



# The Wire

#### Volume 2 Issue 11

Sleep: A Dynamic Activity

#### September 2019

## Inside this issue: Cooking with 2 Gwen Up coming 3 Programs Sleep *continued* 4 Sleep *continued* 5 Trivia 6 MHRD PRograms Staving Safe us- 7 ing your Email, continued MHRD Programs Trivia Answers

Until the 1950s, most people thought of sleep as a passive, dormant part of our daily lives. We now know that our brains are very active during sleep. Moreover, sleep affects our daily functioning and our physical and mental health in many ways that we are just beginning to understand.

Nerve-signaling chemicals called *neurotransmitters* control whether we are asleep or awake by acting on different groups of nerve cells, or neurons, in the brain. Neurons in the brainstem, which connects the brain with the spinal cord, produce neurotransmitters such as serotonin and norepinephrine that keep some parts of the brain active while we are awake. Other neurons at the base of the brain begin signaling when we fall asleep. These neurons appear to "switch off" the signals that keep us awake. Research also suggests that a chemical called adenosine builds up in our blood while we are awake and causes drowsiness. This chemical gradually breaks down while we sleep.

During sleep, we usually pass through five phases of sleep: stages 1, 2, 3, 4, and *REM* (rapid eye movement) sleep. These stages progress in a cycle from stage 1 to REM sleep, then the cycle starts over again with stage 1 We spend almost 50 percent of our total sleep time in stage 2 sleep, about 20 percent in REM sleep, and the remaining 30 percent in the other stages. Infants, by contrast, spend about half of their sleep time in REM sleep.

During stage 1, which is light sleep, we drift in and out of sleep and can be awakened easily. Our eyes move very slowly and muscle activity slows. People awakened from stage 1 sleep often remember fragmented visual images. Many also experience sudden muscle contractions called hypnic *myoclonia*, often preceded by a sensation of starting to fall. These sudden movements are similar to the "jump" we make when startled. When we enter stage 2 sleep, our eye movements stop and our brain waves (fluctuations of electrical activity that can be measured by electrodes) become slower, with occasional bursts of rapid waves called sleep spindles. In stage 3, extremely slow brain waves called *delta waves* begin to appear, interspersed with smaller, faster waves. By stage 4, the brain produces delta waves almost exclusively. It is very difficult to wake someone during stages 3 and 4, which together are called *deep sleep*. There is no eye movement or muscle activity. People awakened during deep sleep do not adjust immediately and often feel groggy and disoriented for several minutes after they wake up.

Continued on page 4

#### Volume 2, Issue 11

## **Cooking with Gwen**

Gwen is the Meal Coordinator for both Sanford and Starbuck GEMS Meal programs. Her love of Seniors and cooking is apparent as everything she makes is fantastic!

If you have not yet been to a meal program, check out our calendar and give us a call. We would love to see you!

#### No Bake Cheesecake Dessert

1 Box Raspberry Jello
1 Can of Cherry Pie Filling
1 Block of Cream Cheese
1 Cup of Icing Sugar
1 Can of Crushed Pineapple
1 Container of Whipped Topping
Chopped pecans for topping

Make jello according to directions. Mix in Cherry Pie Filling. Refrigerate until set

Mix together cream cheese, icing sugar, pineapple and whipped topping. Add to the top of the set jello. Top with chopped pecans. Return to the refrigerator for at least 1 hour. Enjoy!







### **Upcoming Programs**

**Back Health** with Sandra Thompson, Thursday Sept 12 at Sanford Legion

80% of people experience back problem at some time in their lives. Sandra Thompson BMR(PT) has 27 years of experience treating people with back pain. She will be able to answer your back related questions like...Should I have an xray or an MRI done? What is my "core"? Won't activity or exercise make it worse? How bad does my



back pain need to be before I see a Physiotherapist? My leg hurts and my doctor says its coming from my back.

This presentation is free and begins at 1:00p.m. Lunch is served at noon for those wanting to join us for lunch at a cost of \$10 p.p. Please call ahead to reserve lunch, 204-735-3052

Healthy Habits for a Healthy Brain with Active Aging Manitoba Wednesday, September 25 at Starbuck Hall

Mental well-being matters — at all ages of life. Healthy habits contribute to a healthy brain and a positive outlook on life.

