



FROM SPACE DOWN TO EARTH

NASA Technology Makes Our Lives Better

Ingestible Toothpaste

A consultant to NASA developed a foamless toothpaste for the zero-gravity environment of space. Because it could be swallowed, it was useful as a first toothpaste for children.

Programmable Pacemaker

Pacemakers developed by NASA benefit from chips using the two-way telemetry of space communication and long-life batteries from spacecraft technology.

Scratch-Resistant Lenses

Plastic lenses use NASA's plasma polymerization technique to make lenses lighter, cheaper, stronger and virtually shatterproof.

Flexible Eyeglass Frames

Memory metals such as titanium alloys are used to make flexible metal eyeglass frames. The metals came from research for the International Space Station.

Cell Phone

A receiving amplifier helped NASA hear weak communication signals from space, and helped boost cellular phone frequencies, as well as television and radio broadcasts.

Lead Poisoning Detection

A portable, electro-optical instrument developed with help from NASA detects toxic levels of lead in the bloodstream. Lead exposure can cause delayed growth and behavioral and learning problems in children.

Senior Meals

Using experience NASA gained from manned space projects, a meal system was developed to fill nutritional gaps for senior citizens unable to take part in meal service programs.

Medical Testing

Thanks to NASA's "camera on a chip" technology, doctors can test bone density in 30 seconds.

Laptop Computer

Fans required to cool laptops were first used by NASA in portable computers that monitored navigation.

Bar Codes

Bar code labels were developed to track NASA's inventory of millions of space shuttle parts and to withstand the extreme conditions of space.

Inorganic Coating

NASA developed a coating to protect metal structures from sun, salt and water. The coating is nontoxic and nonflammable, bonds quickly to steel and lasts for more than 25 years.

