

# ALL YOU NEED TO KNOW ABOUT SAD



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### SADA Seasonal Affective Disorder Association

SADA is a voluntary organisation and registered charity, founded in 1987 to support and advise people with SAD and inform the public and health professionals about the condition. SADA is the world's only non-commercial support organisation for Seasonal Affective Disorder. Since it was set up, SADA has dramatically raised awareness of SAD in the UK and beyond.

The charity is self-financing and receives no government funding. SADA is managed according to its constitution by elected officers and charity trustees, who have no financial interest in SAD. The Committee are all volunteers and give their time freely.

Until 2017, membership subscriptions formed the financial basis of the charity. However it was felt that we would reach more people by making our store of information freely available. We hope that individuals, health professionals and organisations, employers, educational institutions, local authorities and the media will inform themselves about SAD and spread the word.

SADA is an independent charity and has no commercial interests or products to promote. Individual bloggers writing about SAD may help you to understand the condition from a personal angle but to make the right choices for yourself, you also need tried and tested information backed up by years of scientific research.

SADA monitors the development of light boxes/devices and international SAD research. Representatives of the Association may attend conferences, undertake surveys and assist in relevant SAD-related research projects. Public recognition of SAD has changed considerably, thanks to media interest and the hard work of a handful of people, but there is still much to be done. There are people with SAD all over the country who still do not have access to a sympathetic and knowledgeable GP, and many more who manage their condition with light therapy, without their doctor's knowledge.

SADA's aim is to ensure that SAD is recognised and accepted in every part of the UK, and that those with SAD can maintain a productive life with the support of

doctors, employers, family and friends. Although little research into SAD itself is taking place at the moment, much of the work currently underway in the field of circadian rhythms, weight gain, sleep patterns and dark/light balance is of great interest to SADA and may eventually work to our advantage as the importance of light is fully investigated.

As we no longer have membership subscriptions we would be particularly grateful for donations to SADA to help us continue our work. If you have found our information useful, please consider helping us in return.

### WHAT IS SAD?

SAD (Seasonal Affective Disorder) is recognised medically as a form of depression now said to affect an estimated 8% of people in the UK every winter. A new survey has shown increased figures, with a further 21% of the UK's population affected by "Winter Blues", a milder form of SAD. Symptoms can start as early as August and are at their worst from November to February, usually disappearing by April.



Autumn floods in Cumbria with typical UK light

Lack of light causes SAD. Winter brings shorter days and less sunshine, and the sun is not as bright, so people with SAD experience continuous symptoms over this period. However, other conditions which reduce light levels can bring on the

symptoms of SAD at any time of the year, for example, prolonged periods of dull weather in summer, or low levels of light at home or at work. Lack of light creates a biochemical imbalance in the hypothalamus, a part of the brain which regulates many functions of the body. This explains why SAD often affects people in many ways - physically, mentally, cognitively and emotionally. The severity of SAD symptoms and the problems they cause can vary from very serious to mild. Other illnesses, major life events, relocation and the length and harshness of winter can also determine just how much a person who has SAD is affected. Sometimes hormonal changes like puberty and childbirth will act as triggers in individuals who are genetically predisposed to SAD.

SAD may begin at any age. Some people say that they have had it since childhood or adolescence; others feel that it was triggered by life changes such as illness or bereavement. It occurs throughout the northern and southern hemispheres but it is extremely rare to see symptoms in those living within 30 degrees of the equator, where the length of the day varies very little with the seasons and the sun remains extremely bright throughout the year. However, people who experience no SAD symptoms at all if they live in such bright conditions may start to develop them if they move further away from the equator, where seasons are more pronounced.



Have you migrated?

For many people SAD is a seriously disabling condition, preventing them from functioning normally without medical treatment. People with severe SAD become medically depressed. If untreated, this depression - coupled with the other symptoms - can be devastating, leading to unemployment, damage to relationships

and even suicide. Winter Blues (or Sub-syndromal SAD) is the common name for the mild form of SAD. People with Winter Blues feel more tired, lethargic and "fedup" in winter than they do at other times, but not so seriously depressed.

### SYMPTOMS OF SAD

SAD symptoms usually recur regularly each winter, starting between mid-August and November and continuing until March or April. Medical guidelines advise that SAD can be diagnosed after two or more consecutive winters if the person has suffered from a number of symptoms typically associated with SAD. Other reasons for a recurring winter depression (e.g. bereavement) should first be eliminated.

Often the first symptoms experienced in autumn or early winter are physical, with other changes developing as winter sets in. These first signs can be useful in alerting us and ensuring that winter levels of treatment are started and changes to lifestyle and routine are made. Forward planning can sometimes prevent symptoms worsening and depression setting in. Partners of people with SAD can help with this and plan ahead together in summer in preparation for winter.

