Assistive Technology

2nd Edition

AUTHORED BY

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Credits

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Assistive technology (AT) encompasses a wide variety of equipment that helps an individual maintain or improve their performance in their daily lives.[1] The technology can be as simple as a reacher, a device to extend one's reach and limit the need to bend over, or as complex as a computer program to operate a wheelchair or the home environment. Either way, AT is used to facilitate independence and increase participation in activities that are meaningful to you!

AT can be simple and cost-effective or it can be expensive as AT may only be partially covered by insurance or not at all. There are two different types of assistive technology. High tech AT are devices that are electronically powered and often require additional training to use. Examples include text to speech applications, word prediction devices when typing, powered wheelchairs, smartphones, or iPads. Low tech AT devices are often commercially available, simple to use, and do not have an electronic component. Devices include simple tools such as reachers, sock aids, long-handled shoehorns, shower chairs, or tub benches.

It is important to understand and identify your goals as the consumer. You'll want to consider what activities you want to complete with less difficulty and how the context or environment influences the performance of those activities. If you are unsure of what devices you could benefit from, occupational therapists (OTs) can help. OTs are skilled at analyzing activity performance, barriers to activity performance, clients' abilities and preferences, and the clients' context allowing them to recommend the best device fit for the individual.[1] A referral to an OT can be made by your primary care provider.

Here you will find information on assistive technology that individuals with dysautonomia may find helpful. Please note, DSN does not endorse any specific devices/products, or equipment.

HIGH TECH ASSISTIVE TECHNOLOGY

High Tech AT typically includes devices and equipment that utilize electronic or digital components and may be computerized. These devices may be helpful for individuals with decreased endurance, brain fog, blurred vision, light/noise sensitivities, or limited range of motion. [2]

Some examples of high tech AT are:

- Accessibility Features: audio/visual customizations such as display screen changes in contrast, text size, and alerts
- Navigation apps
- Keyboard customizations
- Dictation/speech recognition such as text to speech, or speech to text applications
- Smartphone and smartwatch applications

PERSONAL OPERATING SYSTEM ACCESSIBILITY FEATURES

Personal operating systems on your computer, phone, or other electronic devices either have accessibility features built into them or allow you to download other applications for your needs.
Accessibility features make modifications to your existing devices when dealing with increased fatigue, blurred vision, light/noise sensitivity, or brain fog.
Potential helpful examples of accessibility features include display changes that allow you to alter text size or increase contrast to reduce eye strain or sensitivity to light, or voiceover/narration that allows you to navigate the device through voice and audio alone when dealing with fatigue or light sensitivity.

To learn more about accessibility features and how to access these services on your devices, click on the links below.

- Apple Accessibility
- Android Accessibility
- Windows 10 Accessibility Features
- Microsoft Accessibility

Voice-To-Text

You can use your voice to dictate and edit text instead of typing by hand on your devices when fatigue, brain fog, or eye fatigue makes writing and editing long passages difficult. This can be challenging in noisy areas, however.

Voice-To-Text Resources

- Google Docs Voice Typing
- Dictation.io for Google Chrome
- Microsoft Office Dictation
- Android Dictation
- Apple Dictation
- Additional Dictation Applications

Word Prediction Software

Word prediction software is great for those who might be experiencing brain fog or fatigue. This software uses the letter combinations while typing to suggest words that it thinks you are typing. See below to learn more about the benefits of word prediction software and for how to set it up using the following systems.

Word Prediction Software Resources

- What is Word Prediction Software?
- Apple Word Prediction Software
- Android Word Prediction Software
- Microsoft Word Prediction Software
- Google Docs Smart Compose

Screen Readers

When reading and/or comprehending written text becomes increasingly challenging due to brain fog or fatigue, screen readers are useful to turn written text into an audio message. The software can easily be accessed through downloading apps or exploring the accessibility features offered by web browsers, applications, and additional software already available on the device.

