Let’s Get Physical!
The Importance of Being Physically Active as Part of Daily Life with MS

Meet Your 2014 MSF Ambassadors
COPAXONE® (glatiramer acetate injection) is indicated for the treatment of patients with relapsing forms of multiple sclerosis.

**Important Safety Information**

Do not take COPAXONE® if you are allergic to glatiramer acetate or mannitol.

Some patients report a short-term reaction right after injecting COPAXONE®. This reaction can involve flushing (feeling of warmth and/or redness), chest tightness or pain with heart palpitations, anxiety, and trouble breathing. These symptoms generally appear within minutes of an injection, last about 15 minutes, and do not require specific treatment. During the postmarketing period, there have been reports of patients with similar symptoms who received emergency medical care. **If symptoms become severe, call the emergency phone number in your area.**

Please see additional Important Safety Information and brief summary of full Prescribing Information on the following pages.

To get started, call Shared Solutions®

1-800-887-8100 or visit www.startcopaxone.com
Freedom to...


It’s your future.

3-TIMES-A-WEEK COPAXONE® 40 mg

Treatment on your terms

COPAXONE®
(glatiramer acetate injection)
Important Safety Information (cont’d)

Call your doctor right away if you develop hives, skin rash with irritation, dizziness, sweating, chest pain, trouble breathing, or severe pain at the injection site. If any of the above occurs, do not give yourself any more injections until your doctor tells you to begin again.

Chest pain may occur either as part of the immediate postinjection reaction or on its own. This pain should only last a few minutes. You may experience more than one such episode, usually beginning at least one month after starting treatment. Tell your doctor if you experience chest pain that lasts for a long time or feels very intense.

A permanent indentation under the skin (lipoatrophy or, rarely, necrosis) at the injection site may occur, due to local destruction of fat tissue. Be sure to follow proper injection technique and inform your doctor of any skin changes.

The most common side effects in studies of COPAXONE® (glatiramer acetate injection) are redness, pain, swelling, itching, or a lump at the site of injection, flushing, rash, shortness of breath, and chest pain. These are not all of the possible side effects of COPAXONE®. For a complete list, ask your doctor or pharmacist. Tell your doctor about any side effects you have while taking COPAXONE®.

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch or call 1-800-FDA-1088.

Please see brief summary of full Prescribing Information on the following page.
Patient Information

COPAXONE (co-PAX-own)
(glatiramer acetate injection)
for subcutaneous use

Read this Patient Information before you start using COPAXONE and each time you get a refill. There may be new information. This information does not take the place of talking with your doctor about your medical condition or your treatment.

What is COPAXONE?
COPAXONE is prescription medicine used for the treatment of people with relapsing forms of multiple sclerosis (MS).
It is not known if COPAXONE is safe and effective in children under 18 years of age.

Who should not use COPAXONE?
• Do not use COPAXONE if you are allergic to glatiramer acetate, mannitol or any of the ingredients in COPAXONE. See the end of this leaflet for a complete list of the ingredients in COPAXONE.

What should I tell my doctor before using COPAXONE?
Before you use COPAXONE, tell your doctor if you:
• are pregnant or plan to become pregnant. It is not known if COPAXONE will harm your unborn baby.
• are breastfeeding or plan to breastfeed. It is not known if COPAXONE passes into your breast milk. Talk to your doctor about the best way to feed your baby while using COPAXONE.

Tell your doctor about all the medicines you take, including prescription and over-the-counter medicines, vitamins, and herbal supplements. COPAXONE may affect the way other medicines work, and other medicines may affect how COPAXONE works.

Know the medicines you take. Keep a list of your medicines with you to show your doctor and pharmacist when you get a new medicine.

How should I use COPAXONE?
• For detailed instructions, see the Full Prescribing Information for complete information on how to use COPAXONE.
• Your doctor will tell you how much COPAXONE to use and when to use it.
• COPAXONE is given by injection under your skin (subcutaneously).
• Use COPAXONE exactly as your doctor tells you to use it.
• Since every body type is different, talk with your doctor about the injection areas that are best for you.
• You should receive your first dose of COPAXONE with a doctor or nurse present. This might be at your doctor's office or with a visiting home health nurse who will teach you how to give your COPAXONE injections.

What are the possible side effects of COPAXONE?
COPAXONE may cause serious side effects, including:
• Post-Injection Reactions. Serious side effects may happen right after you inject COPAXONE at any time during your course of treatment. Call your doctor right away if you have any of these post-injection reaction symptoms including:
  • redness to your cheeks or other parts of the body (flushing)
  • chest pain
  • fast heart beat
  • anxiety
  • breathing problems or tightness in your throat
  • swelling, rash, hives, or itching
If you have symptoms of a post-injection reaction, do not give yourself more injections until a doctor tells you to.
• Chest Pain. You can have chest pain as part of a post-injection reaction or by itself. This type of chest pain usually lasts a few minutes and can begin around 1 month after you start using COPAXONE. Call your doctor right away if you have chest pain while using COPAXONE.
• Damage to your skin. Damage to the fatty tissue just under your skin's surface (lipodystrophy) and, rarely, death of your skin tissue (necrosis) can happen when you use COPAXONE. Damage to the fatty tissue under your skin can cause a "dent" at the injection site that may not go away. You can reduce your chance of developing these problems by:
  • following your doctor's instructions for how to use COPAXONE
  • choosing a different injection area each time you use COPAXONE. See Step 4 in the Instructions for Use, "Choose your injection area".
The most common side effects of COPAXONE include:
• skin problems at your injection site including:
  • redness
  • pain
  • swelling
  • itching
  • bumps
  • rash
  • shortness of breath
  • flushing (vasodilation)
Tell your doctor if you have any side effect that bothers you or that does not go away.
These are not all the possible side effects of COPAXONE. For more information, ask your doctor or pharmacist.
Call your doctor for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088.

How should I store COPAXONE?
• Store COPAXONE in the refrigerator between 36°F to 46°F (2°C to 8°C).
• When you are not able to refrigerate COPAXONE, you may store it for up to 1 month at room temperature between 59°F to 86°F (15°C to 30°C).
• Protect COPAXONE from light or high temperature.
• Do not freeze COPAXONE syringes. If a syringe freezes, throw it away in a sharp disposal container. See Step 13 in the Instructions for Use, "Dispose of needles and syringes."

Keep COPAXONE and all medicines out of the reach of children.

General information about the safe and effective use of COPAXONE.
Medicines are sometimes prescribed for purposes other than those listed in a Patient Information Leaflet. Do not use COPAXONE for a condition for which it was not prescribed. Do not give COPAXONE to other people, even if they have the same symptoms as you have. It may harm them.
This Patient Information Leaflet summarizes the most important information about COPAXONE. If you would like more information, talk with your doctor. You can ask your pharmacist or doctor for information about COPAXONE that is written for health professionals.
For more information, go to www.copaxone.com or call 1-800-887-5100.

What are the ingredients in COPAXONE?
Active ingredient: glatiramer acetate
Inactive ingredients: mannitol

Marketed by: TEVA Neuroscience, Inc., Overland Park, KS 66211
Distributed by: TEVA Pharmaceuticals USA, Inc., North Wales, PA 19454

Product of Israel
This brief summary is based on COPAXONE FDA-approved patient labeling, revised: January 2014.
COP-41059
“TALK BACK”
We Welcome Topic Suggestions for Future Issues.
Your comments about each issue are important to us. Email comments to:
editor@msfocus.org
or write to: Editor, MSFocus
6520 N. Andrews Avenue,
Fort Lauderdale, FL 33309

Moving?
Please notify us of your change of address. Call:
888-MSFOCUS (673-6287)
Manage your subscription online at:
www.msfocus.org.
Click on publications.

Take MSFocus on the road with MSFocusRadio.org
Listen on your PC or mobile device
Available 24/7

Publications Manager
Terry Schenker

Managing Editor
Gay Falkowski

Editorial Committee
Kasey Minnis
Briea Curington
Natalie Blake
Jay Hass

Contributing Writers
Hildy Berger
Stephanie Butler, NP, MSCN
Joanne Fortunato
Ellen Whipple Guthrie, PharmD
Yvonne C. Learmonth, PhD
Robert Motl, PhD
Keith A. Otis
Glenn Sparrow

http://www.facebook.com/MultipleSclerosisFoundation
MS_Focus
http://www.youtube.com/user/MSFstaff
www.sharecare.com/group/multiple-sclerosis.foundation
Statement of Purpose

The purpose of the Multiple Sclerosis Foundation’s publications is to empower those affected by MS with the information necessary to make the most complete and educated decisions concerning their healthcare. We do not advocate or endorse any specific treatments, healing modalities, or practitioners. The material presented in this publication is for informational purposes only. For specific advice, consult a healthcare professional. MSF does believe that each person has the right to choose the treatments they feel are best, and therefore acts as a source of information, providing referrals to local resources and partnership in problem solving.

MSFocus is published quarterly in enlarged type for the benefit of our readers. Audio versions of featured articles are available for listening or download on www.msfocus.org (click On Demand Audio). Back issues are available online at www.msfocus.org. MSFocus is a free publication for individuals with MS, their families, and others interested in MS.
Recently, some news came over the wire services that has given us reason to be concerned. We have been reminded that it won’t be long before the federal funding that provides benefits for Social Security Disability Income (SSDI) runs out. The large number of aging baby boomers has sped up the process.

As many of you know firsthand, SSDI serves as a vital lifeline for individuals and families who are unable to work due to permanent disability resulting from an injury or chronic disease such as MS. With monthly benefits currently averaging $1,100, families are living a meager existence – even when food stamps are added. When one considers all the hoops a person has to jump through to qualify as well as the limited income benefit, it is plain to see there is no excess to trim. Funding must not be allowed to lapse for any period of time – the impact on people’s lives would be catastrophic.

In no way does this come as a shock to politicians, bureaucrats, and advocates. Everyone has been aware for some time of the “well running dry” for SSDI and ultimately for Social Security retirement benefits as well. What makes this especially troubling is that next year and the year after, Congress may use this urgent need for funding as a ball to be batted around in its usual-as-of-late political infighting. The irony of all this is that SSDI was originally passed into law, in part, due to the efforts of key congressmen who were up for re-election along with a determined majority leader, Lyndon Johnson. Today, with some representatives touting their fiscal conservatism at re-election time, an adequate funding plan may not necessarily be assured or implemented on a timely basis.

The best news to hear would be that all this is just speculation and that Congress will indeed work together to ensure that SSDI does not come in harm’s way. It is possible this is actually how it will all play out at the end. Unfortunately, in recent years, we have seen how our legislative branch of government has managed to come to a standstill. Thus, for now, we encourage everyone to poll their congressional representatives to learn how they stand on this issue, and if necessary, make it perfectly clear – SSDI is not a bargaining chip!

Jules Kuperberg  Alan R. Segaloff
Co-Executive Director  Co-Executive Director
Spring Issue Hits Home

I have been reading your magazine for probably 20 years now, and the spring issue is by far the best I have ever read! Even though the main article was addressing pediatric MS, this can really apply to anyone dealing with MS, their family, and care partner. Kudos for a job well done.

Jody Bukacek, Oklahoma City, Okla.

Writer Restores Reader's Hope

I read the story written by Molly Williams [A Teen's Shattered Dreams Restored, Spring 2014]. Molly, you inspired me and restored my dreams and thoughts. Oh, the dreams I had before I knew I had MS! I found out in 2004 – I was not as young as you, but it shattered me. Everyone who knows treats you like you are already gone. Your story is just what I’ve battled. But your story brought me to the sunshine I once had. Thank you, Molly Williams, for your story.

Rhonda Pickerell, Mt. Washington, Ky.

An Accessible Bathroom for Keeping Clean and Safe

I just want to thank you from the bottom of my heart for agreeing to help perhaps one of the sweetest and most deserving women I have ever had the pleasure to know – Nola Griner.

Nola has been waiting well over a year now for repairs to a botched bathroom remodel so that she can finally utilize her facilities to bathe. Now – and only now, because of the MSF – this extremely disabled woman who has suffered so severely with MS shall finally be capable of having what the majority of us take for granted.

Nola is a special woman, a woman living alone with two teenage daughters and very little financial resources. She has nothing but the very limited use of one hand, and this shall mean everything to her – safety, security, and the ability to feel “whole.”

I wish you and your organization much continued success, and though I wish your work weren't necessary, I'm grateful you’re here for those of us who desperately require it.

Sharon Newman, Babylon, N.Y.

Happily in the Minority

The “Question and Answer” article in your spring 2014 edition addressed the issue of sex drive in women with MS. It was noted that dysfunction was reported rather frequently. I am so happy that I am in the minority, as I have found that not only is my libido not affected by MS, my sex drive is actually better than it has ever been.

I have chronic nerve pain and take Gabapentin for it. It doesn’t take the pain away totally, and it’s much worse at night. Strangely, I’ve found that on the days/nights that I do have sex, I have no nerve pain. My neurologist and I can’t figure it out, but I’m not complaining.

Maeve Cooper, Des Moines, Iowa
Over the past two decades, researchers and clinicians have focused exclusively on the benefits and promotion of exercise training in persons with multiple sclerosis. Exercise training is a type of structured physical activity that focuses on improving one’s physical fitness and is typically performed under supervised conditions in a gymnasium. This type of physical activity could include aerobic exercise (e.g., riding a cycle) or resistance exercise (e.g., lifting weights). It is prescribed based on intensity, duration, and frequency, with the objective of improving endurance or muscle strength. There is substantial scientific evidence that exercise training is safe and effective in persons with MS, but exercise training is neither an available nor attractive option for all persons with MS.

We have recently begun focusing on being physically active as part of daily life (i.e., lifestyle physical activity) in persons with MS. This represents an alternative approach for managing many of the MS consequences and signifies a fresh approach for promotion of health and wellness in MS. This article defines lifestyle physical activity and describes its possible benefits and promotion in persons with MS. The hope is that this will represent an alternative or complementary approach compared with exercise training for promotion of health and wellness in MS.

**Lifestyle Physical Activity: What Is It?**

Lifestyle physical activity is a behavior that is broadly defined as any bodily movement produced by the contraction of muscles that substantially increases energy expenditure. This type of behavior can be accumulated during one’s daily routine by participating in 30 or more minutes of self-selected physical activities. This can include leisure activities (e.g., a nice walk in the park), occupational work...
(e.g., walking to a co-worker’s desk rather than sending an email), transportation (e.g., riding a bicycle to the store), gardening, or even household chores (e.g., vacuuming). Lifestyle physical activity can be planned or spontaneous, but essentially, it is accumulated as part of daily life. This means that the physical activities are self-selected rather than prescribed by another person; purposefully planned by an individual or unplanned and spontaneous; and, importantly, can be accumulated in multiple, short bouts over the day (e.g., multiple five minute periods of walking) rather than one long, continuous session. Overall, lifestyle physical activity offers personal control, flexibility, and variation, and is accumulated in a manner that should not be taxing on a person with MS (e.g., short bouts should minimize fatigue). This is a new approach for promoting health and wellness in MS.

Does Lifestyle Physical Activity Matter?

You may be asking, “are lifestyle physical activities beneficial for persons with MS?” There is actual scientific evidence that lifestyle physical activity is associated with meaningful outcomes for persons with MS, and these outcomes range from cells to quality of life. Indeed, research has indicated that persons with MS who engage in lifestyle physical activity have better brain health based on magnetic resonance imaging, better cognition based on speed of information processing, and increased mobility and cardiovascular health. Furthermore, persons with MS who engage in lifestyle physical activity have less fatigue, depression, anxiety, and pain, and better sleep quality and quality of life. Collectively, this suggests that persons with MS can benefit from lifestyle physical activity.

How Do We Promote Lifestyle Physical Activity?

