

Sleep patterns: There's more to light than meets the eye

Lack of the right light each morning to reset the body's natural sleep clock may play a role in teenagers' irregular sleep, suggests a small but provocative school experiment.

Specialists say too few teens get the recommended nine hours of sleep a night. They are often unable to fall asleep until late and struggle to awaken for early classes. Sleep patterns start changing in adolescence for numerous reasons, including hormonal changes and more school, work and social demands.

Researchers turned to a North Carolina school built for energy efficiency, with lots of skylights so classrooms could reduce use of electric lights, yet still be brighter than usual indoors. That allowed testing of the effects when some eighth-graders at Smith Middle School in Chapel Hill suddenly lost exposure to a specific wavelength of light. From waking until school ended, 11 students donned special orange goggles that block short-wavelength "blue light," but not other wavelengths necessary for



BRIGHT IDEA: Sleep has a lot to do with light.

proper vision. Blocking that light for five days upset the students' internal body clocks — delaying by half an hour their evening surge of a hormone called melatonin that helps induce sleep, researchers reported.

Teens who trudge to the bus stop before dawn or spend their days in mostly windowless schools probably suffer the same effect, as daylight is the best source of those short-wavelength rays, said lead researcher Mariana Figueiro.

"If you have this morning light, that is a benefit to the teenagers," Figueiro said.

Figueiro's study was a first step to test in real-world conditions findings from sleep laboratories showing that light effects on the 24-hour body clock may play a role in teen sleep problems too.

The study is small and didn't track student sleep, just an early sign of change, the evening melatonin surge that typically precedes sleep by about two hours.

Although preliminary, the study was well done and should spur additional research on everyday light exposure, said Dr Judith Owens, an associate paediatrics professor at Brown University and sleep medicine specialist.

"There's a biologically based shift in the natural sleep onset and wake-up time. I think what this study shows is that you can impact that shift with light manipulation," Owens said. "The major take-home message is to get natural light exposure early in the day."

Morning light is not the only factor, added Figueiro. The report is part of a larger study involving a second school in New York to examine evening light exposure — computer and TV light plus regular indoor lighting. Too much evening light can add to the problem, she said.

— AP

spreading the word on real foods 'with no goo'

by Sally Brooker

A TIMARU WOMAN with a health war to wage is rallying more troops. Rachel Tomkinson is the founder and director of Better Bods Better Health.

As a qualified nurse, personal trainer, and massage therapist, she thought she knew a thing or two about health and nutrition. But a colossal personal battle led to a revolution in her family's eating habits, and now she's spreading the word as widely as she can.

Mrs Tomkinson's baby, Jenna, had severe eczema and 24 food allergies. After trying conventional medicine, then alternative treatments, the desperate mother began extensive research.

"I wasn't getting answers through the system . . . I had to look for my own answers."

Mrs Tomkinson has done six years of independent study into nutrition and food allergies. That has included consulting with a United States neurosurgeon and reading numerous books.

She has come to a resounding conclusion — whole foods are the solution, including the animal fats that many health professionals have spent decades advising against.

"Saturated fats like butter, dripping, lard, cream and other full-fat options become our friend," Mrs Tomkinson says.

"Getting rid of the 'goo', or the hidden chemicals, is essential in the healing process. And believe me they are everywhere, including the so-called 'healthy' options."

Jenna is now a healthy little girl, her skin — once marred by eczema — now clear and glowing.

By sharing her findings in a weekly newspaper column, Mrs Tomkinson has drawn a growing following in the central South Island.

The number of people becoming sick with food allergies is increasing to the point where it's becoming "normal", she says. She's been involved with many case studies, and all have "the same simple solution".

"People are afraid of fat and cholesterol."

She is fine-tuning her knowledge with

the information she receives from those who seek her help.

They come from throughout New Zealand, and from as far away as Japan and the United States.

When they send her lists of the foods they have been eating, she soon sees the

and passionate about what she's doing.

"The message will get through. "There's so much interest, so many healing stories. I know I've got to push through with it."

Next month she's holding free nutrition seminars in Christchurch, Southbridge, Oamaru, Queenstown, Blenheim, and Napier. All she asks in return is a donation of a 'real' food item to go into the Salvation Army's food banks.

"I believe, because the

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— Rachel Tomkinson

common links.

"My job is lifting the veil. Then you can choose.

"Often, they don't seek me out until they're at the bottom of the barrel.

"The mainstream failed me, then the naturopath system failed me — they're still prescribing pills and potions.

"You have to get rid of the goo. I'm teaching common sense.

"We've normalised complications. "I'm giving people some hope."

Mrs Tomkinson dispels fears that the whole foods she recommends will cost more. Her family of five spends \$130 a week on food, including meat and organic vegetables.

Mrs Tomkinson says she's excited

mess-age needs to be heard, you can't put a price on it. Rather than bringing money to me, bring real food."

There's a list on her website of 'Whoo Hoo' or 'real' foods — those with no goo.



BIG CHANGE: Rachael Tomkinson's baby, Jenna, is now glowing with health.

RELAX

Bond with baby and build muscles at the same time

with **JOANN CROWLEY**

www.yoga2you.co.nz

The body undergoes huge changes during pregnancy and childbirth. Gentle Mums n' Bubs yoga classes help bring structural integrity back to the body as well as helping to relieve common problems such as back pain, which is often aggravated by the constant lifting of baby in or out of strollers or the car, and the associated lifting of baby gear.

Once baby is six weeks old (eight weeks if mum has had a Caesarean) mums can include gentle abdominal exercises, working on the core muscles, to protect their weakened lower backs; stronger poses to continue to strengthen the back as well as knitting back the birthing muscles; exercises to release the upper back, neck and shoulder muscles, tensed from endless hours of feeding; poses to improve posture and alignment, stimulate circulation and digestion, build up lung capacity, flexibility and strength as well as breath awareness and relaxation techniques to help increase energy levels, keep stress at bay, while

also working to calm the nervous system, allowing for better sleep and more relaxed mums.

In this posture (pictured), lie on your back, knees bent to chest and place baby on your shins, holding around the waist. Hold your legs together at a right angle with your toes flexed towards your body.

Keeping your lower back pressed into the floor, raise your torso so you come closer to baby, engaging your pelvic muscles as you come up. Inhale, and lower to the floor, relaxing your pelvic muscles. Repeat six times. This will help strengthen the mid section, while also toning the pelvic girdle.



MUMS AND BUBS: Yoga can be tailored to the needs of mothers and babies.

PICTURE / APN