Screen Reader Resources

- Google Chrome Screen Reader
- Microsoft Edge Accessibility Features
- Apple Accessibility Screen Reader

Word Prediction on Phones

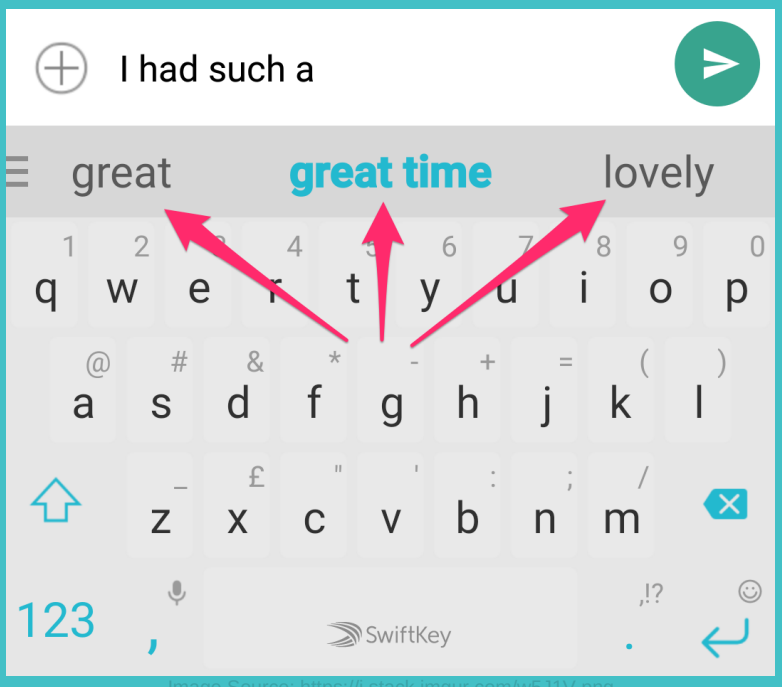


Image Source: https://i.stack.imgur.com/w5J1V.png

Enlarged Cursor Option Apple

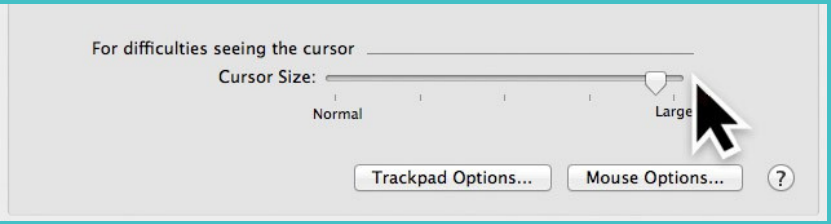


Image Source:https://cdn.cultofmac.com/wp-content/uploads/2012/02/cursor.jpg

Enlarged Cursors

Light sensitivity, difficulty concentrating, and eye fatigue can make it difficult to locate and move the cursor on your devices. This accessibility feature, already built into your device, will allow you to follow along with the content you are reading more easily.

Enlarged Cursors Resources

- Apple Enlarged Cursors
- Android Enlarged Cursors
- Microsoft Enlarged Cursors

Alternative Keyboards

These may be helpful when dealing with fatigue or painful muscles/joints associated with comorbidities of dysautonomia like EDS, CFS, or fibromyalgia. Keyboards with bigger key buttons can help you see better. Ergonomic keyboards can help to reduce strain. You can also select different keyboards on your smartphone device, enable a one-handed keyboard, a keyboard with keys in an alternative layout, or enlarge your keyboard to allow you to have an easier time texting, typing, and communicating.

Alternative Keyboard Resources

- Apple Keyboard Settings
- Android Keyboard Height
- Microsoft Changing Keyboard Layout

Alternative Keyboard

Image Source: https://images.novatech.co.uk/2016/BLOG/keyboard-big.jpg

Smart Thermostat

Smart thermostats allow you to control your home temperature with an application on your phone making it convenient for you to monitor and change the temperature while you are home or away. Available from several different brands with different features, smart thermostats are helpful when dealing with fatigue and difficulty with temperature regulation.

Smart Thermostat Resources

- Smart Thermostats Review

Smart Thermostat

Image Source: https://www.efficiencyvermont.com/Media/Default/blog/HowTo/EVT-Blog-HowTo-SmartThermostat-SmallHero.jpg?width=1120&quality=90&format=jpg

Smart Plug

Image Source: https://images.app.goo.gl/qckD4sNbRq3nDADYA

Smart Plugs & Switches

Smart plugs allow you to control devices attached to an outlet (i.e. lamps, small appliances, fans, TVs, etc.) using an app on your phone or by audio control using a smart speaker (i.e. Amazon Echo, Alexa, Google Home) through your home's WiFi system. Smart switches allow you to control lighting using a remote/moveable switch or through your phone. These devices can help conserve energy when fatigue or other symptoms flare-up.

