

Help around the house New products, technology make the home more accessible and tasks easier for people with disabilities

April 11, 2004 - Simple tasks taken for granted by most of us can be real challenges when a person has severe arthritis or a physical disability.

Reaching for a glass in a cabinet, getting up from the couch or even going to the bathroom are not easily done when you're confined to a **wheelchair** or have weakened limbs.

Advances in technology and innovative products are constantly being introduced that make it easier to get around the house for the physically challenged.

Last August the Food and Drug Administration approved the iBOT 3000 Mobility System, considered the next generation of **power wheelchairs**.

Dean Kamen, founder of DEKA Research and Development Corp. and inventor of such devices as the Segway Human Transporter and the wearable infusion pump for chemotherapy, developed the iBOT.

The gyro-balanced **wheelchair** uses electronics, sensors and software components to automatically adjust wheel position and seat orientation to stabilize the user.

What this means is that users can safely climb up and down stairs, climb curbs as high as 4 inches, travel over uneven terrain like grass or gravel and even elevate themselves to eye level, allowing them to speak to standing adults and reach high places independently.

"It is estimated that approximately 2 million Americans use a **wheelchair** or scooter type of mobility aid," says Jean-Luc Butel, president of Independence Technology, the Johnson & Johnson subsidiary that partnered with Kamen to produce and market the iBOT.

"For people with mobility-related disabilities, the iBOT Mobility System represents breakthrough technology not available in any other product. In essence, the iBOT Mobility System empowers users to go where they want to go."

Priced at \$29,000 per unit and available by prescription only, the iBOT can often eliminate the need for other home modifications like ramps, elevators and lower appliances and light switches.

Last week, Mike D'Arcy of Plainfield was the first person in the Midwest to receive an iBOT.

"I feel that I have started a new chapter in my life today with the delivery of my own iBOT," D'Arcy said. "I look forward to expanding my world and all that I am able to do with my family, my career and my life."

There are all kinds of less high-tech aids for the home available for people who need assistance.

Uplift Technologies of Dartmouth, Nova Scotia, creates multifunctional furniture.

"An emerging trend among the aging population is the demand for multifunctional furniture," says Amanda Dean, spokeswoman for Uplift Technologies. "As people age, so do their needs, though their taste in furniture may not. That is why we concentrate on innovative solutions to help those with mobility restrictions maintain their lifestyle."

The company's UpEasy power lifting cushion transforms an armchair or sofa into a lift chair for users weighing up to 300 pounds. It can even be safely used in recliners. Weighing only 12 pounds, the device is portable with a built-in handle for carrying.

To rise, a user flicks the power lever up and then places his hands on the arms of the chair or sofa while being lifted. The cushion stops automatically when it reaches its maximum height or it can be stopped by pushing down on the power lever.

The power lifting cushion is only available through catalogs in the United States. One of those is the Plow and Hearth catalog where it lists for \$99.95, plus tax and shipping. You can view it at www.plowhearth.com in its personal care "problem solvers" section or phone (800) 494-7544.

Uplift Technologies also has a similar product for the bathroom, Dean says. The Uplift Commode Assist is a self-powered lifting commode chair that helps users seat and raise themselves.

Since the chair only lifts as needed, the commode assist allows users to maintain their muscular strength, while also relieving stress and strain on joints.

The commode assist is available through certain local medical equipment dealers including Reliable Medical in Mundelein, Medserve Medical Equipment in Palatine and Westmont Pharmacy Home Medical Equipment in Westmont. The cost is about \$330.

Built-in home features like cabinets and closets often offer particular challenges to those with disabilities.

Accessible Design and Consulting Inc. of Santa Monica, Calif., offers an array of products, including a hydraulic pull-down closet rack.

It and other products can be viewed online at www.accessibleconstruction.com and can be ordered by calling (866) 902-9800 toll free. The closet rack ranges in price from \$186 to \$302, depending on the size and style, plus shipping and installation.

In the kitchen, cabinets, sinks and cooktops that raise and lower with the push of a button are available.

AD-AS, a furniture company from Boise, Idaho, focuses on designing "furniture solutions of universal design."

For instance, Approach for the Cooktop is a motorized adjustment for cooktops and counters. Users can choose their own gas or electric cooktop and the Approach system provides the accessibility that allows those in **wheelchairs** to raise and lower the cooktop to see into tall soup pots and cook with ease.

Open space underneath the cooktop lets users pull straight up to the cooking surface with room for **wheelchairs** under the stove.

When they are done, the cooking surface can be adjusted for use by other family members. The system costs \$1,145, plus shipping and installation.

Wall cabinets can be similarly adjusted with AD-AS's Approach for the Cabinet.

The motorized system for wall cabinets provides a 20-inch range of adjustment. It can move cabinets down to meet a standard height counter or one that's 34 inches high and works with any face frame or European style cabinet. The system costs \$990, plus shipping and installation.

Even the kitchen sink can be raised and lowered. Approach for the Sink works just like its sister products for the cooktop and cabinets except that a special flexible drain kit is required. The cost of the adjustable sink kit with the special drain kit is \$1,177, plus shipping and installation.

For more information about AD-AS products or to request a catalog, phone (800) 208-2020 or log onto www.ad-as.com.