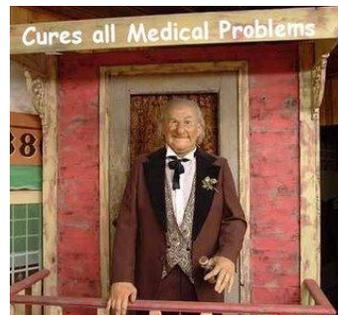


# Consumer Awareness Report

## Ionized Alkaline Water



### **[Stephen K. Lower, Ph.D. – Who Exactly Are People Listening To?](#)**

(Text that is underlined and in blue are clickable links to additional information)

### **Pseudoscience...Quackery...Crackpot Chemistry...Wonky-Water...Non-Sense...**

These are just a few of the choice terms that Stephen Lower, a self proclaimed authority on the chemistry of water, uses to describe ionized alkaline water. His opinions on this particular topic are very well documented, mainly by him. He has been taking his personal opinions and twisting them into something that he seems to think resembles an absolute, indisputable fact. Unfortunately for him, there is plenty of well established and well documented scientific proof that is quite to the contrary of his purported “facts”. But, in the spirit of fairness, let’s take a look at “Dr. Lower” and see exactly from whom people are taking advice.

First, let’s meet the man behind the “Crackpot Chemistry” Ionized Alkaline Water website that supposedly, once and for all, puts to rest this whole Ionized Alkaline Water foolishness. The author of the website, Stephen K. Lower, was born in 1933. He does have degrees in biochemistry and physical chemistry and became an instructor at Simon Fraser University in Vancouver, BC at its founding in 1965 and taught courses in general chemistry, physical chemistry and environmental chemistry. He retired from teaching in 1999. To try to find out a bit more about Stephen Lower, we visited the Simon Fraser University website. Unfortunately, there was very little about [Dr. Lower](#). In fact, a search of the entire University website using “Stephen Lower” as the search criteria only had 3 actual matches. Ironically, one of these matches was Dr. Lower giving his opinion about an article that appeared in the Los Angeles Times. Once again, Dr. Lower was true to form, as he made his opinions very clear.

### **[Meet water's cooler cousins](#)**

#### **[Los Angeles Times, Jan. 16](#)**

[Bottled water has huge demand and subsequent growth for a refreshing beverage that has become innovative and broadening in variety. The latest trend indicates that consumers are looking for water that does more than quench your thirst - they are looking for energy, vitamins or mineral benefits. There is a very lucrative market that is catering to this consumer need by manufacturing trendy looking bottles in a variety of flavours, colours and shapes. But skeptics, like retired SFU chemistry professor](#)

**Stephen Lower**, warn that there is lots of hype around this issue. “It's snake oil,” says Lower, and, “there is no evidence that you can change the structure of water.” To put it simply, water is water, refreshing and hydrating and nothing more.

There was actually another article that appeared on the front page of the Los Angeles Times that focused on the way that [restructured water](#) was being used in a 4-Star Hotel for cleaning and sterilization. By the contents of the article, It is obvious that no one told the Sheraton Delfina and the Los Angeles Times that restructuring water is impossible.

Because there was so little about Stephen Lower, other than information posted to the Internet by him, we took additional steps to find out more about him. Simon Fraser University was contacted directly and several staff members tried to located more information. Unfortunately, they were not able to find much more about what Dr. Lower had accomplished, but they were able to find out what **HE HAD NOT ACCOMPLISHED**.

One of the things that staffers from the Media & Public Relations Department of the University looked into was the Simon Fraser University's [Directory of Experts](#) database. This database is specifically designed for media looking to contact or find information. They checked to see if Dr. Lower was, or had ever been, included in this database and they discovered that he was not and had never been part of it. Meaning, the University where Dr. Lower taught, never recognized him as an “Expert” in chemistry or water or anything for that matter. They explained that there is a major difference between being a professor / university level instructor / teacher and being an “Expert”. Dr. Lower was never recognized as an expert by his own university. In fact, there is actually a [student written paper](#) by an undergraduate published on the Simon Fraser University website that is **COMPLETELY** to the contrary of the opinions expressed by Dr. Lower, yet it has been given a place of distinction by being published on the university website.

Based on the information that could be found, Dr. Lower seems to be basing the vast majority of his opinions on **HIS OWN** scientific education, which was prior to 1965. This then raises an interesting question: Is it possible that any new science related advancements could have happened between then and now? It also seems that his credentials as an “expert” on anything have been drawn into question, as the educational institution, which is the main substance of his experience and qualifications, do not recognize him as any kind of an expert and they have published works that completely contradict his position.

