



The cost of commercial weight loss

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Obesity trends

- Obesity is an ever growing health concern - in Britain, 58% of adults have BMI greater than 25kg/m². Noted trends in obesity with respect to age, sex, ethnicity and socioeconomic status
- James *et al*, (1997) suggested obesity is increasing amongst lower SES groups.
- 1996 Health Survey of England showed 14% of women in social class I were obese compared to 25% of women in social class V

Food purchase and socioeconomic groups

- Individuals in the lower SES groups less likely to purchase food that conformed to diet disease prevention messages (Turrell *et al* 2002)
- Cost is influential determinant of food choice in the UK (Lennernas *et al* 1997)
- Therefore the cost of adopting a healthful diet requires consideration

Commercial weight loss programmes

- Wang *et al* (2003) suggested the programme cost was more important than success rate, programme type and duration
- Commercial weight loss programmes produces £12 billion per year in the UK (Wylie-Rosett 2001)

Aim

To calculate and compare the costs of following 4 commercial weight loss programmes in Surrey: the Dr. Atkins 'New Diet Revolution', the 'Slimfast Plan', Weight Watchers 'Pure Points' and Rosemary Conley's 'Eat Yourself Slim'.

Method

Subjects (n=44)

- Clinically overweight men and women (initial BMI 27-36kg/m²) otherwise fit and healthy. Aged between 21-60 years with a mix of SES groupings – comprising the Surrey cohort of multi centred weight loss trial ('Diet Trials')
- All subjects randomly allocated to one of intervention groups or control group (n=8). The latter group excluded from this costings study.

Food Diaries

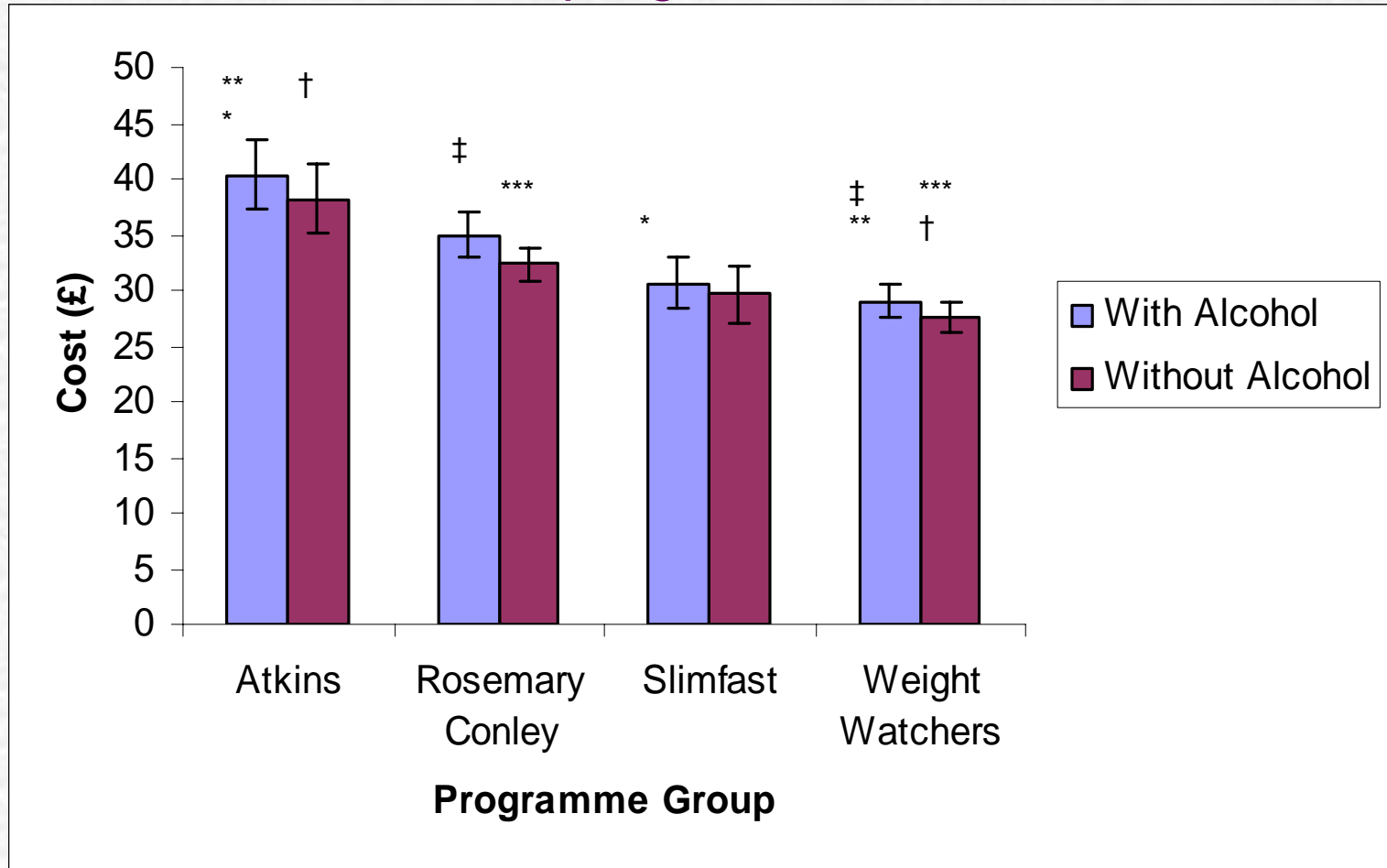
- Subjects completed 7 day food and activity diary at baseline and 2 months into the trial

