## Thomas Stack, defender of soil.

For the past three years, we've been learning a lot about immunity. The pandemic has highlighted the issue of immune health for many people. Others have always been aware of the role a strong immune system plays in beneficial health. In fact, it could be argued that good immunity is what good health is all about. I don't think any medical expert would dispute this. But how much do we really understand about it? Where does immune health start and how can it be kept at its optimum? It's commonly believed that 70-80% of immunity begins in the gut. "A huge proportion of your immune system is actually in your GI tract," said Dan Peterson, assistant professor of pathology at the Johns Hopkins University School of Medicine.

Anyone who is familiar with my musings will know that I'm a huge proponent of natural and organic food. If this food seems more expensive, I see it as an investment in good health. Recently, a local farmer's name cropped up in several food conversations I had, so I set about meeting him to see how exactly he works his farm. After a bit of persuasion on my part, Thomas Stack finally agreed to meet me. Knowing how busy his life is, I was grateful for the opportunity to visit his farm, and for the time he allocated to my questioning!

I arrived at the farm and was greeted by Tom and his dog Coco, and immediately cursed my stupidity for not bringing a pair of wellies! It was a rainy day, and I could only expect to leave with sodden feet. But I was pleasantly surprised to discover that, apart from a few muddy puddles in the driveway to the back of the farm, the land was dry. I walked on the grass, and it felt spongy, but not wet. I was also struck by the colour of the grass. It wasn't a bright green that we usually see on a farm, but a slightly darker shade, a more natural hue that is found in woodland areas. The fields were a colourful mix of grass and plants, many of whom I recognised as weeds. From my childhood memories of being raised on a farm, I recognised worm castings in the soil, something I hadn't seen for many years. These little mounds are like the black gold of the agriculture industry as they provide endless benefits without the harmful toxins and pesticides that fertilizers have. Unlike chemical fertilizers, worm castings won't harm plants regardless of how much is added. The soil on Tom's farm was very much alive. The farm smelled differently too; a fresh smell of growth is the only way I can describe it. There was no aroma of slurry or manure that I would normally associate with a herd of one hundred and two, including sixty-five milking cows. I also noticed that the cattle were remarkably clean. Usual enough for the time of the year perhaps, but they were out in the field, happy and content, with no visible signs of muck anywhere on their bodies. Tom's garden was in full growth, with potatoes and big heads of cabbages intermixed with weeds and flowers. I was intrigued as to how all of this was possible. After a while, Tom asked me into the farmhouse for tea. We sat at the kitchen table, and he explained what he was doing, and what he'd achieved. Two things occurred to me almost at once; this young farmer had mastered the fundamentals of good farming practices as I saw it, and that he was probably a man before his time or had rediscovered a successful way of farming long forgotten in a modern age.

He explained that in 1997, he completed his Agriculture Year in college in order to one day inherit the farm at his parent's urging. The indoctrination to modern farming during that time saw him lose all interest in the business. "What they were pushing for just didn't sit well with me" he said. Disillusionment set in quickly, so he worked elsewhere, completing a Carpentry apprenticeship which he worked at until the economic crash of 2008 when work dried up. He then travelled around the world, America, Australia, Asia, South America. "I thought travelling was the best education" he added. He finally returned home and started to farm the land in 2012. His father told him, on more than one occasion "Less is more, respect what you have." But increased production was the name of the game as far as the department of Agriculture was concerned. "This is what I was being told, so I

went from forty-eight or nine cows, to fifty-five and sixty. Very soon, I realised that every penny I was earning was going back into increasing production on the farm". He was being urged to increase his herd to one hundred milking cows. His father was farming with him at the time. He had rented another hundred acres of land from a neighbour. "It was untouched land" he told me "Old grassland, with fruit trees, perfect land, nature was blooming on it." After that land was sold, another twenty acres came up for rent and also another thirty acres nearby, which means that he is now farming one hundred and thirty acres currently. Tom was on board with what advisors were saying but started to get a little uncomfortable. "If you do the same thing over and over and get the same results, it has to be a sign of madness" he laughed. He began to doubt his ability as a farmer. He saw his bills increase and realised that if it wasn't for the single farm payments, he would be operating at a loss. It just didn't seem right that he was working all the time for little or no profit. The single farm payment was usually spent on fertiliser to tide farmers over, but it seemed to Tom to be a vicious circle of debt, and repayments. Then, Tom's father passed away in 2016, and he thought again about what his father said; "less is more and respect what you have" He and Nicki, his partner, at that stage had a little girl, Isabella. He finally realised that if he increased his dairy milking stock to one hundred, he would never see his family. He couldn't afford hired help, and he began to look at different ways of farming. "In 2018, there was a drought, and I didn't see my family for three weeks. Basically, I was spreading water at night, and chemicals afterwards. I considered it was a waste of time. I was walking on grass that was burning up like plastic. The salt in the fertiliser was burning the ground. There was no biology in the soil, it was just dead." He thought again about his father, who had provided for them all, educated his family and lived a good life by farming forty cows on eighty acres. Even though he was a conventional farmer, he recognised the value of good soil and good feeding practices. "The heifer for the freezer was always fed grass" Tom said. He realised that there was value in what his father had done and began treating his animals homoeopathically and started to think outside the box. His first "outside- the- box" effort was ringing Sean McGloin from Organic Skillnet (www.skillnetireland.ie). Sean advised Tom to attend a Biofarm Conference in Mullingar in November of '18. This conference served to really open Tom's eyes to what conventional farming had become, basically a large Agri Business. He listened to a lecturer called Dan Kittredge (www.bionutrient.org) who said that sea water and Korean Natural Farming would be the best way to start farming naturally. So, Tom took Dan at his word and started to investigate. After the Biofarm conference in November 2018, he had walked his farm with a shovel, dug it up and found only a handful of worms. He was digging up grey, dead soil, even though he wasn't farming intensively. "I knew that the worm played a vital role in health soil. Once that worm keeps going through your soil, you're laughing" Tom told me

