

LONDON  
SCHOOL of  
HYGIENE  
& TROPICAL  
MEDICINE



LSHTM Research Online

Thompson, RL; Summerbell, CD; Hooper, L; Higgins, JP; Little, PS; Talbot, D; Ebrahim, S; (2003) Dietary advice given by a dietitian versus other health professional or self-help resources to reduce blood cholesterol. The Cochrane database of systematic reviews (3). CD001366. ISSN 1469-493X DOI: <https://doi.org/10.1002/14651858.CD001366>

Downloaded from: <http://researchonline.lshtm.ac.uk/12687/>

DOI: <https://doi.org/10.1002/14651858.CD001366>

**Usage Guidelines:**

Please refer to usage guidelines at <https://researchonline.lshtm.ac.uk/policies.html> or alternatively contact [researchonline@lshtm.ac.uk](mailto:researchonline@lshtm.ac.uk).

Available under license: Copyright the author(s)

<https://researchonline.lshtm.ac.uk>



**Cochrane**  
**Library**

Cochrane Database of Systematic Reviews

## Dietary advice given by a dietitian versus other health professional or self-help resources to reduce blood cholesterol (Review)

Thompson RL, Summerbell CD, Hooper L, Higgins JPT, Little P, Talbot D, Ebrahim S

Thompson RL, Summerbell CD, Hooper L, Higgins JPT, Little P, Talbot D, Ebrahim S.

Dietary advice given by a dietitian versus other health professional or self-help resources to reduce blood cholesterol.

*Cochrane Database of Systematic Reviews* 2003, Issue 3. Art. No.: CD001366.

DOI: 10.1002/14651858.CD001366.

[www.cochranelibrary.com](http://www.cochranelibrary.com)

## TABLE OF CONTENTS

HEADER . . . . .	1
ABSTRACT . . . . .	1
PLAIN LANGUAGE SUMMARY . . . . .	2
BACKGROUND . . . . .	2
OBJECTIVES . . . . .	3
METHODS . . . . .	3
RESULTS . . . . .	5
DISCUSSION . . . . .	9
AUTHORS' CONCLUSIONS . . . . .	10
ACKNOWLEDGEMENTS . . . . .	10
REFERENCES . . . . .	11
CHARACTERISTICS OF STUDIES . . . . .	32
DATA AND ANALYSES . . . . .	62
Analysis 1.1. Comparison 1 Dietitian compared with other health professional or self-help resources, Outcome 1 Blood cholesterol at final visit. . . . .	63
Analysis 1.2. Comparison 1 Dietitian compared with other health professional or self-help resources, Outcome 2 LDLcholesterol at final visit. . . . .	65
Analysis 1.3. Comparison 1 Dietitian compared with other health professional or self-help resources, Outcome 3 HDLcholesterol at final visit. . . . .	66
Analysis 1.4. Comparison 1 Dietitian compared with other health professional or self-help resources, Outcome 4 Diastolic blood pressure at final visit. . . . .	67
Analysis 1.5. Comparison 1 Dietitian compared with other health professional or self-help resources, Outcome 5 Systolic blood pressure at final visit. . . . .	68
Analysis 1.6. Comparison 1 Dietitian compared with other health professional or self-help resources, Outcome 6 Body weight (kg) at final visit. . . . .	69
Analysis 1.7. Comparison 1 Dietitian compared with other health professional or self-help resources, Outcome 7 Blood cholesterol at one year. . . . .	70
Analysis 1.8. Comparison 1 Dietitian compared with other health professional or self-help resources, Outcome 8 Blood cholesterol up to 6 months. . . . .	71
Analysis 2.1. Comparison 2 Dietitian compared with doctor, nurse, counsellor and self-help resources, Outcome 1 Blood cholesterol at final visit. . . . .	72
WHAT'S NEW . . . . .	72
HISTORY . . . . .	72
CONTRIBUTIONS OF AUTHORS . . . . .	73
DECLARATIONS OF INTEREST . . . . .	73
SOURCES OF SUPPORT . . . . .	73
INDEX TERMS . . . . .	73

[Intervention Review]

# Dietary advice given by a dietitian versus other health professional or self-help resources to reduce blood cholesterol

Rachel L Thompson<sup>1</sup>, Carolyn D Summerbell<sup>2</sup>, Lee Hooper<sup>3</sup>, Julian PT Higgins<sup>4</sup>, Paul Little<sup>5</sup>, Diane Talbot<sup>6</sup>, Shah Ebrahim<sup>7</sup>

<sup>1</sup>The Wessex Institute for Health R & D, Southampton General Hospital, Southampton, UK. <sup>2</sup>School of Medicine and Health, Wolfson Research Institute, Durham University, Stockton-on-Tees, UK. <sup>3</sup>School of Medicine, Health Policy & Practice, University of East Anglia, Norwich, UK. <sup>4</sup>MRC Biostatistics Unit, Cambridge, UK. <sup>5</sup>Department of Community Clinical Sciences, University of Southampton School of Medicine, Southampton, UK. <sup>6</sup>The Linwood Centre, Leicester, UK. <sup>7</sup>Department of Epidemiology & Population Health, London School of Hygiene & Tropical Medicine, London, UK

Contact address: Rachel L Thompson, The Wessex Institute for Health R & D, Southampton General Hospital, Level B, South Academic Block, Southampton, Hampshire, SO16 6YD, UK. [rlt@soton.ac.uk](mailto:rlt@soton.ac.uk).

**Editorial group:** Cochrane Effective Practice and Organisation of Care Group.

**Publication status and date:** Edited (no change to conclusions), published in Issue 1, 2009.

**Review content assessed as up-to-date:** 22 May 2003.

**Citation:** Thompson RL, Summerbell CD, Hooper L, Higgins JPT, Little P, Talbot D, Ebrahim S. Dietary advice given by a dietitian versus other health professional or self-help resources to reduce blood cholesterol. *Cochrane Database of Systematic Reviews* 2003, Issue 3. Art. No.: CD001366. DOI: 10.1002/14651858.CD001366.

Copyright © 2009 The Cochrane Collaboration. Published by John Wiley & Sons, Ltd.

## ABSTRACT

### Background

The average level of blood cholesterol is an important determinant of the risk of coronary heart disease. Blood cholesterol can be reduced by dietary means. Although dietitians are trained to provide dietary advice, for practical reasons it may be given by other health professionals or using self-help resources.

### Objectives

To assess the effects of dietary advice given by a dietitian compared with another health professional, or the use of self-help resources, in reducing blood cholesterol in adults.

### Search methods

We searched The Cochrane Library (to Issue 3 2002), the EPOC trial register (October 2002), MEDLINE (1966 to September 2002), EMBASE (1980 to September 2002), Cinahl (1982 to August 2002), Human Nutrition (1991 to 1998), Science Citation Index, Social Sciences Citation Index, hand searched conference proceedings on nutrition and heart disease, and contacted experts in the field.

### Selection criteria

Randomised trials of dietary advice given by a dietitian compared with another health professional or self-help resources. The main outcome was difference in blood cholesterol between dietitian groups compared with other intervention groups.

### Data collection and analysis

Two reviewers independently extracted data and assessed study quality.

## Main results

Twelve studies with 13 comparisons were included. Four studies compared dietitian with doctor, seven with self-help resources, and only one study was found for dietitian versus nurse and dietitian versus counsellor comparisons. Participants receiving advice from dietitians experienced a greater reduction in blood cholesterol than those receiving advice only from doctors (-0.25 mmol/L (95% CI -0.37, -0.12 mmol/L)). There was no statistically significant difference in change in blood cholesterol between dietitians and self-help resources (-0.10 mmol/L (95% CI -0.22, 0.03 mmol/L)). No statistically significant differences were detected for secondary outcome measures between any of the comparisons with the exception of dietitian versus nurse for HDLc, where the dietitian group showed a greater reduction (-0.06 mmol/L (95% CI -0.11, -0.01)) and dietitian versus counsellor for body weight, where the dietitian group showed a greater reduction (-5.80 kg (95% CI -8.91, -2.69 kg)).

## Authors' conclusions

Dietitians were better than doctors at lowering blood cholesterol in the short to medium term, but there was no evidence that they were better than self-help resources. There was no evidence that dietitians provided better outcomes than nurses.

The results should be interpreted with caution as the studies were not of good quality and the analysis was based on a limited number of trials.

## PLAIN LANGUAGE SUMMARY

**Dietary advice by dietitians to lower blood cholesterol can be more effective than advice by doctors, but may not be more effective than self-help resources.**

Blood cholesterol level is an important indicator of the risk of heart disease. This review looked at the effectiveness of dietary advice given by dietitians to lower blood cholesterol, compared with the effectiveness of dietary advice given by other types of health professional or using self-help resources. The review found that advice by dietitians to lower blood cholesterol was more effective than that of doctors (in the short to medium term), but possibly not more effective than using self-help resources. There was no evidence to suggest that dietary advice given by dietitians was more effective than that given by nurses.

## BACKGROUND

### Description of the condition

The average level of blood cholesterol within a population is an important determinant of the coronary heart disease (CHD) risk of the population. In countries in which the average cholesterol levels of the population are low CHD tends to be an uncommon disease. In prospective epidemiological studies of individuals those with lower levels of cholesterol run lower risk of developing CHD. The association between cholesterol level and future risk of CHD is graded and continuous: there is no threshold above which CHD risk begins to increase.

Differences in the average levels of blood cholesterol between communities or populations are largely determined by differences in their diets. Countries with high dietary saturated fat intake and a low ratio of polyunsaturated to saturated fatty acids have high average cholesterol levels (Grundy 1982). Randomised controlled trials in institutional settings demonstrate that if components of the diets of individuals are changed substantially then large changes in blood cholesterol levels can be achieved (Clarke 1997). The generally small changes in blood cholesterol which are produced by interventions aimed at free-living populations (Ebrahim 1997; Brunner 1997; Tang 1998) may reflect poor compliance to the dietary advice given in community settings and/or that the people providing the advice could be more effective in their role.

### Description of the intervention

### How the intervention might work

It appears that the willingness and ability of general populations to modify their eating habits, and thereby their blood cholesterol levels, in response to dietary advice as customarily given in primary care and occupational health settings is very limited. A recent US trial of a range of dietary fat reductions in hypercholesterolemia volunteers of above average education and with very positive health behaviours showed reductions in total cholesterol of between 4-10% over one year, although one in eight participants dropped out during the year (Knopp 1997). However, this trial had no placebo group and probably over-estimated reductions because of regression to the mean effects. In a British trial comparing the effects of dietary advice given by a practice nurse, dietitian or use of a self-help leaflet, allowance for regression to the mean effects reduced the observed fall in total blood cholesterol to 1.5% (Neil 1995). These studies suggest that the level of cholesterol reduction that may be expected from advice by doctors and nurses is likely to be very small.

### Why it is important to do this review

Dietitians are specifically trained and motivated to provide high quality dietary advice. Dietitians have a variety of different approaches available in order to provide advice and information that is appropriate for an individual patient. Due to the limited number of dietitians and the large proportion of the population who are at risk from, or have, coronary heart disease, much of the dietary advice is given by physicians and nurses rather than by dietitians with extensive nutrition training (Summerbell 1996). The effectiveness of dietary advice given by dietitians compared with other health professionals or self-help resources is unknown. Knowledge of the relative effectiveness would inform policy decisions on the best way to manage raised blood cholesterol in the general population. If dietitians prove to be much better than other health professionals at reducing blood cholesterol it may be sensible to increase the number of dietitians, alternatively if there is not a large difference some dietetic work could be channeled into training nurses and doctors to give appropriate advice. It is important that patients get the best treatment but that this also fits within current resources and financial constraints.

## OBJECTIVES

Primary objective

The review aimed to answer the following question:

In adults, what is the relative efficacy of dietary advice given by a dietitian compared with another health professional, or using self-help resources in reducing blood cholesterol?

Comparisons included:

1. Dietitians with other health professionals (including nurses and doctors);
2. Dietitians with self-help resources (such as leaflets, videos, computers in which there was no contact with a health professional).

Secondary objectives

To determine the effect of other factors on the effectiveness of reducing blood cholesterol.

1. Participants at high risk of coronary heart disease versus those at low risk;
2. Dietary interventions alone versus multiple lifestyle interventions (e.g. smoking cessation, physical activity given in addition to dietary advice);
3. Length of follow-up;
4. Setting for dietary advice (workplace, primary care, out-patient clinics);
5. Contact time with health professional;
6. Concurrent use of lipid lowering drugs in all arms;
7. Dietetic training for other health professionals.

## METHODS

### Criteria for considering studies for this review

#### Types of studies

Randomised controlled trials (RCTs) of at least six weeks from baseline visit. This includes any study in which the term random has been used to describe the method of study group allocation.

#### Types of participants

Age: studies of individuals aged at least 18 years.

Gender: both males and females were included.

Health: studies of participants with or without existing heart disease or previous myocardial infarction were included.

Setting: free-living subjects recruited from primary care, workplace, out-patient clinics and other community settings.

Studies of participants who were hospitalised or living in institutions were excluded.

## Types of interventions

All interventions including dietary advice to reduce blood cholesterol. Interventions of dietary advice using dietary supplements were excluded. Accepted interventions included dietary advice given by a dietitian or a nutritionist compared with another health professional (e.g. doctor or nurse) or self-help resources. Nutritionists as well as dietitians have been included as in different settings and different countries the terms dietitian and nutritionist may both be used to describe a health professional trained to give dietary advice. Studies in which the intervention included the provision of meals or food items were not accepted. Trials of lipid lowering drugs, where drugs were given to the intervention group only, were excluded.

## Types of outcome measures

Primary outcomes:

The main outcome was difference in blood cholesterol between dietitian group compared with other intervention groups.

Secondary outcomes:

We examined data on change in low density lipoprotein cholesterol, high density lipoprotein cholesterol, body mass index (or body weight) and blood pressure. Since patient preference and acceptability of methods are important, data on patient satisfaction with the interventions were also examined.

## Search methods for identification of studies

### Electronic searches

We searched the EPOC trial register (October 2002), MEDLINE (1966 to September 2002), EMBASE (1980 to September 2002), Human Nutrition (1991 to 1998), CINAHL (1982 to August 2002), The Cochrane Library (to Issue 3 2002). The search was not limited to English language publications only.

The following strategy developed in MEDLINE (written for Silver Platter) was used and modified as necessary for other databases.

Topic search:

explode "HYPERLIPIDEMIA"/ all subheadings  
explode "CHOLESTEROL" / all subheadings  
explode "CARDIOVASCULAR-DISEASES"/ all subheadings  
"LIPIDS"/ all subheadings  
explode "LIPOPROTEINS"/ all subheadings  
explode "HYPERLIPOPROTEINEMIA" /all subheadings  
HYPERCHOLESTEROL\* in TI,AB  
HYPERLIP\* in TI,AB  
CHOLESTEROL\* in TI,AB  
HEART in TI,AB  
CORONARY in TI,AB  
CARDIOVASCULAR in TI,AB  
CARDIO VASCULAR in TI,AB

LIPID\* in TI,AB  
LIPOPROTEIN\* in TI,AB  
MYOCARDIAL INFARCTION\* in TI,AB  
#1 or #2 or #3 or #4 or #5 or #6  
#7 or #8 or #9 or #10 or #11 or #12 or #13 or #14 or #15 or #16  
#17 or #18  
explode "DIET"/ all subheadings  
explode "DIET-THERAPY"/ all subheadings  
explode "DIETARY-FATS"/ all subheadings  
explode "FOOD"/ all subheadings  
"EATING"/ all subheadings  
explode "FEEDING-BEHAVIOR"/ all subheadings  
DIET\* in TI,AB  
DIET-THERAPY in MESH  
NUTRI\* in TI,AB  
FOOD\* in TI,AB  
FEED\* in TI,AB  
LIFESTYL\* in TI,AB  
LIFE STYL\* in TI,AB  
EAT\* in TI,AB  
FAT\* near INTAKE\* in TI,AB  
FAT\* near CONSUM\* in TI,AB  
#20 or #21 or #22 or #23 or #24 or #25  
#26 or #27 or #28 or #29 or #30 or #31 or #32 or #33 or #34 or #35  
#36 or #37  
#19 and #38  
RCT search  
(TG=ANIMAL) not ((TG=HUMAN) and (TG=ANIMAL))  
RANDOMIZED-CONTROLLED-TRIAL in PT  
CONTROLLED-CLINICAL-TRIAL in PT  
RANDOMIZED-CONTROLLED-TRIALS  
RANDOM-ALLOCATION  
DOUBLE-BLIND-METHOD  
SINGLE-BLIND-METHOD  
#2 or #3 or #4 or #5 or #6 or #7  
Titles and abstracts from the above searches were screened by RT. When the title/abstract could not be rejected with certainty, the full text of the article was obtained for further evaluation.

### Searching other resources

#### Hand searches

The following conference proceedings were hand searched by RT. Proceedings of the Nutrition Society (1990 to 1998); 3rd and 4th International Conferences on Preventive Cardiology (1993 and 1997); 15th and 16th International Congresses on Nutrition (1993 and 1997); and 15th Congress of the European Society of Cardiology (1993).

### Other searches

Published systematic reviews addressing dietary advice to lower blood cholesterol were sought as a source of RCTs. The reference lists of both published reviews and studies included in this review were also checked for other potentially important studies.

Experts in the field were contacted for references to studies not yet identified by the search process. Experts were defined as the first authors of studies meeting the inclusion criteria for this review or any relevant systematic review.

A forward search on included studies was conducted using Science Citation Index (1981 to 1998) and Social Sciences Citation Index (1981 to 1998).

### Data collection and analysis

Each potentially relevant study was assessed for inclusion in the review independently by at least two reviewers (RT, LH, PL). Differences between the reviewers were resolved by discussion. It was planned that if after discussion agreement between the reviewers could not be established a third reviewer would be used. However this was unnecessary. The Kappa statistic for the agreement between the reviewers was 0.68 (a good agreement). The main area of discrepancy between the reviewers was establishing who was responsible for giving the dietary advice as it was not always explicit.

Excluded studies along with the reasons for their exclusion are given in the Characteristics of excluded studies table.

### Data Collection

A data extraction form based upon the standard EPOC checklist was designed for this review (See EDITORIAL INFORMATION under GROUP DETAILS for METHODS USED IN REVIEWS.).

The following information on outcome variables from each trial was extracted: number of subjects, baseline and final values, mean change (final minus baseline values) and standard deviation of change for both intervention and control groups. If standard deviations were not reported they were estimated using the methods described by Follmann (Follmann 1992). Four studies provided baseline and follow-up values with standard deviations but no standard deviation for the mean change (Bacon 2002; Luepker 1978; Smith 1976; Tomson 1995). Using two studies (Foreyt 1979; Neil 1995) in which data were provided for baseline, follow-up and change from baseline a value for the correlation between baseline and follow-up values was computed. A conservative estimate (lowest correlation) was used to compute the standard deviation for the mean change for four studies.

The standard EPOC criteria were used to assess the methodological quality of randomised trials. (See EDITORIAL INFORMATION under GROUP DETAILS for METHODS USED IN REVIEWS.) In brief the criteria were:

- 1) Concealment of allocation score DONE if random process was explicitly described.
  - 2) Follow-up of participants at end of study score DONE if at least 80%.
  - 3) Blinded assessment of blood cholesterol score DONE if a standardised, automated laboratory test was used.
  - 4) Similar baseline measures for each intervention group score DONE if no substantial differences.
  - 5) Reliable blood cholesterol measure score DONE if standardized test used.
  - 6) Protection against contamination score DONE if it is unlikely there was any communication between intervention groups.
- Original reports of trial results were extracted by two independent reviewers (RT, LH) using the data extraction form. Minor differences mainly in terms of the quality assessment between reviewers' extraction results were resolved by discussion.

### Data analysis

The outcome measurements - total blood cholesterol, low density lipoprotein cholesterol, high density lipoprotein cholesterol, body mass index and blood pressure were continuous variables. Only one study reported any data on the qualitative measures of patient preference and therefore this outcome has not been included in the meta-analysis.

Net differences (i.e. dietitian minus other group differences) at the longest duration of follow-up available were computed. Unstandardised mean differences were examined using the random effects model. Standardised mean differences were also performed to allow for the difference in length of follow-up between the studies. Where there were no material differences between results using standardised and unstandardised mean differences, the unstandardised results are presented.

Differences between the results of the trials were checked for heterogeneity by visual inspection of the graphs and by statistical test (chi square).

Sensitivity analysis was carried out to assess the robustness of the results in terms of quality. Funnel plots were used to assess asymmetry between the effects of larger and smaller studies. Sensitivity analyses were also performed to assess the robustness of meta-analytic results to unit of analysis errors. For cluster randomised trials for which papers presented results based on participants as units of analysis, variances of treatment effect estimates were inflated by a 'design effect' as described by Hauck et al (Hauck 1991). A range of feasible intra class correlation coefficients was assumed, using findings of Ukoumunne (Ukoumunne 1999) as a guide. In particular, for general practices values of 0.001 and 0.01 were used.

## RESULTS



## Description of studies

See: [Characteristics of included studies](#); [Characteristics of excluded studies](#).

Details of the studies included in the review are shown in the table of characteristics of included studies. The column headed 'methods' presents the results of the quality assessment (see methods of the review). The column headed 'notes' refers to additional information about the studies and includes the conclusions made by the authors of the studies.

Twelve studies (13 comparisons) were identified that met all the inclusion criteria (one study had two relevant comparisons). There were four studies comparing advice from dietitians and doctors, seven comparing advice from dietitians and self-help resources, one comparing dietitian and counsellor and one comparing dietitians and nurses. Most studies were carried out in the UK, USA and Australia. Studies were carried out in a range of settings including general practice ([Caggiula 1996](#); [Gosselin 1996](#); [Neil 1995](#); [Tomson 1995](#)), workplace ([Barratt 1994](#); [Luepker 1978](#); [Smith 1976](#)) and a variety of clinic settings ([Bacon 2002](#); [Dyson 1997](#); [Foreyt 1979](#); [Heller 1989](#); [Wing 1998](#)). The health status at baseline of participants varied; slightly raised blood cholesterol values ([Barratt 1994](#); [Foreyt 1979](#)), raised lipid values requiring treatment ([Caggiula 1996](#); [Gosselin 1996](#); [Luepker 1978](#); [Neil 1995](#); [Smith 1976](#); [Tomson 1995](#)), others had raised fasting plasma glucose ([Dyson 1997](#)), risk factors for diabetes ([Wing 1998](#)), obese ([Bacon 2002](#)) or previous heart disease ([Heller 1989](#)).

The duration of the studies varied from six weeks to 104 weeks. Most interventions were diet alone with the exception of two studies that included exercise in both intervention groups ([Bacon 2002](#); [Dyson 1997](#)). Only three studies reported participants taking lipid lowering medication ([Caggiula 1996](#); [Luepker 1978](#); [Smith 1976](#)). One study ([Caggiula 1996](#)) presented results separately for those participants not receiving lipid lowering medication, and in the other two studies ([Luepker 1978](#); [Smith 1976](#)) lipid lowering medication was introduced after 6 weeks into the study. In order to reduce the clinical heterogeneity between the studies only data for the first six weeks for the studies by [Luepker \(1978\)](#) and [Smith \(1976\)](#) were included.

The service delivery methods also differed between the studies. Those participants seen by a doctor tended to have less frequent appointments or less time at appointments than those seen by a dietitian ([Caggiula 1996](#); [Gosselin 1996](#); [Luepker 1978](#); [Smith 1976](#)). The self-help resources tended to be fairly simple leaflets. The interventions by the dietitians included group sessions of less than 10 meetings ([Barratt 1994](#)); group sessions of more than 10 meetings ([Bacon 2002](#); [Foreyt 1979](#); [Wing 1998](#)), individual consultations ([Caggiula 1996](#); [Dyson 1997](#); [Gosselin 1996](#); [Heller 1989](#); [Neil 1995](#)) and three studies used both individual and group sessions ([Luepker 1978](#); [Smith 1976](#); [Tomson 1995](#)). For three of the five comparisons for dietitian versus doctor and one for dietitian versus self-help resources the participants who were randomised to receive advice from a dietitian also received non-

dietary advice from a physician ([Caggiula 1996](#); [Luepker 1978](#); [Smith 1976](#); [Tomson 1995](#)).

In terms of outcomes, in addition to measuring blood cholesterol four trials measured LDLc ([Bacon 2002](#); [Dyson 1997](#); [Gosselin 1996](#); [Neil 1995](#)); eight measured HDLc ([Bacon 2002](#); [Barratt 1994](#); [Dyson 1997](#); [Gosselin 1996](#); [Heller 1989](#); [Neil 1995](#); [Tomson 1995](#); [Wing 1998](#)), four measured blood pressure ([Bacon 2002](#); [Dyson 1997](#); [Foreyt 1979](#); [Wing 1998](#)) and six body weight ([Bacon 2002](#); [Barratt 1994](#); [Dyson 1997](#); [Foreyt 1979](#); [Gosselin 1996](#); [Wing 1998](#)). Only one study measured patient satisfaction ([Caggiula 1996](#)).

The main reason for exclusion was that 'interventions were not dietitian versus other health professional or self-help resources' (91%). Other criteria that were often not met were 'blood cholesterol not measured' (32%) and 'study was not a randomised trial' (18%).

## Risk of bias in included studies

The methodological quality of the studies is described in the Characteristics of included studies table. The six quality criteria applied to RCTs are described in METHODS OF THE REVIEW

All 12 of the reported studies had methodological weaknesses according to the EPOC criteria. None of the studies fulfilled all of the quality criteria.

### 1. Concealment of allocation

All the RCTs failed to report the method of randomisation in detail, therefore it was not possible to determine whether allocation to groups was capable of being manipulated. ([Stephenson 1998](#)).

### 2. Follow-up of participants

Patient follow-up of at least 80% was achieved for four studies for both dietitian and comparison groups ([Dyson 1997](#); [Luepker 1978](#); [Neil 1995](#); [Smith 1976](#)) and three studies for the group seeing the dietitian but not the self-help resources ([Foreyt 1979](#); [Tomson 1995](#); [Wing 1998](#)). Follow-up was not achieved in four studies for either the dietitian or comparison groups ([Bacon 2002](#); [Barratt 1994](#); [Gosselin 1996](#); [Heller 1989](#)).

### 3. Blinded assessment of blood cholesterol

The main outcome was blood cholesterol, using an objective outcome measure, therefore a blinded assessment was assumed for all studies. It was not possible to blind participants to dietary interventions and this may cause bias

### 4. Similar baseline blood cholesterol measures for each intervention group

Baseline values for blood cholesterol between groups in each trial were compared. When differences at baseline were likely to affect the post intervention differences the baseline measurement was considered NOT DONE. For example it might be expected that groups with a higher blood cholesterol at baseline may experience a larger reduction at follow-up than those with a lower blood cholesterol. This was the case for four studies ([Barratt 1994](#); [Heller 1989](#); [Neil 1995](#); [Wing 1998](#)) where the dietitian group had a higher

blood cholesterol measure than the comparison group; and Neil (Neil 1995) where the self-help resources group had a statistically significantly greater blood cholesterol than the dietitian group. In the studies that did not have similar baseline blood cholesterol for each intervention group it was unclear whether adjustment for the difference in baseline values had been carried out in the analysis.

