

# Improving eating behaviours in socioeconomically disadvantaged communities

<b>Submission date</b> 04/06/2010	<b>Recruitment status</b> No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
<b>Registration date</b> 30/06/2010	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 06/09/2016	<b>Condition category</b> Nutritional, Metabolic, Endocrine	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims

Diet-related diseases such as obesity, heart disease and diabetes are on the rise in Australia and internationally. Many of these diseases can be prevented by health-promoting strategies such as eating a diet high in fruits and vegetables. Recent research has shown that women who have a lower level of education and/or are living on lower incomes are less likely to consume healthy foods including fruits and vegetables than those who are more educated and/or wealthier. This may be because certain knowledge and skills in nutrition, budgeting, meal planning and preparation are lacking in this population group. The aim of this study is to test a set of skill-building materials developed to help women on low incomes plan for, purchase and consume a healthier diet on a budget.

### Who can participate?

Women aged between 18 and 60 who shop regularly at one of the participating supermarkets and have a low weekly household income.

### What does the study involve?

Participants are randomly allocated to either a skill-building intervention or a waiting list. The skill-building intervention is delivered over six months via regular newsletters, recipes, booklets and activities, as well as an optional face-to-face supermarket tour with qualified Dietitians. The study tests the effectiveness of these strategies for increasing the amount of fruit and vegetables purchased and eaten by the participants. This is done through collecting and analysing survey data and supermarket sales data before, after and 6 months after the intervention. Participants on the waiting list complete the assessments only until the intervention and 6-month follow-up are complete, at which point they are offered the skill-building intervention materials.

### What are the possible benefits and risks of participating?

The risks to taking part in this study are very small. Participation is voluntary and participants can withdraw from the study at any time.

### Where is the study run from?

Deakin University (Australia)

When is study starting and how long is it expected to run for?  
January 2010 to March 2015

Who is funding the study?  
Australian Research Council (ARC) (Australia)

Who is the main contact?  
Prof. Kylie Ball

## Contact information

**Type(s)**  
Scientific

**Contact name**  
Prof Kylie Ball

**Contact details**  
221 Burwood Highway  
Burwood, Victoria  
Australia  
3125

## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**  
N/A

## Study information

**Scientific Title**  
Improving eating behaviours in socio-economically disadvantaged communities: a randomised controlled trial

**Acronym**  
ShopSmart 4 Health

**Study objectives**  
This study aims to test the effectiveness of a skill-building nutrition promotion strategy on increasing fruit and vegetable purchasing and consumption amongst women living in socio-economically disadvantaged communities. The study also aims to test the impact of the strategy on self-efficacy for, perceived barriers to, and perceived affordability of, consuming fruits and vegetables. The contribution of self-efficacy, perceived barriers and perceived affordability as

mediators of changes in fruit and vegetable purchasing and consumption behaviours will also be examined.

The study will test to see if there is a difference between the skill-building intervention participants and the controls, both immediately post-intervention and at a six-month follow-up, in:

1. Measures of fruit and vegetable purchasing or consumption
2. The proposed mediators, self-efficacy, perceived affordability and barriers of fruit and vegetable consumption

### **Ethics approval required**

Old ethics approval format

### **Ethics approval(s)**

Deakin University Human Research Ethics Committee - Health Medicine Nursing and Behavioural Sciences Subcommittee, 05/02/2010, ref: HEAG-H 188/09

### **Study design**

Randomised controlled trial

### **Primary study design**

Interventional

### **Secondary study design**

Randomised controlled trial

### **Study setting(s)**

Other

### **Study type(s)**

Quality of life

### **Participant information sheet**

Not available in web format, please use contact details below to request a patient information sheet

### **Health condition(s) or problem(s) studied**

Supermarket-based health promotion for socio-economically disadvantaged women in the area of nutrition

### **Interventions**

A randomised controlled trial conducted with women who shop at two randomly-selected Coles supermarkets based in low-income neighbourhoods in metropolitan Melbourne.

#### **Control:**

No treatment. Participants will complete the assessments only, until the intervention and 6-month follow-up are complete, at which point they will be offered the skill building intervention materials.

#### **Intervention:**

The skill-building intervention will be delivered over a six-month period and will incorporate a

range of modes of delivery and educational and behaviour change strategies.

Participants in this intervention condition will be provided with materials and resources through printed newsletters. Newsletters will be sent every two weeks for the first two months, and then once a month for the rest of the six-month intervention. Participants will also be provided with the opportunity to undertake a supermarket tour, during which the range and potential uses of fruits and vegetables (including tinned and frozen) will be identified. Elements of the intervention to be provided will include:

1. Education- will focus on raising awareness of the health- and weight-related benefits of consuming a healthy diet, particularly recommended intakes and suggestions for how to increase fruits and vegetables. The range of fruit and vegetable options available and their relative costs compared with other less healthful foods will be highlighted.
2. Skill-building to foster behavioural skills in budgeting; meal planning; and meal preparation strategies including provision of shopping lists linked to simple recipes. This is aimed at increasing the theoretical mediators, self-efficacy and perceived affordability.
3. Goal-setting this is a key behaviour change activity identified as a common element of successful previous dietary interventions. e.g. women will be encouraged to increase their and their families vegetable consumption to meet the guidelines of five serves/day.
4. Overcoming barriers tips will be provided on overcoming commonly-reported barriers to increased fruit and vegetable consumption, e.g. suggestions will be provided on engaging familial support, given theoretical arguments and previous literature on the importance of social influences on behaviour.

A key focus of the skill-building intervention will be on affordability and addressing perceived high costs of healthy eating.

