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NEWS, VIEWS & REVIEWS

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TEN HERBS AND FOODS THAT KILL SUPERBUGS

Because of massive over-prescribing by the modern healthcare industry, today's crop of antibiotics is becoming less and less effective. "It is not difficult to make microbes resistant to penicillin in the laboratory by exposing them to concentrations not sufficient to kill them," warned Alexander Fleming, the creator of the first antibiotic, penicillin, back in 1945. He said "There is the danger that the ignorant man may easily under dose himself and by exposing his microbes to non-lethal quantities of the drug make them resistant."

There are 10 herbs and foods that will act as a good antibiotic and control even so to say superbugs that too naturally:

1. Honey: In a recently released study, researchers from the Salve Regina University in Newport, Rhode Island, reaffirmed that raw honey is one of the best natural antibiotics you can have.

"The unique property of honey lies in its ability to fight infection on multiple levels, making it more difficult for bacteria to develop resistance," said one of the researchers. Honey uses a combination of weapons including polyphenols, hydrogen peroxide and an osmotic effect. Honey is practically an ambidextrous fighter, using multiple modalities to kill bacteria.

2. Colloidal silver: As noted by Gregory A. Gore, in his book, Defeat Cancer:

Prior to 1938, before antibiotics, colloidal silver was used by doctors as their main substance to fight bacteria in a more natural way than through the antibiotics they use today. Antibiotics can harm our kidneys and liver functions. Colloidal silver promotes healing.

3. Pascalite: This is a type of bentonite clay used topically and known for its ability to draw infections from wounds in a matter of hours or days, thereby bringing about total recovery.

4. Turmeric: This herb has been used in Ayurvedic and Chinese medicine for many thousands of years to treat a wide range of infections. The antibacterial and anti-inflammatory qualities have been known to be highly effective in the treatment of bacterial infections. It can also be used topically for MRSA and additional lesions of the skin.

5. Oil of Oregano: This is an essential oil known best for its bacteria-killing abilities, as well as controlling staph infections like MRSA. It contains antioxidant, antiseptic, antiviral, antifungal, anti-inflammatory, antiparasitic and pain-relieving properties. In 2001, Science Daily reported on a Georgetown University study which found that oregano oil's germ-killing properties were nearly as effective as most antibiotics.

6. Tea tree oil: This is also very potent and essential oil that has been shown to be effective in killing antibiotic-resistant MRSA on the skin. Therapeutic-grade tea tree oil must be used undiluted if it is to be used for this purpose.

7. Olive leaf extract: This substance has been used for a number of centuries to battle bacterial infections and is now currently being used as well to fight MRSA infections in some European hospitals. It provides immune system support while fighting antibiotic-resistant infections.

8. Garlic: It has been used for medicinal purposes around the world for thousands of years. It was even used in the 1700s to ward off the plague. It possesses very potent antibiotic, antiviral and antifungal properties.

9. Echinacea: This herb has been used to treat aging and a wide variety of infections for centuries. It was traditionally used to treat open wounds, as well as blood poisoning, diphtheria and other bacteria-related illnesses. Today, it is used mostly to treat colds and flu.

10. Goldenseal: This is one of the most popular herbs sold on the American market and has recently gained a reputation as an herbal antibiotic and immune system enhancer. American Indians used goldenseal as a medication for inflammatory internal conditions such as respiratory, digestive and genitourinary tract inflammation induced by allergy or infection, according to Herbwisdom.com.

J. D. Heyes , Naturalnews.com , June 16 2014

GREEN TEA REPAIRS DNA

To get to the cellular roots of effects of green tea on human health, Iris Benzie of the Hong Kong Polytechnic University and her colleagues monitored the activity of DNA repair enzymes in lymphocytes, shortly after people drank a cup of green tea and after a week of drinking two cups of tea each day.

The findings

An enzyme critical for fixing DNA damage from oxidation, hOGG1, and another that protects against such damage, heme oxygenase-1 (HMOX-1), were more active after the 16 study participants drank tea, compared to when they drank water. There was also 30 percent less DNA damage in lymphocytes 60 minutes after a cup of tea. Benzie says the finding "opens up a whole new avenue to look at the molecular mechanisms" of green tea's effect on cells.

The mechanism

Genes coding for hOGG1 and HMOX-1 did not show an increase in expression. The authors speculate that green tea triggers posttranslational changes that prolong the enzymes' half-lives or their ability to protect and repair DNA.

Another cup

"It's a good preliminary study," says Susanne Henning of the University of California, Los Angeles. She recommends studying animal models for a clearer understanding of the molecular mechanism in all tissue types. It also remains to be seen whether the changes Benzie observed actually correspond to any health benefits.

EDITOR'S CHOICE IN CELL & MOLECULAR BIOLOGY C.K. Ho et al., "Effects of single dose and regular intake of green tea (*Camellia sinensis*) on DNA damage, DNA repair, and heme oxygenase-1 expression in a randomized controlled human supplementation study," *Mol Nutr Food Res*, doi:10.1002/mnfr.201300751, 2014.

<http://www.the-scientist.com/?articles.view/articleNo/40061/title/Beneficial-Brew/> 12/06/14

DISCOVERING DRUGS FROM HERBALS, NEW PERSPECTIVES

With tens of thousands of plant species on earth, we are endowed with an enormous wealth of medicinal remedies from Mother Nature. Natural products and their derivatives represent more than 50% of all the drugs in modern therapeutics. Because of the low success rate and huge capital investment need, the research and development of conventional drugs are very costly and difficult. Over the past few decades, researchers have focused on drug discovery from herbal medicines or

botanical sources, an important group of complementary and alternative medicine (CAM) therapy. With a long history of herbal usage for the clinical management of a variety of diseases in indigenous cultures, the success rate of developing a new drug from herbal medicinal preparations should, in theory, be higher than that from chemical synthesis. While the endeavor for drug discovery from herbal medicines is "experience driven," the search for a therapeutically useful synthetic drug, like "looking for a needle in a haystack," is a daunting task. In this paper, we first illustrated various approaches of drug discovery from herbal medicines. Typical examples of successful drug discovery from botanical sources were given. In addition, problems in drug discovery from herbal medicines were described and possible solutions were proposed. The prospect of drug discovery from herbal medicines in the post genomic era was made with the provision of future directions in this area of drug development.

New Perspectives on How to Discover Drugs from Herbal Medicines: CAM's Outstanding Contribution to Modern Therapeutics
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HERBAL DRUG STANDARDIZATION FOR DIABETES

Diabetes is dreadful lifestyle disorder of 21st century. In addition to drugs, diet management, increased food fiber intake, Resistant Starch intake and routine exercise aid in managing such dangerous metabolic disorder. One of the key factors that limit commercial utility of herbal drugs is standardization. Standardization poses numerous challenges related to marker identification, active principle(s), lack of defined regulations, non-availability of universally acceptable technical standards for testing and implementation of quality control/safety standard (toxicological testing). The present study proposed an integrated herbal drug development & standardization model which is an amalgamation of Classical Approach of Ayurvedic Therapeutics, Reverse Pharmacological Approach based on Observational Therapeutics, Technical Standards for complete product cycle, Chemi-informatics, Herbal Qualitative Structure Activity Relationship and Pharmacophore modeling and, Post-Launch Market Analysis.

Evidence based herbal drug standardization approach in coping with challenges of holistic management of diabetes: a dreadful lifestyle disorder of 21st century. Raman Chawla and coworkers

(DRDO , New Delhi, India)

Journal of Diabetes & Metabolic Disorders 2013, 12:35

<http://www.jdmdonline.com/content/12/1/35>