

In Good Health

Travelling Jet lag



The body has an internal 'clock' which is set through repetition: it grows accustomed to a natural pattern of sleeping, awaking and eating. When crossing time zones, the body clock becomes unsynchronised with the time in the new destination and the rhythms that regulate eating, sleeping, hormone regulation and body temperature variations no longer correspond to the environment or to each other.

Whilst the recovery time for jet lag varies greatly between individuals, as a guideline it takes 1 day to recover from an eastward transition of 1 time zone and 1 day to recover from a westward transition of 1.5 time zones. The more time zones that are crossed whilst travelling, the worse the jet lag tends to be, and it can take anywhere from a few days to a few weeks to adjust.

Symptoms of jet lag can include digestive upset, headache, fatigue and exhaustion, temporary insomnia or altered sleeping patterns, grogginess, irritability, disorientation and even mild depression. Other symptoms which are often associated with jet lag, such as nausea and ear aches, are more likely to be caused by the method of travel than the change in time zones.

Jet lag is medically referred to as "desynchronosis"; it is a physiological condition classified under circadian rhythm sleep disorders.

There are a few preventative measures that can be taken to try and reduce the severity of jet lag. Before travelling, ensure you are well rested, as a sleep deficit can make jet lag worse. Try to fly during the day time if possible, keep well hydrated on the flight and avoid the dehydrating affects of alcohol. Use a blindfold and ear plugs to help you get a good sleep whilst flying and if it is a long distance trip, make sure you get some exercise: walk up and down the aisles, stand for awhile or do some small stretches to help reduce discomfort.

It is not recommended to take sleeping pills to help you get a good sleep on the plane, as they prevent natural movement of the body and prolonged immobility has been known to be associated with blood clots.

Once you have arrived at your destination, try to expose yourself to bright light to stimulate your body clock. Avoid the temptation to sleep through the day if it would be night time at home; but do still try to get enough sleep each day, even if it means going to bed earlier than your usual time or taking naps during the day when tired.

It is a good idea to discuss with your doctor any medications you take regularly to see how they will be affected by a change in time zones.



Exercising at home

Exercising at home is a great option for those who are time poor as well as those wishing to save money or simply stay out of a gym. If you exercise at home you have the ability to work out whenever you want, no matter the weather.

All you need to do is look around your house to see what things you can use to help you exercise. You can then organise these activities into a workout program which includes a warm up, cardio, strength training, stretching and a cool down.



Some easy exercises using household items:

- **Fill a laundry basket with clothes and lift the basket up above your head with straight but not locked arms. Lie on your back and lift the basket from your chest, again making sure your elbows don't lock.**
- **Sit at a desk on an office chair with wheels. Hold onto the desk in front of you and push yourself backwards then pull back in.**
- **Fill two recyclable grocery bags with cans, bags of rice, etc, and hold one in each hand whilst doing lunges and squats.**
- **Fill a two litre milk, juice or soft drink bottle with water for a 2kg weight, or with one bag of rice for a 1kg weight. Hold one in each hand and use for bicep curls, overhead tricep extensions, and other arm exercises.**
- **Put some items (books, bags of rice, etc) in a backpack and wear it while walking. Make sure it is not so heavy that you can't maintain good posture whilst walking and standing.**
- **If you have a staircase in your house, either run or walk up and down them for cardio or slowly take two to three steps at a time (depending on your length of stride) to work your butt and leg muscles.**

Remember that there are a variety of exercises which require no equipment: bench dips, push ups, wall push ups, shadow boxing, squats, lunges, sit ups and other abdominal exercises, running on the spot, star jumps and the plank. You can also do a wide range of stretches that target the whole body.

If you have the space, you can jog or walk laps of your garden, or set up an obstacle course with sprints, jogs, star jumps, jumping over planks, crawling under chairs or a rope, etc.

There are also some cheaper items you can buy to help you exercise at home – things such as skipping ropes are great for cardiovascular fitness, a small set of dumbbells can be used for any number of strength training exercises, a Swiss ball is useful for yoga moves and abdominal work, small wrist or ankle weights add impact to a walk or jog and there are a number of yoga, Pilates, dance or aerobics DVDs which provide you with a workout in your own lounge room.

Keep your eyes open around the house and garden and you'll see there are plenty of opportunities to exercise at home, for little or no cost.

Exercise & Injury prevention

Injury from exercise is common and the reason most injuries occur is because people tend not to listen to their bodies- they push themselves too hard or too fast and don't take into consideration their current fitness level.

The best way to prevent injury from exercise is to take it easy and to take notice when you feel pain or discomfort.

It is important to give your muscles time to rest between workouts, as each time you exercise you will experience muscle damage through tears and pulls. It is recommended to take a day of rest in between exercising muscle groups.

It is also a good idea to mix up your exercise by training across different fields. This not only prevents you from working the same muscles too hard, but also allows you to develop all the body's muscles instead of just one core group.