Smart Plugs & Switches Resources

- Smart Plugs Review
- Smart Switches Review

Video Doorbell

Image Source: https://images.app.goo.gl/U3MBgsWKAdvxmeQX7

Video Doorbells

On days when fatigue limits your ability to answer the door or know when packages are delivered, video doorbells allow you to get notifications when there is motion outside of your home and even speak through the doorbell to those at the door. Video doorbells are available from a variety of companies with different capabilities.

Video Doorbells Resource

- Video Doorbells Review

Smart Locks

Smart Locks allow you to lock or unlock your door anytime and from anywhere using an application on your phone, a fingerprint, voice-activation, or when approaching the door. They allow you to open a door without having to bend over to set down bags causing lightheadedness, allow EMS into your home if you are unable to get to the door, or open the door to others while remaining in bed. They can also include a keypad allowing you to type in your home code instead of maneuvering a key.

Smart Locks Resource

- Smart Locks Review

Smart Locks

Image Source: https://images.app.goo.gl/sBL4ywrykB2UtftN6

Apple TV

This product allows you to control your Apple TV using the same accessibility features from your Apple smartphone such as voiceover, closed captioning, zoom, Siri for voice activation, and display changes. These features may be useful when fatigue and dizziness/lightheadedness limit your ability to physically retrieve another remote or light/audio sensitivity and brain fog make accessing your TV more of a challenge.

Apple TV Resource

- Accessibility Features on Apple TV

Apple TV

Image Source: https://support.apple.com/library/content/dam/edam/applecare/images/en_US/appletv/tvos11-apple-tv-siri-search-hero.jpg

Google Maps Wheelchair Accessibility

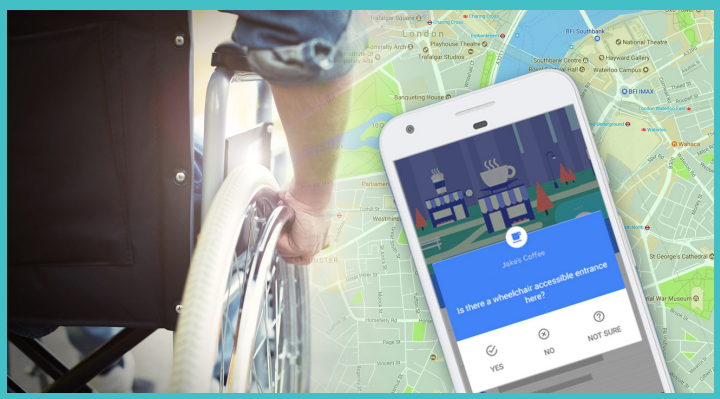


Image Source: https://images.app.goo.gl/rZKpTg7XbyQTfEPY6

Google Maps Wheelchair Accessibility

Google Maps provides information on wheelchair accessible routes and whether the location you are heading to is wheelchair accessible or not. To determine if the location you're heading to is wheelchair accessible, open the Google Maps app on your phone. Then, click on "About" and scroll down to Accessibility to enable "Accessible Places". When activated, a wheelchair icon will appear at locations that have accessible entrances as well as accessible seating and parking. If a place does not have an accessible entrance, that will be indicated as well.

Google Maps Resource

- Find Wheelchair Accessible Places on Google Maps

Caring Village

Caring Village is a free dashboard and mobile app that allows caregivers to manage all caregiving activities including loved one's medications, important documents, shared calendars, wellness journal/symptom tracker, and more.

Caring Village

Image Source: https://images.app.goo.gl/SUF3wpai2Gw7Ev5t9

Medisafe

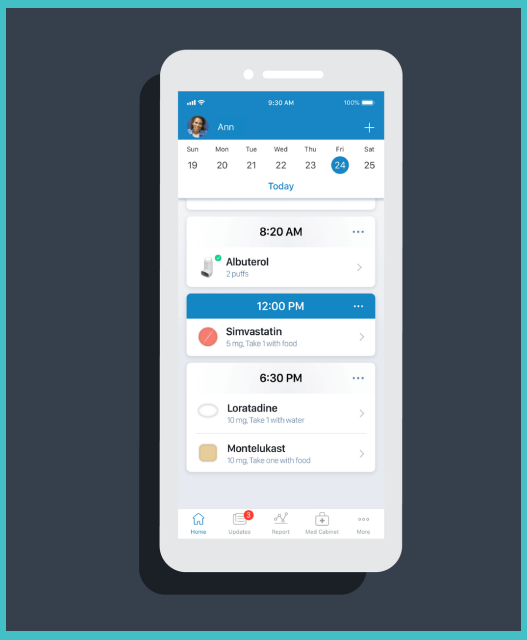


Image Source: https://images.app.goo.gl/yj7xRCQNCMWwhuD19

Medisafe

The free Medisafe app is a medication management app that provides medication and refill reminders.