"I also met with John McHugh, (<a href="www.farmingfornature.ie">www.farmingfornature.ie</a>), who has a 230-acre organic dairy farm in Co. Laois. He moved away from being an intensive dairy farmer in 2015 when he realised that he needed to create a sustainable and resilient lifestyle that his children could carry on. He is a farmer that has adapted from a commodity and profit driven production system of dairy farming to one that is focused on family succession, long term environmental goals and nature-based farming. He taught me about trees, Nature, looking after the soil and basically what Dad had been telling me all along." Tom's father had a natural instinct for nature. He was a water diviner also.

Korean natural farming is a self-sufficient farming system that involves the culturing of indigenous microorganisms (IMO) – bacteria, fungi, nematodes, and protozoa – in place of inorganic fertilizers to produce fertile soil. The culturing and nurturing of indigenous microorganisms is at the heart of this method. To my untrained ear, it sounded complicated, but Tom went on to explain that he spent almost a month of putting in long hours in the dead of night on the internet, following Chris Trump, (<a href="https://christrump.com">https://christrump.com</a>) world-renown Korean Natural Farmer (KNF) and the first to use

KNF on a large-scale farm. He is a macadamia farmer in the US. Even though Chris was telling Tom what to do, he found it hard to relate it to his own farm. After a lot of effort, Tom started to see incredible success.

"I'm now farming one hundred and thirty acres of land with no inputs" he said. I found this mind boggling. "I knew that my soil was the key. In 2018, I went grass fed only, at a time when nobody really understood the true meaning of grass fed." What is being generally promoted is not grass fed, Tom told me. "I decided to go organic, grass fed only, no inputs and using Korean Natural Farming as a base, and generally walked my farm off a cliff" He laughed. "I learned that there's really only two things: Fear and Love. In Natural Farming, we're taught to treat everything with love, even the inputs that we make to care for the soil. Putting love and energy into it means we get it back tenfold in our soil health and productivity and health of our animals." Tom had to shake off any concerns he had about the move he was making and trust what he believed in. He began making his own inputs based on sea water. "After a time, you're left with what I call Rocket Fuel, which I put in my slurry tanks and sprayed on my land. Then I started to add my own inputs to the soil, through Korean Natural Farming." Tom was, essentially, feeding the soil's immune system to make it the best it could possibly be, and it was working. That was just the beginning for him and from what he'd learned through his own efforts. He was making L.A.B, which is a probiotic, from his own cow's milk "Every farmer in the country can make it" he said adamantly. "Every input that we make on our own farm, I give to my family, my animals and my soil. That gives you the best bug for every ailment. This was the process I needed to start growing my grass for free. Nature tells you what is wrong with the soil. By Summer of 2019, I could see the difference in my land. I transitioned to organic. Everything that now grows on my soil, grass, or weeds, are nutritionally dense, which my cows enjoy. I harvested the rich nutrients from the plants that grew all over my farm. I had my fruit plant juice and my sea water. I could make everything I needed. I put everything in an aerator for thirty-six hours and this is what's used to fertilise the soil"