#### 5. Reliable blood cholesterol measure

The main outcome was change in blood cholesterol using a standard method, therefore a reliable outcome was assumed for all studies (Stephenson 1998).

#### 6. Protection against contamination

Protection against contamination was judged DONE for seven studies (Caggiula 1996; Foreyt 1979; Gosselin 1996; Luepker 1978; Neil 1995 (dietitian versus self-help resources); Smith 1976; Tomson 1995).

One study randomised by cluster (physician practice) and analysed their data at the level of the participant (Caggiula 1996). The remaining studies randomised and analysed their data at the level of the participant.

Judged by the six quality criteria two studies met five of the criteria (Luepker 1978; Smith 1976); five studies met four of the criteria (Dyson 1997; Foreyt 1979; Gosselin 1996; Neil 1995 (dietitian versus self-help resources); Tomson 1995), two studies met three of the criteria (Bacon 2002; Caggiula 1996) and three studies met only two of the criteria (Barratt 1994; Heller 1989; Wing 1998). In general those studies comparing dietitian with doctor were of a higher quality than the studies comparing dietitian with self-help resources.

## Effects of interventions

The results are presented separately for each comparison (dietitian versus doctor, self-help resources, nurse or counsellor). Some studies reported measuring some secondary outcomes of interest, however, not all these data were in the appropriate format for inclusion. The results are presented by the outcome of interest. There was no heterogeneity detected for any of the comparisons. Sub-group analyses

Due to the limited number of studies identified we restricted the sub-group analysis to length of follow-up for the primary outcome blood cholesterol. We compared data at follow-ups of six months or less with follow-ups of one year.

### Blood cholesterol

#### Dietitian versus doctor

The random effects analyses demonstrated a statistically significant reduction in participants receiving advice from dietitians compared with doctors (change -0.25 mmol/L, 95% CI -0.37, -0.12 mmol/L). Two studies (Caggiula 1996; Gosselin 1996) individually showed statistically significant reductions for the dietetic group compared with those seeing the doctor. Although the overall difference between dietitians and doctors was similar between the studies, the actual reduction achieved by dietitian or doctor

for individual studies was greatest for Luepker (Luepker 1978) and Smith (Smith 1976), where data for six weeks follow-up were used; this difference progressively declined with duration of study. Results were robust to unit of analysis errors. The single cluster randomised trial contributed to the comparison of dietitians with doctors. Even assuming an intra class correlation coefficient of 1 did not affect the statistical significance of the result.

#### Dietitian versus self-help resources

The random effects analyses for dietitian versus self-help resources showed no difference in reduction of blood cholesterol (change -0.10 mmol/L, 95% CI -0.22, 0.03). Four studies showed virtually no difference (Barratt 1994; Dyson 1997; Neil 1995; Tomson 1995). Two studies found that those seeing the dietitian had a greater reduction than those using self-help resources (Heller 1989; Wing 1998); however, both of these were rated of lower quality. There did not appear to be a trend of smaller reductions in blood cholesterol with increasing study duration for either the dietitian or self-help group.

If the results of self-help resources, counsellor and doctors compared with dietitians are pooled, dietitians performed better than the other methods (change -0.14 mmol/L, 95% CI -0.23, -0.05). We did not include the data for nurses as the only study on nurses also reported on self-help resources, and therefore both these interventions were compared with the same group of participants receiving advice from a dietitian.

In most of the trials the baseline blood cholesterol value was higher for the dietitian group than those receiving advice from a doctor or using self-help resources. The difference in baseline blood cholesterol (dietitian minus other group) was computed. A trend was observed such that higher baseline differences were associated with higher mean differences, indicating that if dietitians saw participants with higher cholesterol then larger treatment effects were observed.

#### Dietitian versus nurse

The only study meeting the inclusion criteria (Neil 1995) found that reduction in blood cholesterol was slightly less for the dietitian group compared with the nurse group (0.08 mmol/L, 95% CI -0.11, 0.27).

#### Dietitian versus counsellor

The only study meeting the inclusion criteria (Bacon 2002) showed no apparent difference between the dietitian group and counsellor group (-0.03 mmol/L, 95% CI -0.46, 0.40).

Sub-group analysis - effects of length of follow-up on cholesterol reduction

Follow-up of 6 months or less compared with follow-up at one year.

#### Dietitian versus doctor

All studies were six months or less in duration. The difference between dietitian and doctor was -0.25 mmol/L 95% CI -0.37, -0.12.

#### Dietitian versus self-help resources

Five of the seven studies had follow-up of six months or less (Barratt 1994; Foreyt 1979; Heller 1989; Neil 1995; Wing 1998). Heterogeneity was detected for this comparison with the random effect analyses for dietitian versus self-help resources showing a statistically significant difference in favour of the dietitian group (-0.25 mmol/L 95% CI -0.48, -0.02). The heterogeneity appears to be the result of an increase in blood cholesterol in the participants receiving self-help resources in the study by Wing 1998. If this study is removed from the meta-analysis the difference is reduced to -0.15 mmol/L 95% CI -0.35, 0.04.

Four of the seven studies had follow-up between six months and one year (Dyson 1997; Foreyt 1979; Tomson 1995; Wing 1998). No heterogeneity was detected and there was a non-statistically significant difference in favour of the dietitian group (-0.05 mmol/L 95% CI -0.18, 0.09). The heterogeneity appears to be the result of an increase in blood cholesterol in the participants receiving self-help resources in the study by Wing 1998.

Two studies (Foreyt 1979; Wing 1998) had follow-up at six months and one year. Both showed a decline in difference (mmol/L) between the methods with increased follow-up (-0.28 and -0.21 for Foreyt 1979 and -0.61 and -0.13 for Wing 1998).

#### Dietitian versus nurse

The only study (Neil 1995) was of six months and showed a non-statistically significant result in favour of the nurse group.

#### Dietitian versus counsellor

The only study (Bacon 2002) had follow-ups at 12, 14 and 52 weeks. The differences between dietitian and counsellor were -0.42 mmol/L 95% CI -0.87, 0.03 (not shown in forest plot, -0.37 mmol/L 95% CI -0.82, 0.08, and -0.03 mmol/L 95% CI -0.46, 0.40 respectively

#### LDL cholesterol

Five studies provided usable information on LDLc.

#### Dietitian versus doctor

Gosselin (Gosselin 1996) found a non-statistically significant difference in favour of the dietitian.

#### Dietitian versus self-help resources

The three studies showed no difference (0.03 mmol/L, 95% CI -0.14, 0.19 mmol/L). One favoured the dietitian (Wing 1998) and two the self-help resources (Dyson 1997; Neil 1995).

#### Dietitian versus nurse

Neil (Neil 1995) found a non-statistically significant difference in favour of the nurse group.

#### Dietitian versus counsellor

Bacon (Bacon 2002) found a non-statistically significant difference in favour of the dietitian group.

#### HDL cholesterol

#### Dietitian versus doctor

One study compared dietitian and doctor (Gosselin 1996) and found no difference.

#### Dietitian versus self-help resources

Five studies (Barratt 1994; Dyson 1997; Heller 1989; Neil 1995; Wing 1998) provided appropriate data and most of the studies

clustered around the line of no effect. The exception was Heller (Heller 1989), who reported a greater reduction in the dietitian group; however this study contributed little to the overall result (3.5%). Overall those seeing the dietitian showed a non-statistically significant decline in HDLc (-0.02 mmol/L, 95% CI -0.05, 0.01 mmol/L).

#### Dietitian versus nurse

Neil (Neil 1995) showed a statistically significant difference in favour of the nurse group. The difference for dietitian versus nurse was -0.06 mmol/L (95% CI -0.11, -0.01).

#### Dietitian versus counsellor

Bacon (Bacon 2002) found a non-statistically significant result in favour of the dietitian group.

#### Diastolic blood pressure

#### Dietitian versus self-help resources

Three studies (Dyson 1997; Foreyt 1979; Wing 1998) provided required data. None of the studies individually or together showed a statistically significant difference (0.30 mmHg, 95% CI -1.4, 2.0).

#### Dietitian versus counsellor

Bacon (Bacon 2002) showed a non-statistically significant result in favour of the dietitian group.

#### Systolic blood pressure

#### Dietitian versus self-help resources

Three studies provided required data. Two studies favoured the dietitian (Dyson 1997; Foreyt 1979) and one favoured the self-help resources (Wing 1998). The overall effect was -1.8 mmHg (95% CI -4.4, 0.9 mmHg) in favour of the dietitian.

#### Dietitian versus counsellor

Bacon (Bacon 2002) showed a non-statistically significant result in favour of the dietitian group.

#### Body weight

#### Dietitian versus self-help resources

Data from four studies (Barratt 1994; Dyson 1997; Foreyt 1979; Wing 1998) could be used for body weight as some studies only presented results for relative weight or body mass index. Although no studies were individually or together statistically significant, all favoured the dietitian. However the overall weight loss was minimal (-0.42 kg 95% CI -1.0, 0.2). One study (Wing 1998) achieved a mean weight loss of -2.1 kg after two years; however this study was of poor quality.

#### Dietitian versus counsellor

Bacon (Bacon 2002) showed a statistically significant result in favour of the dietitian group (-5.8 kg 95% CI -8.91, -2.69). The main objective of the interventions in this study was weight loss.

#### Patient satisfaction

One study (Caggiula 1996) reported patient satisfaction with the interventions. Participants receiving advice from a nutritionist indicated that they used the provided literature more, found them more helpful and less difficult and were more positive in recommending the programme than participants receiving advice from

the doctor. However this may reflect the greater amount of time spent with the participants randomised to see the nutritionist.

#### Funnel plots

Funnel plots prepared for blood cholesterol showed no evidence of asymmetry for the dietitian versus doctor comparison, although there were only four studies. The funnel plot for dietitian versus self-help resources showed that, amongst the smaller studies, most favoured the dietitian over the self-help resources. This may be due to publication bias, but could well be due to a larger underlying effect in smaller studies.

## DISCUSSION

Dietary advice from a dietitian was more effective than advice from a doctor in reducing blood cholesterol. However there was no difference for secondary outcome variables or for dietitian versus self-help resources. There was no detected heterogeneity between studies for any of the comparisons with the exception of the subgroup analyses for dietitian versus self-help resources.

#### Dietitian versus doctor

The effect on blood cholesterol of advice from a dietitian compared with a doctor was small (-0.25 mmol/L, about 4%) but statistically significant. The quality of the four studies was superior to that of those comparing dietitian and self-help resources. It is worth noting that the participants who were randomised to receive advice from the dietitian also saw a doctor although not for dietary advice. It is possible that the presence of the doctor improves participant compliance. Most of the data available for use from studies were of short duration (nine weeks or less) and therefore we have no evidence of the long term effects, although there was some evidence to suggest that length of duration of the study appeared to be inversely related to the reduction in blood cholesterol achieved. It is not possible to distinguish whether the difference in blood cholesterol was a result of advice from a different health professional or from more contact with the health professional. Participants randomised to the dietitian generally received more time with a health professional than those randomised to the doctor. All the studies were carried out in the USA or Canada, which limits their generalisability to Europe. Only one study assessed patient satisfaction, and showed a greater satisfaction with advice from the dietitian rather than advice from the doctor. This may partly be explained by participants seeing the dietitian having a longer consultation time.

#### Dietitian versus self-help

The effect of advice from dietitians or self-help resources on blood cholesterol was more varied. The overall effect was small (-0.10 mmol/L, less than 2%). The effect of dietary advice from dietitians in the self-help comparison compared with those in the doctor comparison was much less. This may have been because the overall

follow-up time was longer, only two had the presence of a doctor or a multi-disciplinary team. The baseline blood cholesterol values were below 6 mmol/l for three of the seven studies, possibly leading to a low motivation for participants to change their dietary habits. The quality of the studies varied, with three studies being of low quality. An explanation for a similar but poor effect of the interventions might be that some well-motivated participants will change their dietary habits with little input from the health professional. A leaflet in some circumstances may be sufficient. The subgroup analyses appeared to show a greater decline in blood cholesterol in studies with a follow-up at 6 months or less compared with a one year follow-up. The difference between the methods with a follow-up of 6 months or less was similar to that for the comparison of dietitian versus doctor, however, caution should be exercised as heterogeneity was detected in the dietitian versus self-help resources comparison and only two studies had data for both follow-ups.

#### Dietitian versus nurse

Only one study comparing advice from a dietitian with a nurse was found. This is an important comparison to investigate as many practice nurses give dietary advice in relation to coronary heart disease. Nurses may have more opportunities to provide dietary advice than dietitians as they have more patient contact.

#### Dietitian versus counsellor

Only one study comparing advice from a dietitian with a counsellor was found. Despite the small study sample this study whose main objective was weight loss did show a greater weight loss in the dietitian group (Traditional weight loss programme) compared with the counsellor group ('health-centred' non-diet wellness programme). Both approaches however seemed to result in a similar reduction in blood cholesterol. As in the case for nurses further studies are required to assess the impact of counsellors giving dietary advice on blood cholesterol.

#### Patient satisfaction

It is unfortunate that only one study included questions on patient satisfaction. This is an important point as improved patient compliance may be achieved if new interventions, in particular self-help resources and accompanying literature, are prepared in consultation with the user.

#### Methodological quality

None of the studies fulfilled all of the quality criteria. Most trials were of a relatively small sample size. Seven of the 12 trials had less than 50 participants with blood cholesterol measures at follow-up in each arm of the trial. The smaller studies showed bigger effect sizes favouring the dietitian. This may relate to publication bias in which studies favouring self-help resources were missed, however, it may be that in smaller studies dietitians perform better. There was imbalance in the randomisation process for some of the

studies, most notably, the smaller studies where participants with higher baseline blood cholesterol appeared to be randomised to the dietitian group. In these studies the size of the mean differences appeared greater. This may be partly due to regression to the mean, or it may be easier to reduce blood cholesterol in participants with higher baseline levels.

Although we were able to address the primary question of the review, due to the small number of studies fulfilling the selection criteria the secondary objectives could not be carried out. Some important questions remain outstanding. It was not possible to assess the effect of type of patient, setting, length of follow-up and whether the intervention was diet alone or a multiple lifestyle intervention approach, on the outcomes assessed.

## **AUTHORS' CONCLUSIONS**

### **Implications for practice**

Dietitians are better at lowering blood cholesterol in the short to medium term than doctors, but the evidence is not convincing that they are better than self-help resources. More evidence is required to assess whether change can be maintained in the longer term. The evidence for the comparison with nurses is limited but so far there is no evidence that dietitians provide better outcomes than nurses.

However in practice there will never be enough dietitians to see every patient with a raised blood cholesterol. It may be more practical and a better use of resources to ensure that all members of the health team are trained by dietitians to give the appropriate advice. The use of self-help resources need to be encouraged and patients involved in their development. Some patients will respond well to self-help resources and these patients should be identified and targeted appropriately. Using self-help resources will be more cost-effective than individual dietary advice and if they are as effective they should be employed. The remaining dietetic time can then be used with patients who have more complex medical problems, who require more in depth nutrition education or need support to encourage and motivate them to make dietary changes. The

presence of a doctor or other health professional (not to give dietary advice) for individual or group education may also aid compliance.

Patient education should include ways of maintaining dietary change so that long term reductions in blood cholesterol are achieved.

### **Implications for research**

Many of these studies were small and of poor quality. There is a need for good quality randomised controlled trials for all of the comparisons studied. The efficacy of nurse-led dietary interventions compared with dietetic advice is an important comparison that requires further work, due both to the limited number of papers and the practical implications of nurses giving dietary advice.

Further work is needed on which elements of dietary advice make it effective, e.g. length and frequency of contact, type of approach (e.g. individual or group, behavioural therapy or instructional techniques), level of belief of practitioner, level of training of practitioner, patient satisfaction, initial characteristics of patients. Research in the setting in which dietary advice is given would inform us about the effectiveness of advice in primary care and the workplace compared with hospital settings. Work would be especially useful on the types of self-help resources that are the most effective. For example, are interactive computer programmes better than simple leaflets. The method of administration may also be important. Does it make any difference if a leaflet is handed out by a doctor or nurse, or administered by post?

## **ACKNOWLEDGEMENTS**

We are grateful to the following investigators who provided us with further information: Russell V Luepker (University of Minnesota), H Andrew W Neil (University of Oxford), Alexandra Barratt (University of Sydney). We are also grateful to Stuart Logan, Betsy Anagnostelis and Leanne Jones from the Systematic Reviews Training Unit at the Institute of Child Health, University of London.

## REFERENCES

### References to studies included in this review

#### Bacon 2002 *{published data only}*

\* Bacon L, Keim NL, Van Loan MD, Derricote M, Gale B, Kazaks A, Stern JS. Evaluating a 'non-diet' wellness intervention for improvement of metabolic fitness, psychological well-being and eating and activity behaviors. *International Journal of Obesity* 2002;**26**:854–65.

#### Barratt 1994 *{published and unpublished data}*

\* Barratt A, Reznik R, Irwig L, Cuff A, Simpson JM, Oldenburg B, et al. Work-site cholesterol screening and dietary intervention: the Staff Healthy Heart Project. *American Journal of Public Health* 1994;**84**(5):779–82. [MEDLINE: 94234407]

#### Caggiula 1996 *{published data only}*

\* Caggiula AW, Watson JE, Kuller LH, Olson MB, Milas NC, Berry M, et al. Cholesterol-lowering intervention program. Effect of the step I diet in community office practices. *Archives of Internal Medicine* 1996;**156**(11):1205–13. [MEDLINE: 96235063]  
Ford, D.E, Sciamanna, C. Nutritional counseling in community office practices [letter]. *Arch. Intern. Med.* 1997; **157**(3):361–2.

#### Dyson 1997 *{published data only}*

\* Dyson PA, Hammersley MS, Morris RJ, Holman RR, Turner RC. The Fasting Hyperglycaemia Study: II. Randomized controlled trial of reinforced healthy-living advice in subjects with increased but not diabetic fasting plasma glucose. *Metabolism: Clinical & Experimental* 1997; **46**(12 Suppl 1):50–5. [MEDLINE: 98102733]

#### Foreyt 1979 *{published data only}*

\* Foreyt JP, Scott LW, Mitchell RE, Gotto AM. Plasma lipid changes in the normal population following behavioral treatment. *Journal of Consulting and Clinical Psychology* 1979;**47**(3):440–52. [MEDLINE: 80116271]

#### Gosselin 1996 *{published data only}*

\* Gosselin P, Verreault R, Gaudreault C, Guillemette J. Dietary treatment of mild to moderate hypercholesterolemia. Effectiveness of different interventions [Traitement dietetique de l'hypercholesterolemie legere a moderee. Efficacite de differentes interventions.]. *Canadian Family Physician* 1996;**42**:2160–7. [MEDLINE: 97093853]

#### Heller 1989 *{published data only}*

Amos, B.J. Reducing blood cholesterol: dietitian or diet fact sheet?. *Med.J.Aust.* 1990;**152**:168.  
\* Heller RF, Elliott H, Bray AE, Alabaster M. Reducing blood cholesterol levels in patients with peripheral vascular disease: dietitian or diet fact sheet?. *Medical Journal of Australia* 1989;**151**(10):566–8. [MEDLINE: 90081472]

#### Luepker 1978 *{published data only}*

\* Luepker RV, Smith LK, Rothchild SS, Gillis A, Kochman L, Warbasse JR. Management of hypercholesterolemia: evaluation of practical clinical approaches in healthy young

adults. *American Journal of Cardiology* 1978;**41**(3):590–6. [MEDLINE: 78121056]

#### Neil 1995 *{published and unpublished data}*

\* Neil HA, Roe L, Godlee RJ, Moore JW, Clark GM, Brown J, et al. Randomised trial of lipid lowering dietary advice in general practice: the effects on serum lipids, lipoproteins, and antioxidants. *BMJ* 1995;**310**(6979):569–73. [MEDLINE: 95195538]

#### Smith 1976 *{published data only}*

\* Smith LK, Luepker RV, Rothchild SS, Gillis A, Kochman L, Warnasse JR. Management of type IV hyperlipoproteinemia. Evaluation of practical clinical approaches. *Annals of Internal Medicine* 1976;**84**(1):22–8. [MEDLINE: 76086334]

#### Tomson 1995 *{published data only}*

\* Tomson Y, Johannesson M, Aberg H. The costs and effects of two different lipid intervention programmes in primary health care. *Journal of Internal Medicine* 1995;**237**(1):13–7. [MEDLINE: 95131151]

#### Wing 1998 *{published data only}*

\* Wing RR, Venditti E, Jakicic JM, Polley BA, Lang W. Lifestyle intervention in overweight individuals with a family history of diabetes. *Diabetes Care* 1998;**21**(3):350–9. [MEDLINE: 98200836]

### References to studies excluded from this review

#### Agewall 1993 *{published data only}*

\* Agewall S. Multiple cardiovascular risk factor intervention in treated hypertensive men. What can be achieved?. *Nutrition Metabolism & Cardiovascular Diseases* 1993;**3**:128–35.

Agewall S, Wikstrand J, Dahlof C, Fagerberg B. A randomized study of quality of life during multiple risk factor intervention in treated hypertensive men at high cardiovascular risk. *Journal of Hypertension* 1995;**13**(12 Pt1):1471–7. [MEDLINE: 97020531]

Agewall S, Wikstrand J, Samuelsson O, Persson B, Andersson OK, Fagerberg B. The efficacy of multiple risk factor intervention in treated hypertensive men during long-term follow up. Risk Factor Intervention Study Group. *Journal of Internal Medicine* 1994;**236**(6):651–9. [MEDLINE: 95081756]

Fagerberg B, Wiklund O, Agewall S, Camejo G, Wikstrand RJ. Multifactorial treatment of hypertensive men at high cardiovascular risk and low-density lipoprotein cholesterol affinity to human arterial proteoglycans. *European Journal of Clinical Investigation* 1996;**26**(11):960–5. [MEDLINE: 97116112]

Johannesson M, Agewall S, Hartford M, Hedner T, Fagerberg B. The cost-effectiveness of a cardiovascular multiple-risk-factor intervention programme in treated hypertensive men. *Journal of Internal Medicine* 1995;**237**(1):19–26. [MEDLINE: 95131152]

**Agewall 2001** {published data only}

\* Agewall S, Fagerberg B, Berglund G, Schmidt C, Wendelhag I, Wikstrand J. Multiple risk intervention trial in high risk hypertensive men: comparison of ultrasound intima-media thickness and clinical outcome during 6 years of follow-up. *Journal of Internal Medicine* 2001;**249**: 305–14.

**Agurs 1997** {published data only}

\* Agurs-Collins TD, Kumanyika SK, Ten Have TR, Adams-Campbell LL. A randomized controlled trial of weight reduction and exercise for diabetes management in older African-American subjects. *Diabetes Care* 1997;**20**(10): 1503–11. [MEDLINE: 97460200]

**Aish 1996** {published data only}

Aish, A, A comparison of female and male cardiac patients' response to nursing care promoting nutritional self-care. *Can.J.Cardiovasc.Nurs.* 1996;**7**(3):4–13.

\* Aish, A.E, Isenberg, M. Effects of Orem-based nursing intervention on nutritional self-care of myocardial infarction patients. *Int.J.Nurs.Stud.* 1996;**33**(3):259–70.

**Allen 1996** {published data only}

\* Allen JK. Coronary risk factor modification in women after coronary artery bypass surgery. *Nursing Research* 1996; **45**(5):260–5. [MEDLINE: 96428548]

**Allison 2000** {published data only}

\* Allison, T.G, Farkouh, M.E, Smars, P.A, Evans, R.W, Squires, R.W, Gabriel, S.E, Kopecky, S.L, Gibbons, R.J, Reeder, G.S. Management of coronary risk factors by registered nurses versus usual care in patients with unstable angina pectoris (a chest pain evaluation in the emergency room [CHEER] substudy). *American Journal of Cardiology* 2000;**86**:133–8.

**Andersen 1985** {published data only}

\* Andersen TR, Nielsen PE. Blood pressure lowering effect of weight reduction. *Scandinavian Journal of Clinical & Laboratory Investigation - Supplement* 1985;**176**:7–14. [MEDLINE: 86044337]

**Anderson 1990** {published data only}

Anderson JW, Garrity TF, Smith BM, Whitis SE. Follow-up on a clinical trial comparing the effects of two lipid-lowering diets. *Arteriosclerosis* 1990;**10**:882A.

\* Anderson JW, Garrity TF, Wood CL, Whitis SE, Smith BM, Oeltgen PR. Prospective, randomized, controlled comparison of the effects of low-fat and low-fat plus high-fiber diets on serum lipid concentrations. *American Journal of Clinical Nutrition* 1992;**56**(5):887–94. [MEDLINE: 93035069]

**Anderson 1999** {published data only}

\* Anderson J, Dusenbury L. Worksite cholesterol and nutrition. An intervention project in Colorado. *Academy of Nutrition and Dietetics Journal* 1999;**47**(3):99–106.

**Anonymous 1965** {published data only}

Anonymous. Low-fat diet in myocardial infarction: A controlled trial. *Lancet* 1965;**2**(411):501–4.

**Anonymous 1991** {published data only}

\* Anonymous. Low high-density lipoprotein cholesterol and other coronary heart disease risk factors in patients with total cholesterol levels greater than 5.17 mmol/L (200 mg/dL) in family practice. A report from CEN. *J.Am.Board.Fam.Pract.* 1991;**4**(5):285–97.

**Appel 1995** {published data only}

\* Appel, L, J, Espeland, M, Whelton, P, K, Dolecek, T, Kumanyika, S, Applegate, W, B, Ettinger, W, H, Kostis, J, B, Wilson, A, C, Lacy, C, Miller, S, T. Trial of Nonpharmacologic Intervention in the Elderly (TONE). Design and rationale of a blood pressure control trial. *Annals of Epidemiology* 1995;**5**:119–29.

**Applegate 1992** {published data only}

\* Applegate, W.B, Miller, S.T, Elam, J.T, Cushman, W.C, el Derwi, D, Brewer, A, Graney, M.J. Nonpharmacologic intervention to reduce blood pressure in older patients with mild hypertension. *Arch.Intern.Med.* 1992;**152**(6):1162–6.

**Arntzenius 1985** {published data only}

Arntzenius, A.C, Diet, lipoproteins and the progression of coronary atherosclerosis. The Leiden Intervention Trial. *Drugs* 1986;**31**(Suppl 1):61–5.

