SUMMER

The big health message for summer is – hydration! Make sure you drink plenty of water (unless your doctor advises otherwise). For those with lots of phlegm, being properly hydrated thins out the mucus, making it easier to cough up and less likely to stay down, harbouring bugs.

Put a jug of water and a glass out where you’ll see it and have a drink every time you pass. Have a glass of water with each meal.

Keep up the walking - but choose your time carefully to avoid getting too hot. Early morning or late afternoon are obviously cooler. Or try walking in an air-conditioned shopping centre, arriving early to avoid the crowds. Afterwards reward yourself with a cuppa and a chat with other walkers. Join a mall walking group – see page 11 for details.

WISHING READERS A HEALTHY & JOYFUL CHRISTMAS AND AN EXCITING 2019

L I F E CHRISTMAS PARTY
5 DECEMBER
RSVP today- details page 3.
LIFE EVENTS

Recent

September
We took part in a focussed discussion on sleep. A summary appears on page 22.

October
Our scheduled October speaker, Di Inglese was unable to come due to illness, but we will re-schedule her talk in 2019 on writing your own life story. Instead Associate Professor Cecilia Prele and Associate Prof Steve Mutsaers stepped into the breach. They are key researchers in the tissue repair unit of the Institute for Respiratory Health and they outlined their proposal to collaborate with LIFE members to enable stronger health consumer input into the direction of their respiratory research. This discussion seemed to be of great interest to all those present.

November
Phil Bianchi, bush historian, 4WD driver and author, presented an interesting, illustrated talk on the history of the Canning Stock Route from Wiluna to Halls Creek. His book on the topic, Work Completed, Canning, was published in 2013 by Hesperian Press. Catch Phil on the web at www.philbianchi.com.au/ or on Facebook. Thanks so much Phil.
Coming

LIFE Summer Lunch is our Christmas Party

Wednesday 5 December from 12 noon to 2.30pm

Level 2 (not our usual level 6)

Perkins Building, QEII Medical Campus

Mains: This year’s Christmas lunch will be partly catered with the costs be shared by LIFE and the Institute for Respiratory Health. Our main course will be supplied by caterers so it’s vital you RSVP as soon as possible. Family and friends are welcome - but we need to know your numbers by 29 November.

Dessert: If you’d like to bring something sweet and celebratory for afters - please do.

RSVP essential by Thursday 29 Nov to Mary E mvfedele@bigpond.com or T 9337 1286. Please advise Mary of any special dietary requirements.

Details of meetings in the first quarter of 2019 are listed on the back cover.
RESPIRATORY NEWS

1 July marked the date your subscription was due. Renew for only $20 a year at a L I F E meeting, online or phone Sarah Cermak T 6151 0815. If you are not sure whether you have renewed, ask Sarah. Sadly, without renewal you will no longer be on our email list.

Your community membership of the Institute for Respiratory Health brings you into L I F E, its community support arm.

Have A Go At Have-A-Go? Update

L I F E was considering hosting a booth at Have A Go Day on Wednesday 14 November, the seniors expo held annually at Burswood Park by the WA Seniors Recreation Council. We approached the Clinical Trials Unit of the Institute for Respiratory Health and they were keen to do this with us. Unfortunately we were a bit slow off the mark and by the time we contacted the Seniors Recreation Council there were no more booths left! Next year we plan to act more promptly.

L I F E Diary Dates 2019

L I F E will meet at 12 noon on the following dates in 2019 (always 1st Wednesday of the month from February to December). No meeting in January.

6 Feb, 6 Mar, 3 Apr, 1 May, 5 Jun
3 Jul, 7 Aug, 4 Sep, 2 Oct, 6 Nov, 4 Dec.

We will hold lunch in the community in autumn, winter and spring, dates yet to be decided. The December meeting is usually our Christmas party.

LUNG LAUGHS

THE LITTLE TOE

Designed specifically to Geo-locate furniture in low light conditions.

HUSBANDS ARE THE BEST PEOPLE TO SHARE YOUR SECRETS WITH.

THEY'LL NEVER TELL ANYONE BECAUSE THEY AREN'T EVEN LISTENING.
**INSIGHT TIMER**

*Review by member Heather Windsor*

Insight Timer is a meditation app\(^1\) offering secular or Buddhist meditations, which are timed for easy use and application. I use it to calm my breathing, anxieties, as an adjunct to quitting smoking, other addictions, and generally improving my mental health.

Insight Timer is easy to use – even although I’m not very tech savvy. There are thousands of free meditation apps for every purpose, including getting to sleep. The app also links to paid meditation courses and also provides music meditations. The app menu is easy to use and includes adequate descriptions and the name and photo of the practitioner.

