

Augmented NAC — The Elephant in the Room

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Augmented NAC is promoted as a research-backed dietary supplement for reducing spike-protein load in the body. But a closer investigation reveals that the science behind it is questionable at best, and the conflicts of interest are striking.

Recently, a friend of mine introduced me to a dietary supplement called Augmented NAC, which she said was a “potentized” N-acetylcysteine (NAC) specifically for Covid-19 “spike” detox. It is manufactured by B.A.I. Technologies, a company in Switzerland headed by entrepreneur and blockchain expert, Fabio Zoffi, who has given lectures on the benefits of the product. I was intrigued, not only because of the grandiose testimonials being made for the product, but by the fact that “quantum physics” is the manufacturer’s explanation for the augmentation process itself.

NAC is the acetylated form of the non-essential amino acid, L-cysteine, and it was first patented in 1960 and used by doctors intravenously as a life-saving antidote for acetaminophen overdose and to break down thick mucus in respiratory diseases. Around this time, it also became available as an over-the-counter dietary supplement.

NAC has three core functions: it is a potent antioxidant (by serving as a direct precursor to glutathione); it is an anti-inflammatory (modulating key signal pathways such as NF- κ B); and it is an effective mucolytic (able to break down mucus viscosity).

As a precursor to glutathione, the body’s master antioxidant, NAC supplementation can elevate glutathione production. This, in turn, is central to: free radical neutralization; Phase II detoxification that can help to eliminate xenobiotics (drugs, toxins and carcinogens) by rendering them soluble in water; and the recycling of standard antioxidants such as Vitamin C and E, allowing them to continue their protective role.

While the antioxidant properties do help with inflammation, NAC has direct anti-inflammatory abilities, including the inhibition of NF- κ B (a key component of the inflammatory process), and the suppression of pro-inflammatory cytokines (including TNF- α , IL-6 and IL-8).

And the third core function was NAC’s ability to thin mucus by breaking up the disulfide bonds in the mucus, bonds which give it its thick and viscous nature. This can help to disrupt biofilm in the body, which bacteria hide in for protection, making infection more difficult to treat and prolonging illness.

These three properties make NAC a very useful supplement in clinical practice, both conventional and alternative/complementary. Indeed, the usefulness of NAC even in conventional treatment testifies to the supplement’s powerful healing modalities that even conventional doctors fixated on drug-solutions can appreciate.

The conventional medical literature indicates that NAC is used for Acetaminophen overdose, as a lung decongestant for broncho-pulmonary diseases, and the modulation of neurology and mental health.

Interestingly, the doses used in conventional treatments tend to be quite high: 600mg – 3000mg per day orally. Even taking it for general antioxidant support involves intake of 600mg – 1200mg. This high dosage is due to NAC's low oral bioavailability (only 4 – 10% of oral intake is absorbed in its active state).

Of course, alternative and complementary practitioners have a much wider use for such a multi-talented nutrient. For nutritionists, naturopaths and functional medicine doctors, NAC forms the backbone of many health restoration plans. It is used for those with toxicity issues, chronic fatigue and fibromyalgia, autoimmune conditions, viral infections, hormonal and metabolic health (used for PCOS and endometriosis), gut health (by being a biofilm disruptor), mental health (as above), and chronic respiratory issues. It also has been shown to have anti-thrombotic effects, which is why it is recommended for those who have an elevated risk of blood clotting. (Please note that in practice, NAC is regarded as a “team player” and is usually integrated with many other supportive nutrients in natural healing plans. Amounts recommended by alternative and complementary practitioners are around the same or higher than the doses used by conventional medical practitioners.)

Given the above, we can understand why NAC has been so popular in treatment protocols for those with Covid-19 and the Covid-19 ‘vaccine’ protocols, most notably with its antioxidant activity, its anti-inflammatory and immunomodulatory effects, and its antiviral and anti-thrombotic effects. It is the ideal detox supplement for such respiratory infections and spike protein poisoning because of its ability to counter cytokine storms, reduce lung mucus and thus infection, alter (with its ability to break disulfide bonds) the shape and function of the deadly spike protein, reducing its deadly toxicity, and counteract thrombosis and disrupting platelet aggregation. In 2023, pooled data from eight studies involving over 20,000 participants found that NAC reduced mortality by 35% (relative risk reduction), reduced C-reactive protein and D-dimer, and enhanced oxygenation. (However, a 2024 meta-analysis found little benefit, but used about half the NAC doses of the 2023 studies.)

