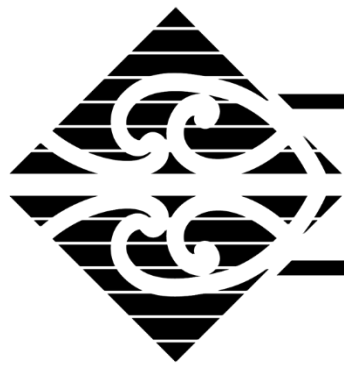




The more we import the food, the more we need to import the medicine

Volume 8 | Issue 2
Article 3 October 2026

Johnny Rydge
Bora Bora, French Polynesia

It started on a quiet Sunday evening. I was watering the last of my tomato plants. The boys were getting ready for school the next day and everything felt normal. Peaceful, even.

Then Jack cried out. Pain was shooting through his leg joints like fire. Within hours, fever spiked. Rashes bloomed across his skin like his little body was burning from the inside. Sickness was rare in our family — we ate well, lived clean, spent time in the sun and soil. This was different. This was crisis.

A month of tests. Then the verdict: Rheumatic Fever. An autoimmune storm where bacteria had slipped past his defences, inflaming his joints and threatening permanent damage to his heart. The prescribed treatment? Monthly injections of broad-spectrum antibiotics for up to eight years. I am a natural farmer. I have spent fifteen years learning what antibiotics do to a garden — they carpet-bomb the invisible world, taking the good and the bad down together. A living soil without its microbes is not a soil anymore. It is dirt. I knew what eight years of monthly antibiotic injections would do to my eleven-year-old son's gut. So I went looking for another way. And what

I found sent me back — of all places — to my farm.

Paradise with a Problem

I live and farm in Bora Bora, an island northwest of Tahiti in French Polynesia. To most people, that sounds like a punchline to the world's most fortunate life story. And in many ways it is. The lagoon outside my door changes colour four times a day. My children grew up climbing breadfruit trees. We eat fish caught that morning. But there is something else happening here that does not make the travel brochures.

French Polynesia now sits at number two in the world ranking for diabetes prevalence at 25.2% in people aged 20 to 79 years (Genitsaridi et al. 2025; Moro, 2023). We also sit at number nine in the world for obesity with nearly half (47%) of our adult population clinically obese (Paries et al., 2025; Phelps et al., 2024). Fewer than two in one hundred adults present a genuinely low risk of developing a non-communicable disease (Teiti et al., 2023). We are a population of 285,000 people — smaller than a mid-sized city — and we are in a full-scale chronic disease emergency.

How does a Pacific island paradise become one of the sickest populations on earth? The answer is simple, and it is sitting in every supermarket on every island: imported food. French Polynesia imports \$2.2 billion worth of goods annually

against \$174 million in exports. Most of our meat comes from New Zealand. Most of our dairy comes from France. In 2015, two out of every three vegetables consumed here were imported. The figure has not improved. Processed food from industrial supply chains has systematically replaced the taro, breadfruit, manioc, fresh fish and coconut that Polynesians ate for centuries — the foods our bodies and our gut microbiomes co-evolved with over generations. The more we import the food, the more we need to import the medicine. That is not a slogan. It is a diagnosis.

The Invisible Connection

What the new science is now confirming (Kumar et al., 2023; Singh J. 2020)— and what my fifteen years of natural farming had been quietly showing me all along — is that the crisis in the Polynesian gut and the crisis in Polynesian soil are the same crisis, viewed from different ends. (Blum, et al., 2019; Brame et al., 2024; Horman & Islam, 2010; Lowenfels 2013, 2017; Lowenfels & Lewis, 2010; Sullivan et al., 2017, Tlaskalova-Hogenov et al., 2010; Wang et al., 2022). The microbiome of healthy soil and the microbiome of a healthy human gut operate by exactly the same biological laws. Both depend on diversity. Both collapse under chemical assault. Both respond to the same inputs — living food, fibre, fermentation, the absence of poisons. What feeds beneficial soil microbes feeds beneficial gut microbes. What destroys one destroys the other.

