

Double Helix Water, a review of the original study.

The original study on immune response to Double Helix Water was done about two decades ago, in 1998.

This study looked at many aspects, but there are 3 questions that are frequently asked today by practitioners that can be answered by the research done in this study.

- **Does Double Helix Water produce immune response?**
- **Is more, or a higher dose better?**
- **Is there an ideal interval between doses taken?**

Per the information in the original study, the short answer to the all three questions is yes.

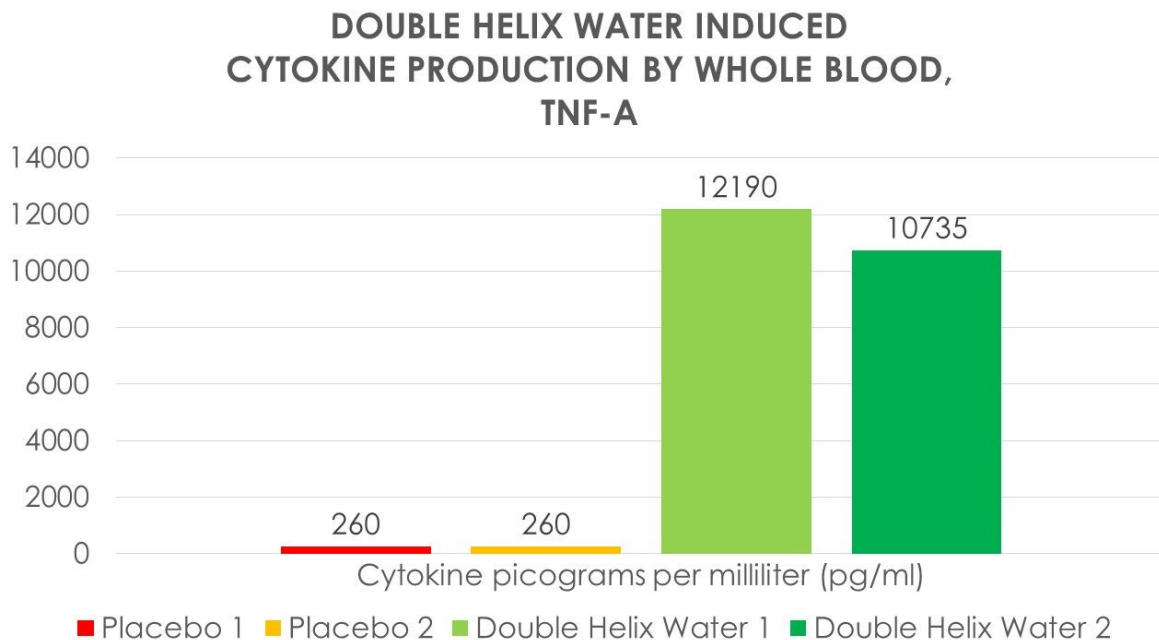


Figure 1: Placebo one and two are samples of **regular water**. One provided by the laboratory doing testing, the other by the company. Two separate batches of stable water clusters were tested. Stable water clusters were later branded as Double Helix Water after discovering that they would form into **double helix structures**.

The first study on the health benefits and immune support of Double Helix Water was done by B. Bonavida, Ph.D. Professor at UCLA and notable for his work in Microbiology, Immunology & Molecular Genetics, and author of over a dozen scientific

books on these subjects and many more scientific papers. A heavy weight when it comes to research.

The results of this very first study were so startling, some found it hard to credit at the time. Even though the study was done by an independent laboratory and headed Professor B. Bonavida, Ph.D. who is otherwise considered a prominent and meticulous researcher.

The samples of Double Helix Water produced such a *high immune response* during testing it was *thought* that the samples had been contaminated by some drug or other factor. This was tested for and found not to be the case.

All results seen in testing were purely due to **Double Helix Water**.

While more studies have been done since then. This initial study sparked controversy due to its results, with a few orthodox and conservative researches refusing to believe that “water” could produce these results.

In a way they were right, *normal water does not*. No one anywhere contests that assertion. Any observed changes in the study are due to the presence of **stable water clusters** (now called Double Helix Water), **not** water.

Now twenty years later, anyone trying to *refute* the existence of stable water clusters, is simply arguing with hard cold photographic and scientific evidence. That they exist is no longer contested. They can be seen with an AMF or EMF microscope. End of story.

