



SUMMARY REPORT
IMPACT OF THE
SALSA PROGRAM
IN HIGH SCHOOLS
IN WESTERN SYDNEY
2013-2016



Health
Sydney
Local Health District

phn
WESTERN SYDNEY

An Australian Government Initiative



THE UNIVERSITY OF
SYDNEY

Summary Report:

Impact of the SALSA Program in High Schools in Western Sydney

SALSA (Students As LifeStyle Activists) is a unique peer educational program designed to motivate high school students to increase physical activity, improve diet and lead a healthier lifestyle.

This document summarises the project activities between August 2013 and January 2016, funded by the Australian Government Department of Health, under the Chronic Disease Prevention and Service Improvement Fund. To obtain a complete version of this report, contact the corresponding author.

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Website: <http://sydney.edu.au/medicine/public-health/salsa-triple-a/>



Facebook: <http://www.facebook.com/StudentsAsLifestyleActivists>



Instagram: @StudentsAsLifeStyleActivists



Achievements of the SALSA Project 2014/15

The funding from the Australian Government Department of Health between August 2013 and January 2016 was integral to the success of the SALSA project.

Implementation of the SALSA program

- Four workshops training University students as SALSA educators (n=96)
- A fifth workshop with Indigenous Australian students enrolled in the Graduate Diploma in Indigenous Health Promotion at the University of Sydney (n=18)
- 32 SALSA Peer Leader Workshops in 23 high schools during 2014/15 coaching Year 10 students as SALSA Peer Leaders (n=850)
- 128 SASLA lessons led by SALSA Peer Leaders for Year 8 students (n≈4700)

Pre-Post Evaluation

- High completion rate: SALSA Peer Leaders (n=415) and Year 8 students (n=2,033)

SALSA Extension Projects

- The Healthy Food Family Forum, Nepean High School 2014
- Multicultural Day, Holroyd High School 2014
- Healthy Me, Blacktown Girls High School 2014
- SALSA 10 Year Anniversary Celebration, Rooty Hill High School 2014
- My Canteen Rules, Rooty Hill High School (2014 /15)
- Canteen project, Blacktown Girls High School (2015)
- General Practitioner Workshop, Western Sydney Primary Health Network 2015

Presentations, publications and media

- 2 Oral presentations at National Conferences
- 9 formal presentations locally
- 9 Poster presentations at national and international conferences
- Report: Impact of the SALSA Project in High Schools in Western Sydney
- Summary Report: Impact of the SALSA Project in High Schools in Western Sydney
- 5 SALSA newsletters
- 18 stories in Mass Media
- 400 likes on Facebook

Resources created/updated

- Peer Leader Manual, SALSA Workbook
- Teacher Guide, The SALSA Educator's Guide and The SALSA Champion's Guide
- SALSA video, produced by Australian Medical Association
- The SALSA Banner

Awards

- AMA Excellence in Health Care Award 2015, S Shah
- Western Sydney Local Health District Quality Award 2014: Building Partnerships
- Western Sydney Local Health District Quality Award 2014: Community Choice
- Western Sydney Local Health District Quality Award 2014: Chair of the Board Award – Innovation and Excellence

Grants for 2016

- Western Sydney Primary Health Network (\$50,000)
- The University of Sydney, School of Public Health, Reaching Families Project (\$15,000) in partnership with the Physical Activity Nutrition and Obesity Research Group (PANORG)
- The University of Sydney, School of Public Health, Stepping into the Community (\$15,000)

Foreword: School Principal



In the twenty first century, many demands are made on secondary students and their families – to study, to use technology, to exercise, to make friends, to eat well, to undertake part time employment, to volunteer and to master new ways of learning and working. Critically, as adolescents become more independent, they do not always consider the impact of their eating and exercise habits on their adult lives. The patterns of behaviour developed in adolescence are often the patterns that remain throughout life.

Rising levels of eating disorders, diabetes and poor physical condition are common among many adolescents. As this report demonstrates, this does not have to be the case.

The SALSA program has critical design features that resonate with students and encourage behavioural change: volunteer university educators who conduct the training program and Year 10 peer leaders who are happy to be role models, learning activities that are engaging and based on great research.

For teachers and principals, the availability of a well-researched, evidence based and comprehensively resourced program developed in partnership with health professionals, teachers and students really sets SALSA apart.