But he also made a huge leap of faith. He could see massive changes in his animal and soil health and decided to take it one step further by going to the States to learn even more from Chris Trump, in person, who was happy to teach him all he knew. "I sold the things on the farm that I felt I wouldn't need, my fertiliser spreader, two feed bins, and my Dairymaster automatic feeder, I paid for my flights, my course and accommodation and finally met Chris". He learned much more than he could possibly have imagined. He learned about mycelium and the whole network of soil health. He had the key. He had Indigenous Microorganisms Stage one, and ultimately went on to further stages. "It is the most powerful thing you can introduce to any farmer or horticulturalist" he explained. He was taught how to get all the balances right. Tom went into much more technical detail trying to explain the process to me. "For a thousand litres of mix now, I can spread about nine acres of land" he told me. "When I came back from America, I knew what I needed to do" There was no denying his passion for the subject, or his in-depth knowledge of it. He took the plunge and stopped using antibiotics. He stopped using conventional feed. "Whatever was out there (on the farm) was either going to live or die" he said. He suffered very little loss. That gave him courage to keep going. The whole journey of getting to this point had been incredibly difficult for him. He had to forget everything he had ever learned conventionally, and with that came a sense of doubt. But once he started to see success, he essentially never turned back. He was able to treat his animals homoeopathically, sometimes enlisting the help of his open-minded vets, Waterside Veterinary Clinic Dromcollogher, and his soil was coming alive. Tom's cattle were thriving. They no longer needed to be treated with antibiotics or other interventions. "The cycle is clean" he said. "From the soil to the grass to the animal, so they don't get infected" It made perfect sense to me. The immune system of these cattle is at its best, because the immune system of the soil itself is at its best. They

are completely organic. He is a certified Organic farmer since 2021. Tom has had several visits from the department, making sure that his methods are up to standard. To me, it appears that Tom's methods are, in fact, exceeding the standards set out by European Farming regulations. It's hard to understand why any organisation would not totally embrace a method that doesn't promote the use of chemicals and antibiotics, since it's widely known that their use impacts the beneficial quality of farm produce. And since regular farm waste is often blamed for contaminating our water table, one would imagine that Ireland's green agenda would be advocating for natural farming that has little or no impact on rivers or streams, and that actively promotes biodiversity, so sadly lacking in many conventional farmlands. In October, RTE's Primetime highlighted the issue during one of its programmes about Ireland's environmental woes, and the cost to the exchequer through EU fines. But Tom is proving to be a reckoning force by showing his method is working on every front. In 2019, Chris Trump had been so impressed with Tom's soil sample that he predicted that in three to four years, (this year, Tom only needs a maintenance spray) he would never have to touch his soil again, other than a maintenance spray annually. "The system is there for farmers; we can now be selfsufficient. We can be profitable with healthy soil and cattle" he said. Chris Trump has visited Tom at his farm and stayed for three weeks teaching other farmers the methods that he and Tom apply. "It's hard to change people's mind about farming" he said, since for many years the goal has always been intensive farming with very expensive, company owned fertilisers and inputs. In June of this Summer, Tom and Chris Trump did a six-day course on his farm. He invited those in authority, along with the farming community to attend. They had forty-five farmers in attendance, all of whom are interested in pursuing this method. Already, nationwide the method is being practiced by many farmers who are seeing considerable success.

We took a lunch break, and I was treated to a wonderful meal of homemade quiche, coleslaw, and bread. One sip of the tea transported me back in time to my childhood kitchen when we always used our own milk. It was all simply delicious.

We later went outside, and I was given the tour of Tom's "lab" where he had numerous mixtures in Kilner jars, buckets, soil in huge containers, barrels of organic cane sugar, and apple cider vinegar with the Mother (the bacteria that feeds on alcoholic liquids,) and much more. It was amazing to see how expert he has become in his method. I tasted everything he offered me, absolutely certain that I was getting something special in my intestinal tract and giving my immune system a good boost. I could have spoken to Tom for hours on the subject and was a bit dismayed to discover that I'd already taken up many hours of his busy day. I came home with a bucket of spuds, and an overwhelming sense that I had a glimpse into a bright future for our food industry, and for farmers countrywide who were willing to step off the cliff, just as Tom had done. Tom's website <a href="https://www.knfdairy.com">www.knfdairy.com</a> has all the details of what he does and promotes.

As I drove home, I thought about the whole experience. As someone who grows vegetables, I would never buy any vegetables while I can produce them myself. Yet it always struck me as strange that most farmers will go to the supermarket for milk, even though they produce thousands of gallons on the farm. If farming practices are as safe as they are assumed to be, why not use raw milk? Industrialized agriculture is highly concentrated and mechanized, relying on chemical inputs like fertilizers, pesticides and non-therapeutic antibiotics. It is regulated to incredibly high standards, yet the use of chemicals and pesticides is promoted, even though their impact on health is widely known to be less than beneficial. Sustainable agriculture, however, which uses methods that protect the environment, public health, human communities and animal welfare, is surely the better option?

It's also much better for the environment. The Green agenda proposes to cull the national herd by twenty five percent, yet most natural farmers do not hold a large herd.

As for Thomas Stack and his family farm, I am in no doubt that his method of farming, of respecting what he has, and of continuing to nurture the immune systems of all he holds dear, will be the farming success story of the decade. He and his wife Nicki, along with their two beautiful daughters Isabella and Sienna, live a happy, healthy life, content to work with what God has provided. I'm looking forward to my next visit already.