Health for Shift Workers

Eat, Sleep, Get Active!
The Importance of Proper Exercise and Nutrition...

What you eat directly impacts your level of health. Regular consumption of processed foods high in sugar, salt, and fat will negatively affect your level of energy, mental clarity, body composition, and will put you at a much higher risk for diseases such as cancer, diabetes, and cardiovascular disease. Eating healthy foods every few hours will help to stabilize your blood sugar levels, reduce cravings, maintain energy levels and focus, and increase your metabolism. Pack a lunch, drinks lots of water, and keep healthy snacks at your workplace.

Regular activity promotes increased immune system support, improved blood flow, higher energy levels, decreased stress, and lower risk of physical disease and ailment. Try to incorporate cardiovascular, strength, and flexibility exercises into your lifestyle. Despite your irregular eating, sleeping, and working schedule, there are things you can do to keep your body active, energy high, and your mind focused. Use the following tips to help establish some healthy patterns in your own life. Join a gym, start a walking group, take stretch breaks at work, and always take the stairs. Remember, every little bit really does count!

Tips for Staying Healthy

How Can I Eat Healthy as a Shift Worker?

- Pack a lunch with healthy snack options such as yogurt, fruit & veggies, or nuts & seeds.
- Avoid vending machines.
- Be sure you are eating every 2-3 hours to keep your metabolism elevated.
- Choose whole grains, and be sure your protein intake is adequate.
- Avoid heavy meals before bed, as well as foods that contain high levels of sugar or caffeine.
- Relax during meals and allow time for digestion.
- Drink lots of water, and cut back on foods high in salt and fat.
- Afternoon workers: have meals in middle of the day instead of middle of your shift.
- Night workers: eat lightly throughout your shift, & have a moderate breakfast.

Some Tips for Sleeping Better....

- Make sure you limit sun exposure before your scheduled sleep time.
- Remove all light sources from your sleeping space.
- Use a sleeping mask and ear plugs to eliminate sound and light.
- Use white noise (such as a fan) to drown out sounds.
- Keep your sleeping space free of clutter, and at a comfortable temperature: not too warm, not too cool.
- Avoid caffeine and alcohol prior to sleeping.
- Be aware of the ingredients in your medication, and be sure you are taking them at a time that will not disrupt your sleep. Antihistamines, anti-depressants, and decongestants have been linked to poor sleep patterns.
- Develop a ritual such as meditation, deep breathing, or a hot bath to help you fall asleep more easily.
- Before sleeping, make a list of things you need to do the next day to clear your mind while you try to fall asleep. Creating a “thinking time” to deal with daily issues will help you ease into sleep without worrying about the day’s events.
Exercise! Even 20 minutes of activity at home a day can help you to relieve stress, making it easier to fall asleep.

Ensure your family is aware & considerate of your sleep hours & needs. (Post your work/sleep schedule on the fridge).

If you do not fall asleep after an hour, read a book or listen to quiet music on the radio. If sleep still does not come, reschedule your sleeping hours for later in the day.

Avoid large meals heavy in protein/ fat/sugar before bed. Eat foods containing tryptophan (an amino acid) such as soy & dairy products before bed. A glass of warm milk is a great place to start. Tryptophan usually takes effect after an hour.

If your mind racing deeply affects your ability to fall asleep, keep a pen & notepad in your bedside drawer. Every time a thought about your responsibilities enters your mind, jot down your ideas/solutions, and review the list in the morning.

Avoid strenuous exercise before sleep, as it increases your body’s metabolism for several hours, making it difficult to sleep.

The following are smart food combinations that are good pre-sleep snack ideas:

- Whole grain crackers with almond butter
- Yogurt sprinkled with granola
- Oatmeal or cereal with milk or soy milk
- Banana with peanut or almond butter
- Rice cake topped with tomato or lean turkey breast
- Sliced apple and cottage cheese

Emotional and Social Effects

Stress

There is a direct link between an individual’s level of stress and their exercise/nutritional habits. A regular exercise program and well-balanced diet can significantly help to lower stress levels. This is where the difficulty is for shift workers. Erratic schedules make exercise and proper nutrition difficult to implement, often leading to higher levels of stress, which workers often cope with by eating foods high in sugar and fat.