DEPRESSION	Low mood – worse than normal and different Sadness – negative thoughts and feelings – guilt – loss of self-esteem – hopelessness – despair Apathy – inability to feel – loss of enjoyment
SLEEP PROBLEMS	A need to sleep more – a tendency to oversleep - daytime sleepiness – disturbed sleep at night – early morning wakening – feeling unrefreshed by sleep
LETHARGY	Fatigue, often incapacitating – difficulty just carrying out normal routines
OVEREATING	Craving for carbohydrates and/or sweet foods – increase in weight in winter – using food to improve mood

COGNITIVE FUNCTION	Difficulty with concentration and memory – brain does not work as well or as quickly when symptoms occur
SOCIAL PROBLEMS	Irritability – finding it harder to be in the company of people – refusing invitations
ANXIETY	Tension, physical and mental – inability to deal with stress – panic attacks – generalised fears
LOSS OF LIBIDO	Less interest in sex and physical contact
<ul> <li>MOOD CHANGES IN SPRING</li> </ul>	These often depend on individual or spring weather and may vary Sudden lift in mood – agitation or restlessness – over-activity – tiredness – gradual loss of winter symptoms – see-sawing moods – relaxation into summer





Potatoes, pudding or both?

## A HISTORY OF SAD

It is often assumed that SAD is a condition of the late 20th century, invented as yet another excuse for not coping with life's stresses. Not true! Seasonal illness and depression and the benefits of light have been observed for over 2000 years.

In c 430 BC Hippocrates noted that "... it is chiefly the changes of the seasons which produce diseases." The Roman doctor Cornelius Celsius advised depressives to "... live in rooms full of light, eat and drink moderately, take massage, baths, exercise and gymnastics, avoid frightening ideas and indulge in cheerful conversation and amusements."

In the 2nd century AD Aretaeus suggested that "... *lethargics be laid in the light and exposed to the rays of the sun, for the disease is gloom*." Kraepelin wrote in his book "Manic Depressive Illness and Paranoia" in 1928: "*Repeatedly I saw ... moodiness set in in the autumn and pass over in the spring ... to excitement ... hypomania...* "



Hippocrates, Aretaeus of Cappadocia and Jean-Etienne Esquirol were all on the right track

In the last 400 years various cases have been documented which would now be diagnosed as Seasonal Affective Disorder. A pioneering French psychiatrist, Jean-Etienne Esquirol, gave the following advice in 1825 to a 42 year-old businessman whose symptoms and problems resemble many present day cases:

"A hospital will not benefit but, on the contrary, injure you ...in September, go to the south of France and be in Italy by the close of October, from whence you must not return until May". The patient returned to Paris in May "...in the enjoyment of excellent health" and many SAD patients (who could afford it) were prescribed similar treatment during the 19th century.

By the early 20th century bright light was being used to treat many illnesses, including depression. Dr J.G. Porter Phillips of the Bethlem Hospital wrote in 1923: "Since the energising influence of sunlight on all living matter is so well known, it is surprising that therapists have not made greater use of this natural curative agent. In the province of psychological medicine, it is generally accepted that no institution is complete without its solarium ...in addition several mental institutions have already installed apparatus for the production of artificial sunlight. Even to the lay mind, it is obvious what a stimulating and beneficial influence artificial sunlight can exert on those whose fund of energy is seriously depleted by nervous or mental disorder, especially during the dull, sunless and depressing months of our British winter."

This good advice was largely ignored over the next sixty years as psychoanalysis, ECT (electro-convulsive therapy) and psychotropic drugs were developed.

It was not until the early 1980s that a US research engineer, Herb Kern, suggested to doctors at the NIMH (National Institute of Mental Health) in Bethesda, USA, that his annual cycle of depression coincided with the winter months and therefore might be related to shorter, duller, daylight hours. The doctors tried an experimental treatment on Herb. They exposed him to bright light, equivalent to summer daylight, for several hours each day. The improvement after four days of this treatment was dramatic.

