HealthyLiving

Cancer Care Centre Inc.

Quarterly Program and Newsletter

Know Your Genes

They are your genetic blueprint. See page 6

Causes of Cancer
– Part 4a

What You Catch. See page 10

Join Jane and Jenny as they bike ride from Cambodia to Vietnam

Want to do something worthwhile? Join these two amazing women for the ride of your life! See page 13





The leading provider of supportive cancer care in South Australia, since 1985

Cancer Care Centre Inc is a community based, not-for-profit organisation offering a wide range of complementary care to support cancer patients and their families.

Complementary care refers to a variety of holistic health services which enhance wellbeing on physical, emotional, mental and

spiritual levels. Areas specific to cancer care include interpersonal support such as counselling and support groups; stress management approaches such as meditation and massage and nutritional approaches such as diet and nutrients.

Research has demonstrated that complementary care improves cancer patients'

wellbeing and may assist them to better tolerate their medical treatment for optimal outcomes. Cancer Care Centre Inc staff consist of a variety of dedicated health care professionals and trained volunteers – many of whom have been affected by cancer in their own lives. We support individuals and families to empower

themselves as they travel the cancer journey. We provide an environment which complements medical treatment as clients work towards wellbeing.

To keep up to date with what's happening at the Centre, visit our website www.cancercarecentre. org.au or follow us on Facebook.



Cancer Care Centre Inc 76 Edmund Ave, Unley SA 5061 Call (08) 8272 2411 cancercarecentre.org.au

Help support Cancer Care Centre by ordering your 2017/2018 Entertainment™ Books and Entertainment™ Digital Memberships through us.





The Entertainment™ Books and Entertainment™ Digital Memberships are guides that provide discounts and special offers for many of the best restaurants, cafes, supermarkets, cinemas, theatres, hotels, accommodations, attractions, and activities in your local area.

You can choose from the following:

- The traditional Entertainment™ Book Membership that comes with the Gold Card and vouchers.
- The Entertainment[™] Digital Membership that puts the value of the Entertainment[™] Book into your smartphone!

Virtually all of the valuable offers in the Entertainment™ Books and Entertainment™ Digital Memberships can be used throughout the year and are restriction-free.

If you purchase the Digital Membership you are able to share it with another family member who also has a smartphone. You are also able to share the link via your Digital Membership with friends who would like to support the Centre.

A percentage of every copy or membership sold goes directly to Cancer Care Centre.

You can order online at www.entbook.com.au/161c980 or ring the Centre to have a copy put aside for you.

The Entertainment™ Books and Entertainment™ Digital Memberships are \$70 each.

Donations

The Centre would like to thank the following people for their generosity:

Alan Pincombe Angela Butcher Anita Baltutis Barbara Anderson Barbara Pitt **Barry Lienert** Bernard Smith Birute & Trevor Goulding Carl Hopkins City of Unley Colleen Costello Dave Brown Dorothy Carman **Dragon Boats** Abreast

Eddie Tweedale
Evelina Ursini
Gael Adams
GP Sampson
Helen Bishop
Helen Lally
Helen Parsons
Ian Budenberg
Janet McKinnie
Janice Riordan
John Neuling
Karen Andrews
Katy Smith
Keith & Betty Bull
Kym Rogers

Kym Rogers Liam Murphy Linda Squires Macclesfield Cricket Club Inc Madeleine Smith Marika Tiggemann Meredith Swalue Milton Lodge NO 99 INC Miss Mahony Peter Benger Robert Sumner Robert Whitbread Ros Sumner Ross Allegretto

Sally Ann Kripps
Sally Krips
Seymour College
Spiridoula Psarras
Startrack
AdelaideAirport
Stephen Risitano
T & B Roussos
Vicki Braidwood
Yvonne Smolenski



Thank you to the following people who are our Cancer Care Champions:

Elena Voss Malcolm Potticary Ray & Jocelyn Nicholson Yvonne Martin Clarke Alex May

Donations made after 9 March 2017 will appear in the next edition of Healthy Living.

Like us on Facebook and follow us on Twitter



Remember to like Cancer Care Centre on Facebook and spread the word to friends.



@CANCER_CARE

Note: The Cancer Care Centre is a support and resource organisation and provides information of a general nature. It does not recommend any specific treatments.



Dear Healthy Living readers

With 2017 now well underway, it's a pleasure to see the Cancer Care Centre returning to normal after the mid-summer hiatus.

Although we have had 'Mad March' upon us, our courses, classes, therapies and counselling services are back in full swing.

Leanne Isaacson is settling well into the new position of Centre Co-ordinator handling the mix of the day-to-day matters of running the Centre and looking to improve our offerings and our administration. At the end of last year, we were very fortunate to receive a grant of about \$10,000 from the Dry July Foundation which has allowed us, amongst other things, to buy a second massage therapy bed. Last year we found that our specialised oncology massage therapists often had a long waiting list and we believe that people with cancer should be able to receive their chosen service within a very reasonable time frame. We are recruiting more therapists to make the most of this second massage therapy room. We have several massage therapists now trained to use our laser equipment in the treatment and prevention of lymphoedema and we wish to develop our reputation as a specialist centre for this wonderful offering.

