

'Living Well with Lung Cancer

Webinar 4 – TRANSCRIPT

Lung Cancer Webinar Series - Lung Cancer Connect

Presented on 21.11.18

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SLIDE 1



Slide content:

Text: Living Well with Lung Cancer

Lung Cancer Connect Webinar

Dr. Nicole Kiss – Advanced APD

Dr. Catherine Granger – PhD PT

Transcript: [BEGIN WEBINAR]

Host (Ashleigh):

Welcome, everyone! Thank you for joining us for today's webinar. My name is Jane Ashleigh Ricardo and I am the Thoracic Cancer Coordinator at Lung Foundation Australia, Australia's only national charity supporting those with lung cancer and lung disease.

I would like to start the day by acknowledging the traditional custodians of the land on which we meet today. We wish to acknowledge and pay respects to their continuing culture and the contribution they make to the life of this city and this region. We would also like to welcome Aboriginal and Torres Strait Islander people who may be listening to today's webinar.

Today we are presenting our fourth webinar, 'Living Well with Lung Cancer'.

Please join me in welcoming our presenters for today, Dr Catherine Granger, PhD Pt, who is a physiotherapist clinical researcher from the royal Melbourne Hospital and the University of Melbourne with expertise in physical activity and exercise for people with cancer or cardio-respiratory disease. Dr. Nicole Kiss is an advanced APD with more than 18 years' experience in cancer nutrition and is the chair of the nutrition group for the clinical oncology society of Australia. Nicole is co-lead of the exercise and nutrition for cancer research in the institute of physical activity and nutrition at Deakin University. She holds honorary research positions in the department of cancer experiences at the Peter MacCallum Centre and the University of Melbourne.

SLIDE 2



OPTIMISING NUTRITION ACROSS THE CANCER TREATMENT JOURNEY

Dr Nicole Kiss, PhD AdvAPD



Slide content:

Text: Optimising Nutrition Across the Cancer Treatment Journey

Transcript:

PRESENTER (Nicole):

Thanks Ashleigh and it's a pleasure to be here and presenting this today. So, I'm going to be talking to you about optimising nutrition against the cancer treatment journey. So to start with; nutrition recommendations and guidelines can vary quite considerably depending on what stage you're at and your cancer journey. What we recommend during cancer treatment compared to time during cancer recovery and for cancer survivorship can be quite varied. So I'm going to be covering each of those areas today.

SLIDE 3

During Cancer Treatment

- Around 1/3 of people receiving cancer treatment are malnourished (Marshall et al, 2018)
- What is malnutrition?
 - Unintentional loss of weight $\geq 5\%$ (3kg for a 60kg person)
 - Loss of muscle and fat stores
- Malnutrition can lead to poorer health outcomes
 - Harder to cope with treatment
 - Increased length of hospital stay
 - Poorer quality of life
 - Reduced survival

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Slide content:

Text: During Cancer Treatment

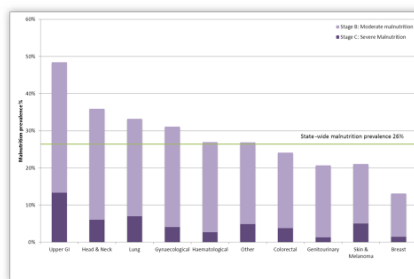
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Transcript:

Nicole:

We start off during cancer treatment. First of all, one of the most important, or the biggest issue regarding nutrition during cancer treatment is cancer related malnutrition. And we know from large studies approximately one third of people undergoing cancer treatment can present with malnutrition. So what do I mean by malnutrition? Malnutrition can be any unintentional weight loss of five percent or more of your usual body weight, and this can be as little as 3 kilograms for a person weighing sixty kilograms. So it isn't a large amount of weight loss. Also, what is really important is that underlying malnutrition is loss of muscle and fat, which are the really important components that distinguish malnutrition from regular weight loss that is intentional. Malnutrition can also lead to poor health outcomes so can make it harder to cope with your treatment, it can lead to increased length of hospital stay, it can reduce quality of life and can also reduce survival.

SLIDE 4



Malnutrition is present in patients with all cancer types, but is more prevalent in certain cancer types

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Slide content:

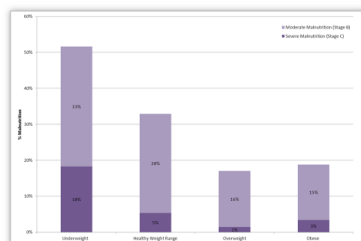
Text: Malnutrition is present in patients with all cancer types, but is more prevalent in certain cancer types.

Transcript:

Nicole:

So this graph or figure here presents results from a large Victorian point prevalent study on cancer related malnutrition. You can see on the graph that the rates of malnutrition or prevalence of malnutrition across different cancer types can vary significantly. And also, you can see that malnutrition occurs in all different patient types and all different cancer types. Lung cancer is there as the third highest prevalence of malnutrition, so it is obviously a really important factor for us to consider when we are looking after people with lung cancer.

SLIDE 5



1 in 6 (16.5%) overweight/obese people with cancer were malnourished

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PHYSICAL ACTIVITY AND NUTRITION



Slide content:

Text: 1 in 6 (16.5%) overweight/obese people with cancer were malnourished

Transcript:

Nicole:

Also important to remember as well, is that malnutrition can occur not just in people who are underweight but can also be present in people who are overweight or present with obesity. And the same Victorian study also demonstrated that as many as one in six people who are overweight or obese present with malnutrition. One of the issues with this is that often it might not be recognised in the same way as someone presenting underweight, so it is important if you have had some unintentional weight loss or you notice some muscle wasting that you mention this to your doctor or one of your health professionals.

SLIDE 6

Why does malnutrition occur?

- Your body has a higher need for protein and energy during treatment
- Treatment side effects may make it difficult to eat as much as you normally would
 - Loss of appetite
 - Pain on swallowing
 - Fatigue
 - Nausea

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Slide content:

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- Your body has a higher need for protein and energy during treatment
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 - Nausea

Transcript:

Nicole:

So why does malnutrition occur? Your body has a much higher need for protein and energy during cancer treatment as a consequence of both the cancer itself and the treatment. And treatment side effects can also make it much more challenging for you to meet your nutritional requirements for protein and energy. Things like loss of appetite, pain on swallowing as a result of radiotherapy, fatigue and nausea can all contribute to making it much more difficult to eat the nutrients that you need.

SLIDE 7

Nutrition Intervention Can Help

Research has shown nutrition intervention can help:

- ✓ Improving weight status (e.g. weight maintenance, prevent further weight loss, weight gain)
- ✓ Enhancing tolerance to treatment and medication
- ✓ Better post-operative recovery with reduction in risks of complications.
- ✓ Improve overall quality of life with indicators such as less fatigue, improved physical functioning etc.

(Arends 2017, ESPEN guidelines on nutrition and cancer)

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Slide content:

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- ✓ Improve overall quality of life with indicators such as less fatigue, improved physical functioning, etc.