The accumulation of lifestyle physical activity can be promoted through behavioral interventions. Such interventions target the reduction of sedentary behavior (e.g., sitting and watching television) and encourage engagement in physical activities as part of daily life (i.e., sit less and move more). These interventions work by teaching people with MS the skills, strategies, and techniques for successful health behavior change. For example, behavioral interventions might teach skills of self-monitoring, goal setting, and positive reinforcement. This could be accomplished by wearing a simple pedometer and concurrently recording steps taken per day in a journal across a
one or two week period of time (i.e., self-monitoring). Such a recording serves as a baseline for setting goals based on changing steps taken per day. The goals can be short term (e.g., next week) or long term (e.g., next six months), and build upon one another. The pedometer can again be a tracking tool for monitoring goal attainment weekly, monthly, and annually, and goal attainment could be reinforced with rewards (e.g., dinner with friends). This is one of many approaches for changing health behaviors, and such a simple approach has been tested as part of many research studies in MS.

In our research on this topic, our first behavioral intervention for increasing lifestyle physical activity in MS was delivered through an Internet website. The Internet website and its content – based on our experiences with MS, a brief survey, and feedback from a focus group – targeted self-monitoring, goal setting, beliefs about the benefitsof physical activity, self-confidence, and overcoming barriers. We examined if the Internet website as a behavioral intervention would increase lifestyle physical activity across a three-month period in 54 persons with relapsing-remitting MS. Participants were randomized into either behavioral intervention or waitlist control conditions, and we measured self-reported physical activity before and after the three-month pilot randomized control trial.

The intervention group reported a large increase in physical activity over time, whereas the control group had minimal change. The intervention worked mostly by promoting self-monitoring and goal setting, and there were no adverse events. We have replicated the increase in lifestyle physical activity in three subsequent studies involving persons with MS, and one study reported that the increase in physical activity persisted for three additional months even after the Internet website was removed. These studies suggest people with MS can learn to self-manage their lifestyle physical activity.

We recently tested the same behavioral intervention for increasing lifestyle physical activity and improving secondary outcomes of walking mobility, cognition, symptoms, and quality of life over a six-month period in 82 persons with MS. Importantly, the intervention condition yielded 40 minutes per week more lifestyle physical activity than the control condition, and the average minutes per day of lifestyle physical activity for the intervention group translated into 140 minutes per week. This nearly meets the current public health recommendation of accumulating 150 minutes per week of lifestyle physical activity. The behavioral intervention proved beneficial by reducing fatigue, depression, anxiety, and pain, and improving sleep and quality of life. There were further improvements in the distance walked during a six-minute walk test and performance on a neuropsychological test of cognitive processing speed.

Another logical focus of behavioral interventions involves reducing daily sitting time, a form of sedentary behavior that has been identified as a highly prevalent risk factor for MS-related morbidity. To that end, we recently
examined if the behavioral intervention would reduce daily sitting time in 70 persons with MS. The behavioral intervention reduced daily sitting time by over 1.5 hours compared with the control group. We provide the first data on the efficacy of a behavioral intervention for reducing sitting time in MS patients. This highlights the importance of designing and testing the effect of behavioral interventions that reduce sitting on secondary outcomes such as function, symptoms, quality of life, and health status in persons with MS.

**Take Home Message**

While managing the consequences of the illness, lifestyle physical activity represents a new approach for improving the health and wellness of persons with MS. The reduction of sedentary behavior might further be a new method for managing MS and its consequences. It is to your advantage to choose a new approach for health and wellness, starting by moving more and sitting less. There are many simple options. If you are ambulatory, you might consider standing while watching TV or walking around the house while talking on the phone. You might consider taking 5-minute walk breaks every hour while working or during the day on weekends. You could walk around the outside aisles of the grocery store before and after shopping. You could document the effects of these lifestyle changes using a pedometer along with self-monitoring and goal setting. For those with limited mobility, there are other options. The only limitation for increasing lifestyle physical activity is your imagination.

Robert W. Motl is an associate professor of Kinesiology and Community Health, affiliate of the Division of Neuroscience, and director of the Exercise Neuroscience Laboratory at the University of Illinois at Urbana-Champaign. Also, Prof. Motl is chair of the Biomedical and Health Sciences, Institutional Review Board on the University of Illinois campus. Prof. Motl has research interests in the areas of exercise psychology, measurement, and neuroscience for understanding physical activity and exercise in persons with multiple sclerosis. Prof. Motl received a bachelor’s degree from San Diego State University, a master’s degree from the University of Wyoming, and a PhD from the University of Georgia. Prof. Motl has published nearly 300 papers and is currently an associate editor for Neurorehabilitation and Neural Repair. Furthermore, Prof. Motl is a study section member and chair for the National Multiple Sclerosis Society.

**TAX DEDUCTION IN YOUR GARAGE?**

DONATING YOUR UNNEEDED CAR, VAN OR TRUCK CAN HELP FIGHT MULTIPLE SCLEROSIS

CONVENIENT FREE PICKUP

WE DO ALL PAPERWORK

**MSF**

MULTIPLE SCLEROSIS FOUNDATION 800-225-6495
If your healthcare provider suggested an approach for managing your MS that could improve aerobic capacity, balance, depression, fatigue, muscular strength, quality of life, and walking mobility, would you choose it? Can exercise provide such benefits and be “good medicine” in MS? The answer seems to be, “Yes!”

The Many Benefits of Exercise

People with MS experience many benefits from engaging in an exercise program. For example, exercise programs can improve endurance, balance, muscle strength, and walking in people with MS. Exercise programs can alleviate symptoms of depression and fatigue. Engaging in exercise can improve overall evaluation of life satisfaction or quality of life in people with MS. There might even be benefits for cognitive function and brain health. We know of no other approach or medicine that can offer all these benefits in MS!

Aerobic Fitness or Endurance

Researchers use assessments of aerobic fitness (i.e., ability for sustaining physical effort or performance over time) for examining one’s endurance. Aerobic fitness is important for mobility, everyday activities, energy, happiness, and health-related quality of life in MS. Exercise training programs of two to three times per week for 30 to 60 minutes at a moderate intensity (60 percent of maximal physical effort) are effective for improving aerobic fitness in people with MS.

Balance and Falls Prevention

Balance assessments (i.e., maintenance of standing or upright posture) provide knowledge of a person’s capacity for maintaining control of one’s body and avoiding a fall. Physical balance is relevant to mobility, everyday activities, and safety amongst those with MS. As part of combined exercise training programs performed two to three times per week, balance exercises may be effective at improving one’s walking confidence and reducing fall frequency.

Muscular Strength

Strength assessments (i.e., the maximal amount of load one can lift in a single repetition of a given exercise) provide information on a person’s muscular strength. Muscular strength is important for mobility, balance, everyday activities, and fatigue in MS. Progressive exercise...
training programs of two to three sessions per week starting at an intensity of around 10 to 15 repetitions (to reach the maximal load one can lift) may result in important gains in muscle strength leading to functional improvement.

**Mobility or Walking**

Researchers use assessments of mobility (i.e., the distance one can walk in a given time, or the time to walk a standardized distance) for examining walking performance in people with MS. Such measures provide information on walking endurance, speed, and agility. Mobility is important to almost all areas of one's life and is important for maintaining independence. Exercise training programs that include aerobic exercise, strength training, and combined exercise may result in improved mobility or walking performance.

**Depression**

Assessments of mood (i.e., completion of questionnaires on topics related to depression and mood) are used by researchers to establish levels of depression and anxiety in people with MS. These moods may be important in many areas of life and can be linked with fatigue and quality of life among persons with MS. Research is beginning to indicate that exercise training may be a good approach for preventing or alleviating symptoms of depression amongst those with MS.

**Fatigue**

Researchers use self-report assessments of fatigue (i.e., completion of questionnaires on topics related to fatigue severity and its effect on one's life) for examining fatigue in MS. Fatigue is common in MS and can affect almost all areas of one's life. Evidence indicates that participating in an MS exercise program can reduce fatigue over time and may be one of the most important fatigue management strategies in MS. The evidence suggests that exercise might even reduce fatigue enough over time that it no longer interferes with daily tasks such as employment.

**Exercise Safety**

Those who have been diagnosed with MS may have been advised to rest and take life easy rather than engage in exercise. This was based on concerns that exercising may worsen symptoms and increase relapse rates in MS. There is actually very little evidence of problems or safety concerns regarding exercise participation in MS. There might even be fewer MS relapses in those who exercise compared with those who do not exercise.

**Begin to Exercise**

As with any new treatment, approach your healthcare provider and discuss starting exercise as part of your overall MS management strategy. You might even bring the recent physical activity guidelines for adults with MS. These guidelines are for adults with mild to moderate disability resulting from MS and provide evidence-based recommendations for both aerobic and strength exercises. The guidelines recommend 30 or more minutes of aerobic exercise (e.g., arm cycling, walking, leg cycling, elliptical training) twice a week and strength training exercises for major muscle groups (e.g., weight machines, free weights) twice a week. The exercises should progress in intensity or strenuousness over time, and there should be one day of rest between aerobic or resistance exercise training.

Exercise is important among those who have more advanced disability, although there is less research in this segment of persons with MS. Recent research is
investigating the use of body-weight-supported exercise and wheelchair-based activity (e.g., self-propulsion and strength training) for improving outcomes among those with more advanced MS.

There are exercise opportunities available for everyone with MS. We recommend that you take part in exercises that you enjoy. Beginning to

exercise is the first step, and it is important to integrate exercise and physical activity into your long term MS management strategy, as you are more likely to continue exercising if you enjoy it. Exercise is good medicine and something that is self-empowering as an approach for MS management.

Yvonne C. Learmonth, PhD, is a post-doctoral research associate in Biobehavioral Kinesiology at the University of Illinois, Urbana Champaign, Illinois. She is a licensed physiotherapist (Health & Care Professions Council) and has previously held appointments in the Scottish NHS and in competitive sports. She has been involved in MS research for over five years, obtaining her doctorate in rehabilitation from the University of Glasgow. She has published and presented internationally in the areas of physical activity and exercise for individuals with MS. Dr. Learmonth is passionate about understanding rehabilitation strategies to improve the health and quality of life of individuals with MS. To that end, her current research interests include physical activity and exercise strategies for those with disabilities, accurate measurement in rehabilitation practice, establishing the impact of exercise on MS disease progression, encouraging physical activity and exercise prescription, and education in healthcare.

MSF Health and Wellness Program Combines Fun and Fitness

The MSF Health and Wellness Program (HWP) provides resources to people with MS, family members, medical professionals, and health and wellness supporters nationally. These resources include educational materials, information, referrals, and the opportunity for those with MS to participate in a wide range of health and wellness programs.

The HWP consists of group and individual participation programs. Both programs offer activities such as adaptive yoga, aquatics, fitness, exercise, and therapeutic horseback riding, as well as recreational therapies such as art, music, horticultural, or adaptive sports. Currently, there have been greater demands for programs such as yoga and gym memberships.

These programs, which help manage specific symptoms associated with the disease, are offered to those with MS in a safe and supportive environment by qualified service providers. The programs also help maintain or improve physical abilities and emotional well-being, as well as increase social skills, confidence, and self-esteem.

There are a total of approximately 51 group and individual programs ongoing at 35 locations in 20 states. For more information, contact Alma Henry, MSF Health and Wellness Program Coordinator at (800) 225-6495.
Only GILENYA® combines proven efficacy to cut MS relapses in half vs a leading injectable in a once-daily* pill.

GILENYA reduced the frequency of relapses by 52% in a 1-year study vs Avonex®, and by 54% in a 2-year study vs placebo.

Indication
GILENYA is a prescription medicine used to treat relapsing forms of multiple sclerosis (MS) in adults. GILENYA can decrease the number of MS flare-ups (relapses). GILENYA does not cure MS, but it can help slow down the physical problems that MS causes.

Important Safety Information
You should not take GILENYA if you have certain types of an irregular or abnormal heartbeat (arrhythmia), including a heart finding called prolonged QT, as seen on a test to check the electrical activity of your heart (ECG) before starting GILENYA. You should not take GILENYA if you take certain medicines that change your heart rhythm.

GILENYA can result in a slow heart rate when first taken. Your first dose will be given in a medical facility where you will be watched for at least 6 hours. If you stop taking GILENYA for more than 14 days after your first month of treatment, you will need to repeat this observation.

Please see additional Important Safety Information on the next page and Brief Summary of Important Product Information on the following pages.

SPEAK UP TODAY!
Ask your doctor if GILENYA is right for you, and join the thousands of people already speaking out against their relapsing MS.
Important Safety Information

GILENYA may cause serious side effects such as:

- **Slow heart rate, especially after your first dose.** An ECG will be performed before and 6 hours after your first dose. Your pulse and blood pressure should be checked every hour while you stay in a medical facility during this time. If your heart rate slows down too much, you might feel dizzy or tired, or feel like your heart is beating slowly or skipping beats. Symptoms can happen up to 24 hours after your first dose. After 6 hours, if your ECG shows any heart problems or if your heart rate is still too low or continues to decrease, you will continue to be watched by a health care professional. If you have any serious side effects after your first dose, especially those that require treatment with other medicines, you will stay in a medical facility to be watched overnight and for at least 6 hours after your second dose of GILENYA the next day. If you have certain types of heart problems, or if you are taking certain types of medicines that can affect your heart, you will be watched overnight after you take your first dose. If you experience slow heart rate, it will usually return to normal within 1 month. Call your doctor or go to the nearest emergency room right away if you have any symptoms of a slow heart rate. If you stop taking GILENYA for more than 14 days after your first month of treatment, you will need to repeat this observation.

- **Increased risk of serious infections.** GILENYA lowers the number of white blood cells (lymphocytes) in your blood. This will usually go back to normal within 2 months of stopping GILENYA. Your doctor may do a blood test before you start GILENYA. Increased risk of infection was seen with doses higher than the approved dose (0.5 mg). Two patients died who took higher-dose GILENYA (1.25 mg) combined with high-dose steroids. Call your doctor right away if you have fever, tiredness, body aches, chills, nausea, or vomiting.

- **Macular edema, a vision problem that can cause some of the same vision symptoms as an MS attack (optic neuritis), or no symptoms.** Macular edema usually starts in the first 3 to 4 months after starting GILENYA. Your doctor should test your vision before you start GILENYA; 3 to 4 months after you start GILENYA; and any time you notice vision changes. Vision problems may continue after macular edema has gone away. Your risk of macular edema may be higher if you have diabetes or have had an inflammation of your eye (uveitis). Call your doctor right away if you have blurriness, shadows, or a blind spot in the center of your vision; sensitivity to light; or unusually colored vision.

- **Breathing problems.** Some patients have shortness of breath. Call your doctor right away if you have trouble breathing.

- **Liver problems.** Your doctor should do blood tests to check your liver before you start GILENYA. Call your doctor right away if you have nausea, vomiting, stomach pain, loss of appetite, tiredness, dark urine, or if your skin or the whites of your eyes turn yellow.

- **Increases in blood pressure (BP).** BP should be monitored during treatment.

GILENYA may harm your unborn baby. Talk to your doctor if you are pregnant or planning to become pregnant. Women who can become pregnant should use effective birth control while on GILENYA, and for at least 2 months after stopping. If you become pregnant while taking GILENYA, or within 2 months after stopping, tell your doctor right away. Women who take GILENYA should not breastfeed, as it is not known if GILENYA passes into breast milk. A pregnancy registry is available for women who become pregnant during GILENYA treatment. Call 1-877-598-7237 or visit www.gilenyapregnancyregistry.com for more information.

Tell your doctor about all your medical conditions, including if you have or now have an irregular or abnormal heartbeat; history of stroke or warning stroke; heart problems; a history of repeated fainting; a fever or infection, or if you are unable to fight infections; eye problems; diabetes; breathing or liver problems; or high blood pressure. Also tell your doctor if you have had chicken pox or have received the vaccine for chicken pox. Your doctor may do a test for the chicken pox virus, and you may need to get the vaccine for chicken pox and wait 1 month before starting GILENYA.