You can see where people are meditating throughout the world using the app, and even befriend other meditators, if you wish. Selecting a meditation according to the time I have available is helpful as I have different commitments across the day. Forget the doctor’s waiting room glossy mags,

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\(^1\) App is short for application which means a software program that you can download from the internet to your smartphone or tablet or computer. Some apps are free, others cost.
Instead of making small talk with strangers or experiencing existential angst, I just enjoy the moment and relax. You’ll need head phones or ear plugs to use the app when you’re out and about. I have sometimes found it a bit hard to get out of (the meditative state) at the end of my session - but that could just be my faulty skills. Give yourself a present and meditate today! 5 stars from me.

I have also heard of, and been recommended 'Let's Meditate but have not looked at it yet.

Thanks Heather. Insight Timer is available free for your tablet or phone from Google Play Store or the Apple App Store.

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**SHORTS**

*Links to source articles are available online at the L I F E webpage or in the electronic edition.*

**WHY ARE SUGARY DRINKS LINKED TO WEIGHT GAIN?**

The problem with sugary drinks is that you can down a lot of liquid in a very short time - up to 600mL (or about 1000 kJ) per minute. This means that the average adult could drink their entire energy needs for the day in 7-10 minutes! If you drink this much and also eat three meals, you will certainly gain weight.

Source [Live Lighter](#)

**SLEEP APNOEA EQUIPMENT**

Dianne Fisher from Healthy Sleep Solutions (HSS), recently contacted L I F E to introduce herself. She is an owner of HSS, part of the Air Liquide Healthcare Group. As well as selling CPAP and other sleep apnoea equipment, she also sells portable oxygen concentrators.
Healthy Sleep Solutions is headquartered in Alexandria, NSW but has sleep clinics in many parts of Australia - nine in Western Australia including Busselton, Bunbury, Mandurah, Baldivis and Kalgoorlie.

Dianne is a sleep scientist and CPAP therapist and can be reached at T 08 9200 2214; T 08 62705445; M 0410 689 274

E dianne@hssperth.com.au   W www.healthysleep.net.au/

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**MILK DRINKING & PHLEGDM**

Drinking milk does not cause more phlegm! This old coconut has been busted by science.

While certainly the texture of milk can make some people feel their mucus and saliva is thicker and harder to swallow, there is no evidence and indeed evidence to the contrary that milk leads to excessive mucus secretion.

Ian Balfour-Lynn from Royal Brompton Hospital in the UK has checked on studies going back over the last 70 years.

The sticky biochemical compounds in saliva could be interacting with the emulsive properties of milk to produce more of the liquid and give the impression of excess mucus. People think there is a link when it fact - there isn’t.

Furthermore, by avoiding milk you are robbing yourself of an important source of vital nutrients, especially B2, B12, calcium and phosphorus.

[Source](#)

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**AUTOIMMUNITY, COPD & GENES**

Autoimmunity plays a role in COPD according to a recent genetic study aimed at identifying early indicators of COPD risk. This is an interesting development.

Genome-wide association studies have already identified several genes that contribute to the development of COPD, but scientists still lack a complete understanding of the pathogenesis of this disease. In this recent study, the researchers looked at the link between genetic variants in COPD and how

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2 **Autoimmunity** is the system of immune responses of an organism against its own healthy cells and tissues. Instead of protecting you from outside threats, the body is seeing parts of itself as the threat.
patients actually present clinically, irrespective of the analysis of their genes. This aimed to understand the biological mechanisms underlying COPD.

(The study did not challenge the established association between cigarette smoking and COPD.)

Source

COPD, VITAMIN D & MORTALITY

Previous studies has established the important role of vitamin D levels and mortality in people with COPD. A large scale study (over 6,600 people) in Finland over 3 years asked the question, do COPD and vitamin D levels act jointly or independently in predicting mortality? For example, do you have to have COPD for vitamin D levels to be an important factor in predicting mortality? What about people without COPD? They found that both factors, vitamin D and having COPD status could independently affect mortality, but that those with COPD were particularly sensitive to vitamin D levels.

How to get enough vitamin D

Outdoors: 10-15 minutes of sunshine

Food: fatty fish, like tuna, salmon, sardines and mackerel; mushrooms; foods fortified with vitamin D, like some dairy products, soy milk, and some cereals; liver; cheese; egg yolk.

Foods alone are not usually enough. You need to get outside too!

Sources [Source](#) and [Jean Hailes Foundation](#)

VITAMIN D & CARDIORESPIRATORY FITNESS

Higher levels of vitamin D are associated with better exercise capacity, according to new US research. It’s already known that vitamin D plays an important role in heart and bone health, among other roles. Sources of vitamin D are dietary, some sunshine exposure, and supplements. But be careful not to take too much vitamin D through pills as this can cause excess calcium and subsequent heart problems.

Source
ORAL FLU VACCINE – COMING SOON?

If you are one of those people who doesn’t like needles this should interest you. We have written before about the development of a flu vaccine tablet. A recent randomised control trial in California USA with 150 people has shown that the immune response in the body is just as good as the injectable version.

Source

MEASURING COUGH STRENGTH

Ever wondered how doctors measure the strength of your cough? And why would they need to?

