



MARCH 30, 2015

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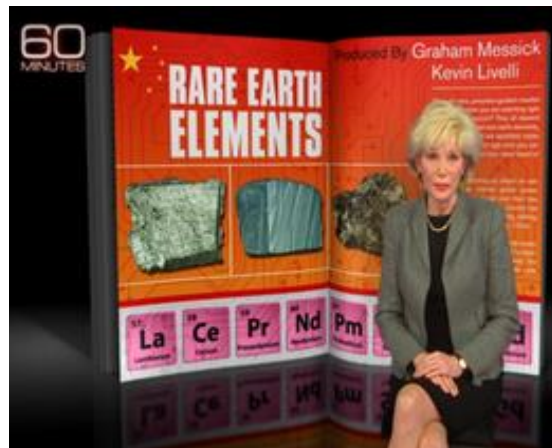
Innovative engineers have recently developed techniques to **3-D print custom bones**—a remarkable medical advancement made possible by minerals. The 3-D metal bones are porous, allowing new tissue to grow inside. Over time, the bone dissolves, leaving healthy bone in its place. Minerals power incredible medical innovations and applications like this every day.

Here are just a few other places you can find minerals in medical applications:

- **Beryllium:** In new mammography equipment, beryllium transmits lower doses of radiation and has greater tumor-targeting accuracy, enabling breast cancer detection at earlier, more treatable stages.
- **Copper:** Copper is frequently used in hospital surfaces due to its anti-microbial properties. It is also found in MRI scanners and has proved effective in fighting the H1N1 influenza virus.
- **Platinum:** Platinum is the active ingredient in select chemotherapy drugs.
- **Silver:** With the emergence of antibiotic-resistant superbugs, **researchers** are turning to silver as an alternative

DID YOU KNOW?

60 Minutes Investigates Rare Earth Elements



60 Minutes' report on Sunday night made it clear that the U.S. is too dependent on other countries for minerals essential for everything from smartphones to the new F-35 fighter jet. Don't miss this: [Watch the full story here.](#)

Thank Minerals!

antibacterial material for hospital surfaces.

- **Titanium:** Titanium is used in countless surgical equipment and items like pins, bone plates, wires, rods, expandable rib cages and screws due to its resistance to bacteria.

Lifesaving medical technology depends on minerals and metals, which is why we must ensure ready access to a stable supply of the raw materials needed for these vital applications. That's why Congress should pass legislation that streamlines the U.S. mine permitting process. **If you agree, please share this Facebook ([click here](#)) and Twitter ([click here](#)) post with your friends.**

Post: *We can't afford to take minerals for granted. America must open access to U.S. minerals & metals. Share if you support mining!*

Thank you,

Hal Quinn
NMA President and CEO



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