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Summer means picnics, barbecues, parades and fireworks displays, especially around the 4th of July.

Summer also means an increase in injuries from backyard grills, bon-fires and fireworks. In 2006, an estimated 9,200 people were treated in emergency rooms for fireworks-related injuries, 36 percent of whom were under 15 years old.

Of injuries to children ages 10 to 14, 20% of the injuries were due to **SPARKLERS**.

It is wise to leave the fireworks to the professionals. However, if fireworks are legal where you live and you decide to use them, be sure to follow these important safety tips:

- \* Never allow young children to handle fireworks.
- Older children should use fireworks only under close adult supervision.
- \* Light fireworks outdoors in a clear area away from onlookers, houses and flammable materials.
- \* Light one device at a time; maintain a safe distance after lighting.
- Do not allow any running or horseplay while fireworks are being used.
- Never ignite devices in a container.
- \* Do not try to re-light or handle malfunctioning fireworks; douse and soak them with water and discard them safely.
- Keep a bucket of water nearby to fully extinguish fireworks that don't go off or in case of fire.



Fireworks during the Fourth of July are as American as apple-pie, but did you know that two out of five fires reported on that day are started by fireworks, more than for any other cause? The good news is you can enjoy your holiday and the fireworks, with just a few simple safety tips:

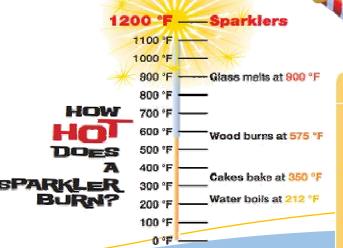
## PROCEED WITH CAUTION!

- Leave fireworks to the professionals.
  Do not use consumer fireworks.
- The safest way to enjoy fireworks is to attend a public display conducted by trained professionals.
- After the firework display, children should never pick up fireworks that may be left over, they may still be active.



include sparklers and firecrackers. The tip of a sparkler burns at a temperature of more than 1,200 degrees

> Fahrenheit, which is hot enough to cause third-degree burns.



## FACTS

- Each July Fourth, thousands of people, often children and teens, are injured while using consumer freworks.
- The risk of fireworks injury is highest for children ages 5–19 and adults 25–44.
- Nearly 90% of emergency room fireworks injuries involve fireworks consumers are permitted to use.







## Vitamin D Deficiency — It may be an Epidemic

If you haven't had your Vitamin D level tested, ask your doctor to do a test. It's very possible that you could have a Vitamin D deficiency.

**Why it matters:** Almost every tissue type in the body has receptors for Vitamin D, which means that the tissues require Vitamin D for adequate functioning.

Recent research is revealing that inadequate levels of Vitamin D could be responsible for increasing the risk of diabetes, heart disease, many cancers, autoimmune diseases, cognitive decline, pregnancy complications, bone disease, allergy, chronic fatigue, and even frailty.

**Sunlight is our best source:** We all learned in grammar school that D is "the sunshine vitamin" because when our skin is exposed to sunlight, we make our own D. What happens is that the sun's ultraviolet B (UVB) waves trigger chemical reactions in our bodies so they manufacture a pre-vitamin D that penetrates our bloodstream and then converts to the active form, Vitamin D-3. We have all been told for years that we should stay out of the sun and use sunscreen. But limited exposure to the sun can make a huge difference in our Vitamin D levels.

In the Northern hemisphere, exposing your arms and legs (and abdomen and back whenever possible) to sunlight twice weekly for about 15 to 30 minutes of June noontime sun produces adequate levels of D3. There's no need to expose the sensitive skin of your face because, ironically, your face is highly inefficient at Vitamin D production anyway. If you have darker skin, you'll need more exposure.

Melanin is what gives skin its color. Lighter skin has less melanin than darker skin. Melanin is able to absorb UVB radiation from the sun and reduce the skin's capacity to produce vitamin D3. People with a naturally dark skin tone have natural sun protection and require at least three to five times longer exposures to make the same amount of vitamin D as a person with a white skin tone.

We can also get some limited D from foods, oily fish like wild salmon and fortified milk among them, but not enough. So supplements are often the answer.

**How much do we need?** All it takes is a simple blood test to find out if you are deficient in vitamin D, but determining the optimal level is not quite as simple. There is a lot of controversy about what the optimal levels and deficient levels are. The test will measure your 25(OH)D level. The Institute of Medicine set the guidelines for serum (blood) 25(OH)D levels to be as follows:

- Deficiency: 25(OH)D level BELOW 12 ng/mL
- Inadequate: 25(OH)D level BETWEEN 12-20 ng/mL
- An adequate 25(OH)D level is between 20-50 ng/mL
- Excessive: 25(OH)D level over 50 ng/mL

If you have an adequate level of Vitamin D, you may still need a supplement to maintain that level if you have limited sun exposure.

The guidelines for how much vitamin D we need were updated in 2010 by the Institute of Medicine (IOM). They were set based on the evidence for bone health and assumed that there was limited sun exposure. The recommended dietary allowance (RDA) for vitamin D is as follows:

- 600 IU/day for ages 1 to 70
- 800 IU/day for over 70 years of age
- 600 IU/day for pregnant and lactating women

These amounts need to be increased, however, if you have a Vitamin D deficiency. Your doctor may recommend 1000 – 2000 IU/day or more of a D3 supplement.

Caution: Before taking larger amount of supplemental Vitamin D, know your current blood level. High blood levels can cause harm also.

Excessive intakes of Vitamin D can lead to high levels of calcium (hypercalcemia). The symptoms of this are weakness, confusion, constipation, loss of appetite, and development of painful calcium deposits.





