women's health australia

australian longitudinal study on women's health

WHoA! Women's Health of Australia

# WELCOME TO THE LATEST EDITION OF THE PARTICIPANT NEWSLETTER

In this edition, we've included new research on health checks, diet and depression, sitting times, and the link between smoking and painful periods. Also, looking at data collected over the past 18 years, we've highlighted changes in the lifestyle and health behaviour trends of 18-23 year olds in 1996 and 2013, as well as an overview of the 1921-26 cohort, who completed their first survey in 1996.

Thank you for your continued participation in this important study. The 18 years of data collected to date provide researchers and policy makers with vital information about health and health services for Australian women. Your experiences and contributions ensure that women's health issues over the lifespan are better understood, and will help shape a better health care system in Australia.

Your contribution to knowledge is widespread. Over the past 12 months, 316 articles have been published where ALSWH was mentioned in media from across the world, including USA, South Africa, and Switzerland (and 15 other countries). The potential reach of these articles is an audience of 833,384,500. The information you provide is contributing not only to the health and wellbeing of women in Australia but also to women from all over the world.

For further information on any of the articles in this newsletter, please visit the ALSWH website: www.alswh.org.au.

# HEALTH CHECKS IN MID-AGE WOMEN

## —ARE WE FOLLOWING THE RECOMMENDATIONS?

Health checks are important for reducing the risk of common diseases and to detect and treat them early. Recommended health checks for women include:

***Pap test:*** every two years (after you become sexually active) until you are 70 years of age

***Screening mammogram:*** every two years between 50-70 years of age (unless there is a family history of breast cancer)

***Cholesterol check:*** every five years after the age of 45

***Diabetes check:*** blood sugars every three years after you turn 40

***Blood pressure check:*** every two years after you turn 18

Information from the ALSWH 1946-51 cohort survey has shown that many women do not have health checks in line with these recommendations.

While most women report having their blood pressure checked regularly, women were less likely to have checks for blood sugar or cholesterol. Women were more likely to have these tests done if they already knew that they had a chronic condition such as hypertension, diabetes or heart disease.

More than 80% of women reported they were having a mammogram at the recommended two-yearly intervals by the time they reach 59–64 years. However, women in this age group were less likely to have Pap tests than mammograms, particularly as they became older. Regular breast and cervical cancer screening remain important for most women at least up to age 70.

Women who smoked and obese women were least likely to have regular mammograms and Pap tests, despite the increased risk of breast and cervical cancer that occurs with obesity.

Married women had higher rates of screening, particularly for breast cancer, than women who were divorced, separated, never married or widowed.

In relation to area of residence, women in regional and remote areas were less likely to have cholesterol testing but were more likely to have regular mammograms.

Regular health checks assist in the early detection of disease or illness and are an important part of staying well. The best person to talk to about health checks and screening is your doctor.

*Australian & New Zealand Journal of Public Health (2014) doi : 10.1111/1753-6405.1218*

## DID YOU KNOW? ALSWH data show...

**PIECES OF FRESH FRUIT EATEN DAILY:** **65%** of 59-64 year olds, and **63%** of 85-90 year olds eat two or more pieces of fresh fruit each day.

**DAILY VEGETABLE INTAKE:** **9%** of 59-64 year olds, and **8%** of 85-90 year olds eat five or more serves of vegetables each day.

**VOLUNTARY WORK:** **18%** of 34-39 year olds, **29%** of 59-64 year olds, and **29%** of 85-90 year olds do voluntary work.

**DRIVING:** In 2011, **39%** of 85-90 year olds were still driving.

# SMOKING LINKED TO PAINFUL PERIODS

A new study has found that women who smoke are at higher risk of experiencing painful periods.

Using data from more than 9000 women in the 1973-78 cohort, the study found that 29% of smokers suffered from dysmenorrhea – painful periods – compared with 23% of non-smokers.

While it is relatively common for most women to experience painful periods at least sometimes, women who smoked were more likely to suffer painful periods regularly over many years.

Smokers were 40% more likely to experience ongoing pain throughout the 12-year study period (2000-2012) than non-smokers. Women who started smoking by age 13 were 60% more likely to have ongoing period pain than non-smokers.