\* Arntzenius, A.C, Kromhout, D, Barth, J.D, et al.Diet, lipoproteins, and the progression of coronary atherosclerosis. The Leiden Intervention Trial. *N.Engl.J.Med.* 1985;**312** (13):805–11.

**Avila 1994** {published data only}

\* Avila, P, Hovell, M.F. Physical activity training for weight loss in Latinas: a controlled trial. *Int.J.Obes.Relat.Metab.Disord.* 1994;**18**(7):476–82.

**Bae 1991** {published data only}

\* Bae CY, Keenan JM, Wenz J, McCaffrey DJ. A clinical trial of the American Heart Association step one diet for treatment of hypercholesterolemia. *Journal of Family Practice* 1991;**33**(3):249–54. [MEDLINE: 91349718]

**Baer 1993** {published data only}

\* Baer, J.T, Improved plasma cholesterol levels in men after a nutrition education program at the worksite. *J.Am.Diet.Assoc.* 1993;**93**(6):658–63.

**Bakx 1997** {published data only}

\* Bakx JC, Stafleu A, van Staveren WA, van den Hoogen HJ, van Weel C. Long-term effect of nutritional counseling: a study in family medicine. *American Journal of Clinical Nutrition* 1997;**65**(6 Suppl):1946S–50S. [MEDLINE: 97317473]

**Baron 1990** {published data only}

\* Baron, J.A, Gleason, R, Crowe, B, Mann, J.I. Preliminary trial of the effect of general practice based nutritional advice. *Br.J.Gen.Pract.* 1990;**40**(333):137–41.

**Baxter 1997** {published data only}

\* Baxter T, Milner P, Wilson K, Leaf M, Nicholl J, Freeman J, et al.A cost effective, community based heart health promotion project in England: prospective comparative study. *BMJ* 1997;**315**(7108):582–5. [MEDLINE: 97448631]

**Beckmann 1995** {published data only}

\* Beckmann, S.L, Os, I, Kjeldsen, S.E, Eide, I.K, Westheim, A.S, Hjermann, I. Effect of dietary counselling on blood pressure and arterial plasma catecholamines in primary hypertension. *Am.J.Hypertens.* 1995;**8**(7):704–11.

**Bemelmans 2000** {published data only}

\* Bemelmans, W.J, Broer, J, de Vries, J.H, Hulshof, K.F, May, J.F, Meyboom-De-Jong, B. Impact of Mediterranean diet education versus posted leaflet on dietary habits and serum cholesterol in a high risk population for cardiovascular disease. *Public Health Nutrition* 2000;**3**(3): 273–83.

Siero, F.W, Broer, J, Bemelmans, W.J, Meyboom-de-Jong, B.M. Impact of group nutrition education and surplus value of Prochaska-based stage-matched information on health-related cognitions and on Mediterranean nutrition behavior. *Health Education Research* 2000;**15**(5):635–47.

**Beresford 1992** {published data only}

\* Beresford, S.A, Farmer, E.M, Feingold, L, Graves, K.L, Sumner, S.K, Baker, R.M. Evaluation of a self-help dietary intervention in a primary care setting. *Am.J.Public Health* 1992;**82**:79–84.

**Beresford 1997** {published data only}

\* Beresford, S.A, Curry, S.J, Kristal, A.R, Lazovich, D, Feng, Z, Wagner, E.H. A dietary intervention in primary care practice: the Eating Patterns Study. *Am.J.Public Health* 1997;**87**(4):610–6.

**Bergstrom 1967** {published data only}

\* Bergstrom G, Svanborg A. Dietary treatment of acute myocardial infarction. *Acta Medica Scandinavica* 1967;**181** (6):717–21. [MEDLINE: 90086360]

**Bertera 1981** {published data only}

\* Bertera EM, Bertera RL. The cost-effectiveness of telephone vs clinic counseling for hypertensive patients: a pilot study. *American Journal of Public Health* 1981;**71**(6): 626–9. [MEDLINE: 81204809]

**Bierenbaum 1967** {published data only}

\* Bierenbaum ML, Green DP, Florin A, Fleischman AI, Caldwell AB. Modified-fat dietary management of the young male with coronary disease. A five-year report. *JAMA* 1967;**202**(13):1119–23. [MEDLINE: 68049410]

**Bloemberg 1991** {published data only}

\* Bloemberg, B.P, Kromhout, D, Goddijn, H.E, Jansen, A, Obermann de Boer, G.L. The impact of the Guidelines for a Healthy Diet of The Netherlands Nutrition Council on total and high density lipoprotein cholesterol in hypercholesterolemic free-living men. *Am.J.Epidemiol.* 1991;**134**(1):39–48.

**Bonk 1975** {published data only}

\* Bonk, S, Hubotter, E, Nickel, C, Stocksmeier, U, Vahey, P, Volk, I, Ziel, H. Myocardial infarct patients with and without intensive nutrition consultation over several years-- comparison of physiological and social variables. *Infusionsther.Klin.Ernahr.* 1975;**2**:290–6.

**Bourn 1994** {published data only}

\* Bourn, D.M, Mann, J.I, McSkimming, B.J, Waldron, M.A, Wishart, J.D. Impaired glucose tolerance and NIDDM: Does a lifestyle intervention program have an effect?. *Diabetes Care* 1994;**17**(11):1311–9.

**Boyd 1988** {published data only}

Boyd, N.F, McGuire, V, Shannon, P, Cousins, M, Kriukov, V, Mahoney, L, Fish, E, Lickley, L, Lockwood, G, Tritchler, D. Effect of a low-fat high-carbohydrate diet on symptoms of cyclical mastopathy. *Lancet* 1988;**2**(8603):128–32.

**Boyd 1990** {published data only}

Boyd, N, F, Cousins, M, Beaton, M, Fishell, E, Wright, B, Fish, E, Kriukov, V, Lockwood, G, Tritchler, D, Hanna, W, Page, D, L. Clinical trial of low-fat, high-carbohydrate diet in subjects with mammographic dysplasia: report of early outcomes. *Journal of the National Cancer Institute* 1988;**80**: 1244–8.

\* Boyd, N.F, Cousins, M, Beaton, M, Kriukov, V, Lockwood, G, Tritchler, D. Quantitative changes in dietary fat intake and serum cholesterol in women: results from a randomized, controlled trial. *Am.J.Clin.Nutr.* 1990;**52**(3): 470–6.

Boyd, N.F, Cousins, M, Kriukov, V. A randomized controlled trial of dietary fat reduction: the retention of subjects and characteristics of drop outs. *J.Clin.Epidemiol.* 1992;**45**:31–8.

Boyd, N.F, Martin, L.J, Beaton, M, Cousins, M, Kriukov, V. Long-term effects of participation in a randomized trial of a low-fat, high-carbohydrate diet. *Cancer Epidemiol.Biomarkers.Prev.* 1996;**5**(3):217–22.

Lee Han, H, Cousins, M, Beaton, M, McGuire, V, Kriukov, V, Chipman, M, Boyd, N. Compliance in a randomized clinical trial of dietary fat reduction in patients with breast dysplasia. *Am.J.Clin.Nutr.* 1988;**48**(3):575–86.

**Braeckman 1999** {published data only}

\* Braeckman, L, De Bacquer, D, Maes, L, De Backer, G. Effects of a low-intensity worksite-based nutrition intervention. *Occupational Medicine* 1999;**49**(8):549–55.

**Brown 1974** {published data only}

\* Brown HB, De Wolfe VG. The additive effect of probucol on diet in hyperlipidemia. *Clinical Pharmacology & Therapeutics* 1974;**16**(1):44–50. [MEDLINE: 74277596]

**Brown 1984** {published data only}

\* Brown, G.D, Whyte, L, Gee, M.I, Crockford, P.M, Grace, M, Oberle, K, Williams, H.T, Hutchison, K.J. Effects of two “lipid-lowering” diets on plasma lipid levels of patients with peripheral vascular disease. *J.Am.Diet.Assoc.* 1984;**84** (5):546–50.

**Brug 1996** {published data only}

\* Brug J, Steenhuis I, van Assema P, de Vries H. The impact of a computer-tailored nutrition intervention. *Preventive Medicine* 1996;**25**(3):236–42. [MEDLINE: 96374773]

**Bruno 1983** {published data only}

\* Bruno, R, Arnold, C, Jacobson, L, Winick, M, Wynder, E. Randomized controlled trial of a nonpharmacologic



- cholesterol reduction program at the worksite. *Prev.Med.* 1983;**12**(4):523–32.
- Brunt 1996** {published data only}  
 \* Brunt, J.H, Shields, L. Preventive behaviours in the Hutterite community following a nurse-managed cholesterol screening program. *Canadian Journal of Cardiovascular Nursing* 1996;**7**:6–11.
- Buchwald 1996** {published data only}  
 \* Buchwald, H, Bourdages, H.R, Campos, C.T, Nguyen, P, Williams, S.E, Boen, J.R, Silver, D. Impact of cholesterol reduction on peripheral arterial disease in the Program on the Surgical Control of the Hyperlipidemias (POSCH). *Surgery* 1996;**120**(4):672–9.
- Burke 1999** {published data only}  
 \* Burke V, Giangulio N, Gillam HF, Beilin LJ, Houghton S, Milligan RAK. Health promotion in couple adapting to a shared lifestyle. *Health Education Research* 1999;**14**(2): 269–88.
- Burr 1989** {published data only}  
 Burr, M.L, Fehily, A.M. Fatty fish and heart disease: a randomized controlled trial. *World Rev.Nutr.Diet.* 1991;**66**: 306–12.  
 \* Burr, M.L, Fehily, A.M, Gilbert, J.F, Rogers, S, Holliday, R.M, Sweetnam, P.M, Elwood, P.C, Deadman, N.M. Effects of changes in fat, fish, and fibre intakes on death and myocardial reinfarction: diet and reinfarction trial (DART). *Lancet* 1989;**2**(8666):757–61.  
 Fehily, A.M, Vaughan Williams, E, Shiels, K, Williams, A.H, Horner, M, Bingham, G, Burr, M.L, Holliday, R.M. The effect of dietary advice on nutrient intakes: Evidence from the diet and reinfarction trial (DART). *J.HUM.NUTR.DIET.* 1989;**2**(4):225–35.
- Byers 1995** {published data only}  
 \* Byers T, Mullis R, Anderson J, Dusenbury L, Gorsky R, Kinber C, et al.The costs and effects of a nutritional education program following work-site cholesterol screening. *American Journal of Public Health* 1995;**85**(5): 650–5. [MEDLINE: 95251125]
- Cambien 1981** {published data only}  
 \* Cambien, F, Richard, J.L, Ducimetiere, P, et al.The Paris Cardiovascular Risk Factor Prevention Trial. Effects of two years of intervention in a population of young men. *J.EPIDEMIOL.COMMUN.HEALTH* 1981;**35**(2):91–97.
- Campbell 1990** {published data only}  
 \* Campbell LV, Barth R, Gosper JK, Jupp JJ, Simons LA, Chisholm DJ. Impact of intensive educational approach to dietary change in NIDDM. *Diabetes Care* 1990;**13**(8): 841–7. [MEDLINE: 91005686]
- Campbell 1994** {published data only}  
 \* Campbell MK, DeVellis BM, Strecher VJ, Ammerman AS, DeVellis RF, Sandler RS. Improving dietary behavior: the effectiveness of tailored messages in primary care settings. *American Journal of Public Health* 1994;**84**(5): 783–7. [MEDLINE: 94234408]
- Carlsson 1997** {published data only}  
 \* Carlsson, R, Lindberg, G, Westin, L, Israelsson, B. Influence of coronary nursing management follow up on lifestyle after acute myocardial infarction. *Heart* 1997;**77**(3):256–9.
- Carson 1994** {published data only}  
 \* Carson CA, Hassel CA. Educating high-risk Minnesotans about dietary fats, blood cholesterol, and heart disease. *Journal of the American Dietetic Association* 1994;**94**(6): 659–60. [MEDLINE: 94253532]
- Cederholm 1985** {published data only}  
 \* Cederholm, J. Short-term treatment of glucose intolerance in middle-aged subjects by diet, exercise and sulfonylurea. *Ups.J.Med.Sci.* 1985;**90**(3):229–42.
- Chlebowski 1993** {published data only}  
 \* Chlebowski RT, Blackburn GL, Buzzard IM, Rose DP, Martino S, Khandekar JD, et al.Adherence to a dietary fat intake reduction program in postmenopausal women receiving therapy for early breast cancer. The Women's Intervention Nutrition Study. *Journal of Clinical Oncology* 1993;**11**(11):2072–80. [MEDLINE: 94045810]
- Clark 1997** {published data only}  
 \* Clark, M, Ghandour, G, Miller, N.H, Taylor, C.B, Bandura, A, DeBusk, R.F. Development and evaluation of a computer-based system for dietary management of hyperlipidemia. *J.Am.Diet.Assoc.* 1997;**97**(2):146–50.
- Cohen 1991** {published data only}  
 \* Cohen MD, D'Amico FJ, Merenstein JH. Weight reduction in obese hypertensive patients. *Family Medicine* 1991;**23**(1):25–8. [MEDLINE: 91160846]
- Cousins 1992** {published data only}  
 \* Cousins JH, Rubovits DS, Dunn JK, Reeves RS, Ramirez AG, Foreyt JP. Family versus individually oriented intervention for weight loss in Mexican American women. *Public Health Reports* 1992;**107**(5):549–55. [MEDLINE: 93029198]
- Cox 1996** {published data only}  
 \* Cox RH, Gonzales-Vigilar MCR, Novascone MA, Silva-Barbeau I. Impact of a cancer intervention on diet-related cardiovascular disease risks of white and African-American EFNEP clients. *Journal of Nutrition Education* 1996;**28**: 209–18.
- Crouch 1986** {published data only}  
 \* Crouch, M, Sallis, J.F, Farquhar, J.W, et al.Personal and mediated health counseling for sustained dietary reduction of hypercholesterolemia. *Prev.Med.* 1986;**15**(3):282–91.
- Cupples 1994** {published data only}  
 \* Cupples, M.E, McKnight, A. Randomised controlled trial of health promotion in general practice for patients at high cardiovascular risk [see comments]. *BMJ* 1994;**309**(6960): 993–6.
- Curzio 1989** {published data only}  
 \* Curzio JL, Kennedy SS, Elliott HL, Farish E, Barnes JF, Howie CA, et al.Hypercholesterolaemia in treated hypertensives: a controlled trial of intensive dietary advice.

- Journal of Hypertension Supplement* 1989;7(6):S254–5. [MEDLINE: 90218389]
- Dahl 1995** {published data only}  
 \* Dahl BR, Read MH. Effect of a nutrition education program on the reduction of serum cholesterol level in Veterans Administration outpatients. *Journal of the American Dietetic Association* 1995;95(6):702–3. [MEDLINE: 95279663]
- Dalgard 2001** {published data only}  
 \* Dalgard C, Thuroe A, Haastrup B, Haghfelt T, Stender S. Saturated fat intake is reduced in ischemic heart disease 1 year after comprehensive counseling but not after brief counseling. *Journal of the American Dietetic Association* 2001;101:1420–9.
- De Busk 1994** {published data only}  
 \* De Busk RF, Miller NH, Superko HR, Dennis CA, Thomas RJ, Lew HT, et al. A case-management system for coronary risk factor modification after acute myocardial infarction. *Annals of Internal Medicine* 1994;120(9):721–9. [MEDLINE: 94197361]
- de Sonnaville 1997** {published data only}  
 \* de Sonnaville, J.J, Bouma, M, Colly, L.P, Deville, W, Wijkel, D, Heine, R.J. Sustained good glycaemic control in NIDDM patients by implementation of structured care in general practice: 2-year follow-up study. *Diabetologia* 1997;40(11):1334–40.
- de Waard 1993** {published data only}  
 \* de Waard, F, Ramlau, R, Mulders, Y, De Vries, T, van Waveren, S. A feasibility study on weight reduction in obese postmenopausal breast cancer patients. *Eur.J.Cancer Prev.* 1993;2:233–8.
- Delahanty 2001** {published data only}  
 \* Delahanty LM, Sonnenberg LM, Hayden D, Nathan DM. Clinical and cost outcomes of medical nutrition therapy for hypercholesterolemia: A controlled trial. *J Am Diet Assoc* 2001;101(9):1012–23.
- Dobs 1994** {published data only}  
 \* Dobs AS, Masters RB, Rajaram L, Stillman FA, Wilder LB, Margolis S, et al. A comparison of education methods and their impact on behavioral change in patients with hyperlipidemia. *Patient Education and Counseling* 1994;24(2):157–64. [MEDLINE: 95265564]
- Dodson 1984** {published data only}  
 \* Dodson, P.M, Pacy, P.J, Bal, P, et al. A controlled trial of a high fibre, low fat and low sodium diet for mild hypertension in type 2 (non-insulin-dependent) diabetic patients. *Diabetologia* 1984;27(5):522–6.  
 Pacy, P.J, Dodson, P.M, Kubicki, A.J, et al. Effect of a high fibre, high carbohydrate dietary regimen on serum lipids and lipoproteins in type II hypertensive diabetic patients. *Diabetes Res.* 1984;1(3):159–63.
- Dodson 1989** {published data only}  
 \* Dodson, P.M, Stephenson, J, Dodson, L.J, Kurnik, D, Kritzinger, E.E, Taylor, K.G, Fletcher, R.F. Randomised blind controlled trial of a high fibre, low fat and low sodium dietary regimen in mild essential hypertension. *J.Hum.Hypertens.* 1989;3(3):197–202.
- Domenech 1995** {published data only}  
 \* Domenech, M.I, Assad, D, Mazzei, M.E, Kronsbein, P, Gagliardino, J.J. Evaluation of the effectiveness of an ambulatory teaching/treatment programme for non-insulin dependent (type 2) diabetic patients. *Acta Diabetol.* 1995;32:143–7.
- Dreon 1998** {published data only}  
 \* Dreon, D.M, Fernstrom, H.A, Campos, H, Blanche, P, Williams, P.T, Krauss, R.M. Change in dietary saturated fat intake is correlated with change in mass of large low-density-lipoprotein particles in men. *Am.J.Clin.Nutr.* 1998;67(5):828–36.
- Duff 2000** {published data only}  
 \* Duff EMW, Simpson SH, Whittle S, Bailey EY, Lopez SA, Wilks R. Impact on blood pressure control of a six-month intervention project. *West Indian Med J* 2000;49(4):307–11.
- Dullaart 1992** {published data only}  
 \* Dullaart RP, Beusekamp BJ, Meijer S, Hoogenberg K, van Doormaal JJ, Sluiter WJ. Long-term effects of linoleic-acid-enriched diet on albuminuria and lipid levels in type 1 (insulin-dependent) diabetic patients with elevated urinary albumin excretion. *Diabetologia* 1992;35(2):165–72. [MEDLINE: 92192366]
- Dunstan 1997** {published data only}  
 \* Dunstan, D.W, Mori, T.A, Puddey, I.B, Beilin, L.J, Burke, V, Morton, A.R, Stanton, K.G. The independent and combined effects of aerobic exercise and dietary fish intake on serum lipids and glycemic control in NIDDM. A randomized controlled. *Diabetes Care* 1997;20(6):913–21.
- Eastwood 1969** {published data only}  
 \* Eastwood M. Dietary fibre and serum-lipids. *Lancet* 1969;2(7632):1222–4. [MEDLINE: 70054526]
- Edington 1987** {published data only}  
 \* Edington, J, Geekie, M, Carter, R, Benfield, L, Fisher, K, Ball, M, Mann, J. Effect of dietary cholesterol on plasma cholesterol concentration in subjects following reduced fat, high fibre diet. *British Medical Journal* 1987;294:333–6.
- Ehnholm 1982** {published data only}  
 \* Ehnholm, C, Huttunen, J.K, Pietinen, P, Leino, U, Mutanen, M, Kostiaainen, E, Pikkarainen, J, Dougherty, R, Iacono, J, Puska, P. Effect of diet on serum lipoproteins in a population with a high risk of coronary heart disease. *N.Engl.J.Med.* 1982;307(14):850–5.
- Elmer 1995** {published data only}  
 \* Elmer, P.J, Grimm, R.J, Laing, B, Grandits, G, Svendsen, K, Van, H.N, Betz, E, Raines, J, Link, M, Stamler, J, Neaton, J. Lifestyle intervention: Results of the Treatment of Mild Hypertension Study (TOMHS). *Preventive.Medicine* 1995;24:378–88.
- Engblom 1992** {published data only}  
 Engblom, E, Korpilahti, K, Hamalainen, H, Puukka, P, Ronnema, T. Effects of five years of cardiac rehabilitation

- after coronary artery bypass grafting on coronary risk factors. *Am.J.Cardiol.* 1996;**78**:1428–31.
- \* Engblom, E, Ronnema, T, Hamalainen, H, Kallio, V, Vanttinen, E, Knuts, L.-R. Coronary heart disease risk factors before and after bypass surgery: Results of a controlled trial on multifactorial rehabilitation. *Eur.Heart J.* 1992;**13**(2):232–7.
- Eriksson 1999** *{published data only}*
- \* Eriksson J, Lindstrom J, Valle T, Aunola S, Hamalainen H, Ilanne-Parikka, Keinanen-Kiukaaniemi, Laakso M, Lauhkonen M, Lehto P, lehtonen A, Louheranta A, Mannelin M, Martikkala V, Rastas M, Sundvall J, Turpeinen A, Viljanen T, Uusitupa M, Tuomilehto J. Prevention of Type II diabetes in subjects with impaired glucose tolerance: the Diabetes prevention Study (DPS) in Finland. Study design and 1-year interim report on the feasibility of the lifestyle intervention programme. *Diabetologia* 1999;**42**: 793–801.
- Uusitupa M, Louheranta A, Lindstrom J, Valle T, Sundvall J, Eriksson J, Tuomilehto J. The Finnish Diabetes prevention Study. *British Journal of Nutrition* 2000;**83**(Suppl 1): S137–S142.
- Evans 1996** *{published data only}*
- \* Evans, A.T, Rogers, L.Q, Peden, J.G, Jr, Seelig, C.B, Layne, R.D, Levine, M.A, Levin, M.L, Grossman, R.S, Darden, P.M, Jackson, S.M, Ammerman, A.S, Settle, M.B, Stritter, F.T, Fletcher, S.W. Teaching dietary counseling skills to residents: patient and physician outcomes. The CADRE Study Group. *Am.J.Prev.Med.* 1996;**12**(4):259–65.
- Fagerberg 1998** *{published data only}*
- \* Fagerberg B, Wikstrand J, Berglund G, Samuelsson O, Agewall S. Mortality rates in treated hypertensive men with additional risk factors are high but can be reduced: a randomized intervention study. *American Journal of Hypertension* 1998;**11**(1 part 1):14–22. [MEDLINE: 98162973]
- FHS 1994** *{published data only}*
- \* Family Heart Study Group. Randomised controlled trial evaluating cardiovascular screening and intervention in general practice: principal results of British family heart study. *BMJ.* 1994;**308**(6924):313–20.
- Fitzgerald 1991** *{published data only}*
- \* Fitzgerald, S.T, Gibbens, S, Agnew, J. Evaluation of referral completion after a workplace cholesterol screening program. *Am.J.Prev.Med.* 1991;**7**(6):335–40.
- Fletcher 1987** *{published data only}*
- \* Fletcher, V, An individualized teaching programme following primary uncomplicated myocardial infarction. *J.Adv.Nurs.* 1987;**12**(2):195–200.
- Fodor 1991** *{published data only}*
- \* Fodor, J.G, Chockalingam, A. Modification of cardiovascular risk factors in rural population of Newfoundland through nutritional counselling. *COR.VASA.* 1991;**33**(2):107–13.
- Fortmann 1993** *{published data only}*
- Fortmann, S.P, Winkleby, M.A, Flora, J.A, Haskell, W.L, Taylor, C.B. Effect of long-term community health education on blood pressure and hypertension control: The Stanford Five-City Project. *Am.J.Epidemiol.* 1990;**132**(4): 629–46.
- \* Fortmann SP, Taylor CB, Flora JA, Winkleby MA. Effect of community health education on plasma cholesterol levels and diet: the Stanford Five-City Project. *American Journal of Epidemiology* 1993;**137**(10):1039–55. [MEDLINE: 93304354]
- Franz 1995** *{published data only}*
- Franz, M.J, Splett, P.L, Monk, A, Barry, B, McClain, K, Weaver, T, Upham, P, Bergenstal, R, Mazze, R.S. Cost-effectiveness of medical nutrition therapy provided by dietitians for persons with non-insulin-dependent diabetes mellitus. *J.Am.Diet.Assoc.* 1995;**95**:1018–24.
- \* Franz MJ, Monk A, Barry B, McClain K, Weaver T, Cooper N, et al.Effectiveness of medical nutrition therapy provided by dietitians in the management of non-insulin-dependent diabetes mellitus: a randomized, controlled clinical trial. *Journal of the American Dietetic Association* 1995;**95**(9):1009–17. [MEDLINE: 95386795]
- Fuchs 1993** *{published data only}*
- \* Fuchs Z, Viskoper JR, Drexler I, Nitzan H, Lubin F, Berlin S, et al.Comprehensive individualised nonpharmacological treatment programme for hypertension in physician-nurse clinics: two year follow-up. *Journal of Human Hypertension* 1993;**7**(6):585–91. [MEDLINE: 94157869]
- Ginsberg GM, Viskoper JR, Fuchs Z, Drexler I, Lubin F, Berlin S, et al.Partial cost-benefit analysis of two different modes of nonpharmacological control of hypertension in the community. *Journal of Human Hypertension* 1993;**7**(6): 593–7. [MEDLINE: 94157870]
- Gans 1994** *{published data only}*
- \* Gans KM, Lapane KL, Lasater TM, Carleton RA. Effects of intervention on compliance to referral and lifestyle recommendations given at cholesterol screening programs. *American Journal of Preventive Medicine* 1994;**10**(5): 275–82. [MEDLINE: 95151349]
- Gemson 1990** *{published data only}*
- \* Gemson, D.H, Sloan, R.P, Messeri, P, Goldberg, I.J. A public health model for cardiovascular risk reduction. Impact of cholesterol screening with brief nonphysician counseling. *Arch.Intern.Med.* 1990;**150**(5):985–9.
- Gentile 1995** *{published data only}*
- D’Amico, G, Gentile, M, G. Effect of dietary manipulation on the lipid abnormalities and urinary protein loss in nephrotic. *Mineral & Electrolyte Metabolism* 1992;**18**: 203–6.
- \* Gentile MG, Ciceri R, Manna GM, Delle Fave A, Zanoni C, Raschioni E, et al.The role of fibre in the treatment of secondary hyperlipidaemia in nephrotic patients. *European Journal of Clinical Nutrition* 1995;**49** Suppl 3:S239–41. [MEDLINE: 96119272]

**Giampaoli 1997** {published data only}

\* Giampaoli, S, Poce, A, Sciarra, F, Lo Noce, C, Dima, F, Minoprio, A, Santaquilani, A, Caiola de Sanctis, P, Volpe, R, Menditto, A, Menotti, A, Urbinati, G.C. Change in cardiovascular risk factors during a 10-year community intervention program. *Acta Cardiol.* 1997;**52**(5):411–22.