While NAC has remarkable benefits, please note that there are safety issues to take into consideration. These include: gastrointestinal upset; detoxification reactions (headache, fatigue, and flu-like symptoms); mineral chelation including zinc and copper (which is why long-term use should be accompanied by a good multi-mineral supplement); the exacerbation of active peptic ulcers; the need to carefully monitor those on anticoagulant medications and those with asthma. So especially at higher doses, patients need to be regularly monitored.

So we see that standard NAC supplementation is remarkably potent and multi-faceted, and this explains the popularity of this supplement in both alternative and conventional healing protocols, and especially in spike-reduction protocols. So this must be kept in mind: NAC does not necessarily have to be “augmented” in order to be a very effective healing tool. It is possible that the NAC itself — unaugmented — is entirely responsible for the remarkable recoveries being reported for Augmented NAC. But that is not what the manufacturers of Augmented NAC claim. For them, the augmentation process is central to effectiveness of their supplement, far more effective at spike detox than standard NAC... in fact, they claim it is many times more effective. And considering the remarkable benefits of standard NAC, such statements elevate Augmented NAC to a wonder drug.

However, this “augmentation” process used for Augmented NAC is kept secret by the manufacturers, other than to throw out nebulous terms like “quantum coherence”, “increased order in the sub-atomic particles”, and analogies with the intensity of focused laser light. Even doctors, who should know better, seem to be perfectly willing to gloss over the augmentation process because “quantum physics” is not in their skill set. While this “let’s skip over that part” approach might be understandable if there was bona fide research showing that Augmented NAC is significantly more effective than standard NAC, at the moment there are no available comparative studies. There are comparative study results quoted by the manufacturer, but no indication of where these results came from. (More on this later.)

Such evasion of the elephant in the room can only go on for so long. We need to determine whether the augmentation process is legitimately potentizing the product, or whether we are facing a naked emperor. And if it really is legitimate, then augmentation itself is far more interesting than a singular augmented product. It could catalyze new branches of physics, like the photoelectric effect did a century ago, and it could be used on all sorts of medications, increasing potency and therefore reducing side-effects due to lower effective doses (saving millions of lives globally). It could become a standard manufacturing stage for all dietary supplements, increasing their beneficial effects, and an augmentation machine could become a standard appliance in the kitchen, teasing out higher nutritive return in the meals we consume. And maybe even gas could be augmented, making these fuels burn more efficiently, or maybe batteries could be augmented to make them hold charge longer. The possibilities seem endless... augmentation as it is being described could well be the greatest new invention in the 21st Century!

B.A.I. Technologies, however, is forsaking this bigger picture and focusing instead on just selling Augmented NAC. Forget the potential 21st Century revolution, that can wait. For now, only NAC (and a few bracelets) is being augmented in this way, although given their strong marketing, new augmented supplements will no doubt soon appear.

However, there are clues indicating what the augmentation process is likely to be if you read between the lines and study the actual individuals involved:

1. Augmentation seems to be an informational/energetic process similar to fringe medical practices such as flower remedies, homeopathy, radionics, scalar waves, etc. The term “fringe” used here is not necessarily being used pejoratively. We are keeping an open mind here, and there are certainly some interesting indications that there might be more to these fringe treatments than just a placebo effect.
2. Something called H.I.T. (‘Holographic Information Transfer’) is involved because “H.I.T.” was originally on the labels of the Augmented NAC, and it is still mentioned on the websites of some sellers. The inventor of “H.I.T. Technology” is Dario Maximilian Spera, who has the websites regeneration4life.com and hitmalaria.org, where his focus is on creating wristbands that hold specific frequencies for health (the frequencies of health have been transferred to a substrate on the rubber wristbands).
3. A real sample of Covid-19 spike protein was apparently (according to Fabio Zoffi) used in the augmentation process to sensitize the NAC to the spike protein so that this sensitized NAC is much more effective at denaturing it. This would be very similar to the term “imprinting” used in other fringe

healing methods such as radionics, homeopathy, and bioresonance machines, although that term “imprinting” is not used by Zoffi or ZeroSpike.

