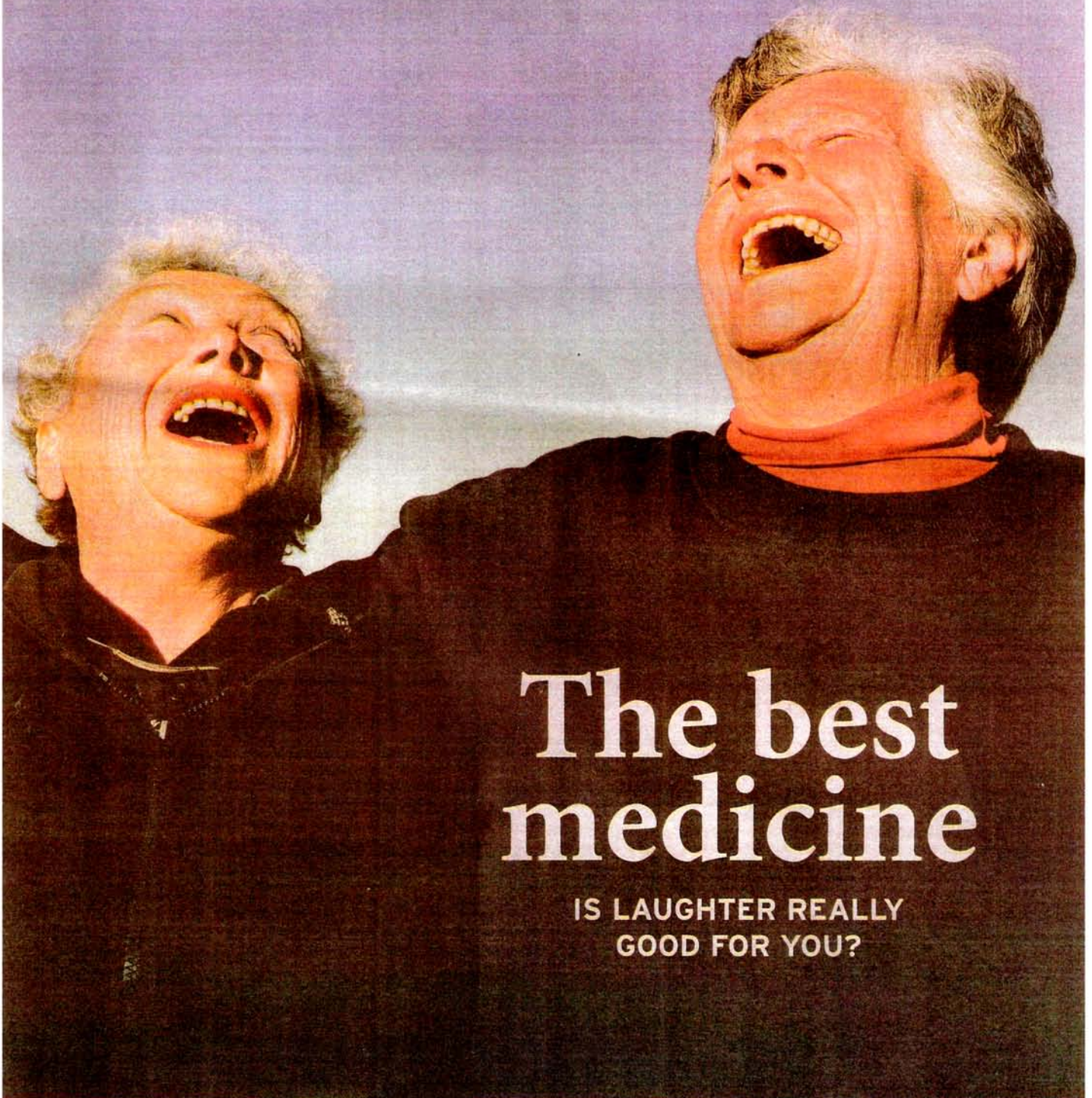


Health & Science



The best medicine

IS LAUGHTER REALLY GOOD FOR YOU?

FACE-OFF

The latest in transplant surgery

PAGE 3



WHY BOYS MAKE PASSES ...

at girls with full glasses

PAGE 6



JOBS BEGIN

PAGE 8

SAD but true: winter's blues

The effects of seasonal change on the body are more than the odd cold, writes **Louisa Deasey**.