**Gillum 1983** {published data only}

\* Gillum RE, Prineas RJ, Jeffery RW, Jacobs DR, Elmer PJ, Gomez O, et al. Nonpharmacologic therapy of hypertension: the independent effects of weight reduction and sodium restriction in overweight borderline hypertensive patients. *American Heart Journal* 1983;**105**(1):128–33. [MEDLINE: 83097284]

**Glasgow 1989** {published data only}

\* Glasgow RE, Toobert DJ, Mitchell DL, Donnelly JE, Calder D. Nutrition education and social learning interventions for type II diabetes. *Diabetes Care* 1989;**12**(2):150–2. [MEDLINE: 89196156]

**Glasgow 1992** {published data only}

\* Glasgow, R.E, Toobert, D.J, Hampson, S.E, Brown, J.E, Lewinsohn, P.M, Donnelly, J. Improving self-care among older patients with type II diabetes: the “Sixty Something...” Study. *Patient.Educ. Couns.* 1992;**19**:61–74.

**Glasgow 1995** {published data only}

Glasgow, R.E, Perry, J.D, Toobert, D.J, Hollis, J.F. Brief assessments of dietary behavior in field settings. *Addict.Behav.* 1996;**21**(2):239–47.

\* Glasgow, R.E, Terborg, J.R, Hollis, J.F, Severson, H.H, Boles, S.M. Take heart: results from the initial phase of a work-site wellness program. *Am.J.Public Health* 1995;**85**(2):209–16.

Glasgow, R.E, Terborg, J.R, Hollis, J.F, Severson, H.H, Fisher, K.J, Boles, S.M, Pettigrew, E.L, Foster, L.S, Strycker, L.A, Bischoff, S. Modifying dietary and tobacco use patterns in the worksite: the Take Heart Project. *Health Educ.Q.* 1994;**21**(1):69–82.

Glasgow, R.E, Terborg, J.R, Strycker, L.A, Boles, S.M, Hollis, J.F. Take Heart II: replication of a worksite health promotion trial. *J.Behav.Med.* 1997;**20**(2):143–161.

**Glasgow 1996** {published data only}

Glasgow RE, La Chance PA, Toobert DJ, Brown J, Hampson SE, Riddle MC. Long-term effects and costs of brief behavioural dietary intervention for patients with diabetes delivered from the medical office. *Patient Education and Counseling* 1997;**32**(3):175–84. [MEDLINE: 98085557]

\* Glasgow RE, Toobert DJ, Hampson SE. Effects of a brief office-based intervention to facilitate diabetes dietary self-management. *Diabetes Care* 1996;**19**(8):835–42. [MEDLINE: 96440290]

**Goble 1997** {published data only}

\* Goble A, Jackson B, Phillips P, Race E, Oliver RG, Worcester MC. The Family Atherosclerosis Risk Intervention Study (FARIS): risk factor profiles of patients and their relatives following an acute cardiac event.

*Australian and New Zealand Journal of Medicine* 1997;**27**(5):568–77. [MEDLINE: 98068400]

**Gomel 1993** {published data only}

\* Gomel M, Oldenburg B, Simpson JM, Owen N. Work-site cardiovascular risk reduction: A randomized trial of health risk assessment, education, counseling, and incentives. *American Journal of Public Health* 1993;**83**(9):1231–8. [MEDLINE: 83370584]  
Oldenburg B, Owen N, Parle M, Gomel M. An economic evaluation of four work site based cardiovascular risk factor interventions. *Health Education Quarterly* 1995;**22**(1):9–19. [MEDLINE: 95238160]

**Grace 1996** {published data only}

\* Grace C, Summerbell C. Does provision of additional dietary information affect actual or only reported compliance to a low-fat diet over 12 weeks in hyperlipidaemic individuals? Report of a pilot study. *Journal of Human Nutrition and Dietetics* 1996;**9**:303–7.

**Greene 1992** {published data only}

\* Greene GW, Strychar I. Participation in a worksite cholesterol education program in a university setting. *Journal of the American Dietetic Association* 1992;**92**(11):1376–81. [MEDLINE: 93056045]

**Gyntelberg 1981** {published data only}

\* Gyntelberg F, Morck HI, Agner E, Brendstrup T, Hollnagel H, Schroll M. Blood pressure reduction by change in lifestyle. The CVD intervention in Glostrup. *Acta Med Scand Suppl* 1981;**646**:10–14.

**Hakala 1993** {published data only}

\* Hakala P, Karvetti RL, Ronnema T. Group vs. individual weight reduction programmes in the treatment of severe obesity—a five year follow-up study. *International Journal of Obesity and Related Metabolic Disorders* 1993;**17**(2):97–102. [MEDLINE: 93202820]

**Hakala 1994** {published data only}

\* Hakala P. Weight reduction programmes at a rehabilitation centre and a health centre based on group counselling and individual support: short- and long-term follow-up study. *International Journal of Obesity and Related Metabolic Disorders* 1994;**18**(7):483–9. [MEDLINE: 95004908]

**Hall 1974** {published data only}

\* Hall RG, Hanson RW, Borden BL. Permeance of two self-managed treatments of overweight in university and community populations. *Journal of Consulting and Clinical Psychology* 1974;**42**(6):781–6. [MEDLINE: 75060725]

**Hanefeld 1991** {published data only}

\* Hanefeld M, Fischer S, Schmechel H, Rothe G, Schulze J, Dude H, et al. Diabetes Intervention Study. Multi-intervention trial in newly diagnosed NIDDM. *Diabetes Care* 1991;**14**(4):308–17. [MEDLINE: 91284791]

**Hanlon 1995** {published data only}

\* Hanlon, P, McEwen, J, Carey, L, Gilmour, H, Tannahill, C, Tannahill, A, Kelly, M. Health checks and coronary risk: further evidence from a randomised controlled trial. *BMJ.* 1995;**311**(7020):1609–13.

**Hannah 1997** {published data only}

\* Hannah, J, S, Jablonski, K, A, Howard, B, V. The relationship between weight and response to cholesterol-lowering diets in women. *International Journal of Obesity* 1997;**21**:445–50.

**Harris 1990** {published data only}

\* Harris, W.S, Feldman, E.B. Intensive dietary intervention in hypercholesterolemic patients. Observed versus predicted changes in cholesterol levels [ *Arteriosclerosis* 1990;**10**: 853A.

**Hartman 1997** {published data only}

\* Hartman TJ, McCarthy PR, Park RJ, Schuster E, Kushi LH. Results of a community-based low-literacy nutrition education program. *Journal of Community Health* 1997;**22** (5):325–41. [MEDLINE: 98015098]

**Hartwell 1986** {published data only}

\* Hartwell, S.L, Kaplan, R.M, Wallace, J.P. Comparison of behavioral interventions for control of type II diabetes mellitus. *BEHAV.THER.* 1986;**17**(4):447–61.

**Haskell 1988** {published data only}

Fair, J.M, Haskell, W.L. The effect of intensive coronary risk reduction on psychosocial and health-related quality of life responses. *J.PREVENTION.COMMUNITY.* 1996;**13**(1-2):71–89.

Haskell WL, Alderman EL, Fair JM, Maron DJ, Mackey SF, Superko HR, et al.Effects of intensive multiple risk factor reduction on coronary atherosclerosis and clinical cardiac events in men and women with coronary artery disease. The Stanford Coronary Risk Intervention Project (SCRIP). *Circulation* 1994;**89**(3):975–90. [MEDLINE: 94170510]

\* Haskell WL, Fair J, Sanders W, Alderman EL. New methodologies for studying the prevention of atherosclerosis. *Annals of Clinical Research* 1988;**20**(1-2): 39–45. [MEDLINE: 88308389]

Quinn, T.G, Alderman, E.L, McMillan, A, Haskell, W. Development of new coronary atherosclerotic lesions during a 4- year multifactor risk reduction program: the Stanford Coronary Risk Intervention. *J.Am. Coll. Cardiol.* 1994;**24** (4):900–8.

**Haynes 1984** {published data only}

\* Haynes, R.B, Harper, A.C, Costley, S.R, Johnston, M, Logan, A.G, Flanagan, P.T, Sackett, D.L. Failure of weight reduction to reduce mildly elevated blood pressure: a randomized trial. *J.Hypertens* 1984;**2**(5):535–9.

**HDFP 1985** {published data only}

\* The Hypertension Detection and Follow-up Program Cooperative Research Group. Mortality findings for stepped-care and referred-care participants in the hypertension detection and follow-up program, stratified by other risk factors. *Preventive Medicine* 1985;**14**(3):312–35. [MEDLINE: 86042571]

**Heber 1992** {published data only}

\* Heber, D, Ashley, J.M, McCarthy, W.J, Solares, M.E, Leaf, D.A, Chang, L...J.C, Elashoff, R.M. Assessment of adherence to a low-fat diet for breast cancer prevention. *Prev.Med.* 1992;**21**(2):218–27.

**Hebert 1995** {published data only}

Anonymous. Effects of weight loss and sodium reduction intervention on blood pressure and hypertension incidence in overweight people with high-normal blood pressure. The Trials of Hypertension Prevention, phase II. The Trials of Hypertension Prevention Collaborative Research Group. *Arch.Intern.Med.* 1997;**157**(6):657–67.

\* Hebert, P, R, Bolt, R, J, Borhani, N, O, Cook, N, R, Cohen, J, D, Cutler, J, A, Hollis, J, F, Kuller, L, H, Lasser, N, L, Oberman, A, Miller, S, T, Moris, C, Whelton, P, K, Hennekens, C, H. Design of a multicenter trial to evaluate long-term life-style intervention in adults with high-normal blood pressure levels trials of hypertension. *Annals of Epidemiology* 1995;**5**:130–9.

**Heller 1988** {published data only}

\* Heller SR, Clarke P, Daly H, Davis I, McCulloch DK, Allison SP, et al.Group education for obese patients with type 2 diabetes: greater success at less cost. *Diabetic Medicine* 1988;**5**(6):552–6. [MEDLINE: 89090452]

**Heller 1993** {published data only}

\* Heller RF, Knapp JC, Valenti LA, Dobson AJ. Secondary prevention after acute myocardial infarction. *American Journal of Cardiology* 1993;**72**(11):759–62. [MEDLINE: 94026719]

**Heller 1994** {published data only}

\* Heller RF, Walker RJ, Boyle CA, O'Connell DL, Rusakaniko S, Dobson AJ. A randomised controlled trial of a dietary advice program for relatives of heart attack victims. *Medical Journal of Australia* 1994;**161**(9):529–31. [MEDLINE: 95058447]

**Heller 2001** {published data only}

\* Heller, R.F, D'Este, C, Lim, L.L, O'Connell, R.L, Powell, H. Randomised controlled trial to change the hospital management of unstable angina. *Medical Journal of Australia* 2001;**174**:217–21.

**Henkin 2000** {published data only}

\* Henkin Y, Shai I, Zuk R, Brickner D, Zuilli I, Neumann L, Shany S. Dietary treatment of hypercholesterolemia: do dietitians do it better? A randomized, controlled trial.. *American Journal of Medicine* 2000;**109**:549–55.

**Hitchcock Noel 1998** {published data only}

\* Hitchcock Noel, P, Larme, A.C, Meyer, J, Marsh, G, Correa, A, Pugh, J.A. Patient choice in diabetes education curriculum. Nutritional versus standard content for type 2 diabetes. *Diabetes Care* 1998;**21**(6):896–901.

**Hjermann 1986** {published data only}

Hjermann I. Smoking and diet intervention in healthy coronary high risk men. Methods and 5-year follow-up risk factors in a randomized trial. The Oslo Study. *J Oslo City Hospital* 1980;**30**(1):3–17.

\* Hjermann I, Holme I, Leren P. Oslo Study Diet and Antismoking Trial. Results after 102 months. *American Journal of Medicine* 1986;**80**(2A):7–11.

Hjermann I, Leren P, Norman N, Helgeland A, Holme I. Serum insulin response to oral glucose load during a dietary

- intervention trial in healthy coronary high risk men: the Oslo Study. *Scand J Clin Lab Invest* 1980;**40**(1):89–94.
- Hjermann I, Velve Byre K, Holme I, Leren P. Effect of diet and smoking intervention on the incidence of coronary heart disease. Report from the Oslo Study Group of a randomised trial in healthy men. *Lancet* 1981;**2**(8259):1303–10.
- Hjermann I. Intervention of smoking and eating habits in healthy men carrying high risk of coronary heart disease. The Oslo Study. *Acta Med Scand Suppl* 1981;**651**:281–4.
- Holme, I, On the separation of the intervention effects of diet and antismoking advice on the incidence of major coronary events in coronary high risk men. The. *Journal of the Oslo City Hospitals* 1982;**32**:31–54.
- Holme, I, Hjermann, I, Helgeland, A, Leren, P. The Oslo Study: diet and antismoking advice. Additional results from a 5-year primary preventive trial in middle-aged men. *Prev.Med.* 1985;**14**(3):279–92.
- Jacobsen, B.K, Trygg, K, Hjermann, I, et al.Acyl pattern of adipose tissue triglycerides, plasma free fatty acids, and diet of a group of men participating in a primary coronary prevention program. *Am.J.Clin.Nutr.* 1983;**38**(6):906–13.
- Hollis 1984 {published data only}**
- \* Hollis JF, Sexton G, Connor SL, Calvin L, Pereira C, Matarazzo JD. The family heart dietary intervention program: community response and characteristics of joining and nonjoining families. *Preventive Medicine* 1984;**13**(3):276–85. [MEDLINE: 85038458]
- Howard 1997 {published data only}**
- \* Howard-Pitney B, Winkleby MA, Albright CL, Bruce B, Fortmann SP. The Stanford Nutrition Action Program: a dietary fat intervention for low-literacy adults. *American Journal of Public Health* 1997;**87**(12):1971–6. [MEDLINE: 98093314]
- Winkleby, M.A, Howard Pitney, B, Albright, C.A, Bruce, B, Kraemer, H.C, Fortmann, S.P. Predicting achievement of a low-fat diet: A nutrition intervention for adults with low literacy skills. *Prev.Med.* 1997;**26**(6):874–82.
- HPT 1990 {published data only}**
- \* Hypertension Prevention Trial Research Group. The Hypertension Prevention Trial: three-year effects of dietary changes on blood pressure. Hypertension Prevention Trial Research Group. *Arch.Intern.Med.* 1990;**150**(1):153–62.
- Jeffery, R.W, Tonascia, S, Bjornson Benson, W, Schlundt, D.G, Sugars, C. Treatment in the Hypertension Prevention Trial. Hypertension Prevention Trial Research Group. *Controlled Clin. Trials.* 1989;**10**(3 Suppl):65–83S.
- Shah, M, Jeffery, R.W, Laing, B, Savre, S.G, Van Natta, M, Strickland, D. Hypertension Prevention Trial (HPT): food pattern changes resulting from intervention on sodium, potassium, and energy intake. Hypertension. *J.Am.Diet.Assoc.* 1990;**90**(1):69–76.
- Hunninghake 1993 {published data only}**
- \* Hunninghake, D.B, Stein, E.A, Dujovne, C.A, Harris, W.S, Feldman, E.B, Miller, V.T, Tobert, J.A, Laskarzewski, P.M, Quiter, E, Held, J, et al.The efficacy of intensive dietary therapy alone or combined with lovastatin in outpatients with hypercholesterolemia [see comments]. *N.Engl.J.Med.* 1993;**328**(17):1213–9.
- Hyman 1996 {published data only}**
- \* Hyman, D.J, Herd, J.A, Ho, K.S, Dunn, J.K, Gregory, K.A. Maintenance of cholesterol reduction using automated telephone calls. *Am.J.Prev.Med.* 1996;**12**(2):129–33.
- Hyman 1998 {published data only}**
- \* Hyman, D.J, Ho, K.S, Dunn, J.K, Simons Morton, D. Dietary intervention for cholesterol reduction in public clinic patients. *American Journal of Preventive Medicine* 1998;**15**(2):139–45.
- Insull 1990 {published data only}**
- Bowen, D, Clifford, C.K, Coates, R, Evans, M, Feng, Z, Fouad, M, George, V, Gerace, T, Grizzle, J.E, Hall, W.D, Hearn, M, Henderson, M, Kestin, M, Kristal, A, Leary, E.T, Lewis, C.E, Oberman, A, Prentice, R, Raczynski, J, Toivola, B, Urban, N. The Women's Health Trial Feasibility Study in Minority Populations: design and baseline descriptions. *Ann.Epidemiol.* 1996;**6**(6):507–19.
- Bowen, D.J, Kestin, M, McTiernan, A, Carrell, D, Green, P. Effects of dietary fat intervention on mental health in women. *Cancer Epidemiol.Biomarkers.Prev.* 1995;**4**(5):555–9.
- Gorbach, S.L, Morrill LaBrose, A, Woods, M.N, Dwyer, J.T, Selles, W.D, Henderson, M, Insull, W, Jr, Goldman, S, Thompson, D. Changes in food patterns during a low-fat dietary intervention in women. *J.Am.Diet.Assoc.* 1990;**90**(6):802–9.
- Henderson, M.M, Kushi, L.H, Thompson, D.J, Gorbach, S.L, Clifford, C.K, Insull, W, Jr, Moskowit, M, Thompson, R.S. Feasibility of a randomized trial of a low-fat diet for the prevention of breast cancer: dietary compliance in the Women's Health Trial Vanguard Study. *Prev.Med.* 1990;**19**(2):115–33.
- \* Insull, W, Jr, Henderson, M.M, Prentice, R.L, Thompson, D.J, Clifford, C, Goldman, S, Gorbach, S, Moskowit, M, Thompson, R, Woods, M. Results of a randomized feasibility study of a low-fat diet. *Arch.Intern.Med.* 1990;**150**(2):421–7.
- White, E, Shattuck, A.L, Kristal, A.R, Urban, N, Prentice, R.L, Henderson, M.M, Insull, W, Jr, Moskowit, M, Goldman, S, Woods, M.N. Maintenance of a low-fat diet: follow-up of the Women's Health Trial. *Cancer Epidemiol.Biomarkers.Prev.* 1992;**1**(4):315–23.
- Iso 2002 {published data only}**
- \* Iso, H, Imano, H, Nakagawa, Y, Kiyama, M, Kitamura, A, Sato, S, Naito, Y, Shimamoto, T, Iida, M. One-year community-based education program for hypercholesterolemia in middle-aged Japanese: A long-term outcome at 8-year follow-up. *Atherosclerosis* 2002;**164**:195–202.
- Ives 1993 {published data only}**
- \* Ives DG, Kuller LH, Schulz R, Traven ND, Lave JR. Comparison of recruitment strategies and associated disease

- prevalence for health promotion in rural elderly. *Preventive Medicine* 1992;**21**(5):582–91. [MEDLINE: 93066069]
- Ives DG, Kuller LH, Traven ND. Use and outcomes of a cholesterol-lowering intervention for rural elderly subjects. *American Journal of Preventive Medicine* 1993;**9**(5):274–81. [MEDLINE: 94079785]
- Jaax 1997** *{published data only}*
- \* Jaax, S, Scott, L.W, Wolf, J.E, Jr, Thornby, J.I, Black, H.S. General guidelines for a low-fat diet effective in the management and prevention of nonmelanoma skin cancer. *Nutr.Cancer* 1997;**27**(2):150–6.
- Jalkanen 1991** *{published data only}*
- \* Jalkanen, L, The effect of a weight reduction program on cardiovascular risk factors among overweight hypertensives in primary health care. *Scand.J.Soc.Med.* 1991;**19**(1): 66–71.
- Jeffery 1983** *{published data only}*
- \* Jeffery RW, Gillum R, Gerber WM, Jacobs D, Elmer PJ, Prineas RJ. Weight and sodium reduction for the prevention of hypertension: a comparison of group treatment and individual counseling. *American Journal of Public Health* 1983;**73**(6):691–3. [MEDLINE: 83201773]
- Johnston 1995** *{published data only}*
- \* Johnston HJ, Jones M, Ridler-Dutton G, Spechler F, Stokes GS, Wyndham LE. Diet modification in lowering plasma cholesterol levels. A randomised trial of three types of intervention. *Medical Journal of Australia* 1995;**162**(10): 524–6. [MEDLINE: 95295600]
- Jolly 1999** *{published data only}*
- Jolly K, Bradley F, Sharp S, Smith H, Mant D. Follow-up care in general practice of patients with myocardial infarction or angina pectoris: initial results of the SHIP trial. *Family Practice* 1998;**15**(6):548–55.
- \* Jolly K, Bradley F, Sharp S, Smith H, Thompson S, Kinmonth A-L, Mant D. Randomised controlled trial of follow up care in general practice of patients with myocardial infarction and angina: final results of the Southampton heart integrated care project (SHIP). *BMJ* 1999;**318**: 706–11.
- Jones 1979** *{published data only}*
- \* Jones RJ, Turner D, Ginther J, Brandt B, Slowie L, Lauger G. A randomized study of instructional variations in nutrition counseling and their efficacy in the treatment of hyperlipidemia. *American Journal of Clinical Nutrition* 1979;**32**(4):884–904. [MEDLINE: 79162509]
- Jones 1986** *{published data only}*
- \* Jones, S.E, Owens, H.M, Bennett, G.A. Does behaviour therapy work for dietitians? An experimental evaluation of the effects of three procedures in a weight reduction clinic. *Hum.Nutr.Appl.Nutr.* 1986;**40**:272–81.
- Jones 1996** *{published data only}*
- \* Jones, D.W. Body weight and blood pressure. Effects of weight reduction on hypertension. *Am.J.Hypertens.* 1996;**9** (8 II):50S–4S.
- Jula 1990** *{published data only}*
- \* Jula, A, Ronnema, T, Rastas, M, Karvetti, R.L, Maki, J. Long-term nopharmacological treatment for mild to moderate hypertension. *J.Intern.Med.* 1990;**227**(6): 413–21.
- Kaplan 1985** *{published data only}*
- \* Kaplan, R.M, Wilson, D.K, Hartwell, S.L, Merino, K.L, Wallace, J.P. Prospective evaluation of HDL cholesterol changes after diet and physical conditioning programs for patients with type II diabetes mellitus. *Diabetes Care* 1985; **8**(4):343–8.
- Karvetti 1981** *{published data only}*
- \* Karvetti RL. Changes in the diet of myocardial infarction patients. Effects of nutrition education. *Journal of the American Dietetic Association* 1981;**79**:660–7.
- Karvetti RL. The effect of nutrition education on the diet and nutrient intake of myocardial infarction patients. *International Journal of Rehabilitation Research* 1980;**3**(1): 75–6. [MEDLINE: 81092942]
- Karvetti RL, Knuts LR. Effects of comprehensive rehabilitation on weight reduction in myocardial infarction patients. *Scandinavian Journal of Rehabilitation Medicine* 1983;**15**(1):11–6. [MEDLINE: 83146264]
- Karvetti 1992** *{published data only}*
- \* Karvetti, R.L, Hakala, P. A seven-year follow-up of a weight reduction programme in Finnish primary health care. *Eur.J.Clin.Nutr.* 1992;**46**(10):743–52.
- Katzel 1995** *{published data only}*
- \* Katzel, L.I, Bleecker, E.R, Colman, E.G, Rogus, E.M, Sorkin, J.D, Goldberg, A.P. Effects of weight loss vs aerobic exercise training on risk factors for coronary disease in healthy, obese, middle-aged and older men. A randomized controlled trial. *JAMA* 274;**24**:1915–21.
- Kelley 1994** *{published data only}*
- \* Kelley, M.J, Hoover Plow, J, Nichols Bernhard, J.F, Verity, L.S, Brewer, H. Oat bran lowers total and low-density lipoprotein cholesterol but not lipoprotein(a) in exercising adults with borderline hypercholesterolemia. *J.Am.Diet.Assoc.* 1994;**94**(12):1419–21.
- Ketola 2001** *{published data only}*
- \* Ketola E, Makela M, Klockars M. Individualised multifactorial lifestyle intervention trial for high-risk cardiovascular patients in primary care. *British Journal of General Practice* 2001;**51**:291–4.
- Keyserling 1997** *{published data only}*
- \* Keyserling, T.C, Ammerman, A.S, Davis, C.E, Mok, M.C, Garrett, J, Simpson, R, Jr. A randomized controlled trial of a physician-directed treatment program for low-income patients with high blood cholesterol: the Southeast Cholesterol Project []. *Arch.Fam.Med.* 1997;**6**(2):135–45.
- Kirkman 1994** *{published data only}*
- \* Kirkman, M.S, Weinberger, M, Landsman, P.B, Samsa, G.P, Shortliffe, E.A, Simel, D.L, Feussner, J.R. A telephone-delivered intervention for patients with NIDDM. Effect on coronary risk factors. *Diabetes Care* 1994;**17**(8):840–6.

**Knutsen 1991** *{published data only}*

Knutsen, S.F, Knutsen, R. The Tromso Heart Study: Family approach to intervention on CHD. Feasibility of risk factor reduction in high-risk persons - Project description. *Scand.J.Soc.Med.* 1989;**17**(1):109–19.

\* Knutsen, S.F, Knutsen, R. The Tromso Survey: the Family Intervention study--the effect of intervention on some coronary risk factors and dietary habits, a 6-year. *Prev.Med.* 1991;**20**(2):197–212.

**Koopman 1990** *{published data only}*

\* Koopman, H, Spreeuwenberg, C, Westerman, R.F, Donker, A.J. Dietary treatment of patients with mild to moderate hypertension in a general practice: a pilot intervention study (1). The first three months. *J.Hum.Hypertens.* 1990;**4**(4):368–71.

Koopman, H, Spreeuwenberg, C, Westerman, R.F, Donker, A.J. Dietary treatment of patients with mild to moderate hypertension in a general practice: a pilot intervention study (2). Beyond three months. *J.Hum.Hypertens.* 1990;**4**(4):372–4.

**Korhonen 1983** *{published data only}*

\* Korhonen T, Huttunen JK, Aro A, Hentinen M, Ihalainen O, Majander H, et al.A controlled trial on the effects of patient education in the treatment of insulin-dependent diabetes. *Diabetes Care* 1983;**6**(3):256–61. [MEDLINE: 83261150]

**Korhonen 1987** *{published data only}*

Korhonen, T, Uusitupa, M, Aro, A, Kumpulainen, T, Siitonen, O, Voutilainen, E, Pyorala, K. Efficacy of dietary instructions in newly diagnosed non-insulin-dependent diabetic patients. Comparison of two different patient education. *Acta Med.Scand.* 1987;**222**(4):323–31.

