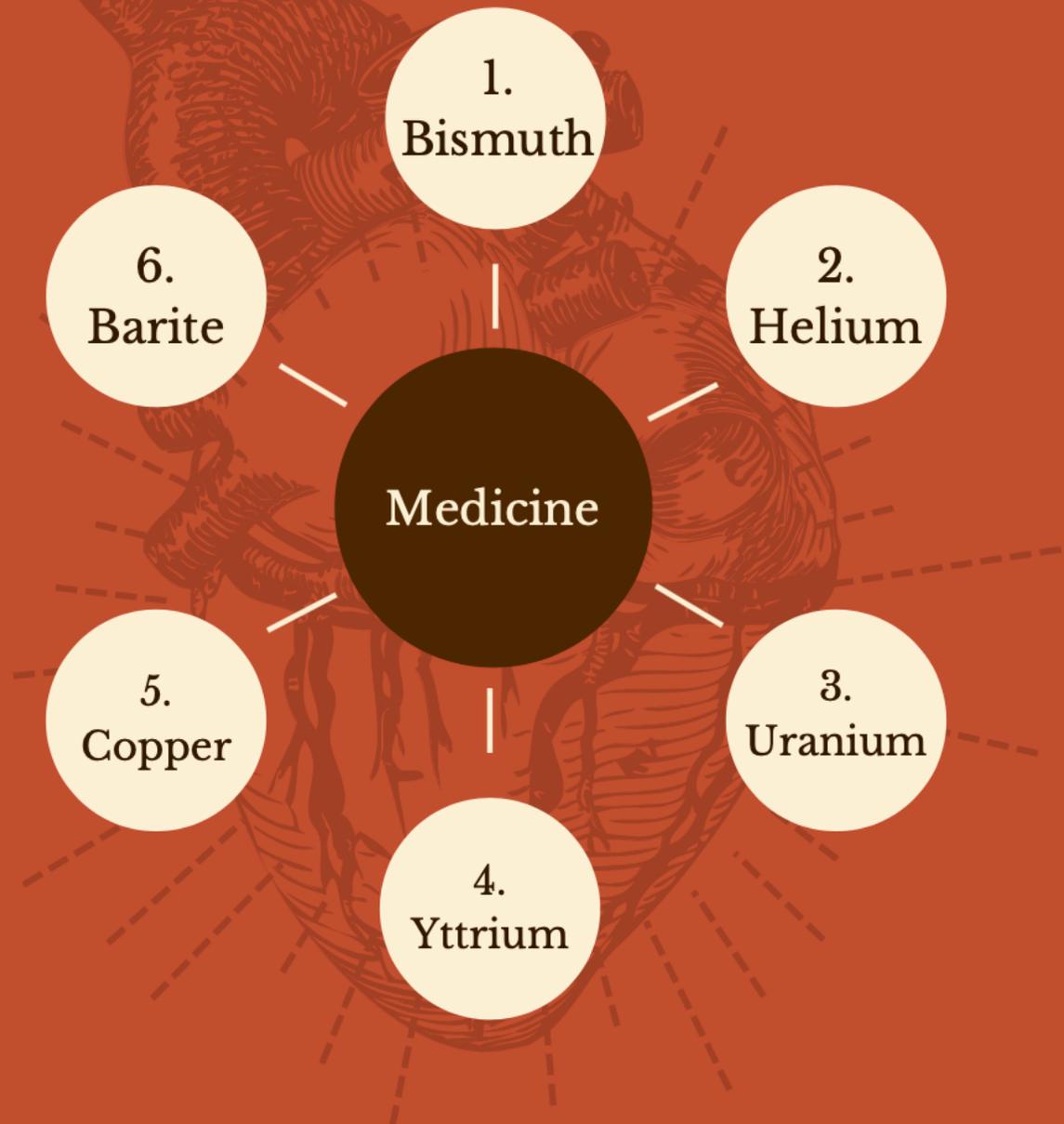


# Minerals in Medicine

1. Bismuth (Bi) is used in pharmaceutical treatments for burns, intestinal disorders, and stomach ulcers. 96% of bismuth is imported to the United States, with 76% sourced from China.
2. Helium (He) is used in powerful magnets and is considered irreplaceable in MRI machines. 79% of helium imports to the U.S. come from Qatar.
3. Uranium (U), used in medical isotope production, is imported at a rate of over 90% with approximately half sourced from Kazakhstan, Russia, Uzbekistan, and Chinese-owned mines in Namibia.
4. Yttrium (Y), one of the rare earth elements, is a component in laser crystals used for specialized surgical procedures, and in treatment of certain cancers. The United States is 100% reliant on foreign sources for yttrium; 87% of our demand is met by China.
5. Copper (Cu) has natural antimicrobial properties, with recent research indicating its effectiveness in medical face masks and installed on hospital beds. Due to the growth of EVs and other technologies, demand is projected to skyrocket. We are expected to need as much copper in the next 25 years as we've produced in the last 5,000 years (World Bank).
6. Barite ( $BaSO_4$ ) is used in the creation of x-ray machines. 87% is imported to the United States, mostly from China.



Note: all statistics sourced from the 2020 USGS Mineral Commodity Summaries