Tell your doctor about all the medicines you take, including medicines for heart problems or high blood pressure or other medicines that may lower your heart rate or change your heart rhythm; medicines that could increase your chance of infections, such as medicines to treat cancer or control your immune system; or ketoconazole (an antifungal) by mouth. If taken with GILENYA, serious side effects may occur. You should not get certain vaccines while taking GILENYA, and for at least 2 months after stopping.

The most common side effects with GILENYA were headache, flu, diarrhea, back pain, abnormal liver tests, and cough.

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch, or call 1-800-FDA-1088.

Please see additional Important Safety Information on previous page.
MEDICATION GUIDE
GILENYA™ (je-LEN-yah) (fingolimod) capsules

Read this Medication Guide before you start using GILENYA and each time you get a refill. There may be new information. This information does not take the place of talking with your doctor about your medical condition or your treatment.

What is the most important information I should know about GILENYA?
GILENYA may cause serious side effects, including:

1. Slow heart rate (bradycardia or bradyarrhythmia) when you start taking GILENYA. GILENYA can cause your heart rate to slow down, especially after you take your first dose. You will have a test to check the electrical activity of your heart (ECG) before you take your first dose of GILENYA.

You should stay in a medical facility for at least 6 hours after you take your first dose of GILENYA.
After you take your first dose of GILENYA:
• Your pulse and blood pressure should be checked every hour.
• You should be watched by a healthcare professional to see if you have any serious side effects. If your heart rate slows down too much, you may have symptoms such as:
  ◦ dizziness
  ◦ tiredness
  ◦ feeling like your heart is beating slowly or skipping beats
• If you have any of the symptoms of slow heart rate, they will usually happen during the first 6 hours after your first dose of GILENYA. Symptoms can happen up to 24 hours after you take your first dose of GILENYA.
• 6 hours after you take your first dose of GILENYA you will have another ECG. If your ECG shows any heart problems or if your heart rate is still too low or continues to decrease, you will continue to be watched.
• If you have any serious side effects after your first dose of GILENYA, especially those that require treatment with other medicines, you will stay in the medical facility to be watched overnight. You will also be watched for any serious side effects for at least 6 hours after you take your second dose of GILENYA the next day.
• If you have certain types of heart problems, or if you are taking certain types of medicines that can affect your heart, you will be watched overnight after you take your first dose of GILENYA.

Your slow heart rate will usually return to normal within 1 month after you start taking GILENYA.

Call your doctor or go to the nearest emergency room right away if you have any symptoms of slow heart rate.

2. Infections. GILENYA can increase your risk of serious infections. GILENYA lowers the number of white blood cells (lymphocytes) in your blood. This will usually go back to normal within 2 months of stopping treatment. Your doctor may do a blood test before you start taking GILENYA. Call your doctor right away if you have any of these symptoms of an infection:
• fever
• tiredness
• body aches
• chills
• nausea
• vomiting

3. A problem with your vision called macular edema. Macular edema can cause some of the same vision symptoms as an MS attack (optic neuritis). You may not notice any symptoms with macular edema. Macular edema usually starts in the first 3 to 4 months after you start taking GILENYA. Your doctor should test your vision before you start taking GILENYA and 3 to 4 months after you start taking GILENYA, or any time you notice vision changes during treatment with GILENYA. Your risk of macular edema may be higher if you have diabetes or have had an inflammation of your eye called uveitis.

Call your doctor right away if you have any of the following:
• blurriness or shadows in the center of your vision
• a blind spot in the center of your vision
• sensitivity to light
• unusually colored (tinted) vision

What is GILENYA?
GILENYA is a prescription medicine used to treat relapsing forms of multiple sclerosis (MS) in adults. GILENYA can decrease the number of MS flare-ups (relapses). GILENYA does not cure MS, but it can help slow down the physical problems that MS causes.

It is not known if GILENYA is safe and effective in children under age 18.

Who should not take GILENYA?
Do not take GILENYA if you:
• have had a heart attack, unstable angina, stroke or warning stroke or certain types of heart failure in the last 6 months
• have certain types of irregular or abnormal heartbeat (arrhythmia), including patients in whom a heart finding called prolonged QT is seen on ECG before starting GILENYA
• are taking certain medicines that change your heart rhythm

If any of the above situations apply to you, tell your doctor.

What should I tell my doctor before taking GILENYA?
Before you take GILENYA, tell your doctor about all your medical conditions, including if you had or now have:
• an irregular or abnormal heartbeat (arrhythmia)
• a history of stroke or warning stroke
• heart problems, including heart attack or angina
• a history of repeated fainting (syncope)
• a fever or infection, or you are unable to fight infections. Tell your doctor if you have had chicken pox or have received the vaccine for chicken pox. Your doctor may do a blood test for chicken pox virus. You may need to get the vaccine for chicken pox and then wait 1 month before you start taking GILENYA.
• eye problems, especially an inflammation of the eye called uveitis.
• diabetes
• breathing problems, including during your sleep
• liver problems
• high blood pressure
• Are pregnant or plan to become pregnant. GILENYA may harm your unborn baby. Talk to your doctor if you are pregnant or are planning to become pregnant.
• Tell your doctor right away if you become pregnant while taking GILENYA or if you become pregnant within 2 months after you stop taking GILENYA.
• If you are a female who can become pregnant, you should use effective birth control during your treatment with GILENYA and for at least 2 months after you stop taking GILENYA.

Pregnancy Registry: There is a registry for women who become pregnant during treatment with GILENYA. If you become pregnant while taking GILENYA, talk to your doctor about registering with the GILENYA Pregnancy Registry. The purpose of this registry is to collect information about your health and your baby's health.
For more information, you can call the GILENYA Pregnancy Registry at 1-877-598-7237 or visit www.gilenyapregnancyregistry.com.

- Are breastfeeding or plan to breastfeed. It is not known if GILENYA passes into your breast milk. You and your doctor should decide if you will take GILENYA or breastfeed. You should not do both.

Tell your doctor about all the medicines you take, including prescription and non-prescription medicines, vitamins, and herbal supplements.

Know the medicines you take. Keep a list of your medicines with you to show your doctor and pharmacist when you get a new medicine.

Using GILENYA and other medicines together may affect each other causing serious side effects. Especially tell your doctor if you take:

- Medicines for:
  - heart problems or
  - high blood pressure or
  - other medicines that may lower your heart rate or change your heart rhythm
- Vaccines. Tell your doctor if you have been vaccinated within 1 month before you start taking GILENYA. You should not get certain vaccines while you take GILENYA and for at least 2 months after you stop taking GILENYA. If you take certain vaccines, you may get the infection the vaccine should have prevented. Vaccines may not work as well when given during GILENYA treatment.
- Medicines that could raise your chance of getting infections, such as medicines to treat cancer or to control your immune system.
- ketoconazole (an antifungal drug) by mouth

Ask your doctor or pharmacist for a list of these medicines if you are not sure.

How should I take GILENYA?
- Your first dose of GILENYA will be given in a medical facility where you will be watched for at least 6 hours after your first dose of GILENYA. See “What is the most important information I should know about GILENYA?”
- Take GILENYA exactly as your doctor tells you to take it.
- Take GILENYA 1 time each day.
- Take GILENYA with or without food.
- Do not stop taking GILENYA without talking with your doctor first.
- If you start GILENYA again after stopping for 2 weeks or more, you will start taking GILENYA again in your doctor’s office or clinic.

What are possible side effects of GILENYA?

GILENYA can cause serious side effects.

See “What is the most important information I should know about GILENYA?”

Serious side effects include:

- Breathing Problems. Some people who take GILENYA have shortness of breath. Call your doctor right away if you have trouble breathing.
- Liver problems. GILENYA may cause liver problems. Your doctor should do blood tests to check your liver before you start taking GILENYA. Call your doctor right away if you have any of the following symptoms of liver problems:
  - nausea
  - vomiting
  - stomach pain
  - loss of appetite

- tiredness
- your skin or the whites of your eyes turn yellow
- dark urine

The most common side effects of GILENYA include:

- headache
- flu
- diarrhea
- back pain
- abnormal liver tests
- cough

Tell your doctor if you have any side effect that bothers you or that does not go away.

These are not all of the possible side effects of GILENYA. For more information, ask your doctor or pharmacist. Call your doctor for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088.

How do I store GILENYA?
- Store GILENYA in the original blister pack in a dry place.
- Store GILENYA at room temperature between 59°F to 86°F (15°C to 30°C).
- Keep GILENYA and all medicines out of the reach of children.

General information about GILENYA

Medicines are sometimes prescribed for purposes other than those listed in a Medication Guide. Do not use GILENYA for a condition for which it was not prescribed. Do not give GILENYA to other people, even if they have the same symptoms you have. It may harm them.

This Medication Guide summarizes the most important information about GILENYA. If you would like more information, talk with your doctor. You can ask your doctor or pharmacist for information about GILENYA that is written for healthcare professionals.

For more information, go to www.pharma.US.Novartis.com or call 1-888-669-6682.

What are the ingredients in GILENYA?

Active ingredient: fingolimod

Inactive ingredients: gelatin, magnesium stearate, mannitol, titanium dioxide, yellow iron oxide.

This Medication Guide has been approved by the U.S. Food and Drug Administration.

GILENYA is a trademark of Novartis AG.

Manufactured by:
Novartis Pharma Stein AG
Stein, Switzerland

Distributed by:
Novartis Pharmaceuticals Corporation
East Hanover, New Jersey 07936

© Novartis
T2012-109
May 2012
An n Pietrangelo
Williamsburg, Va.

A published author and freelance writer from Virginia, Ann Pietrangelo is committed to not only raising awareness, but also to educating others to make informed decisions as they battle MS. Diagnosed with relapsing remitting multiple sclerosis in 2004 and triple-negative breast cancer just a few years later, she knows all too well the importance of having a positive support system and hopes to offer the same to others. Her personal experiences have taught her a few things about how to navigate life with chronic illness, what it takes to truly survive, and just how precious life is. As an MSF Ambassador, Ann strives to help people with MS find the support, services, and information they need to make good decisions and to live life to the fullest. Also, Ann wants to use her online presence to encourage the MS community and to help family, friends, and others gain some insight into the realities of MS. She credits her husband, Jim, for his support as a caregiver and assistance in finding alternate ways to handle daily responsibilities. Their adult children are scattered throughout the country, so they’ve learned to love road trips. Their philosophy is simple: live while you’re here and give back when you can.

Chad Bolema
Jenison, Mich.

“There are good days, and there are better days” is the motto Chad Bolema lives his life by. Diagnosed with MS in 2000, the initial news took an emotional toll, as the idea of not being able to financially or physically support his wife and two daughters hit hard. With a renewed sense of determination and resiliency, he was able to change his mindset, minimize his fears, grab hold of faith, and figure out a way to keep going. Having gone through a variety of injections, chemotherapies, and steroid treatments, Chad believes his story can inspire and provide comfort to someone else. As an MSF Ambassador, Chad hopes to spread his positive outlook to those with MS by speaking to support groups and the local community. “I feel blessed having the opportunity to educate others about MS; however, it’s also awesome to be a part of directing families in finding meaningful support.”

Dina Kutcher
Huntington Station, N.Y.

As Dina Kutcher was finishing her last clinical rotation in physician assistant school, she noticed that the vision in her left eye was blurry. Having
seen what MS did to her dearly departed mother, she was fearful of what the outcome would be. “My reaction was ‘I am 29 years old and I am just getting started in my career.’ How was I going to be able to finish school? It didn’t seem fair.” It has now been 12 years since she was diagnosed, and she is still a walking, talking, happy, moving, and singing person. Understanding MS from the perspective of a caregiver and patient, Dina is most passionate about helping those who are living with this unpredictable disease stay positive and never give up. “We need to fight this fight, and the more hands we have, the better we will do and the further we will go!” Dina enjoys helping those in need and encouraging others to live in the here and now. “Positive attitude, positive mind. ‘Never give up’ is my motto.” Dina is the proud parent of an active and healthy 8-year-old son.

Twyla Lee Cochran
Copperhill, Tenn.

A grand mal seizure on her 42nd birthday led to Twyla Cochran’s MS diagnosis. After seeing many physicians, she was informed that she had seven lesions on her brain and one on her spine. Although she was initially told by doctors not to inform others that she was battling MS, she chose not to be silenced by this disease. It has been four years since that fateful day, and her life has done a complete 180. Despite struggling with symptoms of fatigue and headaches, she remains hopeful. “My mission as an MSF Ambassador is to spread awareness. By spreading awareness, we can work together to raise funding, educate others, and obtain resources for those with MS.” Prior to being diagnosed, Twyla was an office manager for an OB/GYN, but, due to the effects of her disease-modifying drugs, has since become a housewife. “I want to be remembered by my family, friends, and community as a fighter. I want to know that I did everything within my power to bring awareness and hope for those in the future.”

Ashli Hopson
Suwanee, Ga.

For Ashli Hopson, one of the best days of her life was when she graduated from Auburn University. However, the feeling was short-lived. After a bout with vertigo and going blind for two weeks, a general neurologist speculated that she had MS. “I went from being on top of the world to feeling like everything I accomplished had been taken away from me.” After an official diagnosis, Ashli found her health destabilizing, as she was hospitalized seven to eight times a year and experienced acute exacerbations regularly. However, she did not let her circumstances undermine her faith. With lifestyle changes and a renewed positive attitude, Ashli has been able to lend her voice and share her experiences with others. By keeping the lines of communication open, Ashli hopes to “abolish the overgeneralizations associated with people living with MS.” As an MSF Ambassador, she hopes to bridge the gap in the community by encouraging and raising awareness. “I will do this by speaking to staff in doctors’ offices and teaching the local firefighters and police officers how to recognize signs of an MS exacerbation versus inebriation.”
Sheri Paulson, Galesburg, N.D.

“The happiest people do not have the best of everything; they make the best of everything.” Living by this motto, Sheri Paulson has not let her MS diagnosis keep her down. Since being diagnosed with MS in April 2001, she has continuously worked to make a difference in the lives of MS patients while giving her time and energy to support various causes. This has given her life great purpose and fulfillment. She has been active with fundraising, team leading, sharing her story, advocating for others, working on public policy reform, volunteering, and donating to charities. Sheri has set a goal to do an MS event in all 50 states by 2020, whether that is a bike ride, walk, or speaking event. She only has 24 states to go! When Sheri is not volunteering, she loves spending time with her family at the lakes or on the farm in Galesburg, N.D. Her family includes husband Alan, daughter Amanda, and faithful friend and sidekick Jazzy, the golden retriever.

Jodi Cooley Valley Village, Calif.

Jodi Cooley is no stranger to the effects of MS. “MS has been in my life since I was 6 years old, as my mother was afflicted with this disease.” After giving birth to her daughter in 2005, Jodi was also diagnosed. Even though she admits her pride wouldn’t allow her to accept the prognosis, she has since come to live a full, happy life with MS. She wants to remind others that they are not alone, and she encourages them to get into community to learn from others in the same situation. As an MSF Ambassador, Jodi hopes to spread the word of the MSF and to empower those in need to know that there are individuals available who can help. “The MSF has helped me in so many ways, from the Cooling Program that provided cooling vests to keep cool in the California heat to the Assistive Technology Program that provided a lift on my van. I want to give back to the organization that has done so much for me.” Through visual workshops and speaking engagements, Jodi plans to share her story with all who will listen.

Michelle Sanfiel Kissimmee, Fla.