4. Dario Maximilian Spera has made several patent applications related to “frequency physical carriers”. Here are the seven I could find, none of which have been granted, and three of which have been stopped for various reasons. Here are his patent applications over the years:
 - a. EP1170019 (2001) – Homeopathic rendering device [Withdrawn]
 - b. WO2007068831 (2007) – Frequency carrier PCT [Expired]
 - c. EP2404617 (2010) – Frequency physical carrier [Refused]
 - d. US20120010859 (2011) – Frequency physical carrier [Abandoned]
 - e. EP2589969 (2011) – Physical carrier of frequencies [Withdrawn]
 - f. US20240113409 (2022) – Programmable electrical bypass [Pending]
 - g. US20240161951 (2022) – Programmable material [Pending]
5. Dario Spera is directly linked to Fabio Zoffi because they co-authored a research paper related to the H.I.T. underlying principles, along with Simone Cristoni, and how NAC combined with low frequency radiation can effectively denature Spike protein. The research is on the Zenodo open-access repository — <https://zenodo.org/record/5830436>. Please note that Zenodo is merely an open and unvetted platform for sharing research information, and in no way legitimizes what is posted. The article is tagged as a “Journal article” which it has never been. And most importantly, the NAC used in this investigation is actually standard NAC.

From the above we can see that Augmented NAC uses technology developed by Dario Spera, and no doubt uses other devices such as Vega-test type machines (mentioned in the 2011 patent applications). There are now many such computerized systems that purport to be able to read, record and ‘imprint’ frequencies including: BICOM, IMEDIS-BRT, WAVE TRANSFER, MEDICUP, MORA, Qest4, and SPOOKY2.

So the idea of augmentation seems to be: using one of these computer systems, record frequency readings from a sample of spike protein (whatever that means), and then imprint those frequencies from these machines on to N-acetylcysteine by putting it in a Faraday cage to supposedly sensitize it to spike protein denaturation. Call the imprinted NAC “Augmented NAC”, and then market it as a unique type of NAC dietary supplement that is far more potent at denaturing spike protein than standard NAC. This is augmentation in a nutshell, and it is actually a standard process used by practitioners who use these energy machines. There is nothing new here: “energized” or “activated” supplements have been used for years by those who have imprinted those supplements with various frequencies.

Most other organizations would not get away with this brazen marketing, but B.A.I. Technologies has one massive advantage: they are registered in Switzerland, and because of that, they appear to have greater latitude to make unsubstantiated claims for their product.

Of course, ultimately, it doesn’t really matter how seemingly unsubstantiated the augmentation process is if it works. And here is perhaps the most concerning part of this review. As mentioned previously, there are actually no available studies comparing standard NAC with Augmented NAC. Not one.

But this is not true: a direct comparison is made in every lecture and on their website based on “laboratory tests”. The results of these “laboratory tests” very clearly and definitively show that Augmented NAC is many times more effective than standard NAC at denaturation of the spike protein, dissolution of blood clots, denaturation of Vax spike protein, preventing glutathione degradation, and protecting Vitamin C from oxidation. The numbers cannot be more definitive, and taking them at face value, who would choose anything other than the more expensive Augmented NAC? But where exactly do these figures come from?

If you go to AugmentedNac.com or ZeroSpike.org and click the link for the research, they both show a simple PDF with a picture of the bottle at the top, and then, underneath the following text:

“In the present experiment, mass spectrometry technology is applied to study the effect of Augmented NAC versus Standard NAC under different conditions. The conformation of the Spike Protein exposed to different physicochemical effects and the action originated by the interaction with the compound N-acetylcysteine (NAC) in the Augmented vs. Standard version of NAC is monitored.”

Underneath this simple statement is a table giving “Percentage denaturation of Spike Protein on receptors of mesenchymal cell lines.” Here is the table:

| TYPE OF NAC | TIME SPAN | DENATURATION % |
|---------------|-----------|----------------|
| STANDARD NAC | 0 | 3 |
| | 90 min | 10 |
| | 12 hours | 11 |
| | 24 hours | 12 |
| AUGMENTED NAC | 0 | 2 |
| | 90 min | 40 |
| | 12 hours | 77 |
| | 24 hours | 99 |

That’s it: no authors, no laboratory, no date, no detailed methodology, no number of replicates, no biological replicates, no conflict of interest statements, no error-ranges for each reading, and no statistical analysis. Just a table of numbers that we have to take their word about.