The study also found that women who stopped smoking sometimes experienced reduced period pain; however, they still suffered painful periods at a higher rate than those who had never smoked.

More research is needed to understand exactly how smoking increases the risk of painful periods, but one reason may be that smoking narrows the blood vessels, which could cause pain.

While the links between smoking and cancer, heart and lung diseases are well known, some young women may dismiss these risks as too far off to worry about now. The findings from this new research may give young women, especially those experiencing painful periods, a more compelling reason to quit smoking now, or not start at all.

*Tobacco Control (2014) doi: 10.1136/tobaccocontrol-2014-051920*

## CHANGING CONTRIBUTIONS OF RISK FACTORS TO HEART DISEASE ACROSS THE LIFESPAN:

# WHY WE NEED TO MOVE MORE

ALSWH researchers used data from the three original cohorts to assess the contributions of the major heart disease risk factors (smoking, physical inactivity, high body mass index [BMI] and hypertension [high blood pressure]) to heart disease risk in women across the adult lifespan.

They did this by assessing the prevalence of each of the four risk factors (i.e. the proportion of women at risk) in women from the 1973-78, 1946-51 and 1921-26 cohorts who answered questions about these risk factors at every survey. The researchers found that, as smoking prevalence fell, rates of the other risk factors increased. For example, the prevalence of smoking decreased from 28% in women aged 22-27 (in 2000) to 11.3% by the time these women were 34-39 (in 2012), and from 17.2% in women who were 47-52 (in 1999), to 8.9% when the women were 59-64 (in 2010). Inactivity rates and BMI were highest in women aged 31-36; almost one in five women in this age group reported doing no physical activity, and one third had a high BMI. Hypertension rates were highest in women aged 56-64 (10.7%).

Up to age 30, smoking was the most important contributor to lifetime risk of heart disease. However, as smoking rates declined, physical inactivity became the most important contributor from age 30, all the way through to age 85-90.

### *So what does this mean?*

Across the lifespan, physical inactivity is the most important contributor to risk of heart disease in women. This does not mean smoking is insignificant – rather that – as more women quit smoking, the population risk attributable to smoking declines, and the risks attributable to the other risk factors become relatively more important. The bottom line for ALSWH participants (and all women) is to quit smoking, watch their weight and move more for optimal health as they age.

*British Journal of Sports Medicine (2014) doi: 10.1136/bjsports-2013-093090*

# THE PATTERN OF CARING ROLES IN AUSTRALIAN WOMEN

More than 2.6 million Australians identify themselves as informal carers and the majority of these carers are women. Researchers working with ALSWH data have conducted several research projects with women who are carers. Below is a snapshot of the impact of caring roles on Australian women in different age groups.

**CARERS IN THE 1921-26 COHORT:** Older women tended to transition in and out of caring roles. The percentage of women who reported caring for another person increased from 17% at age 70-75 years to 26% at age 79-84, and then decreased to 13% by age 85-90. Women who provided care for their grandchildren or other children on at least an occasional basis decreased from 44% at age 73-78 to 13% at age 85-90.

**CARERS IN THE 1946-51 COHORT:** The percentage of women in caring roles in this age group increased from 25% at age 50-55 to 29% at age 53-58. For more than half of the women who provided care, the intensity of caring remained stable. However, where the level of care changed, it was more likely to increase.

Women who provided care were almost three times more likely to care for someone living elsewhere than for someone living with them. Live-in carers were found to experience poorer mental health, with lower levels of optimism and higher levels of stress than non-carers.

**CARERS IN THE 1973-78 COHORT:** The percentage of women providing informal care was 6% at age 34-39. These women undertook episodic or intermittent care, including providing short-term housing and support for frail elderly parents, children or siblings with mental or physical disabilities.

*BMC Public Health (2014) doi: 10.1186/1471-2458-14-74*

## Your Comments

**In each survey we ask you to include any comments you'd like to share with us. Here are a few of them...**

**From the 1989-95 cohort:**

- *"I am currently feeling a lot better than I was 6 months ago due to seeking help and being lucky enough to find someone who would help me with my depression and anxiety. I know many people who have tried seeking help and never get taken seriously and end up giving up and believing that they will just have to deal with it for the rest of their life."*

- *"I am currently 35 weeks pregnant so that is why I have ticked a lot of health issues - back pain, constipation, breathing difficulties, most things being an effort, etc. … This pregnancy & baby is the best thing that has ever happened to me & I am so excited about becoming a mother."*

- *"I love the Women's Health of Australia Survey! I saw a WHoA newsletter on my grandma's bedside table and I asked her where she got it - and she's in the study too! I had no idea!!! She's 91 this year :-)"*

**From the 1973-78 cohort:**

- *"I enjoy the reflection of my health issues. I always look forward to seeing some results in the newsletter."*

- *"Motherhood equals tired, sick, worn out, emotional, happy, excited, judged by all, joy at what you've created, excitement at what's to come, frustration, wishing for just one moments peace, worry at all decisions made, assertiveness that I know what's best for my child, and a million other things in between - it affects all parts of your life and your physical, emotional and relationship health and wellbeing beyond a non-parents imagination!!"*

- *"Life is a constant juggling act and I am very tired but I am happy and thankful for the life that I enjoy."*

# TOO MUCH SITTING!

In the last five years a group of ALSWH researchers has been focussing on an issue that has received a great deal of media attention – the health effects of too much sitting. This is important because prolonged sitting time is associated with a range of chronic health problems and increased risk of premature death.

One recent paper assessed changes in sitting time over nine years. We found that in the 1973-78 cohort, average sitting time decreased from 6.1 to 5.4 hours/day, while in the 1946-51 cohort it increased from 5.1 to 5.6 hours/day. These small average changes masked some noticeable changes in sitting time: 22% of the younger women and 17% of the mid age women decreased their sitting time by more than two hours per day, while 21% of the young and 19% of the mid-age group increased their sitting time, by more than two hours/day.

Among the 1973-78 cohort, returning to study was associated with more sitting (ie increasing by more than two hours per day), while having a baby was associated with less sitting (decreasing by more than two hours per day). In the 1946-51 cohort, 'changes at work' (which could mean more desk based or computerised work) was associated with more sitting, while retirement was associated with reduced sitting time.

Australian guidelines recommend that all adults should minimise the amount of time spent in prolonged sitting, and, if you have to sit (eg for work), break up long periods of sitting as often as possible. Breaks in sitting time need not involve moderate or vigorous activity. Standing-up, stretching and 'light' activities are beneficial.

*Preventive Medicine (2014) doi: 10.1016/j.ypmed.2014.03.017*

**From the 1946-51 cohort:**

- *"I have found a great deal of peace, contentment and pleasure in this stage of my life. Although I have occasionally missed my prior occupation, it being the one thing I knew I was good at, my life-style now is very relaxed and enjoyable. We don't have a great deal of surplus money but it is cheaper to live in retirement."*
- *"No changes, just battling life on the land, animals, fallen trees. If anything, at 64 it is harder on my knees!"*
- *"I did notice a change in my health due to demands made on me with the birth of grandchildren. The stress, worry and added fatigue just helping out, even though I received great joy from this, took its toll and my health suffered. I have now cut back and tried to improve my health through exercise, vitamins, rest, meditation, mindfulness and setting limits."*

**From the 1921-26 cohort:**

- *"On Mother's Day, my daughter presented me with an iPad. Having resisted computers for about 20 years, I am now enjoying a fresh challenge- taking it slowly- emails and photos to and from family and online scrabble with friends. As physical activity decreases, this new skill keeps me busy."*
- *"Enjoyed a motorbike ride on 90th birthday!"*
- *"I do lots of sewing and knitting for hospitals- beanies for babies and caps for our soldiers. Keeps me busy and I really enjoy doing this for them."*
- *"I am still holding my own one year since I was diagnosed with terminal cancer and given four weeks to live. I am still here and (although a great loss of weight, hair and energy), keep cheerful."*
- *"I put a bit of pink colour in my hair for a bit of fun!"*

# LIFESTYLE & HEALTH BEHAVIOURS OF 18-23 YEAR OLDS IN 1996 & 2013

During 2012-13, we recruited and welcomed a new cohort of 18-23 year old women. Over 17,000 young women from around Australia joined the 1989-85 cohort. In line with the 2011 Census, 75% were from major cities, 17% from inner regional areas and 8% from outer regional and remote areas.