**Krachler 1997** *{published and unpublished data}*

\* Krachler M, Lindschinger M, Eber B, Watzinger N, Wällner S. Trace elements in coronary heart disease: Impact of intensified lifestyle modification. *Biological Trace Element Research* 1997;**60**(3):175–85. [MEDLINE: 98153075]

**Kraemer 1997** *{published data only}*

\* Kraemer, W.J, Volek, J.S, Clark, K.L, Gordon, S.E, Incledon, T, Puhl, S.M, Triplett McBride, N.T, McBride, J.M, Putukian, M, Sebastianelli, W.J. Physiological adaptations to a weight-loss dietary regimen and exercise programs in women. *J.Appl.Physiol.* 1997;**83**(1):270–9.

**Kreuter 1996** *{published data only}*

\* Kreuter MW, Strecher VJ. Do tailored behavior change messages enhance the effectiveness of health risk appraisal? Results from a randomized trial. *Health Education Research* 1996;**11**:97–105.

**Kumanyika 1999** *{published data only}*

\* Kumanyika SK, Adams-Campbell L, van Horn B, Ten Have TR, Treu JA, Askov E, Williams J, Achterberg C, Zaghoul S, Monsegu D, Bright M, Stoy DB, Malone-Jackson, Mooney D, Deiling S, Caulfield J. Outcomes of a cardiovascular nutrition counseling program in African-Americans with elevated blood pressure or cholesterol level. *J Am Diet Assoc* 1999;**99**:1380–1388,1391.

**Kumpusalo 1996** *{published data only}*

\* Kumpusalo, E, Neittaanmaki, L, Halonen, P, Pekkarinen, H, Penttila, I, Parviainen, M. Finnish Healthy Village Study: impact and outcomes of a low-cost local health promotion programme. *Health Promotion International* 1996;**11**:105–15.

**Lackey 1992** *{published data only}*

\* Lackey CJ, Kolasa KM, Horner RD. Nutrition education in a community cholesterol screening program. *Health Values: Achieving High Level Wellness* 1992;**16**:39–47.

**Laitinen 1993** *{published data only}*

Laitinen J, Uusitupa M, Ahola I, Siitonen O. Metabolic and dietary determinants of serum lipids in obese patients with recently diagnosed non-insulin-dependent diabetes. *Annals of Medicine* 1994;**26**(2):119–24. [MEDLINE: 94296602]

\* Laitinen JH, Ahola IE, Sarkkinen ES, Winberg RL, Harmaakorpi Iivonen PA, Uusitupa MI. Impact of intensified dietary therapy on energy and nutrient intakes and fatty acid composition of serum lipids in patients with recently diagnosed non-insulin-dependent diabetes mellitus. *Journal of the American Dietetic Association* 1993;**93**(3): 276–83. [MEDLINE: 93179637]

Uusitupa, M.I. Early lifestyle intervention in patients with non-insulin-dependent diabetes mellitus and impaired glucose tolerance. *Ann.Med.* 1996;**28**(5):445–9.

Uusitupa M, Laitinen J, Siitonen O, Vanninen E, Pyorala K. The maintenance of improved metabolic control after intensified diet therapy in recent type 2 diabetes. *Diabetes Research & Clinical Practice* 1993;**19**(3):227–38. [MEDLINE: 93307030]

Uusitupa MI. Early lifestyle intervention in patients with non-insulin-dependent diabetes mellitus and impaired glucose tolerance. *Annals of Medicine* 1996;**28**(5):445–9. [MEDLINE: 97107229]

**Lauritzen 1995** *{published data only}*

\* Lauritzen T, Leboeuf-Yde C, Lunde IM, Nielsen KD. Ebeltoft project: baseline data from a five-year randomized, controlled, prospective health promotion study in a Danish population. *British Journal of General Practice* 1995;**45** (399):542–7. [MEDLINE: 96104321]

**Le Lorier 1978** *{published data only}*

Le Lorier J, DuBreuil Quidoz S, Lussier Cacan S, HuangYS, Davignon J. Diet and probucol in lowering cholesterol concentrations. Additive effects on plasma cholesterol concentrations in patients with familial type ii hyperlipoproteinemia. *Arch.Intern.Med.* 1978;**137**(10): 1429–34.

**Leduc 1994** *{published data only}*

\* Leduc CP, Cherniak D, Faucher J. Effectiveness of a group dietary intervention on hypercholesterolemia: a randomized, controlled clinical trial. *Atherosclerosis* 1994; **109**:149.

**Lee 1997** *{published data only}*

\* Lee C, White SW. Controlled trial of a minimal-intervention exercise program for middle-aged working women. *Psychology and Health* 1997;**12**:361–74.



**Leenen 1993** {published data only}

\* Leenen, R, Van der Kooy, K, Meyboom, S, Seidell, J.C, Deurenberg, P, Weststrate, J.A. Relative effects of weight loss and dietary fat modification on serum lipid levels in the dietary treatment of obesity. *J.Lipid Res.* 1993;**34**(12): 2183–91.

**Leren 1970** {published data only}

Leren, P. The effect of plasma-cholesterol-lowering diet in male survivors of myocardial infarction. A controlled clinical trial. *Bull.N.Y.Acad.Med.* 1968;**44**(8):1012–20.  
Leren P. The effect of plasma cholesterol lowering diet in male survivors of myocardial infarction. A controlled clinical trial. *Acta Med.Scand.Suppl.* 1966;**466**:1–92.  
Leren P. The Oslo diet-heart study. Eleven-year report. *Circulation* 1970;**42**(5):935–42.

**Lidell 1996** {published data only}

\* Lidell, E, Fridlund, B. Long-term effects of a comprehensive rehabilitation programme after myocardial infarction. *Scand.J.Caring.Sci.* 1996;**10**(2):67–74.

**Lindholm 1995** {published data only}

Lindholm, L.H, Ekbom, T, Dash, C, Isacson, A, Schersten, B. Changes in cardiovascular risk factors by combined pharmacological and nonpharmacological strategies: The main results of the CELL study. *Journal.of.Internal.Medicine* 1996;**240**:13–22.  
\* Lindholm LH, Ekbom T, Dash C, Eriksson M, Tibblin G, Schersten B. The impact of health care advice given in primary care on cardiovascular risk. CELL Study Group. *BMJ* 1995;**310**(6987):1105–9. [MEDLINE: 95261214]

**Lisspers 1999** {published data only}

\* Lisspers, J, Sundin, O, Hofman Bang, C, Nordlander, R, Nygren, A, Ryden, L, Ohman, A. Behavioral effects of a comprehensive, multifactorial program for lifestyle change after percutaneous transluminal coronary angioplasty: A prospective, randomized, controlled study. *Journal of Psychosomatic Research* 1999;**46**(2):143–54.

**Little 1990** {published data only}

\* Little, P, Girling, G, Hasler, A, Craven, A, Trafford, A. The effect of a combination low sodium, low fat, high fibre diet on serum lipids in treated hypertensive patients. *Eur.J.Clin.Nutr.* 1990;**44**(4):293–300.  
Little, P, Girling, G, Hasler, A, Trafford, A, Craven, A. A controlled trial of a low sodium, low fat, high fibre diet in treated hypertensive patients: the efficacy of multiple dietary intervention. *Postgrad.Med.J.* 1990;**66**(778):616–21.

**Lovibond 1986** {published data only}

\* Lovibond SH, Birrell PC, Langeluddecke P. Changing coronary heart disease risk-factor status: the effects of three behavioral programs. *Journal of Behavioral Medicine* 1986;**9**(5):415–37. [MEDLINE: 87086747]

**Luepker 1994** {published data only}

\* Luepker, R.V, Murray, D.M, Jacobs, D.R, Mittelmark, M.B, Bracht, N, Carlaw, R, Crow, R, Elmer, P, Finnegan, J, Folsom, A.R, Grimm, R, Hannan, R.J, Jeffrey, R, Lando, H, McGovern, P, Mullis, R, Perry, C.L, Pechacek, T, Pirie, P, Sprafka, J.M, Weisbrod, R, Blackburn, H. Community

education for cardiovascular disease prevention: risk factor changes in the Minnesota Heart Health Program. *Am.J.Public Health* 1994;**84**(9):1383–93.

Murray, D.M, Kurth, C, Mullis, R, Jeffery, R.W. Cholesterol reduction through low-intensity interventions: results from the Minnesota Heart Health Program. *Prev.Med.* 1990;**19**(2):181–9.

**Lyons 1997** {published data only}

\* Lyons GK, Woodruff SI, Candelaria JL, Rupp JW, Elder JP. Effect of a nutrition intervention on macronutrient intake in a low English-proficient Hispanic sample. *American Journal of Health Promotion* 1997;**11**:371–4.

**MacLennan 1995** {published data only}

\* MacLennan, R, Macrae, F, Bain, C, Battistutta, D, Chapuis, P, Gratten, H, Lambert, J, Newland, R.C, Ngu, M, Russell, A, et al. Randomized trial of intake of fat, fiber, and beta carotene to prevent colorectal adenomas. The Australian Polyp Prevention Project [see comments]. *J.Natl.Cancer Inst.* 1995;**87**:1760–6.

**MacMahon 1985** {published data only}

\* MacMahon, S.W, Macdonald, G.J, Bernstein, L, Andrews, G, Blacket, R.B. A randomized controlled trial of weight reduction and metoprolol in the treatment of hypertension in young overweight patients. *Clin.Exp.Pharmacol.Physiol.* 1985;**12**(3):267–71.

**Manning 1995** {published data only}

\* Manning, R.M, Jung, R.T, Leese, G.P, Newton, R.W. The comparison of four weight reduction strategies aimed at overweight diabetic patients. *Diabet.Med.* 1995;**12**: 409–15.

**Margetts 1985** {published data only}

\* Margetts, B.M, Beilin, L.J, Armstrong, B.K, Vandongen, R. A randomized control trial of a vegetarian diet in the treatment of mild hypertension. *Clin.Exp.Pharmacol.Physiol.* 1985;**12**(3):263–6.  
Margetts, B.M, Beilin, L.J, Armstrong, B.K, Vandongen, R. Vegetarian diet in the treatment of mild hypertension: a randomized controlled trial. *J.Hypertens.Suppl.* 1985;**3** Suppl 3:S429–31.

**Marniemi 1990** {published data only}

\* Marniemi, J, Seppanen, A, Hakala, P. Long-term effects on lipid metabolism of weight reduction on lactovegetarian and mixed diet. *Int.J.Obes.* 1990;**14**(2):113–25.

**Masley 2001** {published data only}

Masley S, Phillips S, Copeland JR. Group office visits change dietary habits of patients with coronary artery disease—the dietary intervention and evaluation trial (D.I.E.T.). *Journal of Family Practice* 2001;**50**:235–9.

**Mazucca 1986** {published data only}

\* Mazucca SA, Moorman NH, Wheeler ML, Norton JA, Fineberg NS, Vinicor F, et al. The diabetes education study: a controlled trial of the effects of diabetes patient education. *Diabetes Care* 1986;**9**(1):1–10. [MEDLINE: 86135225]

**McCance 1985** {published data only}

\* McCance, K.L, Eutropius, L, Jacobs, M.K, Williams, R.R. Preventing coronary heart disease in high-risk families. *Res.Nurs.Health* 1985;**8**(4):413–20.

**McCann 1997** {published data only}

\* McCann TJ, Criqui MH, Kashani IA, Sallis JF, Calfas KJ, Langer RD, et al.A randomized trial of cardiovascular risk factor reduction: patterns of attrition after randomization and during follow-up. *Journal of Cardiovascular Risk* 1997;**4**(1):41–6. [MEDLINE: 97358401]

Sallis, J.F, Criqui, M.H, Kashani, I.A, Rupp, J.W, Calfas, K.J, Langer, R.D. A program for health behavior change in a preventive cardiology center. *Am.J.Prev.Med.* 1990;**6** Suppl 1:43–50.

**McGowan 1994** {published data only}

\* McGowan MP, Joffe A, Duggan AK, McCay PS. Intervention in hypercholesterolemic college students: a pilot study. *Journal of Adolescent Health* 1994;**15**(2): 155–62. [MEDLINE: 94289444]

**McNabb 1997** {published data only}

\* McNabb, W, Quinn, M, Kerver, J, Cook, S, Karrison, T. The PATHWAYS church-based weight loss program for urban African- American women at risk for diabetes. *Diabetes Care* 1997;**20**:1518–23.

**Meland 1997** {published data only}

\* Meland E, Laerum E, Ulvik RJ. Effectiveness of two preventive interventions for coronary heart disease in primary care. *Scandinavian Journal of Primary Health Care* 1997;**15**(1):57–64. [MEDLINE: 97256296]

**Miettinen 1972** {published data only}

\* Miettinen M, Turpeinen O, Karvonen MJ, Elosuo R, Paavilainen E. Effect of cholesterol-lowering diet on mortality from coronary heart-disease and other causes. A twelve-year clinical trial in men and women. *Lancet* 1972;**2**(7782):835–8. [MEDLINE: 73016674]

Turpeinen, O, Miettinen, M, Karvonen, M.J, Roine, P, Pekkarinen, M, Lehtosuo, E.J, Alivirta, P. Dietary prevention of coronary heart disease: long-term experiment. I. Observations on male subjects. *Am.J.Clin.Nutr.* 1968;**21**(4):255–76.

**Miettinen 1985** {published data only}

\* Miettinen, T.A, Huttunen, J.K, Naukkarinen, V, Strandberg, T, Mattila, S, Kumlin, T, Sarna, S. Multifactorial primary prevention of cardiovascular diseases in middle-aged men. Risk factor changes, incidence, and mortality. *JAMA* 254;**15**:2097–102.

Strandberg, T.E, Salomaa, V.V, Naukkarinen, V.A, Vanhanen, H.T, Sarna, S.J, Miettinen, T.A. Long-term mortality after 5-year multifactorial primary prevention of cardiovascular diseases in middle-aged men [see comments]. *JAMA* 1991;**266**(9):1225–9.

**Milkereit 1992** {published data only}

\* Milkereit J, Graves JS. Follow-up dietary counseling benefits attainment of intake goals for total fat, saturated fat, and fiber. *Journal of the American Dietetic Association* 1992;**92**(5):603–5. [MEDLINE: 92242706]

**Miller 2002** {published data only}

\* Miller CK, Edwards L, Kissling G, Sanville L. Nutrition education improves metabolic outcomes among older adults with diabetes mellitus: results from a randomized controlled trial. *Preventive Medicine* 2002;**34**:252–9.

**Miracle 1996** {published data only}

\* Miracle V. Quality of life and risk factor modification up to one year post coronary angioplasty. *Kentucky Nurse* 1996;**44**:25.

**Mishra 1994** {published data only}

\* Mishra, S.K, Sharma, A.K, Salila, M, Srivastava, A.K, Bal, S, Ramesh, V. Efficacy of low fat diet in the treatment of benign breast disease. *Natl.Med.J.India.* 1994;**7**(2):60–2.

**Mojonnier 1980** {published data only}

\* Mojonnier, M.L, Hall, Y, Berkson, D.M, Robinson, E, Wethers, B, Pannbacker, B, Moss, D, Pardo, E, Stamler, J, Shekelle, R.B, Raynor, W. Experience in changing food habits of hyperlipidemic men and women. *J.Am.Diet.Assoc.* 1980;**77**(2):140–8.

**Mori 1994** {published data only}

\* Mori, T.A, Vandongen, R, Beilin, L.J, Burke, V, Morris, J, Ritchie, J. Effects of varying dietary fat, fish, and fish oils on blood lipids in a randomized controlled trial in men at risk of heart disease. *Am.J.Clin.Nutr.* 1994;**59**(5):1060–8.

**Morrison 1951** {published data only}

\* Morrison LM. Reduction of mortality rate in coronary atherosclerosis by a low cholesterol-low fat diet. *American Heart Journal* 1951;**42**:538–45.

**MRFIT 1982** {published data only}

Anonymous. Coronary heart disease death, nonfatal acute myocardial infarction and other clinical outcomes in the Multiple Risk Factor Intervention Trial. Multiple Risk Factor Intervention Trial Research Group. *Am.J.Cardiol.* 1986;**58**:1–13.

Anonymous. Mortality after 16 years for participants randomized to the Multiple Risk Factor Intervention Trial. *Circulation* 1996;**94**(5):946–51.

Caggiula, A.W, Christakis, G, Farrand, M, et al.The multiple risk factor intervention trial (MRFIT). IV. Intervention on blood lipids. *Prev.Med.* 1981;**10**(4): 443–75.

Cutler, J.A, Neaton, J.D, Hulley, S.B, Kuller, L, Paul, O, Stamler, J. Coronary heart disease and all-causes mortality in the Multiple Risk Factor Intervention Trial: subgroup findings and comparisons with other. *Prev.Med.* 1985;**14**(3):293–311.

Dolecek, T.A. Epidemiological evidence of relationships between dietary polyunsaturated fatty acids and mortality in the multiple risk factor intervention trial. *Proc.Soc.Exp.Biol.Med.* 1992;**200**(2):177–82.

Dolecek, T.A, Milas, N.C, Van Horn, L.V, Farrand, M.E, Gorder, D.D, Duchene, A.G, Dyer, J.R, Stone, P.A, Randall, B.L. A long-term nutrition intervention experience: lipid responses and dietary adherence patterns in the Multiple

Risk Factor Intervention Trial. *J.Am.Diet.Assoc.* 1986;**86**(6):752–8.

Kjelsberg, M.O, Cutler, J.A, Dolecek, T.A. Brief description of the Multiple Risk Factor Intervention Trial. *Am.J.Clin.Nutr.* 1997;**65**(1 Suppl):191S–5S.

\* Multiple Risk Factor Intervention Trial Research Group. Multiple risk factor intervention trial. Risk factor changes and mortality results. *Journal of the American Medical Association* 1982;**248**:1465–77.

Okin, P.M, Prineas, R.J, Grandits, G, Rautaharju, P.M, Cohen, J.D, Crow, R.S, Kligfield, P. Heart rate adjustment of exercise-induced ST-segment depression identifies men who benefit from a risk factor reduction program. *Circulation* 1997;**96**(9):2899–904.

Stamler, J, Briefel, R.R, Milas, C, Grandits, G.A, Caggiula, A.W. Chapter 7. Relation of changes in dietary lipids and weight, trial years 1-6, to changes in blood lipids in the special intervention and usual care groups in the Multiple Risk Factor Intervention Trial. *Am.J.Clin.Nutr.* 1997;**65**(1 Suppl):272S–88S.

Stamler, J, Rains Clearman, D, Lenz Litzow, K, Tillotson, J.L, Grandits, G.A. Chapter 14. Relation of smoking at baseline and during trial years 1-6 to food and nutrient intakes and weight in the special intervention and usual care groups in the Multiple Risk Factor Intervention Trial. *Am.J.Clin.Nutr.* 1997;**65**(1 Suppl):374S–402S.

The Multiple Risk Factor Intervention Trial Research Group. Mortality rates after 10.5 years for participants in the Multiple Risk Factor Intervention Trial. Findings related to a priori hypotheses of the trial. The Multiple Risk Factor Intervention Trial Research Group. *JAMA* 1990;**263**(13):1795–1801.

**Nader 1989** {published data only}

Nader, P.R, Sallis, J.F, Patterson, T.L, Abramson, I.S, Rupp, J.W, Senn, K.L, Atkins, C.J, Roppe, B.E, Morris, J.A, Wallace, J.P, et al. A family approach to cardiovascular risk reduction: results from the San Diego Family Health Project. *Health Educ.Q.* 1989;**16**(2):229–44.

**Naslund 1996** {published data only}

Hellenius, M.L, Dahlof, C, Aberg, H, Krakau, I, de Faire, U. Quality of life is not negatively affected by diet and exercise intervention in healthy men with cardiovascular risk factors. *Qual.Life Res.* 1995;**4**(1):13–20.

Hellenius, M.L, de Faire, U, Berglund, B, Hamsten, A, Krakau, I. Diet and exercise are equally effective in reducing risk for cardiovascular disease. Results of a randomized controlled study in men with slightly to moderately raised cardiovascular risk factors. *Atherosclerosis* 1993;**103**(1):81–91.

\* Naslund, G, K, Fredrikson, M, Hellenius, M, L, Faire, U, de. Effect of diet and physical exercise intervention programmes on coronary heart disease risk in smoking and non-smoking men in Sweden. *Journal of Epidemiology & Community Health* 1996;**50**:131–6.

Naslund, G.K, Fredrikson, M, Hellenius, M.L, de Faire, U. Characteristics of participating and nonparticipating men

in a randomized, controlled diet and exercise intervention trial. *Scand.J.Prim.Health Care* 1994;**12**(4):249–54.

Naslund, G.K, Fredrikson, M, Hellenius, M.L, de Faire, U. Determinants of compliance in men enrolled in a diet and exercise intervention trial: a randomized, controlled study. *Patient.Educ.Couns.* 1996;**29**(3):247–56.

**Niebauer 1995a** {published data only}

\* Niebauer J, Hambrecht R, Schlierf G, Marburger C, Kalberer B, Kubler W, et al. Five years of physical exercise and low fat diet: effects on progression of coronary artery disease. *Journal of Cardiopulmonary Rehabilitation* 1995;**15**(1):47–64. [MEDLINE: 96080433]

Schlierf G, Schuler G, Hambrecht R, Niebauer J, Hauer K, Vogel G, et al. Treatment of coronary heart disease by diet and exercise. *Journal of Cardiovascular Pharmacology* 1995;**25 Suppl 4**:S32–4. [MEDLINE: 97063345]

**Niebauer 1995b** {published data only}

Marburger, C, Hambrecht, R, Niebauer, J, Schoepenthou, M, Scheffler, E, Hauer, K, Schuler, G, Schlierf, G. Association between lipoprotein(a) and progression of coronary artery disease in middle-aged men. *Am.J.Cardiol.* 1994;**73**(11):742–6.

Niebauer, J, Hambrecht, R, Velich, T, Hauer, K, Marburger, C, Kalberer, B, Weiss, C, von Hodenberg, E, Schlierf, G, Schuler, G, Zimmermann, R, Kubler, W. Attenuated progression of coronary artery disease after 6 years of multifactorial risk intervention: Role of physical exercise. *Circulation* 1997;**96**(8):2534–41.

\* Niebauer J, Hambrecht R, Marburger C, Hauer K, Velich T, von Hodenberg E, et al. Impact of intensive physical exercise and low-fat diet on collateral vessel formation in stable angina pectoris and angiographically confirmed coronary artery disease. *American Journal of Cardiology* 1995;**76**(11):771–5. [MEDLINE: 96011453]

Niebauer J, Hambrecht R, Velich T, Marburger C, Hauer K, Kreuzer J, et al. Predictive value of lipid profile for salutary coronary angiographic changes in patients on a low-fat diet and physical exercise program. *American Journal of Cardiology* 1996;**78**(2):163–7. [MEDLINE: 96331202]

Schuler, G, Hambrecht, R, Schlierf, G, Niebauer, J, Hauer, K, Neumann, J, Hoberg, E, Drinkmann, A, Bacher, F, Grunze, M, et al. Regular physical exercise and low-fat diet. Effects on progression of coronary artery disease. *Circulation* 1992;**86**(1):1–11.

**Nikolaus 1991** {published data only}

\* Nikolaus T, Schlierf G, Vogel G, Schuler G, Wagner I. Treatment of coronary heart disease with diet and exercise--problems of compliance. *Annals of Nutrition and Metabolism* 1991;**35**(1):1–7. [MEDLINE: 91282413]

**Nilsson 2001** {published data only}

\* Nilsson PM, Klasson E-B, Nyberg P. Life-style intervention at the worksite - reduction of cardiovascular risk factors in a randomized study. *Scan J Work Environ Health* 2001;**27**(1):57–62.

**Nisbeth 2000 {published data only}**

Andersen LB, Klausen K, Nisbeth O. One-year effect of health counselling on life-style and risk factors for heart disease. *Ugeskrifti-for-Laeger* 2002;**164**(13):1814–8.

\* Nisbeth O, Klausen K, Andersen LB. Effectiveness of counselling over 1 year on changes in lifestyle and coronary heart disease risk factors. *Patient Education and Counseling* 2000;**40**:121–31.

**Nordevang 1990 {published data only}**

Nordevang, E, Callmer, E, Marmur, A, Holm, L.E. Dietary intervention in breast cancer patients: effects on food choice. *Eur.J.Clin.Nutr* 1992;**46**:387–96.

\* Nordevang, E, Ikkala, E, Callmer, E, Hallstrom, L, Holm, L.E. Dietary intervention in breast cancer patients: effects on dietary habits and nutrient intake. *Eur.J.Clin.Nutr.* 1990;**44**:681–7.

**O'Loughlin 1995 {published data only}**

\* O'Loughlin, J, Paradis, G, Kishchuk, N, Gray Donald, K, Renaud, L, Fines, P, Barnett, T. Coeur en sante St-Henri - A heart health promotion programme in Montreal, Canada: Design and methods for evaluation. *J.Epidemiol.Community.Health* 1995;**49**(5):495–502.

**Ockene 1995 {published data only}**

Ockene, I.S, Hebert, J.R, Ockene, J.K, Merriam, P.A, Hurley, T.G, Saperia, G.M. Effect of training and a structured office practice on physician- delivered nutrition counseling: the Worcester-Area Trial for Counseling in. *Am.J.Prev.Med.* 1996;**12**(4):252–8.

\* Ockene, J.K, Ockene, I.S, Quirk, M.E, Hebert, J.R, Saperia, G.M, Luippold, R.S, Merriam, P.A, Ellis, S. Physician training for patient-centered nutrition counseling in a lipid intervention trial. *Prev.Med.* 1995;**24**(6):563–70.

**ODES 1993 {published data only}**

Anderssen, S, A, Haaland, A, Hjermann, I, Urdal, P, Gjesdal, K, Holme, I. Oslo Diet and Exercise Study: a one-year randomized intervention trial. Effect on hemostatic variables and other coronary risk factors. *Nutrition Metabolism & Cardiovascular Diseases* 1995;**5**:189–200.

Anderssen, S, Holme, I, Urdal, P, Hjermann, I. Diet and exercise intervention have favourable effects on blood pressure in mild hypertensives: the Oslo Diet and Exercise Study (ODES). *Blood Press.* 1995;**4**(6):343–9.

Anderssen, S.A, Hjermann, I, Urdal, P, Torjesen, P.A, Holme, I. Improved carbohydrate metabolism after physical training and dietary intervention in individuals with the "atherothrombogenic syndrome". Oslo Diet and Exercise Study (ODES). A randomized trial. *J.Intern.Med.* 1996;**240**(4):203–9.

\* Anonymous. The Oslo Diet and Exercise Study (ODES): design and objectives. *Control.Clin.Trials.* 1993;**14**(3): 229–43.