## **Intervention Type**

Behavioural

## **Primary outcome measure**

Current primary outcome measures as of 27/07/2011:

Data on demographic characteristics, key study outcomes and mediators will be collected pre- and immediately post-intervention, and at 6-month follow-up.

### **1. Demographics:**

#### **1.1. Age**

1.2. Family structure (marital/cohabitation status, number and ages of dependent children, other household members)

#### **1.3. Education level**

1.4. Own and household income will be assessed

### **2. Outcome measures:**

Data on food purchasing will be gathered using a combination of electronic sales data, which Coles have confirmed they will provide to us via linkage with their store loyalty cards (FlyBuys); and self-report survey data (to assess consumption and complement the electronic sales data). We will use previously-published measures of both fruit and vegetable purchasing and consumption. Measures of daily equivalent fruit and vegetable purchasing quantities (adjusted for household members/composition) and daily equivalent serves consumed will be calculated.

Previous primary outcome measures from update on 30/06/2010:

Data on demographic characteristics, key study outcomes and mediators will be collected pre- and immediately post-intervention, and at 6-month follow-up.

### **1. Demographics:**

#### **1.1. Age**

1.2. Family structure (marital/cohabitation status, number and ages of dependent children, other household members)

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2. Outcome measures:

Data on food purchasing will be gathered using a combination of electronic sales data, which Coles have confirmed they will provide to us via store loyalty cards (Fly-Buys and/ or a study card); and self-report survey data (to assess consumption and complement the electronic food purchasing data). We will use previously-published measures of both fruit and vegetable purchasing and consumption. Measures of daily equivalent fruit and vegetable purchasing quantities (adjusted for household members/composition) and daily equivalent serves consumed will be calculated.

### **Secondary outcome measures**

Current secondary outcome measures as of 27/07/2011:

1. Mediator measures:

We will assess self-efficacy, perceived barriers and perceived affordability via validated self-report surveys.

2. Process evaluation outcomes:

We will assess subjective perceptions of the intervention components that may be useful in predicting outcomes at the completion of the intervention.

3. Economic evaluation:

A cost consequences analysis will be conducted from a societal perspective comparing incremental costs and outcomes in the intervention arm to the control arm at 12 months. Intervention resource use and costs will be prospectively recorded via project team records and Coles data, supported by interviews with the project team. Household cost impact will be determined through external (Coles) data on food purchasing combined with participant self-report data on non-Coles and Coles-non-Flybuys food purchasing over the course of the intervention and follow-up period.

Previous secondary outcome measures from update on 30/06/2010:

1. Mediator measures:

We will assess self-efficacy, perceived barriers and perceived affordability via validated self-report surveys.

2. Process evaluation outcomes:

We will assess subjective perceptions of the intervention components that may be useful in predicting outcomes at the completion of the intervention.

### **Overall study start date**

01/01/2010

### **Completion date**

16/03/2015

## **Eligibility**

### **Key inclusion criteria**

Current inclusion criteria as of 09/11/2011:

1. Female

2. The main household shopper

3. Aged between 18 and 60 years

4. Shop regularly at one of the participating Coles supermarkets in low socio-economic areas
5. A FlyBuys (Coles store loyalty card) member OR willing to sign up to FlyBuys
7. Able to give written informed consent to participate in the study
8. Willing to give information about income and dietary and mediator behaviours at three time points (baseline, post-intervention and six-month follow-up)
9. Belong to one of the following low income groups: Have a weekly household income below \$1000 per week after tax, have a health care card, or main income is from a pension or welfare benefit
10. Willing to have purchase data collected and analysed
11. Able to speak, read and write in English

**Previous inclusion criteria:**

1. Female
2. The main household shopper
3. Aged between 18 and 45 years
4. Shop regularly at one of the participating Coles supermarkets in low socio-economic areas
5. A FlyBuys (Coles store loyalty card) member OR willing to sign up to FlyBuys
6. Planning to continue to shop with Coles regularly over the next 12 months
7. Able to give written informed consent to participate in the study
8. Willing to give information about income and dietary and mediator behaviours at three time points (baseline, post-intervention and six-month follow-up)
9. Have an equivalised household income below AUS\$----- (to be confirmed)
10. Willing to have purchase data collected and analysed
11. Able to speak, read and write in English

**Participant type(s)**

Other

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Female

**Target number of participants**

274 to allow for survey non-response, drop-outs, and measuring a low-effect size as found in a similar trial in New Zealand. 137 in each study arm, with an additional 30 in the pilot study group.

**Key exclusion criteria**

Does not meet inclusion criteria

**Date of first enrolment**

09/05/2011

**Date of final enrolment**

09/06/2011

# Locations

## Countries of recruitment

Australia

## Study participating centre

221 Burwood Highway

Burwood, Victoria

Australia

3125

# Sponsor information

## Organisation

Australian Research Council (ARC) (Australia)

## Sponsor details

GPO Box 2702

Canberra ACT

Australia

2601

## Sponsor type

Research council

## ROR

<https://ror.org/05mmh0f86>

# Funder(s)

## Funder type

Research council

## Funder Name

Australian Research Council - Industry Linkage Grant (ref: LP0990129)

## Alternative Name(s)

arc\_gov\_au, The Australian Research Council, Australian Government Australian Research Council (ARC), ARC

## Funding Body Type

Government organisation

**Funding Body Subtype**

Other non-profit organizations

**Location**

Australia

## Results and Publications

**Publication and dissemination plan**

Not provided at time of registration

**Intention to publish date****Individual participant data (IPD) sharing plan****IPD sharing plan summary**

Not provided at time of registration

**Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Protocol article</a>	protocol	14/05/2013		Yes	No
<a href="#">Results article</a>	results	01/08/2016		Yes	No