

Understanding seasonal affective disorder

Seasonal affective disorder (SAD), or 'winter depression', may affect as many as a third of us, but the problem often goes undiagnosed.

For a smaller number, it can be seriously disabling. This booklet is for anyone who wants to know how seasonal changes in light levels affect behaviour or mood, and what can be done about it.

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Why do we have seasonal mood changes?

Most of us feel better when the sun is shining – more cheerful and energetic. On grey, gloomy days, especially in winter, we tend to feel less enthusiastic, more inclined to stay indoors or even in bed, to do less work, to socialise less and to eat more. The reason for this is the change in the quality and quantity of light. As winter approaches, there are fewer daylight hours and so, by December, we often get up in the dark and come home from work or school in darkness. What's more, the shorter winter days don't have the same light intensity that we get in summer.

For years I suffered from depression. It started in the autumn, as the evenings drew in. By Christmas, I would be so low that I could barely get out of bed. I couldn't cope with organising the celebrations, so we used to go to my mother-in-law's. One year, I felt so bad that I went to bed on Christmas Eve and refused to move. That's what made me realise there was something seriously wrong.

The cycle of light and dark determines our sleeping and waking patterns. Until the widespread use of electric light, people used to wake and get up with the dawn light and sleep when it became dark. In winter, people would sleep longer and be less active. Nowadays, we tend to override these natural rhythms and manipulate the hours of light and darkness to suit our sophisticated lifestyle. Many night-shift workers and jet-lagged air travellers suffer from disrupting their body clocks in this way.

The effects of light

Some people seem to be more affected than others by lack of daylight. When light hits the back of the eye (the retina), messages are passed to the part of the brain (the hypothalamus) that rules sleep, appetite, sex drive, temperature, mood and activity. If there's not enough light, these functions are likely to slow down and gradually stop, like a car that is running out of fuel. Some people seem to need a lot more light than others to keep them on the road, and these are the people who develop seasonal affective disorder (SAD), to a greater or lesser extent.

What are the effects of SAD?

Nine out of ten people report that they eat and sleep more in winter and that long stretches of grey skies make them more down in the dumps – this is all perfectly natural. But for those with SAD, the changes in mood and behaviour are much more severe, and happen regularly, each winter, following a seasonal pattern. Symptoms (for people in Northern Europe) may start emerging between September and November and continue until March, April or even May.

The symptoms go away in spring, either suddenly (with a short period of hyperactivity) or gradually, depending on the amount of sunlight in the spring and early summer.

Symptoms

Unfortunately, SAD is often misdiagnosed or overlooked. Once someone has experienced two or three winters of symptoms, they can be said to be suffering from SAD. The symptoms are many and varied, and people can experience any of the following common effects:

- lethargy or fatigue – no energy for everyday tasks
- feeling under the weather – most people with SAD have a lowered immune system during the winter, and are more likely to get constant colds, infections and other illnesses
- sleep problems – oversleeping, disturbed sleep, waking too early in the morning, unable to stay awake during the day
- depression (including postnatal depression) – feeling sad, low, weepy, guilty, a failure; sometimes hopeless and despairing, sometimes apathetic and feeling nothing
- mood changes – in some people, bursts of over activity and cheerfulness (known as hypomania) in spring and autumn
- anxiety – tenseness and inability to cope with everyday stresses; panic attacks
- social problems – irritability (especially among children) and not wanting to see people; abusive behaviour
- concentration problems – difficulty 'thinking straight' or making decisions
- overeating – craving carbohydrates and putting on weight (which may increase negative feelings)
- bulimia – eating large amounts of food and then vomiting
- loss of libido – not being interested in sex or physical contact
- alcohol and drug abuse
- period problems.

A small percentage of people have very severe symptoms and can't function in winter without continuous treatment. Many can find it difficult to study or hold down a job during this season, because they feel lethargic or sleepy and find it difficult to concentrate. Their relationships can be put under strain and even break up, because they become irritable and unloving.

However, for some people, symptoms are fairly mild and last for a shorter period and are known as the 'winter blues', or sub-syndromal SAD. Occurring mainly during December, January and February, symptoms typically might include tiredness, lethargy, sleeping and eating problems.

What causes SAD?

The exact causes of SAD are still unclear. Scientists and doctors worldwide have been researching SAD since the early 1980s, and there are several different theories as to what causes it and where the problem lies. They mostly centre on the way that light triggers messages to part of the brain called the hypothalamus, which controls sleep, mood and appetite.

Low serotonin levels

Neurotransmitters (brain chemicals) carry the messages to the brain. There are several neurotransmitters involved in SAD, but the main one is serotonin. Levels of serotonin have been found to be lower in depressed people, in winter. It's thought that this neurotransmitter might not work properly in people with SAD.

Low melatonin levels

After reaching the hypothalamus, nerve impulses travel to a tiny organ behind it called the pineal gland. While it's dark, the gland produces the hormone melatonin, which makes us sleep. Light stops melatonin production, so we wake up.