Sorensen, M, Anderssen, S, Hjerman, I, Holme, I, Ursin, H. Exercise and diet interventions improve perceptions of self in middle-aged adults. *Scand.J.Med.Sci.Sports* 1997;**7**(5):312–20.

**Oldenburg 1985 {published data only}**

\* Oldenburg B, Perkins RJ, Andrews G. Controlled trial of psychological intervention in myocardial infarction. *Journal of Consulting and Clinical Psychology* 1985;**53**(6):852–9. [MEDLINE: 86112744]

**Oldenburg 1995 {published data only}**

\* Oldenburg, B, Martin, A, Greenwood, J, Bernstein, L, Allan, R. A controlled trial of a behavioral and educational intervention following coronary artery bypass surgery. *J.CARDIOPULM.REHABIL.* 1995;**15**(1):39–46.

**Oldroyd 2001 {published data only}**

\* Oldroyd, J.C, Unwin, N.C, White, M, Imrie, K, Mathers, J.C, Alberti, K.G. Randomised controlled trial evaluating the effectiveness of behavioural interventions to modify cardiovascular risk factors in men and women with impaired glucose tolerance: outcomes at 6 months. *Diabetes Research and Clinical Practice* 2001;**52**:29–43.

**Ornish 1990 {published data only}**

Anonymous. The Lifestyle Heart Trial: Regression of coronary artery blockage. *Nutr.Rev.* 1991;**49**(8):250–2. Barnard, N.D, Scherwitz, L.W, Ornish, D. Adherence and acceptability of a low-fat, vegetarian diet among patients with cardiac disease. *Journal of Cardiopulmonary Rehabilitation* 1992;**12**:423–31.

Gould KL, Ornish D, Kirkeeide R, Brown S, Stuart Y, Buchi M, et al.Improved stenosis geometry by quantitative coronary arteriography after vigorous risk factor modification. *American Journal of Cardiology* 1992;**69**(9):845–53. [MEDLINE: 92197484]

Ornish D. Lifestyle heart trial. *Cardiovascular Risk Factors* 1992;**2**:276–81.

\* Ornish D, Brown SE, Scherwitz LW, Billings JH, Armstrong WT, Ports TA, et al.Can lifestyle changes reverse coronary heart disease? The Lifestyle Heart Trial. *Lancet* 1990;**336**(8708):129–33. [MEDLINE: 90318158]

**Ostwald 1989 {published data only}**

\* Ostwald SK. Changing employees' dietary and exercise practices: an experimental study in a small company. *Journal of Occupational Medicine* 1989;**31**(2):90–7. [MEDLINE: 89216114]

**Oxcheck 1995 {published data only}**

\* Anonymous. Effectiveness of health checks conducted by nurses in primary care: final results of the OXCHECK study. Imperial Cancer Research Fund. *BMJ* 1995;**310**(6987):1099–104.

Anonymous. Effectiveness of health checks conducted by nurses in primary care: results of the OXCHECK study after one year. Imperial Cancer Research Fund OXCHECK Study Group. *BMJ* 1994;**308**(6924):308–12.

Coulter, A, Fowler, G, Fuller, A, Jones, L, Lancaster, T, Lawrence, M, Mant, D, Muir, J, Neil, A, O, N.C, Roe, L, Rusted, N, Schofield, T, Silagy, C, Thorogood, M, Yudkin, P, Ziebland, S, Freedman, D, Oggelsby, M, et al.Effectiveness of health checks conducted by nurses

- in primary care: Final results of the OXCHECK study. *British Medical Journal*. 1995;**310**:1099–1104.
- Silagy, C, Muir, J, Coulter, M, Thorogood, M, Yudkin, P, Roe, L. Lifestyle advice in general practice: Rates recalled by patients. *BMJ* 1992;**305**(6858):871–4.
- Pace 1983** *{published data only}*  
 \* Pace, P.W, Henske, J.C, Whitfill, B.J, et al. Videocassette use in diet instruction. *J.Am.Diet.Assoc.* 1983;**83**(2):166–9.
- Page 1992** *{published data only}*  
 \* Page, R.C, Harnden, K.E, Cook, J.T, Turner, R.C. Can life-styles of subjects with impaired glucose tolerance be changed? A feasibility study. *Diabet.Med.* 1992;**9**(6): 562–6.
- Pan 1997** *{published data only}*  
 \* Pan, X.R, Li, G.W, Hu, Y.H, Wang, J.X, Yang, W.Y, An, Z.X, Hu, Z.X, Lin, J, Xiao, J.Z, Cao, H.B, Liu, P.A, Jiang, X.G, Jiang, Y.Y, Wang, J.P, Zheng, H, Zhang, H, Bennett, P.H, Howard, B.V. Effects of diet and exercise in preventing NIDDM in people with impaired glucose tolerance. The Da Qing IGT and Diabetes Study. *Diabetes Care* 1997;**20** (4):537–44.
- Perry 1997** *{published data only}*  
 \* Perry TL, Mann JI, Lewis BARNED NJ, Duncan AW, Waldron MA, Thompson C. Lifestyle intervention in people with insulin-dependent diabetes mellitus (IDDM). *European Journal of Clinical Nutrition* 1997;**51**(11):757–63. [MEDLINE: 98035267]
- Persson 1996** *{published data only}*  
 \* Persson, J, Israelsson, B, Stavenow, L, Holmstrom, E, Berglund, G. Progression of atherosclerosis in middle-aged men: Effects of multifactorial intervention. *J.Intern.Med.* 1996;**239**(5):425–33.
- Pilkington 1960** *{published data only}*  
 \* Pilkington TR, Stafford JL, Hankin VS, Simmonds FM, Koerselman HB. Practical diets for lowering serum lipids: a long-term study on out-patients with ischaemic heart disease. *British Medical Journal* 1960;**1**:23–5.
- Pontes 1990** *{published data only}*  
 \* Pontes, M, Honig, J, Barra, L, Blackburn, G.L. Long-term effects of two dietary interventions on serum lipid levels [abstract]. *Arteriosclerosis* 1990;**10**:881A.
- Pritchard 1997** *{published data only}*  
 \* Pritchard, J.E, Nowson, C.A, Wark, J.D. A worksite program for overweight middle-aged men achieves lesser weight loss with exercise than with dietary change. *J.Am.Diet.Assoc.* 1997;**97**(1):37–42.
- Pritchard 1999** *{published data only}*  
 \* Pritchard DA, Hyndman J, Taba F. Nutritional counselling in general practice: a cost effective analysis. *J. Epidemiol Community Health* 1999;**53**:311–6.
- Puddey 1992** *{published data only}*  
 \* Puddey, I.B, Parker, M, Beilin, L.J, Vandongen, R, Masarei, J.R. Effects of alcohol and caloric restrictions on blood pressure and serum lipids in overweight men. *Hypertension* 1992;**20**(4):533–41.
- Puska 1983** *{published data only}*  
 \* Puska, P, Iacono, J.M, Nissinen, A, Korhonen, H.J, Vartiainen, E, Pietinen, P, Dougherty, R, Leino, U, Mutanen, M, Moisio, S, Huttunen, J. Controlled, randomised trial of the effect of dietary fat on blood pressure. *Lancet* 1983;**8314**-5(1):5.
- Puska, P, Nissinen, A, Pietinen, P, Iacono, J. Role of dietary fat in blood pressure control. *Scand.J.Clin.Lab.Invest.Suppl.* 1985;**176**:62–69.
- Puska 1985** *{published data only}*  
 \* Puska, P, Iacono, J.M, Nissinen, A, Vartiainen, E, Dougherty, R, Pietinen, P, Leino, U, Uusitalo, U, Kuusi, T, Kostianen, E, et al. Dietary fat and blood pressure: an intervention study on the effects of a low-fat diet with two levels of polyunsaturated fat. *Prev.Med.* 1985;**14**(5): 573–84.
- Rabkin 1983** *{published data only}*  
 \* Rabkin SW, Boyko E, Wilson A, Streja DA. A randomized clinical trial comparing behavior modification and individual counseling in the nutritional therapy of non-insulin-dependent diabetes mellitus: comparison of the effect on blood sugar, body weight, and serum lipids. *Diabetes Care* 1983;**6**(1):50–6. [MEDLINE: 83181968]
- Ramsay 1978** *{published data only}*  
 \* Ramsay LE, Ramsay MH, Hettiarachchi J, Davies DL, Winchester J. Weight reduction in a blood pressure clinic. *British Medical Journal* 1978;**2**(6132):244–5. [MEDLINE: 78236486]
- Redman 1995** *{published data only}*  
 \* Redman, S, Sanson Fisher, R, Kreft, S, Fleming, J, Dickinson, J. Is the Australian National Heart Foundation programme effective in reducing cholesterol levels among general practice patients?. *HEALTH PROMOT.INT.* 1995; **10**(4):293–303.
- Rhodes 1996** *{published data only}*  
 \* Rhodes KS, Bookstein LC, Aaronson LS, Mercer NM, Orringer CE. Intensive nutrition counseling enhances outcomes of National Cholesterol Education Program dietary therapy. *Journal of the American Dietetic Association* 1996;**96**(10):1003-10; quiz 1011-2. [MEDLINE: 96438827]
- Ribeiro 1984** *{published data only}*  
 \* Ribeiro, J.P, Hartley, L.H, Sherwood, J, Herd, J.A. The effectiveness of a low lipid diet and exercise in the management of coronary artery disease. *Am.Heart J.* 1984; **108**(5):1183–9.
- Rich 1996** *{published data only}*  
 \* Rich, M, W, Baldus Gray, D, Beckham, V, Wittenberg, C, Luther, P. Effect of a multidisciplinary intervention on medication compliance in elderly patients with congestive heart failure. *American Journal of Medicine* 1996;**101**(3): 270–6.
- Rich, M.W, Beckham, V, Wittenberg, C, Leven, C.L, Freedland, K.E, Carney, R.M. A multidisciplinary intervention to prevent the readmission of elderly patients

- with congestive heart failure [see comments]. *N.Engl.J.Med.* 1995;**333**(18):1190–5.
- Ridgeway 1999** *{published data only}*  
 \* Ridgeway, N.A, Harvill, D.R, Harvill, L.M, Falin, T.M, Forester, G.M, Gose, O.D. Improved control of type 2 diabetes mellitus: a practical education/behavior modification program in a primary care clinic. *Southern Medical Journal* 1999;**92**(7):667–72.
- Roderick 1997** *{published data only}*  
 \* Roderick P, Ruddock V, Hunt P, Miller G. A randomized trial to evaluate the effectiveness of dietary advice by practice nurses in lowering diet-related coronary heart disease risk. *British Journal of General Practice* 1997;**47**(414):7–12. [MEDLINE: 97248785]
- Rose 1992** *{published data only}*  
 \* Rose MA. Evaluation of a peer-education program on heart disease prevention with older adults. *Public Health Nursing* 1992;**9**(4):242–7. [MEDLINE: 93133786]
- Sacks 1984** *{published data only}*  
 \* Sacks, F.M, Marais, G.E, Handysides, G, Salazar, J, Miller, L, Foster, J.M, Rosner, B, Kass, E.H. Lack of an effect of dietary saturated fat and cholesterol on blood pressure in normotensives. *Hypertension* 1984;**6**(2 Pt 1):193–8.
- Salkeld 1997** *{published data only}*  
 \* Salkeld G, Phongsavan P, Oldenburg B, Johannesson M, Convery P, Graham CP, et al. The cost-effectiveness of a cardiovascular risk reduction program in general practice. *Health Policy* 1997;**41**:105–19.
- Sarkkinen 1994** *{published data only}*  
 \* Sarkkinen, E.S, Uusitupa, M.I, Pietinen, P, Aro, A, Ahola, I, Penttila, I, Kervinen, K, Kesaniemi, Y.A. Long-term effects of three fat-modified diets in hypercholesterolemic subjects. *Atherosclerosis* 1994;**105**(1):9–23.
- Schechtman 1996** *{published data only}*  
 \* Schechtman G, Wolff N, Byrd JC, Hiatt JG, Hartz A. Physician extenders for cost-effective management of hypercholesterolemia. *Journal of General Internal Medicine* 1996;**11**(5):277–86. [MEDLINE: 96338658]
- Schlierf 1988** *{published data only}*  
 \* Schlierf G, Schuler G, Wirth A, Kohlmeier M, Vogel G. Treatment of coronary heart disease by diet and exercise: fasting and diurnal lipoproteins. *Klinische Wochenschrift* 1988;**66**:1103–9. [MEDLINE: 89179704]
- Schuster 1995** *{published data only}*  
 \* Schuster, P.M, Wright, C, Tomich, P. Gender differences in the outcomes of participants in home programs compared to those in structured cardiac rehabilitation programs. *Rehabilitation Nursing* 1995;**20**:93–101.
- Sciarrone 1990** *{published data only}*  
 \* Sciarrone, S.E, Rouse, I.L, Rogers, P, Beilin, L.J. A factorial study of fat and fibre changes and sodium restriction on blood pressure of human hypertensive subjects. *Clin.Exp.Pharmacol.Physiol.* 1990;**17**(3):197–201.
- Shenberger 1992** *{published data only}*  
 \* Shenberger, D, M, Helgren, R, J, Peters, J, R, Quiter, E, Johnston, E, A, Hunninghake, D, B. Intense dietary counseling lowers LDL cholesterol in the recruitment phase of a clinical trial of men who had coronary artery bypass grafts. *Journal of the American Dietetic Association* 1992;**92**:441–5.
- SimkinSilverman 1995** *{published data only}*  
 Klem, M.L, Wing, R.R, Simkin Silverman, L, Kuller, L.H. The psychological consequences of weight gain prevention in healthy, premenopausal women. *Int.J.Eat.Disord.* 1997;**21**(2):167–74.  
 Pasagian Macaulay, A, Aston, C.E, Ferrell, R.E, McAllister, A.E, Wing, R.R, Kuller, L.H. A dietary and behavioral intervention designed to lower coronary heart disease. Risk factors are unaffected by variation at the APOE gene locus. *Atherosclerosis* 1997;**132**(2):221–7.  
 \* Simkin Silverman, L, Wing, R.R, Hansen, D.H, Klem, M.L, Pasagian Macaulay, A.P, Meilahn, E.N, Kuller, L.H. Prevention of cardiovascular risk factor elevations in healthy premenopausal women. *Prev.Med.* 1995;**24**(5):509–17.
- Simon 1997** *{published data only}*  
 \* Simon, M.S, Heilbrun, L.K, Boomer, A, Kresge, C, Depper, J, Kim, P.N, Valeriote, F, Martino, S. A randomized trial of a low-fat dietary intervention in women at high risk for breast cancer. *Nutr.Cancer* 1997;**27**:136–42.
- Singh 1990** *{published data only}*  
 Singh, R.B, Rastogi, S.S, Sircar, A.R, Mehta, P.J, Sharma, K.K. Dietary strategies for risk-factor modification to prevent cardiovascular diseases. *Nutrition.* 1991;**7**(3):210–4.  
 Singh RB, Rastogi SS, Sircar A, Mehta PJ. Risk factor intervention through dietary modification. *Journal of Nutritional Medicine* 1990;**1**:267–75.
- Singh 1990 (2)** *{published data only}*  
 \* Singh, R.B, Rastogi, S.S, Mehta, P.J, Mody, R, Garg, V. Effect of diet and weight reduction in hypertension. *Nutrition* 1990;**6**(4):297–302.
- Singh 1995** *{published data only}*  
 \* Singh, R.B, Niaz, M.A, Bishnoi, I, Singh, U, Begum, R, Rastogi, S.S. Effect of low energy diet and weight loss on major risk factors, central obesity and associated disturbances in patients with essential hypertension. *J.Hum.Hypertens.* 1995;**9**(5):355–62.  
 Singh, R.B, Sharma, V.K, Gupta, R.K, Singh, R. Nutritional modulators of lipoprotein metabolism in patients with risk factors for coronary heart disease: diet and moderate exercise trial. *J.Am.Coll.Nutr.* 1992;**11**(4):391–8.  
 Singh, R.B, Singh, N.K, Rastogi, S.S, Mani, U.V, Niaz, M.A. Effects of diet and lifestyle changes on atherosclerotic risk factors after 24 weeks on the Indian Diet Heart Study. *Am.J.Cardiol.* 1993;**71**(15):1283–8.  
 Singh, R.B, Sircar, A.R, Singh, R.G, Mani, U.V, Seth, J, Devi, L. Dietary modulators of lipid metabolism in the Indian diet-heart study (I.D.H.S.). *Int.J.Vitam.Nutr.Res.* 1992;**62**(1):73–82.

**Singh 1997** {published data only}

\* Singh, R, B, Rastogi, S, S, Reema Singh, Niaz, M, A, Singh, N, K, Madhu, S, V. Effects on plasma ascorbic acid and coronary risk factors of adding guava fruit to the usual diet in hypertensives with mild to moderate. *Journal of Nutritional & Environmental Medicine* 1997;7:5–14.

**Sivarajan 1983** {published data only}

Sivarajan ES, Bruce RA, Almes MJ, Green B, Belanger L, Lindskog BD, et al. In-hospital exercise after myocardial infarction does not remove treadmill performance. *New England Journal of Medicine* 1981;305(7):357–62. [MEDLINE: 81245065]  
Sivarajan ES, Bruce RA, Lindskog BD, Almes MJ, Belanger L, Green B. Treadmill test responses to an early exercise program after myocardial infarction: A randomized study. *Circulation* 1982;65(7):1420–8. [MEDLINE: 82184700]  
\* Sivarajan ES, Newton KM, Almes MJ, Kempf TM, Mansfield LW, Bruce RA. Limited effects of outpatient teaching and counseling after myocardial infarction: a controlled study. *Heart Lung* 1983;12(1):65–73. [MEDLINE: 83082057]

**Sjostrom 1992** {published data only}

\* Sjostrom, L, Larsson, B, Backman, L, Bengtsson, C, Bouchard, C, Dahlgren, S, Hallgren, P, Jonsson, E, Karlsson, J, Lapidus, L, Lindroos, A.-K, Lindstedt, S, Lissner, L, Narbro, K, Naslund, I, Olbe, L, Sullivan, M, Sylvan, A, Wedel, H, Agren, G. Swedish obese subjects (SOS). Recruitment for an intervention study and a selected description of the obese state. *INT.J.OBESITY*. 1992;16(6): 465–79.

**Smith 1991** {published data only}

\* Smith, M.F, Bobroff, L.B. Study of the effectiveness of a health-risk reduction program. *EVAL.HEALTH PROF* 1991;14(1):88–99.

**Sopko 1985** {published data only}

\* Sopko, G, Leon, A.S, Jacobs, D.R, Jr, Foster, N, Moy, J, Kuba, K, Anderson, J.T, Casal, D, McNally, C, Frantz, I. The effects of exercise and weight loss on plasma lipids in young obese men. *Metabolism* 1985;34(3):227–36.

**Sorensen 1992** {published data only}

\* Sorensen, G, Morris, D.M, Hunt, M.K, Hebert, J.R, Harris, D.R, Stoddard, A, Ockene, J.K. Work-site nutrition intervention and employees' dietary habits: the Treatwell program. *Am.J.Public Health* 1992;82:877–80.

**Sorensen 1998** {published data only}

Hebert, J, R, Hurley, T, G, Hsieh, J, Rogers, E, Stoddard, A, M, Sorensen, G, Nicolosi, R, J. Determinants of plasma vitamins and lipids: the Working Well Study. *American Journal of Epidemiology* 1994;140(2):132–47.  
\* Sorensen, G, Stoddard, A, Hunt, M.K, Hebert, J.R, Ockene, J.K, Avrunin, J.S, Himmelstein, J, Hammond, S.K. The effects of a health promotion-health protection intervention on behavior change: The wellworks study. *American Journal of Public Health* 1998;88(11):1685–90.

**Stamler 1987** {published data only}

Stamler, R, Stamler, J, Grimm, R, Gosch, F.C, Elmer, P, Dyer, A, Berman, R, Fishman, J, Van Heel, N, Civinelli, J, et al. Nutritional therapy for high blood pressure. Final report of a four-year randomized controlled trial--the Hypertension Control Program. *JAMA* 1987;257(11): 1484–91.

**Stamler 1989** {published data only}

Stamler, R, Stamler, J, Gosch, F.C, Civinelli, J, Fishman, J, McKeever, P, McDonald, A, Dyer, A.R. Primary prevention of hypertension by nutritional-hygienic means. Final report of a randomized, controlled trial [ . *JAMA* 1989;262(13): 1801–7.  
Stamler, R, Stamler, J, Gosch, F.C, McDonald, A.M. Primary prevention of hypertension--a randomized controlled trial. *Ann.Clin.Res.* 1984;16 Suppl 43:136–42.

**Stefanick 1998** {published data only}

\* Stefanick ML, Mackey S, Sheehan M, Ellsworth N, Haskell WL, Wood PD. Effects of diet and exercise in men and postmenopausal women with low levels of HDL cholesterol and high levels of LDL cholesterol. *New England Journal of Medicine* 1998;339(1):12–20. [MEDLINE: 98299381]

**Step toe 1999** {published data only}

\* Steptoe A, Doherty S, Rink E, Kerry S, Kendrick T, Hilton S. behavioural counselling in general practice for the promotion of healthy behaviour among adults at increased risk of coronary heart disease: randomised trial. *BMJ* 1999;319:943.8.

**Step toe 2001** {published data only}

\* Steptoe, A, Kerry, S, Rink, E, Hilton, S. The impact of behavioral counseling on stage of change in fat intake, physical activity, and cigarette smoking in adults at increased risk of coronary heart disease. *American Journal of Public Health* 2001;91:265–9.

**Stevens 1993** {published data only}

\* Stevens VJ, Corrigan SA, Obarzanek E, Bernauer E, Cook NR, Hebert P, et al. Weight loss intervention in phase 1 of the Trials of Hypertension Prevention. The TOHP Collaborative Research Group. *Archives of Internal Medicine* 1993;153(7):849–58. [MEDLINE: 93221340]  
The trials of Hypertension Prevention Collaborative Research Group. The effects of nonpharmacologic interventions on blood pressure of persons with high normal levels. *JAMA* 1992;267(9):1213–20. [MEDLINE: 92167528]

**Stolley 1997** {published data only}

\* Stolley, M.R, Fitzgibbon, M.L. Effects of an obesity prevention program on the eating behavior of African American mothers and daughters. *Health Educ.Behav.* 1997;24(2):152–64.

**Stone 1963** {published data only}

\* Stone D-B, Connor W-E. The prolonged effects of a low cholesterol, high carbohydrate diet upon the serum lipids in diabetic patients. *Diabetes* 1963;12:127–131.

**Svendsen 1994** {published data only}

Svendsen, O.L, Hassager, C, Christiansen, C. Effect of an energy-restrictive diet, with or without exercise, on lean tissue mass, resting metabolic rate, cardiovascular risk factors, and bone in overweight postmenopausal women. *Am.J.Med.* 1993;**95**(2):131–40.

\* Svendsen, O.L, Hassager, C, Christiansen, C. Six months' follow-up on exercise added to a short-term diet in overweight postmenopausal women—effects on body composition, resting metabolic rate, cardiovascular risk factors and bone. *Int.J.Obes.Relat.Metab.Disord.* 1994;**18**(10):692–8.

**Taylor 1991** {published data only}

\* Taylor CB, Agras WS, Losch M, Plante TG, Burnett K. Improving the effectiveness of computer-assisted weight loss. *Behavior Therapy* 1991;**22**:229–36.

**Thoresen 1982** {published data only}

\* Thoresen CE, Friedman M, Gill JK, Ulmer DK. The recurrent coronary prevention project. Some preliminary findings.. *Acta Med Scand Suppl* 1982;**660**:172–92.

**Timlin 2002** {published data only}

\* Timlin MT, Shores KV, Reicks M. Behavior change outcomes in an outpatient cardiac rehabilitation program. *J Am Diet Assoc* 2002;**102**:664–71.

**Traeden 1998** {published data only}

\* Traeden UI, Holm L, Sandstrom B, Andersen PK, Jarden M. Effectiveness of a dietary intervention strategy in general practice: effects on blood lipids, health and well-being. *Public Health Nutrition* 1998;**1**(4):273–81.

**Travers 1992** {published data only}

\* Travers KD, Tan M-H, MacCleave AP, Murphy A, Whiting S. Evaluation of a motivational education program for cardiovascular risk reduction: effects on knowledge and behavior. *Journal of Nutrition Education* 1992;**24**:109–116.

**Trento 2001** {published data only}

\* Trento, M, Passera, P, Tomalino, M, Bajardi, M, Pomerio, F, Allione, A, Vaccari, P, Molinatti, G.M, Porta, M. Group visits improve metabolic control in type 2 diabetes: a 2-year follow-up. *Diabetes Care* 2001;**24**(6):995–1000.

**Tuomilehto 1985** {published data only}

\* Tuomilehto, J, Salonen, J, T, Nissinen, A. Factors associated with changes in serum cholesterol during a community-based hypertension programme. *Acta Medica Scandinavica* 1985;**217**:243–52.

**Turnin 1992** {published data only}

\* Turnin MC, Beddok RH, Clottes JP, Martini PF, Abadie RG, Buisson JC, et al. Telematic expert system Diabeto. New tool for diet self-monitoring for diabetic patients. *Diabetes Care* 1992;**15**(2):204–12. [MEDLINE: 92191773]

Turnin MC, Bolzonella-Pene C, Dumoulin S, Bourgeois O, Clottes J, Martini P, et al. Nutri Expert: a telematic system for diet self-monitoring [Système telematique d'atoursurveillance dietetique Nutr-Expert]. *Medecine et Nutrition* 1994;**30**:307–13.

**Uusitupa 1994** {published data only}

\* Uusitupa, M.I, Sarkkinen, E.S, Torpstrom, J, Pietinen, P, Aro, A. Long-term effects of four fat-modified diets on blood pressure. *J.Hum.Hypertens.* 1994;**8**(3):209–18.

**Vale 2002** {published data only}

\* Vale MJ, Jelinek MV, Best JD, Santamaria JD. Coaching patients with coronary heart disease to achieve the target cholesterol: A method to bridge the gap between evidence-based medicine and the "real world" - randomized controlled trial. *Journal of Clinical Epidemiology* 2002;**55**: 245–52.

**van Beurden 1990** {published data only}

Van Beurden, E, James, R, Montague, D, Christian, J, Dunn, T. Community-based cholesterol screening and education to prevent heart disease: Five-year results of the North Coast cholesterol check campaign. *AUST.J.PUBLIC HEALTH* 1993;**17**(2):109–16.

\* van Beurden E, James R, Dunn T, Tyler C. Risk assessment and dietary counselling for cholesterol reduction. *Health Education Research* 1990;**5**:445–50.