(Arends 2017, ESPEN guidelines on nutrition and cancer)

Transcript:

Nicole:

But nutrition intervention can help, and we know that quite a large amount of research has shown us that improving nutrition interventions during your cancer treatments can improve your weight status so can help you with maintaining your weight or even gaining weight at bare minimum and preventing further weight loss as a result of your cancer treatment. It can also help with enhancing tolerance to treatment and your medications and can help with better post-operative recovery and reduction in the rate of complications you might experience postoperatively. It can also improve overall quality of life through improving fatigue and physical functioning as well.

SLIDE 8

Nutrition recommendations

- Maintain weight or aim for weight gain if malnourished, especially lean body weight (muscle)
- Ensure treatment side effects are well managed
- Energy and protein needs are higher than usual
 - Aim for a protein and energy dense diet
 - Protein food at each meal



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Slide content:

Text: Nutrition Recommendations

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- Ensure treatment side effects are well managed
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 - Aim for a protein and energy dense diet
 - Protein good at each meal

Transcript:

Nicole:

So the nutrition recommendations that apply during cancer treatment. the most important one is to maintain weight or aim for weight gain if you are malnourished although this can be a little more challenging whilst you are going through cancer treatment. And what we want to see especially is that you are trying to or able to maintain your lean muscle mass which is the most important component of your body weight that we are looking at. It is also important to ensure that your treatment side effects are well managed and under control so making sure that your medical team is aware of any treatment side affects you might be experiencing like nausea or mouth ulceration from chemotherapy or radiotherapy treatment. Making sure that these things are as well controlled as possible can help improve your ability to eat the amount of nutrition that you need as well. As I mentioned earlier your energy and protein needs are quite substantially higher than they are normally, so it is really important to make sure that you are trying to eat an energy and protein dense diet and particularly including protein food at each meal time. And this might be things like meat, chicken or fish, eggs, dairy foods, nuts and legumes and those types of things. And I have got some links to resources at the end of the presentation where you will be able to find some more information about energy and protein dense foods.

SLIDE 9

Loss of appetite

- Tips for managing a poor appetite
 - Eat small meals often (5 to 6/day)
 - Serve food on bread and butter plates
 - Eat foods high in energy and protein
 - Try eating meals with family and friends
 - Make meals look as appetising as possible

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Transcript:

Nicole:

So there are a few common treatment side effects or symptoms that people with lung cancer experience more often, so I just wanted to go through a few tips for some of these side effects about how you can manage them to try and still get the amount of nutrition that you need. So loss of appetite first of all is quite a common one. Some tips that we suggest for managing loss of appetite are firstly eating small meals often; so you might find it much easier to eat five or six small meals a day then perhaps your regular three meals a day. Along the lines of that having food served on a bread and butter plate can be a lot easier to manage rather than regular dinner size plates when your appetite is poor. Often the amount of food that is presented to you that is a large volume and you are experiencing a poor appetite can make it harder for you to eat that, so presenting a small amount seems much more achievable as well. Eating foods that are high in protein and energy is important too so that way you are maximising the amount of nutrition that you are getting even in a smaller volume of food. Eating meals with family and friends can also help, so the social aspect of that often can improve appetite and the amount of food that you eat as well. And making meals look as appetizing as possible is obviously important when your appetite is low.

0:10 / 2:43

SLIDE 10

Pain on swallowing

- Tips for eating when it's painful:
 - Choose soft, moist foods (add sauces if needed)
 - Avoid spicy and acidic foods as these can irritate
 - Avoid dry foods that may scratch your throat
 - Try high energy and protein drinks (smoothies, milkshakes)

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Slide content:

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Transcript:

Nicole:

Pain on swallowing can also be another issue, particularly if you are undergoing radiotherapy treatment to the chest area. So some of the tips to manage this particular symptom are choosing soft, moist meals so adding sauces as much as possible to keep those foods easy to swallow, avoiding spicy and acidic foods. So these types of foods can often irritate your throat particularly if you've got some pain because of the radiotherapy and again avoiding dry foods that could scratch or irritate your throat are important as well. Other things that might help are trying to have high energy or protein drinks like smoothies or milkshakes and these are often a lot easier to tolerate than other foods as well.

SLIDE 11

Fatigue

- Tips to cope with fatigue:
 - Do grocery shopping online and have it delivered
 - Prepare meals in bulk when you are less tired and freeze in portions for later
 - Ask family or friends to prepare meals for you
 - Have ready made meals or snacks on hand for quick and easy options

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Slide content:

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Transcript:

Nicole:

Fatigue is another really common issue in people with lung cancer whilst they are going through treatment as well and can have a huge impact on your nutrition as well from the point of view that it can be difficult to go out and get your grocery shopping as well as putting some time and energy into preparing meals and often it is really hard to feel like doing either of those things and can compromise your nutrition. So some of the things that you can do in that situation is doing your grocery shopping online and having it delivered. Also trying to prepare meals in bulk at times when you are feeling more well, or less fatigued and having meals frozen in portion sizes so you can use them at times when you are feeling too fatigued to prepare meals or asking friends and family members to prepare meals for you can be helpful as well. If none of those are an option than having ready-made meals from the supermarket can be another alternative as well to help you in times of fatigue.

SLIDE 12

Nausea

- Tips to cope with nausea:
 - Drink plenty of fluids (especially fluids that provide energy)
 - Eat small meals often
 - Avoid food smells if these trigger nausea
 - Avoid fried or high fat foods if these trigger nausea
 - Dry and salty foods may be best tolerated

www.lungcancerresearch.org



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Transcript:

Nicole:

Nausea is also really common so some of the tips to cope with nausea is firstly drinking plenty of fluids, particularly fluids that provide energy as well, so this might be particularly milk-based drinks to give you that extra protein as well, milkshakes some of the commercial supplements like Sustagen, again eating small meals often can be helpful. So when you are nauseated it can be really challenging to manage a full meal but at the same time if you don't eat for a long period because you are nauseated. That feeling of an empty stomach can actually exacerbate your nausea. So eating small amounts often is really helpful. Avoiding food smells so the smell of cooking foods if this triggers nausea for you and avoiding foods that are high in fat or fried foods if these trigger nausea for you as well. And often we find with nausea that dry and salty foods can be the easiest things to tolerate.

SLIDE 13

What if I'm gaining weight?

- Follow healthy eating guidelines
- Don't restrict food intake
- Aim to maintain weight/ muscle
- Increase physical activity



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Sharon Downey, 2012/11/16, 10:18 AM



Slide content:

Text: What if I'm gaining weight?

- Follow healthy eating guidelines
- Don't restrict food intake
- Aim to maintain weight/muscle
- Increase physical activity

Transcript:

Nicole:

So it is a lot less common, but weight gain can also occur and sometimes this can bother people and alarm people. What I usually say in this situation is that if it does concern you that you are actually gaining weight during treatment the most important thing to do is to follow the guidelines for healthy eating that are recommended just for the general population. It is really important not to restrict your food intake as I mentioned earlier, your nutritional needs are higher whilst you're going through cancer treatment and it can make it harder for you to cope with that treatment if you are not getting enough nutrition. Make sure that you do still continue to maintain your weight and your muscle mass in particular. I'm not going to cover this too much as Catherine is going to cover this later but increasing your physical activity in this situation as well.