The Cancer Care Centre depends on donations and fund raising to survive. The fees for our services are kept as low as possible and they do not cover the cost of running the Centre – so we must fill the gap. As I write, we are working hard to make a great success of our 2017 'Shining Through' fundraiser which seems to me to be the ultimate 'win-win' – the member raises over \$1000 for the Centre and in return keeps a beautiful black and white portrait. I would like to thank Heidi Linehan of www.heidiwho.com and Atkins Photo Lab (www.atkins.com.au) for donating their time, material and expertise which means that we face no costs at all – and to Jane Horton for volunteering her time to manage the whole event.

This magazine lists an enormous array of courses and therapies to help those with cancer, and their carers, and I urge you to take full advantage of what we have to offer. Please feel free to pass this magazine around your work, family and friendship groups – there are more copies available at the Centre, of course. Do drop in and visit – a Place of Help, Hope and Understanding. Kind regards,

Ian Budenberg Chairman

Please give generously

What your donation will do for Cancer Care Centre and its clients:

With a fully tax deductible donation of:

- \$100 help purchase books for the library collection
- **\$200** help purchase organic ingredients for our vegetarian cooking course
- **\$300** help subsidize the cost of 'Mindfulness for Cancer Stress' course for a client
- \$600 help mail out an edition of Healthy Living

These are just a few of the costs that can be covered by a fully tax deductible donation.

You can make your contribution by:

- becoming a Cancer Care Champion
- donation by completing the 'cut out' slip on the next page and post-marking the envelope 'reply paid' (donations are 100% tax deductible)
- bequest by contacting the Manager for details
- in memoriam donation by naming the Cancer Care Centre.

Your gift to the Cancer Care Centre will assist the support and care of cancer sufferers and their carers.

Thank you for supporting the Cancer Care Centre.





Tax Deductible Gift

Title		
First name		
Surname		
Address		
Suburb		
Postcode		
Email		

I wish my gift to be:

- \bigcirc anonymous
- publicly acknowledged (name only is published)

I would like to donate \$		by
O Credit Card		
O Visa	○ Mastercard	
Card number		
Expiry date		
Name on card		
Signature		

Cheque / Money order payable to:
Cancer Care Centre and posted to:
The Manager
Cancer Care Centre
Reply Paid 83842

76 Edmund Ave Unley SA 5061

O Direct credit to:

BSB: 105 011 Account number: 075 271 440

Account number: 075 271 440
Account name: Cancer Care Centre Inc

Reference: Your name

O Telephone:

For credit card payment by telephone please ring the Manager on (08) 8373 1470 Monday – Friday, 10.00am – 4.00pm

Thank you for your generosity.
Your support is greatly appreciated.

ABN 73 640 293 985



One on One Meditation

The Centre is pleased to be able to offer one on one meditation sessions to members three times a week. Sessions will last one hour and will be led by one of the Centre's three very skilled volunteers: Dagma (Tuesday morning), Nicole (Wednesday morning) and Lynne (Thursday afternoon).

Perhaps you are a beginner to meditation? A one on one session will teach you the skills you need to begin a meditation practice.

- how to sit correctly
- how to be mindful of your breath
- how to quieten the chattering monkey in your mind

You will also learn numerous other tips to help you feel confident to meditate at home.

For those who are very familiar to meditation, a one on one session is often helpful to re-motivate and re-inspire you to get back on the cushion! Those who have been meditating for a while find a one on one session is a great way to deepen their meditation practice.

Next time you are at the Centre, pop into the library. You will be surprised at the large selection of books on meditation and mindfulness and the extensive range of CDs. Often, borrowing a CD is a good push to get you establishing your meditation practice.



New! Art Therapy now available at the Cancer Care Centre

Occasionally in life, we experience events that are so painful, confusing or shocking that language fails to convey the full extent of our emotional response to them. People who have been through the experience of a cancer diagnosis would certainly resonate with this.

In the majority of cases, the first response after a cancer diagnosis is a biomedical intervention such as radiation, chemotherapy or surgery which deals with the physical aspects of managing and curing cancer. During this emotionally turbulent time, the focus is shifted away from the deep impact that a diagnosis has on the psyche, towards the more immediate demands of the body for a cure.

Art therapy can be a wonderful intervention to care for the soul in the chaotic phases of surgery, treatment, survivorship, recurrence and in some cases, end of life transition.

Art therapy is a form of psychotherapeutic counselling that uses arts-based activities in the psychological and physical healing process. This type of therapy can be a powerfully cathartic method of resolving emotional aspects of living with cancer, providing insight, self discovery and resilience.

If you have chosen to take an integrative approach to your cancer, consider that art therapy is a way of strengthening the relationship between your mind and the body's intelligence. While providing relief as a result of creative and diversional activities, art therapy can bring a whole new dimension of meaning to your life through insights gained from the artwork in a safe, therapeutic environment.

No talent required!

If your artistic talent only extends as far as drawing a squiggly line, you needn't worry. You already have what it takes to do art therapy. Your work will never be judged on whether or not it is 'good'. It will never be shown to anyone except your therapist unless you want it to be. The healing component of art therapy is in the 'process' of making the art and discovering its hidden messages, not in simply making something beautiful to look at. In short, you don't need to be artistically gifted to benefit from engaging in art therapy. All ages and skill levels are accepted.

The art-making process enables you to 'externalise' thoughts and feelings that might otherwise remain internal or unspoken. Seeing the problem or issue in a visual form made by you, creates different perspectives from which new insight and understanding can emerge. The creative process will also help you identify new ways to approach the obstacles preventing you from living your best life in the face of cancer.

The two hemispheres of the human brain control two very different types of thinking. While the left brain is the control centre for language and logic, sequence and numbers, the right brain handles visual images, intuition, imagination and emotion. In straightforward 'talk' counselling, the left brain is in the driver's seat, directing the discussion using language and rationale. In art psychotherapy however, the right brain is afforded the opportunity to express itself freely, from the unconscious realms of the psyche.

This produces non-verbal creative information so that in turn, after a dialoguing process with the artwork and therapist, the left brain can integrate new knowledge, often leading to long term psychological healing and personal transformation.

Rebekah Popescu is an art psychotherapist who has just completed running the Hero's Journey program at the Cancer Care Centre. We are now happy to announce that she will be offering individual art therapy sessions to our members every Tuesday morning. Rebekah works in private practice and also as an art therapist at Flinders University, running group programs for adults with acquired brain injuries. She also holds an academic position at the Ikon Institute of Australia where she lectures in art therapy.

As a recent survivor of breast cancer herself, Rebekah brings a great depth of empathy and understanding to the relationships she builds with clients. She is an active Cancer Care Centre member and part of the Young Women's Support Group.

Please ring the Centre to book a one on one session with Rebekah.

Cost per 90-minute session \$60.



Know your genes, know your health challenges

Scientists have been interested in the human genome and human genes for many years, but in April 2003 the Human Genome Project was completed. This meant that all the genes in human DNA were "read" and thus we had a genetic blueprint for building a human being. This led to being able to look at not only what the genes should look like, but understand what gene differences meant, and how our genetics can impact our health

A gene is the basic physical and functional unit of heredity. Genes, which are made up of DNA, act as instructions to make proteins.

In humans, genes vary in size from a few hundred DNA bases to more than 2 million bases. We know that humans have between 20,000 and 25,000 genes.

Every person has two copies of each gene, one inherited from each parent. Most genes are the same in all people, but a small number of genes (less than 1 percent of the total) are slightly different between people.

Alleles are forms of the same gene with small differences in their sequence of DNA bases. These small differences contribute to each person's unique physical features, biological efficiencies, and even susceptibility to disease.

It is quite normal for there to be a few "errors" (polymorphisms) in genes. Some have no impact on our lives; however, there are a few that may impact our health. They may influence how a person deals with toxins, prescribed medication, and even vitamins and minerals. Others could leave the person susceptible to depression, anxiety and even fatigue. (See table 1)

How do genetic errors cause this?

Genes are "instructions" for different proteins that make up the human body. Some of these may be muscles, skin, eye colour etc. Others code for enzymes, which are essential for us to function. They play roles in general metabolism, neurotransmitters, detoxification, digestion, cellular health plus so much more.

Some genetic defects (Polymorphisms) mean enzymes we make aren't efficient at breaking down toxins, or repairing DNA.

The BRCA2 gene provides instructions for making a protein that suppresses tumours. Tumour suppressor proteins help prevent cells from growing and dividing too rapidly, or in an uncontrolled way. The BRCA2 protein is involved in repairing damaged DNA.

In normal cells, the BRCA2 protein interacts with several other proteins to mend breaks in DNA. These breaks can be caused by natural and medical radiation or other environmental exposures, and they also occur during normal cell division. By helping to repair DNA, the BRCA2 protein plays a critical role in ensuring cell replication is "normal" and rogue cells are less likely to occur or survive.

BIOLOGICAL FUNCTIONS	POSSIBLE GENES INVOLVED	CONSEQUENCES
Detoxification	SULT2A1, CYP1A1, CYP1B1, NAT2	Issues with deactivating carcinogens and sulphation of toxins
Neurotransmitter levels	COMT, DAOA, MAO-B, TH	Low dopamine, Low mental energy, prone to anxiety
Folate Metabolism	MTHFR, MTHFD1, PEMT	Problems with using Folate normally and increased need for choline

Table 1. Genetic polymorphisms and their consequences

The MTHFR gene is also discussed as being of relevance in cancer.

The MTHFR gene provides instructions for making an enzyme called methylenetetrahydrofolate reductase. This enzyme plays a role in processing amino acids and for the body to be able to use folate properly. Folate is essential for proper DNA repair too, so it's a cell's first line of defence against harmful mutations, plus essential for the body to detoxify normally.

So why is there discussion that gene polymorphisms such as BRCA2 and MTHFR cause cancer?

They DON"T cause cancer. BRCA 2 and MTHFR gene mutations can create an environment in the body that makes cells more likely to become cancerous.

While it can be difficult to find studies that definitively connect MTHFR and certain cancers, the cancer and methylation connection is much more conclusive.

Some examples of cancer research in relation to the two major MTHFR gene mutations, include breast, oesophageal, gastric and oral cancer for a specific gene defect known as C677T, and breast, colon and oesophageal cancer for another defect known as A1298C. Breast and colon cancer seem to be significantly affected by one's folate status.

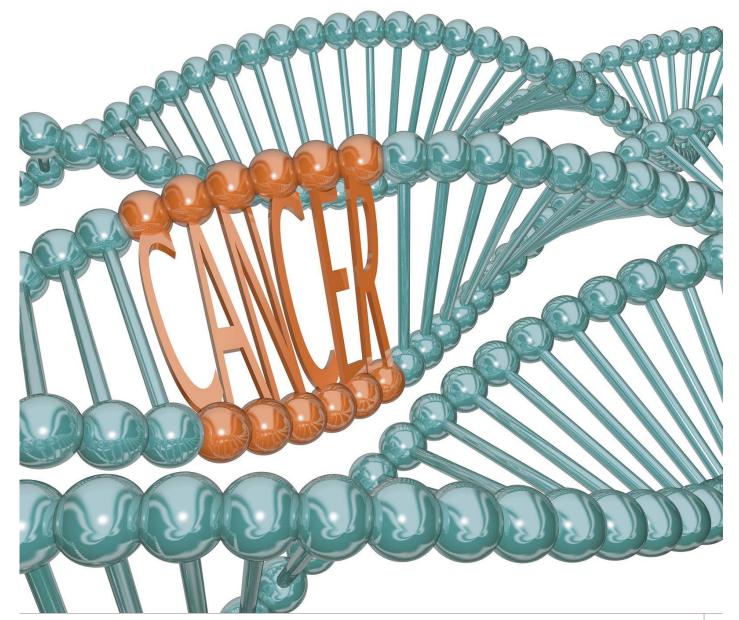
So, what can you do about it?

There are tests that are available to determine if you have either of the 2 defects discussed – but remember there are hundreds that can affect your health. You can either speak with your doctor about this or there are naturopaths and nutritionists that look at specific defects and nutritional ways of assisting the body to function optimally. They can help you choose the right supplements for your genetic profile, and specific dietary and lifestyle choices.

The list of gene polymorphisms is large, but once you know which ones affect you, you can adjust your lifestyle and foods to be as healthy and happy as possible.



Paul Kern has been a practicing naturopath for the past 22 years. Since 1998 he has been delivering highly informative seminars to Doctors and Naturopaths throughout Australia and New Zealand, as well as maintaining a busy private practice and lecturing to students at colleges around Australia.



What's on at the Centre... Weekly Programme

What is Pathways?

Pathways is an opportunity to spend time with one of our trained Support Workers in a private, quiet environment to explore and prioritise goals, needs and skills regarding your cancer journey, or if you are a carer, to explore how you can be of support, while at the same time taking care of yourself. Pathways appointments are available most days. Please ring the Centre to book your free Pathways appointment.

Monday

Young Women's Support Group

A friendly support group for women under 45 to discuss issues affecting them on their cancer journey.

Facilitator: India 1st & 3rd Monday of the month 6.00pm – 7.30pm By Donation

Please register your interest by telephoning the Centre on 8272 2411.

Massage – Remedial, Relaxation, Myofascial; Cranio Sacral, Trigger point

Therapist: Ryan Fortnightly, Monday mornings Members \$40 Non-Members \$85

Massage – Remedial, Relaxation

Therapist: Trudie Fortnightly, Monday afternoons Members \$40 Non-Members \$85

Reiki

Therapist: Angela Fortnightly, Monday afternoons Members \$40 Non-Members \$85

Counselling

Counsellor: Natalie Weekly, Wednesday afternoons Members \$40 Non-Members \$85

Tuesday

Counselling

Counsellor: Dagmar Weekly, Tuesday afternoons Members \$40 Non-Members \$85

Art Therapy – one on one

Individual 90-minute session Facilitator: Rebekah Tuesday mornings 10am & 12noon Members \$60 Non-members \$90

Men's Support Group

This group provides an opportunity for men to discuss issues affecting them on their journey, whether they are a patient, carer or partner of a patient.

Facilitator: Mel 1st & 3rd Tuesdays of the month 7.00pm - 9.00pm By Donation

Please register your interest by telephoning the Centre on 8272 2411.

Massage – Oncology, Relaxation, Remedial, Lymphatic Drainage, EFT, Bowen therapy

Therapist: Judy Fortnightly, Tuesday mornings Members \$40 Non-Members \$85

Massage – Oncology, Relaxation, Remedial

Therapist: Andrea Fortnightly, Tuesday mornings Members \$40 Non-Members \$85

One on One Meditation

Facilitator: Dagma Weekly, Tuesday afternoon Members \$20 Non-Members \$30

Reiki

Therapist: Colomba Weekly, Tuesday afternoons Members \$40 Non-Members \$85

Twilight Talk

Twilight Talks are an informative session held on the second Tuesday of each month from 6.30pm to 7.30pm. Bookings essential.

Members free Non-members \$20

Please ring the Centre or look on our website for upcoming dates and topics.

Wednesday

Group Meditation

Facilitator: Dharmamodini No booking necessary Weekly, Wednesday mornings 10.30am – 12noon Members \$7.50 Non-Members \$10

Massage – Oncology, Bowen Therapy, Kinesiology, EFT, Lymphatic Drainage

Therapist: Sarah Weekly, Wednesday mornings Members \$40 Non-Members \$85

One on One Meditation

Facilitator: Nicole Weekly, Wednesday morning Members \$20 Non-Members \$30

Thursday

Thursday Women's Support Group

A friendly support group for women over 45yrs of age to discuss issues affecting them on their cancer journey.

1st & 3rd Thursday of the month 10.00am – 12noon By Donation

Please register your interest by telephoning the Centre on 8272 2411.

Massage – Relaxation, Lymphatic Drainage, Myofascial, Oncology, Positional Release, Lymphoedema Therapy

Therapist: Richard Weekly, Thursday mornings Members \$40 Non-Members \$85

Courses and Workshops

Please ring the Centre on 8272 2411 to book into a workshop/course as bookings are essential.

Massage – Oncology, Remedial, Lymphoedema Therapy

Therapist: Erin Fortnightly, Thursday afternoons Members \$40 Non-Members \$85

Massage – Oncology, Remedial, Cranio-Sacral, Reiki, SER (emotional release)

Therapist: Anne-Marie Fortnightly, Thursday afternoons Members \$40 Non-Members \$85

Counselling

Counsellor: Lynne Weekly, Thursday afternoons Members \$40 Non-Members \$85

One on One Meditation

Facilitator: Lynne Weekly, Thursday afternoon Members \$20 Non-Members \$30

Friday

Reiki

Therapist: Colomba
Fortnightly, Friday afternoons
Members \$40 Non-Members \$85

Monday - Friday

Resource Centre

The library is an easy and convenient way to find information and inspiration. Come in and have a browse, ask our staff how this great resource can help. Internet research can be arranged for you by one of our volunteers.

The library is open during office hours 9.30am – 4.30pm, Mon–Fri No Charge – Members' facility only

Monday

Journey to Wellness – a highly recommended course for all our new members.

This 6-week course covers a range of topics specifically designed to assist cancer patients to maximize their wellbeing on a physical, emotional, psychological and spiritual level. The course is inspired by Dr Gawler's Cancer Healing and Wellbeing course.

Facilitators: Sarah Trangmar, Richard Roope, Paul Kern, Lynne Murphy, Anne-Marie Halligan and Pam Mitchell

Next course commences 29 May 10.00am–12.30pm Cost: \$120

Wednesday

Yoga

Yoga It's safe, fun & easy to do. You will enjoy this relaxing class of gentle exercise and conscious relaxation. An 8 week course that requires no prerequisites.

Facilitator: Tina

Next course commences 17 May 2.30pm – 3.45pm Class is limited to 12 Members \$56 Non-members \$80

Juicing Workshop

This monthly workshop shows you how easy it is to make your own fresh juice and harness all the goodness of vegetables and fruit.

Facilitator: Cherie

1st Wednesday of the Month 1.00pm – 2.00pm Members \$7.50 Non-Members \$10

Saturday

Exercise your Lymphatics

Facilitator: Richard Roope
2 consecutive Saturday afternoons

Next course commences 17 & 24 June 1.30pm – 4.30pm Members \$48 Non-members \$75 Full details in last edition of Healthy Living.

With the exception of Wednesday morning meditation, you are advised to contact the Centre on (08) 8272 2411 to confirm course commencement dates and times, and to make bookings for all courses listed.

All sessions are held at the Cancer Care Centre 76 Edmund Ave, Unley unless otherwise specified.



Previous articles in this series (1, 2, 3) have discussed preventing 37,000 Australian cancer cases a year by addressing six lifestyle factors (4).

- Alcohol;
- Smoking;
- Poor Diet;
- Obesity;
- Lack of regular exercise; and
- Excessive exposure to UV light.

We also discussed the first two causes of cancer listed by Professor lan Frazer of the University of Queensland (5):

- 30% of cancer is caused by what we do to ourselves:
- 30% of cancer is caused by what we've done to the environment;
- 30% of cancer is caused by what you catch;
 and
- Only 5–10% of cancers are genetic.

In this article, we will look at the third: 30% of cancer is caused by what you catch.

"What you catch" are infectious agents like viruses, bacteria, fungi and parasites (6). We have neither time nor space to discuss how these microorganisms cause cancer here. It is much more useful to know how you come in contact with them and how to protect yourself.

One would hope cancer-causing microorganisms were rare and you don't come across them often. Sadly this isn't the case (6). Chances are you've been exposed to microorganisms implicated in cancer from birth, while others are so common (like the bacteria Helicobacter pylori or Epstein-Barr Virus - EBV) you will almost certainly have come in contact with them or been infected by your 60th birthday (7, 8). If cancer-causing microorganisms are so common, then why doesn't everyone infected have cancer? The reason is the environment and your susceptibility are also determining factors (13, 14). We will touch on this below.

While there may be little you can do to avoid the common microorganisms implicated in cancer, there are ways to minimise the damage they may do. One way is to maintain a healthy normal flora. Normal flora are the microorganisms living on and in you — on your skin, in your mouth, lungs, gut and in every other nook and cranny. You may be surprised at how many there are. You have just as many, if not more bacterial cells growing on and in you than you have human cells (9, 12). But hang on... If "What you catch" is a cause of cancer, surely having so many microorganisms living on and in you is bad? Again, it's not so simple.

To explain, we need to divide microorganisms into 'good' bugs and 'bad' bugs. The 'good' bugs help you and the 'bad' bugs hurt you. While it isn't this black and white in reality, far from it in fact, let's stay with this distinction for now. The 'good' bugs of your normal flora do a lot of good. Indeed, you wouldn't be healthy without them (9, 10, 11). They help digest your food, provide you essential nutrients (like B group vitamins and Vitamin K) and keep the 'bad' bugs in check and stop them from making you sick. Probiotics and the 'good' bugs are also essential for the healthy development, education and function of your immune system (9, 10, 13, 14, 15). It is when the healthy balance between 'good' and 'bad' is disturbed things go wrong - and you pay the price – potentially a high price (10, 11). This balance can be upset for example by antibiotics, environmental factors and pharmaceuticals, if your immune system is compromised or supressed and by our six lifestyle factors.

We could end this article here: The trick to avoiding the "What you catch" factors is to maintain a healthy normal flora, stay away from cancer-causing microorganisms and make your immune system better at fighting them and their effects.

To end the article here would be a great disservice however, as it would barely scratch the surface of how your immune system protects you from cancer. We need to go deeper and we'll do just that in Part 4b (next issue of Healthy Living in July)





Dr Stephen Hardy
serves on the
Cancer Care
Centre Board and
is the founder and
managing director
of Promoting Good
Health Pty Ltd.

References and Suggested Reading

- (1) Hardy, S. J.: Causes Of Cancer: Everything Old Is New Again. Healthy Living, January – March 2016, pages 6 – 7. Available at: http:// drstephenhardy.com/wp-content/uploads/2016/03/ Hardy-Causes-of-Cancer-1-Healthy-Living-January-March-2016-Pages-6-7.pdf
- (2) Hardy, S. J.: Causes Of Cancer Part 2: What we do to ourselves. Healthy Living, April June 2016, pages 8 9. Available at: http://drstephenhardy.com/wp-content/uploads/2016/04/Hardy-Causes-of-Cancer-2-Healthy-Living-April-June-2016-Pages-8-9.pdf
- (3) Hardy, S. J.: Causes Of Cancer Part 3: What we've done to the Environment. Healthy Living, January March, 2017, pages 6 7. Available at: http://drstephenhardy.com/wp-content/uploads/2017/01/Hardy-Causes-of-Cancer-3-Healthy-Living-January-March-2017-Pages-6-7.pdf
- (4) Whiteman, D. C.; Webb, P. M.; Green, A. C.; Neale, R. E.; Fritschi, L.; Bain, C. J.; Parkin, D. M.; Wilson, L. F.; Olsen, C. M.; Nagle, C. M.; Pandeya, N.; Jordan, S. J.; Antonsson, A., Kendall, B. J.; Hughes, M. C. B.; Ibiebele, T. I.; Miura, K., Peters, S.; Carey R. N.: Cancers in Australia in 2010 attributable to modifiable factors: Introduction and overview. Aust NZ J Public Health; 39, 403 407, 2015; doi: 10.1111/1753-6405.12468. Available at: http://onlinelibrary.wiley.com/doi/10.1111/1753-6405.12468/epdf
- (5) Frazer, I.: Florey lecture to the University of Adelaide, September 2013: Available at: https://www.youtube.com/watch?v=q1Qg-iHhSto
- (6) At time of writing, ten (10) microorganisms are currently designated by the International Agency for Cancer Research (ICAR) as carcinogenic to humans. More will doubtless be added to this list as our understanding increases. https://www.iarc.fr/en/media-centre/iarcnews/pdf/TLO-INF-May2012-Eng.pdf For full report see: de Martel, C.; Ferlay, F.; Franceschi, S.; Vignat, J.; Bray, F.; Forman, D.; Plummer, M.: Global burden of cancers attributable to infections in 2008: A review and synthetic analysis. Lancet Oncol. 13, 607 615, 2012. Abstract available at: https://www.ncbi.nlm.nih.gov/pubmed/22575588

You may also wish to read:

Mager, D. L.: Bacteria and cance: cause, coincidence or cure? A review. Journal of Translational Medicine 2006, 4:14 doi:10.1186/1479-5876-4-14 Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1479838/

McLaughlin-Drubin M. E.; Munger, K.: Viruses associated with human cancer. Biochemica et Biophysica Acta (BBA), 1782 (3), 127-150, 2008. Available at: http://www.sciencedirect.com/science/article/pii/S0925443907002384

- (7) Eusebi, L. H.; Zagari, M.; Bazzoli, F.: Epidemiology of Helicobacter pylori infection. Helicobacter, 19 (Suppl. 1): 1–5 2014. doi: 10.1111/ hel.12165. Available at: http://www.helicobacter. org/content/publications/2014/HelYiH2014.pdf
- (8) Henrik Hjalgrim, H.; Friborg, J.; Melbye, M.: Chapter 53: The epidemiology of EBV and its association with malignant disease. In: Human Herpesviruses: Biology, Therapy, and Immunoprophylaxis. Arvin, A.; Campadelli-Fiume, G.; Mocarski, E.; et al., Editors. Cambridge: Cambridge University Press; 2007. Available at: https://www.ncbi.nlm.nih.gov/books/NBK47424/
- (9) Wenner, M.: Humans Carry More Bacterial Cells Than Human Ones. Scientific American, November 30, 2007. Available at: https://www.scientificamerican.com/article/strange-but-true-humans-carry-more-bacterial-cells-than-human-ones/
- (10) Nature Special: Human Microbiota. nature. com Available at: http://www.nature.com/nature/focus/humanmicrobiota/
- (11) Cho, I,; Blaser, M. J.: The Human Microbiome: At The Interface Of Health And Disease. Nature Reviews Genetics. 13(4), 260 – 270, 2012. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/ PMC3418802/pdf/nihms388822.pdf
- (12) Greshko, M.: How Many Cells Are in the Human Body—And How Many Microbes? National Geographic. 13 January 2016. Available at: http://news.nationalgeographic.com/2016/01/160111-microbiome-estimate-count-ratio-human-health-science/

The original publication on which the above article is based is:

Sender, R.; Fuchs, S.; Milo, R.: Revised estimates for the number of human and bacteria cells in the body. First published at bioRxiv: http://biorxiv.org/ content/early/2016/01/06/036103 and subsequently at: PLoS Biol 14(8): e1002533. doi:10.1371/journal. pbio.1002533, 2016. Available at: http://journals. plos.org/plosbiology/article?id=10.1371/journal. pbio.1002533

- (13) Lussier, D. M.; Schreiber, R. D.: Cancer Immunosurveillance: Immunoediting. Encyclopedia of Immunology, 4, 396 405, 2016. Available at: http://www.sciencedirect.com/science/article/pii/B9780123742797170018
- (14) Garrett, W. S.: Cancer and the microbiota. Science, 348, (6230), 80 – 86, 3 April 2015. Available at: http://science.sciencemag.org/content/ sci/348/6230/80.full.pdf
- (15) Ashraf R.; Shah, N. P.: Immune system stimulation by probiotic microorganisms. Crit Rev Food Sci Nutr., 54(7), 938 56, 2014. doi: 10.1080/10408398.2011.619671. Abstract available at: https://www.ncbi.nlm.nih.gov/pubmed/24499072



THEBIGRIDE Cambodia to Vietnam



Raising funds to help the Cancer Care Centre provide vital resources, courses, counselling and therapies to help support people with cancer and their families.

Raise the set fundraising target and have the opportunity to raise surplus funds to pay for your travel costs.

Cancer Care Centre and Connect Adventure have teamed up to deliver a unique, challenging and awesome cycling experience.

Individual & Team Registrations Welcome!

and take your cycling to the next level by really making a difference.

Extend your spirit of adventure Take on the challenge on behalf of, or in memory of someone close to you who has been affected by cancer.

Riding from Cambodia to Vietnam delivers a unique opportunity to cycle through some of the most breathtaking and diverse countrysides. While visiting sites rich in historical and military significance, and taking in stunning coastal sceneries, you will also meet the beautiful people of the area.







For further information & details about the ride please contact Leanne Isaacson, Centre Coordinator, Cancer Care

Centre, on



Join us for the ride of your life!



As is the case with many people, Jane and I have been touched by cancer through family and friends and it has been our desire for many years to do something worthwhile with respect to raising funds for cancer in some form or another.

Whilst we talked about it 10 years ago, it has taken to now to put it into action! There seems to be much fundraising on the research side and so we wanted to help from another angle, thus we chose the Cancer Care Centre so benefit could be provided from a wellness perspective. We felt this would help those in need directly and at this very moment. Jane had always had a desire to ride in Vietnam for a charity she was passionate about, to raise not only funds but also awareness, and I was happy to go along for the ride. Soon I was just as passionate as Jane!

We learnt the Cancer Care Centre was planning to embark on a Vietnam Bike Challenge and upon meeting with the Manager Jane Horton in 2016, we liked what we heard about the services Cancer Care Centre provide and so the relationship began.

We were novices to fundraising and it did take some time to get our head around what to do and for the momentum to take off, but soon we were underway and putting plans in place.

Our first fundraising event was a movie night at Event Cinemas in May 2016, where 100 people attended and all enjoyed a good movie whilst helping a good cause. Raffle tickets and silent auctions, along with kind donations from those who could not attend, saw nearly \$3000 raised. We were wrapped with this great start! We then decided we wanted a bigger event that would bring more people and thus raise not only more funds but also awareness for the Cancer Care Centre.