LOW TECH ASSISTIVE TECHNOLOGY

Low Tech AT is cost-effective and can sometimes be made with things in your home! Here is a list of some low tech AT that can be utilized to help you engage in your everyday activities that are meaningful to you! Many of these items can be found in a variety of places including online, medical supply companies, and drugstores without a prescription.

Image Source: https://images.app.goo.gl/Qurv4F65VJnJSgMd7

BATHROOM TOOLS

SHOWER CHAIR/ TUB BENCH

If you have orthostatic intolerance, standing for a prolonged period of time in a hot shower can cause your blood vessels to dilate which increases your risk of dizziness or fainting. Incorporating items such as a shower chair or tub bench can help to reduce the risk of injury or allow for improved access to the shower when experiencing increased fatigue. Tub benches are most often used when someone has difficulty stepping over a tub ledge. Shower chairs, on the other hand, only sit in the shower/tub and therefore are smaller and take up less space.

Image Source: https://images.app.goo.gl/zB6...6ZSXpA1pc1uR7

HAND-FREE HAIR DRYER STAND

A hand-free hair dryer stand can be either free-standing or attached to the mirror while the hair dryer is on, allowing for hands-free use. This device may be most helpful when holding your arms above your head for extended periods of time is fatiguing or when gripping the hair dryer causes too much joint pain.

Image Source:
https://images.app.goo.gl/Qurv4F65VJnJSgMd7

LONG-HANDLED SPONGE/RAZOR

Long-handled sponges/razors can assist in bathing while experiencing increased fatigue or lightheadedness when reaching down or bending over.

RAISED TOILET SEAT

A raised toilet seat can be attached to your existing toilet raising the height several inches and lowering the distance required to transition from sitting to standing and vice versa. The side rails also provide additional support for safe transfers on and off the toilet when experiencing increased fatigue and lightheadedness.

Image Source:
https://images.app.goo.gl/DgcqRiBoE67HrXuWA

BUILT-UP HANDLE TOOTHBRUSH

This simple device can be added to an existing toothbrush and can help to reduce joint pain/gripping problems that might come with dysautonomia comorbidities, like EDS or peripheral neuropathy.

Image Source: https://images.app.goo.gl/kxermU9ZscEXL99J7

LONG-HANDLED SHOE HORN

A long-handled shoe horn can help you put on your shoes easier by helping slide your heel in your shoes when bending forward exacerbates fatigue and lightheadedness.

SOCK AID

A sock aid makes putting on socks easier, when bending forward increases lightheadedness or when grasping your socks is more difficult due to joint pain/gripping problems that might come with dysautonomia comorbidities, like EDS or peripheral neuropathy.

ELASTIC/NO TIE SHOELACES

Elastic/No tie shoelaces come in a variety of types of laces that can be added to any shoes with laces so they are easier to slip on to your feet. This reduces the amount of time and energy needed to bend forward to put on your shoes when experiencing fatigue and lightheadedness.

Image Source: https://images.app.goo.gl/SrqYVsPqYqHHenSc9

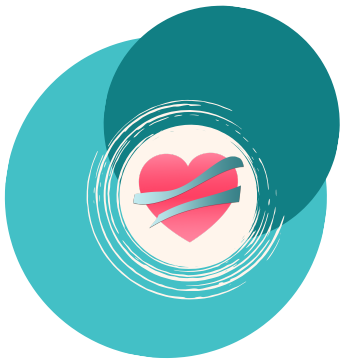
Image Source: https://images.app.goo.gl/Uo1sWc79zkM82XPA6

Image Source: https://images.app.goo.gl/YqXjNshJxTM86EnY7

COMPRESSION STOCKINGS

Compression stockings are designed to provide compression to your legs to help pump blood back to your heart to prevent blood pooling in the legs. These may be especially helpful when dealing with lightheadedness and orthostatic hypotension. There are different compression sock grades (levels of tightness) so you'll want to ask your doctor what compression grade is best for you. The standard compression levels for compression stockings are 8-15 mmHg (mild), 15-20 mmHg (medium), 20-30 mmHg (firm), 30-40 mmHg (extra firm), and 40-50 mmHg (medical compression). There are other levels of compression, however, these are the most common. This is one product that insurance may pay for, so talk to your doctor before buying them yourself.