When Polynesian families shifted from growing taro and catching fish to buying packaged food flown in from industrial farms, they did not just change their diet. They changed the composition of the invisible world living inside them. They starved the beneficial bacteria that had been running their immune systems, sealing their gut linings, producing the short-chain fatty acids that regulate inflammation, blood sugar, mood and metabolism. They fed instead the pathogenic species — the ones that thrive on processed sugar, damaged oils, and food stripped of its fibre. The result is dysbiosis. An imbalance now understood by researchers as the common root of virtually every chronic disease devastating our communities: Type 2 diabetes, obesity, cardiovascular disease, autoimmune conditions, certain cancers. (Thursby & Juge, 2017).

There is also an epigenetic dimension that makes the Polynesian case particularly urgent. The dietary shift here happened fast — within one or two generations. That compressed timeline means the epigenetic signal is unusually clear. The Western diet is not just making people sick. It is rewriting the genetic expression passed to the next generation. Children here are inheriting a microbiome already compromised before they take their first bite of solid food.

Eight Months, Not Eight Years

Back to Jack. I did not send him down the eight-year antibiotic path. Instead, I went to work. I practically lived in the NIH PubMed library for months, reading every paper on the gut microbiome I could find. What I discovered connected everything I had learned about natural farming with cutting-edge medical science in ways I never imagined. I learned which beneficial bacteria were most critical for Jack's recovery. I learned what they ate — resistant starch, prebiotic fibre, fermented foods. I learned how to feed them specifically, strategically, consistently (Dunn, et al., 2017; Gouda et al., 2017; Kamel et al., 2024; Marschner, 2012; Tlaskalova-Hogenova, et al., 2010; Wang et al., 2022).

I grew what they needed in my farm. I prepared it in our kitchen according to the new science — cooking, cooling and freezing starchy staples to maximise resistant starch, fermenting vegetables to multiply lactic acid bacteria, building bone broths to seal the gut lining. I gave Jack a protocol, which I called the Microbes and Meals Program. And every month when the antibiotic storm hit, we rebuilt.

Eight months later, Jack's cardiologist looked at his scans and shook his head. No inflammation. The heart tissues had healed completely. He had never seen recovery like it in a Rheumatic Fever case. Eight months, not eight years. The invisible world that had been saving my farm had just saved my son.

Miri

Not long after, as I thought the book I was writing might be finished, Miri came to my door looking for vegetables and quietly shared what

she was carrying: Type 2 diabetes, borderline obesity, hypertension, and a fresh diagnosis of endometrial cancer. Her doctors had given her pills and told her to wait for more results from France. No roadmap. Just uncertainty and a mountain to climb alone.

I asked if she would allow me to create a program for her — the same Microbes and Meals approach I had used for Jack, adapted to her specific situation. She left that day with a bounce in her step she had not had since her diagnosis twelve months earlier. The research connecting her conditions to dysbiosis was clear. Endometrial cancer is linked to a disrupted gut microbiome — when certain harmful bacteria overpopulate, they produce an enzyme called beta-glucuronidase that recycles waste estrogen back into the blood instead of eliminating it. More circulating estrogen fuels estrogen-driven cancers. Meanwhile, protective bacteria fade away, and inflammation spirals.

We addressed all of it — systematically, through food. Phase one: calm the systemic inflammation with omega-3s, remove the processed foods and seed oils feeding the enemy. Phase two: flood the gut with prebiotics, resistant starch, and fermented vegetables carrying billions of live lactic acid bacteria. Phase three: introduce the therapeutic arsenal — concentrated cruciferous compounds, green tea EGCG (epigallocatechin gallate), curcumin activated with black pepper, lycopene from cooked tomatoes with olive oil. Two months later, Miri's doctors stood stunned. Diabetes in remission. Hypertension normalised. Eleven kilos gone. And no sign of endometrial cancer. None at all.

These are not theories. These are people I know, sitting across a table from me in Bora Bora, whose bodies healed themselves once we stopped getting in the way.

The pharmacy

I call what I do a farmacy. Not a pharmacy. A farmacy (Rydge, 2026). A purposeful, medically-informed growing system where we cultivate specific plants for specific microbes that perform specific healing work in the human body. Sweet potatoes and manioc for resistant starch to feed the butyrate producers that seal the gut lining.

