Staying Healthy After TBI

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https://msktc.org/tbi/factsheets

TBI Factsheet

This factsheet includes information about how to monitor and maintain your physical and mental health after TBI. It also includes resources to help you stay healthy after TBI.

For more information contact: MossRehab Traumatic Brain Injury Model System

60 Township Line Road, Elkins Park, PA 19027

1-800-CALL MOSS

www.mrri.org www.mossrehab.com

The Model System
Knowledge Translation
Center works with
Traumatic Brain Injury
Model System centers
to provide free
research- based
rehabilitation
resources for people
living with traumatic
brain injury (see
https://msktc.org/tbi for
more information).

Staying healthy after having a traumatic brain injury (TBI) can be hard. TBI can cause negative changes in your physical and mental health and change how you think and feel. These changes can make it hard to take care of yourself and to prevent or manage other health problems. This factsheet aims to help you understand how TBI can affect your health and offers tips for staying healthy throughout your life.

Monitoring Your Health

To stay healthy, we all need to know the signs that tell us that something may be wrong. But TBI can make it hard to do this. For example, you may have a hard time noticing your body's signals or remembering what health problems to tell your doctor about during an appointment. You may also have a hard time recognizing the emotions that may signal a mental health problem. Here are some tips to help you monitor your health after a TBI:

- Get some tools to help monitor your health at home. Body weight, temperature, blood pressure, and waist size are important health measurements. Important tools to monitor these include a scale, a thermometer, a blood pressure cuff, and a soft tape measure. If you have problems with low or high blood sugar, you may need a glucose or blood sugar monitor. Remember that your health measurements can change for many reasons. Work with your health care provider to decide the best times to take your health measurements and how often to take them.
- Use technology to help monitor your health. Other tools to help you monitor your health might include smart watches or fitness trackers, phone apps, digital blood pressure cuffs, and smart scales. These tools can make it easier to track your health over time. Many of these tools have alarms or reminders, which are helpful when you have trouble remembering. Some apps and devices can help you monitor all aspects of your health, such as mental and cognitive health, physical health and fitness, social health, and sleep. For example, some apps ask you to set health goals, such as a certain amount of exercise or an annual wellness check. They can track progress toward goals and send you reminders and motivational messages. You can also find apps to assist you to manage specific health conditions, such as diabetes or cardiac disease. These can help you monitor and care for symptoms related to these specific conditions. Some apps can even monitor your spiritual health goals (e.g., meditation, prayer, reading religious texts). You can find health and fitness apps by searching the Apple or Google Play App Store based on whether your cell phone is an iPhone or Android. You can try different apps to find the ones that work best for your unique needs. It is important to be aware of safety issues when entering any personal information in an app.







Take care to only use apps that you have researched for how they protect your privacy. Ask someone that you trust to help you determine how apps handle your personal information. Remember to delete apps that you are no longer using.

- **Keep a health journal or diary.** Keeping a journal or diary may help you notice changes in your body or behaviors that you may need to pay attention to. It is also a great way to help you keep track of problems that you want to talk to your doctor about. You may want to start with basic health information, such as your age, height, weight, allergies, and surgeries. Decide what about your health you want to monitor and how often. Some good things to keep track of are how much you sleep; the amount and type of food you eat; how much water you drink; when you take medicines or vitamins; when you have pain; when you exercise or are active; when you feel sick; and when you have a doctor's appointment.
- Schedule a yearly check-up with your regular doctor or primary care provider. These check-ups are important for monitoring your health and finding potential problems early. During these visits, your doctor or other health care provider will check aspects of your health that you can't monitor at home. This may include blood work or breast or prostate screenings. Yearly exams give you a chance to talk to your health care provider about any concerns you may have. Your health care providers can also help you identify resources to help you better manage your health and remind you of important vaccinations, like flu or shingles. If you have a doctor that has seen you specifically for your brain injury (such as a physiatrist or a neurologist), then you can ask for an appointment if you are having a problem that your regular provider does not address.

Preventing and Taking Care of Other Health Conditions

People with TBI may have other health issues, such as high blood pressure or heart disease. Problems caused by the TBI, like issues with memory or planning, can make it hard to care for other health problems. Here are some tips to help you prevent or take care of other health conditions after TBI.



