



Blood Pressure Checker

An estimated 30 million people in the United States have high blood pressure, or hypertension. But a great many of them are unaware of it because hypertension, in its initial stages, displays no symptoms. Thus, the simply-operated blood pressure checking devices now widely located in public places are useful health aids. The one pictured above, called Medimax 30, is a direct spinoff from NASA technology developed to monitor astronauts in space.

For manned space flights, NASA wanted a compact, highly-reliable, extremely accurate method of checking astronauts' blood pressure without the need for a physician's interpretive skill. NASA's Johnson Space Center and Technology, Inc., a contractor, developed an electronic sound processor that automatically analyzes blood flow sounds to get both systolic (contracting arteries) and diastolic (expanding arteries) blood pressure measurements. NASA granted a patent license for this technology to Advanced Life Sciences, Inc., New York City, manufacturers of Medimax 30.

Medimax 30 is a coin-operated self-checking device that produces blood pressure readings in only 30 seconds—and provides a printed record as well. It is extremely simple; the user puts an arm in the self-adjusting cuff and the rest is completely automatic. Medimax 30 allows the hypertension sufferer to keep ongoing blood pressure records between visits to the doctor's office. It also affords an opportunity for early detection of the disease by the many who are not aware of their problem.

Springback Foam

A decade ago, NASA's Ames Research Center developed a new foam material for protective padding of airplane seats. Now known as Temper Foam, the material has become one of the most widely-used spinoffs. Latest application is a line of Temper Foam cushioning produced by Edmont-Wilson, Coshocton, Ohio for office and medical furniture. The example pictured is the Classic Dental Stool, manufactured by Dentsply International, Inc., York, Pennsylvania, one of four models which use Edmont-Wilson Temper Foam.

Temper Foam is an open-cell, flame-resistant foam with unique qualities.

As illustrated in the before and after photos of the dental stool, the material takes the shape of impressed objects temporarily but springs back to its original shape, even after 90 percent compression. When employed as furniture cushioning, it molds to conform to body shape, evenly distributing weight over the entire contact area for comfort and working efficiency. In other applications, the material absorbs up to 90 percent of impact shocks and becomes firmer after subjected to sudden impact. Among the many applications of Temper Foam are wheelchairs and hospital pads, cushioning for off-road vehicles, and a variety of athletic equipment such as body pads, chest protectors and football helmet liners.