SLIDE 14 & 15

AFTER TREATMENT

In the short term

- Allow time to recover from treatment
- Continue to maintain weight/ muscle
- Transition to recommendations for cancer survivors once treatment side effects resolve and weight is stable

Recovery

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Slide content:

Text: (Slide 14) After treatment

Text: (Slide 15) In the short term

- Allow time to recover from treatment
- Continue to maintain weight/muscle
- Transition to recommendations for cancer survivors once treatment side effects resolve and weight is stable

Transcript:

Nicole:

So what about after treatment?

So really in the short term it is really important to allow time to recover from treatment. Often some of the symptoms and side effects that I have just gone through can continue, and sometimes that might continue for a few weeks, sometimes for a few months after treatment. And it is not a time to be trying to necessarily get back into healthy eating at that particular time point. You want to continue to make sure that you have adequate protein and energy and again focus on maintaining your weight and your lean muscle at this particular time. What we then suggest is transitioning to more of a healthy eating pattern for cancer survivors at appropriate points that you know that your treatment side effects have all settled down, you feel well recovered from treatment and you are maintaining weight, you are not losing any weight. It is really important to make sure that all of those boxes are ticked before you start to think about getting back to general healthy eating guidelines again.

SLIDE 16

Dietary recommendations for cancer survivors

Follow the recommendations for cancer prevention

skinetics.au/research/ipan Public Good by RCSI, funded since 2016



Slide content:

Text: Dietary recommendations for cancer survivors
Follow the recommendations for cancer prevention

Transcript:

Nicole:

So what are the recommendations then? After that initial recovery after treatment and in the stage of cancer survivorship the recommendations are actually exactly the same as the dietary recommendations for cancer prevention and very much based around following a general healthy diet.

SLIDE 17

WCRF guidelines for cancer prevention



- 1. Be a healthy weight**
 - Be as lean as possible within the healthy range of body weight
 - Avoid weight gain throughout adulthood

BMI = weight/height²

Normal weight: 18.5 – 24.9
Overweight: 25 – 29.9
Obese: ≥ 30

- 2. Be physically active**
- 3. Limit sugar sweetened drinks**
 - Avoid sugary drinks, drink mostly water and unsweetened drinks

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 - Avoid sugary drinks, drink mostly water and unsweetened drinks

Transcript:

Nicole:

So the world cancer research fund have developed diet and lifestyle recommendations for cancer prevention that are based on a comprehensive review of the research evidence on the role of diet and physical activity in cancer prevention. And this research is based on over 9000 studies at present and these recommendations also apply to the time period of cancer survivorship. So I will go through - there is about 8 recommendations that will apply specifically to Nutrition. I will cover each of those in more detail for you. So the first one is to be a healthy weight. So this means being as lean as possible within the healthy weight range or healthy body weight for your height. And the way you work that out is through body mass index or BMI, which is your weight in kilograms divided by height in metres squared. And a healthy weight range or healthy BMI is anywhere between 18.5 to 24.9. And it is important if possible to avoid weight gain throughout adulthood. Being physically active is obviously really important and Catherine is going to cover that so I'm not going to go into any detail about that. The third recommendation is to limit sugar sweetened drinks, so this means avoiding any sugary drinks and really trying to focus on making sure that you drink mostly water or unsweetened drinks.

SLIDE 18

WCRF guidelines for cancer prevention

4. Eat wholegrains, vegetables, fruit and beans

- Eat at least 5 servings of vegetables and 2 serves of fruit each day
- Eat relatively unprocessed cereals/ grains or pulses with each meal



Slide content:

Text: WCRF guidelines for cancer prevention

4. Eat wholegrains, vegetables, fruit and beans
 - Eat at least 5 servings of vegetables and 2 serves of fruit each day
 - Eat relatively unprocessed cereals/grains or pulses with each meal

Transcript:

Nicole:


Eating whole grain vegetables and fruits and beans like legumes, kidney beans and lentils and those types of things is really important as well in terms of survivorship and managing a healthy diet. So this means eating at least five serves of vegetables and two serves of fruit each day. And I have just put up some information that you can see on the slide about what constitutes a serve of fruit and a serve of vegetables. And also important to eat relatively unprocessed cereals and grains, so trying to choose whole grain cereals and grains as much as you possibly can.

SLIDE 19



WCRF guidelines for cancer prevention

5. **Limit red and processed meat**

- Consume very little, if any, processed meats
- Limit consumption of red meat (e.g. beef, pork, lamb)
 - WCRF suggest 350 to 500g/week (cooked weight)
 - Cancer Council suggest no more than 65 – 100g three to four times/week



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Transcript:

Nicole:

Also one of the recommendations is to limit red and processed meats. Now what is recommended by the world cancer research fund is to limit your consumption of processed meats. So that is things like ham, bacon, salami, those types of things and to be careful around the amount of red meat that you're consuming. So this is in particular is beef, pork and lamb. So the recommendations are for you to maintain your red meat intake within about 350 to 500g per week. And to put that in to context, you can see on the slide that there is a deck of cards. A piece of red meat that is the equivalent size of that deck of cards would weigh approximately 90g. So obviously it's a really good source of protein, a good source of iron but in terms of preventing cancer and cancer survivorship comma red eat meat in particular needs to be maintained within that type of range.

SLIDE 20

WCRF guidelines for cancer prevention

6. **Limit alcohol consumption**

- Best not to drink alcohol.
- If you do drink, do not exceed national guidelines (≤ 2 standard drinks per day)



7. **Limit 'fast foods'**

- Limit consumption of "fast foods" and other processed foods high in fat, starches or sugars

8. **Don't rely on dietary supplements**

- Aim to meet nutritional needs through diet alone, dietary supplements are not recommended

Slide content:

Text: WCRF guidelines for cancer prevention

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 - Limit consumption of 'fast foods' and other processed foods high in fat, starches or sugars
8. Don't rely on dietary supplements
 - Aim to meet nutritional needs through diet alone, dietary supplements are not recommended.

Transcript:

Nicole:

Also really important is alcohol. So limiting alcohol consumption. Again the world cancer research fund actually recommend avoiding alcohol if possible and I know that it is not always practical for social reasons and personal enjoyment, so if you do choose to drink it is important to make sure that you don't exceed national guidelines for alcohol intake and in Australia that is less than two standard drinks a day. And I have put some examples there are of what constitutes a standard drink and that does vary considerably across the different types of alcohol as well. Limiting fast food intake is also important so avoiding consumption of fast foods and processed foods that are high in fat, starches and sugars and also not to rely on dietary supplements. So the recommendation is to get your nutrients and all of your nutrition through food sources rather than relying on dietary supplements. And this is in part because there have been some studies that have shown that certain dietary supplements can actually increase your risk of cancer or developing other types of cancers, but also the components of foods and vitamins interacting with other micronutrients and substances in foods is so complex that we can't actually mimic that in supplement form as well. So it is important to eat as many natural and whole foods as we can.