Although Michelle was officially diagnosed with progressive relapsing multiple sclerosis five years ago, she has been battling symptoms of the illness for at least eight. Now bound to a power chair due to paralysis, Michelle hopes that by participating in MS-related events, speaking at support group meetings, and interacting with the medical community, others will be more sympathetic to the day-to-day challenges facing someone who is living with MS. “It took me awhile to figure it out, but now I understand what my purpose is, and if I can at least help educate one person, I have done my job.” Michelle is an activist, advocate volunteer for United for Care, and a volunteer for hospice. While she may have MS, she proudly exclaims, “It doesn’t have me.” Michelle is wife to Frankie and mom to four children, including a 15 year old, 14 year old, and a set of 10-year-old twins. Michelle considers her family “her world.”
Marlene McDaniel
*Citrus Heights, Calif.*

Born and raised in California, Marlene McDaniel was diagnosed with MS in November 2005. Having actively worked for a transportation company for most of her adult life, she was forced to retire just three months after her diagnosis. She admits that she has seen the “ugly side” of MS: the fatigue, depression, loneliness, frustration, and pain. She wants others to know that while she may not look sick, MS affects each person differently. As an MSF Ambassador, she hopes to educate others about the illness and share her tips for perseverance and finding the silver lining. “I believe that my passion for helping others along with my personal knowledge and experience with MS make me a strong ambassador.” In addition to volunteering for the local sheriff’s department, she is actively involved in two support groups, reaching over 8,000 people. While focusing on helping others who are newly diagnosed, Marlene hopes to expound on the illness to those who do not understand. She currently lives in Northern California with her cat, Elvis.

Diana Valeriano
*Thousand Oaks, Calif.*

Diana Valeriano was diagnosed with MS more than 30 years ago. While she admits that the disease has changed her life drastically, she is proud to say that with each challenge comes another feat. Confined to a motorized wheelchair 24/7, Diana has learned to manage her limited mobility, including training herself to write and use a computer with her left hand once her right one became paralyzed. In addition to serving as a peer counselor to those newly diagnosed with MS, she hopes to continue the path of past fundraising efforts, which included a published cookbook of recipes with proceeds supporting MS research. Diana hopes to donate her time and energy to make sure others understand how the illness affects lives. “As someone afflicted with this illness, I am able to identify and relate to challenges that those newly diagnosed may be facing. I am honored to have been chosen to represent the Multiple Sclerosis Foundation as an Ambassador.” “Live life to the fullest” is her motto and she plans on doing just that.
7-Night Southern Caribbean Cruise aboard Royal Caribbean’s Adventure of the Seas departing San Juan, Puerto Rico on February 1st, 2015 to Charlotte Amalie, St. Thomas; Basseterre, St. Kitts; Oranjestad, Aruba; and Willemstad, Curacao.

In order to participate in the Multiple Sclerosis Foundation’s program aboard the ship, you must book through the MSF by calling:

(800) 659-0081
(954) 322-1030
(800) 225-6495 or cruise@msfocus.org

Cruise Itinerary

Sunday, February 1st
Depart San Juan, Puerto Rico - 8:30 p.m.

Monday, February 2nd
Charlotte Amalie, St. Thomas
Arrive 8:00 a.m., Depart 5:30 p.m.

Tuesday, February 3rd
Basseterre, St. Kitts
Arrive 8:00 a.m., Depart 5:00 p.m.

Wednesday, February 4th - At Sea

Thursday, February 5th
Oranjestad, Aruba
Arrive 8:00 a.m., Depart 10:00 p.m.

Friday, February 6th
Willemstad, Curacao
Arrive 8:00 a.m. - Depart 6:00 p.m.

Saturday, February 7th - At Sea

Sunday, February 8th
Arrive San Juan, Puerto Rico - 6:00 a.m.
We recently caught up with MSF Ambassador Nick Marchesani, who had just returned from leading a Chair Zumba class on the Jersey Shore, and asked him to tell us about Chair Zumba and how it benefits people with MS. Nick’s Chair Zumba session on the last MSF Cruise for a Cause® was such a hit that he’s been asked to return to bring more fun, energizing Chair Zumba sessions to the next MSF cruise in February 2015 (see page 25 for more information.)

How would you describe Chair Zumba?

Chair Zumba, a genre of Zumba Gold®, is offered to participants with physical, physiological, or psychological limitations. Chair Zumba is a modified version of Zumba that teaches participants alternative versions of original Zumba dance steps while focusing on the special needs that disabled individuals bring to fitness.

Can people with very limited mobility do Chair Zumba?

Chair Zumba exercises are designed for those who have severely limited mobility. The majority of my Chair Zumba classes are completely done while sitting in a chair. Modified movements are available for those who have more mobility. A well-trained licensed instructor who recognizes and understands a participant’s level of ability can instantly modify the moves to a song, allowing the individual to participate seamlessly in unity with all class participants. As always, consult your doctor before starting an exercise program.

How long does someone need to do Chair Zumba in order to get a benefit from it?

Each individual is different. I believe the true benefits are seen when a participant is laughing and smiling! Deleting the words “I can’t” from a person’s vocabulary and replacing them with “I can” gives the individual a positive attitude. With time, the brain will find detours around damaged nerves and lesions. Weak muscles in the arms, legs, quads, and hamstrings will get support from newly strengthened and developed muscles, lessening the breakdown of tendons and cartilage. In theory, as a person becomes more positive physically, as well as mentally, the body will relax. The muscles will loosen and the stiffness will disappear. Again, people react differently at different times. Always make sure your core body temperature is low and you drink plenty of cold water.
What kind of music provides the basis for Chair Zumba?

Chair Zumba involves dance and aerobic elements. Its choreography is inspired by hip-hop, Latin, reggae, and mainstream top 40 music to keep all involved physically as well as mentally. Its psychological concept is to have the participants thinking of the great times and laughter that I incorporate in the workout. Familiarity with the songs is an absolute must!

If you don't have a class in your area, can you do Chair Zumba on your own?

Strength is in numbers. Doing Chair Zumba on your own generally will not work. After completing physical or occupational therapy, instructions are given with the workouts to do at home; alone, however, the majority of people will never revisit the exercise, or if they do, they won’t do it correctly, resulting in re-injury. Chair Zumba is no different. I recommend that people always have a licensed Zumba instructor specializing in Chair Zumba around to monitor your abilities. That instructor will work with you to adjust a movement to better your abilities in a safe, alternative, and effective way.

How did you get involved in Chair Zumba and how has it helped you?

While at a local gym, I heard music and clapping coming from a room. It sounded like a party. I looked in and saw people dancing in unison. I looked toward the front of the room and saw an instructor in fluorescent colors leading the class. The colors brought me back to the 80s when I was running around in high school wearing the same colored clothes. The whole package of music, dance moves, and laughter got me hooked!

Zumba had me moving again and brought a smile back to my face. My legs were weak when I started and I could not bend my knees or ankles. My legs were two-by-fours! But I did not care. I stayed in the middle of the packed room as I danced, laughed, and sang to the music. On the whole, the classes I have attended brought back my positivity and my mobility. In my mind, there was no stopping me. I started imagining myself doing each movement like the instructor. Little by little, I was doing it.

A couple of years later, I took courses to be licensed as a Zumba and Zumba Gold® Instructor, which allow me to teach Chair Zumba.

What was it like leading Chair Zumba on the last cruise? What do you have planned for next year’s cruisers?

Instructing Chair Zumba on the 2014 MSF Cruise for a Cause made me proud of what I’ve made of myself after being diagnosed with MS. I wanted to give back to others and I made that happen! The energy from the attendees was incredible! As laughter and singing grew louder during class, I knew they were having fun and thinking which song may be next!

What am I planning for the 2015 MSF Cruise for a Cause? Chair Zumba class will be focused on a theme that we all can relate to – ‘Don't Hold Back!’ It will be energizing, fun, and will have meaning for all who attend. I am researching an endless collection of CDs, MP3s, and stacks of wax for the most uplifting, positive, and fun songs that we all can sing and dance to, as well as help us with our balance and strength. It’s about finding our inner abilities!
I was a neurosurgical ICU nurse for several years before being diagnosed with MS. After my diagnosis, I decided to get my MS certification and began working as a nurse in an MS center. Since then, I have been playing the role of both a patient and a provider. Because I am a nurse, I am good at navigating insurance claims and advocating for myself during visits to the doctor. However, the majority of patients don’t have a healthcare background. Today, I am going to teach you one simple way to be your own advocate.

In the hospital, every professional from doctors to physical therapists depends on patient charts to do their jobs. Arguably, the chart is just as important as the patient, which may sound heartless, but hear me out! Patients forget details or sometimes even lie about them on purpose. “MS brain” is a real thing, and it’s not your fault that you can’t remember your medications, every test result you have ever gotten back, or who your urologist is. The chart, however, never deceives. It contains all of the data, results, and hard evidence that lets us do our jobs.

Most of us are not in a hospital or facility where all of our information is kept in one place. We bounce from specialist to specialist, between multiple offices and medical centers. Our chart doesn’t follow us everywhere we go, but instead, we have several charts in several different offices, each one only containing part of our story. Have you ever moved and experienced the frustration of getting all your records from 10 different doctors sent to your new provider? Wouldn’t it be nice if your chart could follow you everywhere to avoid those situations? Well, mine does, and yours can too!

I started with a standard binder and organized it how a hospital chart would be organized. It has been so helpful, and every doctor that I visit is grateful to have an organized record of my medical history. You have the right to have copies of all medical records and test results; you just have to ask for them. Additionally, MRIs and other radiology results can be burned onto a CD for you, often free of charge. Here is how I organized my chart; I hope it inspires you to do something similar!

**Front Flap:**
- A list of all current medications and allergies. For medications, include the name of the medication, the dosage, and how often you take it. For allergies, record what kind of allergic reaction you had (e.g. rash, trouble breathing, etc.)
- CDs of MRI images
- A list of questions that you don’t want to forget to ask.

On the first divider, I tape the business cards of doctors, social workers, and other professionals that are involved in my care. When I need to contact someone, I never have to search for their contact
information, and when I’m in a doctor’s office and they want to send records to another one of my specialists, I always have fax numbers right there.

Next, I have four sections, separated by dividers:

1. **Lab and Diagnostic Studies**
   - Recent blood work and any special blood tests like lyme titers
   - Lumbar puncture (spinal tap) results
   - MRI reports
   - Evoked potential reports
   - Visual test results.

2. **Progress Notes**
   - Visit notes from doctors, if your doctor’s office will provide them.

3. **Hospital Admissions**
   - Dates of every hospital admission, brief notes about the admission, and any important paperwork.

4. **Insurance Paperwork and Billing**
   - Copies of bills
   - Enrollment information for copay assistance programs
   - Copies of insurance denial/approval letters for tests and medications
   - Receipts of all copays because they are tax-deductible
   - Which disease modifying drugs you have been on, the dates, and why you switched off of them. This also can help speed up the approval process with your insurance company if you have to switch to a new drug.

Being an informed patient should be a priority for everyone with MS and everyone who cares for someone with MS. Having well-organized records can help providers give you the best care possible and may even spare you from having to repeat unpleasant tests and exams. Even if you don’t create an entire chart, having copies of important test results is always a good idea. I once met a doctor whose office was tragically lost to a fire, along with all the medical records of all of his patients! Having your own records, even just as a back-up, can only help you manage your MS.

*Read Stephanie Butler’s Bio on page 31.*
Difficulty with walking, or gait, is one of those common symptoms of multiple sclerosis. There are many causes of gait issues, including muscle weakness, foot drop, muscle spasms, balance difficulty, loss of sensation, and fatigue. If you have difficulty walking, your neurologist will try to identify the cause and will accordingly pick the treatment that is best for you. One particular cause of walking difficulty is foot drop, which is the focus of this article.

Foot drop occurs when the muscles of your leg are weak or when the peroneal nerve, which runs down your leg to your foot, is damaged. This causes the foot to constantly point toes down, as if you were sitting with your legs dangling off the edge of a tall chair. Normally, while walking, we pick up our leg, point our toes up, and step down onto the heel of our foot, which allows us to propel forward. A person with foot drop cannot point his or her toes up while taking a step, causing the toes to drag. Because the toes drag on the ground, they are more likely to catch on carpeting, stairs, or other obstacles while walking. The biggest risk associated with foot drop is that it can cause the person to trip and fall. Falls are a major concern because they can lead to serious complications, such as broken bones or head injuries.

Foot drop may occur during a relapse and get better with time, or it may become permanent. In either case, there are a few treatments to help manage it. The first is physical therapy (PT). The goal of PT is to strengthen the muscles in the leg and to help train the body to walk normally again. Often, a type of brace called an ankle-foot orthosis (AFO) is used in addition to PT. AFOs go under the foot like the sole of a shoe and come up the back of the leg where it is secured to the lower leg with a strap. This keeps the foot in a neutral position and keeps the toes from pointing down when the leg is lifted to take a step. Many people like using them because they fit easily into shoes, are very supportive, and effectively prevent falls while improving gait.

Another method that many MS patients find to be helpful is nerve stimulation. The brain normally talks to your nerves and tells them what to do by sending an electrical signal to them. If the myelin covering the nerve is damaged by MS, then the nerve essentially becomes a frayed electrical wire. Signals can no longer travel properly, cutting off communication from the brain. Functional electrical stimulation (FES) creates its own electrical signal and stimulates the nerve that has lost its communication with the brain.
Stephanie Butler is an ICU nurse who was diagnosed with multiple sclerosis at the age of 25. Six months after being diagnosed, she became a multiple sclerosis certified nurse and started working in the MS center where she was a patient. Her diagnosis was a defining moment in her life, but she feels that it has made her a better nurse and a better person. She is also attending graduate school to become a nurse practitioner, and she hopes to continue working with people who have MS for a very long time. She also writes for MultipleSclerosis.net and serves on the Advocacy Committee at the New Jersey Metro Chapter of the MS Society. Her blog, www.justkeepsmyelin.com, offers a unique perspective on multiple sclerosis from the point of view of both a healthcare provider and as a person living with the disease every day. Her mission is to bring compassion, humor, and a deeper understanding of MS to anyone who reads it.
Tecfidera (dimethyl fumarate) is a prescription medicine used to treat people with relapsing forms of multiple sclerosis.

Important Safety Information

Before taking and while you take Tecfidera, tell your doctor about any low white blood cell counts or infections or any other medical conditions.

What are the possible side effects of Tecfidera? Tecfidera may cause serious side effects including decreases in your white blood cell count. Your doctor may check your white blood cell count before you take Tecfidera and from time to time during treatment.

The most common side effects of Tecfidera include flushing and stomach problems. These can happen especially at the start of treatment and may decrease over time. Call your doctor if these symptoms bother you or do not go away.

These are not all the possible side effects of Tecfidera. Call your doctor for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088. For more information go to dailymed.nlm.nih.gov.

Tell your doctor if you are pregnant or plan to become pregnant, or breastfeeding or plan to breastfeed. It is not known if Tecfidera will harm your unborn baby or if it passes into your breast milk. Also tell your doctor if you are taking prescription or over-the-counter medicines, vitamins, or herbal supplements.

For additional important safety information, please turn the next page to see Patient Information. This is not intended to replace discussions with your doctor.
Meet a pill that helps you push back against relapsing MS.
Thousands of people have switched to Tecfidera.

It’s the #1 prescribed pill for relapsing MS in the US since September 2013.*

It’s a pill. It cuts relapses in half.

It slows development of brain lesions. It slows physical disability progression.

The 2 most common side effects are flushing and stomach problems. These can happen mainly at the start of treatment and may decrease over time.

Talk to your doctor about your treatment goals and see if switching to Tecfidera is right for you.

*Based on number of prescriptions from IMS NPA™ Weekly Data (September 27, 2013 - March 7, 2014) and Biogen Idec data on file.
# Patient Information

TECFIDERA™ (tek” fi de’ rah)  
(dimethyl fumarate) delayed-release capsules

## What is TECFIDERA?
- TECFIDERA is a prescription medicine used to treat people with relapsing forms of multiple sclerosis (MS).
- It is not known if TECFIDERA is safe and effective in children under 18 years of age.

## Before taking and while you take TECFIDERA, tell your doctor if you have or have had:
- low white blood cell counts or an infection
- any other medical conditions

## Tell your doctor if you are:
- pregnant or plan to become pregnant. It is not known if TECFIDERA will harm your unborn baby.
  - If you become pregnant while taking TECFIDERA, talk to your doctor about enrolling in the TECFIDERA Pregnancy Registry. You can enroll in this registry by calling 1-800-456-2255. The purpose of this registry is to monitor the health of you and your baby.
- breastfeeding or plan to breastfeed. It is not known if TECFIDERA passes into your breast milk. You and your doctor should decide if you will take TECFIDERA or breastfeed.
- taking prescription or over-the-counter medicines, vitamins, or herbal supplements.