Challenged by the confronting statistics about adult obesity and poor diet in Australia, initiatives that actually work to change the attitudes, eating behaviours and exercise habits of secondary students are rare. SALSA is one such initiative and the effort, energy and success outlined in this report, suggests that a long term cultural shift is possible when schools and health professionals receive quality funding for this important partnership work.

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Foreword: General Practitioner

In the primary care setting, obesity and lifestyle diseases are some of the most challenging conditions to treat. The underlying causes of these conditions are multifactorial. The challenge of creating sustainable behavioural change requires not just an understanding of the underlying barriers to change, but an appreciation of the social ecological environment each person exists within. For each person, there will be micro-, meso- and macro-environmental influences on lifestyle and behavior. Simply telling someone to do something rarely leads to sustained change.



By working at the school and community level, the SALSA program goes a great way towards addressing the multiple influences on behavioural change. Peer led programs such as SALSA allows us to harness the power of small groups and the strength of peer influence. In the SALSA program, student peer leaders enhance their leadership skills enabling them to influence cultural change within the school environment. The impact of these changes on the broader school community cannot be underestimated. The SALSA Program has demonstrated the capacity to not only influence behavior within the school, but also on the friends and families of students. This is a subtle and powerful effect providing great opportunities for public health.

Perhaps one of the greatest strengths of the SALSA Program is that it has been developed in partnership between the schools – especially Rooty Hill High School, local health care providers in the Mt Druitt Medical Practitioners Association and the Western Sydney Local Health District. The dynamic partnership of educators, health consumers and health providers has enabled the creation of a locally relevant and effective tool for change.

As a local health provider and General Practitioner, I am proud to be involved in the development and ongoing evolution of this program.

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**Dr Kean-Seng Lim received the Royal Australian College of General Practice 'GP of the Year Award' in 2015*



Partnerships

Partnerships have played a key role in raising the profile and impact of the SALSA program.



Participating Schools 2014 - 2015

1. Arthur Philip	13. Kingswood
2. Bethel Christian	14. Mitchell
3. Blacktown Girls	15. Nepean
4. Blakehurst	16. Pendle Hill
5. Catherine McAuley	17. Pennant Hills
6. Colyton	18. Plumpton
7. Erskine Park	19. Rooty Hill
8. Girraween	20. Rouse Hill
9. Granville Boys	21. St Agnes
10. Granville South	22. St Andrews College
11. Holroyd	23. St Clair
12. James Ruse	

Introduction

The Primary Health Care Education and Research Unit received a grant of \$350,000 from the Australian Government Department of Health to conduct the SALSA (Students As LifeStyle Activists) Project (August 2013 to January 2016). The project involved extending the reach of the SALSA program in western Sydney and evaluated the changes in lifestyle behaviours of students through their participation in the SALSA program.

This report summarises the evaluation of the SALSA project undertaken during 2014 and 2015.

Background

Chronic conditions, such as cardiovascular diseases, type 2 diabetes, obesity and associated lifestyle risk factors are a huge burden on our health, the economy and society. They contribute to more than two-thirds of deaths worldwide and 85% of the total disease burden in the Australasian region. We urgently need low-cost solutions to prevent lifestyle risk factors that contribute to these diseases.

We established the SALSA program in 2004, in response to a community need in western Sydney. A partnership between Mt Druitt Medical Practitioners Association, Western Sydney Local Health District and Rooty Hill High School led to the program's development. The SALSA program is based on sound psychosocial theories of behaviour change and empowerment education. It motivates high school students to make healthier food choices and increase physical activity. The program uses a peer education approach whereby SALSA lessons are delivered by trained Year 10 peer leaders to Year 8 students, in a fun and engaging way.

The SALSA program

The SALSA program is a peer-led educational intervention to motivate school students to make healthier lifestyle choices. The broad aims of the SALSA program are to promote healthy eating patterns and regular physical activity in an engaging, fun and supportive school environment. The SALSA program is incorporated into each school's Personal Development, Health and Physical Education (PDHPE) curriculum to complement lessons taught by PDHPE teachers. The program specifically targets schools in western Sydney where the risk for overweight and obesity development is a major public health concern.