Resources

Cancer Council Australia and local state Cancer Council websites

Cancer Prevention:

<http://www.cancer.org.au/preventing-cancer/nutrition-and-physical-activity/>

<http://www.cancertas.org.au/prevent-cancer/eat-for-health/>

<https://www.wcrf.org/dietandcancer/cancer-prevention-recommendations>

During Treatment:

<http://www.cancervic.org.au/living-with-cancer/diet-nutrition>

deakin.edu.au/research/ipan Deakin University (2012) Provider Code: 20118



Slide content:

Text: Resources

Cancer Council Australia and local state Cancer Council websites

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<http://www.cancer.org.au/preventing-cancer/nutrition-and-physical-activity/>

<http://www.cancertas.org.au/prevent-cancer/eat-for-health/>

<https://www.wcrf.org/dietandcancer/cancer-prevention-recommendations>

During Treatment:

<http://www.cancervic.org.au/living-with-cancer/diet-nutrition>

Transcript:

Nicole:

So, I have got some resources listed here on the screen. So some of these are for - it does say cancer prevention. As I mentioned they are the same recommendations that we would suggest you use in a cancer survivorship stage and the bottom recommendation, there is some resources for use during cancer treatments. So this is the Cancer Council Victoria website: there is a lot of information on there on managing the different possible symptoms and side affects you might experience during cancer treatment; as well as information about energy and protein diet that you might require going through cancer treatments. So, I think in summary during cancer treatment the really important message I would like to get across is that maintaining weight, in particular muscle mass, is really important in avoiding becoming malnourished. And dealing with or making sure that any symptoms that you are experiencing are managed as well as possible is the key recommendation. In the recovery from treatment it is very similar, it's still managing the treatment side effects and continuing to maintain your weight and muscle mass. And it is only once you are feeling those symptoms have recovered that your weight is stabilized that you would then transition to the dietary recommendations for healthy eating for cancer survivors. I am happy to take questions at a later time, so I will hand over to Catherine now to talk about physical activity.

SLIDE 22

**Lung Cancer Connect webinar:
Living well with lung cancer**

Dr Catherine L Granger

Physiotherapy Research Lead, Royal Melbourne Hospital
Senior Lecturer, The University of Melbourne
Victorian Cancer Agency Clinical Research Fellow

catherine.granger@unimelb.edu.au

Slide content:

Text: Lung Cancer Connect webinar:
Living well with lung cancer

Dr. Catherine L Granger

Physiotherapy Research Lead, Royal Melbourne Hospital
Senior Lecturer, The University of Melbourne
Victorian Cancer Agency Clinical Research Fellow

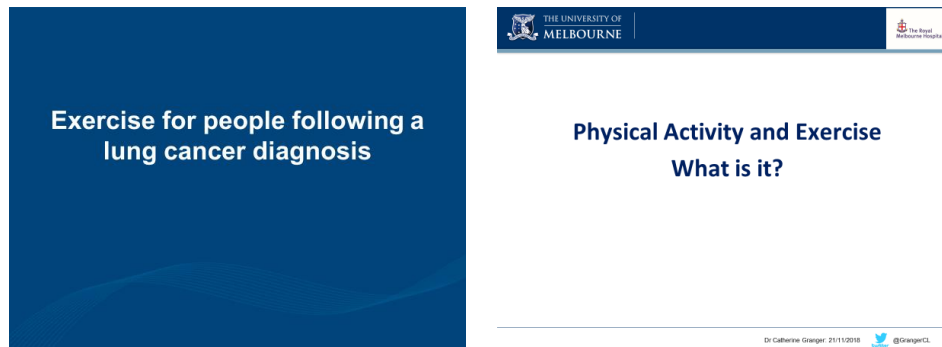
Catherine.granger@unimelb.edu.au

Transcript:

Catherine:

Thank you Nicole and I am here to present on this webinar today about exercise and physical activity for people with lung cancer who are either recently diagnosed and going through treatment or in the survivorship phase.

SLIDE 23 & 24



Slide content:

Text: (Slide 23) Exercise for people following a lung cancer diagnosis

Text: (Slide 24) Physical Activity and Exercise
What is it?

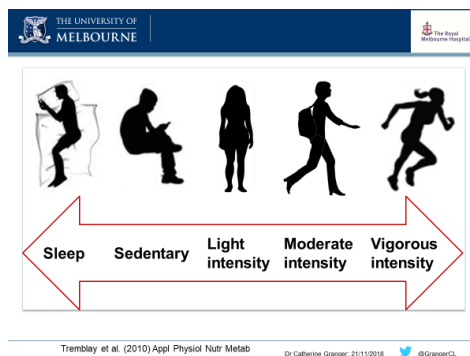
Transcript:

Catherine:

So physical activity and exercise. You may hear these terms used interchangeably and that is very reasonable, and I am going to talk to you a little bit about the differences between physical activity and exercise to begin with in my presentation.

So what is it? physical activity can be a range of different exercises or different activities.

SLIDE 25



Slide content:

Text: Sleep – Sedentary – Light Intensity – Moderate intensity – Vigorous intensity

Transcript:

Catherine:

You may see this graph here or pictures here on the screen that show an individual doing many different activities that you can do over your day. This goes from sleeping to sedentary type behaviours such as sitting down to light intensity exercises, walking and more moderate and vigorous intensity and I will talk through the definitions are what they actually mean and some examples in a moment. These are all types of physical activity. Physical activity is, before I go into how much you should be doing, physical activity is any type of bodily movement that produces or uses energy, so it can be simple things such as walking up and down stairs, walking around your home, walking the dog those types of exercises are activities. That type of activities differs to exercise which is a much more structured and planned type of activity. So It may be a matter of going for a brisk walk, it may be a matter of going to the gym and I will give you many examples of that. And it is really important to include components of generalised physical activity as well as structured physical activity in your daily week.

SLIDE 26 & 27



Physical Activity How much should you be doing?

Dr Catherine Granger 21/11/2018 @GrangerCL



- Resume exercise as soon as possible
- Aim to perform aerobic exercise (moderate intensity) for 150 minutes per week
- Muscle strengthening 2-3 times per week
- Avoid sedentary time



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Slide content:

Text: For people with cancer:

- Resume exercise as soon as possible
- Aim to perform aerobic exercise (moderate intensity) for 150 minutes per week
- Muscle strengthening 2 – 3 times per week
- Avoid sedentary time

Transcript:

Catherine:

For people with cancer we recommend a certain level of exercise and physical activity and these are the same recommendations for people living anywhere around the world, they are our international guidelines. What those recommendations include: to resume exercise as soon as possible after a cancer diagnosis. Now for everyone that will differ slightly depending on the type of treatment that you may be undergoing, or you have undergone in the past. So that will differ certainly if you are having surgery or have just had surgery compared to other types of treatment, but the recommendations are to resume exercise as soon as possible. Then the targets are to build up slowly to a few different components. The first one is moderate intensity aerobic exercise. So aerobic exercise is things like cardiovascular or cardio exercise like brisk walking and I will give you some examples later on in my presentation about the types of exercise you could use to achieve this. But The aim is to reach 150 minutes of this type of exercise over the whole week. Now many people break that down into about 30 minutes of exercise per day for five days of the week. The second component is resistance or strengthening exercises. Now these exercises work to strengthen your muscles and your peripheral muscle such as your muscles in your arms and your legs and throughout your body. we recommend that you don't need to do these as often as aerobic or cardio exercises. They are only required to be done two or three times a week. And as I mentioned I will give you some examples shortly. And the final recommendation is to avoid sedentary time. So this means avoiding spending too long sitting down during the day or lying down during the day. One good tip to try and avoid that is to break up long periods of sedentary time by standing up and walking. So for example, if you are sitting down to watch television during the day, every ad break get up and go for a walk around the living room and come and sit back down and that will break up that period of sedentary behaviour. Now you may know that if you are interested in physical activity and familiar with this area, you may actually recognise that these guidelines for people with cancer are exactly the same as the guidelines for the general population and that is a really important message that we are still aiming for the same level of physical activity. But at some time points that will need to be changed and I will talk about that shortly.

SLIDE 28



Moderate intensity physical activity

= *some shortness of breath but can still talk*

For example: brisk walking, slower cycling, swimming

Vigorous intensity physical activity

= *shortness of breath that makes it difficult to talk between breaths*

For example: fast running, fast cycling

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Slide content:

Text: **Moderate intensity physical activity**

= *some shortness of breath but can still talk*

For example: brisk walking, slower cycling, swimming

Vigorous intensity physical activity

= *Shortness of breath that makes it difficult to talk between breaths*

For example: fast running, fast cycling

Transcript:

Catherine:

So here is some examples of different intensity exercise or activities. The first one is moderate intensity and as I mentioned a moment ago the recommendations are for people with cancer to do moderate intensity exercise. So this is where your heart is beating, your body is working you are probably getting a bit puffed doing the exercise, but it is not vigorous intensity exercise where you are really very puffed, you might be running at a fast pace or you might be cycling very fast and your heart is working much harder. What we know from the research studies is that moderate and vigorous intensity exercises are safe for people with cancer. But usually vigorous intensity exercise which is a much higher level is done under supervised conditions. So usually that would be done in a gymnasium supervised for example by a physiotherapist or exercise physiologist. So the recommendations certainly state that most people who might not be working with a health professional moderate exercise is perfectly fine and very feasible to do.

SLIDE 29

Several systematic reviews have reported positive effects of exercise for people with lung cancer¹⁻³

Improvements in:

- Fitness
- Quality of life
- Mood (anxiety and depression)
- Fatigue
- Cancer symptoms
- Treatment side effects

¹ Cavalheri V et al Cochrane 2013; ² Granger C. Journal of Physiotherapy 2016; Cavalheri & Granger Cochrane 2017.

D Catherine Granger, 21/11/2018 @GrangerC

Slide content:

Text: Benefits of Exercise

Several systematic reviews have reported positive effects of exercise for people with lung cancer
1 - 3

Improvements in:

- Fitness
- Quality of life
- Mood (anxiety and depression)
- Fatigue
- Cancer Symptoms
- Treatment side effects

¹Cavalheri V et al Cochrane 2013; ²Granger C. Journal of Physiotherapy 2016; ³Cavalheri & Granger Cochrane 2017

Transcript:

Catherine:

There are many benefits for people with lung cancer to exercise and what we have seen over the past twenty years is a huge amount of research looking at what those benefits are and why is so important for people to keep up activity levels. Here is a list of some things on the screen but it is really quite significant that the results for people who can keep up physical exercise activity, things such as improving fitness levels, improving quality of life, improving symptoms, reducing cancer-related fatigue are some of the expected benefits. And that's why the recommendations are what they are. And those recommendations are supported by this strong body of evidence.

SLIDE 30 & 31

THE UNIVERSITY OF MELBOURNE | The Royal Melbourne Hospital

Physical Activity Are we doing enough?

Dr Catherine Granger 21/11/2018 @GrangerCL

THE UNIVERSITY OF MELBOURNE | LACK of Physical Activity | The Royal Melbourne Hospital

A global health issue

Annually:

- costs the healthcare system \$53.8 billion¹
- responsible for 13.4 billion disability-adjusted life-years (DALYS)¹

Fig 7 | Continuous risk curves for association between physical activity and breast cancer, colon cancer, diabetes, ischaemic heart disease, and ischaemic stroke

¹ Ding Lancet 2016; ² Kyu BMJ 2016

Dr Catherine Granger 21/11/2018 @GrangerCL

Slide content:

Text: (Slide 29) Physical Activity
Are we doing enough?

Text: (Slide 30) LACK of Physical Activity
A global health issue

Annually:

- Costs the healthcare system \$53.8 billion ¹
- Responsible for 13.4 billion disability-adjusted life-years (DALYS) ¹

1. Ding Lancet 2016; 2. Kyu BMJ 2016

Transcript:

Catherine:

So, my next theme to look at is physical activity. So, I've looked at the level of physical activity we recommend but the next concept is - are we actually doing enough physical activity.

So firstly, I would like to talk about physical activity in the global sense so everybody living in the world regardless of whether people have cancer or not and the answer is no, we're really not doing enough physical activity. In fact, lack of physical activity is a major issue worldwide at the moment. What you can see here from the figure is actually looking at some data looking at the protective benefit of physical activity to protect people against certain diseases. But what we know across the world is that inactivity across the general population is actually responsible for a huge amount of disability and health care costs. There is a lot of potential for people across the board regardless of what they may have to promote physical activity.

SLIDE 32



- People with cancer decrease their physical activity between diagnosis and starting treatment ¹
- Only a minority of people with lung cancer meet the physical activity guidelines at diagnosis or after treatment ²

¹ McTiernan 2004; ² Granger 2014 Dr Catherine Granger 21/11/2018 @GrangerCL

Slide content:

Text: People with cancer

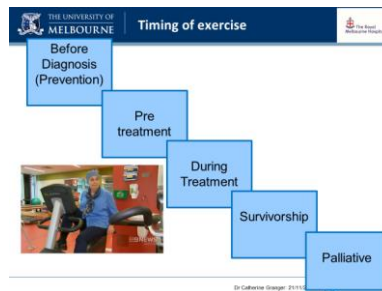
- People with cancer decrease their physical activity between diagnosis and starting treatment ¹
- Only a minority of people with lung cancer meet the physical activity guidelines at diagnosis or after treatment ²

Transcript:

Catherine:

But then in terms of people with cancer what we know from the research studies is that it is very hard for people with cancer to exercise and I'm going to talk about some of those barriers shortly but the data of shows us that people between even being diagnosed with cancer and starting treatment, many people reduce how much activity they are doing and then the data shows us that as people go through treatment and after treatment it is very common to be reducing physical activity levels and not meeting those guidelines. There are many reasons why. They are often individual, but I'm going to talk about some of the research that we have around some of those barriers and some ways to overcome those barriers shortly.