Image Source: https://images.app.goo.gl/b6zRqREJ5x1jyn169



COMPRESSION STOCKING DONNER

A compression stocking donner is designed to make putting on compression stockings easier when bending forward to reach your feet is difficult. It also helps to correctly position and hold open the compression stocking which may be difficult on joints.

REACHER

A reacher is designed to increase your ability to reach things that are out of reach above your head or on the floor. This could be helpful when trying to reach something overhead from your closet or to pick up clothing items off the floor without the need to bend forward. It can also be useful for pulling up pants or adjusting socks while seated.

Image Source: https://images.app.goo.gl/JbFa6nrkwb46SrtM7

BUTTON HOOK

When grasping small buttons is more challenging due to joint pain/gripping problems that might come with dysautonomia comorbidities like EDS, or peripheral neuropathy, a button hook can make buttoning your clothing easier.

Image Source: https://images.app.goo.gl/H6XB5VWs74dLJgY27

PAN STABILIZER

When fatigue or joint pain makes stirring while cooking too difficult, a pan stabilizer allows for one-handed stirring.

Image Source:
https://images.app.goo.gl/MVw9Gwi3ALbLUNa3A

BUILT-UP UTENSIL HANDLES

A simple oversized grip can be attached to existing utensils when grasping and manipulating them becomes difficult due to joint pain/gripping problems that might come with dysautonomia comorbidities like EDS or peripheral neuropathy.

Image Source: https://images.app.goo.gl/XyhpzmSRTba7WCQq7

GOOD GRIP OPENER/ ELECTRIC CAN OPENER

Fatigue and joint pain can make completing the many aspects of meal preparation difficult. A good grip opener or electric can opener can help reduce the energy required to open jars and/or cans.

Image Source: https://images.app.goo.gl/kJPAgj5ENw1fsLyQ7

Image Source: https://images.app.goo.gl/7pBo5dUA1zHfHyuM8

ROCKER KNIFE

A rocker knife is designed to allow for cutting using only one hand using a rocking motion instead of a sawing motion. When fatigue or joint pain limits your ability to cut food, this device has a handle that can easily be grasped with the entire hand.

SWIVEL SEAT

This rotating disc assists in swinging your legs in or out of the car when dealing with fatigue.

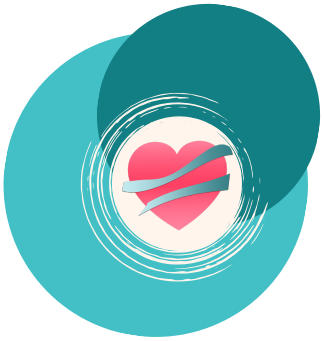


Image Source: https://images.app.goo.gl/t2uWNQ3PvmcMovzf6

HANDYBAR

On days when fatigue, lightheadedness, or orthostatic hypotension are the most debilitating, this device is used to help stand up while exiting a vehicle. The HandyBar attaches to the inside of your car door and gives an additional place to push off from while transitioning from sitting to standing. It is small enough to keep in your car's glove box or in a purse.

Image Source: https://images.app.goo.gl/12uKGAJCgu2b9jTj7


Image Source: https://images.app.goo.gl/n9459DFvftVBQoBx9

SUN SHADE

Getting into a hot car after being parked in the sun all day can exacerbate symptoms of dysautonomia or throw off temperature regulation. This device can help to keep your parked car cooler on hot days by blocking the amount of sun that enters through your windshield.

WINDOW TINT

Window tint is another product that can help to keep your vehicle cooler on warm days through a tint which helps to block the heat from the sun. This can help with temperature regulation problems and prevent exacerbation of symptoms. Be aware that certain states have different regulations when it comes to which windows can be tinted and how tinted they can be.

Window Tint Resource

- Window Tint Laws By State

Image Source: https://images.app.goo.gl/s51BP5QS5UxhUL3n8

BIG LAMP SWITCHES

Fatigue and joint pain or gripping problems that might come with dysautonomia's comorbidities such as EDS or peripheral neuropathy, can make grasping and turning small lamp knobs difficult. Big lamp switches can be attached to lamps within your home making it easier to twist the knobs.

Image Source:
Image Source: https://images.app.goo.gl/WZJHVAxgnsbNftaX9

Image source: https://images.app.goo.gl/yueYJnvhGmayi5b3A

KEY TURNER

Using a key to enter your home can sometimes be painful and difficult, particularly in those with EDS or peripheral neuropathy where grasping can be a challenge. A key turner can be attached to any individual key making grasping and rotating the key easier.