The theoretical framework of the SALSA program is based on Bandura's Social Cognitive Theory and empowerment education approach. The Social Cognitive Theory proposes a reciprocal determinism in the interaction between a person, a targeted behaviour and a particular social context. It emphasises that people learn not only from their own experiences but also by observing the actions of others. The intervention strategies are based on the empowerment education approach, wherein students gain knowledge through group sharing and understanding of the social influences that affect their lives, set their own priorities and decide on group action in order to change conditions or resolve issues.

A variety of strategies including a video, games, role-playing and a quiz show are used in the program, with participation and fun central to all aspects of learning. The program materials and delivery of the four lessons by the SALSA Year 10 Peer Leaders to Year 8 students are standardized through the use of structured lessons using the Peer Leaders Manual and the 'Ryan's Goal' video (available at www.sydney.edu.au/medicine/public-health/salsa-triple-a/).

Implementation 2014-15

SALSA champions and project staff train volunteer university students from range of education and health disciplines as SALSA Educators.

Educators' Training Workshop

The aim of the educators' workshop is to build the capacity of participants in order to train high school students as SALSA Peer Leaders. The training for SALSA educators is based on adult learning principles and is conducted as a one-day workshop. The process involves having educators experience each of the activities they will be conducting with the year 10 peer leaders.

Peer Leaders' Training Workshop

The SALSA program is delivered to high schools as a three-step process involving university students, and high school students as both learners and educators. The aim of the peer leaders' workshop is to build the capacity of Year 10 students who have either volunteered or been selected by teachers to coach year 8 students through four SALSA lessons. The one-day SALSA peer leader training workshop is delivered at high schools by small teams of SALSA.





Educators Training Workshop

Year 10 Peer Leader Training Workshop



Year 8 lessons

Year 8 students participate in four 70 minutes lessons, delivered by the trained Year 10 SALSA peer leaders. The lessons use a range of games, activities and a video, detailed in the Peer Leader Manual.



Evaluation Results

The SALSA program was implemented in 23 high schools during 2014 and 2015. Over two years, we trained 96 university students as SALSA Educators. They in turn coached 850 Year 10 SALSA Peer Leaders who educated more than 4,700 Year 8 students. We evaluated changes in behaviours and intentions of students to live a healthy lifestyle, from baseline to post-SALSA (after delivery of the SALSA program).

Year 10 Peer Leaders (n=415)

Fruit intake

- Increase in the proportion of peer leaders who reported eating the recommended fruit intake (≥ 2 serves/day) from 54% at baseline to 63% post-SALSA ($p < 0.01$).
- Increase in the proportion of peer leaders intending to eat the recommended fruit intake in the next month from 73% at baseline to 82% post-SALSA ($p < 0.01$).

Vegetable intake

- Increase in the proportion of peer leaders who reported eating the recommended vegetable intake (≥ 5 serves/day) from 8% at baseline to 12% post-SALSA ($p < 0.01$).
- Increase in the proportion of peer leaders intending to eat the recommended vegetable intake next month from 17% at baseline to 30% post-SALSA ($p < 0.001$).

Sugar sweetened beverages (SSBs)

- Decrease in the proportion of peer leaders who reported drinking ≥ 1 cup of SSBs each day from 44% at baseline to 38% post-SALSA ($p < 0.01$).

Breakfast intake frequency

- Increase in the proportion of peer leaders who reported eating breakfast on at least 5 days the previous week from 67% at baseline to 71% post SALSA ($p < 0.05$).
- Increase in the proportion of peer leaders intending to eat breakfast daily over the next month from 67% at baseline to 77% post-SALSA ($p < 0.001$).

Moderate-to-vigorous physical activity (MVPA)

- No significant changes in students meeting MVPA guidelines (≥ 60 minutes/day), however there was an increase in the proportion of boys from 14% at baseline to 27% post-SALSA ($p < 0.001$).
- The proportion of peer leaders intending to increase their physical activity in the next month was high at baseline (80%) and this was maintained at follow up (83%) ($p = 0.110$).

Recreational screen time

- No significant change in school-day recreational screen time behaviours.
- Increase in the proportion of peer leaders intending to decrease their recreational screen time from 37% at baseline to 46% post-SALSA ($p < 0.01$).

