

## A Skeptics Guide to



# HOMEOPATHY

Homeopathy is an “alternative medicine” invented in the early 19<sup>th</sup> century by German doctor Samuel Hahnemann. Despite numerous experiments showing homeopathy to have no effect, it has become a multi-million dollar international industry with its own special rules in advertising law.

In the 19<sup>th</sup> century, homeopathy was seen as a welcome alternative to dangerous medical practices of the time such as blistering, purges, leeches, and blood-letting. Although homeopathy has declined with advances in mainstream medicine, many people are nervous about the complex array of medicines that they do not understand, and which may have adverse side-effects. To them, homeopathy sounds great. Homeopathic remedies are advertised as safe. They have no side-effects, you can't overdose, they are non habit-forming, and have no “use by” date. Why?

Homeopathic preparations contain no medicine. -Some people feel better when they take homeopathic potions or pills. Some people don't. In the modern world it's easy to think that every time we are sick we should take medicines to make us better, (despite the fact that conditions like colds, 'flu and hangovers run their course and go away without medical intervention). Maybe homeopathic potions don't work, but some people just feel the need to take something so that they can feel confident and in control. This well-known phenomenon is known as the “placebo” or “sugar pill” effect.

In support of homeopathy, practitioners claim unique, special laws which defy common sense and sound suspiciously like magic spells.

“Like Cures Like” – Homeopaths believe that if you take a substance that affects humans in a certain way, and subject it to homeopathic dilution, it becomes a potion that cures those effects. For example: pollen triggers hay-fever, so a homeopathic dilution of pollen must cure hay-fever. Coffee keeps people awake, so its homeopathic dilution must cure insomnia.

“Homeopathic Dilution” - If you take a mixture and keep adding water, the mixture will get progressively weaker. Any effect the mixture has would be expected to decrease. Homeopaths, on the other hand, claim that if you shake or tap the container a certain number of times after each dilution, the healing effect of the mixture will in fact increase. Claiming the potions are getting stronger, homeopaths usually dilute them to such a degree that you'd need to drink more than an ocean's worth to be sure of getting just one molecule of the active ingredient. A bottle of pills or potion will contain only the diluting substance (usually water, alcohol or lactose), and none of the healing substance.

One typical homeopathic medication, the 'flu remedy, Oscilloccinum, starts with duck's liver. The liver mixture is diluted to the ratio of one part in  $10^{400}$ . At that rate, one duck is easily enough to make enough anti-'flu “medicine” to satisfy the world's population many times over; in fact it's so dilute that if you were to prepare the product with only one molecule of the duck liver, it would produce more than enough 'flu potion to fill the known universe. This product reaps \$20 million each year. (The unlucky duck has been dubbed “The Twenty Million Dollar Duck.”) The manufacturers don't show the quantities of ingredients on packets of homeopathic products; they show dilutions in a special code. This is because the high dilutions ensure the product will actually contain no active ingredients! The duck liver dilution in Oscilloccinum is written as “200C” . This means the mixture has