While we were not able to find anything of any notoriety about accomplishments of **THIS** Dr. Stephen K. Lower Ph.D.; we were, however, able to find quite a few accomplishments by another Dr. Steven K. Lower, Ph.D., a tenured Associate Professor at Ohio State University. This [Dr. Lower](#), the one with the “v” in the name Steven, instead of a “p”, has had an impressive career, with 47 peer-reviewed articles and abstracts; numerous awards, honors and distinctions; and a recipient of over \$2 million dollars in research grants. But this is not the “Dr. Lower” in question, although I have a feeling that some of this Dr. Lower’s accomplishments are mistaken as those of the subject of this report when people go online to check the credentials and credibility of the person that is telling them that drinking ionized alkaline water is a bunch of hogwash and a complete waste of time.

The website itself is another thing that should really be investigated to develop a better understanding of Stephen Lower. There are several websites operated by Stephen Lower: [Steve Lower stuff](#); [Chem1 Ionbunk](#); and perhaps the most personally informative [Steven Lower Personal Page](#). His main attack page is the Chem1 Ionbunk website. From the very beginning he is trying to set a tone of skepticism for visitors by including a picture of an old "Snake Oil" salesman at the very top of his page.

One of the things that you may notice after only a few minutes on any of Stephen Lower's websites is that he is VERY opinionated and he makes it very clear that if you do not agree with his opinion, you are simply wrong. He also attacks a lot more than just ionized alkaline water. He has lists of different things that he has "debunked". Then, if you know anything about websites, you will instantly recognize the rudimentary design of all of his websites, very unprofessional and "GeoCities" in nature.

After thoroughly reviewing the information on the websites we tried to figure out what might be motivating Stephen Lower to promote his opinions so aggressively. Two theories were developed after the review. Based on information gathered from his own websites it appeared that he was being motivated by one of two things: either to try to make himself seem like an authority / expert for financial gain or because he was simply bored. It is possible that it is actually a combination of both.

On his personal website he lists that he was the "proprietor of [Chem1Ware Ltd](#)" from 1988 to 1999. On this same page he mentions his Chem1 Instructional Software, followed by the comment "this is suppose to be profitable?" It seems that his software "product" was a virtual textbook, which, based on his own comment, and the fact that it is now offered for free, probably never created the financial returns he had hoped for.

Stephen Lower retired from Simon Fraser University in 1999, which is the same year that he lists as the ending date of Chem1Ware Ltd. Leaving his position as a professor would remove much of what gave him any of his scientific credibility. It stands to reason that these science based attacks would help keep him in the public eye and might also continue to perpetuate his standings as some sort of science authority.

Then there is the other possibility, which is that Stephen Lower became bored with retirement and was looking for something to replace the authoritative feeling he got from teaching. And this could be easily achieved by manipulating scientific principles and simply contradicting what others are saying. If you really read his entire page, you will see that it is filled with contradictions and even grammatical / spelling errors. For someone that is supposed to impress me with his intelligence, you would think he could at least use spell check!

In addition to these things, there are some things that make his rants a little hard to swallow. First off, Enagic has been in business for almost 36 years, which is actually longer than his entire teaching career!! If these machines did not actually work, did not actually do anything, then how could they be in business for this long? To think that a business could grow and thrive offering a product that really did not do anything is ridiculous! Scams don't last for almost 40 years! And it was originally started by Sony, a company that I do not think would risk their reputation on developing a product that was based on a scam.

Next are the people that know this technology and promote it. In the big scheme of things, Stephen Lower is nobody special; it is what he is doing with the Internet that is making him somebody. He even has the gall to say that Ray Kurzweil, one of the most famous and honored scientists of our time, is wrong about ionized water and that he does not know what he is talking about. Kurzweil has been called the successor and "rightful heir to Thomas Edison", and was also referred to by *Forbes* as "the ultimate thinking machine."

Here is a quote from Stephen Lower's website regarding Ray Kurzweil, "Even the otherwise respectable Kurzweil and Grossman's *Fantastic Voyage* goes off the track on this craze."