Following this pioneering treatment for Herb's annual winter depression, awareness of SAD and research into the condition and its treatment increased rapidly throughout the world. The NIMH pioneers, Rosenthal, Wehr, Mueller, Lewy *et al*, continued the experimental light treatment on hundreds of patients and wrote their seminal paper in 1984 "Seasonal Affective Disorder: A description of the syndrome and preliminary findings with light therapy" (*Archives of General Psychiatry* 41,72-80)

Since then, cases have been identified throughout the northern and southern hemispheres, from Canada to Australia. SAD is generally known about and articles

appear regularly every winter in the media. Unfortunately, after an initial burst of funding, research into SAD lessened and there is now widespread evidence of denial of SAD in places where it is in fact prevalent. Professionals in the UK are retreating, guided by the NICE criteria. Increasingly, people are getting their information online, self-diagnosing and, if they don't need medication, managing their condition without recourse to the medical profession. The German-speaking world, in contrast, has been very supportive of seasonality and light therapy, light boxes are easily available and the importance of light (e.g. in the workplace) is readily accepted. The differences are not a result of uncertainty regarding the efficacy of light but more a question of funding, the strength of the pharmaceutical industry, and an unwillingness to say honestly, "Light works and you should be entitled to it but we have a limited budget."

Whether one believes that SAD is a type of manic depression or an extreme version of normal winter behaviour - a pathological hibernation syndrome in humans those who suffer from it know that it is a debilitating and disabling condition. The tiredness, lethargy, inability to stay awake and concentrate on everyday tasks, craving for energy-giving carbohydrates, irritability and avoidance of social contact are bad enough to cope with for several months each year, but the crippling depression and anxiety which can ruin careers and relationships leave many without income, love, friendship and human dignity.

The discovery of light therapy has enabled many people to lead a relatively normal life and feel in control of their symptoms for the first time since the onset of their SAD.



Emerging from the burrow... Is SAD a form of human hibernation? Was it adaptive behaviour, to the advantage of early man?

### WHAT CAUSES SAD?

Why and how does SAD happen to some people? Researchers have come up with several hypotheses as to the cause and mechanism of SAD, some or all of which may be involved in this complex disorder.

Light enters the eye and causes impulses to travel along a nerve pathway, the retinohypothalamic tract. This leads from the retina, the light-receiving surface at the back of the eye, to the hypothalamus. This is a small but very important part of the brain which controls mood, appetite, sleep patterns, body temperature and sex drive, and regulates hormones which maintain body function. When insufficient light enters the eye, the activity of the hormones in the hypothalamus decreases, along with the functions they regulate. The list of SAD symptoms on pages 5-6 shows just how many body functions can be affected.

Neurotransmitters are molecules which enable impulses (messages) to pass from one neuron (nerve cell) to another. The brain and nervous system consist of many millions of neurons, organised into pathways. Messages from the brain have to pass from neuron to neuron to reach every part of the body. There are gaps between these neurons, so the neurotransmitters have to jump over them, binding, or joining up with special receptors on the other side. In this way the message is passed along. Faulty receptor binding in some of the neural pathways in the brain may be a partial cause of SAD.

Serotonin is thought to be the main neurotransmitter involved in SAD. Early research indicated that serotonin levels are depleted in winter in people with SAD. Very recent PET scans have shown significant summer-to-winter differences in the levels of the serotonin transporter (SERT) protein in SAD patients, causing rapid winter depletion of serotonin. This may be a cause of the condition and may explain why drugs which raise the effective levels of serotonin have proved successful in treating SAD and depression.

After reaching the hypothalamus, nerve impulses travel to a tiny organ in the brain called the pineal gland. The pineal gland produces melatonin during the hours of darkness. Melatonin causes us to sleep if it is produced in sufficient quantities, but its production is suppressed by bright light.

Some researchers have shown that there is an abnormal seasonal variation in the suppression of melatonin by light in people who suffer from SAD but not in those without the condition.

There is also a hypothesis that people with SAD are sub-sensitive (less sensitive) to light in winter and super-sensitive (more sensitive) to light in summer. The body's daily clock (circadian rhythm) may be unstable in those with SAD. This instability is not a fixed abnormality and may be related to variations in circannual rhythm (yearly clock). In other words the daily biological rhythms of people with SAD change with the seasons. Unstable circadian rhythms may be "reset" using bright light to alleviate the symptoms. Research is continuing in this and other areas.

In the last twenty years, we have experienced a revolution in research, treatment and understanding of the biological abnormalities underlying SAD. As more research has been done, it has become clearer how and why people suffer from SAD, and our understanding of various treatments continues to improve. There are many effective ways of reducing the symptoms of SAD. Continuing research is helping us make the most of these, and will, perhaps, reveal others, as we find out in more detail what happens to brain and body when we get more or less light.

Exploring what treatment or treatment combination works for each person and then keeping to a sensible treatment regime should enable people with SAD to lead a more normal life in winter.

### LIGHT TREATMENT GUIDE

We know that SAD is caused by lack of light and that people with SAD need much more light to function normally than others do. So it is not surprising that the main treatment for SAD is bright light. It has been proven to be effective in up to 85% of people diagnosed with SAD.

