

# **EAT SMART, WORK RIGHT FOR COMMERCIAL DRIVERS**

**increase your energy and improve your sleep  
with smart food choices.**



Shiftwork Services 2009

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# INTRODUCTION

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Whether you work as a courier, an ambulance or truck driver, or a company rep, chances are that at some point you will have experienced driver fatigue (i.e. feeling very tired) out on the road. While most people experience tiredness at work at one time or another, certain workers are more at risk than others, especially those who drive as part of their job.

Everyone knows that the best way to avoid or manage feeling tired is to have enough sleep. However, did you know that eating and drinking the right foods can help you manage how sleepy or tired you feel? This in turn affects how safe you are at work, especially on the road.

The information in this booklet is designed to help you make choices about what you eat and when so that you can arm yourself with useful facts to keep yourself – and others – as safe as possible when you're on the road.

**»» Have you ever wondered:**

- ▶ What time of day to have your main meal.
- ▶ How to avoid those uncomfortable indigestion problems so common when you eat at irregular hours.
- ▶ Why you feel sleepy after eating a big pie and perhaps a bun or cake at lunchtime.

The good news is that this booklet answers all these questions and more.

It contains specific and practical information about how to make smart food choices that help reduce the risk of driver fatigue by boosting your energy levels.

**»» Smart eating for commercial drivers means:**

- ▶ **A healthy diet**, including plenty of fruit and vegetables.
- ▶ **Cutting back** on your intake of sugar, salt and saturated fat.
- ▶ **Keeping yourself 'tuned-up'** by combining certain food and drinks at particular times of your day, thereby managing your blood sugar levels.

**»» Read on to find out more about:**

- ▶ How to use food and drink to maximise energy.
- ▶ What to eat when you want to be alert or when you want to sleep.
- ▶ Dispelling myths about what helps beat fatigue.
- ▶ Links to web sites on healthy eating.

# FATIGUE AND COMMERCIAL DRIVERS

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If you drive long hours, do shiftwork, drive at night, start very early, have changeable hours and/or work in isolation you run the risk of a fatigue-related incident or accident.

These varying work factors upset your eating and sleeping patterns, e.g. the times you have to work when it's normal to be sleeping, or when your schedule doesn't give you enough sleep time. As a result it's likely that you'll be less alert and more likely to make mistakes.

You already know that driving is a safety-critical activity – in other words, the way you drive and the conditions under which you drive make a big difference to your safety, and of course the safety of others on the road.

You can never underestimate the danger of driving when you're tired. The impact of fatigue or tiredness together with the fact your workplace is on the road combine to increase the risk of serious injuries for drivers like you.

**According to the New Zealand Health and Safety in Employment Act**

**FATIGUE IS A  
WORKPLACE HAZARD**

Because fatigue affects your ability to work safely, it has a huge impact on your safety and performance. Feeling tired affects your reaction time, your judgement of what is or isn't dangerous and your decision-making about what is going on and what to do about it.

It's common for people in this situation not to realise they are over-tired and therefore underestimate the effect of fatigue on their performance.

### » Common signs of fatigue

- ▶ Daydreaming, slow reaction times
- ▶ Increased risk-taking
- ▶ Poor judgement of distance or time
- ▶ Sore or tired eyes, blurred vision
- ▶ Nodding off for even just a fraction of a second
- ▶ Drifting over the road edge or centre line
- ▶ Not being able to remember driving the last few kilometres
- ▶ Impatience, restlessness, irritability
- ▶ Not steering as well
- ▶ Not noticing road signs.

Driving and fatigue are a deadly mix. Think about the times you've drifted over the centre line, had to make a very sharp steering correction, or not remembered driving past a familiar landmark. That's what happens when you suffer from driver fatigue.

Of course it's not always work that makes you tired. Other things going on in your life, e.g. family stress, a sleeping disorder or certain medications can all add to the problem.

There are things you can do that reduce the chance of being affected by fatigue – and watching what and when you eat is one of them.