SLIDE 33



Slide content:

Text: Timing of exercise

- Before Diagnosis (prevention)
- Pre treatment
- During treatment
- Survivorship
- Palliative

Transcript:

Catherine:

In terms of the timing of exercise there are so many times when you can consider starting exercise or continuing to exercise. Across the research we have studies that range from exercising before a cancer diagnosis to prevent cancer, we have studies at the moment in lung cancer doing work looking at the role of exercise before you even start treatment; so for example our team has a study in Melbourne at the moment looking for people who are waiting for surgery for lung cancer and the role of exercise. There is obviously a lot of work for exercise during treatment so for people going through chemotherapy or radiation therapy for example. Lots of work looking at exercise in the survivorship phase as people finish treatment, and also equally very important work with people in palliative disease. So the summary for this in terms of timing of exercise is that we have good evidence and research studies showing that exercise is safe across the continuum and really I would encourage you to start exercising no matter where you are in this continuum with some special things to consider as I will come to you later in my talk. But there is not one point in the Continuum where we would say it is not appropriate for some people to talk to their health professional about exercising.

SLIDE 34



Slide content:

Text: Exercise advice and tips

Transcript:

Catherine:

So, I would like to go on now to some advice and tips for exercising because it is certainly not easy to exercise. It is not easy for anyone, we know that generally across the world people do not do enough exercise, but it is extremely difficult for people who have a cancer diagnosis or going through treatment to exercise, so I would like to shed some advice on some tips on this.

SLIDE 35



- Prior to starting a new exercise program:
 - Speak to your GP, specialist, nurse, physio or EP
 - You may need a medical assessment first (this will vary)
- Individualised program set by a physiotherapist or exercise physiologist is recommended however not always possible

Dr Catherine Granger: 21/11/2018 @GrangerCL

Slide content:

Text: Exercise

- Prior to starting a new exercise program:
 - Speak to your GP, Specialist, nurse, physio or EP
 - You may need a medical assessment first (this will vary)
- Individualised program set by a physiotherapist or exercise physiologist is recommended however not always possible

Transcript:

Catherine:

The first one is starting exercise. What I would really recommend is to tap into any access that you have around exercise and support. So if you are going through treatment and working with a medical team, talking to them about exercise, if you are in the survivorship phase and have a general practitioner talking to them about starting exercise, if you have access to a physiotherapist or exercise physiologist or cancer nurse anyone that you are in contact with at the moment I would really encourage you to ask the question about exercise and consider this. For most people, if you are not a regular exerciser, most people we would recommend getting a medical assessment first before starting a program. And that is where talking to those professionals first would be very helpful to look at who would be best help to help you with that, and how we can help you start off on an exercise Program. Then what is recommended is an individual program for you based on your current condition and certainly all of the recommendations for people with cancer is that that exercise program should be tailored exactly to you, your current conditions, your history of treatment and that is a really important aspect and a physiotherapist or exercise physiologist are perfectly placed to do that.

SLIDE 36

- Exercise should be individually prescribed for each person taking into consideration their condition (disease), type of treatments/surgery, baseline fitness and general medical condition



Dr Catherine Granger 21/11/2018 @GrangerCL

Slide content:

Text: Exercise Prescription

- Exercise should be individually prescribed for each person taking into consideration their condition (disease), type of treatments/surgery, baseline fitness and general medical condition

Transcript:

Catherine:




In terms of the prescription I mentioned it should be individually tailored to you but also take into consideration not just your treatments but also any other conditions you may have. So for example if you have a heart condition, have COPD or any other conditions we can tailor the exercise according to other sort of conditions that you might have.

SLIDE 37

THE UNIVERSITY OF MELBOURNE | Exercise examples | The Royal Melbourne Hospital

Exercise program should ideally include:

1. Aerobic exercise (aka cardiovascular, aka cardiorespiratory)
 - Examples: walking, jogging, running, cycling, step machine, aerobics, dancing
 - Length: at least 10 minutes at a time, ideally 30 minutes per day
 - How often: at least 5 times per week



Dr Catherine Granger 21/11/2018 @GrangerCL

Slide content:

Text: Exercise examples

Exercise program should ideally include:

1. Aerobic exercise (aka cardiovascular, aka cardiorespiratory)
 - Examples: walking, jogging, running, cycling, step machine, aerobics, dancing
 - Length: at least 10 minutes at a time, ideally 30 minutes per day
 - How often: at least 5 times per week

Transcript:

Catherine:

So here are some examples of the exercises that you could do to meet the recommendations. The first one you remember that I talked about was aerobic exercise or cardio exercise. So, this is where we were talking about moderate-intensity, so you are working a bit hard, your heart is beating harder, you are getting a bit puffed, but you can certainly still talk to the person that you are with and it's not that hard that you can't even hold a conversation or sentence. Some examples here are walking. Brisk walking is that moderate intensity; walking at a slow pace is probably not going to be sufficient to reach those health benefits, so if you can walk at a brisk pace for you and for everyone that will be slightly different. Jogging, cycling on a stationary bike, using a step machine at the gym, swimming, dancing, are all examples of cardio exercise. As I mentioned the goal is 150 minutes over the week but that is certainly can be broken down. What we recommend usually is a minimum of 10-minute bouts so that you can build that 150 minutes over the seven days of the week or 5 days of the week. But you can build it with small 10-minute sessions, so for example you may do 30 minutes on every weekday, but 10 minutes in the morning, 10 minutes at lunch and 10 minutes in the afternoon would be one way. If it is too challenging to do 30 minutes in one go that is very reasonable, and we aim for at least five times a week.

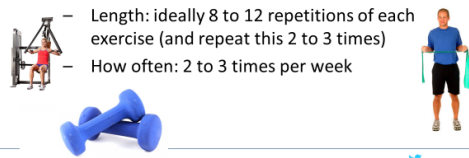
SLIDE 38

THE UNIVERSITY OF MELBOURNE | Exercise examples | The Royal Melbourne Hospital

Exercise program should ideally include:

2. Resistance exercise (aka strength, aka weights)

- Examples: weight machines, theraband, hand held weights (dumbbells), gravity (step ups, squats, wall push-ups, sit ups)
- Length: ideally 8 to 12 repetitions of each exercise (and repeat this 2 to 3 times)
- How often: 2 to 3 times per week



Dr Catherine Granger 21/11/2018 @GrangerCL

Slide content:

Text: Exercise examples

Exercise program should ideally include:

2. Resistance exercise (aka strength, aka weights)

- Examples: weight machines, TheraBand, hand held weights (dumbbells), gravity (step ups, squats, wall push-ups, sit ups)
- Length: ideally 8 to 12 repetitions of each exercise (and repeat this 2 to 3 times)
- How often: 2 to 3 times per week

Transcript:

Catherine:

The next type of classification of exercise is with resistance exercise or strengthening or weight exercises. So, these as I mentioned, and Nicole talked about briefly before, around the issues of malnutrition, these are really important in terms of looking after your muscles in your arms and your legs. Those muscles are very important to keep you active and functioning and doing daily activities. And resistance exercise is often something that people forget about so here are some examples: you can use weight machines, you can use TheraBand's or the elastic bands, you can use just gravity or free weight and we can adapt exercises depending on what type of equipment or resources you have. Or if you have nothing at all we can still use gravity. These are to be done about two to three times a week. These exercises are very hard to start on your own if you are not experienced with exercise or have not done it before and that is where I recommend tapping into a physiotherapist or an exercise physiologist or a nurse or anyone that you're working with just to get some support to start resistance exercises because it is quite important to look at your technique and to see that you are getting the best out of it.