Lightboxes are devices that come in different sizes and designs and house several natural daylight or white fluorescent tubes or more recently, LEDs. The user sits in front of the lightbox so that bright light enters the eyes.

Light treatment has to be used every day in winter to enable people with SAD to lead a normal life. When treatment starts, it usually takes three - four days to work.

The effect wears off if it is not used for three - four days. Treatment should start in early autumn, ideally before symptoms start, and continue till spring. It can also be used on dull, cloudy days in summer. Light levels in the UK are very changeable – we can have several seasons in one day - and some people can be affected by a prolonged downturn in the weather. Although the worst time is inevitably mid-winter, a wet June can sometimes be worse than a sunny February, so be adaptable. It's all about light!

#### Lux

The important thing about light treatment is the intensity, in other words the brightness of the light that enters the eye. Light intensity is measured in "lux". The light on a summer day can be very bright, at least 10,000 lux and sometimes as much as 100,000 lux. A daily dose of between 2,500 and 10,000 lux is needed in order for light treatment to be completely successful.

LUX STRENGTH	WHAT DOES THIS MEAN?	HOW LONG?
200 - 500	Intensity of ordinary lighting in home & office - not bright enough for SAD treatment	not applicable
2,500	Lowest level for SAD treatment	2 - 6 hours
10,000	Standard – usually recommended for SAD treatment	30 mins - 1 hour
100,000	The strength of a bright summer's day	not applicable

The intensity of light that goes through the eye depends on how far away the user is from the lightbox. The further away the user sits from the box, the smaller the amount of light they receive. The minimum intensity for treatment is 2,500 lux which could take two - six hours a day and usually did before higher intensity lightboxes became the norm.

Nowadays most boxes are 10,000 lux and treatment need only take 30 - 60 minutes a day. Difficult cases may require longer and many people split their sessions, topping up at lunch time. It is not advisable to use the light box too late in the day as it may interfere with the production of melatonin and result in sleep delay. Most people soon learn to gauge how much they need and to regulate it accordingly.

It is important that you check the distance at which the manufacturer measures the light output of a box to give yourself an idea of how effective it will be. You should always refer carefully to the manufacturer's instructions with regard to distance and usage times in order to ensure that your treatment is beneficial.

To be effective, the light has to be directed at the eye but it is not necessary to stare at it. The user can read, watch TV, do homework, use a computer, etc. as long as the centre of the lightbox is placed at eye level (or tilted slightly from above – see page 16) and is the correct distance away.

Lightboxes are not available on the NHS. However, because people with SAD use lightboxes for medical reasons, they do not have to pay VAT. Prices start at about £95.00 and larger boxes delivering higher intensities of light tend to cost a bit more, possibly up to £250 - £300. Other devices are proliferating, but are not recommended by SADA as stand-alone treatments for SAD. In some cases, their efficacy and/or long-term usage have not been scientifically investigated.

In winter, whether or not you use a lightbox, daily exposure to as much natural daylight as possible - preferably in the morning – should help.

While the role of the eye in mammals in detecting light for vision has long been known, it has only recently emerged that the eye also performs a role in detecting light for a range of behavioural and physiological responses other than sight. These include our body clock (known as the "Circadian Rhythm"), body temperature, hormone levels, heart rate and blood pressure.

It has been known for years that the rods and cones (two different types of cells) in the retina detect light and allow us to see. However, evidence for the existence of another light-sensing system in the eye, which is quite unconnected with sight, began to emerge in the 1990s. Scientific research has now shown that there are other types of cell in the retina, known as "ganglion cells", which control

responses such as those of our body clock. These cells measure environmental brightness at dawn and dusk to keep our body clock in tune with environmental time. As this is not controlled by the visual pathway, it is possible for blind people to benefit from light therapy.

### FAQs

The following questions and answers will help you to make the most of light therapy. They will help you to find out if it works for you, how to work it into your daily routine, and how to tailor your light treatment to your needs.

#### The market is full of competing brands and models. How do I make a decision?

We currently recommend UK companies who have considerable experience in producing and refining lightboxes that comply with medical and safety standards. We know that they are tried and tested and will be able to help you with your individual requirements. However, the internet has expanded the market greatly in recent years and reputable foreign firms such as Beurer are also making lightboxes to medically approved standards. Look for the CE verification when you consider buying a product and go for something on a trial basis if you can.

The demand for dedicated SAD lightboxes is limited but there is more awareness generally about the need for light. Consequently, many small devices are now being marketed as "energy" and "lifestyle" lights. These are usually blue light or LEDs and are highly portable to suit people who want a quick pick-me-up. Although useful as add-ons if you wish, they are not recommended for serious cases of SAD and continuous daily use. Costs vary and if you have a diagnosis of SAD, you might be better advised to invest in a good standard lightbox.

Daylight simulation lamps are an excellent add-on product once you have a lightbox. They will wake you gently and naturally and some will lower their glow at night to encourage sleep. However, they are not a substitute SAD treatment. Light visors are fine for short periods of travel but still not very user-friendly.

There are other gadgets and time-saving light devices appearing on the market without medical backing that are simply not fit for purpose. If something looks shoddy or unlikely and is not medically approved, it is probably not a bargain.

#### Can SADA recommend a particular model?

The question everyone asks SADA is "which box shall I buy?" We all have our favourites but we cannot decide for you or promote particular models. Much depends on your lifestyle and the severity of your symptoms. However, we hope that our guidelines will put you on the right track.

#### Should I use a box with natural daylight or bright white light tubes?

Both types of light are considered to be equally effective and safe for long-term use and the choice is a matter of personal preference. Many of us have been using this type of lightbox for decades without ill effects or eye damage. Some manufacturers may offer a choice of both types of light in their boxes. The daylight tubes mimic the spectrum of natural daylight without the UV (ultra-violet).

#### What about blue light and LEDs?

Some manufacturers market products which incorporate blue light and/or lightemitting diodes (LEDs) instead of full-spectrum natural daylight or white light tubes. There is some evidence that the ganglion cells in the eye are more sensitive to blue light than other wavelengths and that blue light is particularly energising. It is used successfully for acne and skin treatments but usually for much shorter periods of time. Both blue light and LEDs have proved effective in SAD treatment, so the choice is yours. We are cautious simply because no research is yet available into the long-term use of either and blue light may be more associated with retinal damage.

#### How strong a lightbox should I get?

The minimum dose of light for effective treatment of SAD symptoms is 2,500 lux. Most modern boxes deliver 10,000 lux, though it is always wise to check just how close to the box you need to be to get this intensity of light. If you are receiving 10,000 lux at a comfortable distance from your box then treatment may take as little as half an hour each day.

#### What distance do I need to be from the box to get the correct intensity of light?

This varies according to the make and model of box so it is important to look at the manufacturer's specifications to help you choose your box, and once you have it, to use it effectively. Some boxes will deliver 10,000 lux, for example, but you may need to be as close as 4 inches (10 cms) so this may be impractical. The same box will provide the minimum 2,500 lux at a more comfortable distance so you can get on with other activities at the same time but you will need to use it for longer.

#### What else should I consider?

When choosing a lightbox you should consider price, size, weight and appearance. You might prefer a lightweight, compact box which is easily portable and can be moved from one surface to another: or a larger screen-type box which has a wide expanse of light, but is more cumbersome to move around. It is now generally accepted that a light with a large surface area is more effective than a point source, suggesting that the largest manageable surface area would be best. As we have always experienced sunlight from above, it is a good idea to direct the light source so that it comes from above rather than below eye-level. Many boxes now have a useful slanting mechanism.

#### How do I use my lightbox?

Place the box on a table or surface so that the light is at eye-level and can shine directly into them. Sit or stand at the distance from the light recommended by the manufacturer. This is usually from 10" (25.5cm) to 36" (91.5cm). You can combine light with various activities: reading, eating, working, cooking, etc. but it is important to keep at the same distance. You do not need to stare at the light nor should you wear goggles, tinted lenses or any device which prevents light getting through to the eye. Stay awake - your eyes need to be open!

#### How many hours do I need?

This depends on the intensity of light delivered to your eyes by your box (remember to check the distance recommended by the manufacturer). In general, at 10,000 lux for 30 to 60 minutes per day (no more than two hours maximum), at 5,000 lux one to three hours per day, and at 2,500 lux, you may need between two and six hours a day (see Lux chart on page 15).

You can start with a smaller dose in early autumn and increase it as the winter progresses. As you become more familiar with light therapy and its effects on you personally, you will find it easier to decide how much you need each day, and how this changes as winter progresses.

If you have cataracts, or have any condition which impairs light penetration, or are elderly, you may need more light treatment and should seek medical advice.

#### What time of day is best?

It has been scientifically proven that early morning light is most effective in the treatment of SAD. A top-up is sometimes a good idea at lunchtime (but not in preference to outdoor light). For most people, evening use will interfere with the onset of the sleep hormone, melatonin, and will keep you awake. Evening light after

about 6pm is not recommended unless you have a short circadian cycle, in which case it will help to lengthen and re-set it.



Many people prefer to wake up a bit earlier so that they can use the lightbox first thing in the morning. This is the best time if possible and you can start the day knowing that you have had your treatment.

#### Do I have to use it every day?

As a rule, it is good to establish a routine for your SAD, as a haphazard approach to light treatment will not give you the best chance. Keep to a time if possible and try not to skimp. Researchers tell us that "non- compliance" is the main reason for light therapy not working – in other words we forget, let things divert us, feel guilty about taking time etc. and don't let light do its work properly. You can take a day off occasionally, but try to make it part of your morning routine. Your body will soon tell you when you are not using enough light, so learn to recognise the signs.

#### How do I know when to start light therapy?

Many people know when they start to suffer from SAD symptoms each autumn, and it is recommended that light treatment should start before symptoms appear. At the very least, try to start within a week or two of feeling the first, often flu-like symptoms, be it August, September or October, as you can then avoid becoming seriously depressed. The aches and associated weariness may make you feel that you are getting a virus, so learn to spot the difference. If you leave it until you are really ill, it is sometimes too late for the treatment to be fully effective.

#### Will I have any side effects?

Traditional lightboxes from reputable companies with fluorescent tubes are strenuously tested for safety and efficacy and there have been very few problems reported. Anyone with a specific eye disorder should consult an eye specialist Most of us get sore eyes or a slight headache occasionally when we are using a lightbox. This is not serious and can be alleviated by switching off for a while. Sometimes this happens if you stare at the lights, which is not necessary. Some people may feel restless or agitated and have sleep problems at first and if this does not wear off, consult your medical advisor. You may need to cut down on your daily dose of light, and/or use your lights at a different time of day. Don't worry - light therapy has not caused any long-term ill effects to date, so feel free to experiment until you find a regime that works. It is possible to overdose on anything, including light therapy. We all need to work out our individual light therapy needs. If you begin to feel hyper or a bit "wired", try reducing the time you spend in front of your light until you find the right balance.

#### Are there any alternatives or short cuts?

The best short cut is to move to within 30 degrees of the equator! Failing that, in winter, spend as much time as possible outside in natural daylight or near a window, especially on bright days. Taking occasional winter holidays in the sun will help, but be prepared for symptoms to return (sometimes with a vengeance) within a few days of being home.

Holidays in the snow are also beneficial, as even a small amount of light increases in intensity when it is reflected off snow. Combined with a bit of strenuous exercise, this can make you feel much better.



Snow reflects and intensifies sunlight

#### Can I use my lightbox in summer?

If we are enduring a typical British summer, dull, grey and cloudy, light therapy can help and it makes sense to have a lightbox at hand if symptoms recur. Exposing the skin to too much sun on a bright summer's day has not been recommended in recent years, but there are now concerns that people are becoming vitamin D deficient. If you have SAD, enjoy sunlight regularly in sensible doses but avoid "binge sunbathing" both at home and abroad.

My light treatment isn't alleviating my symptoms as much as I'd like. What can I do? This is not a comprehensive list, but covers some likely causes.

1) SAD experts have found that underusing light therapy is common. Try using your lightbox for a little longer each day, or sit closer to it.

2) Light tubes do not stay at the same brightness throughout their life. If you have had your tubes for some time then you may need to increase your daily light dose, or you could replace your tubes.

If you want to find out the recommendations for your particular box, look at the specifications/ instructions supplied with your lightbox or contact the suppliers direct.

3) You may need to combine light treatment with other treatments. These are described in the following sections.

### DRUG TREATMENT

Drug treatments for SAD can be in used in combination with light therapy. They can also be used alone, which is particularly useful for those people who do not respond to light treatment. All drug treatments can be prescribed on the NHS.

#### Antidepressant drugs

These are the main types of medication prescribed for SAD. Antidepressants are **not** addictive, and fall into three basic groups – SSRIs, TCAs/TTCAs and MAOIs

<u>SSRIs (Selective Serotonin Reuptake Inhibitors)</u> e.g. sertraline, paroxetine, fluoxetine, fluoxamine, escitalopram, citalopram

SSRIs are the drugs of choice for SAD. Most people with SAD have found them a dramatic improvement on other antidepressant drugs. This is probably because

they are selective and work directly on the serotonin system (see "What Causes SAD"). They do not produce the side-effects experienced with other types of antidepressants, which seem to affect SAD patients particularly badly, nor do they result in the "zombie-like" feeling so often experienced with TCAs.

SSRIs are not without side effects. Some users have experienced nausea and gastro -intestinal problems in the early stages and a few have been unable to continue, but most people tolerate them well. If one of the SSRIs does not agree with them, many users have found that another drug in the same group suits them better. Other new drugs on the market are *mirtazapine, reboxetine and venlaxafine*. These are used for major depressive disorders, but we have no data on their use in SAD.

#### TCAs/TTCAs (tricyclics)

#### e.g. imipramine, amitriptyline

Tricyclics are the oldest and most established antidepressants and also the cheapest, but they have many side effects. Most people experience anti-cholinergic effects e.g. dry mouth, constipation and blurred vision. Their sedative effect can be useful if the individual is agitated and sleepless, but can turn a typically sleepy and lethargic SAD sufferer into a zombie.

#### MAOIs (monoamine oxidase inhibitors) e.g. phenelzine, tranylcypromine

These can be useful when people with SAD find they get too many side effects from other types of drug. The older MAOIs are not widely used now as they interact badly with many substances including other drugs, some alcoholic drinks and foods such as cheese, meat and yeast extract. A newer MAOI, *moclobemide*, seems to be a more promising alternative to TCAs and SSRIs because there are fewer reactions with food and drugs.

#### Other drugs

*Benzodiazepines* are a group of drugs which include minor tranquillisers e.g.*diazepam*, and sleeping tablets *e.g. temazepam*, *nitrazepam*.These are not recommended for SAD as they do not alleviate depression and are addictive if taken over long periods. However, taken in low doses and for a short time e.g. a few weeks, they are useful in coping with a crisis, such as suppressing acute anxiety and sleeplessness while waiting for antidepressants to take effect. As SSRIs often begin to work within a week, they should rarely be needed. The major tranquillisers e.g. *chlorpromazine and haloperidol* are also seldom used. *Lithium carbonate & carbamazepine, sodium valproate/semi sodium valproate* are drugs prescribed for bipolar disorders to control mood swings and prevent their recurrence. They are occasionally used in the treatment of SAD to treat winter downswings coupled with spring/summer upswings (hypomania).

## COMBINING LIGHT & DRUG TREATMENT

Although light therapy is widely regarded as the principal treatment for SAD, many people find they need a combination of light and drugs to reduce their SAD symptoms to an acceptable level. People who use combined treatments usually find that they can manage with a lower dose of one or both treatments.

### OTHER WAYS OF HELPING

#### Dawn simulation

There is much scientific research to show that the use of a dawn simulator may be useful in conjunction with other SAD treatments. Many people with SAD report that they have found a dawn simulator to be an invaluable adjunct to their lightbox (although usually not a substitute). Dawn simulation is a technique using a light that comes on slowly in the early morning to imitate a natural sunrise. The key research finding is that our body clocks respond to this stimulus by speeding up and reinforcing the waking-up process, so that we have more or less woken up even before our eyes open.

### Psychological therapies: counselling, psychotherapy, cognitive behavioural therapy (CBT)

The study of how the mind affects the body's systems (psychoneuro immunoendocrinology) is at an early stage of development and people are often surprised that physical symptoms such as sleep and appetite problems, lethargy, aches and pains can be reduced, sometimes dramatically, by talking to a psychotherapist or counsellor.

SAD symptoms can have an overwhelming effect on people for long periods each year. It seems that dealing with chronic debilitating illness can become easier after talking over the problems and frustrations it brings with an informed and sympathetic outsider.

In addition to any reduction in physical symptoms, talking things over can assist people with SAD to make positive, constructive changes to their winter daily routines. It may help them to feel better about the fact that they need to adapt to winter rather than attempt to carry on regardless. They may begin to feel less guilty or frustrated if things are not the same as they are at other times of the year. Exploring different ways of dealing with stressful events and issues, particularly in winter when the ability of many people with SAD to cope is severely reduced, is another way in which these methods may help.

The distinctions between the various psychological therapies are blurring, and many therapists now tend to integrate CBT and other forms of counselling or psychotherapy into their work with clients. This enables them to help people to work through any issues from their past (such as family expectations) or present (such as relationship or work difficulties), as well as tackling the persistent negative thoughts commonly experienced by people with SAD. Recent American trials have reported some success in helping patients to re-think their attitudes to winter through CBT, resulting in an improvement the following year. However, in our opinion this would have to be sustained over a number of years to be considered an effective long-term treatment. The patient would have to be as committed to the positive thinking as to the use of a lightbox.

The aim of any form of therapy would be to provide each person with an understanding of how SAD affects them individually, both psychologically and physically, and to develop appropriate coping strategies.

Psychological therapies are available free on the NHS, via a GP referral. Note that access may be limited in some areas, or there may be a waiting list. Some areas have voluntary counselling services, which may make a charge or request a donation. Details are available in the phonebook or online. Your employer may pay for an occupational health scheme which may include counselling.

Private therapists (who may call themselves counsellors, psychotherapists or psychologists) charge from £30 an hour.

Details of qualified practitioners are available from the following organisations among others:

British Association for Counselling and Psychotherapy (BACP) United Kingdom Council for Psychotherapy (UKCP) British Psychological Society (BPS) British Association of Behavioural and Cognitive Psychotherapists (BABCP)

#### Vitamins

Recent research has found that SAD sufferers are often deficient in Vitamin D and that this is increasing amongst the UK population as a whole. Further studies have shown that sunlight, as well as being our means of producing Vitamin D, also plays a vital rôle in activating the movement of the T cells that are essential to our immune function. The efficiency of the immune system in people with SAD appears to be lowered during the winter and even the healthiest of diets may not provide enough vitamins and minerals to boost it. It may help to take a daily vitamin/mineral supplement e.g. the high dose type, available from chemists and health shops, containing a balanced range of vitamins and minerals. Never exceed the recommended daily allowance (RDA) and consult a competent professional if you are unsure.

#### Complementary therapies

Any form of relaxation or complementary therapy that increases wellbeing and helps someone cope with and adapt to their condition is valuable. Other illnesses, major life changes, and other demands on our mental, physical and emotional reserves can occur at the same time as we are dealing with SAD. Reducing these stresses and strains makes it easier to cope with SAD, and vice versa. No alternative or complementary therapies have been proved to be directly effective in treating or curing SAD itself. However, some of our members have found individual remedies helpful and the following have been mentioned by one or more of them: acupuncture, Alexander Technique, aromatherapy, Bach Flower remedies, craniosacral therapy, health kinesiology, hydrotherapy, hypnotherapy, therapeutic massage, meditation, reflexology and yoga.



Some people find that alternative therapies help them manage their SAD symptoms

### OTHER HEALTH ISSUES

SAD symptoms may mask or be made worse by other underlying conditions and it is important to check other possibilities with your doctor. It is thought, for example, that many people with SAD may also have a thyroid deficiency which may improve with treatment. Similarly, SAD may be triggered or aggravated by the menopause.

### ADAPTING YOUR LIFESTYLE

"Beyond a wholesome discipline, be gentle with yourself" (Max Ehrmann 1927)

One of the most effective ways of dealing with SAD is to adapt your lifestyle wherever possible. People with SAD, like hibernating animals, should not be expected (or expect themselves) to cope with the same work and activity load in winter as they do in summer. Every attempt should be made to reduce this load. Rather than resisting the condition, it is better to acknowledge it, learn how it works and make appropriate changes. This may involve re-educating others as well!

Changes can be made in everyday routines. It is also a good idea to reschedule "high activity" jobs to the summer, rather than trying to tackle them in the winter. Good examples are: home maintenance and all but essential cleaning; extra or more difficult work; non-urgent medical and dental treatment; visiting relatives; Christmas shopping and challenging new projects of any kind. Talking things over (see Other Ways of Helping page 22) can be useful in making decisions about how to adapt to winter. Deciding on and feeling comfortable with the changes you want to make can seem as hard as carrying on trying to do everything, at least at first! This is where talking to someone, whether they are a family member, a friend, a fellow sufferer, or a professional, can help to put things in perspective. Try to do it before winter arrives!

We cannot give up all aspects of normal life during the winter, and indeed it would be very boring to do so, but it is possible to avoid a lot of stressful activity. Try to get plenty of sleep and relaxation, eat a healthy diet and spend as much time as possible outside in natural daylight or near windows, preferably in the morning light and on bright days. You should also try to include exercise in your new lifestyle. It is one of the most effective ways of alleviating depression.

Encourage other members of the family to help and be supportive in winter and **never** cut short your light treatment time to accommodate them. It is they who will suffer ultimately! Try not to take on extra work, or else schedule it for the summer. In other words, don't try to be superhuman!



Head for the hills, find a new interest and get into the garden. It all helps!

Recent research has shown that circadian rhythm disturbance is usually seen in SAD patients as well as in other mood disorders. In addition, poor sleep patterns and overuse of media devices in late evening are being connected with weight gain and more serious health problems. People with SAD are particularly vulnerable but can

help themselves by following a good routine - avoiding the use of media devices late into the night, not oversleeping, using the light box regularly and eating and sleeping at the same time every day. It may sound excessively virtuous, but SAD symptoms love a chaotic lifestyle and will take over if your body clock goes haywire.

If you get stuck at any point in the year, SADA has a series of Helpsheets that can come to the rescue. Sometimes just reminding ourselves what we should be doing will reassure us and keep us on track. Above all, don't forget that SAD is a biochemical deficiency and that it is not your fault that you have it. Others have it too, and it is manageable, so stay informed, adapt to it as you would to any illness and remember that whatever the question, LIGHT is usually the answer!



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