## How should I take TECFIDERA?
- Take TECFIDERA exactly as your doctor tells you to take it.
- The recommended starting dose is one 120 mg capsule taken by mouth 2 times a day for 7 days.
- The recommended dose after 7 days is one 240 mg capsule taken by mouth 2 times a day.
- TECFIDERA can be taken with or without food.
- Swallow TECFIDERA whole. Do not crush, chew, or sprinkle capsule contents on food.
- Protect TECFIDERA from light. You can do this by storing the capsules in their original container. Throw away opened TECFIDERA after 90 days.

## What are the possible side effects of TECFIDERA?
TECFIDERA may cause serious side effects including:
- decreases in your white blood cell count

The most common side effects of TECFIDERA include:
- flushing, redness, itching, or rash
- nausea, vomiting, diarrhea, stomach pain, or indigestion

Flushing and stomach problems are the most common reactions, especially at the start of therapy, and may decrease over time. Call your doctor if you have any of these symptoms and they bother you or do not go away. These are not all the possible side effects of TECFIDERA. Call your doctor for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088. [For more information go to dailymed.nlm.nih.gov](http://dailymed.nlm.nih.gov).

## General Information about the safe and effective use of TECFIDERA
- Medicines are sometimes prescribed for purposes other than those listed in this Patient Information. Do not use TECFIDERA for a condition for which it was not prescribed. Do not give TECFIDERA to other people, even if they have the same symptoms that you have. It may harm them.
- If you would like more information, talk to your doctor or pharmacist. You can ask your doctor or pharmacist for information about TECFIDERA that is written for healthcare professionals.

## What are the ingredients in TECFIDERA?
**Active ingredient:** dimethyl fumarate  
**Inactive ingredients:** microcrystalline cellulose, silicified microcrystalline cellulose, croscarmellose sodium, talc, silica colloidal silicon dioxide, magnesium stearate, triethyl citrate, methacrylic acid copolymer - Type A, methacrylic acid copolymer dispersion, simethicone (30% emulsion), sodium lauryl sulphate, and polysorbate 80.  
**Capsule Shell:** gelatin, titanium dioxide, FD&C blue 1; brilliant blue FCF, yellow iron oxide and black iron oxide.

The information keeps on flowing! We’ve arranged for three more amazing teleconferences. Check out the fantastic lineup of experts standing by to help you live better with MS:

**August 12 – “Ask the Doctor” with Ben Thrower, MD**

You've got questions, he's got answers! Join “Dr. Ben,” MSF's Senior Medical Advisor and Director of the Multiple Sclerosis Institute at Shepherd Center, for your chance to ask an expert your burning MS questions.

**September 22 – “The Importance of Adherence with MS Treatment,” followed by an “Ask the Pharmacist” Q&A with Ellen Guthrie, PharmD**

The management of MS from a pharmaceutical standpoint can be complex! Learn how to successfully adhere to your treatment regime with Ellen Guthrie, PharmD, who is an assistant clinical professor at the University of Georgia and advisor to the MSF.

**October 22 – “Promoting Patient-Centered Care with Health Information Technology” with Jennie Q. Lou, MD, MSc**

How can mobile technology and social media aid in your MS care or rehabilitation? How does technology promote patient-centered care, with you as the focus? Learn how with Dr. Jennie Q. Lou, professor of Biomedical Informatics, Nova Southeastern University.

These educational sessions are easy to join. No registration is required. At the time of the call, simply dial 888-560-5502 and enter code 23441168. To view the slide presentation, go to: https://www.spiderphone.com/23441168.

**Apps Increase Access to MSFocus Radio**

To access MSFocus Radio on your iPhone/iPad (iOS), all you have to do is log on to the App Store and search “MSFocus.” The MSFocus Radio app will appear, click “Install.”

To access MSFocus Radio on your Android device, simply log on to Google Play and search “MSFocus.” The MSFocus Radio app will appear, click “Install.”

Once the app has downloaded, look on your phone for the MSFocus Radio icon. Click on the app; it will open our player and allow you to hear interviews, teleconferences, audio from the MSF Cruise for a Cause®, and news articles from MSFocus magazine – 24 hours a day, 7 days a week.

Scan with your mobile device to visit MSFocus Radio now.
Facebook Feedback is your chance to share, in advance, your experiences related to topics covered in the MSFocus. “Like” our Facebook page at www.facebook.com/MultipleSclerosisFoundation and watch for our next Facebook Feedback post.

Our question for this edition was: “What do you do for exercise and how has it changed your life?”

Shawn Duffy  Exercise helps me raise MS awareness. I can now attend events two to three days most weeks.

Faith Quigley  I walk as much as I can when I am able.

Debbie Vogel-Shearer  I exercise five days a week to strengthen my legs. Now, I am able to walk up stairs!

Alison Potts  I am a yoga teacher and I practice yoga every day (including home practice). I walk in the sunshine for Vitamin D and increased mental health, and exercise all at the same time.

Dawn Townsend  Yoga rocks!

Michelle Walker  I ride my stationary bike five days a week for 30 minutes. I do squats five days a week, but I have to hold on to my walker while doing them. I also do calf stretches and push-ups on the wall. I stretch with an elastic band for my arms. I feel good before and after my workout. My son likes to workout with me too. He does the counting for me because I can never remember my numbers in order. LOL 😊

Erika Bolin  I do yoga. The teacher has two sturdy chairs (front and back) for me to adapt along. She also has a fan on me. I use my ramp to “walk” up and down to keep spasms away (ish) and a pedals-only “bike” 3 x a week to keep my legs moving. I feel better after, and it helps my mood. Especially yoga; it is social too.

Donna Cherry  I've been going to the gym every other day; I feel better and energetic.

Robin Stach  I do neuro-pilates, yoga five days a week, modified strength training three times a week, breathing plus voice and diction exercises, hand exercises with baoudin balls, the dance central game in five minute intervals four to five times a day (my breathing is reduced), plus regular kegals. I had a really bad relapse (or should I say worsening of symptoms) and an infection that stopped exercise for a year. I also lost a lot of function. The first three weeks were miserable, but the imbalances are starting to get worked out finally. I know that the first six months to two years post-worsening is the best time to regenerate nerve function and brain function, so I am hitting it as hard as I can without exhausting myself. The last time, I made it to where I could go out again. This time, I am back up and down the stairs, so I can at least pet my dogs, which is a great comfort. My energy is increasing and my ribs are starting to expand far more for easier breathing.
Daun Heckler Cloos  Up until 2011, I had to use a cane, walker, wheelchair, and a scooter. I am taking Tysabri® and Ampyra®, and I was able to put away all my assistive devices. I signed up for a 5k race on a whim and finished in 1:24. Not bad for a first-timer. I walk a ton, am getting ready to start back at the gym, and will be adding weight training to what I do. I have [now] completed many 5k races, some 10k races, and will be walking in two half marathons this year. My five year plan is to walk the Chicago Marathon by the time I turn 50. It will take a lot of dedication and effort, but I know I can get it done with proper training.

Vanessa Exelby I walk and jog. I completed the Nike Half Marathon in San Francisco last October!
I am the wind
That is my name
I used to span from a gentle breeze
Right on up to a hurricane
But lately the span hasn’t been so great
With less to use I hesitate
I guess what now must be my goal
Live less from body
And more from soul

- Keith A. Otis

Keith Otis lives in Chicago, Ill. He composes and records music in a home studio, writes poetry, and has a blog at KAO33@Wordpress.com, where he writes about spiritual and metaphysical matters. Keith was diagnosed with MS in June 2001. He wrote this poem about two years after he was diagnosed, when his physical abilities started to deteriorate. The name Keith is Gaelic, and it means “the wind.”
In people with MS—

Walking better matters

Only AMPYRA® (dalfampridine), an oral medication, improves walking in people with multiple sclerosis (MS). This was demonstrated by an increase in walking speed.

AMPYRA® (dalfampridine) is indicated as a treatment to improve walking in patients with MS. This was demonstrated by an increase in walking speed.

In two pivotal trials 35% and 43% of patients taking AMPYRA responded to treatment vs 8% and 9% of patients taking placebo. Talk to your doctor to see if AMPYRA may be right for you.

AMPYRA should not be taken with other forms of 4-aminopyridine (4-AP, fampridine), since the active ingredient is the same.

AMPYRA may cause serious side effects, including:

- severe allergic reactions. Stop taking AMPYRA and call your doctor right away or get emergency medical help if you have shortness of breath or trouble breathing, swelling of your throat or tongue, or hives;
- kidney or bladder infections.

The most common adverse events for AMPYRA in MS patients were urinary tract infection, trouble sleeping, dizziness, headache, nausea, weakness, back pain, and problems with balance.

Please see the Patient Medication Guide on the following page.

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch, or call 1-800-FDA-1088.
MEDICATION GUIDE FOR AMPYRA® (am-PY-rah) (dalfampridine) Extended Release Tablets

Read this Medication Guide before you start taking AMPYRA and each time you get a refill. There may be new information. This information does not take the place of talking with your doctor about your medical condition or your treatment.

What is the most important information I should know about AMPYRA?

AMPYRA can cause seizures.
- You could have a seizure even if you never had a seizure before.
- Your chance of having a seizure is higher if you take too much AMPYRA or if your kidneys have a mild decrease in function, which is common after age 50.
- Your doctor may do a blood test to check how well your kidneys are working, if that is not known before you start taking AMPYRA.
- Do not take AMPYRA if you have ever had a seizure.
- Before taking AMPYRA tell your doctor if you have kidney problems.
- Take AMPYRA exactly as prescribed by your doctor. See “How should I take AMPYRA?”

Stop taking AMPYRA and call your doctor right away if you have a seizure while taking AMPYRA.

What is AMPYRA?
AMPYRA is a prescription medicine used to help improve walking in people with multiple sclerosis (MS). This was shown by an increase in walking speed.

It is not known if AMPYRA is safe or effective in children less than 18 years of age.

Who should not take AMPYRA?

Do not take AMPYRA if you:
- have ever had a seizure
- have certain types of kidney problems
- are allergic to dalfampridine (4-aminoypyridine), the active ingredient in AMPYRA

What should I tell my doctor before taking AMPYRA?

Before you take AMPYRA, tell your doctor if you:
- have any other medical conditions
- are taking any other prescription medicine, vitamins, or herbal supplements
- are pregnant or plan to become pregnant. It is not known if AMPYRA will harm your unborn baby. You and your doctor will decide if you should take AMPYRA while you are pregnant.
- are breastfeeding or plan to breastfeed. It is not known if AMPYRA passes into your breast milk. You and your doctor should decide if you will take AMPYRA or breastfeed. You should not do both.

Tell your doctor about all the medicines you take, including prescription and non-prescription medicines, vitamins, and herbal supplements.

Know the medicines you take. Keep a list of them and show it to your doctor and pharmacist when you get a new medicine.

How should I take AMPYRA?

- Take AMPYRA exactly as your doctor tells you to take it. Do not change your dose of AMPYRA.
- Take one tablet of AMPYRA 2 times each day about 12 hours apart. Do not take more than 2 tablets of AMPYRA in a 24-hour period.
- Take AMPYRA tablets whole. Do not break, crush, chew or dissolve AMPYRA tablets before swallowing. If you cannot swallow AMPYRA tablets whole, tell your doctor.
- AMPYRA is released slowly over time. If the tablet is broken, the medicine may be released too fast. This can raise your chance of having a seizure.
- AMPYRA can be taken with or without food.
- If you miss a dose of AMPYRA, do not make up the missed dose. Do not take 2 doses at the same time. Take your next dose at your regular scheduled time.
- If you take too much AMPYRA, call your doctor or go to the nearest hospital emergency room right away.
- Do not take AMPYRA with other aminopyridine medications, including compound 4-AP (sometimes called 4-aminoypyridine, fampridine).

What are the possible side effects of AMPYRA?
AMPYRA may cause serious side effects, including:
- serious allergic reactions. Stop taking AMPYRA and call your doctor right away or get emergency medical help if you have:
  - shortness of breath or trouble breathing
  - swelling of your throat or tongue
  - hives
  - kidney or bladder infections

See “What is the most important information I should know about AMPYRA?”

The most common side effects of AMPYRA include:
- urinary tract infection
- trouble sleeping (insomnia)
- dizziness
- headache
- nausea
- weakness
- back pain
- problems with balance
- multiple sclerosis relapse
- burning, tingling or itching of your skin
- irritation in your nose and throat
- constipation
- indigestion
- pain in your throat

Tell your doctor if you have any side effect that bothers you or that does not go away.

These are not all the possible side effects of AMPYRA. For more information, ask your doctor or pharmacist.

Call your doctor for medical advice about side effects. You may report side effects to the FDA at 1-800-FDA-1088.

How should I store AMPYRA?
- Store AMPYRA at 59°F to 86°F (15°C to 30°C).
- Safely throw away AMPYRA that is out of date or no longer needed.

Keep AMPYRA and all medicines out of the reach of children.

General Information about the safe and effective use of AMPYRA
Medicines are sometimes prescribed for purposes other than those listed in this Medication Guide. Do not use AMPYRA for a condition for which it was not prescribed. Do not give AMPYRA to other people, even if they have the same symptoms that you have. It may harm them.

This Medication Guide summarizes the most important information about AMPYRA. If you would like more information, talk with your doctor. You can ask your pharmacist or doctor for information about AMPYRA that is written for health professionals.

For more information, go to www.AMPYRA.com or call 1-800-367-5109.

What are the ingredients in AMPYRA?
Active ingredient: dalfampridine (previously called fampridine)
Inactive ingredients: colloidal silicon dioxide, hydroxypropyl methylcellulose, magnesium stearate, microcrystalline cellulose, polyethylene glycol, and titanium dioxide.

Distributed by: Acorda Therapeutics, Inc.
Ardsley, NY 10502

Issued 01/2014

This Medication Guide has been approved by the U.S. Food and Drug Administration.

AMPYRA® is a registered trademark of Acorda Therapeutics®, Inc.
Manufactured for Acorda under license from Alkermes Pharma Ireland Limited (APIL), Athlone, Ireland, utilizing APIL's Matrix Drug Absorption System (MDAS™) technology.
MDAS™ is a registered trademark of Alkermes Pharma Ireland Limited (APIL).
U.S. Patent Nos.: US 5,540,938; US 6,007,626; US 8,354,437; and US 8,440,705
The stylized Acorda logo is a registered trademark of Acorda Therapeutics®, Inc.
©2014, Acorda Therapeutics, Inc. All rights reserved.
0114427ARB-0
The Multiple Sclerosis Foundation Independent Support Group Network is growing! Please welcome the following newly affiliated groups:

**African American Inspirational MS Support Group, Hampton, Va.**
**MS in Motion Support Group, Orlando, Fla.**
**Lake Magdalene MS Support Group, Tampa, Fla.**
**MS R Us Support Group, Dothan, Ala.**
**MS Warriors of Southwest Louisiana Support Group, Lake Charles, La.**
**Stockbridge MS Support Group, Stockbridge, Ga.**
**Warriors & Survivors MS Support Group, Charleston, S.C.**
**We Care and Share MS Support Group, Bradenton, Fla.**

Please visit our website at [www.msfocus.org/support-groups.aspx](http://www.msfocus.org/support-groups.aspx) for the meeting dates, times, and locations of the above listed support groups.

The MSF welcomes you to start or affiliate your MS support group with our Network today! As the MSF’s Support Group Coordinator, I provide personalized, one-on-one phone and email support to group leaders and co-leaders throughout the year. I’m always happy to answer questions, brainstorm, help resolve problems, and provide guidance. For those who are hoping to create a new support group, I am available to assist at each step of the way. For those who are hoping to affiliate an already established support group, the MSF provides many types of unique assistance.