The completed diaries were converted into estimated portion sizes allocated by MAFF (1993)

Prices

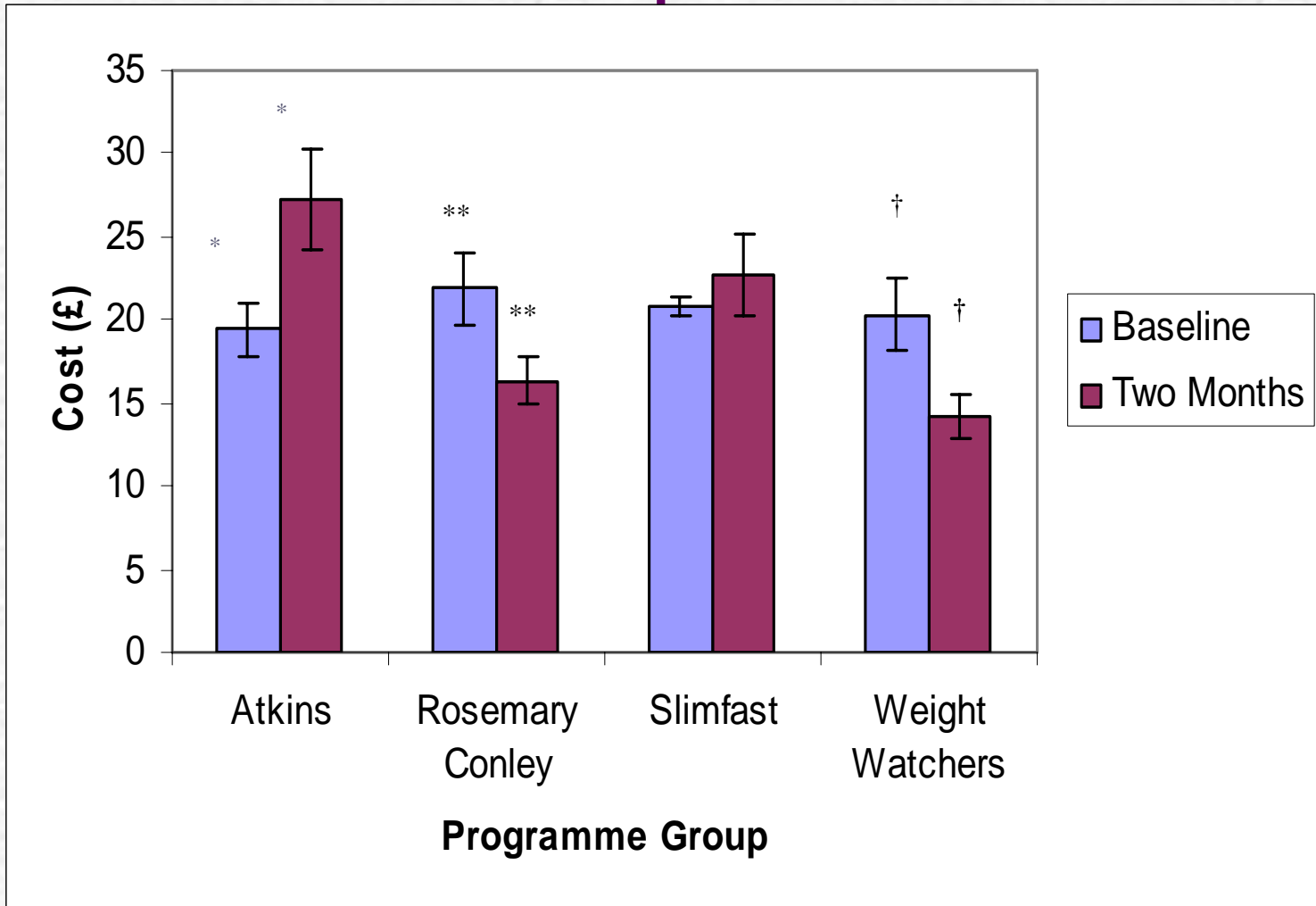
- Prices calculated from Tesco (Guildford store) 6/1/03-10/1/03
- Always used the cheapest possible price
- Programme costs taken before Christmas period 18/12/02
- Parametric and non parametric statistics (according to data distribution Skew statistic >1) were used to compare change in cost over time (paired t-test, Wilcoxon Signed Ranks test) and by programme followed (ANOVA)