Figure 1, the graph that shows immune response generated with stable water clusters is probably what ignited the controversy. The irony in this controversy all sides acknowledge that *water by itself does not cause the immune response*, the test and study clearly show this.

Proof that the immune response was generated by the *stable water clusters* and not water is what the study is all about. Unlike most studies it used not one but *two placebos*¹. The first, clean water used at the laboratory where the research was done. The second placebo was distilled water, supplied by the company that provided the stable water cluster samples.

¹*placebo: an inert or innocuous substance used especially in controlled experiments testing the efficacy of another substance.*

As this was a preliminary study not all the different parts of the immune system were looked over, only a few specific ²cytokines were originally looked at.

While water itself is a necessary and vital component for cells to function properly, and thus the immune system. One can clearly see from the two placebos used (regular water from two different sources), that water was not a major influencing factor to the immune response observed in the study.

Response to Double Helix Water from a few other cytokines were checked for and tested.

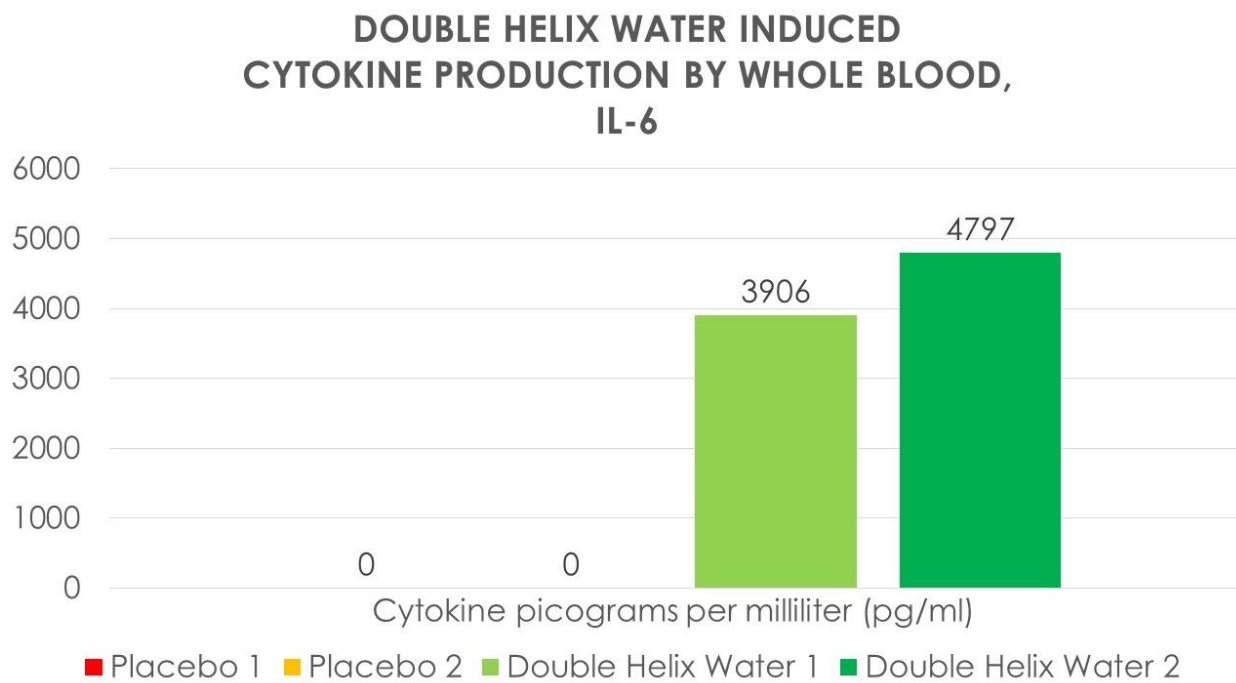


Figure 2: testing done with Double Helix Water on Interleukin 6 also showed a large response. Placebo 1 and 2 are both samples of normal water provided by different sources. As can be seen the placebos (water) did not produce any reaction at all. Stable water clusters (Double Helix Water) on the other hand produced a massive reaction in this test. IL-6 is an interleukin that acts as both a **pro-inflammatory** cytokine and an **anti-inflammatory** myokine⁴.

