



shift work

shift work and circadian rhythm

Shift work can be a challenge because it requires workers to go against their body's natural clock, known as a circadian rhythm. Our circadian rhythm makes us want to sleep when it's dark and be awake when it's light. Other important bodily functions such as digestion, body temperature, and blood pressure are also related to our circadian rhythm. For example, the body temperature of a person who is on a normal work schedule will be highest during the afternoon and early evening (awake time), and lowest just before sunrise (sleep time). Since shift workers may sleep during the day, they won't have the same body temperature cycle, which can lead to fatigue and confusion. Circadian rhythm conflicts can cause work-life balance issues and sleep problems, which can lead to heart disease, high blood pressure, digestive problems, obesity, diabetes, and depression (Culpepper, 2010). To reduce these risks and help the body adapt to shift work, it's important that shift workers learn how to eat well and get the best quality of sleep possible.



sleep and shift work

There are many workplaces now open around the clock. People work at grocery stores, gas stations, and drug stores during the night for customers who may need to shop during off hours. There are also many other jobs where shift work has been a normal part of the schedule for many years (e.g., health care workers, police officers, sales and service clerks, and production workers). In fact, 28% (4.1 million) of Canadian workers work non-traditional schedules, often known as shift work. Shift work is defined as any working hours that are not considered a regular day shift. Shift work include night and evening hours, rotating and splitshifts, and irregular schedules such as casual and on-call jobs. The most common types of shift work are rotating shifts and irregular schedules, accounting for 2.3 million full-time workers (Statistics Canada, 2008b). Unfortunately, they are also the most difficult for the body to get used to.

shift work and nutrition

Research shows that shift workers are more likely to eat poorly, be at an unhealthy body weight, and suffer from digestive problems, such as constipation, diarrhea, and peptic ulcers (Culpepper, 2010). Good nutrition is important to help keep shift workers healthy and alert at work hours. Consider the following shift work dos and don'ts.

dos & don'ts

- do** eat more high fibre foods (e.g., whole grains, vegetables, fruit, beans, and lentils) to help prevent constipation and diarrhea.
- do** drink plenty of water while you're awake to stay hydrated.
- do** pack a variety of healthy snacks to eat during your shift, instead of eating a large meal.
- don't** eat your largest meal of the day just before bed.
- don't** snack on higher fat and higher sugar foods.
- don't** drink large amounts of caffeine to deal with being tired.

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easy & healthy

snack ideas for shift workers

- Baby carrots and cucumbers with hummus.
- Fruit with low fat cottage cheese.
- Whole grain pitas, bread, or bagels with peanut butter.
- Bran muffin with cheese.
- Egg salad with whole grain crackers.
- Lower fat milk, cheese, and yogurt.
- Trail mix containing a variety of unsalted nuts, seeds, and dried fruit.

shift work and quality of sleep

The most common health complaint of shift workers is a lack of sleep (Statistics Canada, 2002). However, sleep diaries filled out by both shift workers and non-shift workers showed they get close to the same amount of sleep time. The difference is the quality of sleep. One-third of shift workers have problems falling asleep or staying asleep compared to only one-quarter of workers with regular daytime jobs. Consider the following tips to help you sleep better:

Make your room as dark as possible. In order to trick your body into thinking its dark outside when it is time to sleep, it's important to block out any sources of light. Be sure to:

- Use special room darkening shades on the windows.
- Block light coming from under the door by rolling up a towel and placing it at the bottom of the door.
- Cover light from bright electronics, such as an alarm clock or a TV.

Make your room as quiet as possible. There are many noises that can wake you from sleep during the day, such as a telephone ringing, a door bell, barking dogs, or traffic outside the home. Before settling down to sleep, consider:

- Wearing ear plugs.
- Tuning a radio or TV to "white noise" to help block out other noises.
- Turning off the telephone ringer in your room.

Tell your family and friends about your sleep schedule. Make sure people in your home know your sleeping schedule. Ask them to:

- Avoid loud activities such as vacuuming or playing loud music while you're trying to sleep.
- Not interrupt you during your sleep time, unless there's an emergency.
- Take messages if you receive a visitor or a phone call.

Be aware that certain drinks, medications, and your level of physical activity can affect your sleep. Consider the following:

- Caffeine affects people in different ways. Know how you respond to caffeine as it can affect you for several hours after eating or drinking.
- Alcohol may make you fall asleep faster, but will make it harder to stay asleep.
- Certain medications may have ingredients that prevent you from falling asleep.
- Physical activity may keep you awake if done within two to three hours of bedtime.

ten sleep tips for shift workers

ONE

Make your bedroom as dark as possible.

TWO

Wear ear plugs to block outside noises.

THREE

Develop a relaxing sleep routine.

FOUR

If possible, sleep the same hours every day, even on days off.

FIVE

Hang a "Do Not Disturb" sign on your door when sleeping.

SIX

Adjust the thermostat to make your room cooler before bedtime.

SEVEN

Avoid caffeine and alcohol for about five hours before bedtime.

EIGHT

If you're hungry, eat small snacks up to one hour before bed.

NINE

Bring enough healthy snacks to work to avoid eating poorly or overeating during a shift.

TEN

Improve your overall health by eating well and getting regular physical activity.