But there are clues what “research” this PDF might be based on. Note above that mass spectrometry technology is used to determine the percentage of spike protein denaturation on receptors of mesenchymal cell lines using NAC and an augmented version. Where have we seen this before? The Zenodo paper written by Spera, Zoffi, and Cristoni. Unless there is hidden research they are keeping secret (why?) then this table of results is just an interpretation of the Zenodo paper with exaggerated percentages to make the Augmented NAC seem many times more effective than the standard NAC. But there is one big issue here:

Augmented NAC was never studied in the Zenodo paper. All of it was standard NAC, on its own and then alongside 7Hz – 80Hz electromagnetic frequencies “by means of an electromagnetic frequency fields generator” in the lab. No detail is given as to what this generator is or what the field strength was, what the frequencies were, and what the waveform characteristics were. But then we are used to that with Augmented NAC research.

The irrational leap of faith here seems to be that Standard NAC + EM Frequencies (generated in a lab with a frequency generator) = Imprinted NAC — marketed as “Augmented NAC”. But Augmented NAC is a bottle of NAC capsules that does not come with a frequency generator. But this is where the H.I.T. Technology comes in — if those frequencies can be imprinted on to the NAC, you don’t need the frequency generator. So from Zoffi’s and Spera’s point of view, NAC that has been imprinted using the computerized systems outlined above is equivalent to having a lab frequency generator at hand. Any proof or even vague studies showing this miraculous equivalence? No, it is just assumed... and what an assumption!

This equivalence requires a true leap of faith! And the “up to 96%” denaturation of spike protein for the NAC + radiation has been pushed up to 99%, while the 64% for the NAC alone has been reduced to just 12%. (On the Augmented NAC website, that top figure goes up to 99.8%! Based on what? Err... nothing.) If this is “research” all these claims are being derived from, it looks like the percentages have been fiddled to maximize the difference in effectiveness between standard NAC and Augmented NAC, thus justifying the significantly higher cost of the Augmented NAC.

How can the research be so contrived when it is on the public-interest ZeroSpike.org website? This is a site, after all, that was set up by the Federazione Rinascimento Italia (FRI), described as an “Italian civic association”, a public interest information site claiming to have “over 2,000 pages of scientific documentation on COVID-19, mRNA, technology, and spike protein toxicity.” It also features reports by a leading academic, Loretta Bolgan, as well as a PDF of an academic book, *The Therapeutic Use of N-Acetylcysteine (NAC) in Medicine*. So there is genuinely a lot of strong science on the ZeroSpike.org website, but almost none on Augmented NAC itself or the augmenting process.

Who actually set up ZeroSpike.org citizen site? It was the very same Fabio Zoffi, Dario Spera and Simone Cristoni, the dynamic trio that coauthored the Zenodo “research” paper being misused to push Augmented NAC over standard NAC. And who is the President of B.A.I. Technologies in Switzerland that manufactures Augmented NAC? None other than Fabio Zoffi.

This is all starting to look suspiciously circular. And yet no conflicts of interest have been declared. I have even seen people raving about how magnanimous Zoffi is for setting up the non-profit ZeroSpike organization to save humanity when, in fact, he is the President of a Swiss commercial company leveraging ZeroSpike.org and no doubt generating substantial profit. But he remains notably silent about his commercial interests. This is not to say that Zoffi doesn’t really believe he is helping humanity, but he should be more transparent about his conflicts of interest.

More recently, the ZeroSpike.org website has even dropped the pretense of independence and started to openly push Augmented NAC with links to the commercial AugmentedNAC.com website run by B.A.I. Technologies. Indeed, there is a bright pink button link now on the home page of ZeroSpike, not really what you would want on a seemingly independent information website for humanity. It seems that the desire for sales was just too tempting to try to keep their so-called ‘civic’ information site quasi-independent.

So instead of actual research on Augmented NAC, B.A.I. Technologies seems to think that their product will gain legitimacy by its close proximity to real academic information on the benefits of standard NAC. Augmented NAC becomes scientific by association. The problem is that that science has little to do with Augmented NAC. Because this position is weak, what they seem to now be doing is to pump out “it-saved-my-life” type testimonials to detract from the complete lack of studies or evidence. People rave about Augmented NAC, so it must be legitimate! However, that is not strictly true. The benefit that customers are getting from Augmented NAC might just be the same as they would have gotten from a good quality standard NAC, which is a fraction of the costs. And a new tactic now being used to cover up the lack of any proper research is to promote “Urine Spike Tests” as proof that the Augmented NAC is working. This is, of course, meaningless without any control using standard NAC.