This presentation is free and begins at 1:00p.m. Lunch is served at noon for those wanting to join us for lunch at a cost of \$10 p.p. Please call ahead to reserve lunch, 204-735-3052

#### MAID (Medical Assistance in Dying)

Thursday, October 3 at Sanford Legion

Medical assistance in dying has been legalized in Canada. It is provided to legally eligible patients who must meet certain criteria. Learn who is eligible, how the request process works, and where and how the assistance may be provided.

This presentation is free and begins at 1:00p.m. Lunch is served at noon for those wanting to join us for lunch at a cost of \$10 p.p. Please call ahead to reserve lunch, 204-735-3052

When we switch into REM sleep, our breathing becomes more rapid, irregular, and shallow, our eyes jerk rapidly in various directions, and our limb muscles become temporarily paralyzed. Our heart rate increases, our blood pressure rises, and males develop penile erections. When people awaken during REM sleep, they often describe bizarre and illogical dreams.

The first REM sleep period usually occurs about 70 to 90 minutes after we fall asleep. A complete sleep cycle takes 90 to 110 minutes on average. The first sleep cycles each night contain relatively short REM periods and long periods of deep sleep. As the night progresses, REM sleep periods increase in length while deep sleep decreases. By morning, people spend nearly all their sleep time in stages 1, 2, and REM.

People awakened after sleeping more than a few minutes are usually unable to recall the last few minutes before they fell asleep. This sleep-related form of amnesia is the reason people often forget telephone calls or conversations they've had in the middle of the night. It also explains why we often do not remember our alarms ringing in the morning if we go right back to sleep after turning them off.

Since sleep and wakefulness are influenced by different neurotransmitter signals in the brain, foods and medicines that change the balance of these signals affect whether we feel alert or drowsy and how well we sleep. Caffeinated drinks such as coffee and drugs such as diet pills and decongestants stimulate some parts of the brain and can cause *insomnia*, or an inability to sleep. Many antidepressants suppress REM sleep. Heavy smokers often sleep very lightly and have reduced amounts of REM sleep. They also tend to wake up after 3 or 4 hours of sleep due to nicotine withdrawal. Many people who suffer from insomnia try to solve the problem with alcohol. While alcohol does help people fall into light sleep, it also robs them of REM and the deeper, more restorative stages of sleep. Instead, it keeps them in the lighter stages of sleep, from which they can be awakened easily.

#### How Much Sleep Do We Need?

The amount of sleep each person needs depends on many factors, including age. Infants generally require about 16 hours a day, while teenagers need about 9 hours on average. For most adults, 7 to 8 hours a night appears to be the best amount of sleep, although some people may need as few as 5 hours or as many as 10 hours of sleep each day. Women in the first 3 months of pregnancy often need several more hours of sleep than usual. The amount of sleep a person needs also increases if he or she has been deprived of sleep in previous days. Getting too little sleep creates a "sleep debt," which is much like being overdrawn at a bank. Eventually, your body will demand that the debt be repaid. We don't seem to adapt to getting less sleep than we need; while we may get used to a sleep-depriving schedule, our judgment, reaction time, and other functions are still impaired.

People tend to sleep more lightly and for shorter time spans as they get older, although they generally need about the same amount of sleep as they needed in early adulthood. About half of all people over 65 have frequent sleeping problems, such as insomnia, and deep sleep stages in many elderly people often become very short or stop completely. This change may be a normal part of aging, or it may result from medical problems that are common in elderly people and from the medications and other treatments for those problems.

#### What Does Sleep Do For Us?

Sleep appears necessary for our nervous systems to work properly. Too little sleep leaves us drowsy and unable to concentrate the next Contir

Continued on page 5

V

day. It also leads to impaired memory and physical performance and reduced ability to carry out math calculations. If sleep deprivation continues, hallucinations and mood swings may develop. Some experts believe sleep gives neurons used while we are awake a chance to shut down and repair themselves. Without sleep, neurons may become so depleted in energy or so polluted with byproducts of normal cellular activities that they begin to malfunction. Sleep also may give the brain a chance to exercise important neuronal connections that might otherwise deteriorate from lack of activity.