² cytokine: any of a number of substances that are secreted by certain cells of the immune system and have an effect on other cells.

³ interleukin: a group of secretions associated with white blood cells that form a large part of the immune system.

⁴ myokine: one of several hundred cytokines or other small proteins produced and released by muscle cells.

In some of the test the two placebos,water, produced no reaction at all. While the *stable water clusters* (Double Helix Water) generated unheard of response.

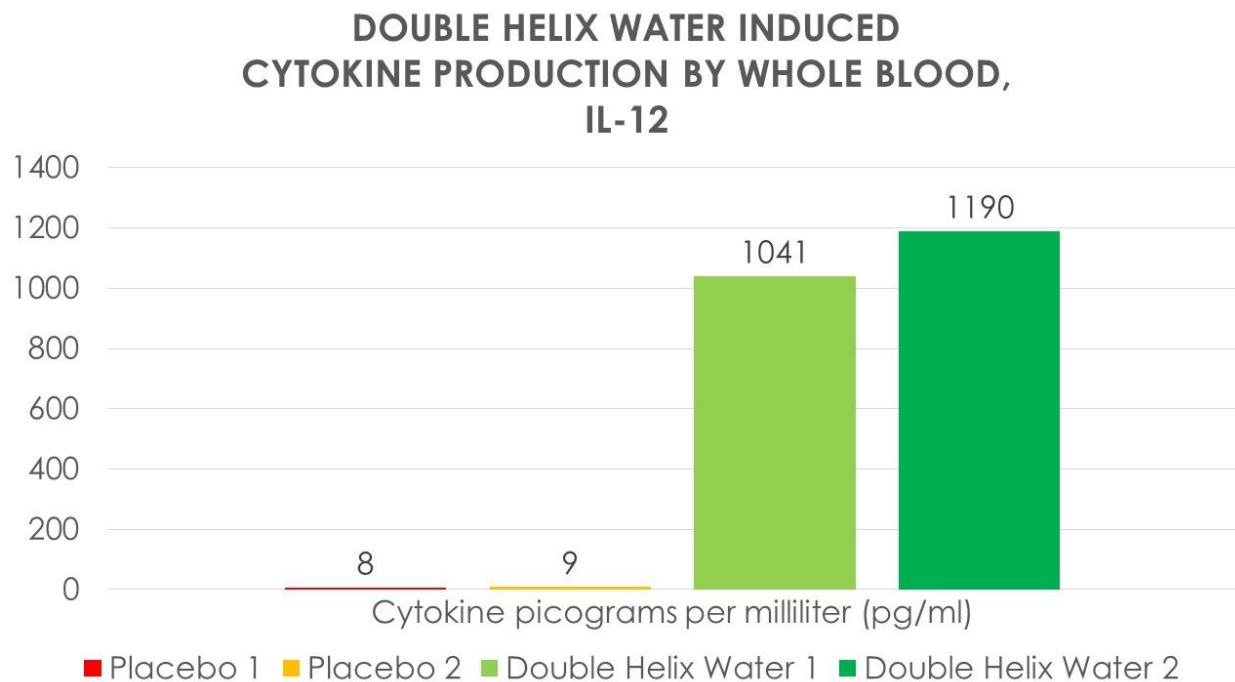


Figure 3: *IL-12 is linked with autoimmunity. Administration of IL-12 to people suffering from autoimmune normally worsens the autoimmune phenomena. Use of Double Helix Water by people with autoimmune disorders has not shown any detrimental effects.*

Figure 3 highlights a particularly interesting immune response:

cytokine IL-12 is associated with autoimmune disorders, if one had such a disorder one would normally not want to use any substance that excites this part of the immune system.

Contrary to what was expected, anecdotal information collected over the years show no detrimental response in people with autoimmune disorders. At first glance this is a paradox. Later studies and investigation into how Double Helix Water triggers immune response, provide insight into what at first seemed illogical. They indicate a much more basic mechanism at work when exciting immune response.

We are looking at cell health, proper function, and a considerable reduction of gene mutation. ^{Ref 2}

Does the quantity of stable water clusters affect the response?

Yes it does. The following graphs show various concentrations being tested. The higher the concentration of Double Helix Water, the larger the immune response is.

