved failed miserably as scientists.

Fortunately, Detlev had already created Tanawisa in his wife's native Thailand before the Coronado/Dr Falk fiasco, so he was able to transfer the business to this company to continue an uninterrupted supply of TSO to the general public.

Next up were Garin Aglietti and Jasper Lawrence, who worked together for long enough to gather NA from the wild and set up Autoimmune Therapies, bringing in Jasper's brother-in-law, clinical scientist, Marc Dellerba PhD, as well as Jorge Llamas MD, whose Tijuana clinic the group used as their base.

In 2008, after Garin found that he could no longer work with Jasper, he founded his own company, Worm Therapy, against which Jasper promptly mounted a digital attack, temporarily commandeering the Worm Therapy website and stealing Garin's clients as well as a number of his printed materials.

In 2012, the late radiologist, Don Donahue MD, founded Biome Restoration to supply HDC to the public, with the help of Marc Dellerba, who had, by that time, left AIT after suffering one of the worst examples I've encountered of Jasperian madness, which in this case included the use of lawyers. Don also brought in Judy Chinitz (educator, autism activist and long-time HT advocate) who stayed with the company for its first decade.

Up until 2014, hookworm self-treaters had had to pay several thousand dollars for either a 3-year contract with AIT, or a 2-year contract with Worm Therapy. AIT had originally offered a single-dose protocol for \$3,900.00 plus travel to Tijuana clinic, or multi-stage therapy costing an eye-watering \$7,800.00 plus travel to clinic, etc.

In 2014, Wormswell was founded by "Nathan", an academic with a PhD in microbiology. Like Garin and Marc, "Nathan" had had problems with Jasper, an experience that inspired him to offer an alternative to the AIT/Worm Therapy contract-based business model by introducing the sale of single doses of NA at a much more affordable price.

Since knowledge of his worm vending activity might have cost "Nathan" his academic position, he operated in total anonymity, using an alias, communicating strictly by email, insisting on payment only in bitcoin, and not offering express shipping, which requires the sender to reveal identifying personal details.

Wormswell traded for four years, until Symmbio had been established by "Simon" who adopted the same alias/email/bitcoin/no-express-shipping model that had been pioneered by "Nathan". In "Simon's" case, this was to allow him to safely sell NA and TTO from within a jurisdiction known for its draconian responses to

the movement of infectious organisms across its borders.

In 2015, Denise Hales obtained a permit to begin distributing, within Australia, HDC supplied by Biome Restoration. After doing this for 3 years, she asked Marc Dellerba if he would teach her how to grow HDC herself so she could supply direct to the Australian market. When Marc declined to do this, Denise travelled to the US to be taught to grow HDC by Sidney Baker MD. Sid had learned the method from William Parker *for free* at Duke University, but subsequently began charging others, like Denise, when passing on the method. And he not only charges for the one-off instruction in the incubation technique (which is actually available [for free in the wiki](#)), but he also charges a commission on all the doses these neophytes sell via their own endeavours! In addition to this, Sid charges his own patients several times the price of HDC from Biome Restoration, claiming that his *special* "little dudes" are superior, [which they aren't](#).

2018 saw the creation of YourSymbionts by Steven, a community member with a passion for the microbiome and a desire to offer a full package of both helminth (NA and TTO) and microbiome services, including stool testing and microbiome analysis. Being based in a more permissive jurisdiction, YourSymbionts are able to operate more openly. They accept PayPal and other payment methods, and have experimented with various forms of protective packaging in an attempt to protect NA from temperature extremes.

Also, in 2018, Garin Aglietti and Jorge Llamas ended their long-term collaboration, with Dr Llamas continuing to use his Tijuana clinic exclusively for his own medical and helminthic therapy (NA and HDC) practices, and with Garin moving his base elsewhere to concentrate more on supplying NA to naturopathic practitioners in the US, and possibly also supplying HDC and/or TTO. Since Garin lives in the US, he guards all details about what he's doing very closely, only revealing them on a need-to-know basis.

By 2018, awareness of AIT's unreliability had evidently begun to affect AIT's bottom line, but the solution that Jasper came up with was not to take any of the more usual steps to improve customer service, but to create an entirely new website under a different company name. Using an alias, he then approached the editors of the wiki with a request that they include the new company among the providers listed on the site.

Immediately suspicious of the sudden appearance of a new supplier who was completely unknown to any of the wiki's editors or the admins of the HT Support group, an email interrogation of the alias was initiated. When this confirmed that the "new" company was a smoke and mirrors subterfuge by Jasper to free himself from the poor reputation AIT had gained, his application for the new company to be listed in the wiki was declined.

In 2019, another HT community member, "Max", set up Au Naturel to help the community by adding an extra source of NA, taking payment via PayPal and offering express shipping, but otherwise staying below the radar as much as possible due to the location of his home base.

