Health issues strike a cord

Stem cells are the building blocks of our body and storing umbilical cord stem cells at birth can go a very long way to protecting your family's future health through stem cell preservation.

Cryo-Save, in partnership with Radio 702, have this week together raised awareness on the importance and many advantages of storing umbilical cord stem cells.

At birth, the baby's umbilical cord is filled with millions of precious stem cells that have been protected in the womb. These cells are young and untainted, making cord blood stem cells the purest form of adult stem cells available today.

The cells, which are a perfect match for your baby and can be used to treat many different diseases, such as leukemia and bone marrow diseases, will also have an excellent chance of matching close family members, such as brothers and sisters.

The role of umbilical cord blood in the treatment of life-threatening blood diseases is increasing globally. Since 2010, the use of cord blood transplants has grown rapidly for both children and adults. The National Bone Marrow Programme anticipates 10 000 cord blood transplants per year by 2015. Medical research anticipates there is a high probability more children will use stem cells from their own umbilical cords later in life.

Storing your child's umbilical cord has a multitude of potential benefits. At birth, the surplus blood that remains in the umbilical cord can be saved for potential treatments. The umbilical cord tissue itself contains another unique type of stem cell.

These remarkable cells have the potential to repair damaged tissues – like cartilage, bone, muscle or nerves. The research into these new applications is ongoing and the future holds many exciting possibilities.

Collecting your baby's stem cells at birth is completely noninvasive and does not interfere with your birthing plan at all. Umbilical cord stem cells will be processed and cryogenically stored at ultra-low temperatures of below -190° C and cryopreservation lasts for more than 20 years.

The sample is immediately available if transplantation is requested for one of the many diseases currently being treated with stem cells.

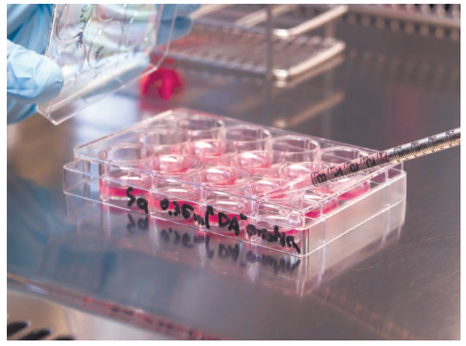
Every year, thousands of South Africans with blood diseases such as leukemia, marrow failure or aplasia – as well as inherited metabolic and immune deficiency syndromes – reach a stage where only a bone marrow transplant from a donor offers any chance of recovery. The problem is finding a matching donor – and this is one of the situations where stem cell storage provides a massive advantage.

Rather than just discarding umbilical cord blood, parents worldwide are now choosing to store their babies' stem cells, to be prepared for unforeseen health challenges. Apart from the apparent benefit of having these cells available for use, there are specific situations where it is important you consider stem cell storage. For instance, if there is a history of disease in the family or where the baby is of mixed ethnicity. – *Citizen reporter*

10 000

cord blood transplants per year by 2015 is anticipated by the National Bone Marrow Programme

For more information
visit *cryo-save.co.za*



An academic wake-up call

SLEEP MATTERS: SACRIFICING TIME IN BED FOR STUDY TIME IS COUNTERPRODUCTIVE

Get a good night's rest and be fully alert for your tests.

Genevieve Vieira

During a brief conversation with a friend the other day, reminiscing about our university days, I mentioned I had never pulled an all-nighter. I further clarified I'd always slept at least three hours, which triggered a disbelieving laugh from my companion.

Barely able to contain himself, he managed a "you might as well have pulled an all-nighter, then".

With the year soon coming to an end, it's time once again for students to dust off their textbooks and bury themselves in their notes in preparation for upcoming exams. In their haste to cram in as much information as possible in a limited time, many are sacrificing sleep time for study time.

But lack of sleep is likely to work against you. Research shows sleep deprivation affects performance and the way the brain functions.