Statistics show credit card debt, chocolate and alcohol consumption, suicide, relationship counselling and even child abuse all reach a peak during the winter months.

In the natural world, winter involves birds nesting, bears hibernating and caterpillars curling into their cocoons, but humans tend to forget that less light and longer nights can have a huge impact on both our psyches and our internal rhythms.

Though even the most severe winter in Australia can't compare with parts of North America, and Scandinavia, research shows that, on average, about one in 300 Australians experiences seasonal affective disorder (SAD).

SAD sufferers typically experience depressive symptoms during the winter months: fatigue, weight gain, sleep problems such as insomnia and hypersomnia, mood swings, introversion and food cravings. The problem many doctors have in diagnosing SAD is the symptoms overlap with many sleep disorders and other forms of depression.

Associate Professor Trevor Norman, a psychiatrist on the Austin Hospital research committee in Melbourne, says: "The most popular theory on SAD is that it's related to an upset in the body's circadian rhythms. What we know is that light affects the body's internal melatonin rhythm."

This explains why much of the research into SAD has been in areas of hormonal changes linked to the effects of light and temperature.

Norman says research into bright light therapy has offered the most hope. "In one study at the Austin Hospital in Melbourne, they found sitting in front of a bright fluorescent light effectively reduced symptoms."

Research by Prince Henry Hospital in 1998 showed the therapy was most effective in the morning. A 2005 University of



Gloomy outlook ... the darker, colder months herald depression for many people. Photo: Andrew Quilty

Philadelphia study found bright blue light was more effective than dim yellow or red light in regulating the circadian rhythms of SAD sufferers, suggesting the average reading lamp won't help much.

Studies show SAD affects more women than men and Norman says this is because women generally suffer from depression more often than men. Others suggest it is related to women's lower physical activity levels.

Debra Hall, who used to live in Canada but now resides on the Gold Coast, experienced SAD throughout her childhood but called it "autumn fever". Instead of experiencing the worst symptoms - melancholy, tearfulness and feeling withdrawn and depressed - during winter, Hall says the worst months were September to November, the beginning of the

Canadian winter. "By December we'd be building snowmen and playing ice hockey, so we weren't so stuck inside," she says.

One year, she took radical action. "I purchased stronger light bulbs and fitted them to all my lamps in my apartment and sat next to them on gloomy, cloudy days.

"I went for as many walks as I could during the day, and if I was too tired to walk, I'd just stand there and let the sun hit my face."

She also began visiting the solarium and sauna and rugged up for walks in the mountains.

Norman says the combination of exercise and light is one of the most effective treatments for SAD, which is backed by US research.

A 2001 study by the Duke University, in North Carolina, found exercise a more effective treatment for depression than anti-depressants, with fewer relapses and a higher recovery rate.

Lisa Roberts, a 29-year-old agronomist from South Australia, first felt the effects of SAD in 2002. Though she spent most days working in sunlight in fields, she experienced a dramatic personality shift each winter for three years.

"My whole personality completely changed," she says.

TYPICAL SYMPTOMS

- Weight gain
- Change in appetite
- Cravings for sugar and carbohydrates
- Fatigue and energy swings
- Irritability
- Insomnia and hypersomnia
- Withdrawal from social situations
- Severe mood swings

"I was so unhappy and I had terrible insomnia. I craved sugar all the time, I couldn't get to sleep until around five o'clock in the morning and I withdrew from my friends. But it was only in winter ... in summer I'd be back to my old self."

Roberts tried sleeping with the light on because she'd read about bright light therapy, but found it didn't help.

Exercise, however, did make a difference. Growing up in Victoria, she had been an avid netballer, but since moving had let exercise slip. "I started walking twice a day for about 40 minutes at a time. Within a month, I was sleeping better, and my whole mood seemed to shift."

AVOID SEASONAL DEPRESSION

GET SOME LIGHT

Sitting under bright fluorescent globes for an hour in the morning has proved effective against SAD.

EXERCISE

In the Duke University study, patients who walked for

30 minutes three times a week felt less depressed.

REGULAR MEALS

Studies on jet lag, another disorder linked to circadian rhythms, suggest regular meals help regulate the internal body clock.