#### Sleep and Disease

Sleep and sleep-related problems play a role in a large number of human disorders and affect almost every field of medicine. For example, problems like stroke and asthma attacks tend to occur more frequently during the night and early morning, perhaps due to changes in hormones, heart rate, and other characteristics associated with sleep. Sleep also affects some kinds of epilepsy in complex ways. REM sleep seems to help prevent seizures that begin in one part of the brain from spreading to other brain regions, while deep sleep may promote the spread of these seizures. Sleep deprivation also triggers seizures in people with some types of epilepsy.

Sleeping problems occur in almost all people with mental disorders, including those with depression and schizophrenia. People with depression, for example, often awaken in the early hours of the morning and find themselves unable to get back to sleep. The amount of sleep a person gets also strongly influences the symptoms of mental disorders.

Sleeping problems are common in many other disorders as well, including Alzheimer's disease, stroke, cancer, and head injury. These sleeping problems may arise from changes in the brain regions and neurotransmitters that control sleep, or from the drugs used to control symptoms of other disorders. In patients who are hospitalized or who receive round-the-clock care, treatment schedules or hospital routines also may disrupt sleep. The old joke about a patient being awakened by a nurse so he could take a sleeping pill contains a grain of truth. Once sleeping problems develop, they can add to a person's impairment and cause confusion, frustration, or depression. Patients who are unable to sleep also notice pain more and may increase their requests for pain medication. Better management of sleeping problems in people who have other disorders could improve these patients' health and quality of life.

#### Tips for a Good Night's Sleep

• Set a schedule:

Go to bed at a set time each night and get up at the same time each morning. Disrupting this schedule may lead to insomnia. "Sleeping in" on weekends also makes it harder to wake up early on Monday morning because it re-sets your sleep cycles for a later awakening.

• Exercise:

Try to exercise 20 to 30 minutes a day. Daily exercise often helps people sleep, although a workout soon before bedtime may interfere with sleep. For maximum benefit, try to get your exercise about 5 to 6 hours before going to bed.

• Avoid caffeine, nicotine, and alcohol:

Avoid drinks that contain caffeine, which acts as a stimulant and keeps people awake. Sources of caffeine include coffee, chocolate, soft drinks, non-herbal teas, diet

Continued on page 7

#### Volume 2, Issue 11

## What Do They Have in Common?

Each list contains a list of several items. Can you figure out what they have in common?

- 1. The heart, women's shoes, and gas station equipment
- 2. Shasta, Hood, McKinley, and Rainier
- 3. M&M's, oysters, peanuts and turtles
- 4. National Velvet, Seabiscuit, King of the Wind, and Misty of Chinoteague
- 5. Vichyssoise, bouillabaisse, gazpacho, miso
- 6. Thimble, wheelbarrow, shoe, and battleship

## HOW WELL I SLEEP



7. Stockings, a marathoner, a car,, and a political candidate

8. Bitte, por favor, and prego

9. Elwood P. Dowd, Jefferson Smith, Roger Hobbs, and George Bailey

10. Lettuce, a pin, a glass of beer, and a coin

11. Eric Blair, Samuel Clemens, and Charles Dodgson

12. Underwood, Olivetti, Royal, and Remington Rand

13. Nelson, Beaver, Snake, Sturgeon

14. Camino de Santiago, Appalachian, Inca, and Bruce

Long term memory Executive functioning Attention to detail

#### Page 6

#### Volume 2, Issue 11

drugs, and some pain relievers. Smokers tend to sleep very lightly and often wake up in the early morning due to nicotine withdrawal. Alcohol robs people of deep sleep and REM sleep and keeps them in the lighter stages of sleep.

• Relax before bed:

A warm bath, reading, or another relaxing routine can make it easier to fall sleep. You can train yourself to associate certain restful activities with sleep and make them part of your bedtime ritual.

• Sleep until sunlight:

If possible, wake up with the sun, or use very bright lights in the morning. Sunlight helps the body's internal biological clock reset itself each day. Sleep experts recommend exposure to an hour of morning sunlight for people having problems falling asleep.

• Don't lie in bed awake:

f you can't get to sleep, don't just lie in bed. Do something else, like reading, watching television, or listening to music, until you feel tired. The anxiety of being unable to fall asleep can actually contribute to insomnia.

• Control your room temperature:

Maintain a comfortable temperature in the bedroom. Extreme temperatures may disrupt sleep or prevent you from falling asleep.