**van Elderen 1994** {published data only}

\* van Elderen-van Kemenade T, Maes S, van den Broek Y. Effects of a health education programme with telephone follow-up during cardiac rehabilitation. *British Journal of Clinical Psychology* 1994;**33**(Pt3):367–78. [MEDLINE: 95086426]

**Vanninen 1992** {published data only}

\* Vanninen E, Uusitupa M, Siitonen O, Laitinen J, Lansimies E. Habitual physical activity, aerobic capacity and metabolic control in patients with newly-diagnosed type 2 (non-insulin-dependent) diabetes mellitus: effect of 1-year diet and exercise intervention. *Diabetologia* 1992;**35**:340–6.

**Walden 1991** {published data only}

Bovbjerg, V.E, McCann, B.S, Brief, D.J, Follette, W.C, Retzlaff, B.M, Dowdy, A.A, Walden, C.E, Knopp, R.H. Spouse support and long-term adherence to lipid-lowering diets. *Am.J.Epidemiol.* 1995;**141**(5):451–60.

Knopp, R.H, Walden, C.E, McCann, B.S, Retzlaff, B, Dowdy, A, Gey, G, Cooper, M. Serial changes in lipoprotein cholesterol in hypercholesterolemic men treated with alternative diets [abstract]. *Arteriosclerosis* 1989;**9**:745A.

\* Walden, C.E, McCann, B.S, Retzlaff, B, Dowdy, A, Hanson, M, Fish, B, Fitzpatrick, V, Follette, W, Parker, D, Gey, G, et al. Alternative fat-restricted diets for hypercholesterolemia and combined hyperlipidemia: feasibility, design, subject recruitment, and baseline characteristics of the dietary alternatives study. *J.Am.Coll.Nutr.* 1991;**10**(5):429–42.

**Walden 1997** {published data only}

\* Walden, C.E, Retzlaff, B.M, Buck, B.L, McCann, B.S, Knopp, R.H. Lipoprotein lipid response to the National Cholesterol Education Program step II diet by hypercholesterolemic and combined hyperlipidemic women. *Arterioscler.Thromb.Vasc.Biol.* 1997;**17**(2):375–82.



**Wass 1981 {published data only}**

\* Wass, V, J, Jarrett, R, J, Meilton, V, Start, M, K, Mattock, M, Ogg, C, S, Cameron, J, S. Effect of a long-term fat-modified diet on serum lipoprotein levels of cholesterol and triglyceride in patients on home haemodialysis. *Clinical Science* 1981;**60**:81–6.

**Watts 1994 {published data only}**

Watts, G.F, Mandalia, S, Brunt, J.N, Slavin, B.M, Coltart, D.J, Lewis, B. Independent associations between plasma lipoprotein subfraction levels and the course of coronary artery disease in the St. Thomas' Atherosclerosis Regression Study (STARS). *Metabolism* 1993;**42**:1461–7.

\* Watts GF, Jackson P, Mandalia S, Brunt JN, Lewis ES, Coltart DJ, et al. Nutrient intake and progression of coronary artery disease. *American Journal of Cardiology* 1994;**73**(5):328–32. [MEDLINE: 94152611]

Watts GF, Lewis B, Brunt JN, Lewis ES, Coltart DJ, Smith LD, et al. Effects on coronary artery disease of lipid-lowering diet, or diet plus cholestyramine, in the St Thomas' Atherosclerosis Regression Study (STARS). *Lancet* 1992;**339**(8793):563–9. [MEDLINE: 92167709]

Watts GF, Lewis B, Jackson P, Burke V, Lewis ES, Brunt JN, et al. Relationships between nutrient intake and progression/regression of coronary atherosclerosis as assessed by serial quantitative angiography. *Canadian Journal of Cardiology* 1995;**11 Suppl G**:110G–4G. [MEDLINE: 96062902]

**WHISG 1998 {published data only}**

\* Anonymous. Design of the Women's Health Initiative clinical trial and observational study. The Women's Health Initiative Study Group. *Control. Clin. Trials*. 1998;**19**(1): 61–109.

**WHO Trial 1980 {published data only}**

Anonymous. An international controlled trial in the multifactorial prevention of coronary heart disease. *Int.J.Epidemiol.* 1974;**3**(3):219–24.

Anonymous. Eight-year follow-up results from the Rome Project of Coronary Heart Disease Prevention. Research Group of the Rome Project of Coronary Heart Disease Prevention. *Preventive Medicine* 1986;**15**(2):176–91.

Anonymous. The Roman Coronary Disease Prevention Project: effectiveness of intervention and reduction of mortality over a 10-year period [II Progetto Romano di Prevenzione della Cardiopatia Coronarica: efficacia dell'intervento e riduzione della mortalità in 10 anni]. *G.Ital.Cardiol.* 1986;**16**(3):196–202.

Bauer, R.L, Heller, R.F, Challah, S. United Kingdom Heart Disease Prevention Project: 12-year follow-up of risk factors. *Am.J.Epidemiol.* 1985;**121**(4):563–9.

Dramaix M, Kornitzer M, De Backer G, Thilly C, Kittel F, Graffar M. The Belgian Heart Disease Prevention Project [Le Projet Belge de Prevention des Affections Cardio-vasculaires]. *Rev Epidemiol Sante Publique* 1981;**29**(3):289–303.

Heller, R.F, Tunstall Pedoe, H.D, Rose, G. A simple method of assessing the effect of dietary advice to reduce plasma cholesterol. *Prev.Med.* 1981;**10**(3):364–70.

Kornitzer, M. The Belgian project for the prevention

of cardiovascular diseases: a model of multifactorial prevention [Le projet belge de prevention des affections cardiovasculaires: un modele de prevention multifactorielle]. *Bull.Mem.Acad.R.Med.Belg.* 1989;**144**(1-2):101–9.

Kornitzer, M, Backer, G, de, Dramaix, M, Thilly, C. The Belgian heart disease prevention project. Modification of the coronary risk profile in an industrial population. *Circulation* 1980;**61**:18–25.

Kornitzer, M, De Backer, G, Dramaix, M, Kittel, F, Thilly, C, Graffar, M, Vuylsteek, K. Belgian heart disease prevention project: incidence and mortality results. *Lancet* 1983;**1**(8333):1066–70.

Menotti, A, The European Multifactorial Preventive Trial of Coronary Heart Disease: Four-year experience. *Prev.Med.* 1983;**12**(1):175–80.

Rose, G, Tunstall Pedoe, H.D, Heller, R.F. UK heart disease prevention project: incidence and mortality results. *Lancet* 1983;**1**(8333):1062–66.

\* Rose G, Heller RF, Pedoe HT, Christie DG. Heart disease prevention project: a randomised controlled trial in industry. *British Medical Journal* 1980;**280**(6216):747–51.

World Health Organisation European Collaborative Group. European collaborative trial of multifactorial prevention of coronary heart disease: final report on the 6-year results. World Health Organisation European Collaborative Group. *Lancet* 1986;**1**:869–72.

World Health Organisation European Collaborative Group. Multi-factorial trial in the prevention of coronary heart disease. II Risk factor changes at two and four years.

*Eur.Heart J.* 1982;**3**(2):184–90.

**Wierenga 1994 {published data only}**

\* Wierenga, M.E. Life-style modification for weight control to improve diabetes health status. *Patient.Educ.Couns.* 1994;**23**:33–40.

**Wilhelmsen 1986 {published data only}**

Wilhelmsen, L, Berglund, G, Elmfeldt, D, Samuelsson, O, Svardsudd, K. The Multifactor Primary Prevention Trial in Goteborg, Sweden. Comparison with a previously untreated population sample. *Drugs* 1986;**31 Suppl 1**:47–51.

Wilhelmsen, L, Berglund, G, Elmfeldt, D, Tibblin, G, Wedel, H, Pennert, K, Vedin, A, Wilhelmsson, C, Werko, L. The multifactor primary prevention trial in Goteborg, Sweden. *European Heart Journal* 1986;**7**(4):279–88.

Wilhelmsen, L, Tibblin, G, Werko, L. A primary preventive study in Gothenburg, Sweden. *Prev.Med.* 1972;**1**:153–60.

**Winett 1991 {published data only}**

\* Winett, R.A, Wagner, J.L, Moore, J.F, Walker, W.B, Hite, L.A, Leahy, M, Neubauer, T, Arbour, D, Walberg, J, Geller, E.S, et al. An experimental evaluation of a prototype public access nutrition information system for supermarkets. *Health Psychol.* 1991;**10**(1):75–8.

**Wolmarans 1991 {published data only}**

\* Wolmarans, P, Benade, A.J, Kotze, T.J, Daubitzer, A.K, Marais, M.P, Laubscher, R. Plasma lipoprotein response to substituting fish for red meat in the diet. *Am.J.Clin.Nutr.* 1991;**53**(5):1171–6.

**Wood 1988** {published data only}

Williams PT, Krauss RM, Vranizan KM, Wood PD. Changes in lipoprotein subfractions during diet-induced and exercise-induced weight loss in moderately overweight men. *Circulation* 1990;**81**(4):1293–304. [MEDLINE: 90200119]

Williams PT, Stefanick ML, Vranizan KM, Wood PD. The effects of weight loss by exercise or by dieting on plasma high-density lipoprotein (HDL) levels in men with low, intermediate, and normal-to-high HDL at baseline. *Metabolism: Clinical & Experimental* 1994;**43**(7):917–24. [MEDLINE: 94301231]

\* Wood PD, Stefanick ML, Dreon DM, Frey-Hewitt B, Garay SC, Williams PT, et al. Changes in plasma lipids and lipoproteins in overweight men during weight loss through dieting as compared with exercise. *New England Journal of Medicine* 1988;**319**(18):1173–9. [MEDLINE: 89014648]

**Wood 1991** {published data only}

Williams, P.T, Krauss, R.M, Stefanick, M.L, Vranizan, K.M, Wood, P.D. Effects of low-fat diet, calorie restriction, and running on lipoprotein subfraction concentrations in moderately overweight men. *Metabolism* 1994;**43**(5): 655–63.

\* Wood, P.D, Stefanick, M.L, Williams, P.T, Haskell, W.L. The effects on plasma lipoproteins of a prudent weight-reducing diet, with or without exercise, in overweight men and women. *N.Engl.J.Med.* 1991;**325**(7):461–6.

**Woodhill 1978** {published data only}

\* Woodhill JM, Palmer AJ, Leelarthaepin B, McGilchrist C, Blacket RB. Low fat, low cholesterol diet in secondary prevention of coronary heart disease. *Advances in Experimental Medicine & Biology* 1978;**109**:317–30. [MEDLINE: 79079846]

**Woollard 1995** {published data only}

\* Woollard J, Beilin L, Lord T, Puddey I, MacAdam D, Rouse I. A controlled trial of nurse counselling on lifestyle change for hypertensives treated in general practice: preliminary results. *Clin Exp Pharmacol Physiol* 1995;**22**(6-7):466–8. [MEDLINE: 96172110]

**Wylie Rosett 1993** {published data only}

\* Wylie Rosett, J, Wassertheil Smoller, S, Blaufox, M.D, Davis, B.R, Langford, H.G, Oberman, A, Jennings, S, Hataway, H, Stern, J, Zimbaldi, N. Trial of antihypertensive intervention and management: greater efficacy with weight reduction than with a sodium-potassium intervention. *J.Am.Diet.Assoc.* 1993;**93**(4):408–15.

**Wylie Rosett 1994** {published data only}

\* Wylie Rosett, J, Swencionis, C, Peters, M.H, Dornelas, E.A, Edlen Nezin, L, Kelly, L.D, Wassertheil Smoller, S. A weight reduction intervention that optimizes use of practitioner's time, lowers glucose level, and raises HDL cholesterol level in older adults. *J.Am.Diet.Assoc.* 1994;**94**(1):37–42.

**Wylie-Rosett 2001** {published data only}

\* Wylie-Rosett, J, Swencionis, C, Ginsberg, M, Cimino, C, Wassertheil-Smoller, S, Caban, A, Segal-Isaacson, C.J,

Martin, T, Lewis, J. Computerized weight loss intervention optimizes staff time: the clinical and cost results of a controlled trial conducted in a managed care setting. *J Am Diet Assoc* 2001;**101**(10):1155–62.

**Yanek 2001** {published data only}

\* Yanek LR, Becker DM, Moy TF, Gittelsohn J, Koffman DM. Project Joy: Faith based cardiovascular health promotion for African American women. *Public Health Reports* 2001;**116**(Supplement 1):68–81.

**Zino 1997** {published data only}

\* Zino, S, Skeaff, M, Williams, S, Mann, J. Randomised controlled trial of effect of fruit and vegetable consumption on plasma concentrations of lipids and antioxidants. *BMJ.* 1997;**314**(7097):1787–91.

**Additional references****Brunner 1997**

Brunner E, White I, Thorogood M, Bristow A, Curle D, Marmot M. Can dietary interventions change diet and cardiovascular risk factors? A meta-analysis of randomized controlled trials. *American Journal of Public Health* 1997;**87**(9):1415–22. [MEDLINE: 97460408]

**Clarke 1997**

Clarke R, Frost C, Collins R, Appleby P, Peto R. Dietary lipids and blood cholesterol: quantitative meta-analysis of metabolic ward studies. *BMJ* 1997;**314**(7074):112–7. [MEDLINE: 97159128]

**Ebrahim 1997**

Ebrahim S, Smith GD. Systematic review of randomised controlled trials of multiple risk factor interventions for preventing coronary heart disease. *BMJ* 1997;**314**(7095): 1666–74. [MEDLINE: 97336545]

**Follmann 1992**

Follmann D, Elliott P, Suh I, Cutler J. Variance imputation for overviews of clinical trials with continuous response. *J Clin Epidemiol* 1992;**45**(7):769–73. [MEDLINE: 92317975]

**Grundy 1982**

Grundy SM, Bilheimer D, Blackburn H, Brown WV, Kwiterovick PO Jr, Mattson F, et al. Rationale of the diet-heart statement of the American Heart Association. Report of the Nutrition Committee. *Circulation* 1982;**65**(4): 839A–854A. [MEDLINE: 82137408]

**Hauck 1991**

Hauck WW, Gilliss CL, Donner A, Gortner S. Randomization by cluster. *Nursing Research* 1991;**40**(6): 356–8. [MEDLINE: 92066521]

**Knopp 1997**

Knopp RH, Walden CE, Retzlaff BM, McCann BS, Dowdy AA, Albers JJ, et al. Long-term cholesterol lowering effects of 4 fat-restricted diets in hypercholesterolemic and combined hyperlipidemic men. The Dietary Alternatives Study. *JAMA* 1997;**278**(18):1509–15. [MEDLINE: 98028601]

**Stephenson 1998**

Stephenson J, Imrie J. Why do we need randomised controlled trials to assess behavioural interventions?. *BMJ* 1998;**316**(7131):611–3. [MEDLINE: 98179423]

**Summerbell 1996**

Summerbell CD. Teaching nutrition to medical doctors: the potential role of the State Registered Dietitian. *J Hum Nutr Dietet* 1996;**9**:349–56.

**Tang 1998**

Tang JL, Armitage JM, Lancaster T, Silagy CA, Fowler GH,

Neil HAW. Systematic review of dietary intervention trials to lower blood total cholesterol in free-living subjects. *BMJ* 1998;**316**(7139):1213–20. [MEDLINE: 98221047]

**Ukoumunne 1999**

Ukoumunne OC, Gulliford MC, Chinn S, Sterne JAC, Burney PGJ. Methods for evaluating area-wide and organisation-based interventions in health and health care: a systematic review. *Health Technol Assess* 1999;**3**(5):iii–92.

\* *Indicates the major publication for the study*

## CHARACTERISTICS OF STUDIES

### Characteristics of included studies [ordered by study ID]

#### Bacon 2002

Methods	<p>RCT Randomisation concealment: NOT CLEAR</p> <p>Follow-up:</p> <p>Dietitian: NOT DONE</p> <p>Counsellor: NOT DONE</p> <p>Blinded assessment: DONE</p> <p>Baseline: DONE</p> <p>Reliable outcomes: DONE</p> <p>Protection against contamination: NOT CLEAR</p> <p>Unit of allocation: participant</p> <p>Unit of analysis: participant</p>	
Participants	<p>N (dietitian) 39</p> <p>N (counsellor) 39</p> <p>Inclusion criteria: caucasian, female, age 30-45y, bmi &gt; or = 30, non-smoker, not pregnant, intending to get pregnant, or lactating; practicing birth control if appropriate, chronic dieters, no recent MI, no active neoplasms, no diabetes, no cerebrovascular or renal disease. Exclusion criteria: weight loss drugs.</p> <p>Baseline blood cholesterol: Dt 5.19 Cs 5.19 mmol/l</p> <p>Setting: General population</p> <p>Country: USA</p>	
Interventions	<p>The study aim was to evaluate the effects of a 'health centred' non-diet wellness program and compare this program to a traditional 'weight-loss centred' diet program. The aim of the dietary interventions was to reduce energy and fat.</p> <p>Dietitian: 24 group sessions each of 90 minutes</p> <p>Counsellor: 24 group sessions each of 90 minutes</p> <p>Both were given a manual</p> <p>No lipid lowering drugs documented.</p> <p>Study duration: 52 weeks</p>	
Outcomes	<p>Blood cholesterol, LDLc, HDLc, BMI, body weight, blood pressure</p>	
Notes	<p>Authors concluded that a diet approach results in weight loss for those who complete the intervention, while a non-diet approach does not. However a non-diet approach can produce similar improvements in metabolic fitness, psychology and eating behaviour, while at the same time reducing the attrition common in diet programs</p>	
<b><i>Risk of bias</i></b>		
<b>Item</b>	<b>Authors' judgement</b>	<b>Description</b>
Allocation concealment?	Unclear	B - Unclear

**Barratt 1994**

Methods	RCT Randomisation concealment: NOT CLEAR Follow-up: Dietitian: NOT DONE Self-help: NOT DONE Blinded assessment: DONE Baseline: NOT DONE Reliable outcomes: DONE Protection against contamination: NOT DONE Unit of allocation: participant Unit of analysis: participant	
Participants	N (dietitian) 114 N (self-help methods) 310 Inclusion criteria: blood cholesterol 5.2mmol/l or above. Exclusion criteria: blood pressure above 140/90 mmHg Baseline blood cholesterol: Dt 6.2; SH 6.0 mmol/L Setting: Workplace Country: Australia	
Interventions	The study aim was to examine the feasibility of conducting a large work-site cholesterol screening project and to evaluate by randomised controlled trial two dietary interventions to lower cholesterol. The aim of the dietary interventions was to reduce total and saturated fat and increase fibre intake. 1. Dietitian-led nutrition course (five 1-hour sessions) included demonstrations and discussions 2. Self-help package (workbook with similar education content to nutrition course and quizzes, shopping guides, video and recipes) Other interventions: diet alone No lipid lowering drugs documented Duration of study: 26 weeks	
Outcomes	Blood cholesterol, HDLc, body weight	
Notes	Authors concluded that there was no benefit from interventions in reducing blood cholesterol. Strategies are required to maintain high ongoing participation rates	
<b><i>Risk of bias</i></b>		
<b>Item</b>	<b>Authors' judgement</b>	<b>Description</b>
Allocation concealment?	Unclear	B - Unclear

**Caggiula 1996**

Methods	<p>RCT Randomisation concealment: NOT CLEAR</p> <p>Follow-up:</p> <p>Dietitian: NOT CLEAR</p> <p>Doctor: NOT CLEAR</p> <p>Blinded assessment: DONE</p> <p>Baseline: NOT CLEAR</p> <p>Reliable outcomes: DONE</p> <p>Protection against contamination: DONE</p> <p>Unit of allocation: physician practices</p> <p>Unit of analysis: participants</p>	
Participants	<p>N (dietitian) 169</p> <p>N (physician and office personnel) 262</p> <p>Inclusion criteria: treatment indicated by the National Cholesterol Education Program Adult Treatment Panel I algorithm</p> <p>Baseline blood cholesterol: DT 6.8; Dr 7.0mmol/L</p> <p>Setting: General practice</p> <p>Country: USA</p>	
Interventions	<p>The study aim was to test the feasibility of cholesterol lowering in physician office practices using NCEP Adult treatment Panel I guidelines.</p> <p>The aim of the dietary interventions was to reduce total and saturated fat and dietary cholesterol.</p> <p>1. Nutritionist at Nutrition centre (3 visits). One visit to physician and office personnel who did not give any dietary advice.</p> <p>2. Physicians and their office personnel (1 visit). Physicians and their office personnel had a 1-day training seminar on diet therapy.</p> <p>Other interventions: diet alone</p> <p>Participants taking lipid lowering medication were analysed separately and were excluded from this review.</p> <p>Duration of study: 9 weeks</p>	
Outcomes	<p>Blood cholesterol, patient satisfaction</p>	
Notes	<p>Baseline values were used at follow-up for subjects who did not attend.</p> <p>Authors concluded that the impact of nutrition intervention delivered through physician offices on blood cholesterol was less than clinically desirable</p>	
<b><i>Risk of bias</i></b>		
<b>Item</b>	<b>Authors' judgement</b>	<b>Description</b>
Allocation concealment?	Unclear	B - Unclear

**Dyson 1997**

Methods	RCT Randomisation concealment: NOT CLEAR Follow-up: Dietitian: DONE Self-help: DONE Blinded assessment: DONE Baseline: DONE Reliable outcomes: DONE Protection against contamination: NOT DONE Unit of allocation: participant Unit of analysis: participant	
Participants	N (dietitian) 111 N (self-help) 116 Inclusion criteria: self-referred subjects with fasting plasma glucose (5.5 to 7.7 mmol/l) Baseline blood cholesterol: Dt 5.0; SH 4.9 mmol/L Setting: Clinic Country: England & France	
Interventions	The study aim was to study the effects of both life-style changes and sulfonylurea therapy in a factorial two-by-two design. The aim of the dietary interventions was to reduce fat and increase fibre. 1. Dietitian: 3 monthly individual consultations 2. Self-help: basic advice from written literature handed out by physician and physician advised weight loss if necessary Other interventions: physical activity (both groups) No lipid lowering drugs documented Study duration: 52 weeks	
Outcomes	Body weight, blood pressure, blood cholesterol, LDLc, HDLc	
Notes	Authors concluded that healthy-living advice from a dietitian was no more successful than basic advice in the form of a leaflet on body weight or glycaemia	
<b><i>Risk of bias</i></b>		
<b>Item</b>	<b>Authors' judgement</b>	<b>Description</b>
Allocation concealment?	Unclear	B - Unclear

**Foreyt 1979**

Methods	<p>RCT Randomisation concealment: NOT CLEAR</p> <p>Follow-up:</p> <p>Dietitian: DONE</p> <p>Self-help: NOT DONE</p> <p>Blinded assessment: DONE</p> <p>Baseline: DONE</p> <p>Reliable outcomes: DONE</p> <p>Protection against contamination: DONE</p> <p>Unit of allocation: participant</p> <p>Unit of analysis: participant</p>	
Participants	<p>N (dietitian) 76</p> <p>N (self-help) 91</p> <p>Volunteers recruited by newspaper articles and workshops.</p> <p>Inclusion criteria: lipid levels within the average range for the American population.</p> <p>Baseline blood cholesterol: Dt 5.4; SH 5.4 mmol/L</p> <p>Setting: Diet modification clinic</p> <p>Country: USA</p>	
Interventions	<p>The study aim was to compare the effectiveness of three intervention programmes for reducing plasma cholesterol and triglyceride in free-living individuals with average levels of cholesterol.</p> <p>The aim of the dietary interventions was to reduce total and saturated fat and increase polyunsaturated fat and fibre.</p> <p>1. Dietitian: nutrition education and behaviour therapy (17 x 60 minute group sessions)</p> <p>2. Self-help: given Help Your Heart Eating Plan and were allowed to telephone a dietitian.</p> <p>Other interventions: diet alone</p> <p>No lipid lowering medication</p> <p>Study duration: 52 weeks</p>	
Outcomes	<p>Blood cholesterol, blood pressure, body weight.</p>	
Notes	<p>Authors concluded that individuals with average plasma cholesterol values who receive behavioural advice can achieve modest reduction in cholesterol for up to 6 months. However, they did not maintain the reduction at one year</p>	
<b><i>Risk of bias</i></b>		
<b>Item</b>	<b>Authors' judgement</b>	<b>Description</b>
Allocation concealment?	Unclear	B - Unclear



**Gosselin 1996**

Methods	<p>RCT Randomisation concealment: NOT CLEAR</p> <p>Follow-up:</p> <p>Dietitian: NOT DONE</p> <p>Doctor: NOT DONE</p> <p>Blinded assessment: DONE</p> <p>Baseline: DONE</p> <p>Reliable outcomes: DONE</p> <p>Protection against contamination: DONE</p> <p>Unit of allocation: participant</p> <p>Unit of analysis: participant</p>	
Participants	<p>135 male and female patients</p> <p>Inclusion criteria: LDL in the range 3.0-7.0 for age 20-29 years and 3.4-7.0 for people aged 30 or more years.</p> <p>Exclusion criteria: BMI &gt; 35, pregnancy, secondary hypercholesterolaemia, triglyceride &gt; 4.5mmol/L, myocardial infarction, major surgery in last 3 months, on a diet for other reasons.</p> <p>Baseline blood cholesterol: Dt 6.4; Dr 6.3 mmol/L</p> <p>Setting: General practice</p> <p>Country: Canada</p>	
Interventions	<p>The study aim was to compare the efficacy of brief dietary intervention by family physician in their daily practice and in group sessions to standard dietetic treatment in mild to moderate hypercholesterolaemia. The aim of the dietary interventions was to reduce total and saturated fat and dietary cholesterol.</p> <p>1. Dietitian: 3 individual appointments (total time 85 minutes)</p> <p>2. Doctor: 3 individual appointments (total time 60 minutes)</p> <p>Other interventions: diet alone</p> <p>No lipid lowering medication</p> <p>Study duration: 26 weeks</p>	
Outcomes	<p>Blood cholesterol, LDLc, HDLc, body weight</p>	
Notes	<p>Authors concluded that the standard dietetic approach was better in correcting the lipid profile of subjects with a mild or moderate hypercholesterolaemia</p>	
<b><i>Risk of bias</i></b>		
<b>Item</b>	<b>Authors' judgement</b>	<b>Description</b>
Allocation concealment?	Unclear	B - Unclear

**Heller 1989**

Methods	RCT Randomisation concealment: NOT CLEAR Follow-up: Dietitian: NOT DONE Self-help: NOT DONE Blinded assessment: DONE Baseline: NOT DONE Reliable outcomes: DONE Protection against contamination: NOT DONE Unit of allocation: participant Unit of analysis: participant	
Participants	N (dietitian) 31 N (self-help) 28 Inclusion criteria: peripheral vascular disease and blood cholesterol < 9mmol/L Baseline blood cholesterol: Dt 7.0; SH 6.6 mmol/L Setting: Vascular Clinic Country: Australia	
Interventions	The study aim was to compare dietary advice from a dietitian with that provided by a leaflet in their abilities to produce reductions in blood cholesterol of patients with peripheral vascular disease. The aim of the dietary interventions was not specified but the general aim was to reduce blood cholesterol 1. Dietitian: 2 individual consultations 2. Self-help: diet fact sheet that was handed out by clinic nurse with encouragement Other interventions: diet alone No lipid lowering medication Study duration: 13 weeks	
Outcomes	Blood cholesterol, HDLc	
Notes	Authors concluded that individual advice which is provided by a dietitian is more successful in leading to a reduction in blood cholesterol levels than is the administration of a diet fact sheet	
<b><i>Risk of bias</i></b>		
<b>Item</b>	<b>Authors' judgement</b>	<b>Description</b>
Allocation concealment?	Unclear	B - Unclear