**For more information on what causes fatigue and a range of ideas for avoiding or managing the problem, have a look at the driver fatigue pages on the ACC website ([www.acc.co.nz](http://www.acc.co.nz)).**



# AVOID THE BLOOD SUGAR BLUES

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You've probably heard of blood sugar, but you might not know how it can affect your safety and performance. Blood sugar is the body's main source of energy and how high or low it is at any time will affect how you feel.

Low blood sugar can cause shakiness, anxiety, excessive sweating and heart palpitations.

High blood sugar can cause feelings of fatigue – there is too much sugar in the body that can't be used for energy.

It makes sense to try and keep your blood sugar levels steady, no big spikes or dips. Your blood sugar levels depend on how much glucose you have in your body, you can keep your levels steady by making the right decisions about the kinds of glucose-containing food you eat.

## » Glucose

Lots of foods provide glucose for the body – some of them are better than others. For example some carbohydrates such as wholegrain bread, pasta and certain types of rice are good because they provide a steady release of glucose into the body. Foods with lots of added sugar are usually higher in glucose but while they give you an energy burst, they will end up making you feel tired later on.



To keep your blood sugar levels steady it helps to know how quickly energy is released from different food. This is what the Glycemic Index (GI) is useful for – it ranks food based on the immediate effect on blood sugar levels.

### » Glycemic Index (GI)

- ▶ Foods with a high GI cause your blood sugar levels to rise quickly which means your body has to work hard to bring its sugar levels back to normal.
- ▶ Foods with a low GI allow your blood sugar levels to rise gradually and keep you feeling fuller for longer. Foods containing fibre (see page 15) will help with this, too.

**HIGH GI – 70 AND ABOVE**

**MEDIUM GI – 56-69**

**LOW GI – 55 AND UNDER**

#### **LOW GI FOODS INCLUDE:**

- **Rolled Oats**
- **Corn**
- **Wholegrain Bread**
- **Whole Wheat Pasta**
- **Baked Beans**
- **Yams**
- **Taro**
- **Unripe Bananas**
- **Some Fruit**

To find out more details about GI and healthy eating, have a look at **The Home of the Glycemic Index - The University of Sydney** ([www.glycemicindex.com](http://www.glycemicindex.com)).

## » Cut back on sugar

Although sugar makes the food we eat taste sweet it contains energy without vitamin and mineral value. To avoid adding extra energy to your diet and inches to your waistline, here are some tips on cutting back on sugar:

- ▶ Eat porridge or untoasted muesli rather than sweetened processed cereals.
- ▶ Check the labels on muesli bars and other snack bars, some are much higher in sugar than others.
- ▶ Drink plain or mineral water instead of fizzy or energy drinks, that contain lots of sugar.
- ▶ Choose a piece of fruit instead of lollies or other confectionary.
- ▶ Plain yoghurt with chopped-up fruit or a fruit yoghurt is a healthy dessert.

# TIMING IS EVERYTHING

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Eating certain foods at certain times can help you fight fatigue and allow for improved concentration and reaction time.

## » Protein

Protein rich foods contain tyrosine, an amino acid that stimulates brain chemicals to help you feel more alert. It's important to choose low fat protein foods because high fat protein foods take longer to digest (this is especially important when these foods are eaten late at night when digestion naturally slows down).

- ▶ Protein foods high in fat take longer to digest and can give you digestive problems especially when eaten at night.
- ▶ Low-fat protein foods help you stay alert.

### LEAN PROTEIN FOODS

**Grilled Fish · Shellfish**  
**· Skinless Chicken · Lean Meat**  
**· Chickpeas · Baked Beans · Hummus**  
**· Eggs · Nuts · Low-fat Dairy Products**  
**such as Cottage Cheese,**  
**Low-fat Milk & Yoghurt**

## » Carbohydrates

Carbohydrate based foods provide energy for everyday tasks and also help to create serotonin a brain chemical that allows you to feel less irritable and more able to focus.

When you eat a small meal containing about 120g of lean protein food with about a cup of certain slow releasing carbohydrate you will be 'powered up' to perform at your best without feeling sluggish.