• See a doctor if your sleeping problem continues:

If you have trouble falling asleep night after night, or if you always feel tired the next day, then you may have a sleep disorder and should see a physician.

http://www.mentalhealthcanada.com/article\_detail.asp?lang=e&id=28

## Some Programs offered through Macdonald Headingley Recreation

#### Nordic Walking/ Urban Poling

#### Instructor: Lori Hildebrandt

Are you looking for a new way to get active and enjoy the great outdoors? Would you like to try a fun and easy way to boost your walking & increase your workout? Urban Poling (or Nordic Walking) uses 90% more muscles than just walking and turns it into a full body workout! It improves your posture, balance and stability while burning up to 20-40% more calories than walking. *Be prepared to head outdoors for a walk! Bring your own poles* or borrow ours! Please wear comfortable walking shoes and dress for the weather.

La Salle - Caisse Community Centre & Trail

Saturday, September 21

10:00 am

Free!

Register by: Monday, September 16

## What?????

You have fingertips, but no toe tips. You can tiptoe, but can't tipfinger.

#### **Other MHRD Programs continued**

#### Yoga For Men

Instructor: Nicole Necsefor

Yoga For Men is a specialized multi -level class designed to introduce male participants to the many benefits of yoga. Students will be able to develop strength and endurance, improve balance and flexibility, increase range of motion, as well as cultivate relaxation techniques to help manage the demands and stresses of daily life. Bring an open mind and your sense of humour! Don't over think it - this class is for you! *Please bring a yoga mat and wear loose comfortable clothing*.

Oak Bluff Recreation Centre 9 Mondays, September 23 - December 9 (No class October 14, 21 & November 11) 7:30 pm - 8:30 pm \$99.00 Register by: Monday, September 16

## RECREATION DISTRICT

Macdonald-Headingley

#### Answers to What Do They Have in Common

1. They are all pumps 2. They are all mountains 3. They all have shells 4. They are all stories that feature horses 5. They are all soups 6. They are all pieces that move around the board in Monopoly 7. They all run 8. They all mean please (German, Spanish, Italian) 9. They are all characters played by James Stewart 10. They all have heads 11. They are all the real names of authors who wrote under pen names (Eric Blair is George Orwell, Samuel Clemens is Mark Twain, Charles Dodgson is Lewis Carroll) 12. They are all brands of typewriters 13. They are all rivers in Canada 14. They are all Walking Trails

Macdonald Services to Seniors has a Website!

Check us out at www.MacdonaldSeniors.ca

#### Macdonald Services

#### to Seniors

Leanne Wilson Box 283 5-38 River Ave Starbuck, MB R0G 2P0 Phone: 204-735-3052 E-mail: mssi@mymts.net

#### Macdonald Seniors Advisory Council (MSAC)

Ray & Joyce Kasur:

204-736-3734

Vic & Viviane Bossuyt:

204-895-0049

Carol & Dennis

Pascieczka:

204-736-2681

Cindy Bestland:

204-736-2667

Becki Ammeter:

204-735-2380

Judy Shirtliff:

204-997-7966

Rodney Burns:

204-735-2751

Bernice Valcourt:

204-272-5586

Barry Feller:

204-736-4433

Susanne Moore:

204-885-2444

#### Helping seniors remain in their own homes

M.S.S. is a service to all older adults within the R.M. of Macdonald.

We can help with transportation, home and yard maintenance, housekeeping, foot care, medical equipment loans, filling out forms, accessing information, Victoria Lifeline and ERIK. Please call for information.

M.S.S. relies on volunteers and service providers to help older adults remain in their own homes for as long as possible.

If you have a few hours to give, please call Leanne to see how you can be of service. We are always looking for people to help with transportation, light house cleaning, or even friendly visiting.

#### Service Providers Featured in Previous Issues:

#### Foot Care:

A Step in Time Foot Care: Brenda Grom—204-509-1817

Leanne Maes (La Salle): 204-771-4030

Hair Care:

Hair I Am Mobile Salon: Leah Macaulay—204-470-2727

If you offer services for seniors, and would like to be featured in this newsletter, please contact Leanne

Macdonald Services to Seniors is in Need of Drivers, and House and yard maintenance in all communities.

If you are interested in putting your name forward to be contacted when someone requires help with transportation or light house cleaning, please call Leanne.

