



Healthy Eating to Support Shift Work

Introduction

- Shift workers are impacted by **environmental, physiological, and psychological** factors that can make eating a healthful diet a challenge.
- **Circadian rhythms** are a part of the body's internal clock and are physical, mental, and behavioural changes that follow a 24-hour cycle. One of the most important and relevant circadian rhythms is the **sleep-wake cycle**. Research has revealed circadian rhythms play an integral role in aspects of physical and mental health, so it is important shift workers plan meals and lifestyle habits that promote health.
- Simple **nutrition strategies** can support shift workers overcome some of these challenges. Benefits of improving diet quality include being adequately fuelled for duty, improved physical and cognitive performance, and enhanced mood.
- This factsheet highlights the **key nutritional considerations** for night shift workers and provides **practical information** to support shift worker health and wellbeing.

Night Shift Meal Pattern

- Developing a **meal pattern** that fits with your shift work routine can be helpful when establishing timing of main meals and healthful snacks.
- A recommended approach is to **have your "main meal" before you start your night shift**. This should follow general healthy eating principles (see DNAS PH2 for more information) and include a whole grain carbohydrate, a lean protein source, and a variety of fruit and vegetables.
- **Avoid large meals between midnight and 06:00hrs**. Instead have smaller meals and healthy snacks, such as low calorie, protein rich options (e.g. hard-boiled eggs, yoghurt pouches, and low-fat cheese snacks)
- **Avoid processed foods**, foods high in **saturated fat** or **sugar**, and **fried foods**.
- Unless you are well accustomed, **spicy foods are not recommended**.

Planning Ahead

- Good **planning and preparation** can help you establish a healthy eating routine during shift work and improve your access to healthier food options.
- You could consider a night shift 'snack pack.'. Select **healthful snacks** that will work with your role, storage facilities, and time availability (e.g. unsalted nuts, jerky, vegetable sticks, and fruit).
- A **cool bag** may be a helpful investment, which you can load with yoghurt, a light meal, vegetable sticks, and easy to carry fresh fruit like bananas, apples, or satsumas.

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- Consider keeping **additional snacks in your personal vehicle for the drive home**, such as fresh and/or dried fruit.
- Make a shopping list and do your **food shop during rest days** to allow yourself time to prepare your meals and snacks.
- **Batch cook** a range of meals on your days off, portion out and store in a fridge or freezer.
- **Avoid convenient options** such as instant noodles or packet soups as these tend to be high in salt, have a poor nutrient profile, and are not very filling.

Hydration

- Hydration is important for **physical and cognitive performance** as well as for appetite regulation and digestive health.
- When working night shifts our feelings of thirst reduce, which means we might miss the normal cues to drink. This can lead to dehydration.
- Generally, water is best. Sugar-free cordial and other low-calorie beverages are also good options. Aim to drink **6-8 glasses of fluid or 2 litres** over the 24hr period.
- Taking sips, little and often, is a recommended approach.
- Tea and coffee do count towards your daily fluid intake; however, if you experience trouble sleeping after your night shift **consider reducing caffeine** during the second half of your shift.
Be mindful to keep within the recommended limits for caffeine intake, Safe limits are up to 400mg per day, which is equivalent to 4 cups of coffee or 3 double espressos.
- Consumption of energy drinks is not recommended due to high caffeine and sugar content. If you do drink energy drinks, select products with no more than 200mg of caffeine per serving.

Circadian Rhythm and Sleep Quality

- Circadian rhythms are **24-hour cycles** that are part of the body's internal clock, running in the background to carry out essential functions and processes. One of the most important and well-known circadian rhythm is the **sleep-wake cycle**.
- The sleep-wake cycle helps us to regulate sleep patterns and sleep quality. Following a night shift, some light activity and daylight exposure can **help re-engage your circadian rhythm**. This could be a short walk or mobility exercises at home before bed.
- In addition, limit screen exposure before sleep such as laptops and mobile phones.
- Some night shift workers report that a **light carbohydrate-based meal before daytime sleep** can assist in achieving a deep sleep and may prevent waking up early due to hunger. An example meal could be a small bowl of cereal, or slice of toast.

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Vitamin D

- Vitamin D is an essential nutrient that helps regulate calcium and phosphorus in the body. It plays a role in maintaining proper bone structure and has been linked to improved **immune status** and **reduced injury risk**.
- Vitamin D is made in the skin when exposed to sunlight. UK dietary guidelines recommend we supplement with **10 micrograms of Vitamin D**, daily, between September and April due to a lack of sunlight. This is particularly relevant to shift workers who work nights, where supplementation year-round may be appropriate if sunlight exposure is limited.
- Some **dietary sources** include oily fish, eggs, dairy, and fortified foods such as some cereals.

Disclaimer

The advice in this factsheet is designed to support your health goals and improve your ability to manage some of the demands of working night shifts. Further guidance may be needed for officers or staff with diabetes, those using medication, and those observing dietary restrictions for religious reasons. If you require additional support, seek advice from your medical professional.