Alchemy Foodtech- Food Technology Solutions For Combating Diabetes

By Arundithi Ananthanarayanan - September 22, 2017



Alan Phua, Master Builder and Verleen Goh, Chief food Fighter

The last decade has witnessed a tremendous rise in healthcare startups with a majority of them based on innovations in medical technology, pharma, diagnostics or digital healthcare. Alchemy Foodtech Pte Ltd, on the other hand aims to provide healthcare solutions using food technology. Incorporated in 2015, this foodtech startup aims to combat diabetes by lowering the glycemic index of carbohydrate food staples such as rice, white bread, noodles etc.

Their patent-pending technology Diabetec®, when added to commonly used carbohydrate staples, decreases their glycemic index in a dosage-dependent manner. They are currently

working with carbohydrate manufacturers or distributors for incorporating their technology into their products so that these foods can be made more easily available to diabetes patients.

I had the pleasure of interviewing Ms. Verleen Goh, Chief Food Fighter and co-founder of Alchemy Foodtech to learn more about Alchemy Foodtech and about her interestingly coined designation.

What was the motivation behind the technology of Alchemy Foodtech and how has the journey been so far?

We started Alchemy Foodtech as we saw that many of the chronic disease we face today are also lifestyle diseases, arising mainly due to our modern diet, coupled with sedentary and stressful life. Diabetes is definitely most commonly seen, and the world is facing a diabetes epidemic now. One-third of all diabetics reside in China alone, and Singapore is the 2nd developed country with the highest incidence of diabetes, only behind USA.

More personally affected is Alan, our co-founder, whose family is genetically predisposed to the disease. Both Alan's grandmothers and an uncle passed away due to diabetes complications, and presently, 5 out of his mother's 6 siblings are suffering from Type 2 diabetes. 90% of diabetics are Type 2, which is caused by insulin resistance brought about by many factors, especially poor diet (high GI, high saturated fat, high sugar, low fibre etc). Since the root cause of the problem is food, we wanted to incorporate food technology to everyday staples so people can still enjoy their food without changing their habits, but have protection against diabetes.

Could you elaborate on your technology behind Alchemy Foodtech?

Alchemy Foodtech centers around the creation of food technology solutions targeting everyday staples to prevent and manage diabetes by combining knowledge from FoodTech, Biotech and MedTech verticals.

Our first product is Diabetec® glycemic lowering composition, which is a patent-pending food composition that can be added to traditionally high GI white refined carbohydrates such as jasmine/japanese rice, bread and noodles without changing their taste, texture and appearance.

We have already conducted *in-vivo* GI testing and with just a single digit percentage dosage of Diabetec® to jasmine or Japanese rice, we are able to lower the GI from high to

medium, which is the same as brown rice. The GI lowering effect of Diabetec® is dosage dependent.

How much is Diabetec® priced at? Does it alter the taste or texture of the carbohydrate?

We have not commercialized the product yet.

Based on our sensory evaluation for Diabetec® + jasmine rice, there is no difference in taste, texture, and appearance when compared with regular jasmine rice.

Any customers/users from different parts of Asia? What is your reach in Asia and other parts of the world?

We have not commercialized yet, but we have several interested parties from Singapore, China, Thailand, and Malaysia.

What is your business/revenue model?

Alchemy Foodtech is a technology enabler, so we will be working with food manufacturers such as rice importers/distributors, bread/noodle manufacturers or any company who sells a carbohydrate-based product to help them incorporate Diabetec® into their product

What other streams of revenue do you foresee? What are the future plans for your company?

We will be developing more food-related technologies surrounding the problem of diabetes.

Your thoughts on foodtech startups in Asia, in general?

I think the foodtech startup scene in Asia is still in its infancy. We can aspire to have more foodtech startups like the big names foodtech startups such as Impossible, Beyond Meat, Hampton Creek in the Valley, and disrupt, or at least make meaningful changes to the food that people eat for healthier or more sustainable food using food technology.

Any advice for foodtech startups?

To be creative and incorporate new technologies into everyday food.

What are your current funding sources?

Alchemy has been granted the TECS POC and POV from SPRING Singapore, and we are currently fundraising.

What makes your technology unique in comparison to other Food Tech startups combating diabetes?

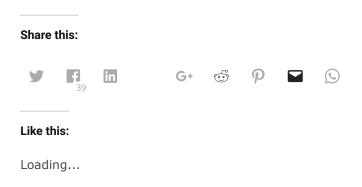
We know of quite a few apps or IOT devised to help combat diabetes by helping to monitor and/or track the blood glucose levels, but we felt that since food is causing diabetes, and also it is food that causes the blood glucose spikes, why not tackle the food instead?

For more information on Alchemy Foodtech do visit their website.

About the founders

Verleen Goh, Chief Food Fighter – Ms. Goh conceptualizes food solutions for diabetes, and works with her team of food scientists and technologists to bring the ideas into reality. She graduated with a degree in Food Science and Technology (Honours) from National University of Singapore.

Alan Phua, Master Builder – Mr. Phua undertakes corporate building, strategy, key partnerships, and fundraising. He graduated with a degree in Finance and Entrepreneurship from Singapore Management University and served on the steering committee of Action Community for Entrepreneurship (ACE).



Related Posts: