

*Translating lifestyle theory to healthy practice for the reduction of cancer occurrence and recurrence*

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# Physical activity and the cancer patient : get started and keep going

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# Inactivity reaches 'pandemic' proportions

## THE LANCET

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www.thelancet.com



"In view of the prevalence, global reach, and health effect of physical inactivity, the issue should be appropriately described as pandemic, with far-reaching health, economic, environmental, and social consequences."



# Inactivity reaches 'pandemic' proportions

- Health benefits of increasing PA
  - wide ranging and well documented
  - available to all
  - even for those dealing with chronic health challenges such as cancer



# ***Translating lifestyle theory to healthy practice for the reduction of cancer occurrence and recurrence - Conclusions from our studies***

- Mutrie, N., et al. (2007). Benefits of supervised group exercise programme for women being treated for early stage breast cancer: pragmatic randomised controlled trial. *British Medical Journal*, 334, 517-520.
- Women benefited from the provision of exercise classes
- A diagnosis of cancer can signal a “teachable moment”
- Clinicians should encourage activity for patients with cancer

# Exercise Programme Goal:

## Attend 2 classes and do 1 session at home

### Classes:

- 10 minute warm up
- 10-20 minute session:
  - Low level aerobics
  - Circuits
  - Walking
  - Cycling
  - Strengthening exercises
  - Dancing
- 10 minute cool down and relaxation

### Group Discussion

- Exercise psychology group discussion to encourage women to becoming independent exercisers
- Home
  - Walk
  - Strengthening exercises
  - Try local opportunities

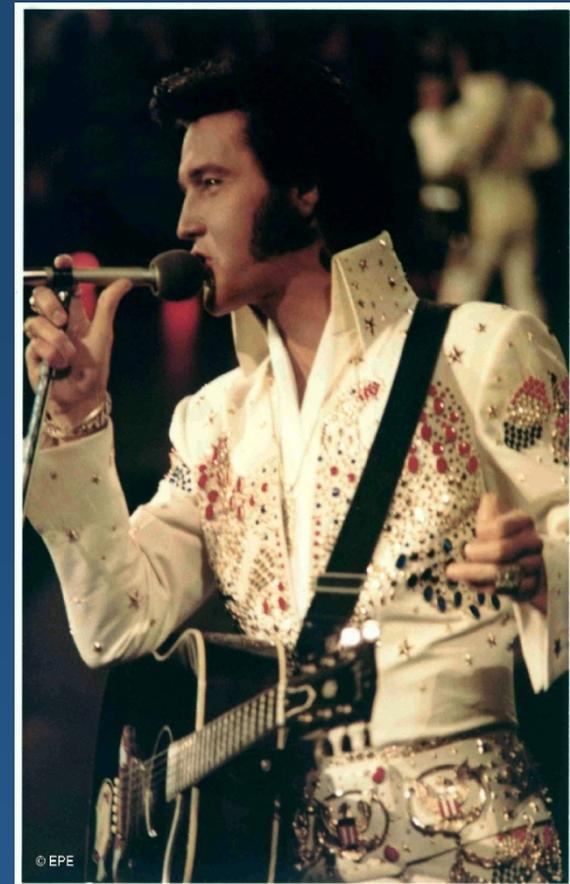


# Exercise programme: Group discussion

- Based on transtheoretical model of exercise behaviour change (Marcus, et al, 1994)
- why exercise?
- how much and how hard?
- pros and cons of increasing activity (decisional balance)
- setting goals for activity each week (intention formation}
- finding support
- relapse prevention
- after the programme - appropriate activities in the community

# Qualitative analysis of focus group responses - A little less conversation, a little more action!

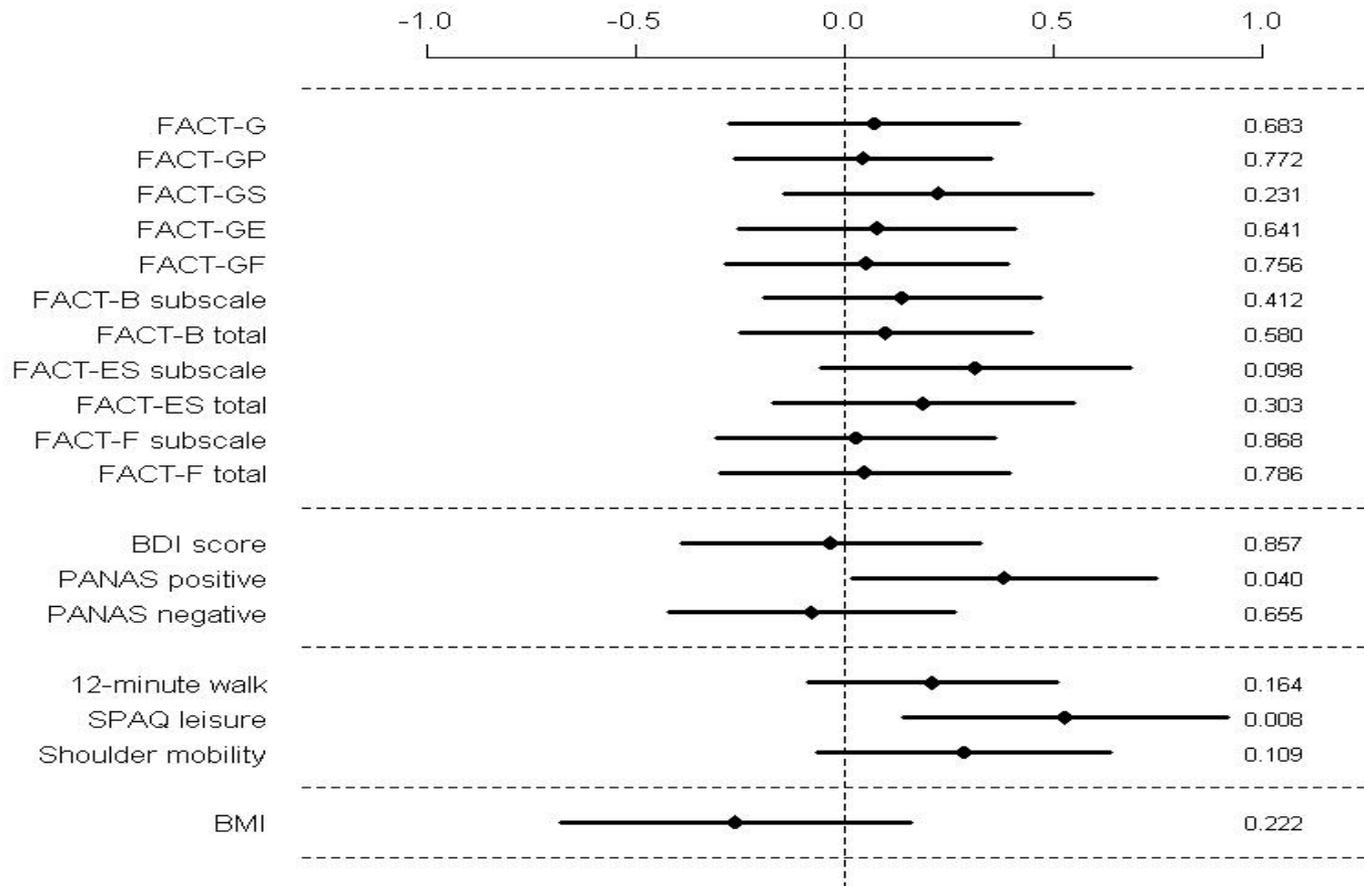
*I wouldn't have been interested in just sitting round a table talking about cancer, that's really the last thing you want to do. I mean we did talk about it quite a lot because we were right in the middle of treatment, but it was kind of alongside of what you were doing (exercise), it wasn't the main focus of why you got together.  
(Respondent 4, group 1, intervention arm)*



# Mutrie, N., et al. (2012) Five-year follow-up of participants in a randomised controlled trial showing benefits from exercise for breast cancer survivors during adjuvant treatment. Are there lasting effects?

