

Rheumatoid Arthritis

Rheumatoid Arthritis is a horrendous disease that leads to the inflammation of the joints and surrounding tissues. There are many symptoms that include fatigue, loss of appetite, morning stiffness, widespread muscle aches, and weakness. Many people with rheumatoid arthritis may have pets to keep them company or to distract them from the pain in their joints and their limbs. It is proven that having a pet can help make people relaxed and feel less anxious and stressed. A pet is helpful for many people, whether they have diabetes or arthritis. For someone with diabetes an animal could help by alerting their owner whenever their blood glucose level drops. It is also a known fact that people with arthritis need to stretch, so playing and interacting with a pet is a good way to get the daily stretches into someone with arthritis's schedule. They are able to walk and play games with their pets, such as Frisbee. Animals are also sensitive to people's feelings and are a great comfort to people who are not feeling well.

As rheumatoid arthritis creates many limitations both physically and mentally not many people have the capability of being able to take care of their pets as much as they should. Most people would not be able to pick up a book because of the increasing pain in their hands, so they would not be able to pick up a heavy bag of pet food. This thought was called to our attention when our VEX robotics team was brainstorming about what type of prototype we should build for our entry in the Future Foundation Product Design category. We found out that someone on our team's parents had rheumatoid arthritis and we started to understand the difficulty that this type of arthritis could cause in everyday life. After thinking and talking about this situation we decided to create a robot that could feed someone's pet on a timed schedule. Our pet-feeder robot is capable of picking up a food bowl, filling it with pet food, and dropping it off again. We believe that this would be a great help for those who have difficulty with feeding their pets. Our robot is a robot for the future because it is helping improve the lives of children and adults for many years to come.