So it appears that slick Italian marketing, pseudoscience, real science, scientific terms used incorrectly, and spurious and sparse research have all been conflated in a potent cocktail to sell an enigmatic product called Augmented NAC, a product that appeals to those who don’t have the time or the inclination to ask questions. It takes enormous confidence to create such a perfect storm of irrational rationality. Maybe some of that confidence comes from being safely ensconced in Switzerland, away from the FDA and FTC (and the equivalent regulatory bodies in other countries).

Those who do ask questions are branded closed-minded and allopathic-fixated. This is a product of the growing duality in the health industry, with Big Pharma on one side and independent doctors, practitioners and natural health products on the other. So anything and anyone that opposes Big Pharma is given a free ride. After all, many feel that it would be sacrilege to question the incredible medical researchers that have risked their careers (and lives) putting out countering information, protocols and products that can help to reduce the damage caused by the medical C-19 racketeering.

We don’t question those seemingly on our side because we are so busy opposing those we perceive to be harming us. Our alternative peers are above reproach. But we forget that the very mechanisms by which Big Pharma gains market traction — controlling seemingly public-interest agencies, fiddling research, and hiding conflicts of interest — are the very same mechanisms that can be used by those pushing alternative perspectives and products. We must be mindful of all conflicts of interest.

What is perhaps most disappointing about the Augmented NAC saga is how easy it is to dupe supposedly intelligent doctors and practitioners into accepting pseudoscience and technobabble. These are the same doctors and healthcare practitioners who have bravely stood up to Big Pharma and the medical establishment, and have huge expertise in their specific fields. Most of these doctors are probably just too busy to check out products themselves, and many might be getting some kind of financial return.

To be fair, it is unknown whether all of this is deliberate subterfuge to sell products, or whether unconscious biases have crept in to the minds of those involved so that integrity has unintentionally been forgotten. But it all seems to be perfectly contrived for selling a questionable product based on... well nothing.

All this could be resolved very quickly if a proper small trial is done to test standard NAC against the Augmented NAC. After all, if there really is as much of a stark contrast between the denaturing of spike by the two types of NAC then it should easily show up in small, inexpensive, double-blind, in-vivo studies run by disinterested third parties. And if that was shown to be the case, then the “woo woo” nature of the augmentation process could almost be set aside. It works... so who cares how!

But the fact that something so obvious as a scientific comparative study has still not been done even years after the launch of Augmented NAC very likely indicates that such studies are being avoided for one reason or another. B.A.I. Technologies is too strong at marketing to let such research go by if it really existed. They would have the world at their feet if their augmentation process was really scientifically proven to potentize the NAC.

Where does this leave us? Those who have taken Augmented NAC are likely to have derived benefit from it just by the fact that it is NAC. And a big portion of those would never have taken it if B.A.I. Technologies’ marketing had not been so strong. So, in a way, we need to thank B.A.I. Technologies for promoting NAC so strongly. Zoffi and his team have done humanity a favor by being so relentlessly good at pushing NAC.

But all this is built on disinformation, and is taking advantage of the gullibility of the alternative and complementary health communities. At some point the situation will become untenable as it becomes increasingly obvious that the science being used to promote Augmented NAC over standard NAC is spurious. B.A.I. Technologies has done well and made a lot of money, but now they must be forthcoming about what legitimate comparative research has been done, and what the augmentation process actually is. There is no shame in using the machines mentioned above that can imprint substances with frequencies, but be honest and say that this is what you are doing, rather than labeling it as quantum physics and avoiding the subject as much as possible. It is like Dorothy in the Wizard of Oz being told not to look behind the curtain. The truth is that despite all the theories, nobody really knows how or why these machines might work, which is what makes them so fascinating and worthy of research.

Just parroting “quantum coherence” and “order in the subatomic particles” hides ignorance, and possibly subterfuge. It is finally time to address the elephant in the room. ■

This review has been written anonymously by a health practitioner in order to encourage dialogue around this potentially revolutionary product and manufacturing process, and to encourage the manufacturer to release some scientific comparative research.

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