People with chronic cough (like many L I F E members) may have to undergo keyhole surgery. It can be very important to know how hard you might cough during the procedure.

Traditionally cough pressure has been measured using a small balloon inserted into the oesophagus (gullet) or the stomach. This is quite invasive and uncomfortable for many.

An enterprising group of Spanish researchers recently compared measurements from the traditional methods, as well as via a catheter in the rectum, a major blood vessel and the bladder. They found all methods provided adequate information about cough strength, although the bladder readings were a bit higher than the others.

Source

LOWER RESPIRATORY INFECTIONS ACROSS THE WORLD

Lower respiratory³ infections are a leading cause of morbidity and mortality around the world. The Global Burden of Diseases, Injuries, and Risk Factors (GBD) Study 2016 covered 652,572 lower respiratory infection deaths,

³ The lower respiratory tract includes the bronchial tubes and the lungs. Bronchitis and pneumonia are infections of the lower respiratory tract. In contrast the upper respiratory tract includes the mouth, nose, sinus, throat, larynx (voice box), and trachea (windpipe). Upper respiratory infections are often referred to as "colds."
providing an up-to-date analysis of the impact of these infections in 195 countries. A recent study assessed cases, deaths, and causes of lower respiratory infection deaths spanning the past 26 years and showed how the burden of lower respiratory infection has changed in people of all ages.

Their findings show there has been substantial progress in reducing lower respiratory infection burden. However this progress has not been equal across locations, has been driven by decreases in several primary risk factors, and might require more effort among elderly people. By highlighting regions and populations with the highest burden, and the risk factors that could have the greatest effect, funders, policy makers, and programme implementers can be more effective in reducing lower respiratory infections among the world’s most susceptible populations.

Source Funded by the Bill & Melinda Gates Foundation.

NOSE PICKING & RUBBING

Pneumonia-causing bacteria can be spread through picking and rubbing the nose, according to an English pilot study with adults published recently.

*Pneumococcus* is known to be spread through inhaling airborne droplets containing the bacteria, for example in coughs and sneezes. This study is the first to show that transmission can also occur via contact between the nose and the hands after exposure to pneumococcus bacteria.

Researchers found that bacteria can spread at the same rate whether it is dry or wet, and at the same rate when a person picks or pokes their nose, as when they rub their nose with the back of their hands.

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4 a common cause of pneumonia and the microbe vaccinated against in the pneumonia vaccine.
The results suggest that ensuring good hand hygiene and keeping toys clean could help to protect young children from catching and spreading the bacteria on to other children and their elderly relatives, who may be more susceptible.

Source

MALL WALKING GROUPS IN PERTH

Following on from the front page story, there are mall walking groups at Belmont Forum, Garden City, Cockburn Gateway, Karrinyup, Mirrabooka.

More COTA 9472 0104

DON'T GIVE DECONGESTANTS TO YOUNG CHILDREN FOR COMMON COLD SYMPTOMS

Decongestants or medicines containing antihistamine should not be given to children aged younger than 6 years, and only given with caution in children aged under 12 years. There is no evidence that they alleviate symptoms such as a stuffy or runny nose, and their safety is unclear, according to a Queensland study published recently in the British Journal of Medicine.

Source

PREVENTING ROSS RIVER VIRUS TRANSMISSION

Ross River virus is the most common mosquito-borne virus that can cause disease in humans in Australia. Symptoms typically start with flu-like illness but can include additional symptoms such as painful or swollen joints, sore muscles, skin rashes, fever and headaches. People can help reduce their risk by wearing long-sleeved, light coloured clothing, by using personal repellent and by cleaning up standing water around their home such as bird baths and animal drink containers.

More Arthritis & Osteoporosis Western Australia has booklets on how to manage fatigue and sleep with Ross River virus. E general@arthritiswa.org.au T 9388 2199

OUR LINKS

New readers might be puzzled about the relationship between L I F E, the Institute for Respiratory Health, the Harry Perkins Institute for Medical Research, and the Perkins Building (where we meet). Here's a diagram showing the relationships between them. Hope that makes things a bit clearer. Thank you David for asking the question that was probably on the lips of others too.
**L I F E (ex-LISA)**
Independent self help support group since 1992

**Institute for Respiratory Health**
(ex- AARI, LIWA)
- research centre of UWA
- non-government, not-for-profit charitable organisation
- clinical trials
- integrated scientific & clinical research into respiratory disease since 1998

**Community support arm since 2009**

**Lung Foundation Australia (QLD)**

**Affiliated group**

**Harry Perkins Institute for Medical Research**
(ex WA Institute for Medical Research) since 1998
- research institute of UWA
- adult cardiovascular, cancer & diabetes research etc.
- clinical trials @ Linear Clinical Research Ltd
- 2 buildings (north) at QEII, (south) at Fiona Stanley

**Tenant**

**UNIVERSITY OF WESTERN AUSTRALIA**
Teaching & Research

**Partner**
HEALTHY EATING

This issue deals with a well-known friend, vitamin C. We all know the story of Captain Cook commanding his sailors to drink citrus juice to avoid scurvy on long voyages\(^5\). There has long been a good community understanding of the benefit of vitamin C-rich foods in our diet.