- Ask your providers about other health records and how to link your records from their treatment to your other medical records.
- Keep a list of your medicines, their dosages, and why you are taking each one. Take this list with you when you go to doctors' appointments.
- Use a pill box to organize your medications so that it is easy for you to take the right amount at the right time.
- Keep a list of your doctors, what they do, and how to reach them.
- Use a calendar to keep track of your doctor's appointments. Smart phone calendars can be useful for this, and often allow you to set alarms to remind you of appointments.
- Before you go to the doctor, write down the questions that you want to ask. During the visit with your doctor
 or healthcare provider, write down their answers or put them in the notes section of your smartphone. If it is
 OK with the doctor, you can also audio record your conversation. Consider bringing a family member or friend
 to your appointment. They can help you remember what to ask and remember what doctors or health care
 providers tell you. At the end of the appointment, repeat what the provider has told you. This will help make
 sure that you understand things and clarify any confusion.
- Talk to each of your doctors about your TBI and about how your medicines may affect your recovery. Some
 medications may not be recommended for people with TBI in certain cases, and not all physicians may be
 aware of this. If you are seeing a doctor who has not treated you for TBI, let them know about your TBI and







- ask if any medicines they prescribe could worsen your TBI symptoms, or interact with current medications. You might also consider calling your brain injury doctor and asking if any new medications are OK for you.
- Avoid medicines that can make TBI-related thinking problems worse. Some medicines that are prescribed for pain and for breathing problems may worsen problems related to TBI. When you are prescribed a new medicine, talk to your doctors about how it may affect your recovery.

Maintaining Your Physical Health

There are a lot of things that you can do each day to support your physical health. These include exercising, eating well, avoiding alcohol and drugs (including tobacco), and sleeping well. Getting support from your family, friends, and health care providers can help you stay healthy. Here are some tips to help you support your physical health after a TBI.

Exercising

Your goal should be to do 150 minutes of safe, moderate exercise each week and to do strength training 2 days a week. You can work up to 150 minutes by starting small- even 10 minutes of exercise a few times a day will soon add up. You can reach this goal by walking, jogging, swimming, or biking. But other activities, such as gardening, cleaning your house, climbing stairs, and doing laundry also count as exercise. The key is to move as much as you can. Find an activity that you enjoy, do it safely, and try not to sit for long periods of time. Exercising with friends and family are also great ways to add social support to your exercise routine. You will know you are doing moderate exercise when you find it physically hard to talk to someone when exercising. Talk to a health care provider before starting a new exercise program. Talk to a physical therapist or physical medicine and rehabilitation doctor if you have mobility impairment that may require modified exercises.

Eating Well

At every meal, try to fill half of your plate with fruits and vegetables, a quarter with protein (fish, chicken), and the last quarter with grains (rice, oatmeal). Tofu and seitan are high-protein options for vegans or vegetarians. Filling your plate with lots of color and different types of fruits and vegetables is good for your health. It's also a good idea to keep healthy snacks on hand so you are not tempted to choose an unhealthy snack. For example, have bowls of fruit or nuts on your kitchen counter or healthy granola bars in your car. Memory aids can also be helpful when you are trying to eat healthy. Examples include setting a timer on your phone to remind you when to eat, organizing your refrigerator or pantry so that healthy food is at eye level (middle shelf) and unhealthy food is lower or higher, and keeping a diary of foods that you ate throughout the day. You may also set a timer to remind you to take short breaks when eating, to ensure that you have time to recognize when you are full. If you are trying to gain or lose weight, you should talk to a health care provider to find out how many calories you should take in each day to stay healthy.

Avoiding Alcohol and Drugs

We know that alcohol and other recreational drugs can have a toxic effect on the brains of people who have not had a TBI. This impact may be more pronounced in people with TBI because injury to the brain makes the brain more vulnerable to other types of damage. Alcohol and drugs can have a negative effect on the injured brain and can limit the brain's ability to recover and get better. Drugs and alcohol impair judgment and can also effect coordination and







balance, making people more likely to injure themselves or others. For these reasons, it is advised that people with TBI avoid consuming alcohol and drugs.

Sleeping Well

To be healthy and function well, our bodies need sleep. Not getting enough sleep may affect our memory, thinking, energy level, and mood. Repeated lack of sleep over many years may contribute to long-term problems with memory and thinking. Aim to get at least 7–8 hours of sleep each night. If you are having trouble sleeping, talk to your doctor.



Here are some more tips that may help you to sleep better:

- Avoid large meals at night.
- Choose a caffeine cutoff time.
- Keep a consistent schedule, including on the weekend. Go to bed at the same time each night and use an alarm to wake up at the same time each day.
- Avoid napping during the daytime. If you do take a nap, keep it to no more than 20 minutes.
- Limit television and the use of electronics for at least one hour before bedtime.
- Use your bedroom only for sleep and intimacy; find another space for work and recreation. Give yourself 20 minutes to fall asleep. If you are not sleepy, get out of bed. Go back to bed when you feel sleepy.

Preventing Another TBI

TBIs have a "cumulative effect" on how well the brain functions. This means that a second injury, even if it were the same as the first, would have a bigger effect on your brain. That is why it is important to do everything you can to prevent another TBI. This may be hard because your past TBI may have affected your vision, your coordination, or your ability to pay attention. It is also important to take precautions to keep yourself safe, such as making sure your home is safe from falls and wearing a seatbelt. You should also use a helmet when recommended. You should avoid sports or activities that have a high chance of causing a blow to the head.

