# Shifting NUTRITION

# A shift workers guide to nutrition



## Shifting **nutrition**

Working shifts can impact on the way you eat and the types of foods and drinks you consume. Having a healthy diet is not only important for your long-term health and preventing chronic diseases, but it is also essential for maintaining your body's day-to-day function and energy levels. This booklet provides practical information to help you to make the right choices about what you eat - helping you to shift your nutrition and ensure you are eating the right foods, at the right time.

#### What happens to your body when you work shifts?

Your body has a 24 hour cycle (also known as your body clock) that helps to regulate when you wake-up, your digestion, hormones and many other functions of your body. This inbuilt clock is pre-programmed to respond to you being active during the day and asleep at night, so when you work shifts, your body can find it difficult to adjust.

When your body clock is disrupted, you may begin experiencing disturbances to your sleep, fatigue and potential health problems. However, eating healthy foods at the right time can make shift work easier by providing your body with energy when you need it, assisting you to sleep better when you rest and helping to prevent fatigue.

#### Why shift your nutrition habits?

Poor eating habits combined with a lack of physical activity can put you at a greater risk of developing chronic diseases including type 2 diabetes, heart disease and some cancers.

Research shows that shift workers, especially males, are at an even greater risk of developing type 2 diabetes.

By eating well, maintaining a healthy weight and exercising regularly, you can decrease your risk, delay or even prevent the onset of type 2 diabetes.

Assess your risk today with a quick and free risk assessment at diabetesqld.org.au

## Healthy eating guidelines for shift workers

Enjoy a wide variety of nutritious foods from the five food groups every day.

## Aim to maintain a regular eating pattern, regardless of your shift:

- Eat every three to four hours: aim for three main meals and two to three snacks in a 24 hour period
- Eat according to the time of day: breakfast foods in the morning, lunch foods in the middle of the day and dinner foods in the evening
- Late at night, eat snacks that contain protein instead of a large meal at a time when you would normally be sleeping
- Eat a small meal after your shift so you don't go to bed hungry
- Watch your portion sizes make sure you don't overeat.

#### **Choose healthy drinks:**

- Drink plenty of water
- Limit your intake of sugary drinks, alcohol and caffeine
- Avoid caffeine at least 6 hours before sleeping.

## Food terms **explained**

#### Protein

Protein is the body's building block for muscle, cartilage, skin and blood and helps to keep you strong and healthy. Protein rich foods also help to keep you feeling fuller for longer. Foods high in protein include meat, fish, poultry, tofu, eggs, nuts and beans.

#### Carbohydrates

Carbohydrates are the body's primary fuel source and provide energy to the brain, muscles and other organs. Foods that contain carbohydrates include wholegrain breads, cereals, rice, pasta, noodles, most fruit and some dairy foods.

#### **Glycaemic Index (GI)**

All carbohydrates are given a GI score. This is a measure of how quickly the body can convert the food into energy. Low GI foods are the healthiest option as they provide longer lasting energy. Low GI foods include brown rice, grain bread, pasta and most fruits and vegetables.

#### **Fibre**

Fibre helps to keep everything you eat moving through your digestive system, keeping it healthy. Foods high in fibre include wholegrain breads and cereals, fruits and vegetables.







## Planning your meals

# Day shift 🍏



### 🎝: When you wake

Breakfast meal to provide you with energy for your day.

## During your shift

Lunch meal and snacks to keep you alert and energised.

## After your shift

Dinner meal (small meal if immediately before sleeping) to help you sleep and stop you from waking due to hunger.

## Night shift 🚯

## (> After your shift and before sleeping

Small breakfast to help you sleep and stop you from waking due to hunger.

## 🏽 After vour sleep

Lunch meal to provide you with energy for your day.

### Night time meal breaks

Early in your shift: small dinner meal or snack.

Late in your shift: a small snack every few hours to keep you alert and energised.

### Remember

All meals should include a balance of protein, low GI carbohydrates including fruits and vegetables. See page 8 and 9 for some healthy shift work food ideas, or head to the Healthy Shopping website: diabetesgld.org.au/healthy-shopping

www.eatforhealth.gov.au

Vegetables and

legumes/beans



Australian Government National Health and Medical Research Council Department of Health and Ageing

# Australian Guide to Healthy Eating

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drink

Enjoy a wide variety of nutritious foods from these five food groups every day.