### PLEASE READ THIS

*We should get most of our nutrients from food,* advises the federal government’s *Australian Guide to Healthy Eating*. Foods contain vitamins, minerals, dietary fibre, and other substances that benefit health. In some cases, fortified foods and dietary supplements may provide nutrients that otherwise may be consumed in less-than-recommended amounts.

*If you are thinking of taking a vitamin supplement consider whether you can get adequate amounts of it in your diet, whether you have any need for extra, the dangers of taking an excess of that vitamin, and whether the vitamin interacts with other medications you are taking.*

*Your pharmacist and your GP can help you decide. A nutritionist may also be able to help.*

### Vitamin C

Vitamin C, also known as ascorbic acid, is a water-soluble nutrient found in some foods. In the body, it acts as an antioxidant, helping to protect cells from the damage caused by free radicals.

Free radicals are compounds formed when our bodies convert the food we eat into energy. (People are also exposed to free radicals in

\(^5\) It is because of this that British sailors used to be known as “limeys” as they were among the world’s first to use limes to prevent scurvy on long voyages of exploration.
the environment from cigarette smoke, air pollution, and ultraviolet light from the sun.)

The body also needs vitamin C to make collagen, a protein required to help wounds heal. In addition, vitamin C improves the absorption of iron from plant-based foods (like green leafy veg) and helps the immune system work properly to protect the body from disease.

**How much vitamin C do I need?**

The table at right shows daily recommended allowances. If you smoke, add 35 mg to these values to calculate your total daily recommended amount.

**What foods provide vitamin C?**

As you know, fruits and vegetables are the best sources of vitamin C. You can get recommended amounts of vitamin C by eating a variety of foods including the following:

- Citrus fruits (such as oranges, limes and grapefruit) and their juices, as well as red and green pepper and kiwifruit, which have a lot of vitamin C.

- Other fruits and vegetables—such as broccoli, strawberries, rockmelon, baked potatoes, and tomatoes—which also have vitamin C.

- Some foods and beverages that are fortified with vitamin C. To find out if vitamin C has been added to a food product, check the product label.

The vitamin C content of food may be reduced by prolonged storage and by cooking. Steaming or microwaving may lessen cooking losses. Fortunately, many of the best food sources of vitamin C, such as fruits and vegetables, are usually eaten raw.

<table>
<thead>
<tr>
<th>Life Stage</th>
<th>Recommended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Birth to 6 months</td>
<td>40 mg</td>
</tr>
<tr>
<td>Infants 7-12 months</td>
<td>50 mg</td>
</tr>
<tr>
<td>Children 1-3 years</td>
<td>15 mg</td>
</tr>
<tr>
<td>Children 4-8 years</td>
<td>25 mg</td>
</tr>
<tr>
<td>Children 9-13 years</td>
<td>45 mg</td>
</tr>
<tr>
<td>Teens 14-18 years (boys)</td>
<td>75 mg</td>
</tr>
<tr>
<td>Teens 14-18 years (girls)</td>
<td>65 mg</td>
</tr>
<tr>
<td>Adults (men)</td>
<td>90 mg</td>
</tr>
<tr>
<td>Adults (women)</td>
<td>75 mg</td>
</tr>
<tr>
<td>Pregnant teens</td>
<td>80 mg</td>
</tr>
<tr>
<td>Pregnant women</td>
<td>85 mg</td>
</tr>
<tr>
<td>Breastfeeding teens</td>
<td>115 mg</td>
</tr>
<tr>
<td>Breastfeeding women</td>
<td>120 mg</td>
</tr>
</tbody>
</table>
Because vitamin C is water soluble any excess on a particular day is not stored in the body, but excreted into the urine. So you need to eat good vitamin C sources daily.

**What kinds of vitamin C dietary supplements are available?**

Most multivitamins include vitamin C. Vitamin C is also available alone as a dietary supplement or in combination with other nutrients.

The vitamin C in dietary supplements is usually in the form of ascorbic acid, but some supplements have other forms, such as sodium ascorbate, calcium ascorbate, other mineral ascorbates, and ascorbic acid with bioflavonoids. Research has not shown that any form of vitamin C is better than the other forms.

**Am I getting enough vitamin C?**

Most people in the United States (and presumably Australia) get enough vitamin C from foods and beverages. However, certain groups of people are more likely than others to have trouble getting enough vitamin C:

- People who smoke and those who are exposed to second-hand smoke, in part because smoke increases the amount of vitamin C that the body needs to repair damage caused by free radicals. People who smoke need 35 mg more vitamin C a day than non-smokers.
- Babies who are fed evaporated or boiled cow's milk, because cow’s milk has very little vitamin C and heat can destroy vitamin C. Cow’s milk is not recommended for infants under 1 year of age. Breast milk and infant formula have adequate amounts of vitamin C.
- People who eat a very limited variety of food.
- People with certain medical conditions such as severe malabsorption, some types of cancer, and kidney disease requiring haemodialysis.
What happens if I don’t get enough vitamin C?

Vitamin C deficiency is rare in (Australia,) the United States and Canada. People who get little or no vitamin C (less than 10 mg per day) for many weeks can get scurvy.

Scurvy causes fatigue, inflammation of the gums, small red or purple spots on the skin, joint pain, poor wound healing, and corkscrew hairs. Additional signs of scurvy include depression as well as swollen, bleeding gums and loosening or loss of teeth. People with scurvy can also develop anaemia. Scurvy is fatal if not treated.

What are some effects of vitamin C on health?

Scientists are studying vitamin C to understand how it affects health. Here are several examples of what this research has shown.

**Cancer prevention and treatment**

People with high intakes of vitamin C from fruits and vegetables might have a lower risk of getting many types of cancer, such as lung, breast, and colon cancer. However, taking vitamin C supplements, with or without other antioxidants, doesn’t seem to protect people from getting cancer.

It is not clear whether taking high doses of vitamin C is helpful as a treatment for cancer. Vitamin C’s effects appear to depend on how it is administered to the person. Oral doses of vitamin C (tablets or powder) can’t raise blood levels of vitamin C nearly as high as intravenous doses given through injections. A few studies in animals and test tubes indicate that very high blood levels of vitamin C might shrink tumours. But more research is needed.
to determine whether high-dose intravenous vitamin C helps treat cancer in people.

Vitamin C dietary supplements and other antioxidants might interact with chemotherapy and radiation therapy for cancer. People being treated for cancer should talk with their oncologist before taking vitamin C or other antioxidant supplements, especially in high doses.

**Cardiovascular disease**

People who eat lots of fruits and vegetables seem to have a lower risk of cardiovascular disease. Researchers believe that the antioxidant content of these foods might be partly responsible for this association because oxidative damage is a major cause of cardiovascular disease. However, scientists aren’t sure whether vitamin C itself, either from food or supplements, helps protect people from cardiovascular disease. It is also not clear whether vitamin C helps prevent cardiovascular disease from getting worse in people who already have it.

**Age-related macular degeneration (AMD) and cataracts**

AMD and cataracts are two of the leading causes of vision loss in older people. Researchers do not believe that vitamin C and other antioxidants affect the risk of getting AMD. However, research suggests that vitamin C combined with other nutrients might help slow AMD progression.

In a large study among older people with AMD who were at high risk of developing advanced AMD, those who took a daily dietary supplement with 500 mg vitamin C, 80 mg zinc, 400 IU vitamin E, 15 mg beta-carotene, and 2 mg copper for about 6 years had a lower chance of developing advanced AMD. They also had less vision loss than those who did not take the dietary supplement. People who have or are developing the disease might want to talk with their doctor about taking dietary supplements.

The relationship between vitamin C and cataract formation is unclear. Some studies show that people who get more vitamin C from foods have a lower risk of getting cataracts. But further research is needed to clarify this association and to determine whether vitamin C supplements affect the risk of getting cataracts.
The common cold

Although vitamin C has long been a popular remedy or prevention for the common cold, research shows that for most people, vitamin C supplements do not reduce the risk of getting the common cold. However, people who take vitamin C supplements regularly might have slightly shorter colds or somewhat milder symptoms when they do have a cold. Using vitamin C supplements after cold symptoms start does not appear to be helpful.

Can vitamin C be harmful?

Taking too much vitamin C can cause diarrhoea, nausea, and stomach cramps. In people with a condition called hemochromatosis, which causes the body to store too much iron, high doses of vitamin C could worsen iron overload and damage body tissues.

The upper limits for vitamin C are listed in the table at right.

Are there any interactions with vitamin C that I should know about?

Vitamin C dietary supplements can interact or interfere with medicines that you take. Here are several examples:

- Vitamin C dietary supplements might interact with cancer treatments, such as chemotherapy and radiation therapy. It is not clear whether vitamin C might have the unwanted effect of protecting tumour cells from cancer treatments or whether it might help protect normal tissues from getting damaged. If you are being treated for cancer, check with your healthcare provider before taking vitamin C or other antioxidant supplements, especially in high doses.

- In one study, vitamin C plus other antioxidants (such as vitamin E, selenium, and beta-carotene) reduced the heart-protective effects of two drugs taken in combination (a statin and niacin) to control blood-cholesterol levels. It is not known whether this interaction also occurs with other statins. Healthcare providers should monitor lipid levels in people taking both statins and antioxidant supplements.

Tell your doctor, pharmacist, and other healthcare providers about any dietary supplements and medicines you take. They can tell you if those dietary supplements might interact or interfere with your prescription or
over-the-counter medicines or if the medicines might interfere with how your body absorbs, uses, or breaks down nutrients.

**Vitamin C plays many important roles in our bodies - but the best way to get it is by a diet rich in vitamin C, through fresh, and - as far as possible - raw fruit and vegetables. If this is a challenge for you, the next article should be of interest.**

*Source based on National Institutes of Health (US) [Office of Dietary Supplements](https://ods.od.nih.gov)*

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## GETTING ENOUGH FRUIT AND VEG?

In Australia, less than one in 10 people eat enough vegetables.

This is tragic, given high vegetables intakes are associated with better health, including a lower risk of heart disease, some cancers, and type 2 diabetes.

For every extra 200 grams of vegetables and fruit eaten each day, there’s an 8 per cent reduction in the risk for heart disease, a 16 per cent risk reduction for stroke and a 10 per cent reduction in risk of dying from any cause, according to research using data from 95 individual studies.

When the researchers drilled deeper into specific types of vegetables and fruit, they found that eating more apples and pears, citrus fruits, cruciferous vegetables (like bok choy, broccoli, Brussels sprouts, cauliflower, radish, swede, turnip, and watercress), green leafy vegetables and salads were all associated with a lower risk for heart disease and death.

They also found a lower risk of getting any type of cancer among those with the highest intakes of green-yellow vegetables such as carrots, corn, pumpkin, zucchini, green beans and cruciferous vegetables (cabbage, broccoli and Brussel sprouts).

Across the globe, about 7.8 million deaths are attributed to low intakes of vegetables and fruit.
But in a country like Australia, you'd think it would be easy to eat your greens, as well as a range of other vegetables.

Reasons for not eating them include not liking the taste, a perceived lack of time or cooking skills, and lack of access to fresh produce.

These are all barriers to boosting our vegetable intake — so let's check them out in more detail.

**Taste**

If you hate vegetables, it could be because you have inherited "super-taster" genes.

About 20 per cent of the population are supertasters and rate cruciferous vegetables as tasting up to 60 per cent bitterer compared with non-tasters, who make up about 30 per cent of the population.

What they are "tasting" is a naturally occurring chemical called *glucosinolate* that is released more when vegetables are cut, cooked or chewed.

Being a super-taster probably offered a survival advantage in ancient times, because it would have meant you were better able to detect poisonous substances (which tend to be bitter), and work out which plants were safer to eat and which to avoid.

The good news is that repeated exposure to these bitter tastes means you do learn to like them over time.

If you hang around with others eating lots of vegetables, or if your parents and household members eat a lot of vegetables, then you will end up eating more too.

True supertasters will prefer vegetables that are not bitter, including beans, beetroot, carrots, corn, eggplant, lettuce, onion, peas, pumpkin and sweet potato.

**Cooking**

If vegetables are off your menu because of how they taste, it is worth a rethink on the way you're preparing them. How you cook vegetables can improve their taste and for super tasters, can mask the bitterness.

**Try some of these fast and easy tricks**

Add a "decoy" flavour. Piperine is the 'hot' taste in black pepper. Adding pepper, or chilli or other spices, distracts your taste buds from noticing the bitter taste of vegetables. Lemon juice can do likewise.

Mask the taste by using cheese sauce. Make it quickly by dissolving a heaped teaspoon of cornflour into a half cup of reduced fat milk in a microwave-proof
jug. Cook on high for 30 seconds, stir and add a cheese slice broken into pieces, and cook for another 30 seconds. Stir again, cook for another 30 seconds, then stir until the melted cheese is fully dissolved and the sauce thickens.

Cook briefly by stir-frying, microwaving or steaming, so the vegetables are still a bit crunchy.

Access

In some regions of Australia, getting good quality fresh vegetables at a reasonable cost is a major challenge. Prices of vegetables can be more than double the cost of supermarkets in cities. This is where modular farms — small indoor farms the size of a shipping container — could potentially help in terms of access and freshness.

A modular farm can be placed just about anywhere from a busy city to a rural community, with the caveat that these farms still need water, although the amount is conservative. However, the power usage is high because they need to run lights 24 hours a day.

Another way to improve your access to a regular supply of vegetables, if distance or affordability is a concern, is by using canned and frozen varieties.

For canned vegetables, choose the salt-reduced varieties where possible. Frozen vegetables on the other hand, are frozen within hours of being harvested and can be even "fresher" than what you buy at the supermarket.

If you live near a market, you could set up a co-op and buy veggies in bulk as a group.

And if you live within a reasonable distance of a market, you could set up a local co-op and take turns to buy in bulk direct and distribute to the members. The Sydney Food Fairness Alliance have a guide to setting up a food co-operative.

With contributions from Clare Collins, a professor of nutrition and dietetics, at the University of Newcastle.

More
SLEEP

At our September meeting we took part in a focussed discussion on the theme of sleep. Here is a summary of the main points members reported.

**Things that may keep us awake or wake us up**

Noise, coughing, cannot breathe, bladder, thoughts, too cold, too hot, pain

Some people go to bed early in winter to save the cost of heating the living room. This can lead to sleeplessness because of spending too long awake in bed. You cannot sleep the whole time if you go to bed at 8. Your brain can become accustomed to doing other things in bed (reading, TV etc), not sleeping, so a cycle of insomnia can start up.

Other people find their projects keep them up at night – such as family history or the Men’s Shed projects.

**L I F E TOP Tips to get to sleep - or get back to sleep**

- **Have a regular night time ritual** - e.g. have a milky drink, like Horlicks, have a regular time to get ready for bed (to train your brain), set up your CPAP machine, have a good pillow, ear plugs against noise in your area, keep light sources down, get up and do something if you’ve been awake for more than 15-20 minutes, listen to podcasts or the radio in bed, read for a short while. Tom tells Google Home to play music for 30 minutes.

- **Be active in the daytime**, including exercise – members reported better sleep when they had exercised that day.
• **Mental attitude** to being awake at night – it’s better to lie awake and relaxed than to get anxious about being awake and worry about being sleep-deprived on the following day.

• **Avoid these things** for a good night’s sleep – caffeine drinks after 4 or 7, clock-watching, screens (TV, phone, tablet), being too sedentary, mentally stimulating activities. Some people avoid drinking liquid after 4pm.

• **Resolving sleep problems** needs an individual approach. Work out what works best for you.

• **Accept** the odd bad night - don’t worry about it too much.

**478 technique for going to sleep (Jenni’s tip)**

- Breathe in for 4
- Hold your breath for 7
- Breathe out for 8 (with a “whoosh”)
- Count at a comfortable rate (doesn’t have to be 1 count 1 second)
- Repeat 3-4 times

The first chart below demonstrates the difference in sleep patterns between young and older adults. It is normal for older people to awaken more often during the night than for younger people. We also do not reach as deep a sleep for as long.

Once you know this is normal, maybe it is easier to accept and worry less.

The second chart below shows that as we age, we spend longer in bed awake than younger people, and less time in REM sleep, the sleep phase when it’s believed we dream.

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6 REM stands for Rapid Eye Movement
Changes in Sleep with Aging

Sleep is cyclical

The ability to stay asleep changes most markedly with aging
Finding treatment for long term sleep problems

Ask your GP to be referred to a sleep physician or a sleep disorders clinic.

*More*

Sleep Disorders Australia  [www.sleepoz.org.au](http://www.sleepoz.org.au)
Health Direct  1800 022 222 (24/7)
Sleep Health Foundation Australia  T 02 8814 8655

The next focussed discussion will be in 2019. If you would like to suggest a topic for discussion please let Jenni or Sal know. Contact details on the back page.

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**HOW CAN I GIVE BACK?**

Doing something that helps make the world a better place, feels good too. There’s always something you can do - no matter how advanced your condition.

1. **Volunteer** for L I F E - help our L I F E group. Or another community organisation near you. Help in the Breath of L I F E mailout or join the L I F E working bee which helps the Institute for Respiratory Health’s Clinical Trials Unit. Just speak to Sal at the next L I F E meeting or call her T 9331 3651  E salhyder1@gmail.com

2. **Spread the word** with family and friend. Tell them about L I F E, the Institute for Respiratory Health and respiratory conditions. Our business cards have L I F E contact details and a space for your name and phone number. Contact us for a bundle.

3. **Register with the Clinical Trials Unit** of the Institute for Respiratory Health to take part in the trial of a new respiratory medication. Call T  6457 3198

4. **Become a simulated patient** at the University of Western Australia’s School of Medicine and help train doctors of the future. Both people with stable medical conditions and healthy volunteers are required. Call the Doctor of Medicine Team T  6488 7528  E  mdpatients-fmdhs@uwa.edu.au

5. **Volunteer to be a research subject** in a medical research project described in Breath of L I F E or in your local paper

6. **Donate** to the work of the Institute for Respiratory Health. Call 6151 0815 or donate [online](http://www.sleepoz.org.au). Mention the Institute’s important research into lung disease to friends and relatives who also might be interested to make a donation. Or make a bequest in your will.
SOME USEFUL CONTACTS

**Flying with Oxygen** - L I F E’s own practical guide endorsed by Prof P J Thompson, Lung Health Clinic

**Lung Foundation Australia** T 1800 654 301 (Queensland time zone)

**Connect Groups** – peak body for support groups in WA T 9364 6909

**Pulmonary Rehabilitation** programs (scroll down to WA) or T 1800 654 301 - You’ll need a referral from a respiratory specialist who has admitting rights to a WA public hospital (even if you see them privately).

**Pulmonary Hypertension Network Australia** – a sister support group to L I F E

**Asthma Foundation WA** T 1800 278 462

**Bronchiectasis Toolbox** for health professionals

**Active Cycle of Breathing Technique** (video) help you clear your airways of phlegm

**Asbestos Diseases Society of Australia** (WA) T 1800 646 690 (08) 9344 4077

**Health Direct** speak to a registered nurse T 1800 022 222

**Lifeline** 24 hour personal crisis support and suicide prevention Association T 13 11 14

**National Quit line** – help to quit smoking T 13 78 48

**Cancer Council WA** T 13 11 20

**Council on the Aging** (COTA) voice of older Australians T (08) 9472 0104

**MyAgedCare**  aged care services you may be eligible for. Speak to your GP

**National Seniors** T 1300 76 50 50

**Carers WA** supporting friends and family who care for others T 1300 227 377

**Health Consumers Council** an independent voice advocating for patients in WA T 08 9221 3422 and 1800 620 780

**Patient Opinion Australia** a site that enables you to share your experience as a patient and ensure the message gets passed on to the right people T 1300 662 996

**ABC Health Online** find reliable health news and information

**Better Health Channel** Victorian Government’s health information website
Seniors Services guide

Seniors Recreation Council WA  T (08) 9492 9773

TED Talks – watch a video of a great speaker on a topic that interests you

Health Report with Norman Swan ABC Radio National (810 AM) – listen to past programs on your computer or smartphone

The Australian Bereavement Register  stop unwanted mail to a family member who has passed away.  T 1300 887 914

Do Not Call Register – stop unwanted marketing calls to your home phone or mobile T 1300 792 958

Act Belong Commit-  activities to promote your mental health  T (08) 9266 3788

Beyond Blue  mental health support service T 1300 22 4636

Australian Mens Shed Association – find a men’s shed near you
T 1300 550 009

If you know of other organisations or services to list here, please let us know.
Meanwhile, this might find a space on your fridge?

INSTITUTE FOR RESPIRATORY HEALTH

The Institute for Respiratory Health (formerly LIWA) is a collaborative research organisation. It aims to improve the life of Australians living with respiratory conditions by bringing together world class researchers and dedicated clinicians to investigate, diagnose, treat and prevent respiratory conditions.

The Institute conducts and fosters innovative basic and clinical research and translates their work into improved treatments for people with respiratory conditions in Australia.

The Institute includes a Clinical Trials Unit and the community support group – LIFE for people living with chronic respiratory conditions.

Membership is open to community members, researchers, health professionals and research students and is due each 1 July.

Your tax deductible donation to the Institute or bequest supports respiratory research.
About Lung Information & Friendship for Everyone (L I F E)

L I F E - a group for anyone with a chronic lung condition, their family and carers. It's run by, and for, people with chronic lung conditions. Started in 1992 as LISA, our name changed to L I F E in 2009. L I F E is the community support group of the Institute for Respiratory Health. More about the Institute on page 27.

L I F E is also a member of Lung Foundation Australia’s network of respiratory self help groups T 1800 654 301. L I F E is extremely thankful for the support of the Department of Respiratory Medicine at Sir Charles Gairdner Hospital.

Breath of L I F E magazine

Our magazine is published 4 times a year - March, June, September & December. It is distributed to all community members of the Institute, including L I F E members. Send your contributions to the editor, Jenni Ibrahim E life@resphealth.uwa.edu.au 7 Ruislip St, W. Leederville, WA 6007. Read it online.

L I F E Membership

Join L I F E by becoming a community member of the Institute. Come to a meeting or contact Sarah at the Institute T 6151 0815 or E life@resphealth.uwa.edu.au. Membership fee of $20 a year (incl. GST) is due each 1 July. Members’ help and ideas are always welcome - magazine, speakers, social events. Please be sure to tell us if you change address.

Contacts

Phone Coordinator Jenni Ibrahim T 9382 4678 M 0413 499 701
Deputy Coordinator Sal Hyder T 0409 336 639 salhyder1@gmail.com
Postal L I F E c/- Institute for Respiratory Health, Ground Floor E Block, S C G H Hospital Ave, Nedlands WA 6009
Email life@resphealth.uwa.edu.au Web L I F E on the Institute website L I F E is also on Facebook

Meetings

1st Wednesday of the month from February to November from 12 - 2.30pm. Speaker at 1.00pm.

Level 6 Meeting Room 612A, Perkins Institute Building, Queen Elizabeth II Medical Campus, Nedlands. Wheelchair and gopher accessible. Light refreshments. If you can, please bring a plate to share.

COMING UP

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<tbody>
<tr>
<td>Jan 2019</td>
<td>No meeting</td>
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<tr>
<td>Wed Feb</td>
<td>Social meeting (no speaker)</td>
<td>Come and have a cuppa. Meet or catch up!</td>
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<tr>
<td>Wed Mar</td>
<td>Meeting with speaker</td>
<td>To be advised (find out on our Facebook page)</td>
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<tr>
<td>Wed Apr</td>
<td>Meeting with speaker</td>
<td>To be advised</td>
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