BALANCING NATURAL PURITY: SANO [CES]

COO Taeyup Kim Discusses New Portable Approach To Oxygenation Of Water Through Innovative Product At Consumer Show

The importance of balanced chemicals in the body is always an ongoing process. But especially for those who need oxygen or sterilized water especially when out in nature, it is always an issue because of the large oxygen tanks. At the Sano Corporation, they have taken these ideas in effect when introducing their hydrogenator which allows this process in a portable package in 20 minutes or less. COO Taeyup Kim sat down with The Buzz at the Consumer Electronics Show in Las Vegas to discuss chemistry, portability and his personal connection to its development.

The Buzz: The texture of new technology....it can be innovative but it is also about what makes life more liveable. And for something like your oxygenator at Sano which you are showing her at CES, it offers the ability to generate oxygen without carrying around the tank.

Taeyup Kim: So the hydrogen [works] with water [within the] product. There are, obviously, two different kinds [of products here]. One is the hydrogen-based drinkable water generator, which is a tumbler. And the other one is a hydrogen generator mist product, which is for hand sanitizing and also for cosmetics. The

essential point of the fundamental idea came from Japan back in 2007. I was reading off an article in a nature science magazine, which is one of the hardest magazines to go through if you're dealing with medical terms. It actually stated about the effects of the benefits of the long-term use of hydrogenated-based water versus just purified water or any other filtered water you can drink. The results were outstanding. Their research was done for liver cancer patients over a course of six weeks to just compare with a control group. [In this test] they were only allowed drink hydrogenated-enriched water for [that period of time]. Their appetite rose and their metabolism rate rose. One of the key reasons cancer patients pass away or die, is not just because of chemotherapy, but lack of nutrient they intake because of the appetite they lose after chemotherapy.

The Buzz: So was your background in medical technology?

TK: I don't have a background in medical, but I have electrical engineering degree from Georgia Tech. And then I was focusing on robotics. I worked for the semi-medical field for some three years.

The Buzz: You were talking about R&D. You went and actually looked at how it was affecting the liver cancer patients. That's external of what you were doing. Why that engagement?

TK: The reason why…and I've got to be a little bit personal…my father actually suffered from liver cancer since back in 2012 He had liver cirrhosis and the first stage of liver cancer. I ended up donating a large portion of my liver to my father. That medical [process] just snapped on right there because, obviously, liver cancer is related to hydrogen-rich water. As my father is not healthy, I thought "How can I make a product that would be very beneficial for others?"

The Buzz: Was your father involved with this company?

TK: Actually the company is owned by my father. He's been here since back in 1996, and manufactured home appliances. Starting in 2001, we started to develop our own home appliances. I was schooled in both Korea and the US, but I started from my high school all the way through the college in the US. Now I'm actually a US citizen and a resident of the US. I filed for US citizenship and primarily reside in Atlanta.

The Buzz: This kind of portable health plan is becoming more and more prevalent. It's because of the technology, but also because of the practical application. Can you talk about that and the learning curve to find a balance?

TK: Okay, so to be honest, when I was a younger kid [I]…nobody wants to go to the doctor's office. You hear all kinds of noises and you hear a lot of horror stories. That's because of the uncertainty that we all have. I believe that uncertainty comes from a lack of education and a lack of knowledge. Automatically, instantly, [when you enter the office] you have to be dependent upon someone else and think that they know a lot more than you do. Right?

The Buzz: True.

TK: I actually always hated that. So you know what? Let me just learn from the ground up…step by step, and then make sure that all the facts check [out] with what I'm hearing is being advertised out there and what's actually true. I started reading articles about the health benefit of them. For instance, my father had liver cancer and he was taking all kinds of medicines. I had no idea whether they actually [were] a benefit for my father or not. [And] of course, our bill was going higher and higher and higher. He didn't seem like he was recuperating anything. He just seemed like he was getting more tumors on a regular basis. So I'm like, "This doesn't make any sense." One of the things that we learned is that our body naturally tries to adapt to a new environment.

The Buzz: Including medications.

TK: Including medications. Whatever the harmful that stuff that actually kills

bacteria or kills cancer cells in our body, it does the same thing for the healthy aspects, right? That is because of being processed through the factory or hand held by humans actually makes a lot of [difference]. We actually started with juicing. We looked at slow juicing a product from nature as much as possible. Then [we asked the question] -- what's the basics of life? We found out [that] it's water. So that's when we began to start tackling the water.

