



Giant Fertilizer Bomb

[Source: TH](#)

A study in “**Proceedings of the National Academy of Sciences**” suggests that a meteorite impact **3.26 billion years** ago acted as a **giant fertilizer bomb** for early life on earth.

- **Nutrient Delivery:** Ancient rocks from the **Barberton Greenstone Belt in northeastern South Africa** provided evidence of recovery and growth in **microbial life** after the meteorite impact.
 - The **carbonaceous chondrite meteorite** delivered essential nutrients like phosphorus and iron, enabling early microbes and archaea to thrive.
- **Effect of the Impact:** The meteorite, measuring **23-36 miles** in diameter and **50-200 times larger than** the asteroid that killed the dinosaurs, caused widespread devastation.
 - Its impact created a **massive vapor cloud and tsunami**, resulting in prolonged darkness and heating that severely affected life at the time.
- **Resilience of Early Life:** Despite initial devastation, life rebounded quickly, with microorganisms adapting and thriving in nutrient-rich environments created by the impact.
 - The findings challenge the notion that meteorite impacts are solely destructive, highlighting their potential role in fostering early life.

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What is a....?

Comet

A comet is a mass of ice, rock, and dust, and often has a tail that is made up of dust and other materials.



Asteroid

An asteroid is made up of metallic or non-metallic rocks, and orbits the sun. They can range in size from a few centimeters wide to almost a thousand kilometers across!



Meteoroid

Meteoroids are usually fragments of asteroids or comets, often smaller than 1 meter wide, that fly through space.



Meteor

A meteor is a meteoroid that enters Earth's atmosphere. It burns up as it travels through the atmosphere, producing a streak of light behind it.



Meteorite

If a meteor doesn't completely burn up in the Earth's atmosphere, the fragment found on Earth is called a meteorite.



Read more: [Diyodar Meteorite](#)

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