In 2020, the wiki received an email from Heather Jackson, asking for her company to be added to the providers list in the wiki. Since none of the wiki's editors or support group's admins had previously heard of her, I entered into an email conversation with her to find out more about her and the company. This revealed that, behind the polished hype, her real interest was purely commercial, and that she was an MBA who had obviously identified the sale of NA as a "business opportunity". She went to considerable lengths to try to convince me of her genuine interest in HT, and of her commitment to various social causes, but it was all just a "pitch", so the application for her company to be listed in the wiki was rejected. Since then, I've heard nothing more from her and she has continued to show zero interest in any aspect of the online HT community.

There are no legal commercial providers of helminths in the US because the FDA considers helminths to be regulated, unapproved biologic "drugs". This being the case, any recognition of a US company like the one created by Heather Jackson could potentially lead to a tightening of the regulatory situation in the US to the detriment of all American self-treaters, which was another reason not to list her company in the wiki.

In August 2021, a Facebook support group was founded for French speakers interested in helminthic therapy ([Helminthes thérapeutiques](#)) and the couple who started this group went on to found [Nathural](#) in 2022 to supply NA to self-treaters in Europe, later also including those in the UK.

In September 2022, [Helminth Therapy NZ](#) was formed to supply NA throughout New Zealand. This latest addition took the number of [helminth providers](#) listed in the wiki to eleven.

AIT is no longer being recommended due to Jasper's serial [failure to look after his clients](#) and his continuing [use of dangerously excessive hookworm doses](#), but AIT continues to be listed, along with an explanation of the situation.

Things to be considered by anyone thinking of becoming a helminth provider

The legality of helminthic therapy

Helminthic therapy isn't approved for clinical use anywhere in the world outside Thailand, and, while it hasn't been ruled illegal in any country, several jurisdictions have shown a readiness to obstruct the passage of helminths across their borders. The US has taken the most extreme position on this, with an [Import Alert](#) from the FDA in force that authorises US Customs staff to confiscate packages they identify as containing helminth products. Australia, New Zealand and Germany have all blocked imports of helminths at various times when the contents of such packages have been identified, but New Zealand is the only country in which a purchaser of helminths has been threatened with potential legal action when a shipment they had ordered was intercepted. This threat was never followed through by the authorities, but, with the legal situation being so poorly defined, there is always a risk of this type of action. For more about the general legal situation, see this wiki page section: [Is helminthic therapy legal?](#)

Providers and anonymity

Although no past or present NA provider has been prosecuted, this remains a possibility, which has led several companies to maintain some degree of anonymity.

YourSymbionts appear not to be concerned about this, presumably after exploring the risks in their native Belgium. However, "Nathan" (an alias) who ran the now-defunct Wormswell, insisted on total anonymity. I knew "Nathan" quite well, but, when contacting me as "Nathan", he always used the Wormswell email address and his chosen alias, and no one else that he interacted with in the HT community knew his real identity.

"Simon", who runs Symmbio, also insists on total anonymity and only communicates with his clients using the company email address. When he and I communicate, we do so via a double encrypted messaging app to ensure his protection.

"Max", who runs Au NATurel, has chosen not to set up a website, and to confine communication to email, and Nathalie, who runs Nathural also uses email exclusively and has no website.

The physical whereabouts of Symmbio and Au NATurel are never revealed, and we ask HT Support group members, in our group guidelines, never to mention a location for any provider, not even a country. If they do, I, or another admin, will delete their post ASAP.

Although most providers now accept PayPal, "Simon" still only accepts payments in the completely anonymous bitcoin.

Ensuring customer safety

Hookworm providers must do everything possible to ensure the safety of their clients, not only for the benefit of individual customers, but also for the sake of the entire community. See [Hookworm incubation issues](#) for more details.

The hookworm donors used by helminth providers need to be tested for all the main communicable diseases - i.e., the ones that are tested for before people can donate blood. They should also have a DNA test to ensure they are free from the the following:

* [Ancylostoma duodenale](#). This less desirable hookworm species, which causes nine times more blood loss than NA, can be passed in a mother's milk and can even cross the placenta to infect a foetus.

* [Strongyloides stercoralis](#). This roundworm is autoinfective and potentially hyperinfective, with a risk of fatality, [\[Link\]](#) [\[Link\]](#) and has [contributed to the death of one member of the HT community](#).

DNA testing for these organisms is essential because the eggs of both AD and SS are virtually identical to those of NA, and it can be difficult for anyone other than an experienced parasitologist to distinguish between the larvae produced from them. Accurate DNA testing of donor stool is available internationally from [Diagnostic Solutions](#) in the US.

The tests need to be repeated periodically to ensure continuing safety for clients. Providers should also be ready to provide copies of test results to any potential customer who requests sight of them.

The hookworm larvae supplied by providers need to be "cleaned" using a method such as the one described in the section, [Cleaning larvae to be shared with others](#).