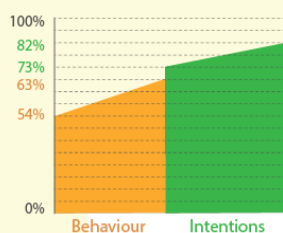


Year 10 Peer Leaders (n=415)

Behaviour

9% ↑
eating 2 serves of
fruit/day ($p < 0.01$)

FRUIT INTAKE

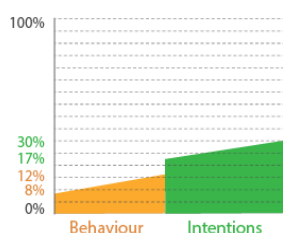


Intentions

9% ↑
intentions to eat 2 serves
fruit/day in the next month
($p < 0.01$)

4% ↑
eating ≥ 5 serves of
vegetables/day ($p < 0.01$)

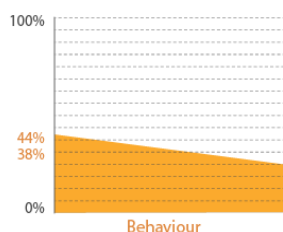
VEGETABLE INTAKE



13% ↑
intentions to eat ≥ 5 serves
of vegetables/day, in the next
month ($p < 0.001$)

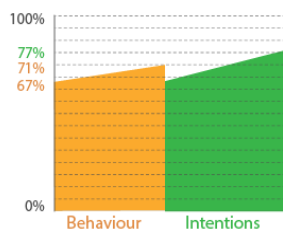
6% ↓
drinking ≥ 1 cup of
SSBs/day ($p < 0.01$)

SUGAR SWEETENED BEVERAGES (SSBS)



BREAKFAST INTAKE FREQUENCY

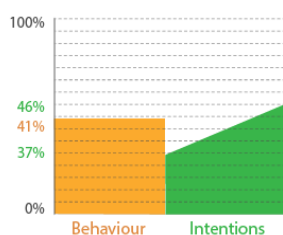
4% ↑
eating breakfast ≥ 5
days/week ($p < 0.05$)



10% ↑
intentions to eat breakfast
daily over the next month
($p < 0.001$)

No change in screen time on
school days (≤ 2 hours/day)
($p = 0.592$)

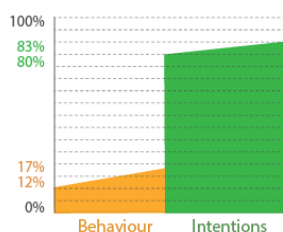
RECREATIONAL SCREEN TIME



10% ↑
intentions to reduce screen
time ($p < 0.01$)

MODERATE-TO-VIGOROUS PHYSICAL ACTIVITY (MVPA)

13% ↑
No change in MVPA
(> 60 minutes/day) ($p = 0.076$)
but boys increased 13%
($p < 0.001$)



↑ Intentions to increase
MVPA remained high
($p = 0.110$)

Year 8 students (n=2,033)

Fruit intake

- Increase in the proportion of students who reported eating the recommended fruit intake (≥ 2 serves/day) from 52% at baseline to 57% post-SALSA ($p < 0.001$).
- Increase in the proportion of students intending to eat the recommended fruit intake in the next month from 66% at baseline to 72% post-SALSA ($p < 0.001$).

Vegetable intake

- The recommended intake of ≥ 5 serves/day did not significantly increase but ≥ 4 vegetable serves/day increased from 22% at baseline to 25% post-SALSA ($p < 0.05$).
- Increase in the proportion of students intending to eat the recommended vegetable intake next month from 19% at baseline to 22% post-SALSA ($p < 0.01$).

Sugar sweetened beverages

- Decrease in the proportion of students who reported drinking ≥ 1 cup of SSBs each day, from 53% at baseline to 47% post SALSA ($p < 0.001$).

Breakfast intake frequency

- Frequency of eating breakfast did not change, however the proportion of students intending to eat breakfast daily over the next month increased from 67% at baseline to 70% post SALSA ($p < 0.05$).

Moderate-to-vigorous physical activity

- There was no change in the MVPA behaviours of Year 8 students or their intentions to be more active.

Recreational screen time

- Decrease in the proportion of students who reported meeting the guideline for recreational screen time on school days, from 56% at baseline to 52% post-SALSA ($p < 0.01$).
- Increase in the proportion of students intending to decrease their recreational screen time, from 37% at baseline to 42% post-SALSA ($p < 0.001$).