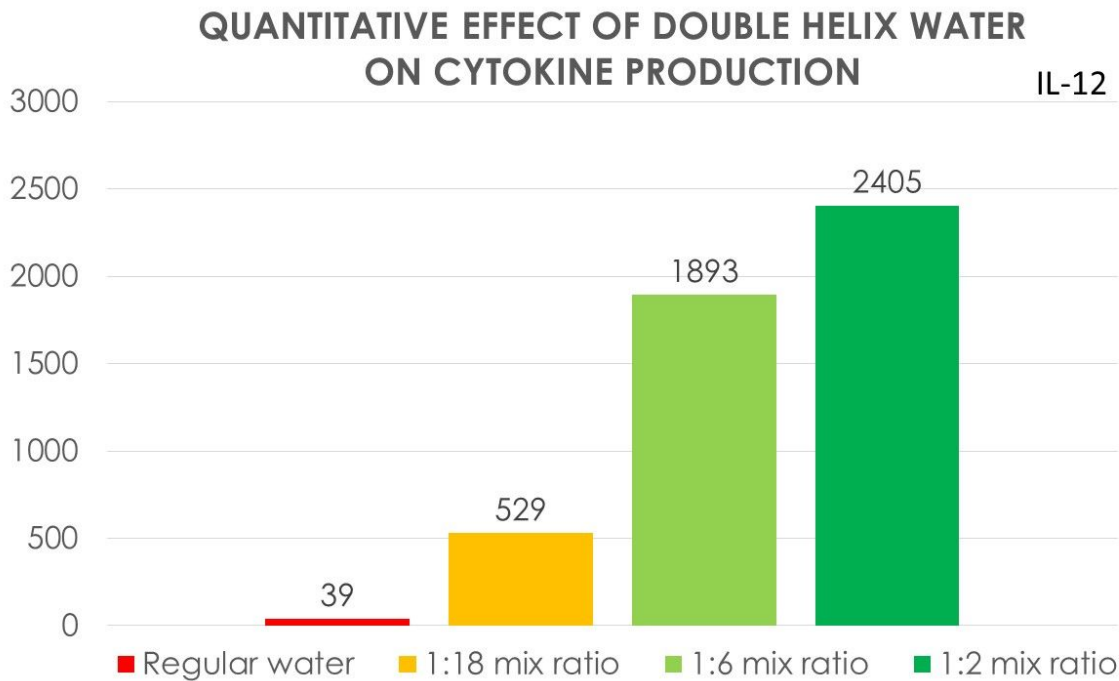


Figure 4: For example the IL-12 production response is larger when the Double Helix Water is more concentrated, and reduces the more diluted the mix is (smaller amount of stable water clusters present).

Higher concentrations of Double Helix Water produce much better response in this study. This is another indicator that it is the *stable water clusters* in Double Helix Water and *not* the *water* that is producing the desired effect.

Different cytokines have different response rates relative to the concentration of stable water clusters. What is clear is that there a better response to higher concentrations or quantities of stable water clusters on the cytokines tested in this study.