Some prospective hookworm self-treaters are less than diligent in preparing themselves for this therapy, so hookworm providers need to take the initiative to screen their clients for the [conditions that are contraindicated](#) and for those [conditions that require a modified approach to helminth dosing](#).

Providers of NA must not assume that their clients will know how to use the larvae they purchase, and there have been many frankly unbelievable mistakes made out of ignorance, even though the necessary information is readily available in the HT wiki. So NA suppliers need to provide their clients with [full instructions for the application of the larvae](#) and links to further information such as the [Hookworm Timeline](#) and details of the [side effects that may follow inoculation](#).

The pricing of NA

Most doses of NA used by self-treaters are now supplied by Symmbio, YourSymbionts, Au NATurel, Nathural and Helminth Therapy NZ, with Worm Therapy largely supplying naturopathic doctors in the US, and AIT being increasingly sidelined because of poor customer service. I believe that Jasper now keeps himself in business by advertising his services on Facebook, which will inevitably attract customers who may not have encountered the HT wiki and the [information in it about Jasper and AIT](#).

The five main NA providers charge the [prices stated in the wiki](#), which have now arguably reached the lowest point at which these companies can remain viable, and all of them struggled during the pandemic. This was partly due to reduced orders during that period, but also to the greatly increased need to send out free replacement doses to cover losses incurred during the often greatly extended shipping times.

One of these five providers told me early in the pandemic that he was struggling to stay afloat, and he had to take on a second job to make ends meet, which resulted in a marked reduction in the quality of customer service he could offer. I know that a second company also struggled, and only survived by cutting their personal expenditure to the bone.

If a new supplier were to undercut the main five providers, this could potentially force at least two of them out of business, leaving fewer companies to meet demand and leaving the HT community more vulnerable to any further loss of providers.

All the current providers will offer discounts to anyone with genuine financial difficulties. If some new supplier were to be more relaxed about discounts, this fact would rapidly become known within the community, and many would-be hookworm hosts would flock to that provider, skewing the market, potentially overloading the newcomer as well as reducing the income of the existing companies, thus threatening their viability, all of which could ultimately be bad for self-treaters generally. For this reason, it would be best for the community in general for any new provider to charge similar prices to those of the existing companies, however generously inclined they may feel towards their clients.

Shipping NA larvae

Symmbio and Au NATurel have long-established packaging methods, but YourSymbionts have experimented with new commercial protective packaging systems in the hope of maintaining a steady temperature during shipping. Unfortunately, I don't have up-to-date information about what YourSymbionts have learned about this, or what their current methods are.

The best way to learn what the other companies have come up with to protect the worms in transit and avoid detection by Customs departments (who now use scanners rather than physical examination) would be to purchase doses from each of the five main companies.

“Difficult” customers

All the providers have to deal with challenging clients from time to time, including those who try a variety of dodges in an attempt to get free doses. For example, by claiming that a package didn't arrive, or that the larvae were dead on arrival, so that the provider will ship a replacement that will be given to a friend or relative, etc.

There have also been claims that one dose out of a package of two or three was DOA, which is highly unlikely. (If one dose dies, all the others will most likely also succumb.) Some clients even argue about the number of live larvae in a dose if they don't get the number of entry marks that corresponds with the number of larvae they ordered. And some of these characters can be very unpleasant until they get what they believe they're entitled to, sometimes submitting very critical reviews to the wiki, or threatening to do this until they get what they want.

There was one lady for whom I arranged a free dose from a provider because I knew she had genuine financial issues. But I eventually learned from this provider that, after having had four completely free doses, he had become suspicious when this lady asked for a replacement dose. So he had asked, politely, if the replacement dose was in fact for her. She apparently snapped back, "Why wouldn't it be?" 🙄

Inclusion of provider details in the wiki

Prospective providers should be aware that, in addition to the possibility of critical reviews being submitted to the wiki by customers, site editors may amend the details presented on the site about providers to include any issues about which they feel site visitors should be aware, such as poor reliability.

Additional thoughts

There are various potential ramifications to becoming known for supplying worms. For example, a provider could be compelled by the authorities to reveal the names of all their clients, or their computers/records could be seized. And any customers named in these could potentially then face legal action themselves. Unfortunately, these are things about which we don't know for certain at the present time.

Until the therapy is given an official green light, there is always going to be some risk involved, especially as the world moves into the ever more autocratic political system that the pandemic has exponentially accelerated.

It's one thing for Detlev to seek regulatory approval for the commercial sale of pig whipworm eggs that die off in a couple of weeks and have no known pathogenic potential in humans, but something entirely different to supply an organism with a reputation like the hookworm, and with a potential to cause massive infections in their hosts in some environments.

Once one individual is caught selling what some medical experts still claim are pathogenic organisms, this could open the door for governments in other countries to take similar action, with a possible domino effect across the world, which would be devastating for the therapy.

John Scott

Last updated, November 2022