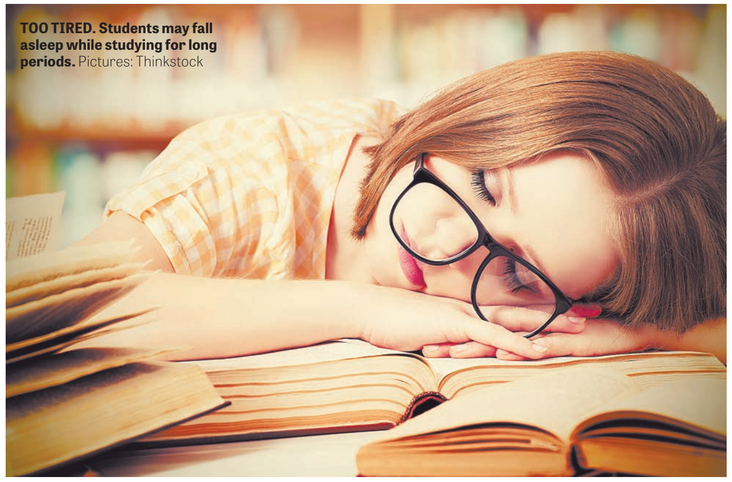
According to clinical psychologist and PsychMatters director Joanna Kleovoulou: "Sleep is a complex process of restoration and renewal for the body and mind necessary for a person's overall wellbeing.

"Spending sleepless nights cramming for your exams can defeat the purpose. Sleep deprivation can make you drowsy and slow your responses. And since your memory can be affected, chances are you probably won't remember much of what you stayed up late studying."

While every person has their own biorhythm and every age and stage requires different amounts of sleep (a baby may need 16 hours, while an adult requires less), eight hours is recommended.

> *Spending sleepless nights cramming for your exams can defeat the purpose*
>
> **Joanna Kleovoulou**

And it's not just students who are ignoring their need for sleep. With life's pressures and demands, more time is needed to juggle everyday activities and, typically, sleep is compromised.



TOO TIRED. Students may fall asleep while studying for long periods. Pictures: Thinkstock

DON'T SKIP SLEEP. Rest well and remain fully alert during an exam. Pictures: Thinkstock

> *Sleep-deprived people tend to forget little things during the day, like where they placed their keys*
>
> **Joanna Kleovoulou**

We have become a sleep-deprived society and people have forgotten the importance of a good night's rest.

"I believe people may not recognise the impact a lack of sleep may have," Kleovoulou says.

"It is important to recognise how alert and awake you feel on a continuous basis during the day, without feeling jittery or restless. Sleep-deprived people tend to forget little things during the day, like where they placed their keys or have trouble remembering anything they had studied just 12 hours before."

These are not just short-term effects. Some studies on sleep deprivation and brain cells have revealed a constant lack of sleep can lead to damaged brain neurons. Also, continuous sleep deprivation can trigger mental disorders, such as anxiety, depression or bipolar disorder.

While the time spent studying seems crucial in the moment, there are ways of manipulating your study schedule so it doesn't eat into your sleep schedule. The two functions need to work together so they best serve your intellectual needs and establishing a good routine early on will help you later in life.

info

Symptoms of a lack of sleep

- Feeling tired or drowsy at any time during the day.
- Falling asleep within five minutes of lying down in the evening.
- Performing poorly on tests such as hand-eye coordination.
- Sleep deprivation can magnify the effects of alcohol.
- Caffeine and other stimulants cannot successfully overcome tiredness associated with sleep deprivation.
- Disruptions in the sleep cycle are believed to account for various sleep disorders.

– Joanna Kleovoulou, clinical psychologist

BE PREPARED

Kleovoulou suggests: "Be prepared long before the exam by getting the right notes and work to study – if you have procrastinated here, attempt to find a study buddy to assist you.

"Work out a study plan for each exam in terms of the amount of time allocated for each subject and stick to your roster. Break down into smaller, chewable sizes work that is overwhelming or difficult – this will make you feel more able to cope. Take regular breaks in between, as your brain cannot study optimally for long periods of time (according to research, about 45 minutes)."