SLIDE 39 & 40



Where to access support

Dr Catherine Granger 21/11/2018 @GrangerCL



How to access physiotherapy?



- Chronic Disease Management Plan
 - Team Care Management Plan (access to 2 allied health professionals with Medicare rebate)
 - Referral from GP required
 - Access to 5 'paid' consultations in calendar year
- Pulmonary rehabilitation programs (some)
- HARP program (post hospitalisation)
- Chronic disease rehab dedicated programs

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Slide content:

Text: (Slide 38) Where to access support

Text: (Slide 39) How to access physiotherapy?

- Chronic Disease Management Plan
 - Team Care Management Plan (access to 2 allied health professionals with Medicare rebate)
 - Referral from GP required
 - Access to 5 'paid' consultations in calendar year
- Pulmonary rehabilitation programs (some)
- HARP program (post hospitalisation)
- Chronic disease rehab dedicated programs

Transcript:

Catherine:

So where to access support?

The first one is to consider the chronic disease management plan, so we recommend getting in touch with your general practitioner about this, and for some people you will have access to sessions to see an exercise physiologist or physiotherapist that may be able to help set you up on an exercise programme. There are many other programs and they are a little bit different around Australia for people with lung cancer. So, there are programs such as pulmonary rehab which is very common in Australia and some pulmonary rehabilitation programs are open to people with lung cancer as well. There are other programs such as HARP which some hospitals have a program post-hospitalization where you can be tapped into more of a chronic disease plan there. There are community rehab programs, there are lots of different programs depending on where you are that might be able to assist you with exercise and at the end of my presentation I have some links to some resources online where you may be able to get information about what is in your local area. But if everything else fails and you can't find anything online I would be starting with asking your GP.

SLIDE 41 & 42

THE UNIVERSITY OF MELBOURNE

The Royal Melbourne Hospital

Tips to keep active



Dr Catherine Granger: 21/11/2018 @GrangerCL

THE UNIVERSITY OF MELBOURNE

Barriers to physical activity

The Royal Melbourne Hospital

Improving the delivery of physical activity services in lung cancer: A qualitative representation of the patient's perspective

Catherine L. Granger^{1,2} | Selina M. Parry¹ | Lara Edbrooke^{1,3} | Shaza Abo² | Nina Leggett^{1,2} | Martha Dwyer¹ | Linda Denehy^{3,4}

WILEY

- Symptoms
- Anxiety, fear, uncomfortable feeling about SOB
- Tiring
- Exacerbation or fluctuating symptoms
- Lack of perceived benefit
- Too busy
- Costs
- Air pollution
- Weather

Dr Catherine Granger: 21/11/2018 @GrangerCL

Slide content:

Text: (Slide 40) Tips to keep active

Text: (Slide 39) Barriers to physical activity

Improving the delivery of physical activity services in lung cancer: A qualitative representation of the patient's perspective

Catherine L. Granger^{1,2} | Selina M. Parry¹ | Lara Edbrooke^{1,3} | Saza Abo² | Nina Leggett^{1,2} | Martha Dwyer¹ | Linda Denehy^{3,4}

- Symptoms
- Anxiety, fear, uncomfortable feeling about SOB
- Tiring
- Exacerbation or fluctuating symptoms
- Lack of perceived benefit
- Too busy
- Costs
- Air pollution
- Weather

Transcript:

Catherine:

So, then some tips to keep active.

The first thing that I mentioned before, this issue is extremely difficult for people with lung cancer to be physically active. And what we have done with our team here is that we have actually done some qualitative research and some work with people who have been through the Victorian healthcare system and been treated for lung cancer. And we bought people in and asked people in a focus group environment to talk to us about what specifically was some of the barriers. And I would like to share some of those insights with you now because it is really helpful for myself as a health professional in terms of advising people how to overcome those barriers. So some of the things that people tell us about is that symptoms are a barrier. If people are feeling very short of breath or feeling very fatigued, of course you don't feel like exercising. A fear of exercising, being tired, exacerbation or fluctuating symptoms, lack of perceived benefit in terms of some people don't realise the important benefits of exercise or why it might be worth prioritising time to exercise. People are too busy and particularly going through treatment this is a very challenging time when you have many appointments and coming to the hospital all the

time and reorganizing everything else in life it is often very hard to find time to fit in exercise. The cost is a big barrier, particularly if you are financially required to be paying to go to a gym, that is a barrier for some people. Air pollution is a concern for people living in very city-based areas where there might be a lot of pollution and then of course the weather. Weather stops all of us exercising if it is extreme heat or if it is very cold it is very hard to exercise so I'd like to talk a little bit about some of those ways to overcome these things.

SLIDE 43



The slide features a blue header with the University of Melbourne logo and the word 'Exercise'. Below the header is a list of general advice points. To the right of the list is a small image of a person's feet wearing red sneakers on a paved surface. At the bottom right, there is a small Twitter icon and the text '@GingerCL'.

General advice:

- WALKING is GREAT!
- Make exercise enjoyable
- Walk with someone (if possible)
- Be aware of exercise intensity ("walk and talk test")
- Be aware of good days / bad days
- Wear appropriate footwear and clothing
- Avoid exercise in extremes of weather (heat or cold)

Slide content:

Text: Exercise

General advice:

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- Be aware of exercise intensity ("walk and talk test")
- Be aware of good days/bad days
- Wear appropriate footwear and clothing
- Avoid exercise in extremes of weather (heat or cold)

Transcript:

Catherine:

So, the first thing is that walking is great and if you don't have access to any other program walking is the best form of exercise. And it is certainly what I recommend for all of the clients that I am working with at the moment who are very early post lung cancer surgery. We start people on a walking program from day 1 or day 2 after surgery. So, walking is a fantastic exercise, you can walk at a fast-enough pace to get very good benefits and it doesn't cost anything, it does not use any equipment or resources, and everybody knows how to walk, so it is such a good exercise and I would really recommend that everybody start with walking. It can also be a really nice social exercise because you can walk with your family or friends and get a lot of enjoyment out of it. Try and make exercise enjoyable because exercise is not for everyone and some people absolutely hate it, so consider what might be enjoyable for you or what might you can add onto it to make it enjoyable because adhering to it is very hard to do if it's something that you really hate doing. So some examples are walking or exercising with family or friends, exercising with music, or going to a place that you really enjoy. If you live near a beach or a nice park or garden

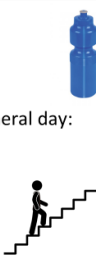
going there to do exercise is a really helpful thing to achieve enjoyment. If you can walk with someone or exercise with someone if possible that really helps, it holds both of you accountable to the exercise, but it also brings that enjoyment. Be aware of how hard you are exercising because the best benefits are achieved when you are exercising at that moderate intensity at least and the best way that I recommend people measure this on your own is the walk and talk test. What this means is that you are walking at a certain distance you are getting a bit puffed, but you can still talk to the person that you're walking with. If you are walking and you are not getting puffed at all you are probably not going fast enough, so you will need to increase your speed. But if you are walking or running or whatever you are doing too fast that you can't even hold a conversation, that you are so short of breath, then that is probably a too high intensity and you need to slow down, so that walk and talk test is a great way to reflect on your body how hard you are working at the moment and what level you should be sitting at. Be aware of good and bad days so you don't actually need to exercise on every day of the week. You can very easily meet the guidelines on exercising on five days of the week and everybody will have really good days and really bad days and fluctuations. So, if you are having a bad day have a rest day and restart exercise the next day. It is completely reasonable, and I particularly really do not recommend exercising if you are having any extremes of symptoms or any new acute medical problems, you really do not recommend pushing through that and recommend seeking medical advice before you come back to exercise. Think about your footwear and clothing, a good pair of shoes or runners is quite important to prevent any musculoskeletal injuries and clothing that is easy to exercise with, so clothing that is not too hot, but you can freely move in is really helpful to promote the whole activity. And then finally in terms of tips avoiding extreme weather or heat. So, in the summer I would recommend avoiding walking or exercising in the middle of the day when it is very hot, usually first thing in the morning is best in the extreme heat of summer. Similarly, in winter when it is very cold you can avoid the morning or evening and try and exercise in the middle of the day, or if you are normally exercising outside and it is very cold consider even just going to a shopping centre. A big shopping centre you can walk you know hundreds of metres or kilometres in shopping centres and it is a way to control your environment. So, a clever little thing too if the weather is holding you back.

SLIDE 44

THE UNIVERSITY OF MELBOURNE | Exercise | The Royal Melbourne Hospital

General advice:

- Maintain hydrated by drinking water
- Good nutrition is important
- Look at ways to be more active in general day:
 - Walking to shops
 - Get off bus/tram one stop early
 - Use the stairs instead of a lift
 - Gardening
 - Housework



Dr Catherine Granger: 21/11/2016 @GrangerCL

Slide content:

Text: Exercise

General advice:

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- Good nutrition is important
- Look at ways to be more active in general day:
 - Walking to shops
 - Get off bus/tram one stop early
 - Use the stairs instead of a lift
 - Gardening
 - Housework

Transcript:

Catherine:

Keep hydrated and Nicole has already touched a little bit on hydration during her talk on nutrition. So, keep hydrated by drinking water when you are exercising. Nicole has touched on the importance of nutrition which obviously comes so closely with exercise and then consider ways that you can just generally be more physically active. So I started my talk today by talking a little bit about general physical activity across the day as well as structured exercise. So whilst we have talked a lot about this structured exercise like going on a walk plus doing strengthening exercise don't forget about just incidental physical activity; things like getting off the train or getting off the tram a stop earlier and walking a bit further, taking the steps whenever you are in a house or in a building with multiple levels, taking the steps if you can rather than a lift, walking up the stairs rather than an elevator. Those are the type of things that promote general activity and are really great ways to keep active and get very good benefits in terms of small choices you can make in your daily life.

SLIDE 45

THE UNIVERSITY OF MELBOURNE | Where can you get more information? | The Royal Melbourne Hospital

<https://choose.physio/your-body/chest/lung-cancer>
<https://lungfoundation.com.au/patients-carers/living-with-a-lung-disease/lung-cancer/support/>
<http://www.health.gov.au/internet/main/publishing.nsf/content/health-pubhlth-strateg-phys-act-guidelines>
<http://www.cancervic.org.au/living-with-cancer/exercise>
<http://www.cancer.org/healthy/eathealthygetactive/index>

Dr Catherine Granger 21/11/2018 @GrangerCL

Slide content:

Text: Where can you get more information?

<https://choose.physio/your-body/chest/lung-cancer>

<https://lungfoundation.com.au/patients-carers/living-with-a-lung-disease/lung-cancer/support/>

<http://www.health.gov.au/internet/main/publishing.nsf/content/health-pubhlth-strateg-phys-actguidelines>

<http://www.cancervic.org.au/living-with-cancer/exercise>

<http://www.cancer.org/healthy/eathealthygetactive/index>

Transcript:

Catherine:

So I have a list here of resources and websites that have a lot more information about the topics that I have talked about today, they give information around physical activity and exercise, they give information about ways that you can access programs as certainly the Lung Foundation Australia have some great resources online that you can certainly go to, to look at more about exercise.

SLIDE 46



THE UNIVERSITY OF
MELBOURNE

KEY TAKE HOME MESSAGES



The Royal
Melbourne Hospital

- **Exercise is beneficial**
- **Lots of research supporting exercise**
- **There are precautions for exercise prescription and pre- assessment/supervision is highly recommended – speak to your GP or physio as a starting point**
- **Get active!**



Dr Catherine Granger 21/11/2018  @GrangerCL

Slide content:

Text: KEY TAKE HOME MESSAGES

- Exercise is beneficial
- Lots of research supporting exercise
- There are precautions for exercise prescription and pre-assessment/supervision is highly recommended – speak to your GP or physio as a starting point
- Get active!

Transcript:

Catherine:

So, in summary my key take home messages from today are exercise is extremely beneficial for people with lung cancer, whether you have just been diagnosed, whether you are going through treatment, whether you have had treatment, whether you are a long time down the track. Exercise is beneficial and there is a lot of research behind it. There are precautions and special things to consider with exercise and that is why I would strongly recommend before starting that you seek advice from a health professional and whoever it is that you are working with and can access. Even as simple as your general practitioner would be perfectly fine to talk about starting a program so please get active, go out and walk and enjoy the exercise.

SLIDE 47 & 48



Slide content:

Text: (Slide 46) Thanks to all of the patients who have participated in our research studies. Thanks to our University of Melbourne and Royal Melbourne Departments and Research team.
Text: (Slide 47) For more information and support contact **freecall 1800 654 301 lungfoundation.com.au**
The Lung Cancer Connect project is a Cancer Australia *Supporting people with cancer* Grant initiative, funded by the Australian Government.

Transcript:

Catherine:

So, I would like to thank everybody and particularly like to thank all of the people who had lung cancer and have been in my studies in the past that have contributed to this body of research. Of course, we could not have done any of this without you and obviously to the Lung Foundation for giving me this opportunity to present today thank you.

Ashleigh:

*Thanks Catherine. So, if anybody has any questions please just send them through via the Facebook but otherwise this video will be available in a few weeks' time. So we are now coming to a close on our fourth webinar, 'Living well with lung cancer' and I would like to remind our audience that if you wish to talk further about anything that was discussed today or any other aspect of living with lung cancer but you can contact Lung foundation Australia on 1800 654 301 and ask to speak to our lung cancer support nurse or you can contact Cancer Council on 13 11 20. A survey link will be sent to you within the next few days and please complete this survey to give your feedback about the webinar. We do apologise for technical inconvenience at the start of the webinar we hope that you do enjoy the Facebook live feed instead. If you missed any part of a webinar a copy will be made available in the coming weeks and this webinar is made possible by a Cancer Australia *Supporting people with cancer* Grant initiative, funded by the Australian government. Thank you to our presenters today Nicole and Catherine and to our audience today for joining us and we hope to see you next time.*

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