Drink plenty of water.

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Grain (cereal) foods, mostly wholegrain and/or high cereal fibre varieties

Fruit

Milk, yoghurt, cheese and/or alternatives, mostly reduced fat

#### Use small amounts

Lean meats and poultry, fish, eggs, tofu, nuts and seeds and legumes/beans



#### Only sometimes and in small amounts



## Eat for **good health**

The Australian Guide to Healthy Eating shows the foods we should be eating every day from each of the five food groups. It also shows that certain foods should only be eaten sometimes and in small amounts. These include foods that are high in saturated fats, sugar and salt, such as 'junk foods', fast food and sugary drinks.

# A healthy diet includes:

- Plenty of vegetables
- Grain foods mostly wholegrain
- Lean meats and poultry, fish, eggs, tofu, nuts and seeds and legumes/ beans
- Fruit
- Milk, yoghurt cheese and/or alternatives, mostly reduced fat.



The exact amount of food you need to eat depends on your age, gender, height, weight and how much physical activity you do. See the Australian Guide to Healthy Eating website for further information: eatforhealth.gov.au

## Shift your **food ideas**



OH

#### **Breakfast ideas:**

- Wholegrain breakfast cereals such as rolled oats, muesli, wheat biscuits or bran cereals with milk and fruit
- Wholegrain toast, sandwich or wrap with toppings such as baked beans, eggs, cheese and tomato, banana and honey, baby spinach and avocado
- Breakfast cereal drink and a piece of fruit
- Homemade mini quiche or vegetable slice.

*Don't skip meals as you are more likely to overindulge the next time you eat.* 

### Snack ideas:

- Fruit fresh or pre-packaged. Try adding yoghurt, rolled oats or nuts and seeds
- Wholegrain crackers with a tin of tuna or baked beans
- Natural nut mix or air popped popcorn
- Vegetables sticks with dip such as avocado, hommus, tzatziki or peanut butter
- Fruit toast or homemade vegetable or fruit muffin
- Smoothie or bowl of breakfast cereal.

## Eat for energy - avoid junk foods as they will make you feel sluggish.

# Lunch and dinner ideas:

- Homemade burger or pizza with vegetable toppings
- Spaghetti bolognaise include grated vegetables in sauce
- Vegetable and bacon quiche with salad
- Burritos or tacos with salad
- Lean protein and vegetable stir fry
- Lean protein and vegetable casserole
- Frozen microwave steam fresh fish with vegetables and rice.





#### No access to a fridge?

There are plenty of healthy options you can take with you when you don't have access to a fridge. Have a look at the meal ideas above and get creative – try freezing your yoghurt and meals, putting soup or casserole into a large thermos or freezing sandwiches. Remember to store food safely – keep cold foods cold by using an esky or cooler bag with a frozen ice block or frozen water bottle in it.



# What does your **plate look like?**

Check the size of your plate. Eating from a smaller plate can trick your brain into thinking the meal is bigger than it is.

## What's for dinner?

Fill 1/2 of your plate with colourful vegetables



Try stir frying, steaming, and roasting. Add vegetables to your casseroles, curries, sauces and mince dishes.



Fill 1/4 of your plate with starchy vegetables or wholegrain foods.







Trim fat from meat. Choose lean mince. Chose skinless chicken. Include plant protein from legumes and tofu.

#### Now mix it up



The What's for dinner poster (2015) was originally produced by NAQ Nutrition and has been reproduced here with permission. Visit www.naqld.org for more information.

# What's in your drink?

Water is the best choice of drink. Aim to drink two litres or more a day depending on the temperature and how active you are. Try adding fresh herbs like mint or fruit such as lemon, lime or strawberries for a natural flavour. Reduced fat milk and 100% juice are also healthy choices when consumed in moderation.