DOUBLE HELIX WATER INDUCED CYTOKINE PRODUCTION BY WHOLE BLOOD, IL-6

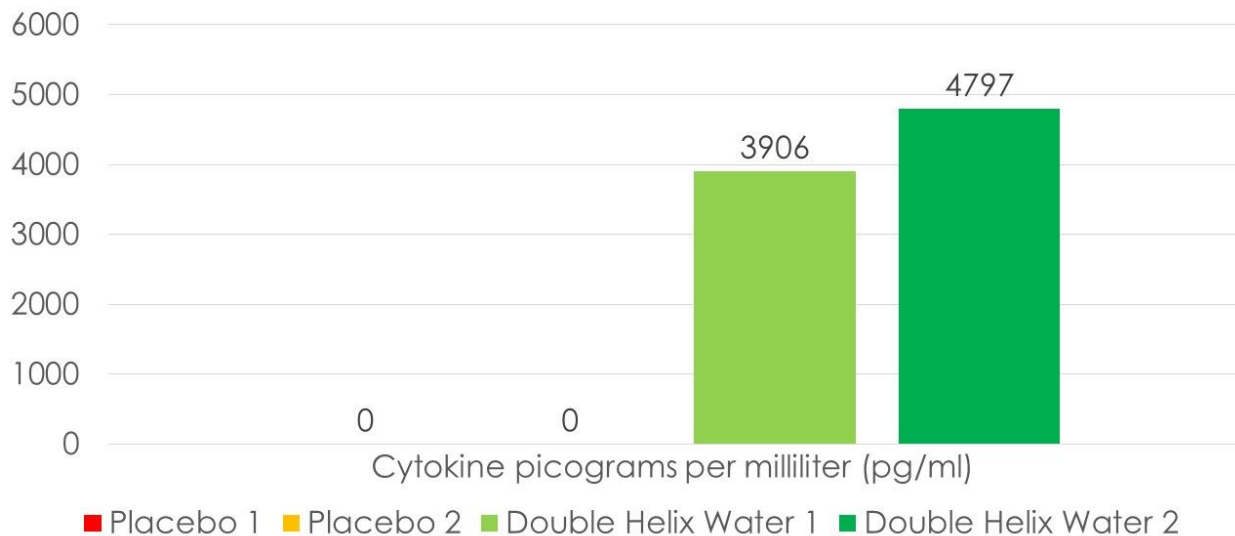


Figure 5: Another example related to inflammation. The placebos in question (water) produced no response at all, stable water clusters did.

Administering Double Helix Water

One of the key question that remains to a degree unresolved is the exact dosage of Double Helix Water.

While the normal dosage recommended on the bottle serves fine for most minor issues. In some instances medical practitioners have used much higher quantities. It may also be possible to *accelerate desired results by increasing the dosage*, and while we have received anecdotal reports on this from highly qualified medical practitioners. No rigorous study has been done to allow for such a claim to be made at this time.

Figures 4 and 5 provide indication on what can be expected at higher dosages. One would want to be aware of any possible herxheimer⁵ or detox reaction. Later studies show that in addition to immune response Double Helix Water, assists in moving both nutrition and intracellular waste across the cell membrane.

⁵The Herxheimer Reaction is a short-term (from days to a few weeks) detoxification reaction in the body.

Optimum Dosing interval.

There is a lot more information that needs to be gathered on this subject. What we can however say is that during the original study, time tables were drawn up looking at various immune responses. Ideal times vary depending on what component of the immune system one is looking at. Our current best estimate is every 8 to 12 hours.