LEVER DOOR HANDLES

Lever door handles require less rotation of the wrist for opening a door and can also be turned using an elbow, shoulder, or hip. When fatigue and joint pain of the hands makes using standard doorknobs difficult, these door handles can decrease the energy required to open doors and simplify daily life. If you are not able to switch out the door handle, there are adaptors to place over doorknobs to turn it into a door handle.

Image Source: https://images.app.goo.gl/ECobzTR5FEcSXWEG8

Image Source: https://images.app.goo.gl/n9459DFvftVBQoBx9

Image Source: https://images.app.goo.gl/9fdrQDPxeqzatqLdA

GRAB BARS

Navigating around the bathroom, getting on and off the toilet, and entering and exiting the bathtub/shower can be challenging and dangerous when experiencing fatigue, brain fog, and lightheadedness. Grab bars can be permanently installed into walls or attached via suction cups for a more temporary solution providing much-needed safety and stability.

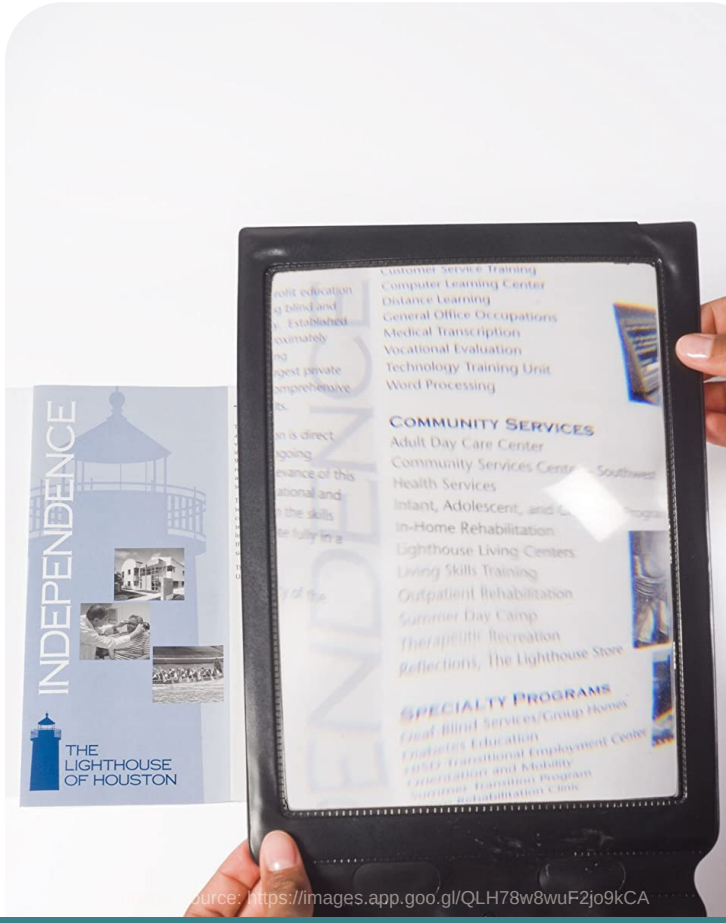
Image Source: https://images.app.goo.gl/uuxJrZjRVuy6eVH99

JUMBO KEYBOARDS & REMOTES

When brain fog and fatigue make accessing TVs and computers difficult, larger buttons, letters, numbers, and different colored keys can help to make watching tv and working on the computer easier.

MAGNIFYING DEVICES

Magnifying devices can be used to enlarge text and images in recipe books, mail, instruction manuals, and more when headaches or fatigue make reading small print challenging.



Source: https://images.app.goo.gl/QLH78w8wuF2jo9kCA

BED CANE

A bed cane can easily be attached to your existing bed, providing a handle to assist in sitting up in bed, or getting in and out of bed when fatigue and lightheadedness make these activities more challenging.

JUMBO PILL ORGANIZER

Brain fog and fatigue can make taking your medication difficult. This product can help organize your pills in a large container with the ability to hold a greater number of pills. Pill organizers can assist you in remembering which medications you need to take when and can help you see if you already have taken them for the day.