We decided on a Bogan Bingo night. This was held in October last year with nearly 150 people in attendance. Everyone dressed up in their best bogan outfits and brought along a great fun attitude. It was a very enjoyable night indeed; the feedback being that it was the best fun many had had in a long time. More importantly, everyone felt that the money being raised was for a very worthy cause. The night raised \$7000 and we were extremely excited by this and very appreciative of our friends and family for their full support. With our fundraising efforts, overall we raised \$10,000 for the Centre and know this will go a long way to helping their clients.

Whilst the bike ride has not yet happened, due to circumstances beyond our control, we are still very much focused on undertaking the bike ride at some point. We are hoping it will be later this year. We would like to finish what we started and that is to raise more awareness for the Cancer Care Centre via the bike ride/social media and in the process perhaps raise more funds along the way.

If anyone is interested in joining the bike trip and raising funds for a good cause they can contact the Cancer Care Centre for more information or you are welcome to have your details passed on to Jane and myself. We would be happy to share our experience and get you excited about the possibility of riding from Cambodia to Vietnam.

written by Jenny Stanley

Cancer Care Centre at the "Survivorship Conference" recently held in Adelaide

Cancer Care Centre had an exhibition stand at the COSA & Flinders Centre for Innovation in Cancer Survivorship Conference at the Convention Centre in February. Our volunteers, Centre Coordinator and Board members manned the stand during the entire conference and some great connections were made.

Three Cancer Care Centre members spoke at the Conference. Each gave amazing presentations, sharing their story of their own cancer journey.

It was very pleasing to hear them each mention how complementary therapies and being members of CCC had played an important role in their wellbeing.

During the conference, many interesting topics were discussed. These included the financial impact of cancer, how cancer effects families – in particular children, parents & partners, the significance of fatigue management, the role of the internet & technology as an

information source and support mechanism, and issues faced for rural and regional cancer sufferers.

Technology was on show with Jackie Herigodt from Imerman Angels presenting live on the "Big Screen" from Chicago.
This showed the power of being able to share information 'live' no matter what location.

As a Centre, we will be exploring the use of technology to present information to our members as well as for counselling & support groups.

The presence of the Cancer Care Centre at the conference was a great success with increased partnerships being made with other organisations which will continue to be developed in the future.

Make it a **meatless Monday**

You may not wish to become vegetarian, but have you thought about introducing a meatless meal each week? One of our clients has a 'meatless Monday' each week and says that even her teenagers have embraced the idea.

Stuck for something tasty to cook? How about swapping hamburgers for veggie burgers? Cheap, nutritious and a real winner with everyone, why not try 'Black Bean and Quinoa Veggie Burgers' for your next Meatless Monday?

Black Bean & Quinoa Veggie Burgers

Ingredients:

½ cup dry quinoa

1 teaspoon olive oil
½ red onion, chopped
3 cloves garlic, minced
½ teaspoon salt, divided
425mg can black beans,
drained and rinsed
2 tablespoons tomato paste
1 large egg
1 small can corn
½ cup coriander, chopped
2 teaspoons ground cumin
½ cup rolled oats
¼ cup plain flour

Method: Place the quinoa in a small saucepan with 1 cup of water. Set the saucepan over medium-high heat and bring to a boil. Reduce heat to low, cover the pan, and cook 10-15 minutes until the water is absorbed and quinoa is cooked. Remove from heat. Note: this step can be done ahead of time.

Heat the oil in a small pan over medium heat and add the onion and garlic. Add ¼ teaspoon salt and sauté until onions are softened, 5-6 minutes. Place the mixture into a large bowl. Add black beans to the bowl and using a potato masher or fork, mash together until a pasty mixture forms.

Stir in the tomato paste, egg, corn, coriander, cumin and remaining ¼ teaspoon salt.
Stir in the cooked quinoa, oats, and flour until well mixed. Form the mixture into 6 equal patties, compacting them well with your hands as you form them. Place the patties on a baking sheet, cover them with plastic wrap and refrigerate for at least a few hours or overnight.

Cook patties in a non-stick fry pan until golden brown and crisp.





Shining Through photographic fundraiser

Stop Press! Shining Through photographic fundraiser has been held over until May this year. This is a wonderful opportunity for you to be photographed, at no cost to you, by award winning photographer Heidi Linehan. Please refer to our website for more details or ring and speak with the Centre's Coordinator Leanne Isaacson.

A big thank you to our wonderful volunteers





Cancer Care Centre...
a place of help, hope and understanding.



Been diagnosed with cancer?

Start your journey with a free Pathways appointment.



Pathways is a free service offered by the Cancer Care Centre to people with cancer.

In a caring and supportive environment, one of our Support Workers will meet with you and listen to your story.

Telling your story is an opportunity to spend time with someone who cares, in a private, quiet environment to explore and prioritize goals, needs, and devise a healing plan appropriate to you and your personal cancer journey.

A Pathways appointment is also available to carers of someone with cancer. The Support Worker will explore how you can be of support to that person, while at the same time taking care of yourself.

The Support Worker will link you to services that will help assist you – either within Cancer Care Centre or with other community organisations.

A Pathways appointment is of one-hour duration and is your first step in complementary care for your cancer journey.



Cancer Care Centre... empowering individuals and families as they travel the cancer journey.