A Brief Summary of the DNA-derived Frequency Theory

By Charlene Boehm

Upon consideration that DNA could be an informational source of frequencies for use in various electrotherapeutic devices, the DNA chain can be compared to a simple length of linear antenna. In reality, DNA has dipole characteristics, i.e., there is directionality to how the charged molecular components are aligned in the chain. If one were to unravel the DNA chain and take a close look at one of the strands, it will have a positive charge on one end, and a negative charge on the other, due to the alignment of the molecular units (nucleotides). This gives the strand characteristics of an antenna. Indeed, it is now known that DNA has conducting and even super-conducting characteristics.

When the two strands of DNA are connected (bonded) with each other in its usual form, they are aligned parallel to each other but have opposite polarities:

\+ ____ −
− ____ +

(For simplicity, the two strands in this simple diagram are shown in untwisted form).

To make things even more interesting, when the two strands of DNA are twisted and bonded together in its normal state, there are negatively-charged molecular ions that run along the entire length on the outer surface of the chain, in a helical fashion. Thus we see that the chain could be very likely sensitive to the influences of electromagnetic fields, in particular electric fields.

In radio science, the length of an antenna will largely determine how effectively it responds to the wavelength energy of an incoming transmission. Likewise, it has been proposed that the length of any particular piece of DNA can be resonated, using the same principle. Another way of approaching this is to consider the piece of DNA as a length of a string on a musical instrument such as a guitar. As one shortens the speaking length of the string with one's finger, the pitch or resonance of the string will change.

The full details of the DNA-resonance theory have been presented in a different paper (1). Since the publication of that paper, a simplified mathematical procedure has been worked out, making it much easier to arrive at the frequencies that relate to the DNA chain under consideration. The numerical constant 4,526,016.44 was arrived at by a person trained in physics and mathematics, and uses a process too lengthy to explain in this paper. The formula for calculating a possible frequency is:

4,526,016.44 / # of base pairs in the chain = frequency

For example, if there are 5,000 base pair molecules (nucleotides) in the DNA chain:

4,526,016.44 / 5,000 = 906.26 hz

(1) Boehm, Charlene. "A Look At the Frequencies of Rife-related Plasma Emission Devices". Published on the internet at:

Electroplasma Digest

Bruce Stenulsons Site

Electroherbalism Home Page

If there are 22,000 base pairs in the chain:

4,526,016.44 / 22,000 = 205.97 hz

And if there are 250 base pairs in the chain:

4,526,016.44 / 250 = 18,125.29 hz

For some frequency-emitting electrotherapeutic devices, the electromagnetic fields with the frequencies just arrived at in the above examples may not be attainable due to the technical limitations of the device. Indeed, any one type of device will quite often supply the electromagnetic fields with frequencies only in certain ranges. To overcome such limitations, the frequency can be adjusted upwards or downwards in a certain simple manner. In music, it would be termed going to a higher or lower octave. This would in effect cut the wavelength exactly in half (if going to a higher octave), or would exactly double the wavelength (if going to a lower octave).

When one needs to go to a lower range frequency, as in the last example above, one can simply divide the frequency number by 2, as many times as necessary, until arriving at the range wanted. Using that example:

18,125.29 hz / 2 = 9062.645 hz

9062.645 hz / 2 = 4531.32 hz

4531.32 hz / 2 = 2265.66 hz

2265.66 hz / 2 = 1132.83 hz

1132.83 hz / 2 = 566.42 hz

One could also arrive at the final result using a shorter method, which would be dividing the original frequency by 32:

18,125.29 hz / 32 = 566.42 hz

Indeed, there is a set of dividers (or multipliers, if one wants to go upwards), that can be used to accurately convert frequencies to the desired range. They are:

2 4 8 16 32 64 128 256 512 1024 2048 4096 etc.

Using these numbers, one can assume a sympathetic vibration is occurring at a "mathematically resonant frequency", or a "mathematically resonant wavelength".

So, where does one go to find DNA base pair information on an item that one wants to affect in some way? There are databases available on the internet that give DNA / RNA base pair coding information for millions of items. One must learn how to use and extract the proper information from these databases; while it is not difficult, it takes a little practice, and willingness to learn a few things along the way. These databases are located at:

Maestro Site

Entrez Site

Sometimes there is valuable information that can be found in books and journals relating to biochemistry, and molecular and cell biology. Take advantage of search engines and indexes to find what is needed.

There is yet another angle to the DNA / RNA approach that seems to be getting recent attention. Sometimes, if we only have basic information about a protein, i.e., how many amino acids are in the protein chain, we may be able to find a usable frequency from this information. Because an amino acid is ALWAYS coded by three base pairs in the messenger RNA, we can arrive at a base pair number by multiplying the number of amino acids in a protein chain by 3.

For example, if there are 100 amino acids in a protein, there would be 300 base pairs in the final messenger RNA related to that protein. Then, to arrive at a frequency:

4,526,016.44 / 300 base pairs = 15,104.4 hz

and to arrive at a lower range,

15,104.4 / 32 = 472 hz

There is another internet database that gives ONLY amino acid information about many thousands of proteins. It is located at:

Amino Acids

It is hoped that this very brief summary will be helpful in understanding and using the DNA-related information for frequency research. The concepts discussed in this paper are not intended to suggest treatment for any disease or condition, and this writer makes no claim that they could in any way affect any person's state of health.