But carbohydrates not only help you to focus, the same slow releasing carbohydrates can also help you to rest and sleep more effectively as well. Choosing a slow releasing, carbohydrate rich meal a few hours before you need to sleep promotes steady blood sugar levels – this will help you stay asleep.

### **'POWERED-UP' MEAL IDEAS**

**Grilled fish, boiled waxy/new potatoes and salad**

**Small bowl of spaghetti and meatballs**

**Chicken and salad wraps/pita pockets**

### **'RELAXING' MEAL IDEAS**

**Cereal, fruit and low fat milk**

**Creamed rice and stewed fruit**

**2 egg omelette with whole grain toast and salad**

**Fruit salad and yoghurt**

## » Serving sizes

If you eat the right types of food but eat too much of them, you won't get the best results. The 'right' serving size is different for different food groups and for different-size bodies.

**To find out more details see the New Zealand Healthy Food Guide - Healthy Eating Guide Serving-Size ([www.healthyfood.co.nz](http://www.healthyfood.co.nz))**

# THE SECRET TO GOOD DIGESTION

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If you're a commercial driver, you may suffer from constipation and other digestive problems. You may also find it difficult to control your weight. This has most likely come about because your work doesn't allow you to get much exercise and it's probably hard for you to eat at regular times.

To help reduce these problems, here are some good eating habits to put in place.

- ▶ Eat little and often is the golden rule as it can be difficult for your body to digest large amounts of food eaten all at once.
- ▶ Stop several times on a long trip, at least every three hours, rather than having one big meal break.
- ▶ Eat smaller meals at set times for increased alertness and focus.
- ▶ Don't skip meals, especially before you start work.
- ▶ Avoid having a large meal near the time you go to bed or your body will be so busy digesting it, you could find it difficult to sleep.
- ▶ Heavy meals can often leave you feeling uncomfortably full, or cause heartburn and other indigestion problems.

## EXERCISE

**Even just a short walk after a meal helps the digestion process – it'll work off some of that surplus energy you gain through eating.**

### » Fill up on fibre

High fibre foods help to keep everything you eat moving right along through your bowels. If you eat regular amounts of wholegrain cereals and breads, fruits and vegetables, all of which contain lots of fibre, you'll keep digestion problems and constipation at bay, which has to be good news when you're sitting in a car or truck for long stretches of time.



**»» To include more fibre in what you eat on a daily basis:**

- ▶ Top up your breakfast cereal or muesli with fresh or stewed fruit.
- ▶ Enjoy lots of fresh fruit – whatever is in season.
- ▶ Eat a jacket potato or potatoes with the skin on, rather than peeled potatoes.
- ▶ Eat wholegrain bread, or if you prefer white bread, try one with high fibre.
- ▶ Buy a bran muffin or wholemeal scone for morning tea.
- ▶ Choose a pie made with wholemeal pastry.
- ▶ Snack on chopped celery and carrot, raw unsalted nuts.
- ▶ Add lettuce, tomato, carrot, avocado, capsicum and beetroot to your sandwiches.
- ▶ Eat brown rice or pasta whenever possible, or mix brown and white rice/pasta together.

## » Cutting back on fatty food

Everyone needs a bit of fat in their diet; it adds flavour to food but most importantly it helps repair the body. Most of us eat way more than we need.

To reduce your fat intake:

- ▶ Swap to low-fat or trim milk.
- ▶ Trim excess fat from your meat.
- ▶ Buy lower fat cheese, e.g. edam, mozzarella or cottage cheese.
- ▶ Fry less – and bake, grill and steam more.
- ▶ Snack on a low-fat yoghurt.
- ▶ Eat tuna in wholemeal bread sandwiches.
- ▶ Instead of cheese, try hummus on crackers.
- ▶ Cook with olive oil or, even better, rice bran oil, instead of butter.



Biscuits, cakes, pies and sausage rolls are nice for an occasional treat but they're full of sugar and fat. It's good to get in the habit of reading the labels on the packaging so you can keep tabs on what you're eating. If it doesn't have a label, think about what's in it and whether it will be good for you!

# WATER – SO GOOD FOR YOU

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Refreshing, cooling, flushing, cleaning – water does it all!