As part of the MSF Independent Support Group Network, you will be able to:

- Receive an outline of topics, booklets, related fact sheets, and ideas for meeting discussions;
- List your group in the National Independent Support Group Directory on the MSF’s website;
- Give each of your members an MSF Support Group Welcome Kit – a colorful, fun, and engaging package of materials;
- Be the “eyes and ears” of the MSF and share the needs of your local MS community with us;
- Advertise your meetings to a wider audience within your community;
- And receive materials, support, resources, and more from the MSF throughout the year!

To learn more about the MSF’s Support Group Program and how you can apply to start or affiliate your support group, please contact me via phone at (888)-MSFOCUS (673-6287) or via email at alissa@msfocus.org. I look forward to hearing from you!
Help Us Help You (and win a free tablet!)

Your feedback is vital to the quality of MSFocus. Please fill out and return this brief survey. One randomly-selected responder will receive a free tablet computer!

How long have you subscribed to MSFocus?
- □ Less than one year
- □ More than one year
- □ More than two years
- □ More than five years

Do you:
- □ Read MSFocus cover to cover
- □ Read only articles that apply to you
- □ Read only certain features

How interested are you in the following topics? (1-5 scale, 1 being not interested; 5 being very interested)

Medical information 1 2 3 4 5
Symptom management 1 2 3 4 5
Complementary alternative medicine 1 2 3 4 5
Human interest 1 2 3 4 5
Tips for caregivers 1 2 3 4 5
First-person accounts of living with MS 1 2 3 4 5
Assistive Technology 1 2 3 4 5
Diet & Exercise 1 2 3 4 5

How familiar are you with the following MSF programs & services:

National toll-free helpline □ □ □
Lending Library □ □ □
Support Group Program □ □ □
Homecare Grant Program □ □ □
Assistive Technology Program □ □ □
Cooling Equipment Program □ □ □
Health & Wellness Program □ □ □
Computer Grant Program □ □ □
Brighter Tomorrow Grant Program □ □ □
MSFocus Radio □ □ □

In order to be entered into the random drawing, please provide your contact information.

Name _______________________________
Address __________________________________________
Phone ____________________________________________
Email address ________________________________

Mail to: Multiple Sclerosis Foundation, 6520 North Andrews Avenue, Fort Lauderdale, FL 33309-2132. Attention: MSFocus Survey.

MSF values your privacy and will never give, sell, or trade your personal information to any other organization or company. By providing your email address, you are automatically registered to receive occasional brief announcements from the MSF about programs and services that are available. An option to opt-out is included with each announcement.
Each year, the MSF makes dreams come true for individuals with MS through the *Brighter Tomorrow Grant Program*. The goal of this national program is to provide goods or services to improve quality of life for those living with MS by enhancing safety, self-sufficiency, comfort, or well-being. In the past, recipients of the *Brighter Tomorrow Grant* have received adaptive sports equipment, appliances, televisions, furniture, tires, hobby supplies, lift chairs, musical instruments, partial scholarships for the MSF Cruise for a Cause®, and more.

Those who applied in the past and were not grant recipients are encouraged to reapply. Previous recipients of the *Brighter Tomorrow Grant* are ineligible. Applications are confidential and will be reviewed by the grant committee. Recipients will be notified in December.

**OFFICIAL GUIDELINES TO APPLY**

Applicants are asked to provide basic personal and financial information, along with a brief essay of one page or less to describe their wish and how the grant might help them to have “A Brighter Tomorrow.”

Grant applicants must meet the following eligibility criteria:

- Applicant must be diagnosed with MS, or be the parent of a minor child with MS.
- Applicant must be over the age of 18.
- Applicant must have no existing financial net (such as Medicaid or private insurance) to cover the request.
- Applicant grants the MSF the right to use their name and photograph for promotional purposes associated with this grant.
- Applicant must agree to sign a waiver of liability.
- Applicant must be a legal resident of the United States.
- Application must be postmarked/time-stamped on or before September 1st.
- Request must be for specific goods or services.
- If the cost of the request exceeds $1,000 dollars, the application will automatically be disqualified.
- Requests for cash, medications, or items currently available through the MSF Assistive Technology, Cooling, Computer, or Health and Wellness programs will not be considered.

Send your completed application to:
**Multiple Sclerosis Foundation, BTG Committee**, 6520 North Andrews Ave., Ft. Lauderdale, FL 33309

Applications can also be submitted online at: [www.msfocus.org](http://www.msfocus.org).
BRIGHTER TOMORROW GRANT

NAME _______________________________________________________________

ADDRESS ___________________________________________________________

CITY______________________ STATE _____ ZIP_______ COUNTY___________

DAY PHONE___________________ ALTERNATE PHONE _______________________

E-MAIL ADDRESS __________________________ DATE OF BIRTH _____________

PHYSICIAN’S NAME __________________________

PHYSICIAN’S PHONE___________________ DATE DIAGNOSED ___________

MONTHLY GROSS INCOME $ ________________

MONTHLY EXPENSES $_____________________

REQUESTED ITEM ______________________________________________________

ESTIMATED COST OF ITEM $____________________________________________

In one page or less, explain how the Brighter Tomorrow Grant of no more than $1,000 in goods or services would help you have a brighter tomorrow. (Additional paper may be used if needed, not to exceed one page.)

I certify that the facts contained in this application are true and complete to the best of my knowledge, and I authorize verification of all statements contained herein.

__________________________________________
SIGNATURE

__________________________________________
DATE
Annual Caregivers’ Night Out Contest
GIVE THANKS TO YOUR CAREGIVER

Has your spouse, child, relative, friend, or neighbor gone above and beyond the call of duty to help you? Then honor them this November during National Family Caregivers Month by sharing your story. Keep in mind that we seek stories with heart – not flawless grammar or perfect penmanship! Winners will receive dinner for two at a restaurant of their choice, and their story will be published in the fall issue of MSFocus.

Name ____________________________________________________________

Address __________________________________________________________

City_____________ State _______ Zip __________ County ________________

Day Phone _________________ Alternate Phone ________________________

Email address ______________________________________________________

In 100 words or less, tell us what makes your caregiver special and how he or she has made a difference in your life. Additional paper may be used, if necessary.

Signature ___________________________________________ Date _____________

Submissions will be accepted August 1st through September 1st. Applications can be faxed to 954-351-0630 or mailed to Caregivers’ Night Out Contest, Multiple Sclerosis Foundation, 6520 N. Andrews Ave, Ft. Lauderdale, FL 33309. This information can also be emailed to homecare@msfocus.org.
“Updates by the Pharmacist” spotlights the latest significant research on MS medications as well as pharmaceutical issues significant to MS care. No endorsement is implied.

A recently reported study suggests that treatment with estriol may benefit people with relapsing remitting multiple sclerosis. According to Ben Thrower, MD, Medical Director at the Shepherd Center Multiple Sclerosis Institute, “Treatment with estriol is not a new concept; however, most of the data to date have consisted of anecdotal reports and small clinical trials.” Dr. Thrower went on to explain that while these recently reported data are intriguing, they will require validation in larger clinical trials.

This article reviews estriol and summarizes the newly released information regarding estriol.

What is Estriol?

Estriol is one of the three main estrogens produced by the human body. Estradiol and estrone are the other two estrogens produced by the human body. Estriol differs from estradiol and estrone because it is only produced in significant amounts during pregnancy. Estriol is made by the placenta from 16-hydroxydehydroepiandrosterone sulfate (16-OH DHEAS), an androgen steroid made in the fetal liver and adrenal glands. Estriol is virtually undetectable in the body until pregnancy, when its levels drastically increase. It is thought that the hormone, estriol, suppresses the immune system so that women’s bodies do not treat the fetus as foreign or harmful. Levels of estriol in non-pregnant women do not change significantly after menopause and resemble those observed in men.

The Relationship Between Multiple Sclerosis, Pregnancy, and Estriol

Data have shown that during pregnancy there is a significant reduction in multiple sclerosis-related attacks (or relapses). In fact, during the PRIMS study, the relapse rate in pregnant women dropped 70 percent during the third trimester. It has been proposed that the increased levels of estriol that are present during pregnancy may be responsible for this effect since estriol suppresses the immune system.

Estriol Data

Over the last 20 years, researchers have proposed that treatment with estriol may decrease relapses in people
with multiple sclerosis. In 2002, a small study in 10 non-pregnant patients found that treatment with estriol decreased the number of lesions by 70 percent. Other studies have shown no or only a modest gain with estriol treatment.

Results from a trial comparing treatment with glatiramer acetate (Copaxone®) plus estriol 8 mg with Copaxone monotherapy were recently presented at the 2014 Annual Meeting of the American Academy of Neurology. A total of 158 women (mean age, 37.5 years) with relapsing remitting multiple sclerosis participated in this Phase II, randomized, double-blind, multicenter, placebo-controlled trial. The primary endpoint was annualized relapse rate; other endpoints included MRI findings and safety. The participants in this trial were followed for two years.

After 12 months of treatment, the annualized relapse rate for the combination therapy group was 47 percent lower than in the patients who only received Copaxone. In addition, patients who received combination therapy scored higher on cognitive tests after one year than did women who were receiving Copaxone monotherapy. The results after 24 months of treatment were not as impressive. According to the authors of this trial, the results were exciting but required validation in larger, Phase III clinical trials.

**How Can I Receive Estriol or Participate in a Clinical Trial?**

Estriol is not approved by the United States Food and Drug Administration (FDA). Compounding pharmacies can compound the product, but a prescription from your doctor will be required. Because estriol is not approved by the United States FDA, it is not likely that insurance companies will pay for the product.

For information on on-going clinical trials with estriol, speak with your neurologist and refer to: [www.clinicaltrials.gov](http://www.clinicaltrials.gov).

While these data are exciting, treatment with estriol is still experimental. Estriol should not be considered a replacement for any currently approved disease-modifying treatment. Stay tuned for more information about estriol, as a Phase III confirmatory trial should be enrolling shortly.

**Ellen Guthrie has been a medical advisor with the MSF since 2002. She is a clinical pharmacist employed as a medical affairs specialist, as well as an assistant clinical professor at the University of Georgia. She received her Doctorate of Pharmacy degree from the University of Georgia College of Pharmacy in 1994 and was later employed at the Shepherd Center and Children’s Healthcare of Atlanta. Ellen is an active member of the Georgia Society of Health System Pharmacists. She has also served on the Pharmacy Advisory Committee for the Department of Community and Health.**
I talked to my doctor.

My medicine is BETASERON® (interferon beta-1b).

BETASERON is a prescription medicine used to reduce the number of relapses in people with relapsing forms of multiple sclerosis (MS). This includes people who have had their first symptoms of multiple sclerosis and have an MRI consistent with multiple sclerosis. BETASERON will not cure MS but may decrease the number of flare-ups of the disease.

IMPORTANT SAFETY INFORMATION

Do not take BETASERON (interferon beta-1b) if you are allergic to interferon beta-1b, to another interferon beta, to human albumin, or mannitol.

Please see additional Important Safety Information and brief summary of Medication Guide on following pages.


Model used for illustrative purposes only.
IMPORTANT SAFETY INFORMATION (continued)

BETASERON can cause serious side effects, including:

Liver Problems Including Liver Failure. Symptoms of liver problems may include yellowing of your eyes, itchy skin, feeling very tired, flu-like symptoms, nausea or vomiting, bruising easily or bleeding problems. Your healthcare provider will do blood tests to check for these problems while you take BETASERON.

Serious Allergic Reactions. Serious allergic reactions can happen quickly and may happen after your first dose of BETASERON or after you have taken BETASERON many times. Symptoms may include difficulty breathing or swallowing, swelling of the mouth or tongue, rash, itching, or skin bumps.

Depression or Suicidal Thoughts. Call your healthcare provider right away if you have any of the following symptoms, especially if they are new, worse or worry you: thoughts about suicide or dying, new or worse depression (sinking feeling or sadness), new or worse anxiety (feeling uneasy, nervous or fearful for no reason), trouble sleeping (insomnia), acting aggressive, being angry, or violent, acting on dangerous impulses, hallucinations, other unusual changes in behavior or mood.

Other possible serious side effects with BETASERON include:

Heart Problems. BETASERON may worsen heart problems including congestive heart failure. Symptoms of heart problems may include swollen ankles, shortness of breath, decreased ability to exercise, fast heartbeat, tightness in chest, increased need to urinate at night, not being able to lay flat in bed.

Injection Site Problems. Serious skin reactions can happen in some people including areas of severe damage to skin and the tissue below the skin (necrosis). These reactions can happen anywhere you inject BETASERON. Symptoms of injection site problems may include swelling, redness, or pain at the injection site, fluid drainage from the injection site, breaks in your skin or blue-black skin discoloration. Change your injection site each time you inject BETASERON as it will lessen the chance of you having a serious skin reaction. Avoid injecting BETASERON into an area of the skin that is sore, reddened, infected or has other problems.

Flu-like Symptoms. BETASERON can cause flu-like symptoms including fever, chills, tiredness, sweating, muscle aches when you first start to use it. These symptoms may decrease over time. Taking medicines for fever and pain relief on the days you are using BETASERON may help decrease these symptoms.

Seizures. Some people have had seizures while taking BETASERON, including people who have never had seizures before. It is not known if the seizures were related to MS, to BETASERON, or to a combination of both. If you have a seizure after taking BETASERON call your healthcare provider right away.

Blood Problems. You may have a drop in the levels of infection-fighting white blood cells, red blood cells, or cells that help you form blood clots. If drops in levels are severe, they can lessen your ability to fight infections, make you feel tired or sluggish or cause you to bruise or bleed easily.

Risk to Pregnancy:

BETASERON can harm your unborn baby. BETASERON may cause you to lose your baby (miscarry). If you become pregnant while taking BETASERON call your healthcare provider right away. You and your healthcare provider should decide if you should continue to take BETASERON.

Most Common Side Effects:

The most common side effects of BETASERON include low white blood cell count, increases in your liver enzymes, headache, increase in your muscle tension, pain, rash, problems sleeping, stomach pain, weakness. These are not all the possible side effects of BETASERON.

Tell your healthcare provider if you have any side effect that bothers you or that does not go away. Tell your healthcare provider about all the medicines you take and your medical conditions.

Please see brief summary of Medication Guide on the following page.

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch or call 1-800-FDA-1088.

Visit ExploreBETASERON.com today
Who should not take BETASERON?
Do not take BETASERON if you are allergic to interferon beta-1b, to another interferon beta, to human albumin, or mannitol. See the end of this leaflet for a complete list of ingredients in BETASERON.

What should I tell my healthcare provider before taking BETASERON?
Before you take BETASERON, tell your healthcare provider if you:
- have or have had depression (sinking feeling or sadness), anxiety (feeling uneasy, nervous, or fearful for no reason) or trouble sleeping
- have or have had liver problems
- have or have had blood problems such as bleeding or bruising easily, low red blood cells (anemia) or low white blood cells
- have or have had seizures
- have or have had heat problems
- are pregnant or plan to become pregnant
- BETASERON may cause you to lose your baby (miscarry). If you become pregnant while taking BETASERON call your healthcare provider right away. You and your healthcare provider should decide if you should continue to take BETASERON.
- are breastfeeding or plan to breastfeed. It is not known if BETASERON passes into your breast milk. You and your healthcare provider should decide if you will take BETASERON or breastfeed. You should not do both.

Tell your healthcare provider about all the medicines you take, including prescription and nonprescription medicines, vitamins, and herbal supplements. Know the medicines you take. Keep a list of them to show your healthcare provider and pharmacist when you get a new medicine.