Maintaining Positive Mental Health

While mental health is just as important as physical health, we often don't take care of our mental health. TBI can cause negative changes in your emotions. It can also make it hard for you to handle other types of stress, such as financial stress or conflict with your family members or friends. Paying attention to your mental health each day can help you handle unexpected stress when it happens. Here are some ways to maintain your mental health:

- Keep a journal or diary to write down what you think and feel each day. You can do this once a day, or at different times each day, such as in the morning and evening. You may notice that you think and feel differently at different times of the day. Being in touch with what you think and feel can help you spot patterns, like when you obsess over one idea that makes you feel sad or irritable. Just being aware of your thoughts and feelings can have positive effects on your mental health.
- Take frequent breaks with time set aside to be with yourself. Having quiet time for yourself each day is
 important for your mental health. It does not have to be a lot of time. If all that you have is 5 minutes, start
 there. You can sit quietly, meditate, drink a cup of your favorite non-alcoholic beverage, listen to music, or







pray. Try not to use this time to plan your next day's activities or do some other mental chore. Reserve the time to just sit with yourself and your thoughts and feelings.

- Try mindfulness exercises. Mindfulness means being aware of whatever you are thinking and feeling, without judgment. It means just noticing whatever you are thinking and feeling, without attaching any special meaning to it or labeling it as good or bad. Scientific evidence shows that being mindful in our daily lives has positive health benefits.
- Reach out to others. Being with other people can have a positive impact on your mental health, while
 loneliness can have a negative impact. TBI can make it hard to socialize. You may not feel like being with
 people, or you may not have the same social network that you did before. The following suggestions may
 help.
 - Try taking part in a support group. The Brain Injury Association or Brain Injury Alliance in your state can help you find TBI support groups near you.
 - Join a social media support groups for people with TBI. You could also join social media groups that are not related to TBI- such as interest in art or music.
 - Look for leisure learning courses in your community. You can take courses that interest
 you, such as photography or art appreciation. This can help you meet other people with similar interests.
 - Volunteering is another way to meet others who are passionate about the same things. Volunteer
 opportunities may include working on political campaigns, helping at a homeless shelter, or helping at a
 local pet rescue and adoption site. Look at your local city's website for other volunteer activities.
- Focus on what you are grateful for. Being grateful has positive health effects. Take a moment each day to think of something that you are grateful for. You may also find something around you, such as a beautiful flower or a pretty bird, and spend a few minutes watching it and appreciating it. Consider writing these positive thoughts in a journal.
- Get help for your mental health when you need it. It is normal to feel sad or worried sometimes, especially if it feels like your life has changed a lot since the TBI. If you find that you are so sad or worried that you don't enjoy activities or being with people, or you feel hopeless, don't be afraid to reach out for help. Talk to a family member or a friend or a doctor or other health care provider. There are ways to feel better. You may try medicine or talk therapy. It is not weak to ask for help; it makes you stronger.
- Getting Social Support. Staying healthy can be hard. You may have more success if you ask others to help
 you stay healthy. This can include family members, friends, or people that you meet when exercising at the
 gym or park. You can encourage each other, push each other to reach new goals, and just support each
 other. You may also join a nutrition or exercise group. Many workplaces have these, or you can connect with
 neighbors on community social media platforms or during community meetings.

Resources to Help You Stay Healthy

Cognitive Health and Older Adults:

https://www.nia.nih.gov/health/cognitive-health-and-older-adults

Hawley, L., Hart, T., Waldman, W., Glenn, M., Hammond, F., & Dams-O'Connor, K. (2018). Living well after traumatic brain injury. *Archives of Physical Medicine and Rehabilitation*, 99(7), 1441–1442. doi:10.1016/j.apmr.2018.02.012. https://www.archives-pmr.org/article/S0003-9993(18)30177-1/fulltext







Physical Activity Recommendations for Adults with Chronic Health Conditions and Disabilities: https://www.cdc.gov/physicalactivity/basics/pdfs/PA-adults-with-chronic-health-conditions-508.pdf

Protecting Against Cognitive Decline:

https://www.health.harvard.edu/mind-and-mood/protecting-against-cognitive-decline

What's Your Move? Move Your Way: https://health.gov/sites/default/files/2019-11/PAG_MYW_Adult_FS.pdf

What's on Your Plate? https://www.myplate.gov/

Body Weight Planner: The Body Weight Planner allows users aged 18 and older to make personalized calorie and physical activity plans to reach a goal weight within a specific time period and to maintain it afterwards. https://www.niddk.nih.gov/bwp

Authorship

Staying Healthy After TBI was developed by Angelle M. Sander, PhD, Monique R. Pappadis, PhD, Flora M. Hammond, MD, Simon Driver, PhD, and John Corrigan, PhD, in collaboration with the Model Systems Knowledge Translation Center.

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