Everyone needs to drink enough water to keep their body working well. Did you know that not drinking enough water can make you feel tired? Some people don't realise their fatigue is due to not drinking enough water. Get in the habit of drinking a glass or two of water first thing, and keep topping up throughout your day.

The fluid you need is based on your energy intake and how much activity you do. A good rule of thumb is to drink 200-300ml of fluid at every meal and snack – so at least six glasses a day – and preferably water – although other fluids such as diet beverages, milk, and even tea all contribute to your daily fluid intake.

- ▶ Don't wait to feel thirsty – keep sipping to stay alert.
- ▶ Thirst is often mistaken for hunger. To avoid over-eating, drink water before a meal.
- ▶ Many fruit and vegetables contain water. Eating them can help increase your intake of water but you will still need to drink up to six glasses to make sure you have enough.
- ▶ Always keep a bottle of fresh water handy in your vehicle.

## » How to know if you're drinking enough water

Get in the habit of checking out the colour of your urine whenever you have a comfort stop. If it's pale yellow you've probably had enough water that day but if it's strongly coloured (i.e. dark yellow), then you are not drinking enough.

# CAFFEINE – WHAT GOES UP MUST COME DOWN

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Most of us like a quick caffeine fix to keep us going during a long day, but too much is not good for the body. You've probably noticed that while a coffee, cola or energy drink gives you a bit of a lift, it's usually followed by a dip in energy. If you have too much caffeine, that lift just stops happening and you start to feel really tired. So it's best to limit these kinds of drink to under 300 mg a day (see caffeine chart on page 20). They also don't help you fight fatigue, they just mask it for a short while.



Caffeine can affect your sleep, which is never a good thing. Too much of it reduces not just the amount of sleep you are getting, but also the quality.



## » How much caffeine do you drink?

Check out the table below to see the approximate amount of caffeine in various food and drinks. Note: this is a guide only as the amount of caffeine may vary from brand to brand.

Coffee per cup	Caffeine (mg)
Instant	75
Plunger	100 - 300
Espresso/cappuccino	100 - 150
Decaffeinated	3-5
Tea per cup	Caffeine (mg)
Brown 'gum boot' five minute brew	50
Brown 'gum boot' one minute brew	9 - 33
Green tea (Chinese)	30 - 50
Soft drinks per 330 can	Caffeine (mg)
Energy drinks	30 - 160
Cola	32
Lemonade type drinks	nil
Other favourite drinks	Caffeine (mg)
Milo	nil
Hot chocolate	5-7
Herbal infusions	nil
Chocolate (50g bar)	Caffeine (mg)
Dark	Up to 25
Milk	Up to 50

# GETTING ORGANISED

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The key to eating foods that will help you stay alert and avoid fatigue is being organised about your shopping. Aim to have the 'right' foods handy by planning when and where you'll do your shopping, and getting it done well before you want to eat.

## » Supermarket shopping

- ▶ Look at your work schedule for the coming week and plan what you'll eat at work and what you'll eat at home.
- ▶ Once you've decided on what you want to eat, make a list of what you'll need to have in the house and what you'll buy on the road.
- ▶ Eat before you go to the supermarket – you'll be less tempted to buy unhealthy snack foods.
- ▶ Buy enough seasonal fruit and veges to keep you going for a few days.
- ▶ Read food labels so you know exactly what you're eating.

## »» Snack box

Keeping a snack box in your vehicle stocked up with healthy choices makes it easier to eat smart to beat fatigue.

## »» Eating on the road

You probably have a favourite eating place or two where you like to stop for a break. Plan on what you're going to eat before you go in so it's easier to resist temptation.

**To help you remember what's good, check out the Healthy Food Guide ([www.healthyfood.co.nz](http://www.healthyfood.co.nz)).**



# SLEEP • FATIGUE • FOOD HOW THEY INTERACT

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If you don't get enough sleep on a regular basis, your body is likely to produce more of a hormone that will make you extra hungry and less of one that suppresses your appetite. In other words, if you're tired your brain starts telling your body to eat - especially foods that are starchy, sweet and high in carbohydrates.