What are the possible side effects of BETASERON?
BETASERON may cause serious side effects. Call your healthcare provider right away if you have any of the following symptoms, especially if they are new, worse, or worry you:
- thoughts about suicide or dying
- new or worse depression
- new or worse anxiety
- trouble sleeping (insomnia)
- acting aggressive, being angry, or violent
- acting on dangerous impulses
- hallucinations
- other unusual changes in behavior or mood

What is BETASERON?
BETASERON is a prescription medicine used to reduce the number of relapses in people with relapsing forms of multiple sclerosis (MS). This includes people who have had their first symptoms of multiple sclerosis and have an MRI consistent with multiple sclerosis. BETASERON is similar to certain interferon proteins that are produced in the body. It will not cure your MS but may decrease the number of flare-ups of the disease.

It is not known if BETASERON is safe and effective in children.

It is not known if BETASERON is safe and effective in children.
By Joanne Fortunato

If your tablet or phone is running slowly or has glitches, there are some very simple techniques to fix these issues and prevent them from happening in the future. This article will: describe how to save battery power and close running applications, offer resources for current information, and address two major operating systems: Apple and Android (Google).

This article does not address Windows Surface devices. If you need information, go to www.microsoft.com/surface/en-us/support/userguides. In addition, desktop computers will not be discussed, as there is too much information to include for the scope of this article.

Location Services:

This application is sometimes called GPS. It will report your location to various apps such as Maps. Many times when you install a new app, it will ask if the app can access your current location. Most of the time, this can be changed at a later time.

Your location can be reported to companies that you may not be aware are tracking you. For example, Apple and Google often collect this information.

To turn on/off location services:

**Apple iPad/iPhone:** Settings → Privacy

You can turn off/on location services in general or for specific applications.

**Android:**

Because the Android operating system is used on devices from many different manufacturers, turning on or off location services is very specific to each device. Usually, this option is located in the settings. Search for your specific device on the internet to determine how this feature works.

Display:

The display is one of the bigger battery hogs. There are several display controls that can reduce the battery power used. First, keep the brightness at the lowest setting you can comfortably use the device. Secondly, inverting the display can save battery life. Dark background with light writing will save battery power. Plus, it makes it easier to read in low light. Finally, putting the device to sleep when not in use is a great battery saver. You
can change the amount of time the device stays on when idle. A magnetic case will automatically put a tablet in sleep mode. Magnetic cases are widely available and range in price, starting from about $10. Make sure to purchase a case specifically for your tablet.

To change the display:

**Apple iPad/iPhone:**

*Settings/ Wallpaper & Brightness:* Turn off auto brightness and adjust the level for the light in your location.

*Settings/ General/ Accessibility / Invert Colors:* This will make the background dark and the text light.

*Settings/ General/ Auto-Lock:* Controls idle time.

**Android:**

*Settings/ Display:* You can control the brightness and idle time. Inverting colors is not easy to set universally on an Android. It is recommended that you set display colors on each individual application you use.

---

**General Features:**

Turning off the following features when not in use will also help preserve battery power: Wifi, bluetooth, and vibration. Bluetooth allows you to connect to wireless devices such as headphones. Many cars today have built in bluetooth.

**Apple iPad/iPhone:**

*Settings/ Wifi, Bluetooth, Do Not Disturb:* To control each of these features.

**Android:**

*Settings/ Wifi, Bluetooth:* To control each of these features.

Because the Android operating system is used on devices from many different manufacturers, turning on or off vibrations will vary depending on your device. Search for your specific device to determine how this feature works.

---

**Running Applications:**

Each time you open an application such as e-mail or the camera, it will stay open until you close it. Just returning to the home screen does not close it because almost all devices have a multi-tasking feature. (Multi-tasking allows you to switch between open applications). When you are no longer using an application, closing it will save battery power and help to make your device operate faster.

**Apple iPad/iPhone:** IOS 7

Press the home button once (the round button at the bottom of your device) to return to the home screen. Press it twice to see running applications. To choose an application, just press on it. To end an application, press and hold then slide the application to the top of the screen. When it is closed, it will disappear.

**Android:**

To see running applications, press on the icon. All running applications will be listed with the corresponding icon. To switch to an application, press on it. To close the application, press and hold it until you get two choices: ‘Remove from list’ and ‘App info.’ Release the app and choose ‘remove from list.’ The application icon will slide off the screen and will be closed.
For more information:

**Apple:** [http://www.apple.com/support/](http://www.apple.com/support/)

**Android:**

Again, depending on which model tablet you have and what version of Android you are using, the best place for information is the website of the manufacturer of your particular device.

---

**Joanne Fortunato BS, MA,** is a retired computer technology teacher in Troy, N.Y. She has a master’s degree in education and has been teaching technology to teachers and students for 30 years. She has published several articles and books on educational computer technology, including several articles with the International Society for Technology in Education (ISTE). She was diagnosed with MS in 2006 and uses technology to aid in coping with the many difficulties that MS can present. She is excited to share this information with others that deal with the same and many other issues on a daily basis.

---

**cool and comfortable**

with Polar’s Cool Comfort® Hybrid Kit

- **EFFECTIVE AND EFFICIENT**
  Offers cooling relief for hours. Works well in any climate.

- **LIGHTWEIGHT AND SPORTY**
  Ideal for pre-cooling, post-cooling and cooling during activity.

- **EASY TO USE**
  Can be water-activated, chilled or frozen and recharged in minutes!

- **GREAT VALUE**
  Kit includes performance vest, neck wrap, wrist wrap and hat.

Polar Products is a proud supplier for the MSF Cooling Program.

**POLAR Products**  A leading worldwide manufacturer of body cooling systems since 1984. Give us a call at 1.800.763.8423 to request a catalog! To see the most complete line of cooling vests and accessories, visit [www.polarproducts.com](http://www.polarproducts.com).
Educational Programs Ride the Wave

MS Awareness Month in March is a tough act to follow, but our energetic MSF Program Services staff kept the momentum going right into April. “MS Updates – 2014” was the topic of an educational program presented on April 2nd in Conyers, Ga. Speaker Jennifer McDonald, MSF, APRN, NP-C, of Southeastern Neurology, Newton Medical Center, discussed the latest research news, treatment options, and how to live well with MS.

As summer approached, MSF programs “turned up the heat” with two programs on “Hot Topics in MS.” The first, presented by neurologist Matthew J. Baker, MD, occurred on June 10th in Naples, Fla. On June 17th, the wave continued to St. Petersburg, Fla., where speaker Michael Franklin, MD, of St. Anthony’s Neurological Group, gave a presentation to a very “cool” audience of people with MS and their supporters.

MSF Leaders Take Part in National Event

The Multiple Sclerosis Foundation (MSF) had a presence at the 2014 Annual Meeting of the Consortium of Multiple Sclerosis Centers (CMSC) in Dallas, Texas in May. The CMSC is the largest national MS meeting which brings together neurologists, nurses, physical therapist, and other healthcare professionals and organizations who provide services to those with MS throughout the U.S. Several members of MSF’s Medical Advisory Committee were in attendance, including David Jones, MD, and Annette Okai, MD.

Pictured top left: MSF Co-Executive Directors, Alan Segaloff and Jules Kuperberg. Top right: Derrick Lee, MSF Associate Director of Quality of Life Programs and Services and Natalie Blake, Director of Program Services. Bottom left: David Jones, MD, Right: Annette Okai, MD
Sharing & Caring: A National MS Education and Awareness Month® Event at South Shore Neurologic Associates in New York

For four full days during the week of March 24th, the Islip and Patchogue offices of South Shore Neurologic Associates (SSNA) (www.southshoreneurologic.com) hosted “Share & Care,” a multiple sclerosis awareness event which offered patients and guests free MS educational information, MSF information and giveaways, as well as numerous raffles featuring awesome products and services donated by many local businesses. Prizes included a custom wine gift basket, spa package, “sports” basket (complete with Mets game tickets), a Jones Twin Sister Snowboard, and more. Plus, a bounteous 50/50 raffle!

Special thanks to event coordinator Susan Strejlau and volunteer Linda Governale for bringing in many enthusiastic supporters and ‘in-kind’ donors from the business community. The eye-catching raffle items attracted lots of attention, which also drew patients and passersby to the MS information table. Along with Susan and Linda, the staff at SSNA went above and beyond, helping with the displays, lending their time and resources, and donating generously. Our appreciation also goes out to James Boyd of Medtronic, Inc. for his participation and substantial donation to the MSF. By the week’s end, the event was so successful – raising MS awareness and $2,372 for the MSF – that South Shore Neurologic is promising to do it again next year! This event wouldn’t have been possible without SSNA Chief Administration Officer Charles Burke, Executive Assistant Stephanie Warn, Financial Assistance Manager Grace Druiett, SSNA’s MS Nurses and Infusion Teams, and “Sharing & Caring” event volunteers Anthony Longo, Ryan Kane and Lauren Corrado. Their dedication to the MSF cause, as well as their philanthropy and kindness in assisting Susan and Linda, is sincerely appreciated by all of us here at the Foundation. See you in 2015!

“A Light to Remember”

On March 14th, the 110 Tower lit up the downtown Fort Lauderdale sky with MSF’s signature colors to support National MS Education and Awareness Month®. Special thanks to the 110 Tower for helping us spread awareness and for making hope for MS patients seem that much brighter!
Volunteer Special Events

March 7th: “Strut for MS Awareness” Fashion Show Benefit (Brooklyn, N.Y.)

This chic affair, which took place at Brooklyn’s famed Woodland NYC restaurant, spotlighted designs from bebe, H&M, and talented local and international designers, including L’Amour Ameer (pictured here with organizer and fashion devotee Nadia Johnson). Highlights of this fabulous evening of fun and MS awareness included an award presentation from Brooklyn Borough President Eric Adams and coverage by Fusion Magazine and Pix11 Television’s local news. Big thanks to Nadia, whose trend-setting talent raised $700 for the MSF!

March 8th: “Sing & Swing 2014” Fundraiser for the MSF (Auburn Hills, Mich.)

Music and revelry were on order at the annual “Sing & Swing” MSF fundraiser at Hoops Sports & Spirits in Auburn Hills. This event included karaoke, dancing, refreshments, drink specials, raffles, and more (check out that cake)! Thank you Janet Jimenez for organizing this lively fundraiser, which raised $950 for the MSF!

March 15th: “Rock ‘n’ Roll USA Marathon 2014” (Washington, DC)

The Rock ‘n’ Roll USA Marathon is the “World’s Largest Running Series,” combining a full/half marathon with a live music festival. This year, Dharm Hall ran in honor of his brother Scott (aka “Scoot”), who lost his battle with MS 10 years ago. Dharm highlighted MS awareness in the nation’s capital and elsewhere, garnering support and raising funds for the MSF from family and friends, near and far. Rock on Dharm!

March 22nd: “Every Step Counts” Spaghetti Dinner (Cincinnati, Ohio)

More than just pasta and potluck, this Spaghetti Dinner fundraiser included inspirational speakers, live music, MS information, youth participation (as a “Teens Can Succeed” event) and, of course, great eats! Our appreciation goes out to event organizer Karen Payne, who dished up a great ‘party with a purpose’ for MSF’s annual March MS Awareness campaign.

April 5th: “Bench Press for MS Awareness” (Spruce Pine, N.C.)

“MS” stood for MIGHTY STRONG at this fundraiser hosted by Fitness Express gym. The competitive event (Male & Female Weight Classes with prizes for the winners) was organized by healthcare and fitness pro Danica Huskins in honor of her
brave friend Courtney, who has been battling debilitating MS symptoms since 2012. Thanks to Danica, Ben Raymer (Fitness Express), and all the supporters and weightlifters, whose donations and entry fees strengthened MSF programs by a very impressive $955!

**April 9th: Chichester HS Tri-M Music Honor Society Benefit Concert (Boothwyn, Pa.)**

Showcasing the joint music departments of Chichester and Garnet Valley High Schools, this benefit concert featured two hours of solo acts, duets, small ensembles, and large choirs performing “Here Comes the Sun” (The Beatles), “Say Something” (A Great Big World), “Seasons of Love” (from Rent), and much more. The event started with an informational video about MS and its life altering effects, and later, volunteers collected donations and funds for gift baskets and 50/50 raffles, with all proceeds going to the Foundation to the tune of $925! Special thanks to student Theresa Mignogna and music teacher Heather Spindel, who organized this truly inspirational fundraiser.

**April 12th: Appalachian State University Baseball Benefit for MSF (Boone, NC)**

Following a winter marked by bitter cold and a barrage of snow storms, springtime finally arrived, and with it, the rescheduled App State Baseball Game benefit for the MSF! Student organizer Kendall Ross was booked to go on live local TV (MTN 18) when she got word the game was called off due to inclement weather. Despite the unfortunate news, Kendall kept her composure and did a great job promoting MS awareness and the baseball fundraiser, which was rescheduled for 2½ weeks later. App State’s Mountaineers triumphed over rival team The Citadel, and Kendall collected $400 from the stands – a winning day for Appalachian State University and the MSF to be sure!

**MSF Connect**

Attention Corporations! Ever wonder how your business can get involved in philanthropy? The answer is MSF Connect: a new program offered by the Foundation that welcomes opportunities to develop new corporate partnerships. We have a number of ways your business can get involved! Let’s “connect” and share ideas on developing an effective strategic alliance tailored for you and the MSF! To benefit from these partnership opportunities, please contact the Fund Development Department at 800-225-6495.

For more information about these events, contact:
Nathalie Sloane at 954.776.6805 or nsloane@msfocus.org
Media Inquiries: Adrienne Mazzone, TransMedia Group at 561.750.9800

*Hildy Berger is the MSF’s Fund Development Coordinator. If you are interested in planning a fundraising event or would like more information, contact the MSF Fund Development Department at 800-225-6495 or send an email to hildy@msfocus.org.*
Dan and Jennifer Digmann aren’t your average married couple. As you learn at the outset of their charming memoir, both Dan and Jennifer have MS, and Jennifer is confined to a wheelchair. However, that isn’t what makes the Digmanns stand out. Throughout the pages of their story, what shines through is their unwavering support of one another.

Adapted from blog posts and alternating between Jennifer’s point of view and Dan’s, Despite MS, to Spite MS provides an unvarnished glimpse into the Digmanns’ lives with the illness. The reader shares Jennifer’s struggles as she pursues her master’s degree “despite MS” and the challenges of decreasing mobility, and Dan’s efforts “to spite MS” by continuing to run and stay as active as possible. With unending positivity, they confront the obstacles they face and find a way forward together.

From Dan’s experience in learning to give himself injections to Jennifer’s joy at finding a hotel with a roll-in shower, readers in different stages of MS will find something relatable in the Digmanns’ recollections. Care partners, too, will appreciate Dan’s reflections on his role as caregiver to Jennifer and the love that overcomes all of MS’s challenges.

Despite the role MS plays in the Digmanns’ tale, theirs is a love story through and through.

Catch up with the Digmanns and find out more about their book on MSFocusRadio.org. Tune into our exclusive interview August 15th at noon EST.

A Mindfulness-Based Stress Reduction Workbook

By Bob Stahl, PhD and Elisha Goldstein, PhD

Authors Bob Stahl, PhD and Elisha Goldstein, PhD begin their book with this dedication: “To all those who have dared to look into their fears and find their hearts.” There could be no better summary of the goal of A Mindfulness-Based Stress Reduction Workbook.

Through a series of lessons, exercises, meditations, and reflections, the workbook aims to help you find the source of
the fears and anxieties that cause you stress and to teach you to accept and move past them. Through the practice of mindfulness – defined as being fully aware of what is happening in the present moment without judgment – the book strives to teach individuals to process emotions to completion, without resorting to avoidance or self-destructive behaviors, like comfort-eating or negative self-talk.

The workbook also includes illustrations of yoga poses and a CD of 21 guided meditations, both designed to help you deepen your mindfulness practice. It’s also peppered with personal accounts from the authors that help to illustrate the meaning of new concepts. The book specifically addresses mindfulness as a tool for coping with chronic pain, a symptom with which those with MS may be all too familiar.

For those new to the practice of mindfulness, this thorough, step-by-step approach will lead them through the process – hopefully to the ultimate goal of reducing anxiety, pain, and stress.