# Need another reason to rethink sugary drinks?

Teaspoons of sugar:

- 600ml cola = 16 teaspoons
- 500ml energy drink = 13 teaspoons
- 600ml iced coffee/chocolate = 13 teaspoons
- 600ml sports drink = 9 teaspoons
- 500ml iced tea = 6.5 teaspoons
- 500ml vitamin water = 6.5 teaspoons
- 250ml fruit drink = 6.5 teaspoons
- 250ml cordial = 4 teaspoons.

If you drink one 600ml sugary drink every day, you will consume a whopping 22 kilograms of sugar in one year! 6ooml Soft Drink

Energy Drink

500ml



## Healthy **takeaway tips**

Takeaway foods can zap your energy and leave you feeling flat. They are often high in salt, fat and sugar, and can contribute to excess weight gain and lifestyle diseases like type 2 diabetes. If takeaway is the only option available, choose wisely and make a healthy choice.

No matter what type of takeaway store you visit, be sure to choose an option containing vegetables or salad, or ask to add a side serve of these. Don't be tempted to upsize or add extras like hot chips or soft drink and remember water is the best choice of drink!

If you are on the road or travel as part of your work, pack some healthy snacks such as trail mix, fruit and tinned tuna or beans.



#### **Takeaway store**

- Ditch deep fried foods for meat skewers, rice paper rolls or steamed dim sims
- Choose dishes packed with vegetables like salads, stir fries and soups. Avoid creamy curries or sauces
- Ask for thin and crispy or regular base pizza. Limit high fat toppings like salami, pepperoni and extra cheese
- Avoid burgers or sandwiches with fried onions, bacon, extra cheese and creamy dressings like mayonnaise.

#### On the road

- Avoid the hot box, hot chips and junk foods
- Look for meat and salad sandwiches or burgers
- No healthy meals available? Look for fresh or canned fruit, yoghurt, trail mix or nuts, tinned beans, tuna or spaghetti.

#### At the pub

- Don't feel pressured to eat everything on your plate. Choose an entree or share a meal with a mate
- Ask to change the side of chips to a side of salad or vegetables
- Avoid deep fried options such as fish, calamari and crumbed chicken
- Avoid creamy sauces and dressings or ask for them on the side.

#### At the onsite cafeteria

- Watch your portion sizes don't overload your plate
- Avoid the bay marie and fried foods
- Choose dishes with lots of vegetables like salads, stir fries and casseroles
- Re-think dessert. Remember these are occasional foods.









## Planning **ahead**

Being organised is the key to eating well on shift. Set yourself up for success by planning your meals for the shifts ahead, going grocery shopping and completing some meal preparation.

### **Try buying:**

- Zip lock bags and small reusable containers so you can portion out meals and snacks
- Frozen mixed vegetables or individual vegetable steam bags
- Pre-packaged fresh vegetable and salad mix bags
- Tins of tuna, chicken or baked beans
- Frozen microwave steam fresh fish
- Single serve microwave rice, quinoa or pasta packets
- Single serve microwave tubs of soup
- Ready to eat frozen or fresh meals.

*Cook recipes in bulk and freeze leftovers in single serve portions.* 





## Shift **your thinking**

Shifting your nutrition isn't that hard. Remember these guideline to help you stay on track!

## Aim to maintain a regular eating pattern, regardless of your shift:

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- Eat a small meal after your shift so you don't go to bed hungry
- Watch your portion sizes make sure you don't overeat.

#### **Choose healthy drinks:**

- Drink plenty of water
- Limit your intake of sugary drinks, alcohol and caffeine
- Avoid caffeine at least 6 hours before sleeping.



The workplace can also play an important role in your nutritional choices. For useful ideas and tools to support healthy eating in your workplace visit worksafe.qld.gov.au and download a copy of the 'Employers guide to shifting nutrition'.

Other useful resources include:

#### Workplace Health and Safety Queensland

worksafe.qld.gov.au/health-wellbeing/home

#### **Diabetes Queensland**

Phone: 13 74 75 Helpline - 1300 136 588 diabetesqld.org.au info@diabetesqld.org.au Diabetes Queensland is a charity supporting all people with diabetes and those at risk.

#### **Get Healthy Qld:**

gethealthyqld.com.au

#### My Health for Life

myhealthforlife.com.au

#### NAQ Nutrition

naqld.org.au Additional food guidelines and nutritional resources.

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