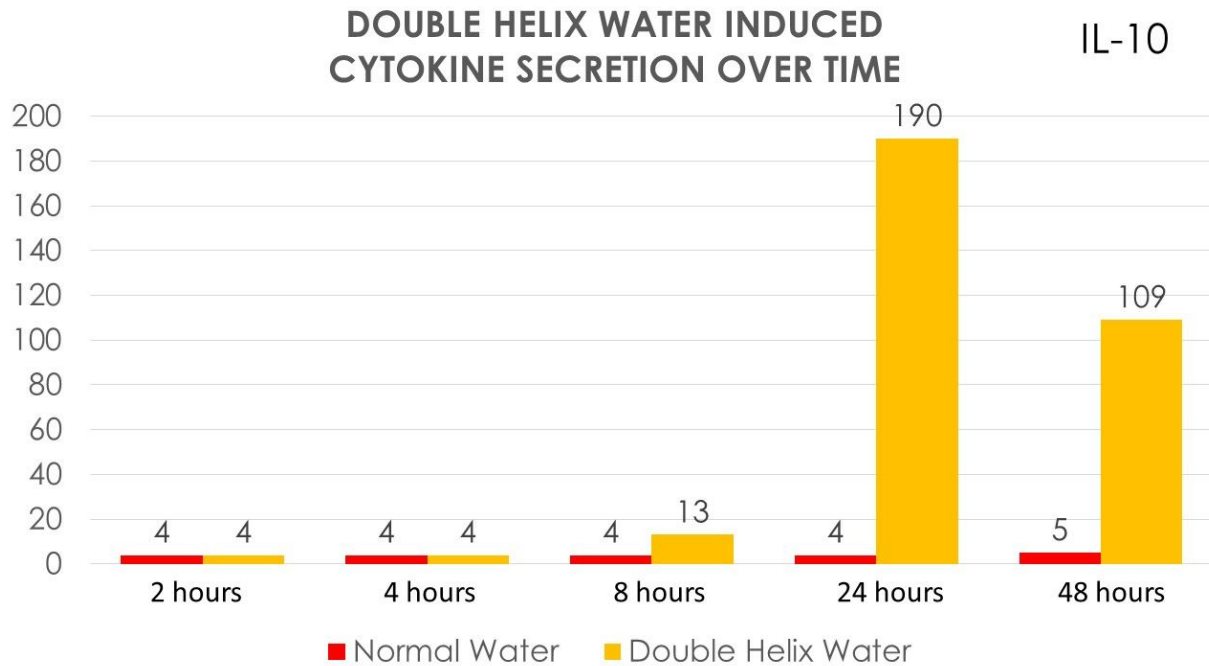


Figure 6: On IL-10 related response times we see an interval of 24 hours in order to produce a significant response. The placebo, normal water has no reaction at all.

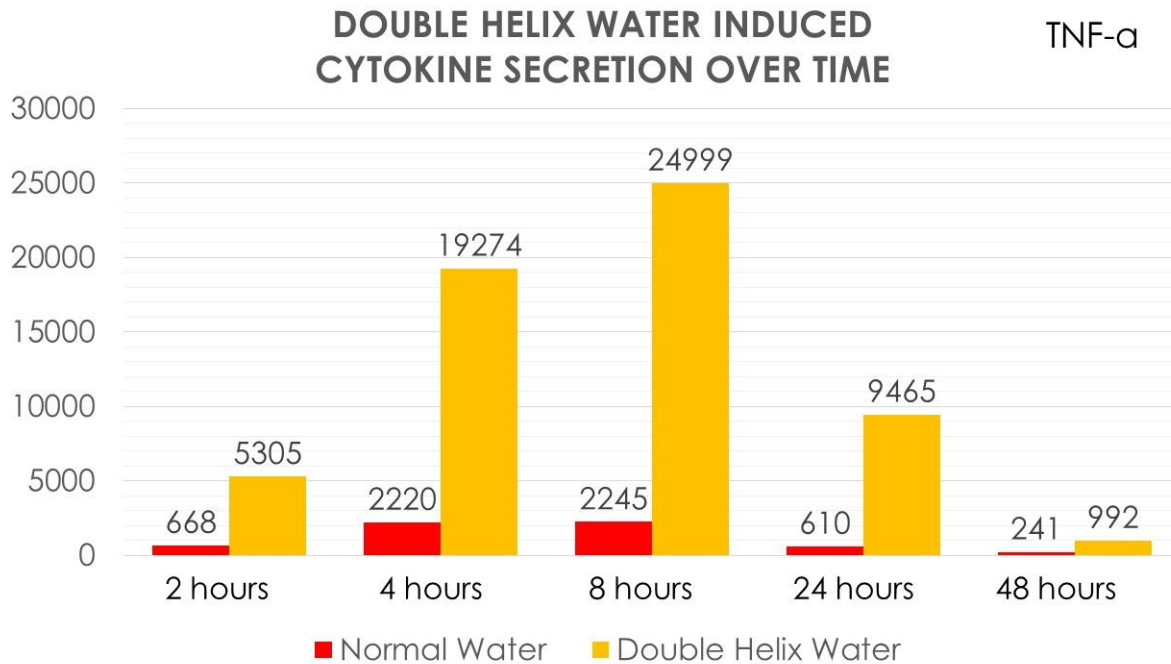


Figure 7: However other cytokine secretion responds much faster, and peaks at the 8 hour mark.

So in closing:

In the very first study, done by an outside laboratory, overseen by one of the world's leading experts on immunology, Double Helix Water produces a significant immune response.

Higher doses produced faster results, and may be required in severe cases to produce adequate response.

Optimum timing for dosages varies, though the earliest drop off observed in tests so far are after 8 hours intervals.

REFERENCES

1. B. BONAVIDA and X.H. GAN, INDUCTION AND REGULATION OF HUMAN PERIPHERAL BLOOD TH1-TH2 DERIVED CYTOKINES BY I_E WATER PREPARATIONS AND SYNERGY WITH MITOGENS. (1998)
2. B. BONAVIDA and STAVROULA BARITAKI, STABLE WATER CLUSTERS-MEDIATED MOLECULAR ALTERATIONS IN HUMAN MELANOMA CELL LINES. (2013)