People with SAD have been found to produce much higher melatonin levels in winter than those who don't have SAD symptoms, but their summer levels are normal. When treated with bright light, melatonin levels drop to normal. However, suppressing melatonin doesn't cure the symptoms, so this factor isn't likely to be the sole cause of SAD.

Disrupted body clock

The suprachiasmatic nucleus (SCN), in the hypothalamus region of the brain, sets a person's body clock (circadian rhythm) by 'noticing' when it's daylight or not. One theory is that if it becomes 'faulty' it can slow down the body clock, causing lethargy and depression. However, bright light (in the morning or from light treatment) can 'reset' the body clock and alleviate the symptoms, so the faulty SCN can't be the only factor involved in this ongoing disorder.

Possible triggers

No one really knows what triggers SAD, but it has been linked to events such as childbirth, hysterectomy or other hormonal upheavals. It's been suggested that postnatal depression may be SAD, brought on by the considerable stress of having a baby. Note: if you already suffer from SAD, and are hoping to start a family, spring is probably the best time to have a baby.

SAD has also been reported to have been triggered by a major loss or bereavement, or by serious illness, all of which are common triggers of depression.

Who gets SAD?

It's extremely rare to find people with symptoms of SAD living within 30 degrees of the equator, where daylight hours are long and extremely bright. But it can affect people anywhere else in the northern and southern hemispheres – from Scandinavia, in the North, throughout Europe, in most of North America and North Asia, and as far as the southern parts of Australia and South America. It is estimated that around 10 per cent of the population of Northern Europe suffer milder symptoms of SAD, while about two per cent suffer very badly. Some people even get SAD in summer, during dull periods.

People who have lived near the tropics for part of their lives and then emigrated to this country seem to be more vulnerable to SAD symptoms. Note: people from different cultural backgrounds may show symptoms differently, and this can sometimes lead to being misdiagnosed with schizophrenia or bipolar disorder, for instance.

SAD can begin at any age, most commonly between 18 and 30, with more people developing it before the age of 21 than after.

It's thought that twice as many women as men have SAD, but it's difficult to get an accurate picture, as men often find it harder to admit to depressive symptoms. However, things are changing and more men are now recognising their symptoms and seeking treatment.

Children can also have SAD. They tend to be irritable, badly behaved and sleepy (finding it difficult to wake up or stay awake), and this may earn them the labels 'lazy' or 'difficult'. If SAD is the cause, and goes undiagnosed, it can have a very negative effect on a child's life and on their future.

What sort of treatment is there?

Many people make their own diagnosis and treat themselves, but it may be a good idea to talk to your GP about your symptoms and how you're dealing with it. Ideally, any treatment (including light treatment) should be medically supervised, either by a GP or a SAD clinic. Unfortunately, there are only a few NHS clinics in this country, and you may have to wait a long time for an appointment.

Bright light therapy

Bright light is the most effective treatment for most people. Light therapy (phototherapy) helps about 80 per cent of people, usually within three to five days. It means spending some time each day exposed to very bright light, at least ten times the intensity of domestic lighting. Ordinary light bulbs and fittings are not strong enough and ordinary suntan lamps or boxes, which emit high levels of UV light, should not be used. Light treatment with the correct lights is perfectly safe. Enough UV is screened out, so there is no danger of eye problems or skin cancer.

There's an ever-growing range of light equipment available, including light boxes, visors and dawn simulators. The light boxes range in size from a small TV-sized tabletop box to a wall-mounted window-type fixture. They contain a number of bright light tubes covered by a screen. You sit about half a metre to a metre away from it, and can carry on with normal activities, such as reading, working, eating or even watching TV. A portable light visor fits on the head, shining light directly into the eyes and giving you complete freedom of movement. A dawn simulator is a bedside light, connected to an alarm clock, which mimics a sunrise and wakes the user gradually.

You can use your lights at any time of day, except late evening. Morning light seems to work best for 'night owls' and evening light for 'morning larks'. Average use is one or two hours a day and the maximum about four hours. Some light boxes are much brighter and can cut treatment time down to half an hour. Use one daily in winter and during dull periods in the summer, beginning in the autumn, when the first symptoms appear.

The benefits continue as long as it's used every day.

Once your routine is established, you can take occasional days off or go away for a long weekend, as long as you start again as soon as you return.

Anyone whose SAD is already very severe by the time they start is unlikely to get much relief. Manufacturers advise trying again early in the following winter.

Occasionally, people report headaches, irritability or in very rare cases nausea, when using light treatment. Changing your position may help, but if problems persist, you must stop using light treatment. Anyone using light treatment, regularly, should tell their optician and have an annual eye check up. Anyone with existing eye problems should ask whether lights are safe.

Light boxes are not available on the NHS. It's best to try out light treatment before buying a fixture. Manufacturers and suppliers may be able to offer you a free trial.

Talking treatments

Talking treatments, such as counselling, psychotherapy or cognitive behaviour therapy can be extremely useful in helping people to cope with symptoms. They also help to uncover other factors that may be contributing to your problem, and enable you to do something about them. Talking treatments are not always available on the NHS, although there may be a counselling service attached to your GP practice.

