# Natural Health News

June 2018

EVERGREEN SPA & WELLNESS ELY, MN

### NATURAL INSECT REPELLENTS



Sonja Jewell NTS, CMT, CCWFN

Evergreen Cottage 146 E. Chapman St. Ely, MN 55731 Phone: 218-365-2288

#### **STORE HOURS:**

Tuesday — Saturday 9 am-5 pm

CLOSED SUNDAYS & MONDAYS

**SPA HOURS:** 

By Appointment



Summertime calls most of us to spend time outdoors. However, bugs can make our time outdoors very uncomfortable and are carriers of many diseases at worst. Additionally, most commercial insect repellents contain a chemical known as DEET, which should be avoided at all cost. DEET (N, N-diethyl-meta-toluamide) is used in more than 230 different products—in concentrations of up to an astounding 100 percent. If a chemical melts plastic or fishing line, it is not wise to apply it to your skin. Duke University Medical Center spent 30 years researching the effects of pesticides. It was discovered that prolonged exposure to DEET can impair cell function in parts of your braindemonstrated in the lab by death and behavioral changes in rats with frequent or prolonged use. Children are particularly at risk for subtle brain changes because their skin more readily absorbs chemicals in the environment and chemicals more potently affect their developing nervous system. Other potential side effects to DEET exposure include: memory loss, headache, muscle weakness and fatigue, shortness of breath, muscle and joint pain, as well as tremors. DEET is used by an estimated one-third of the US population each year. Although DEET is approved by the US Environmental Protection Agency (EPA), it is a known eye irritant and can cause rashes, soreness, or blistering when applied to the skin. DEET has been shown to have a negative impact on wildlife and water sources. It is toxic to birds and aquatic life. DEET has been found in approximately 75 percent of U.S. water sources, including the Mississippi River. While the EPA says that using DEET is "safe" as long as you follow their long list of warnings, it should never be used with sunscreen. Recent studies using animal and human skin cells suggest the mixture might increase DEET absorption but also might make sunscreen ineffective to protect against UV rays as well. Many versions of sunscreen-bug repellent combinations are being sold, but because the Food and Drug Administration regulates sunscreen and the EPA regulates insect repellent, guidance for using these combo products is in limbo since they don't really belong to either agency. Complicating the issue, Canadian researchers recently tested human skin cells and found questions beyond the all-in-one products: Spraying on DEET and then rubbing on sunscreen actually increases DEET absorption the most. Because DEET is absorbed through the skin, it can cause serious damage to the nervous system and the immune system. Once DEET enters the bloodstream through the skin, it is known to cause neurological damage. DEET is most likely effective only because its neurotoxicity extends to insects as well as human beings. There is now evidence that DEET can kill brain neurons and therefore may possibly be a cause of ADHD, sleeping disorders and autism. Therefore, DEET should not be used on children. Another potentially harmful chemical found in many bug sprays is permethrin. This chemical is a neurotoxin. The EPA has even deemed this chemical carcinogenic and it is also damaging to the environment; it is particularly toxic to bees and aquatic life. It should also be noted that permethrin is very toxic to cats. Even a few drops can be lethal to your feline pet. It is used in some topical flea products, so when you see "for dogs only" on the label, it likely contains permethrin. Although permethrin is used as a pesticide, it can be dangerous to animals and humans. It can even cause infertility. Skin irritation, redness, swelling and rashes are the early signs and symptoms of poisoning with permethrin. Other signs include numbness, diarrhea, dizziness, fatigue, muscle twitching, burning sensations, cough, irritability to sound and touch, nausea and seizures. It is also known to debilitate the nutritive quality of plants, water and vegetables when used in excessive quantities. Fortunately, there are highly effective natural repellents on the market.

You will be able to find a variety of safe and natural insect repellents comprised of natural botanical oils and extracts that are every bit as effective as DEET at the Evergreen Cottage. You can also make your own bug spray by following the recipe below. Once you have been bitten, there are many herbs and natural agents that are soothing to the skin, and have anti-inflammatory properties. Swiping a cooled tea bag over your bites will help, as the tannins in the tea act as an astringent, reducing swelling. For bites all over your body, try soaking in the bathtub of warm water with two to three cups of apple cider vinegar added to it. The acidity of the vinegar will help stop the itch. Alternatively, dissolve some baking soda in your bathtub and soak for about 30 minutes. You can also mix some baking soda with a small amount of witch hazel to create a paste, and apply directly to the bite. Using either ice or heat are other options that can help ease the discomfort associated with bug bites. It has also been found that covering the bite with tape works well to suppress the itch. Other natural options include: Aloe vera, calendula (an herb with soothing properties), chamomile, cinnamon, cucumber (helpful for reducing swelling), raw organic honey, lavender, neem oil, tea tree oil (helpful for healing cuts, burns, infections and a multitude of other skin afflictions), basil (contains camphor and thymol, two compounds that will relieve itching) or thyme. Either crush up some fresh herb and apply directly to the bite, or use the essential oil. Lemon and lime (both have anti-itch and antimicrobial actions, however, avoid applying citrus to your skin when outdoors as blistering can occur when exposed to sunlight), as well as peppermint. Oatmeal can relieve itching and swelling. Make an oatmeal paste by mixing equal amounts of oatmeal and water in a bowl until you have a spackle-like substance. Spoon some paste onto a washcloth and apply it to irritated skin for about 10 minutes. Then wipe the area clean. If you have many bites, try an oatmeal bath instead. Sprinkle 1 cup of oatmeal or ground oats into a bathtub full of warm water. Soak in the oatmeal bath for 20 minutes, occasionally rubbing some of the clumped oatmeal onto irritated areas of your skin. Onions also can bring relief to your mosquito bites. The onion's juices, which leak out from the freshly cut bulb, can reduce severe itching and irritation. Onions also have a natural antifungal property that can reduce your risk for an infection. Cut a slice from an onion and apply it directly to the bite for several minutes. Rinse and wash the area well after you remove the onion.

#### MAKE YOUR OWN BUG SPRAY

Place the following essential oils and ingredients in a 4 oz. spray bottle: 60 drops Lemon Eucalyptus, 15 drops Rose Geranium, 15 drops Lavender, 15 drops Peppermint. Add 1 TBSP. vodka or vinegar and shake vigorously. Apply often!

Or try making a **BUG REPELLENT LOTION** by mixing essential oils into 4 oz. of your favorite unscented lotion. Shake well. Apply often!

\*The Center for Disease Control recognizes that Lemon Eucalyptus is as effective as DEET.



## **BUSINESS HOURS:**

TUESDAY through SATURDAY 9 AM—5 PM Closed Sunday & Monday

## NATURAL BUG BITE TREATMENT

Mix the following essential oils in a small glass container: 1 drop lavender (calms inflammation), 1 drop Tea tree (treats irritation) and 1 drop peppermint (numbs itching). Increase amount if needed for treating larger areas but in this case add a small amount of carrier oil. Apply mixture with a cotton swab. Itching/stinging should ease immediately. If itching does not stop, try 1 drop of clove essential oil. Normally, you will only need 1—2 applications for mosquito bites, but more for spider or other insect bites.