Chicory root — one of the richest sources of inulin on the planet — as direct food for the beneficial bacteria that regulate inflammation. Rocket and cabbage delivering isothiocyanates and sulforaphane, compounds that take the fight directly to cancer cells and activate the body's own detoxification pathways. Okra for its mucilage, which coats and protects the gut wall. Fermented wild vegetables — our RYDGEbiotics — carrying billions of live lactic acid bacteria heroes into the gut, ready to colonise, repair and defend.

Everything grown without a single chemical. Everything prepared with precision. Everything chosen because the microbes told me they needed it — through the new science, through Jack's healing, through Miri's transformation. I built Jack's farmacy using 50 by 15 metres on my 3 hectare terrain in Bora Bora. Seven growing cells. A booster room where compost teas brew, fermented fish boosters mature, and seaweed collected from the shoreline during our southerly winds becomes liquid medicine for both soil and gut. It is small. It is human-scaled. It is producing results that medicine is only now beginning to explain.

The Bigger Picture

French Polynesia is not unique. It is an extreme and visible version of something happening everywhere processed food has displaced traditional food systems. The microbiome disruption driving our diabetes epidemic is driving chronic disease rates across the Pacific, across Indigenous communities in Australia and New Zealand, across urban populations in every country where industrial food has replaced the fibre-rich, fermented, diverse diets humans co-evolved with.

The solution is not a new drug. The drugs are arriving and they are not reversing the numbers — Tahiti's diabetes rate is still climbing in 2026. The solution is in the soil. It is in the food we grow and how we prepare it. It is in rebuilding the invisible world that was running our immune systems long before any of us were born.

I am not a doctor. I am a natural farmer, a researcher, and a father who refused to watch his son spend eight years on antibiotics without

looking for a better way. What I found in that search is the most exciting science I have ever encountered — and the most urgent.

The microbiomes of soil and gut are not separate stories. They are the same story. And the way to heal one is the way to heal the other. Know the invisible world. The rest follows.



Figure 1. Buty Bombs – Sweet Potato in ground.



Figure 3 Buty Bombs finished frozen trays



Figure 2 Buty Bombs – Preparation Plate



Figure 4 Wild Okra ferment



Figure 5 Rocket growing in farm



Figure 6 Rokesto Ice Block Tray



Figure 7 Rokesto Ice Block



Figure 8 Rokesto finished pasta plate



Figure 9 Jack helicopter to hospital, Tahiti



Figure 10 Jack and Papa

References

- Blum, W. E. H., Zechmeister-Boltenstern, S., & Keiblinger, K. M. (2019). Does Soil Contribute to the Human Gut Microbiome? *Microorganisms*, 7(9), 287.
<https://doi.org/10.3390/microorganisms7090287>
- Brame, J. E., Liddicoat, C., Abbott, C. A., Edwards, R. A., Robinson, J. M., Gauthier, N. E., & Breed, M. F. (2024). The macroecology of butyrate-producing bacteria via metagenomic assessment of butyrate production capacity. *Ecology and evolution*, 14(5), e11239.
<https://doi.org/10.1002/ece3.1123>
- Dunn, B., Leckie, R. & Singh, H. (2017). *Mycorrhizal Fungi*. Oklahoma State University.
- Genitsaridi I, Salpea P, Salim A et al. (2025). 11th edition of the IDF Diabetes Atlas: global, regional, and national diabetes prevalence estimates for 2024 and projections for 2050 *The Lancet Diabetes & Endocrinology*, 2025; 14, 149-156
- Gouda, S., Das, G., Sen, S. K., Shin, H. S., & Patra, J. K. (2016). Endophytes: A Treasure House of Bioactive Compounds of Medicinal Importance. *Frontiers in microbiology*, 7, 1538.
<https://doi.org/10.3389/fmicb.2016.01538>
- Horman, J. & Islâm, R. (2010). *Understanding Soil Microbes and Nutrient Recycling*. Environment & Natural Resources, The University of Ohio. <https://cfaes.osu.edu/fact-sheet/understanding-soil-microbes-and-nutrient-recycling>
- Kamel, M., Aleya, S., Alsubih, M., & Aleya, L. (2024). Microbiome Dynamics: A Paradigm Shift in Combatting Infectious Diseases. *Journal of personalized medicine*, 14(2), 217.
<https://doi.org/10.3390/jpm14020217>
- Kumar, A., P, N., Kumar, M., Jose, A., Tomer, V., Oz, E., Proestos, C., Zeng, M., Elobeid, T., K, S., & Oz, F. (2023). Major Phytochemicals: Recent Advances in Health Benefits and Extraction Method. *Molecules (Basel, Switzerland)*, 28(2), 887.
<https://doi.org/10.3390/molecules28020887>