The Buzz: Now did you have to learn more about the chemistry aspect of this? It's natural but you do have to adjust some at the molecular level...including the hydrogen. Can you sort of talk about that? Because you indicated earlier that the process only takes 20 minutes.

TK: It is actually a hydrogen generator. In our body, we have the minus and plus which circulates the system. When it is minus at normal time it's okay, but as soon as something happens, drastic change needs to happen as far as increasing OH minus level that become free radicals. Free oxygen just runs up through your body. What that does to your body is that it actually oxidizes your blood stream, which [literally] means your body starts to rust. That's what we call the aging process. During the process of aging, you start to build up an abundance of the carcinogenic cells, and also the abnormal cellular [elements] within your body. So, it's very crucial to actually neutralize OH minus. One of the key aspects and fundamental ideas is to remove, or actually neutralize, OH minus by introducing H plus to your bloodstream. Our body temperature is only 36.7 degrees in Celsius give or take point 1 or 2. Our body temperature's not high enough to convert the molecules. You have to be 200 degrees Celsius to boil the water to actually separate from H plus to H2O. Our device does it for you.

The Buzz: Does it accomplish this task off a charging system... batteries?

TK: So, what we have is a titanium plate with some platinum [placed in]. You can actually see the electrodes…it actually has an electrolysis effect so as soon as the water marker touches the plate, it actually has a facing effect with separation of the H plus and OH minus. We have a membrane in between called a "natrium" membrane that only accepts plus ions, what we call "cations"…they go through the top and the OH minus negative ions, in a gas form, come out through a hole in the bottom. So what you're getting is the pure hydrogen coming from the H2O.

The Buzz: Now when you hook up the oxygen breather, it just simply transfers? I heard that it's a very smooth process.

TK: This is obviously FDA-approved. When we breathe in the hydrogen…so a lot of customers actually ask, "What's the difference between drinking versus inhaling?" Right? I actually put it to the aspect of eating healthy versus taking a pill. The eating healthy takes a longer course of your time but it actually makes your body healthier with that longer period of time. As opposed to if you get a headache, you just take out that Advil or Tylenol, and it just helps instantly, right? That's because when you take pills when you inhale the gas, and it actually absorbs through the bloodstream a lot quicker, as opposed to drinking the water.

The Buzz: Now with older people, who want to be active still…they want portability. You could have made these 2 products in one plug in but you didn't. You made it portable.

TK: The importance is that we actually had sponsorship for the Japanese Track & Field team because larger corporations actually supported it for the Olympians to drink for four years…through the course of four years, they drank only hydrogen-enriched water. And last year, believe it or not, they got the silver medal in the track and field competition. So the portability [can be seen] actually as a very key concept for a lot of outdoor activities. If you want to do jogging or go to health centers [gyms] in the US and pump up your muscles and get healthy [afterwards you are likely] drinking just normal, regular water. The portability is very essential because you can take it anywhere and you can generate hydrogen from water in any place at any time.

The Buzz: How is that affected by the quality of the water since

they are certain elements that need to be filtered out.

TK: I mean, in South Korea and in Japan it's safe to say to use the tap water is fine. Smaller countries have only one regulation, or fewer regulations compared to the US. With larger states, it all depends on the states. If the water is coming from the natural springs, you just pour it inside [the product] and then the generator [works] for about two to three minutes, and should be able to sanitize what's inside.

The Buzz: Can you talk about the importance of outdoor activities, especially in South Korea. We recently did a piece about an RV club there and it is interesting to see how that movement is growing.

TK: If you're just a normal teenager in South Korea you don't have much of an outdoor experience because we have a time scheduled life up until high school. Finally when we are college, you're going to have a fun life. It is very strict compared to US. But, believe it or not, it averages out. When I was studying in South Korea, I had less outdoor experience and more indoors experience. For instance, if I were to compare my 24 hours then, perhaps 18 hours of it was indoors and not much outdoors. But nowadays a lot of South Koreans actually have fused with Western culture. For instance, kayaking and also parasailing are more popular because we got laws [to allow them] in South Korea. Also there's been an increase in GDP, and a lot of growth in economic terms in South Korea so that has actually helped a lot of Korean students to explore outside [which is more] similar to US. So being correlated with that, I wanted to help out the outdoor activities.

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Make Sure To Check Out:

Sano, is a Korea-based manufacturer of home appliances expanding in the aspect of health based products offering better quality of life through such products as Torasano and their new hydrogenator.