CREATE A SAFE ENVIRONMENT

Ensure your study space is where you work most effectively and it gives you the feeling of being in control.

Be aware of your own alertness state – whether you work better in the early hours of the morning or later at night.

REST WELL

Ensure your study schedule includes a good night's rest, typically eight hours.

After studying, it is important to engage in activities that are fun and relaxing and do not require further mental stimulation. Kleovoulou suggests playing a board game or engaging in a sport you enjoy.

You can also connect with family, call a friend or take your dog for a walk.

TREAT YOUR BODY WELL

Kleovoulou concludes: "Eat at regular intervals to keep your sugar levels up. Hydrate yourself during the day (minimise caffeinated drinks, juices or energy drinks that have a high sugar content); get into a good sleep routine – have a hot bath with calming essential oils; decrease any stimulation in your room and have the right room temperature for your body to relax and sleep."

For more information
visit *psychmatters.co.za*

Pictures: Thinkstock

Man-ageing your health

Men face a variety of health risks during the different phases of their lives. A man in his 20s may think he is light years away from the ailments or problems faced by a man in his 70s but – says Fedhealth principal officer Peter Jordan – he will do well to take care of his health in his youth.

"How a man treats his body and his health in his 20s impacts on his body and his health in his 70s," says Jordan.

"This just goes to show that when it comes to taking responsibility for your health the time is definitely now."

He suggests the following routine check-ups:

Eighteen to 39 years: Every year: dental exam; every two to three years: blood pressure, height and weight measurements and a brief physical; every five years: cholesterol check.

Forty to 65 years: Every year: physical exam for cancer (skin, thyroid, lymph nodes, prostate and rectum); dental exam; every one to two years: height/weight measurements; blood pressure check; stool sample check for blood; vision and glaucoma check; every three to five years: cholesterol check; blood sugar check; sigmoidoscopy after 50 for colon cancer.

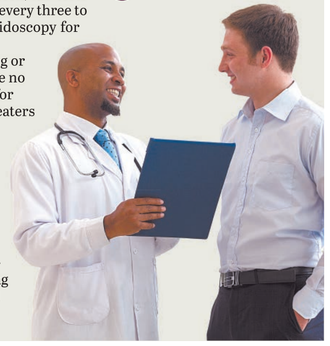
Over 65: Every year: height/weight measurements; blood pressure check; physical exam for cancers (skin, thyroid, lymph nodes, prostate and rectum); stool sample check for blood; dental exam; every one to three years: thyroid hormone check; blood count; cholesterol check; blood sugar check; hearing check; vision and glaucoma check; lab tests or urine sample; every three to five years: sigmoidoscopy for colon cancer.

Luckily, dieting or healthy eating are no longer reserved for women or fussy eaters and this, paired with the fitness wave surging around the globe, is good news.

Jordan stresses, however, one needs to be sensible when changing one's lifestyle and eating habits.

"Strict or restrictive diets may get results, but they remain a contentious issue regarding long-term health effects," he says, suggesting regular check-ups with your doctor if you are committed to a specific diet that cuts out or increases a certain food type.

For more information
visit *fedhealth.co.za*



Age stages

According to the scheme's chronic disease list (CDL) statistics, men account for 51.5% of CDL authorisations. Jordan points out age has a direct influence on the chronic burden and points to the following list of most common diagnoses for men of various ages to highlight how lifestyle diseases come into play as men age:

- **High blood pressure:** 55 years
- **High cholesterol:** 55 years
- **Clotting disorders:** 55 years
- **Non-insulin-dependent diabetes:** 55 years
- **High blood pressure:** 55 years
- **High cholesterol:** 41-55 years
- **Ischaemic heart disease:** 55 years
- **Clotting disorders:** 41-55 years
- **Non-insulin-dependent diabetes:** 41-55 years