Learn to recognize signs of stress: Some symptoms of stress include: tense neck or back, heartburn, upset stomach, hunched shoulders, headaches, dizziness, and short fast breathing.

Learn to recognize how you typically deal with stress:
Examples of how people may negatively handle stress may include: reaching for a cigarette or for something to eat, lashing out, abusing drugs or alcohol.

Learn how to identify the stressors in your life, and make a plan to either eliminate or reduce the negative impact caused by the stressor. Keeping a log of your stressors may help you to more easily identify what situations cause your stress levels to increase. Once you have identified your own stressors, you can begin to develop a plan for healthily coping with them.

Tips for Reducing Stress

- Practice deep breathing or relaxation techniques.
  → Take deep breaths in through your nose to a count of 5, and slowly exhale through your mouth. Exhalation should last a bit longer than inhalation. Repeat this until you begin to feel more relaxed. Keeping your eyes closed will help.

- Every day, implement proper sleep, nutrition, & exercise.
  → Try taking the stairs at work, implement a pre-sleep activity such as music or reading, and prepare a lunch the night before to take to work.

- Seek professional counselling or help from social support groups, friends/family.
  → Check out a local library or gymnasium for social activities you can take part in. Schedule family meetings where you can communicate with each other about your feelings and about events happening in your lives. Talk to the people you trust.

- Learn to let go of things and prioritize what is important in your life.
  → Make a list of things in your life that cause you the most stress, and a list of the things that are most important in your life. Compare these lists, and decide for yourself what items truly deserve your effort, worry, and time.

- Maintain a positive attitude.
  → Post reminder notes around your home or workplace reminding you of the things you are most grateful for. Keep a book of motivational quotes at work, and refer to it during your spare moments, or whenever you are feeling negative emotions.

Tips for Relationships

- Try and eat breakfast with your family and meet your children from school before you go to work.
- Call your family from work and bid them goodnight to remind them you care.
- Keep a family calendar/notice board to stay updated on the activities and events of your family.
Make a real effort to mark special days like birthdays and anniversaries, and ask for days off/shift changes well in advance so you can be with your family.

Use email and answering machines to keep in touch with friends.
Socialize with other shift workers and their families.

### Job Demands & Exercise Solutions

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<tr>
<th>Issue</th>
<th>Solution</th>
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<tbody>
<tr>
<td>Mental clarity and ability to focus is compromised.</td>
<td>Participate in explosive, high intensity exercises to promote circulation. Practice yoga or other stretching to keep your mind sharp. Consistency is vital. Your stress will not go away overnight, so stay consistent with your exercise. Your body and mind need to be stimulated by variety, so challenge yourself with new exercise techniques.</td>
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<td>Postural problems, tension in muscles, back pain due to prolonged sitting.</td>
<td>Exercise using equipment that engages your core such as free weights, bosu balls, and yoga balls. Avoid exercise that requires you to sit. Focus on strong exhalations to promote core strength, and be aware of your posture during your exercise routine.</td>
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<td>Issues with joint and back health, achy feet and knees caused by prolonged hours walking or standing.</td>
<td>Participate in exercises that promote decompression and elongation in your spine such as deep static stretching. Improve your leg strength with exercises such as lunges and squat variations. Proper footwear is important, so update your shoes every 6 months. Additionally, hydration is important for proper lubrication of your joints, so be sure to drink water throughout your shift.</td>
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<td>Compromised back health caused by repetitive lifting, twisting, and bending.</td>
<td>Evaluate your workspace ergonomics and make necessary changes to your seat height, screen height, chair support, etc. Participate in free weight exercises that engage the core muscles such as triceps pushdowns, medicine ball twists, and back extensions. Be aware of muscle imbalances and work to strengthen each side evenly.</td>
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### When Should I Workout?

**Split Shift: 10:00am-2:00pm & 5:00pm -9:00pm**
Exercising before you begin your shift, or in between your morning and afternoon shift can give you the burst of energy you need to help sustain your energy levels and keep your mind sharp. Try to avoid napping in between your shifts - deep REM sleep is meant to be had at night. Napping for a few hours in the afternoon can cause you to feel even gogglier when you wake. Use the time in between your shifts to do any tasks that you might have planned to do that evening after your shift. Avoid passive activities such as watching TV in between shifts, as this can drain you of your energy. This will help the time between your shifts to pass more quickly, and will allow you to focus on sleeping when you return home from work.

