

## The Natural Pharmacy

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## How Does Homeopathy Work?

This is a question I am often asked, particularly by fellow pharmacists, physicians and health care professionals. The direct answer is...we don't know. That said, and before you stop reading, let me ask you a question. How many drugs do you recommend or prescribe with an unknown mechanism of action? Check your PDR or favorite pharmacology textbook and you may be very surprised.

There are several theories of how homeopathic drugs work. Let me present what I perceive to be the most plausible of possible explanations.

#### Hormesis

Edward J. Calabrese, PhD at the University of Massachusetts in Amherst has written extensively on this subject in very conventional journals. The hormesis hypothesis states that most, if not all, chemical and physical agents, such as radiation, have the capacity to stimulate biological effects at doses below the toxicity threshold, while causing toxicity at doses above the threshold. This concept is validated by the Arndt-Schulz Law of pharmacology which essentially says the same thing and is often used to explain the beneficial effects of microdoses of potentially toxic substances that are often used in homeopathy.

#### Can water remember?

A second theory is the systemic memory mechanism of water, which simply states that water can remember. It can be imprinted with the memory of a substance.<sup>2</sup> This may explain the effects of homeopathic drugs well beyond Avogadro's number (12C or 24X). This concept is also being researched with modern analytical procedures. There is much that we still do not know about something so apparently simple as water. Stay tuned.

### Other possible mechanisms of action

The American Association of Homeopathic Pharmacists (AAHP) in their pharmacy c.e.u. program, an *Introduction to Modern Concepts of Homeopathic Pharmacy*<sup>3</sup> presents the following "possible mechanisms of action" of homeopathic drugs:

The human body is wonderfully adaptive and is constantly maintaining its equilibrium and harmony. This process of adjustment is continuous. For example, on a hot day we sweat and in the cold we shiver. These simple examples are good illustrations of the constant adjustments being made due to the environment or specific stimuli. The endocrine and nervous systems are involved in mediating these adjustments, though all of the body's systems are involved in a complex process designed to maintain homeostatic equilibrium.

When the stimuli is weak, the body's response is moderate; the resulting changes are minimal or pass without our notice at all. When the stimuli is great, then the body's response must be equally strong or the body will be overwhelmed and the changes which occur to our body can be equally dramatic.

These adjustments are our "symptoms." We may not think of perspiration as a symptom, but it is the body's way of cooling itself. When we fall and bruise ourselves, the area becomes tender and discolored. These symptoms, while mild, are the healing processes for the damage done to the injured tissue. Inflammation occurs, damaged cells collect, the lymphatic system and lymphocytes mobilize to phagocytize dead cells and debris and remove it from the area. In the case of a viral infection, the same process of inflammation occurs, the immune system is activated, antibodies are formed and systems develop. The symptoms may include fever, runny nose, sneezing, cough, headache, body aches. All of these symptoms represent the body's efforts to overcome and eliminate the viral infection.

Symptoms are therefore a positive phenomenon. They are the body's way of telling us that it is coping with stimuli or stress being applied to it. Homeopathy utilizes these symptoms to assist the body in its efforts to regain its balance and state of health through the application of the "law of similars."

Many of the concentrations used in homeopathic drugs may at first glance seem to be so dilute as to have no possible physiological effect. But it is important to put these concentrations in perspective by comparing them with the normal concentrations at work in our bodies. Our body typically deals with ion concentrations in lymphatic fluid and serum of 10.3 g/ml. Hormone concentrations range from 10.5 to 10.18 g/ ml depending upon the hormone and the tissue where it is being measured. From this it is apparent that most of the lower homeopathic potencies correspond with the natural physiological concentrations found in the body. Higher homeopathic potencies, which correspond to extremely low concentrations, utilize mechanisms for their actions that are not understood. While controversy surrounds the effectiveness of high dilutions, there is research which reports that these very highly diluted solutions do have physiological effects on a variety of natural systems.

In a series of experiments continued over 35 years, Kolisko<sup>4</sup> reported that wheat seed growth was promoted by low dilutions of various metallic salts, inhibited by somewhat higher dilutions, and stimulated again at dilutions higher than Avogadro's number. Another experiment<sup>5</sup> tested the effect on guinea pigs of daily doses of sodium chloride prepared in 30X, 200X, 400X, 600X, 800X, 1000X, 1200X and 1400X dilutions (all well past Avogadro's number). The trial, lasting six months,

was repeated two years in succession. Controls received distilled water. Test animals lost weight and appetite, had dull shaggy coats, and dull watery eyes, were less active than controls, gave birth to young weighing less than the controls and had a higher mortality and lower reproduction rates than the controls.

Other experiments, using techniques from physics, have also reported that homeopathically dilute substances display measurable differences that may seem paradoxical due to the small concentrations present. Nuclear magnetic resonance experiments conducted in 1963 measured three solutions: a) 87% ethanol in water, b) sulphur 12X (prepared with succussion at each step, and c) an equivalent dilution of sulphur 12X prepared without succussion. The authors were able to distinguish the properly prepared sulphur 12X from the others, and concluded "some form of energy is imparted by succussion to a homeopathic drug, resulting in a slight change of the alcohol in these dilutions. There is a structural change in the solvent as the potency is made from the tincture to a higher dilution."

A more recent experiment<sup>7</sup> measured the changes in hydroalcoholic solutions prepared with serial dilution and succussion. Dilutions of sulphur from 5X to 30X were prepared using succussion, vial rotation and neither succussion nor rotation. Measurable and characteristic changes in the spectra were found at each stage of dilution with succussion. These characteristics were absent in analogous solutions prepared without succussion or solute.

A number of theories have been attached to homeopathy in an attempt to explain how these dilute solutions work. The effects of homeopathy can be clinically evident and the physiological changes that homeopathic remedies create in the body have been measured. However, the exact mechanisms for how homeopathy interacts with the body's systems remain unknown.

One possibility is that homeopathic dilutions assist the body to reactivate enzyme and endocrine systems by interacting with regulatory and biofeedback mechanisms. Homeopathic concentrations are in the proper range for interacting with

the receptor sites at the level of cellular membranes, enzymes and neural synapses.

Researchers have stated that the length of the bond between molecules increases in length with repetitive succussion sites. Bond length is a measure of bond strength since it takes more energy to hold the molecules together at greater distances. The kinetic energy of the succussion process becomes transformed into potential energy held within the molecules in the form of molecular bonding.

Current thought is that low dilutions (1X-12X) work on organs and tissue and are used in acute conditions or for drainage. Drainage remedies facilitate or enhance the function of the detoxifying organs, such as liver, kidneys or lymphatic systems. They are claimed to have a stimulatory effect on the system. The intermediate dilutions (12X-30X) are thought to act in a

regulatory fashion, with a slight stimulation of intermediary metabolism in order to achieve homeostasis. Potencies above 30X are used for emotional and mental symptoms or for the constitutional nature of the individual.

Some individuals feel that homeopathic medicines work in a manner similar to vaccines. Others claim that their action is due to the specific resonance that each drug possesses. There is a specific and consistent energy pattern under electromagnetic resonance imaging. Technology allows resonant frequency to be measured, so this may be part of the answer. Still others claim an action similar to the phytotherapeutic effect for low dilutions of herbs. All of these ideas may be true. However, if the symptoms of the body are viewed as total disregulation, and an attempt is made to find the appropriate homeopathic drug(s) based on similarity with symptoms, it could be theorized that homeopathics are able to affect receptors in a way to reestablish normal function. The bottom line is that the exact mechanism of action in homeopathy has not yet been determined.

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