If this goes on for too long you'll eat too much of the wrong foods, which will result in blood sugar highs and lows, plus you'll put on weight and generally lack energy.

# SMART FOOD FOR DRIVERS

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## » Breakfast – never miss it

- ▶ Breakfast drinks or fruit smoothies.
- ▶ Low fat yoghurt with fruit.
- ▶ Two poached or boiled eggs, or a two egg omelette.
- ▶ Beans on wholegrain toast.
- ▶ Porridge with fruit.

## » Food to have in the cab

- ▶ Nuts – mixed, raw and unsalted.
- ▶ Breakfast drinks or fruit smoothies, low fat yoghurt drinks, water.
- ▶ Lean meat sandwich made with wholegrain bread.
- ▶ Use spreads with the 'heart tick'.
- ▶ Canned fish – salmon, tuna, mackerel, sardines.
- ▶ Boiled egg.
- ▶ Raw vegetables – carrot, capsicum, celery.
- ▶ Dried fruit.
- ▶ Assortment of fresh fruit.
- ▶ Muesli (check the sugar content).

» If you don't have enough in your cab food box check out the healthy snacks from petrol stations or take-away places on your route, such as:

- ▶ Breakfast drinks.
- ▶ Fruit smoothies.
- ▶ Unsweetened fruit juices.
- ▶ Low fat pies made with wholemeal pastry.
- ▶ Sandwiches made with whole grain bread.
- ▶ Low fat and reduced sugar biscuits such as digestives.
- ▶ Fresh fruit.
- ▶ Scones and muffins made with wholemeal flour.

**REMEMBER**  
**Read food labels**

# MYTH BUSTING FOR SMART EATING

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▶ **Men need ‘man-sized’ or ‘super-sized portions’.**

Men do not need to eat that much more food than a woman of the same height and weight. They do not need ‘super-sized’ portions.

▶ **Carbohydrates (or sugars) cause weight gain.**

Carbs don’t make you fat! The body does not like converting carbs to fat. It’s the hidden fat in the diet that is the main problem when it comes to weight/fat gain.

▶ **Fresh fruit and vegetables are more nutritious than frozen ones.**

You can often get more nutrients from fruit and vegetables that were frozen as soon as they were picked than from so-called fresh fruit and vegetables that are past their best.

▶ **Chocolate or ice cream is OK to eat after a meal because they have a low GI.**

They may have a low GI, but they are also high in sugar and fat which makes them bad news for the waistline, and will effect your blood sugar levels.

▶ **Eating a big meal before going to bed tires you out and slows you down, making it easier to sleep.**

A large meal does not slow down your digestive system. It actually does the opposite – and lying down does not help your digestion.

# SUMMARY: SMART EATING

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- ▶ What you eat and when can influence how safe you are as a driver because these factors influence fatigue, sleep patterns or tiredness. A good sleep is the best way to avoid fatigue and tiredness.
- ▶ To help manage your general well-being, follow the New Zealand healthy eating guidelines that you'll find at [www.healthyfood.co.nz](http://www.healthyfood.co.nz)
- ▶ To maintain your energy levels and get good quality sleep, choose low GI carbohydrates (e.g. whole grains, vegetables and some fruits), and limit how much refined sugar and processed foods you eat.
- ▶ Eat mainly low-fat protein foods (e.g. fish, lean white meats, eggs and dairy) to increase your alertness.
- ▶ Snack little and often to maintain steady blood sugar levels and to avoid over-working your digestive system. Avoid heavy meals and caffeine 3-4 hours before you want to go to sleep.
- ▶ If you have to sleep fairly soon after you eat, combine only a small amount of protein with your low GI carbohydrates.
- ▶ Most adults need between 6-8 glasses fluid a day, more if they are active.
- ▶ Increase the amount of whole foods you eat and only eat highly processed food as an occasional treat.
- ▶ Plan ahead so you know what you will be eating at home for the next few days; keep plenty of healthy snacks in your vehicle; and make healthy choices whenever possible when you eat in cafés or at roadside stops.

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