To borrow this and other titles, call the MSF Lending Library at 1-888-MSFocus (673-6287) or visit www.msfocus.org. Click on ‘Lending Library’ under the Programs and Activities heading.
The Ticket to Work Program

The ever-changing landscape of federal regulations, medical technology, and insurance coverage can make one's head spin. This column spotlights government resources available to qualifying people who have multiple sclerosis and other chronic illnesses.

Social Security’s Ticket to Work program supports the career development of individuals with disabilities who want to work and progress toward financial independence.

The Ticket program is a good fit for people who want to improve their earning potential and who are committed to long-term success in the workforce. Ticket to Work offers beneficiaries with disabilities access to meaningful employment with the assistance of employment service providers.

Participants in the program are allowed to keep their benefits while exploring employment opportunities, receiving vocational rehabilitation, and gaining work experience. Your cash benefits, Medicaid, or Medicare can continue throughout your transition to work, with protections in place to help you return to benefits if you find you are unable to continue working due to your disability.

Why Ticket to Work?

If you receive disability benefits from Social Security, then you know that getting those benefits took time, energy, and patience. In determining your eligibility for disability benefits, Social Security found that you could not earn enough money to support yourself. However, with the right opportunities and support, many people can earn a higher standard of living by going to work and leaving the benefit rolls.

Earning a living through employment is not something everyone can do, but it may be right for you. Many find that the rewards far outweigh the risks. You become eligible to participate in the Ticket to Work program when you start receiving Social Security Disability Insurance (SSDI) and/or Supplemental Security Income (SSI) benefits. These providers, called Employment Networks (ENs), offer specialized services such as career counseling, job placement, and training. You may receive services from your local vocational rehabilitation agency as well as ongoing services from an EN.

Who Qualifies?

Everyone age 18-64 who receives SSDI and/or SSI benefits is eligible to participate. Participation in the Ticket program is free and voluntary, and your eligibility will be verified by your service provider. You can also find out about your eligibility status by calling the Ticket to Work Help Line at 1-866-968-7842 (V)/ 866-833-2967 (TTY).
Who Can Help Me Go to Work?

You can get the help you need from two types of providers: an Employment Network or your state’s Vocational Rehabilitation agency. An Employment Network is under contract with Social Security to provide free services to beneficiaries under the Ticket program. If you and an EN agree to work together, you will jointly develop an Individual Work Plan that is just right for you.

You can also contact your state Vocational Rehabilitation agency who will work with you to develop an individual plan to help you get a job. You are free to speak with as many service providers as you like; it is your choice to decide with which provider you wish to work. Once you have decided what service provider is right for you, learn more about how you can find satisfaction in the Ticket to Work program.

The Ticket to Work website can be found at: http://choosework.net/mycall/.

---

THE ONLY BODY-CORE COOLING SYSTEM DESIGNED SPECIFICALLY FOR MS PATIENTS

STACOOL UNDER VEST - The most lightweight, comfortable body cooling system available.

The StaCool Under Vest uses high-quality, durable materials and four easily replaceable ThermoPaks, two front and two back to cool the body core comfortably. Each lightweight vest offers up to three hours of cooling per ThermoPak set, and a spare set for a change out is included for total of eight ThermoPaks per vest.

See what existing customers have to say:

“I have recently tried the vest on two different occasions. It worked great. I noticed a major difference in the way I felt while wearing it. The vest truly functions as advertised. Thank you for providing such a useful product for use by people living with Multiple Sclerosis.” — Stephen Smith

For more information visit us on-line at stacoolvest.com or call toll free 1-866-782-2665

---

MSFocus | 61 Summer 2014
By Glenn Sparrow

One of my workmates recently had brain surgery to remove a tumor and is struggling with coming back to work. I can relate; I have had MS for four years, and fatigue is my primary problem. So, I had a chat with her about my MS and sent her the following list of things that have helped me. Hopefully, I can help others as well by sharing these tips.

Don’t Forget to Eat

• The human body requires regular feedings. A healthy breakfast is critical and provides you with energy throughout the whole day. I also find that enjoying healthy snacks during the day helps generate energy. Also, when I am at work, I use my snack times as “micro breaks” to recharge a bit. Drink plenty of fresh water as well. It helps to cleanse the body.

• Give yourself an energy boost by avoiding the quick sugary fix. It’s false energy, and in the long term, you will feel worse.

• As tempting as they may be, avoid energy drinks such as Red Bull. These drinks give you a quick five-minute boost, but will leave you drained for a long time afterwards.

Sleep, Sleep, Sleep

• Another “no brainer” (so to speak) is getting lots of sleep, as sleeping is critical for brain health. There are a number of solutions when sleep is a problem. For example, I have found breathing exercises help me sometimes. When I’m on strong doses of steroids, my doctor prescribes sleeping pills. I hate using them, but I know I have to. If you are having issues with sleep, talk with your doctor.

Know Your Limits

• Your limits may change from day to day, so assess each day what your limits are. This is probably the hardest thing to do. I, for one, struggle with it often.

• Then comes the hard part – sticking to your limits. I’m not good at this and am always trying to push myself to do what I used to do. I find that I don’t have the energy I once had. MS is incredibly frustrating like that.

Break It Down

• There will be things that you can do and other things that you cannot do. The dishes might need washing, the lawn might need mowing, the laundry
might need folding, and the cat might need petting. But try not to feel overwhelmed. Break each individual task down and do them when you can. (But don’t forget to pet the cat, or it will poo in your slippers.)

Recognize Your Signs

- Your body will display certain signs when you have overdone it or are approaching your limit. The biggest sign telling me I have overdone it is when I get very angry, very quickly. I also get vague, dizzy, and my legs feel like they are wrapped in concrete. However, your signs may be completely different.

The Other Horrible “E” Word

- Exercise. I’m not talking about running till you puke or ending up built like a body builder. I am talking about soft, simple, and manageable exercise. It might only be a five-minute walk on the first day, but slow and gradual increases coupled with rests are hugely beneficial. Something as simple as 10 minutes of gardening can make a huge difference.

Turn Your Brain Off

- I find that there are times during the day when I need to turn my brain off and just sit still for a few minutes. I am lucky I can do that at home in the evening while sitting on my deck and listening to the birds.

The “Witching” Hour

- My “witching” hour is from 3:00 p.m. till around 5:30 p.m. Between this time frame each day, I feel like complete crap, so I avoid scheduling anything too mentally taxing during that period. I also try to lie down for 10 minutes when I get home from work. Learn when you feel the most tired and work with it.

Don’t Beat Yourself Up

- Hakuna Matata. On the days when I get really frustrated because I cannot do everything I want to do, I remind myself that my health is most important. I often ask myself when struggling with something, “Is it really important?”

Chocolate and Other Rewards

- Reward yourself. If you have set a goal and achieved it, be proud of that accomplishment and reward yourself. No one else will ever truly know how much of a struggle it may have been for you.

Talk About It

- It is critical that you let those close to you know what is going on. They can help you in a way that no one else can.

Above all else, remember: It’s not your fault you’ve got MS!

Glenn Sparrow has had some major challenges over the last four years. He is a happily married father of one and lives in Kirwee, New Zealand. Having MS for just over four years, working full time, and being actively involved with his local community is an everyday challenge. Like thousands of others, Glenn struggles daily but still enjoys time with family, friends, and being involved with Original Scripts Theatre School.
Plant-Based Diet May Reduce MS Fatigue

People with multiple sclerosis who, for one year, followed a plant-based diet very low in saturated fat had much less MS-related fatigue at the end of that year and significantly less fatigue than a control group of people with MS who didn't follow the diet, according to an Oregon Health & Science University study presented at the American Academy of Neurology's Annual Meeting in Philadelphia, Pa.

The study was the first randomized-controlled trial to examine the potential benefits of the low-fat diet on the management of MS. The study found no significant differences between the two groups in brain lesions detected on MRI brain scans or on other measures of MS. But while the number of trial participants was relatively small, study leaders believe the significantly improved fatigue symptoms merited further and larger studies of the diet.

“Fatigue can be a debilitating problem for many people living with relapsing-remitting MS,” said Vijayshree Yadav, MD, an associate professor of neurology in the OHSU School of Medicine and clinical medical director of the OHSU Multiple Sclerosis Center. “So this study's results – showing some notable improvement in fatigue for people who follow this diet – are a hopeful hint of something that could help many people with MS.”

The study investigated the effects of following a diet called the McDougall Diet, devised by John McDougall, MD. The diet is partly based on an MS-fighting diet developed in the 1940s and 1950s by the late Roy Swank, MD, a former head of the division of neurology at OHSU. The McDougall diet, very low in saturated fat, focuses on eating starches, fruits, and vegetables, and does not include meat, fish, or dairy products.

The study found no difference between the diet group and the control group in the number of MS-caused brain lesions detected on the MRI scans. It also found no difference between the two groups in relapse rate or level of disability caused by the disease. People who followed the diet did lose significantly more weight than the control group and had significantly lower cholesterol levels. People who followed the diet also had higher scores on a questionnaire that measured their quality of life and overall mood.

The study's sample size was relatively
small. Fifty-three people completed the study, with 27 in the control group and 22 people in the diet group who complied with the diet's restrictions.

“This study showed the low-fat diet might offer some promising help with the fatigue that often comes with MS,” said Dennis Bourdette, MD, FAAN, chair of OHSU’s Department of Neurology, director of OHSU’s MS Center, and a study co-author. “But further study is needed, hopefully with a larger trial where we can more closely look at how the diet might help fatigue and possibly affect other symptoms of MS.”

Brain Discovery May Explain Why More Women Get MS

An image of tissue from a female brain affected by multiple sclerosis shows that the brain has much higher levels of a blood vessel receptor than a male brain affected by MS. The difference could help explain why so many more women get MS, researchers at Washington University School of Medicine in St. Louis report.

In recent years, the diagnosis of MS has increased more rapidly among women, who get the disorder nearly four times more than men. The reasons are unclear, but the new study is the first to associate a sex difference in the brain with MS. The findings appear May 8 in The Journal of Clinical Investigation. Studying mice and people, the researchers found that females susceptible to MS produce higher levels of a blood vessel receptor protein, S1PR2, than males, and that the protein is present at even higher levels in the brain areas that MS typically damages.

An investigational MS drug, currently in clinical trials, blocks other receptors in the same protein family but does not affect S1PR2. Klein recommended that researchers work to develop a drug that disables S1PR2.

High Cholesterol May Speed MS Progression

High cholesterol could be at least partially to blame for hastening disease progression in people with MS, according to a recent study in Australia.

For their experiment, scientists at Menzies Research Institute Tasmania identified 141 patients who were diagnosed with MS and followed their progress from 2002 to 2005. Their blood was evaluated at the start of the study, and then again every six months. The Expanded Disability Status Scale (EDSS) test was used to determine each patient's level of disability. The EDSS measures everything from reflexes to bowel and bladder function to the ability to walk.

The researchers found that patients with higher levels of certain lipids, known as “bad fats,” also scored higher on the EDSS, meaning that they were more disabled. Over the course of several years, they noted that these same patients progressed faster in their disease.

But could the disease progression actually be causing an increase in "bad fat" levels? "We could not find evidence that this was the result of reverse causality,” said van der Mei, “that those who progress faster have less physical activity, increase their weight, and as a result, have higher lipid levels, but we cannot rule this out.”
Q. What should I do before I get pregnant if I have multiple sclerosis?
A. If you have multiple sclerosis and plan to get pregnant, you should:

Visit your neurologist – If you are on a disease-modifying drug, you will need to talk to your neurologist about when to stop taking your medication, as well as your plans for treatment after childbirth. No disease-modifying drug is approved for use during pregnancy. Depending on which medication you take, you may need to stop receiving injections or infusions several months before getting pregnant. It is important to tell your doctor about all the drugs that you are taking. While some are safe for your baby, others might need to be substituted while you are pregnant or breast feeding.

Find the right obstetrician (OB) – Begin your search for an OB as soon as possible. Your OB and your neurologist may have to consult with one another, particularly if you need treatment for MS during your pregnancy. Make sure you also meet and are comfortable with any partners your OB might have, and learn which physician is on call to deliver babies. It is difficult to predict exactly when you will go into labor, and having MS is not, in itself, a reason to have a caesarean section.

Learn what to eat – Nutrition is a complicated area of pregnancy, requiring you to balance your needs with those of your growing baby. A pregnant woman needs iron for the red cells in her increased blood supply, and her fetus needs iron for making hemoglobin. Calcium plays many important roles in the body, but the main reason for eating more calcium-rich foods during pregnancy is to provide enough of the mineral for fetal development of teeth and bones. Be aware that even some vitamins and minerals will be off-limits.

Q. How can I use hypnosis to manage pain caused by multiple sclerosis?
A. Recent research has shown that hypnosis benefits individuals with MS and chronic pain. Like relaxation, hypnosis is a way to alter the pain experience using the power of the mind. Although the effects of hypnosis are not fully understood, it is thought that people who respond to hypnosis experience changes in regions of their brain involved in pain processing.
Hypnosis may teach people to “calm” their brain; however, it does not involve the person losing control of his or her actions.

Hypnosis typically begins with an induction that helps the person focus attention on a single object, image, or sensation. For example, you may be asked to take a deep breath and focus on it. As you enter a hypnotic state, you become more focused on your internal state and less focused on your surroundings. In the deeper state of relaxation that follows, you are given suggestions for positive changes, such as increased feelings of comfort and awareness of pleasant sensations. It may also be suggested that your pain will decrease or go away, even after the hypnosis is done. You are then reoriented to be aware, ending the session. This procedure may last from a few minutes to much longer, depending on the goals.

Although you can learn self-hypnosis on your own, pain-control training from an experienced hypnosis professional is often more effective. Studies have shown that usually four to 10 sessions are sufficient for reaping its benefits, including pain reduction and increases in positive mood, relaxation, a sense of control, and overall well-being. To maintain these benefits, hypnosis should be practiced regularly.

Q. How do doctors decide how to treat a person with multiple sclerosis?

A. Choosing a therapy for multiple sclerosis is often guided by experience (although an appropriate risk/benefit analysis should be undertaken), and subsequently, the response to therapy is assessed. People often have breakthrough disease on the chosen agent, necessitating a treatment change. In fact, every medication switch trial that has ever been done has been positive.

MS clinicians sometimes initially choose a second-line therapy based on certain individuals’ characteristics, including severe, multifocal attack, lack of recovery after an early relapse, or a high burden of disease on magnetic resonance imaging (MRI) at diagnosis.

There is some data to suggest that prospective biomarkers will allow doctors to make better treatment decisions by more accurately predicting the appropriate therapy for the appropriate person at the appropriate time. One of the big questions is whether an anti-inflammatory or a neuroprotective agent (or both) is more appropriate. One of the other big pending research questions is whether a combination of two safer drugs will offer the efficacy of one of the more powerful but relatively less safe drugs.
Are you moving? Please notify us of your change of address.
Call: 888-MSFOCUS (673-6287) or E-Mail: support@msfocus.org

Make an Easy transfer with the EasyPivot...

The EasyPivot Patient Lift is the patient lift of choice!
Perfect for the home, schools, hospitals, and rehab centers as it allows for quick and easy adjustments. Stop “slinging” around and choose the EasyPivot for your transferring needs!

- No sling to hassle with
- Adjustable width base
- One-on-one transfers
- Better hygiene

Feel better for life with Spirit Cycle...

The Saratoga Spirit 690 allows you to strap your feet in and get a simultaneous arm and leg exercise. With this versatile cycle, you can work just your arms, just your legs or move both at the same time! It has built in gear reduction, making it easier to turn your feet using your arms. Smooth, cyclic motion with “out of phase arm-leg” provides an unparalleled, smooth feel. This cycle has it all!

- Strengthen your arm, shoulder, back and neck muscles
- Strengthen your heart and lungs, breathe easier, have more energy
- Maintain your cardiovascular health
- Help control your weight
- Feel better—look better

www.RandScot.com