Year 8 Students (n=2,033)

Behaviour

5% ↑

eating 2 serves fruit/day
($p < 0.001$)

No change in ≥ 5 serves veg/day
($p = 0.156$)

3% ↑

eating 4 serves veg/day
($p < 0.005$)

6% ↓

drinking ≥ 1 cup of SSBs
each day ($p < 0.001$)

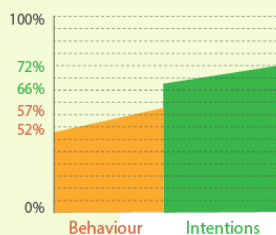
4% ↓

screen time (≤ 2 hours/day)
on school days ($p < 0.01$)

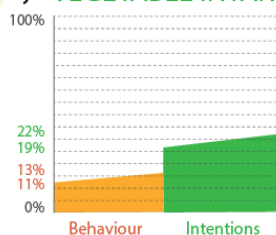
MODERATE-TO-VIGOROUS PHYSICAL ACTIVITY (MVPA)

No change in MVPA behaviours

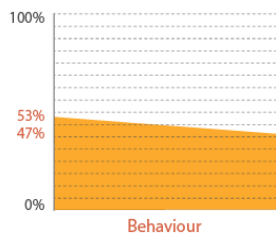
FRUIT INTAKE



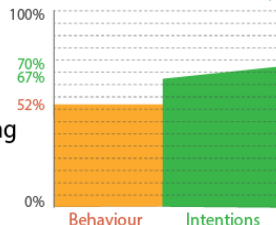
VEGETABLE INTAKE



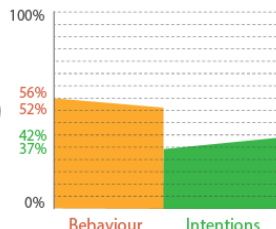
SUGAR SWEETENED BEVERAGES (SSBS)



BREAKFAST INTAKE FREQUENCY



RECREATIONAL SCREEN TIME



Intentions

6% ↑

intentions to eat 2 serves
fruit/day, in the next month
($p < 0.001$)

4% ↑

intentions to eat ≥ 5 serves
veg/day in the next month
($p < 0.01$)

3% ↑

intentions to eat breakfast
daily over the next month
($p < 0.05$)

5% ↑

intentions to reduce
screentime ($p < 0.001$)

or intentions to be more active.



Feedback from the participating schools indicated that the SALSA program was implemented as intended. The university student educators and Year 10 peer leaders were fully engaged in the delivery of the program and reported their involvement as a very positive experience. Students' enjoyment of the program was evident, with 91% of Year 10 peer leaders, and 72% of Year 8 students indicating they would recommend the program to other students.

We also looked at the data for each school to enable us to share specific results with each individual school post-SALSA. We prepared a 'SALSA School Report' detailing their evaluation results; this allowed them to clearly see where their students had made improvements as a result of the program. The reports were valued by the Principals and SALSA coordinators and many used the results to make changes to their school policy on healthy behaviours.



One such example was the proposed introduction of a breakfast club at a school that had low proportions of Year 10 Peer Leaders and Year 8 students eating breakfast daily.

Conclusion

Twenty-three high schools in Western Sydney received the SALSA program in 2014 and 2015. The program had a significant impact on improving the dietary behaviours of students and provided an important nudge to alter the often declining health related behaviours of adolescents.

The SALSA program focuses on the richest resource of our community, students themselves. Our simple premise is that students can motivate each other and learn together about living a healthy lifestyle. The benefits are not limited to the participating students but also extend to the staff, other students at school and to the families of students.

The SALSA program is relevant and developmentally appropriate, implemented in partnership with high schools and should be supported through sustained government funding.

Recommendations

- Extend the SALSA program and maximise its impact. We need to explore how SALSA Peer Leaders and the Year 8 students can be agents of healthy lifestyle change in their families and local communities.
- Improve opportunities for young people to live active lifestyles. We need to work with local councils to create safe and accessible spaces for students and their families to enjoy being physically active.
- Increase the SALSA program's presence on social media. Explore new technological platforms and find out how they can be used effectively to influence young people's health behaviour.
- Disseminate the program state-wide. Develop partnerships and attract funding from government and non-government organisations.
- Ensure ongoing partnerships between the health and education sectors to provide a strong base for the sustainability of the SALSA program.



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