The survey included the usual demographic questions, and questions on health risk factors, physical, mental and sexual health, experience of abuse and access to health services. In 2014, we asked the same women to complete the second yearly survey and this year we will be asking the same women to complete their third survey.

So what did the 1989-95 cohort tell us about their health behaviours and lifestyle factors in the first survey? About two-thirds (63%) had never smoked, 18% were ex-smokers and 19% were still smoking. How did this compare with the women from the 1973-78 cohort, who were 18-23 when they answered their first survey in 1996? Back then, just over half (53%) had never smoked, 15% were ex-smokers and 32% were still smoking. This is positive news!

There was less change in average alcohol consumption. In 2013, 4% of 18-23 year olds were drinking more than two drinks a day on average compared with 5% in 1996. But again, there is positive news—weekly binge drinking declined from 17% in 1996 to 13% in 2013.

On the down side, fewer women aged 18-23 were in the healthy weight range in 2013 (59%) than in 1996 (69%). Healthy weight is based on body mass index which is calculated from weight and height (kilograms divided by height in meters squared). So if weight is 67 kilograms and height is 165 centimetres then body mass index is 24.6 (67/(1.65 x 1.65) =24.6), which is in the healthy weight range of body mass index (between 18.5 and 24.9).

There have been some improvements in the health of 18-23 year olds since 1996. Progress is being made with reduced smoking and binge drinking, but excess weight is an emerging problem which needs to be addressed. Given the correlation between these factors and heart disease and diabetes, more needs to be done to reduce the prevalence of smoking, and excess weight.

*Health and wellbeing of women aged 18 to 23 in 2013 and 1996: Findings from the Australian Longitudinal Study on Women's Health*

## BACK PAIN CARE PRACTITIONERS:

# Who we choose & why?

Chronic back pain is common amongst Australian women, and there is a wide range of treatment options available for relieving this pain. Those providing back pain care include GPs, medical specialists, allied health providers (e.g. physiotherapists), and complementary and alternative medicine (CAM) practitioners (e.g. chiropractors and acupuncturists).

A recent study, using information collected from the ALSWH 1946-51 cohort, looked at the type of practitioner women chose to provide back pain care and what influenced their choice of practitioner. The results showed some interesting findings.

The four main influences on women's choice of practitioner of back pain were:

- **Familiarity with the treatment/experience with individual practitioners**
- **Recommendations from friends, family and social networks**
- **Convenience of practitioners location**
- **Qualifications and credentials of practitioner.**

The majority of sufferers actively juggled multiple treatment and provider options. It was also evident that the study participants wanted to know more about available treatment options but found information about back pain treatments difficult to access and interpret. Therefore, they often sought personal accounts of treatment effectiveness from their social circles, rather than relying on research-based guidance when choosing their back pain care practitioner.

*BMC Health Services Research (2014) doi: 10.1186/1472-6963-14-131*

# WOMEN IN THE 1921-26 COHORT

The survey information provided by the women in the 1921-26 cohort, which initially included 12,432 women, has contributed to a wide range of research and policy documents over the life of the study, as well as providing a snapshot of how the lives of Australian women have changed over time. These data reinforce how good health in older age is a significant resource not only for the woman herself, but also for her family and community.

When the study started, most of the 1921-26 cohort, then aged 70-75, reported being in good, very good or excellent health, were able to live independently, and to make important contributions to their families and communities. Over time, as they entered their 80s and 90s several important changes have been captured by our surveys.

The women continue to report that overall they rate their health as being good, very good or excellent (almost 60% in 2013, compared to around 70% in 1996).

More women are reporting high blood pressure, diabetes, heart disease, arthritis and osteoporosis.

While the number of women who are less physically active has increased, 20% of the women aged 85-90 remain engaged in moderate or high levels of physical activity, compared to about 40% in 1999.

While there has been an increase in the number of women reporting difficulties managing their own self-care (34% in 2013, compared to 9% in 1996), many women still reported caring for others throughout their 70s and 80s.

While the women's physical health declined with age, their mental health has remained fairly stable.

The women have also reported changes in their personal living situations, who they live with, where they live, health and community services they require and how they get around their communities.