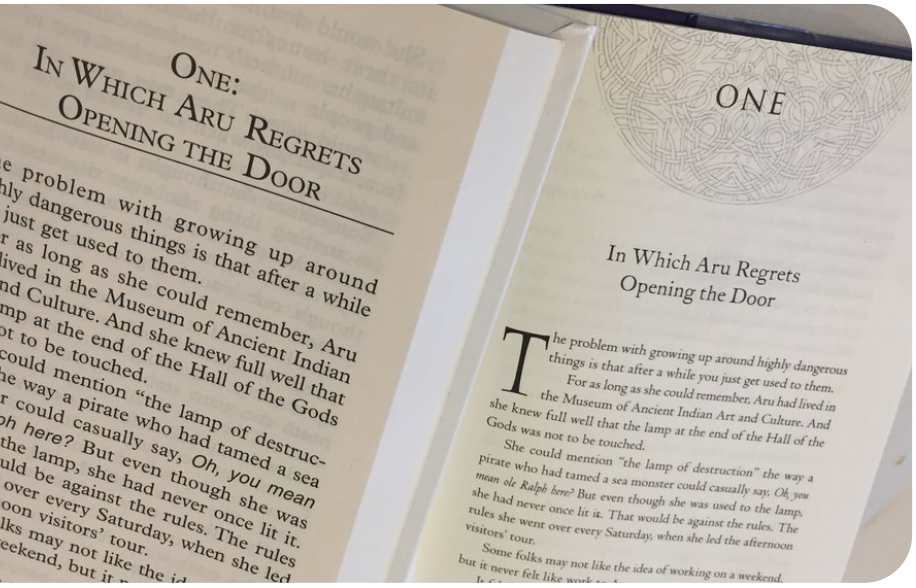
Image Source:
https://images.app.goo.gl/qSCoLUQU41CJjqWB8

COLLECTING MEDICAL INFORMATION

Keeping track of all the information and records from various doctors and specialists can be challenging enough without the addition of brain fog and fatigue that can come with dysautonomia. Collecting all of your medical information into a ringed binder with dividers identifying specific areas of interest can help you more readily keep track and access important information.

COLLECTING MEDICAL INFORMATION RESOURCES

- List of Things to Include In A Medical Binder



LARGE PRINT BOOKS

When brain fog and fatigue make reading difficult, large print books or increased font size on electronic devices can make it easier to keep one's place in the text, differentiate words better, and make reading more enjoyable.

BUILT-UP PENCIL GRIPS FOR WRITING TOOLS

A simple oversized grip can be attached to existing writing instruments when gripping pencils or pens and writing becomes difficult due to joint pain and gripping problems that might come with dysautonomia comorbidities, such as EDS or peripheral neuropathy.

Image Source: https://images.app.goo.gl/s51BP5QS5UxhUL3n8

RAISED GARDEN BEDS

Bending over or kneeling to complete gardening tasks can be challenging when experiencing increased fatigue, lightheadedness, joint pain, or orthostatic hypotension. Garden beds can be raised to waist height which limits the need to bend forward and makes gardening easier. These can be made or purchased.

WE WANT TO HEAR FROM YOU

If you have any ideas for additional assistive devices, both high tech and low tech, that would be helpful to the dysautonomia community, please share them with us. Send us an email at educationteam@dysautonomiasupport.org with your suggestions.

MOBILITY

The symptoms of dysautonomia and its related conditions can sometimes cause individuals to have limited mobility. Using an assistive device may be useful for energy conservation, balance management, and fatigue management. All of these products discussed below can be purchased online, at drug stores, or at a medical supplier. Canes, walkers, and wheelchairs can be paid for in part through insurance if documented as a medical necessity, with insurance paying for replacement devices after several years of use. If these devices are something you might need, talk to your physician for further information.

CANES

There are many factors to consider when choosing a cane. There are different styles of handles to choose from like, rounded, t-shape, or offset. You'll also want to consider how much balance support they provide. Most canes can be adjusted for height. To make sure the cane you are using fits properly, you'll want to bend your elbow 10-30 degrees and make sure that the handle is at the height of your wrist crease.[3]

"To make sure the cane you are using fits properly, you'll want to bend your elbow 10-30 degrees and make sure that the handle is at the height of your wrist crease."[3]

SINGLE POINT CANE

A single point cane is best for minor balance problems and for those who only need to bear down on the cane mildly.

QUAD CANE

The quad cane provides a wider base of support and can stand on its own when released. It may take a little practice to learn to use this type of cane as it has to be moved forward with all four points touching the ground.