**Wake:** 8:30am: Breakfast  
**Work:** 10:00am-2:00pm: Include 2 snacks  
**Break:** 2:00-5:00  
**Workout:** 2:30-3:30  
**Post-workout meal:** 4:00pm, include a protein and a carb  
**Work:** 5:00-9:00pm: Include 2 snacks  
**Pre-sleep ritual:** 11:00pm-11:30pm  
**Sleep:** 11:30pm -8:00am

**Night Shift: 11:00pm – 7:00am**
Working night shifts require you to function against the natural circadian rhythms of your body, making falling asleep in the day very difficult. Avoid exercising at the end of your shift. Working out prior to your shift will give you the energy your body needs to function on the job, and the mental clarity to stay focused and alert. Try to get your daily tasks completed in the hours before you head to work, so that sleep can be a priority when you return home from a night shift.

**Wake:** 2:00pm, varies between individuals, consume full and balanced breakfast within 1 hour of rising  
**Personal time:** 1:00-5:00, eat every 3 hours. Use this time to complete errands so as to reduce stress when trying to sleep later  
**Workout:** 5:00pm-6:00pm  
**Pre-work:** Consume a meal with a protein, starch, and vegetable choice. Use this time to eat, and get ready for work  
**Work:** 11:00pm-7:00am Take healthy snacks with you to work, and eat them every 2-3 hours  
**Pre-sleep Ritual:** 7:30-8:00  
**Sleep:** 8:00-2:00
Rotational Shift:
Monday-Friday 3:00pm-12:00am 4 weeks, Monday-Friday 8:00am-5:00pm following 4 weeks

Rotational shifts can be especially tough, as they make it difficult for your body to adapt to routine. Be sure to make proper sleep a priority, because your body and mind will need to be well fuelled to handle the changes in your work schedule.

On days that you are training with very high intensity explosive work, you may find it helpful to give yourself an hour to recover and rest your body prior to heading to work. This may help eliminate feelings of training induced physical exhaustion at the beginning of your shift.

Job Specific Considerations

Special Considerations for Police
Be aware of your cruiser ergonomics. Twist carefully when using your monitor to avoid contributing to back issues. Your exercise program should focus heavily on strength and cardiovascular endurance. The physical burden of your uniform can cause further issues with your back/joint health, so leg strength is crucial for overall health and support of your upper body weight. Situations that require apprehension will often engage most of your muscle groups, so ensure your exercises are well balanced between upper and lower body as well as core strength. Deadlifts, bench press, pull-ups and chin-ups are great exercises for improving your level of upper and lower body strength. Participate in high intensity cardiovascular/strength circuit training to increase your VO2 max. Keep your grip strength strong by lifting free weights without the aid of wrist wraps. Anaerobic conditioning is important for your body to learn how to go from a sedentary position to a full sprint, so participate in high intensity exercises such as circuit training or Tabata training (using only 4 minutes of exercise at a very high intensity. Ex: sprint for 20 seconds, walk for 10, repeat 8 times for total of 4 minutes).

Special Considerations for Administrative workers
Evaluate your workspace ergonomics. Use a Swiss ball as an alternate to your desk chair and take frequent standing/walk breaks to promote oxygen flow to your brain and muscles. Your exercise program should focus on core and back strength, and should include stretching exercises such as yoga to help elongate the muscles along your spine. Educate yourself on stretches that can be done without leaving your work space: especially stretches that will relieve tension in your shoulders and neck. Try using a low stool under your feet to keep your knees slightly higher than your hips. Try to avoid repetitive movements as much as possible.

Special Considerations for Nurses
Lift properly, using your legs not your back. Be aware of your positioning when leaning over bedsides by keeping your chest high and shoulders open. When assisting patients to an upright position, be careful to not rely too heavily on your back, and use your arm strength evenly. Your exercise program should focus on activities that strengthen your whole body, with focus on your core and back. Rotational strength is important for your job demands, so incorporate exercises such as medicine ball twists and wood chops. Ensure you are wearing comfortable, supportive footwear.