While the credentials of Stephen Lower are unsure, those of Ray Kurzweil are indisputable! He is an American inventor and futurist. He is involved in fields as diverse as optical character recognition (OCR), text-to-speech synthesis, speech recognition technology, and electronic keyboard instruments. He is the author of several books on health, artificial intelligence (AI), transhumanism, the technological singularity, and futurism. And Ray Kurzweil has been honored numerous times by the scientific community. Here is a list of some of his awards and accomplishments:

Kurzweil has received these awards, among others:

- First place in the 1965 International Science Fair for inventing the classical music synthesizing computer.
- The 1978 Grace Murray Hopper Award from the Association for Computing Machinery. The award is given annually to one "outstanding young computer professional" and is accompanied by a \$35,000 prize. Kurzweil won it for his invention of the Kurzweil Reading Machine.
- The 1990 "Engineer of the Year" award from *Design News*.
- The 1994 Dickson Prize in Science. One is awarded every year by Carnegie Mellon University to individuals who have "notably advanced the field of science." Both a medal and a \$50,000 prize are presented to winners.
- The 1998 "Inventor of the Year" award from the Massachusetts Institute of Technology.
- The 1999 National Medal of Technology. This is the highest award the President of the United States can bestow upon individuals and groups for pioneering new technologies, and the President dispenses the award at his discretion. Bill Clinton presented Kurzweil with the National Medal of Technology during a White House ceremony in recognition of Kurzweil's development of computer-based technologies to help the disabled.
- The 2000 Telluride Tech Festival Award of Technology. Two other individuals also received the same honor that year. The award is presented yearly to people who "exemplify the life, times and standard of contribution of Tesla, Westinghouse and Nunn."
- The 2001 Lemelson-MIT Prize for a lifetime of developing technologies to help the disabled and to enrich the arts. Only one is meted out each year to highly successful, mid-career inventors. A \$500,000 award accompanies the prize.
- Kurzweil was inducted into the National Inventors Hall of Fame in 2002 for inventing the Kurzweil Reading Machine. The organization "honors the women

and men responsible for the great technological advances that make human, social and economic progress possible." Fifteen other people were inducted into the Hall of Fame the same year.

- The Arthur C. Clarke Lifetime Achievement Award on April 20, 2009 for lifetime achievement as an inventor and futurist in computer-based technologies.
- He has also received 17 different Honorary Doctorates from 17 different colleges.

Now seriously, if you are going to listen to the opinion of someone regarding science, which would you be more inclined to listen to? Kurzweil is one of the foremost scientists in the world and I think he would not discuss or promote something if it were untrue or not even possible. In fact, here is a link to an interview with Dr. Kurzweil regarding his views on [ionized alkaline water](#).

No offense to Dr. Lower, but I really don't think he is qualified to challenge the scientific opinion of Dr. Kurzweil! And then there are people like Dr. Shinya, a world-renowned M.D. that helped create the endoscope and pioneered the process of removing polyps using an endoscopic snare. It is actually called the "Shinya Method". Dr. Shinya has treated kings, queens, heads-of-state, celebrities and more. He has reviewed more than 300,000 colonoscopies and as part of his treatment regiment Dr. Shinya prescribes Kangen Water, our specific water, to his patients. This is one more example of an extremely credible source, with facts and experiences contrary to those of Stephen Lower, recommending this water.

The other thing that Lower is challenging is over 50 years of documented science and a process created and perfected over the same time, which is ionization. It's funny, because he is trying to use specific scientific principles to disprove unrelated things. He says that you cannot ionize "pure" water, meaning water that is void of any mineral content, which is absolutely correct. But we never said you could!! In fact, we specifically tell people that you have to have minerals in the water for the process to work. But he uses the "pure" water argument as the foundation for his position. If given the opportunity to speak to him directly, we would challenge him with these questions...if the ionization process that we are claiming happens does not, then why is there a difference in the pH of the two separate streams of water that come out of the machine? Why is one acidic and one alkaline? If nothing is happening, then why does the pH differ? Why are the two streams not the same pH as the water going into the machine? I think he would have a very difficult time explaining this!

The truth of the matter is that no matter what it is, when you have something good someone is always going to be out there trying to say it isn't or that they have something just as good for less. It is the nature of a free market, free speech and the freedom provided by the Internet. What each of us must do is really investigate who we are listening to and then decide if that person is a trusted source of information.

One last thing we feel compelled to mention about the good Dr. Stephen Lower is a little more information that he himself provides on his personal website. He has a section listing things he likes and things he can do without. In addition to a few other things, he lists dogs, skepticism and Mr. Bean as some of his likes. In addition to a few other things that he lists that he "can do without", he lists cats, "True Believers" and GOD. Sometimes just a few words can speak volumes about a person.