

A vibrant, low-angle shot of a diverse group of people at a festival. They are all smiling and looking upwards, holding up various drinks like beer bottles and plastic cups in a toast. The scene is bright and festive, with a warm, golden light. A large, semi-transparent white circle is overlaid in the center, containing the text.

**SPARE A
THOUGHT FOR
YOUR LIVER
THIS FESTIVE
SEASON**



Dr Darrell Crawford is a prominent gastroenterologist and the Director of Research at the Gallipoli Medical Research Foundation. As both a clinician and a researcher, he has seen firsthand the devastating impact liver disease and liver cancer are having on our veteran and wider Australian communities. He's taken the time to share with *Queensland RSL News* why the liver deserves – and needs – more attention.

 Dr Darrell Crawford

I DON'T think our liver loves Christmas as much as we do. For most of us, December is traditionally a time of overindulging on delicious food and more than just a few drinks. While we may see a small sign of this come January, with the mysterious shrinking of our clothes, most of us do not give any thought to the damage we've done to our liver.

The liver is the under-rated workhorse of our body. This organ performs over 500 functions, and for the most part is content to quietly go about its job. But, as industrious as it is, there is only so much it can handle.

Over the course of my career, I have seen a dramatic change in Australia's food environment. The focus today is on easy, fast food. This food is high in fats and salts, and it's more accessible than it's ever been. Even what is being cooked at home isn't as 'liver friendly' as you might expect. We're then combining this poor diet with a reduction in physical activity, associated with lifestyle, occupation and domestic changes over the past 30 to 40 years. The result is a build-up of

toxins to a level the liver is no longer equipped to process.

When it comes to illnesses of the liver, the statistics paint an alarming picture. One in three adult Australians has, or will develop, fatty liver disease. This is an insidious disease that can lie dormant for years, progressively worsening without presenting noticeable symptoms. If left untreated, fatty liver disease can reach the point of cirrhosis, which is hardening and scarring of the liver. Cirrhosis can lead to liver cancer, which happens to be the fastest increasing cause of cancer mortality in Australia – due in no small part to the rise in incidence of fatty liver disease.

Liver cancer has one of the lowest survival rates of any cancer. For our veterans, the situation can be even worse. A recent study identified liver illnesses as the second biggest killer of Australian veterans of the war in Vietnam. The research we've conducted with the Post Traumatic Stress Disorder (PTSD) Initiative, in partnership with RSL (Queensland Branch) has revealed an altered liver architecture – most likely due to fatty



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liver – in veterans, particularly among those with PTSD.

The work of the Gallipoli Medical Research Foundation is informed by the needs of the veteran community, so it makes sense that we’ve spent the past few years focusing on illnesses of the liver. There is a lot of data that proves fatty liver disease and liver cancer are intimately linked, which is why our Liver Research Unit and Liver Cancer Unit work together closely. These researchers are examining the underlying mechanisms of this association, with the aim of improving

treatment options before fatty liver disease reaches cirrhosis and, consequently, cancer.

The other impact of fatty liver disease I’ve witnessed as a clinician is the impact on liver transplantation. In most cases, a liver is unable to be transplanted if it contains more than 30% fat. This means the problem of fatty liver disease is twofold; more people requiring a liver transplant and fewer people eligible to donate.

Dr Janske Reiling, from our Liver Research Unit, is working to increase the number of livers suitable for

transplantation to give more people a second chance at life. Her research has shown that the percentage of livers deemed unsuitable for transplantation has increased significantly; from 26 per cent in 2005 to 43 per cent in 2014. From this, Dr Reiling has developed a novel system to better assess the functionality of livers. She’s studied 10 human donor livers that were declined for transplantation due to the anticipated increased risk of malfunction. Using her system of analysing the health of livers, it was estimated that seven could potentially



have been used for transplant. We're now looking at ways to improve the function of these fatty livers.

When it comes to medical research, collaboration is vital. We've formed a partnership with an institute that was nominated the number one liver transplant unit in America. With strong partnerships, I am confident this research will progress to human clinical trials shortly, so that it will one day be used to save the lives of patients on the liver transplant waiting list.

I am very proud of what the GMRF team has been able to achieve through the generous support of our community, but I have no illusions that there is a long road ahead of us. Indeed, based on the current projection, I believe illnesses of the liver to be one of the biggest health issues of our time. It will be even worse for future generations if we don't act now.

So, this Christmas, I hope you spare a thought for your liver. Just remember, it all comes down to moderation. Moderate your food and alcohol intake and make time to exercise over the holiday period – it could be as simple as a 30-minute walk or a swim at the beach. While it might not be a crowd-pleaser, I'd also encourage you to start a conversation about liver health with your family. It is important you find out your family history, as a number of liver diseases are genetically inherited. The more people who start a conversation about liver health, the more momentum we gain in working towards solutions. There is a very poor public perception around fatty liver disease, which is why it has been able to fly under the health radar for so long. Many people are aware of the impact of obesity on their cardiovascular system, but not on the liver.

If you're worried about the health of your liver, or perhaps someone is worried on your behalf, then I urge you to speak to your doctor. Thanks to advances in technology, it is much easier to diagnose the severity of fatty liver disease. The Fibroscan

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machine emerged in 2009, and was initially developed for the assessing of cheeses! It turns out it works well on livers, too, and is now being used to assess damage to the liver. Thanks to our generous donors, there is one here at GMRF, based at Greenslopes Private Hospital, for research and clinical use – in fact, we were the first facility in Brisbane to have one. Your GP can complete a referral to the Gallipoli Medical Research Foundation to assess your liver on our Fibroscan machine.

The poor public perception of liver disease is also reflected in the amount of funding that has been allocated to illnesses of the liver. Despite being

the fastest increasing cause of cancer mortality in the country, liver cancer research ranks ninth in the amount of funding received – it just doesn't add up. Our research is not government funded; we rely on the generous support of our donors. I hope you will consider giving a very special gift this year by making a donation to the GMRF Christmas Appeal to help fund vital and life-changing research to improve liver health. You can visit www.gallipoliresearch.com.au to donate or find out more.

On behalf of everyone here at GMRF, I hope you and your family have an enjoyable – and liver-loving – festive season. ✦