- Lowenfels, J. (2017). *Teaming with Fungi: The Organic Grower's Guide to Mycorrhizae*. Timber Press.
- Lowenfels, J. (2013). *Teaming with nutrients*. Timber Press.
- Lowenfels, J., Lewis, W. (2010). *Teaming with Microbes: The Organic Gardener's Guide to the Soil Food Web, Revised Edition*. Timber Press.
- Marschner, P. (2012). *Mineral nutrition of higher plants (3rd Edition)*. Elsevier.
- Moro, A.J. (2023). *Mapped: Diabetes Rates by Country in 2021*. Visual Capitalist.
<https://www.visualcapitalist.com/cp/diabetes-rates-by-country/>
- Neher, J. (2001). *Role of nematodes in soil health & their use as indicators*. *J Nematol*. 2001 Dec 33(4) 161–168.
<https://pmc.ncbi.nlm.nih.gov/articles/PMC2620512/>
- Paries M, Teiti I, Aubry M et al. (2025). Prevalence and associated factors of obesity, hypertension, and diabetes in French Polynesia: results from a nationwide cross-sectional study. *The Lancet Regional Health – Western Pacific*, 2025; 64.
- Phelps N, Singleton R, Zhou B et al. (2024). Worldwide trends in underweight and obesity from 1990 to 2022: a pooled analysis of 3663 population-representative studies with 222 million children, adolescents, and adults. *The Lancet*, 2024; 403, 1027-1050
- Rydge, J. (2026). *farmacy*. Rydgefarmacy. Ebook. rydgefarmacy.com/farmacy
- Singh, J. (2020). Endophytic Fungi: A Treasure Trove of Novel Bioactive Compounds in Singh, Meshram, Gupta Eds, *Bioactive Natural products in Drug Discovery* (pp.427-449). Springer Nature.
- Sullivan, T.S., Barth, V.P., & Lewis, R.W. (2017). *Soil acidity impacts beneficial soil microorganisms*. Washington State University Extension.
- Teiti, I., Aubry, M., et al. (2023). Unravelling the determinants of human health in French Polynesia: the MATAEA project. *Frontiers in epidemiology*, 3, 1201038.
<https://doi.org/10.3389/fepid.2023.1201038>
- Thursby, E., & Juge, N. (2017). Introduction to the human gut microbiota. *The Biochemical journal*, 474(11), 1823–1836.
<https://doi.org/10.1042/BCJ20160510>
- Taskalova-Hogenova, H., Stěpankova, R., Kozakova, H. et al. (2011). The role of gut microbiota (commensal bacteria) and the mucosal barrier in the pathogenesis of inflammatory and autoimmune diseases and cancer: contribution of germ-free and gnotobiotic animal models of human diseases. *Cellular & molecular immunology*, 8(2), 110–120.
<https://doi.org/10.1038/cmi.2010.67>
- Wang, G., Ren, Y., Bai, X., Su, Y., & Han, J. (2022). Contributions of Beneficial Microorganisms in Soil Remediation and Quality Improvement of Medicinal Plants. *Plants (Basel, Switzerland)*, 11(23), 3200.
<https://doi.org/10.3390/plants11233200>

About the author:

Johnny Rydge (Tahitian/Australian) didn't choose natural farming — it chose him. Chemical poisoning on a vanilla plantation in Tahaa left him in emergency, beginning sixteen years of research in the libraries and in the soil — writing Tahiti's first natural farming book, and receiving an invitation from the Mayor of Bora Bora to start its' first farming school. Then his son Jack fell ill, leading him to soil, plant and gut: one law. He has now finished writing 'farmacy', determined to get the message to Polynesians and build the farmacy project. Johnny, Fradya and their three sons Toby, Jordan and Jack live in Bora Bora, French Polynesia. rydgefarmacy.com