WALKERS

Walkers come in a variety of styles depending on your need for balance and endurance. The proper fit for a walker is found by standing in between the handles with the handles coming up to the crease between your hand and wrist.

"The proper fit for a walker is found by standing in between the handles with the handles coming up to the crease between your hand and wrist."

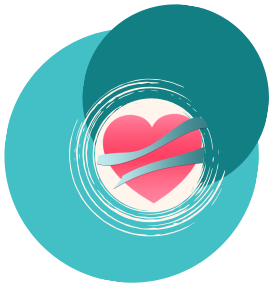
Image Source: https://images.app.goo.gl/9jtNv5BpN9Yai6Xe9

STANDARD WALKER

The standard walker is the most stable of all walkers for transfers as it has no wheels. For mobility, it requires increased effort to use while walking as it has to be picked up and moved in between steps forward.

ROLLING WALKER

A rolling walker is the most stable of the walkers with wheels with 2 wheels in the front. It requires less effort to walk than the standard walker but is still stable to use for transferring on and off of furniture.



ROLLATOR

A rollator has four wheels with brakes on the handles to lock the wheels when transferring. Rollators sometimes include a seat and a basket. The seat can be used to rest on when experiencing fatigue. The rollator can move quicker than you would expect and can roll away from you if you are not careful.

Image Source: https://images.app.goo.gl/aYqvCt6TzzDdsxAL8

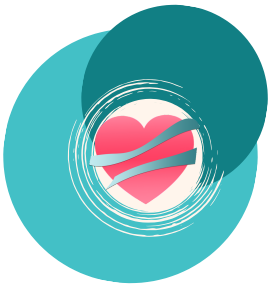
MANUAL WHEELCHAIR

Wheelchairs can be helpful for traveling long distances when endurance limits your mobility.

STANDARD WHEELCHAIR

A standard wheelchair has 2 large wheels which can be used for self propulsion and handles for someone else to propel. It has locks to stop the wheels from moving for safe transfers.

Image Source: https://images.app.goo.gl/b18wDaGCLzGxAEUa6



TRANSPORT CHAIR

A transport chair is similar to the standard wheelchair except it does not have large rear wheels for self propulsion. It is used for transporting someone from one place to another with the assistance of another person. It is not meant to be used as a primary mobility device for long periods of time.

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ABOUT

Dysautonomia Support Network

Incorporated in 2016, Dysautonomia Support Network (DSN) is a US based volunteer-run 501(c)(3). Our mission is to provide a COMMUNITY, that EMPOWERS and SUPPORTS those affected by dysautonomia to live their best lives. DSN strives to improve the quality of life of patients worldwide by increasing awareness and understanding of dysautonomia and building a patient-led community who support each other.

ABOUT THE CONTRIBUTORS

Joanna Behm MS, OTR/L

Editor

Joanna is an occupational therapist and faculty member at Messiah University's Master of Occupational Therapy Program. As a patient with hyperadrenergic POTS, mast cell activation disorder, and hypermobile Ehlers-Danlos syndrome herself, Joanna is passionate about sharing her expertise in her role as Vice President of Dysautonomia Support Network. She is currently a doctoral student at Northeastern University, where she is studying Education with a concentration in curriculum, teaching, leadership, and learning.

Erin Boersma, MOT, OTR/L

Author

Erin is an occupational therapist who has a passion for working with pediatric populations. She resides in Michigan but has called various states in the Midwest home. Erin is a consultant for DSN's Education and Awareness Team. She began researching dysautonomia while in graduate school and has been a part of DSN since 2020.

ABOUT THE CONTRIBUTORS

Katelyn Gularski, MOT, OTR/L

Author

Katie is an occupational therapist who lives and works in Austin, Texas as a school-based OT. Katie was diagnosed with a form of dysautonomia in 2019. She uses her personal experience and occupational therapy knowledge as a consultant for the Education and Awareness Team and a moderator of DSN's Northeast US Regional Community.

Leslie Wuenstel BSN, RN, LNC

Editor & Publisher

Leslie is a nurse who is passionate about dysautonomia education and awareness and health literacy. It took over 17 years to receive a diagnosis of dysautonomia, hypermobility, and mast cell dysfunction, giving validation and explanation to her entire life. Now she desires to cut down that time for others and help them learn to thrive through her advocacy as the Education and Awareness Team Coordinator. Leslie recently completed a post-baccalaureate legal nurse consulting certificate program through Wilmington University and is currently pursuing her Master's of Science in Nursing Leadership with a concentration in education through Wilmington University.