This information has implications for policies concerning healthy and active ageing, which look to optimise quality of life in older age and develop social and physical environments that support older people in maximising their activity and participation. For example, physical activity is a key component of both maintaining good health and coping with illness. This has policy implications, as tailored physical activity programs can help improve strength and balance, reduce falls and enhance independence and overall wellbeing. As another example, cessation or reduction in driving by older women or difficulty using public transport limit women's ability to provide care, participate in social activities, and seek health care. Access to convenient, affordable and safe transport and appropriate community designs contribute to age friendly environments which can promote social integration and physical health.

As this cohort ages, changes in health will continue to provide important information for understanding the pace of change in the development of health conditions, increasing levels of disability and increasing needs for health and social care for older women in Australia.

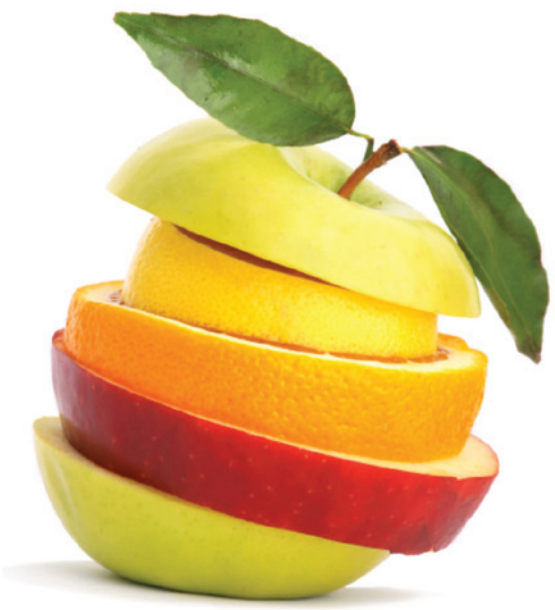
*Australian Longitudinal Study on Women's Health 1921-26 COHORT SUMMARY 1996 – 2013*

# DAILY FRUIT INTAKE CAN HELP PREVENT DEPRESSION

Over the past few years, there has been a lot of interest in the associations between diet and depression. Using data from the ALSWH 1946-51 cohort, we studied the relationship between fruit and symptoms of depression and found a clear link between them.

The study found that women who ate fewer than two serves of fruit a day faced a greater risk of developing depression, even after taking into account other factors such as smoking, alcohol, body mass index, physical activity, marital status and education. The study also found that eating two or more servings of fruit a day protected women from developing depression in the future. This may be because fruit contains high levels of anti-inflammatory compounds and antioxidants, such as resveratrol. This research highlights the importance of a diet high in fruit to help avoid depression in middle age.

*European Journal of Clinical Nutrition (2014)*
*doi: 10.1038/ejcn.2014.222*



# IMPROVING HEALTH AND HEALTH CARE SERVICES FOR AUSTRALIAN WOMEN

## Background

You may remember that during this project we have asked you for permission to receive details from Medicare Australia about your use of Medicare-funded health services. By putting the Medicare data together with the survey data, we have looked at general patterns of use of health services, particularly general practitioner and specialist consultations. Having these data has helped us to write reports about women's access to health services and particularly about how much the services cost according to where women live around the country. These reports have been provided to the government to help improve services for women.

## What's new?

Following discussion with Medicare Australia, information held by them will be regularly provided to the research team without your needing to consent every time. Other information, such as birth and death records, disease registers and hospital discharge records, aged care and community datasets, will also be available subject to strict privacy and confidentiality rules. Names and addresses are not included with the information. The project staff analysing these datasets and the survey data, have signed confidentiality statements and they have no information in the datasets that could identify an individual person. This research is conducted in accordance with relevant privacy requirements and other legislation protecting this information.

## What happens next?

You do not need to do anything. However if you have any questions about this process or if you need more information, please call the Freecall number and we will send you a more detailed information sheet. If you have concerns about this method of data collection, you can opt out of this by phoning the Freecall number 1800 068 081. We will provide updates in future newsletters about our progress and findings and how this research will benefit the health of women now and in the future.

If you have any concerns about this project, and would prefer to discuss these with an independent person, you should feel free to contact the Human Research Ethics Officer at either the University of Newcastle or University of Queensland.

**The Human Research Ethics Officer**
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