The mean cost of following dietary intervention programme



Error bars represent SEM. Bars with identical symbols are significantly different

Food expenditure



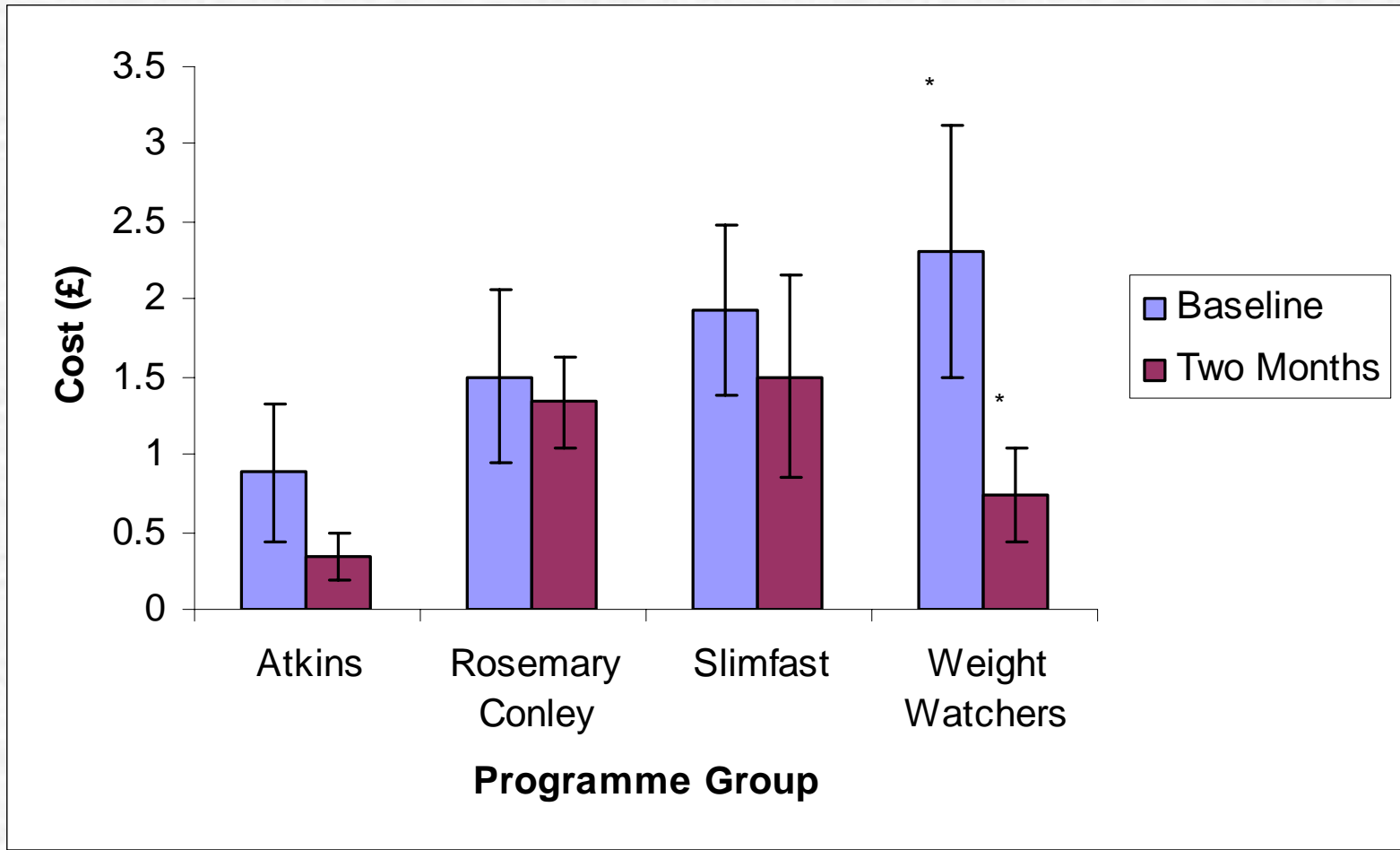
Error bars represent SEM. Bars with identical symbols are significantly different

Specific food groups of interest

Fruit

- No statistical difference in fruit expenditure at baseline (mean £1.63 [SD1.81] per week)
- Each programme group had a decreased fruit expenditure at two months (mean £0.94 [SD 1.14])
- Weight Watchers group had significant difference

The mean cost of fruit expenditure at baseline and two months



Error bars represent SEM. Bars with identical symbols are significantly different

Fruit cont...

- It was thought just opting for cheaper fruits, for example bananas instead of strawberries
- Calculated grams of fruit purchased, Slimfast and Rosemary Conley purchased more fruit, Atkins and Weight Watchers purchased less

Vegetables

- As like fruit, there were no statistical difference in expenditure at baseline (mean £1.95)
- Mean expenditure across the sample at two months was £1.90
- The actual grams of vegetables purchased was calculated – which had decreased in all groups except Rosemary Conley

Alcohol

- Expenditure on alcohol was very variable at baseline and two months
- There was a decrease in expenditure by all groups at two months
- Atkins and Slimfast had a significant decrease at two months but appeared to spend the most at baseline

Meat and Fish

- Meat expenditure decreased for all groups by two months, except Atkins.
- Expenditure in Atkins rose to a mean of £10.68[SD2.24] from £6.61[SD2.42]
- Atkins subjects spent more on fish at two months, from £0.92[SD0.70] to £2.32[SD2.62]

Dairy products

- Little difference in expenditure between baseline and two months except Slimfast – a significant decrease

Slimfast

- Expenditure on Slimfast products varied for the Slimfast group at two months from £4.83-£11.47. Compliance varied!

Conclusion

- Atkins was the most expensive programme followed
- Weight Watchers was the least expensive programme followed, with a decreased expenditure in all food groups raising concerns of under reporting
- As food cost is such an influential factor in food choice, this information will help individuals to chose a programme that they can afford which may aid long term compliance and success

References

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