Antidepressants

In severe cases of SAD, SSRI antidepressants, such as Paroxetine (Seroxat), Sertraline (Lustral) and Fluoxetine (Prozac), which increase the activity of serotonin, have proved successful.

They can be combined with light treatment. Older antidepressants such as Amitriptyline, Imipramine and Dothiepin are less commonly used nowadays and more problematic, because they increase symptoms like sleepiness. (See Mind's booklet *Making sense of antidepressants* for information about side effects and withdrawal.)

What else can I do to help myself?

We know that being outdoors throughout the winter isn't a cure, because many farmers and outdoor workers have SAD. But, it's still worth making the most of the available light. Go outdoors in natural daylight as much as possible, especially at midday and on bright days. Inside the home, choose pale colours that reflect light from outside. Sit near windows, when you can.

Try to avoid putting yourself under stress. Pay attention to the messages that your mind and body are sending you that winter is a time to take it easier and go into hibernation. (See the *Mind guide to managing stress*.) Even if you can't curl up in bed and sleep for six months, you can simplify your life in winter. Be ruthless about which tasks can be left until summer, especially major upheavals, such as changing jobs, moving home, extra housework and decorating or repairs. Plan ahead for the winter. Buy Christmas presents, stock up store cupboards and give parties in the summer, when you want to.

You need to keep active during the winter, but with routine stress-free activities that don't require too much concentration or drain your energy. There's plenty of evidence to show how good physical activity is for mental wellbeing, and for helping with problems such as depression. One research study showed that a daily one-hour walk, in the middle of the day, could be as helpful as light treatment for coping with the winter blues. (See the *Mind guide to physical activity*) A healthy diet is also important, and you should try to balance the SAD craving for carbohydrates, such as pasta and potatoes, with plenty of fresh fruit and vegetables. Some people find that taking extra vitamin B12 is helpful.

Pamper yourself physically with a massage, or learn how relaxation exercises can help you unwind. (See the *Mind guide to relaxation*) Look into the benefits of complementary medicine as an option. St John's wort is a popular herbal remedy available over the counter in the UK. There is some evidence that it is an effective treatment for mild to moderate depression. This would be appropriate for the winter blues, although not for severe SAD. Some people have reported positive benefits, but one of the main side effects of St John's wort is that it increases skin sensitivity to light, and this means that you should not take it if you use a light box. It should not be taken at the same time as other antidepressants. The UK Commission on Human Medicines warns that St John's wort reduces the effectiveness of several types of prescribed drugs, including the contraceptive pill, so it is important to check with your doctor or a pharmacist if you are taking any other medication and are thinking of taking St John's wort. (See Mind's fact sheet, *St John's wort – Hypericum Perforatum*)

There is only one permanent cure for SAD, and that is to live within 30 degrees of the equator. Failing that, think about taking a holiday in sunny places during the winter. Southern Spain and the Canary Islands would both be good options. Or go skiing and benefit from the extra brightness of light reflected off the snow. One word of caution; some people with SAD have become much worse on returning to the UK gloom after very bright sunshine in places such as Africa. It seems that the contrast in light levels can do more harm than good sometimes, so consult your doctor.

Think about joining a support group, or setting one up locally. Sharing your experience with others who know what it's like is very therapeutic. Knowing that you are not alone and that help is available can make SAD much more bearable. Get as much support as possible from your family and friends. Tell them about the condition, so they know what to expect and how to help. Find a supportive GP.

How can family and friends help?

It's not always easy to live with someone who has SAD. It's like being with two different people, one who is lively, cheerful and energetic, during the summer, and the other who is sleepy, morose and irritable, during the winter.

In summer, he or she can be hard to keep up with; in winter, you won't get much response from him or her. Try to accept that your friend or family member feels awful. They aren't being lazy, or not making an effort. They sleep because they have to; they can't help it. Being hostile about it or teasing them is likely to make things worse. Having SAD is no joke; it's been described as feeling half dead, half your life. Sometimes, it can drive people to suicide.

Offer practical assistance, if you can. It's important to get treatment and other matters organised during the summer, because once winter comes, someone with SAD soon finds apathy taking hold. As soon as you notice signs of lethargy, encourage the person to start their treatment programme and to stick with it. If they are using light treatment, build it into daily life. If the person needs an hour's light before going to work or school, make sure other chores or responsibilities don't interfere. Help them to pace themselves, and be sensitive about making too many demands on them (such as inviting a houseful of guests to stay). In the long run, it's in nobody's interest if they become more stressed.

It can be very upsetting when someone is constantly irritable and seems unwilling to give or accept love. Relationships can be strained to breaking point if one partner feels it's all too one-sided. Hard though it might be to imagine or understand, being depressed can be emotionally paralyzing. Someone in the grip of it may be unable to feel happy, caring and loving in the usual way. Whatever it may seem they are not deliberately rejecting you.

They may be desperate for love and care, and yet not able to accept it, when it's offered. Be patient, but insist they get treatment. You can then both look forward to better times.