*Journal of Cancer Survivorship*

Effect estimates of change from baseline at 5 years (Exercise - Control, in units of 1 SD) with 95% CIs



Mutrie,N., et al. (2012) Five-year follow -up of participants in a randomised controlled trial showing benefits from exercise for breast cancer survivors during adjuvant treatment. Are there lasting effects?  
*Journal of Cancer Survivorship*

- Cancer survivors should be encouraged to engage in regular physical activity
- Services to support regular physical activity might include:
  - supervised exercise sessions in early stages
  - similar to that provided for cardiac rehabilitation
  - encouragement to make use of local physical activity opportunities.

# Getting started....

- If you are a clinician....
- If you are a personal trainer....
- If you are a patient.....
- If you are an academic.....
- If you are a network organiser.....
- Or just for yourself.....
- 3 ideas follow.....



# 1) If you are in Glasgow or Dundee

- Contact Macmillan CANmove Team  
0141-287-0241  
[CANmove@glasgowlife.org.uk](mailto:CANmove@glasgowlife.org.uk)
- CANmove is a free physical activity programme for anyone living with or beyond cancer
- 12 week programme
- fully funded by Macmillan Cancer Support

## 2) If you are in other areas

- Ask yourself or appropriate officials why there is no exercise opportunity?
- Suggest you/they are ignoring a powerful 'pill'
- Contact Macmillan CANmove Team  
0141-287-0241  
[CANmove@glasgowlife.org.uk](mailto:CANmove@glasgowlife.org.uk)

### 3) Encourage patients to walk more



Consult

<http://www.macmillan.org.uk/>

Look for 'benefits of being active' including a DVD directed by Anna Campbell

# Nearest activity to perfect exercise

— Morris 1997

- Free
- No equipment
- Accessible to almost everyone
- Safe & low risk of injury
- Popular activity
- Social
- Incorporate into daily lives
- Physiological and psychological benefits established
- Good start point for the inactive
- Can build self efficacy for other PA



# Walking Goals

- Week 1 and 2:
  - an additional 1,500 steps at least 3 days/week
- Week 3 and 4:
  - increase to 5 days/week
- Week 5 and 6:
  - an additional 3,000 steps on at least 3 days/week
- Week 7:
  - increase to 5 days/week
- Week 8-12:
  - maintain week 7



# Understanding behaviour change techniques [BCTs] in relation to walking and cycling

- Recent review of BCTs in walking and cycling interventions (Bird et al (in press) *Health Psychology*)
  - **Self-monitoring and intention formation** most common techniques in interventions that reported statistical improvement in walking or cycling
- In terms of walking – the pedometer offers a perfect self-monitoring tool



# Discussion point with neighbour



- How many of these 3 can you do ?
- Please stand up for your discussion if you would welcome the stretch!

# Keeping going

- Clinicians should encourage discussion about physical activity
  - Let patients know this is important
- Relapse prevention
  - Relapse is part of the cycle of change
  - Discuss patient's potential 'pitfalls' and possible ways of avoiding them
  - Join new groups/activities/ challenges



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Joint  
Cancer Research UK

# Conclusions

- Breast cancer patients who are more physically active experience better quality of life and physical outcomes over the long term than less physically active patients
- Getting started
  - use available services
  - advocate for them if not in your area
  - walking is a great start point
- Keeping going
  - Let patients know that you feel PA is important
  - Consider pitfalls and solutions to avoid relapse
  - Variety is key – new groups/activities/challenges

# Key references

- Main trial
  - Mutrie, N., et al. (2007). Benefits of supervised group exercise programme for women being treated for early stage breast cancer: pragmatic randomised controlled trial. *British Medical Journal*, 334, 517-520.
- 5 year follow up
  - Mutrie, N., et al. (in press) Five-year follow-up of participants in a randomised controlled trial showing benefits from exercise for breast cancer survivors during adjuvant treatment. Are there lasting effects? *Journal of Cancer Survivorship*
- Qualitative
  - Emslie, C., et al. (2007). 'I wouldn't have been interested in just sitting round a table talking about cancer'; exploring the experiences of women with breast cancer in a group exercise trial. *Health Education Research*, 22 (6), 827-838.
- Determinants of physical activity
  - Biddle, S.J.H. and Mutrie, N (2008) Psychology of physical activity: determinants, well-being, and interventions. 2<sup>nd</sup> edition ed. London: Routledge. The 3<sup>rd</sup> edition has been contracted for 2013.

• Thank you for listening