Special Considerations for Manufacturers/Labourers
Be cautious of your lifting mechanics, especially when lifting overhead. If your job requires repetitive movements, ensure that your exercise program addresses muscle imbalances. Participate in dumbbell exercises that focus on equally strengthening both sides of your body, such as dumbbell chest press, rear flies, and walking lunges. If you are standing for long periods of time, wear comfortable and supportive footwear, and ensure that your clothing allows for free movement.

Special Considerations for Firefighters
Ensure you practice proper lifting technique, using your legs, not your back. Your training should include various push and pull movements using heavy loads. For example, a cable row with squat. Because of the lifting demand on your body, a strong core and back are vital. Participate in exercises that promote good overhead strength, such as overhead squats, as well as exercises that focus on rotational strength. Your cardiovascular activity should involve interval training, with a high level of focus on improving lung capacity.

Special Considerations for Transportation Workers
Postural improvement, including back and core strength will greatly assist in your job functionality. Sitting for prolonged periods of time can lead to issues with neck/back tension, so incorporate flexibility and tension relief training such as yoga. Long shifts as a driver can often lead to fatigue, so keep your focus sharp by implementing tips for adequate sleep. When driving, take frequent breaks to stretch your legs, back, arms, and shoulders.
Keeping your Energy Up!

Circulation & Breathing - Stretching helps to maintain a free flow of oxygen to your muscles and brain, keeping you focused & alert. Find time in your day, even at work, to do stretching exercises. Focus on breathing deeply, & let go of any tension in your muscles – focus on your neck, face, and shoulders, which is where people tend to carry most tension. To get a quick burst of energy in the morning, do 5-10 minutes of stretching first thing. If you work nights, take frequent breaks to go for a walk.

Fuel your Body and Brain - Controlling what you put into your body can prove to be the single most effective way to maintain healthy levels of energy. The PH balancing effects of vegetables can drastically improve your overall level of health, and offer a natural solution to your energy problems, all while promoting a healthy longevity. Eat vegetables every time you eat, and opt for vegetables in a variety of colours. Red, orange, and dark leafy greens are a great place to start. In addition, increase the amount of Omega3 in your diet by opting for foods such as fish and nuts, or by supplementing with a quality Omega3 oil.

Set Goals - Establishing a personal goal can help to increase your level of motivation, and give you a deeper sense of meaning in life. The satisfaction that comes with reaching a goal - no matter how big or small - is a great way to help manage the stress that comes with shift work, and give you something to constantly strive for.

Deal with your Stress - Working irregular hours can drastically increase stress levels. Learning to identify your stressors and establishing tools to deal with them can help you achieve more balance between your work and personal life.

Schedule Some YOU Time - Taking time out of each day to focus on yourself is an important tool in keeping your mood elevated and your energy high. Spend time each day doing something you love – read a chapter of your favourite book, enjoy a soothing bath, go for a walk, or listen to music. Even with an irregular schedule, finding time to do things you love will help to improve your level of happiness, leading to a higher satisfaction in life, and improved levels of energy.

Eliminate Refined Sugar - Although sugars have been linked to temporarily increasing energy levels, they do much more harm than good. Excessive sugar in your diet will put high levels of stress on your insulin system, deplete your body of vital nutrients, and affect your body’s PH level – all leading to fatigue.

Stay Engaged - Keep your body and mind stimulated by participating in activities that keep you physically and mentally involved. Exercise, read a book, do word puzzles. In addition, try to limit the amount of time you spend watching TV. Watching TV is a passive activity, so it can easily zap you of energy, leaving you feeling groggy and fatigued.

Start an Interest Group at Work - Establishing connections with coworkers can reduce feelings of isolation that often come with shift work. Start a healthy living group & share ideas on how you incorporate healthy eating and activity while balancing a shift work schedule.

The Bottom Line...
Although your shift work schedule may pose a few extra challenges, it certainly doesn’t mean that a healthy lifestyle is impossible. Use the information in this document, and begin setting daily, monthly, and yearly goals for yourself. Remember, it’s never too late to begin the journey to better health!