If you ever do sustain an injury tend to it straight away. It is a bad idea to 'work through' any pain which is more than a mild discomfort. You should definitely be able to feel the exercise you are doing, but it shouldn't cause anything more than discomfort.



A lot of injuries are caused by failing to warm up or cool down properly, so make sure you include these in your fitness plans. It is also important to use the correct posture during exercise and keep your body in the correct form. If you don't know how to use a piece of exercise equipment, don't just jump on and try it out – ask someone to show you. They will make sure you are using it properly and this will reduce the risk of injuring yourself.

Other advice to prevent injury includes making sure your equipment is in good condition and you are wearing the right gear (whether it be the right running shoes or correct protective wear) for the exercise. Make sure you are getting enough vitamins and minerals in your diet, especially calcium, to keep your muscles and bones healthy.

Remember to always take your time and slowly build up your exercise intensity, frequency and duration; check with your doctor before exercising if you have any condition which may affect your ability to exercise safely.

National Healthy Bones Week 2nd to 8th August

There are 206 bones in the human body that are constantly being dissolved, absorbed, replaced and changed. As we age our bones tend to lose some of their mineral content and become more porous and weak. However, adequate exercise and the right nutrition can help delay this process.

Here are some tips to ensure your bones stay healthy throughout your life:

- Increase the amount of weight bearing and strength training exercises such as walking, jogging, running and dancing. This exercise places a positive stress on bones and increases bone density.
- Consume enough calcium; Your recommended daily intake (RDI) will vary depending on age, gender and whether you suffer from any medical conditions. Calcium is found in milk and dairy products, soy products, almonds, sesame seeds and fish (with bones).
- Adequate vitamin D aids in calcium absorption. Vitamin D can be absorbed via sunlight or consumed in food sources such as milk, eggs, margarine and salmon. Be sure to check with your doctor to better understand what a safe level of sun exposure is for you.
- Limit alcohol consumption as it can have a negative effect on bone density.
- Reduce caffeine and sodium intake as these substances cause calcium to be lost through the urine.

Caffeine

Caffeine is a highly addictive substance which in its raw form is a bitter, white crystalline xanthine alkaloid. It acts as a psychoactive stimulant and can affect mood, stamina, gastric and colonic activity and the cerebral vascular system.



Caffeine is most commonly found in coffee, but is also a component in guarana, mate and tea. It is found in varying quantities in the beans, leaves and fruit of some plants, acting as a natural pesticide.

In humans caffeine acts as a stimulant, temporarily abating the effects of tiredness and creating a feeling of alertness. Because of its wide consumption through a range of food and beverages, caffeine is the most commonly used psychoactive drug worldwide.

As well as affecting mental alertness and depending on the quantities in which it is taken, caffeine affects the body in many ways, contributing to dehydration, affecting sleep patterns, causing irritability, restlessness, anxiety and triggering headaches, abnormal heart rhythms and gastrointestinal problems.

Just like any psychoactive stimulant, it is possible to overdose on caffeine.

Consumption in excess of 300 milligrams of caffeine (depending on the individual's body weight and caffeine tolerance) can cause caffeine intoxication, a state in which the central nervous system is over-stimulated. Symptoms of caffeine intoxication can include restlessness, nervousness, irritability and insomnia, flushing of the face, increased urination, gastrointestinal upset, muscle spasms, irregular or rapid heartbeat, and psychomotor agitation. In cases of much larger overdoses, mania, depression, lapses in judgment, disorientation, lessening of inhibitions, delusions, hallucinations and psychosis may occur.

Treatment of severe caffeine intoxication usually involves managing the systems whilst waiting for the toxins to pass through the body; however if the levels of caffeine in the body are extremely high, further measures such as peritoneal dialysis, hemodialysis, or hemofiltration may be required.

Food Allergies

Food allergies are caused when the body has an adverse reaction to a specific protein (or proteins) in a food. The body overreacts to a usually harmless substance, treating it as if it is toxic.

The most common food allergens are milk and dairy, tree nuts, seafood and food additives. Some food allergies are more common in infants however food allergies can develop at any age; some will resolve or become less severe over time but in other cases the severity can worsen over time.

Food allergies are more common in people who have other allergies, such as asthma, hay fever and eczema.

The symptoms of food allergies include hives, eczema and skin rashes; stomach upset including vomiting, diarrhoea and abdominal cramps; itching, burning and swelling of the mouth, lips and eyes; headache, fatigue and irritability.

In severe cases, symptoms can include breathing difficulties, a drop in blood pressure, persistent cough and loss of consciousness. This is known as anaphylaxis and within minutes of exposure can be potentially fatal.

The only proven treatment for food allergies is complete avoidance of the allergen. In most cases omitting the particular allergen has no adverse nutritional consequences.

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