## Luepker 1978

Methods	<p>RCT Randomisation concealment: NOT CLEAR</p> <p>Follow-up:</p> <p>Dietitian: DONE</p> <p>Doctor: DONE</p> <p>Blinded assessment: DONE</p> <p>Baseline: DONE</p> <p>Reliable outcomes: DONE</p> <p>Protection against contamination: DONE</p> <p>Unit of allocation: participant</p> <p>Unit of analysis: participant</p>	
Participants	<p>N (nutritionist) 37</p> <p>N (doctor) 38</p> <p>Inclusion criteria: type II hyperlipoproteinaemia</p> <p>Exclusion criteria: cardiovascular disease, normal cholesterol at second screening, secondary hyperlipoproteinaemia</p> <p>Baseline blood cholesterol: Dt 7.5; Dr 7.7 mmol/L</p> <p>Setting: Workplace</p> <p>Country: USA</p>	
Interventions	<p>The aim of the study was to determine how a sizeable healthy working population with hypercholesterolaemia can be most effectively identified and treated.</p> <p>The aim of the dietary interventions was to reduce saturated fat and dietary cholesterol and increase polyunsaturated fat.</p> <p>1. Dietitian: 4 visits (individual and group sessions). Employees also saw the physician (who did not give dietary advice).</p> <p>2. Doctor: referred to private physician who was given participants' blood values and information about dietary management</p> <p>Other interventions: diet alone</p> <p>No lipid lowering medication for first 6 weeks</p> <p>Study duration: 6 weeks</p>	
Outcomes	<p>Blood cholesterol, relative weight</p>	
Notes	<p>Authors concluded that specific treatment by lipid clinic or by private physician can effectively decrease fasting cholesterol levels in apparently healthy subjects</p>	
<b><i>Risk of bias</i></b>		
<b>Item</b>	<b>Authors' judgement</b>	<b>Description</b>
Allocation concealment?	Unclear	B - Unclear

Neil 1995

Methods	<p>RCT Randomisation concealment: NOT CLEAR</p> <p>Follow-up:</p> <p>Dietitian: DONE</p> <p>Nurse: DONE</p> <p>Self-help: DONE</p> <p>Blinded assessment: DONE</p> <p>Baseline:</p> <p>Dietitian versus self-help: NOT DONE</p> <p>Dietitian versus nurse: NOT DONE</p> <p>Reliable outcomes: DONE</p> <p>Protection against contamination:</p> <p>Dietitian versus nurse: NOT DONE</p> <p>Dietitian versus self-help: DONE</p> <p>Unit of allocation: participant</p> <p>Unit of analysis: participant</p>	
Participants	<p>N (dietitian) 103</p> <p>N (nurse) 104</p> <p>N (self-help) 102</p> <p>Inclusion criteria: blood cholesterol 6.0-8.5 mmol/l.</p> <p>Exclusion criteria: LDLc &lt; 3.5 mmol/l, triglycerides 5.6mmol/l or above, diabetes, hypothyroidism, renal disease, severe illness in last three months</p> <p>Baseline blood cholesterol: Dt 7.0; Nurse 7.2; SH 7.2 mmol/L</p> <p>Setting: General practice</p> <p>Country: UK</p>	
Interventions	<p>The study aim was to determine the relative efficacy in general practice of dietary advice given by a dietitian, a practice nurse, or a diet leaflet alone in reducing total and LDL cholesterol.</p> <p>The aim of the dietary interventions was to reduce total and saturated fat and dietary cholesterol and increase polyunsaturated and monounsaturated fat and fibre.</p> <ol style="list-style-type: none"> <li>1. Dietitian: 30 minute individual consultation followed by 10 minutes at 8 weeks</li> <li>2. Nurse: 30 minute individual consultation followed by 10 minutes at 8 weeks</li> <li>3. Self-help: leaflet posted to participants</li> </ol> <p>Other interventions: diet alone</p> <p>No lipid lowering medication</p> <p>Study duration: 26 weeks</p>	
Outcomes	<p>Blood cholesterol, LDLc, HDLc, body mass index</p>	
Notes	<p>Baseline values were used at follow-up for subjects who did not attend. Authors concluded that dietary advice is equally effective when given by a dietitian, practice nurse, or a diet leaflet but results in only a small reduction in total and LDL cholesterol</p>	
<b>Risk of bias</b>		
<b>Item</b>	<b>Authors' judgement</b>	<b>Description</b>
Allocation concealment?	Unclear	B - Unclear

**Smith 1976**

Methods	<p>RCT Randomisation concealment: NOT CLEAR</p> <p>Follow-up:</p> <p>Dietitian: DONE</p> <p>Doctor: DONE</p> <p>Blinded assessment: DONE</p> <p>Baseline: DONE</p> <p>Reliable outcomes: DONE</p> <p>Protection against contamination: DONE</p> <p>Unit of allocation: participant</p> <p>Unit of analysis: participant</p>	
Participants	<p>N (nutritionist) 47</p> <p>N (doctor) 53</p> <p>Inclusion criteria: type IV hyperlipidaemia</p> <p>Exclusion criteria: cardiovascular disease, diabetes, hypothyroidism, alcoholism, secondary hyperlipoproteinaemia</p> <p>Baseline blood cholesterol: Dt 6.0; Dr 6.0 mmol/L</p> <p>Setting: Workplace</p> <p>Country: USA</p>	
Interventions	<p>The aim of the study was to investigate how a sizeable population of hyperlipoproteinemia subjects (apparently healthy, relatively young adults) be most effectively and efficiently identified and treated. The aim of the dietary interventions was to reduce saturated fat and dietary cholesterol.</p> <p>1. Dietitian: 4 visits (individual and group sessions). Employees also saw the physician (who did not give dietary advice).</p> <p>2. Doctor: referred to private physician who was given participants blood values and information about dietary management</p> <p>Other interventions: diet alone</p> <p>No lipid lowering medication for first 6 weeks</p> <p>Study duration: 6 weeks</p>	
Outcomes	<p>Blood cholesterol, relative weight</p>	
Notes	<p>Authors concluded that specific treatment by a lipid intervention clinic or physician will markedly decrease blood triglyceride levels in healthy type IV hyperlipoproteinaemic subjects</p>	
<b><i>Risk of bias</i></b>		
<b>Item</b>	<b>Authors' judgement</b>	<b>Description</b>
Allocation concealment?	Unclear	B - Unclear

**Tomson 1995**

Methods	RCT Randomisation concealment: NOT CLEAR Follow-up: Dietitian: DONE Self-help: NOT DONE Blinded assessment: DONE Baseline: DONE Reliable outcomes: DONE Protection against contamination: DONE Unit of allocation: participant Unit of analysis: participant	
Participants	N (dietitian) 47 N (self-help) 45 Inclusion criteria: blood cholesterol 7.0-7.8 mmol/l. Exclusion criteria: hypertension, CHD, diabetes Baseline blood cholesterol: Dt 7.3; SH 7.3 mmol/L Setting: General practice Country: Sweden	
Interventions	The aim of the study was to compare costs and effects of two different intervention strategies for the nonpharmacological treatment of hypercholesterolaemia. The aim of the dietary interventions was to reduce total and saturated fat and dietary cholesterol and increase polyunsaturated fat. 1. Dietitian: 3 visits (1 group session). Also saw general practitioner 2. Self-help: general practitioner posted diet booklet with simple dietary advice Other interventions: diet alone No lipid lowering medication documented Study duration: 52 weeks	
Outcomes	Blood cholesterol, HDLc	
Notes	Authors concluded that because the effect of the two intervention programmes did not differ the low-intensity (self-help) programme is to be preferred from a cost-effectiveness viewpoint	
<b><i>Risk of bias</i></b>		
<b>Item</b>	<b>Authors' judgement</b>	<b>Description</b>
Allocation concealment?	Unclear	B - Unclear

**Wing 1998**

Methods	<p>RCT Randomisation concealment: NOT CLEAR</p> <p>Follow-up:</p> <p>Dietitian: DONE</p> <p>Self-help: NOT DONE</p> <p>Blinded assessment: DONE</p> <p>Baseline: NOT DONE</p> <p>Reliable outcomes: DONE</p> <p>Protection against contamination: NOT DONE</p> <p>Unit of allocation: participant</p> <p>Unit of analysis: participant</p>	
Participants	<p>N (dietitian) 37</p> <p>N (self-help) 40</p> <p>Participants recruited from newspaper advertisements.</p> <p>Inclusion criteria: at least one biological parent with type 2 diabetes, overweight (30-100% of ideal body weight)</p> <p>Exclusion criteria: diabetes</p> <p>Baseline blood cholesterol: Dt 5.2; SH 4.8 mmol/L</p> <p>Setting: Clinic</p> <p>Country: USA</p>	
Interventions	<p>The aim of the study was to assess the effect of lifestyle intervention over 2 years on changes in weight, CHD risk factors, and incidence of diabetes in overweight individuals with a parental history of diabetes. The aim of the dietary interventions was to reduce energy and total fat. intakes.</p> <p>1. Dietitian: 51 group sessions led by a dietitian as part of a multidisciplinary team including a behaviour therapist. Individual consultations were also provided.</p> <p>1. Self-help: copy of the Learn manual, a self-help behavioural manual.</p> <p>Other interventions: diet alone.</p> <p>No lipid lowering medication.</p> <p>Study duration: 104 weeks (2 years).</p>	
Outcomes	<p>Blood cholesterol, LDLc, HDLc, weight, blood pressure</p>	
Notes	<p>Although initially successful, the interventions were not effective in producing long-term changes in behaviour, weight, or physiological parameters</p>	
<b><i>Risk of bias</i></b>		
<b>Item</b>	<b>Authors' judgement</b>	<b>Description</b>
Allocation concealment?	Unclear	B - Unclear

Dt = dietitian, Dr = doctor/physician, SH = self-help resources , Cs= counsellor

### Characteristics of excluded studies *[ordered by study ID]*

Study	Reason for exclusion
Agewall 1993	Drugs: one arm received lipid lowering medication
Agewall 2001	Drugs: one arm received lipid lowering medication Intervention: not dietitian versus other health professional or self-help methods
Agurs 1997	Intervention: not dietitian versus other health professional or self-help methods
Aish 1996	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Allen 1996	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Allison 2000	Drugs: One arm received lipid lowering medication Intervention: not dietitian versus other health professional or self-help methods
Andersen 1985	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Anderson 1990	Intervention: not dietitian versus other health professional or self-help methods
Anderson 1999	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods
Anonymous 1965	Intervention: not dietitian versus other health professional or self-help methods
Anonymous 1991	Randomised controlled trial: no Drugs: one arm received lipid lowering medication Intervention: not dietitian versus other health professional or self-help methods
Appel 1995	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Applegate 1992	Blood cholesterol: not measured at follow-up Intervention: not dietitian versus other health professional or self-help methods
Arntzenius 1985	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods
Avila 1994	Intervention: not dietitian versus other health professional or self-help methods
Bae 1991	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods



(Continued)

Baer 1993	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods
Bakx 1997	Intervention: not dietitian versus other health professional or self-help methods
Baron 1990	Intervention: not dietitian versus other health professional or self-help methods
Baxter 1997	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods
Beckmann 1995	No food provided: no Intervention: not dietitian versus other health professional or self-help methods
Bemelmans 2000	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods
Beresford 1992	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Beresford 1997	Intervention: not dietitian versus other health professional or self-help methods
Bergstrom 1967	Randomised controlled trial: no Blood cholesterol: not measured No food provided: no Study duration: less than 6 weeks Intervention: not dietitian versus other health professional or self-help methods
Bertera 1981	Randomised controlled trial: no Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Bierenbaum 1967	Intervention: not dietitian versus other health professional or self-help methods
Bloemberg 1991	Intervention: not dietitian versus other health professional or self-help methods
Bonk 1975	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods
Bourn 1994	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods
Boyd 1988	Intervention: not dietitian versus other health professional or self-help methods
Boyd 1990	Intervention: not dietitian versus other health professional or self-help methods
Braeckman 1999	Intervention: not dietitian versus other health professional or self-help methods

(Continued)

Brown 1974	Randomised controlled trial: no Drugs: one arm received lipid lowering drugs
Brown 1984	Intervention: not dietitian versus other health professional or self-help methods
Brug 1996	Blood cholesterol: not measured Study duration: less than 6 weeks Intervention: not dietitian versus other health professional or self-help methods
Bruno 1983	Intervention: not dietitian versus other health professional or self-help methods
Brunt 1996	Randomised controlled trial: no Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Buchwald 1996	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Burke 1999	Intervention: not dietitian versus other health professional or self-help methods
Burr 1989	Intervention: not dietitian versus other health professional or self-help methods
Byers 1995	Intervention: not dietitian versus other health professional or self-help methods
Cambien 1981	Intervention: not dietitian versus other health professional or self-help methods
Campbell 1990	Intervention: not dietitian versus other health professional or self-help methods
Campbell 1994	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Carlsson 1997	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Carson 1994	Randomised controlled trial: no Blood cholesterol: not measured Study duration: less than 6 weeks Intervention: not dietitian versus other health professional or self-help methods
Cederholm 1985	Intervention: not dietitian versus other health professional or self-help methods
Chlebowski 1993	Intervention: not dietitian versus other health professional or self-help methods
Clark 1997	Intervention: not dietitian versus other health professional or self-help methods
Cohen 1991	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods

(Continued)

Cousins 1992	Blood cholesterol: not measured
Cox 1996	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Crouch 1986	Intervention: not dietitian versus other health professional or self-help methods
Cupples 1994	Intervention: not dietitian versus other health professional or self-help methods
Curzio 1989	Intervention: not dietitian versus other health professional or self-help methods
Dahl 1995	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods
Dalgard 2001	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
De Busk 1994	Intervention: not dietitian versus other health professional or self-help methods
de Sonnaville 1997	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods
de Waard 1993	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Delahanty 2001	Intervention: not dietitian versus other health professional or self-help methods
Dobs 1994	Intervention: not dietitian versus other health professional or self-help methods
Dodson 1984	No food provided: no Intervention: not dietitian versus other health professional or self-help methods
Dodson 1989	Intervention: not dietitian versus other health professional or self-help methods
Domenech 1995	Randomised controlled trial: no Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Dreon 1998	Intervention: not dietitian versus other health professional or self-help methods
Duff 2000	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Dullaart 1992	Intervention: not dietitian versus other health professional or self-help methods
Dunstan 1997	No food provided: no Intervention: not dietitian versus other health professional or self-help methods

(Continued)

Eastwood 1969	Randomised controlled trial: no No food provided: no Intervention: not dietitian versus other health professional or self-help methods
Edington 1987	Intervention: not dietitian versus other health professional or self-help methods
Ehnholm 1982	Randomised controlled trial: no No food provided: no Intervention: not dietitian versus other health professional or self-help methods
Elmer 1995	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Engblom 1992	No food provided: no Intervention: not dietitian versus other health professional or self-help methods
Eriksson 1999	Intervention: not dietitian versus other health professional or self-help methods
Evans 1996	Intervention: not dietitian versus other health professional or self-help methods
Fagerberg 1998	Drugs: one arm received lipid lowering drugs Intervention: not dietitian versus other health professional or self-help methods
FHS 1994	Intervention: not dietitian versus other health professional or self-help methods
Fitzgerald 1991	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Fletcher 1987	Blood cholesterol: not measured No food provided: no Intervention: not dietitian versus other health professional or self-help methods
Fodor 1991	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods
Fortmann 1993	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods
Franz 1995	Intervention: not dietitian versus other health professional or self-help methods
Fuchs 1993	Blood cholesterol: not measured
Gans 1994	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Gemson 1990	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods

(Continued)

Gentile 1995	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods
Giampaoli 1997	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods
Gillum 1983	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Glasgow 1989	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Glasgow 1992	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Glasgow 1995	Intervention: not dietitian versus other health professional or self-help methods
Glasgow 1996	Intervention: not dietitian versus other health professional or self-help methods
Goble 1997	Intervention: not dietitian versus other health professional or self-help methods
Gomel 1993	Intervention: not dietitian versus other health professional or self-help methods
Grace 1996	Intervention: not dietitian versus other health professional or self-help methods
Greene 1992	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods
Gyntelberg 1981	Intervention: not dietitian versus other health professional or self-help methods
Hakala 1993	Blood cholesterol: not measured No food provided: no Intervention: not dietitian versus other health professional or self-help methods
Hakala 1994	Blood cholesterol: not measured No food provided: no Intervention: not dietitian versus other health professional or self-help methods
Hall 1974	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Hanefeld 1991	Drugs: one arm received lipid lowering medication
Hanlon 1995	Intervention: not dietitian versus other health professional or self-help methods
Hannah 1997	No food provided: no Intervention: not dietitian versus other health professional or self-help methods

(Continued)

Harris 1990	Intervention: not dietitian versus other health professional or self-help methods
Hartman 1997	Intervention: not dietitian versus other health professional or self-help methods
Hartwell 1986	Intervention: not dietitian versus other health professional or self-help methods
Haskell 1988	Drugs: one arm received lipid lowering medication Intervention: not dietitian versus other health professional or self-help methods
Haynes 1984	Intervention: not dietitian versus other health professional or self-help methods
HDFP 1985	Drugs: one arm received lipid lowering medication Intervention: not dietitian versus other health professional or self-help methods
Heber 1992	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods
Hebert 1995	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Heller 1988	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Heller 1993	Intervention: not dietitian versus other health professional or self-help methods
Heller 1994	Intervention: not dietitian versus other health professional or self-help methods
Heller 2001	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Henkin 2000	Intervention: not dietitian versus other health professional or self-help methods
Hitchcock Noel 1998	Intervention: not dietitian versus other health professional or self-help methods
Hjermann 1986	Intervention: not dietitian versus other health professional or self-help methods
Hollis 1984	Randomised controlled trial: no Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Howard 1997	Intervention: not dietitian versus other health professional or self-help methods
HPT 1990	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Hunninghake 1993	Drugs: One arm received lipid lowering medication Intervention: not dietitian versus other health professional or self-help methods

(Continued)

Hyman 1996	Intervention: not dietitian versus other health professional or self-help methods
Hyman 1998	Intervention: not dietitian versus other health professional or self-help methods
Insull 1990	Intervention: not dietitian versus other health professional or self-help methods
Iso 2002	Intervention: not dietitian versus other health professional or self-help methods
Ives 1993	Intervention: not dietitian versus other health professional or self-help methods
Jaax 1997	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Jalkanen 1991	Intervention: not dietitian versus other health professional or self-help methods
Jeffery 1983	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Johnston 1995	Intervention: not dietitian versus other health professional or self-help methods
Jolly 1999	Intervention: not dietitian versus other health professional or self-help methods
Jones 1979	Intervention: not dietitian versus other health professional or self-help methods
Jones 1986	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Jones 1996	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Jula 1990	No food provided: no Intervention: not dietitian versus other health professional or self-help methods
Kaplan 1985	Intervention: not dietitian versus other health professional or self-help methods
Karvetti 1981	No food provided: participants were in-patients for first 2 weeks Intervention: not dietitian versus other health professional or self-help methods
Karvetti 1992	Intervention: not dietitian versus other health professional or self-help methods
Katzel 1995	No food provided: no Intervention: not dietitian versus other health professional or self-help methods
Kelley 1994	Randomised controlled trial: no No food provided: oats provided Study duration: less than 6 weeks Intervention: not dietitian versus other health professional or self-help methods

(Continued)

Ketola 2001	Intervention: not dietitian versus other health professional or self-help methods
Keyserling 1997	Intervention: not dietitian versus other health professional or self-help methods
Kirkman 1994	Intervention: not dietitian versus other health professional or self-help methods
Knutsen 1991	Intervention: not dietitian versus other health professional or self-help methods
Koopman 1990	Intervention: not dietitian versus other health professional or self-help methods
Korhonen 1983	Blood cholesterol: not measured Clinical setting: no education given to in-patients
Korhonen 1987	Intervention: not dietitian versus other health professional or self-help methods
Krachler 1997	Intervention: not dietitian versus other health professional or self-help methods
Kraemer 1997	No food provided: no Intervention: not dietitian versus other health professional or self-help methods
Kreuter 1996	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Kumanyika 1999	Intervention: not dietitian versus other health professional or self-help methods
Kumpusalo 1996	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods
Lackey 1992	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods
Laitinen 1993	Intervention: not dietitian versus other health professional or self-help methods
Lauritzen 1995	Intervention: not dietitian versus other health professional or self-help methods
Le Lorier 1978	Randomised controlled trial: no Drugs: one arm received lipid lowering medication Intervention: not dietitian versus other health professional or self-help methods
Leduc 1994	Intervention: not dietitian versus other health professional or self-help methods
Lee 1997	Dietary advice: none given Intervention: not dietitian versus other health professional or self-help methods
Leenen 1993	Randomised controlled trial: no No food provided: no Intervention: not dietitian versus other health professional or self-help methods



(Continued)

Leren 1970	No food provided: no Intervention: not dietitian versus other health professional or self-help methods
Lidell 1996	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Lindholm 1995	Intervention: not dietitian versus other health professional or self-help methods
Lisspers 1999	Blood cholesterol: not measured Clinical setting: no No food provided: no Intervention: not dietitian versus other health professional or self-help methods
Little 1990	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods
Lovibond 1986	Intervention: not dietitian versus other health professional or self-help methods
Luepker 1994	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods
Lyons 1997	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
MacLennan 1995	Intervention: not dietitian versus other health professional or self-help methods
MacMahon 1985	Drugs: one arm received lipid lowering medication Intervention: not dietitian versus other health professional or self-help methods
Manning 1995	Intervention: not dietitian versus other health professional or self-help methods
Margetts 1985	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Marniemi 1990	Intervention: not dietitian versus other health professional or self-help methods
Masley 2001	Intervention: not dietitian versus other health professional or self-help methods
Mazzuca 1986	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
McCance 1985	Intervention: not dietitian versus other health professional or self-help methods
McCann 1997	Intervention: not dietitian versus other health professional or self-help methods
McGowan 1994	Intervention: not dietitian versus other health professional or self-help methods

(Continued)

McNabb 1997	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Meland 1997	Intervention: not dietitian versus other health professional or self-help methods
Miettinen 1972	Randomised controlled trial: no No food provided: no Intervention: not dietitian versus other health professional or self-help methods
Miettinen 1985	Drugs: one arm received lipid lowering medication Intervention: not dietitian versus other health professional or self-help methods
Milkereit 1992	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Miller 2002	Intervention: not dietitian versus other health professional or self-help methods
Miracle 1996	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods
Mishra 1994	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods
Mojonnier 1980	Intervention: not dietitian versus other health professional or self-help methods
Mori 1994	No food provided: Fish or fish oil capsules provided Intervention: not dietitian versus other health professional or self-help methods
Morrison 1951	Dietary advice: included vitamin supplements Intervention: not dietitian versus other health professional or self-help methods
MRFIT 1982	Intervention: not dietitian versus other health professional or self-help methods
Nader 1989	Intervention: not dietitian versus other health professional or self-help methods
Naslund 1996	Intervention: not dietitian versus other health professional or self-help methods
Niebauer 1995a	Randomised controlled trial: no No food provided: no Intervention: not dietitian versus other health professional or self-help methods
Niebauer 1995b	No food provided: no Intervention: not dietitian versus other health professional or self-help methods
Nikolaus 1991	Clinical setting: no on metabolic ward for 3 weeks No food provided: no Intervention: not dietitian versus other health professional or self-help methods

(Continued)

Nilsson 2001	Intervention: not dietitian versus other health professional or self-help methods
Nisbeth 2000	Intervention: not dietitian versus other health professional or self-help methods
Nordevang 1990	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
O'Loughlin 1995	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods
Ockene 1995	Intervention: not dietitian versus other health professional or self-help methods
ODES 1993	Intervention: not dietitian versus other health professional or self-help methods
Oldenburg 1985	Blood cholesterol: not measured No food provided: no Intervention: not dietitian versus other health professional or self-help methods
Oldenburg 1995	Intervention: not dietitian versus other health professional or self-help methods
Oldroyd 2001	Intervention: not dietitian versus other health professional or self-help methods
Ornish 1990	No food provided: no Intervention: not dietitian versus other health professional or self-help methods
Ostwald 1989	No food provided: no Intervention: not dietitian versus other health professional or self-help methods
Oxcheck 1995	Intervention: not dietitian versus other health professional or self-help methods
Pace 1983	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Page 1992	Intervention: not dietitian versus other health professional or self-help methods
Pan 1997	Blood cholesterol: not measured at follow-up Intervention: not dietitian versus other health professional or self-help methods
Perry 1997	Intervention: not dietitian versus other health professional or self-help methods
Persson 1996	Drugs: one arm received lipid lowering medication Intervention: not dietitian versus other health professional or self-help methods
Pilkington 1960	Drugs: one arm received lipid lowering medication Intervention: not dietitian versus other health professional or self-help methods
Pontes 1990	Intervention: not dietitian versus other health professional or self-help methods

(Continued)

Pritchard 1997	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Pritchard 1999	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Puddey 1992	Intervention: not dietitian versus other health professional or self-help methods
Puska 1983	No food provided: no Intervention: not dietitian versus other health professional or self-help methods
Puska 1985	Intervention: not dietitian versus other health professional or self-help methods
Rabkin 1983	Intervention: not dietitian versus other health professional or self-help methods
Ramsay 1978	Blood cholesterol: not measured
Redman 1995	Intervention: not dietitian versus other health professional or self-help methods
Rhodes 1996	Intervention: not dietitian versus other health professional or self-help methods
Ribeiro 1984	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods
Rich 1996	No food provided: no Intervention: not dietitian versus other health professional or self-help methods
Ridgeway 1999	Intervention: not dietitian versus other health professional or self-help methods
Roderick 1997	Intervention: not dietitian versus other health professional or self-help methods
Rose 1992	Randomised controlled trial: no Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Sacks 1984	Randomised controlled trial: no Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Salkeld 1997	Intervention: not dietitian versus other health professional or self-help methods
Sarkkinen 1994	No food provided: fats provided Intervention: not dietitian versus other health professional or self-help methods
Schectman 1996	Drugs: one arm received lipid lowering drugs

(Continued)

Schlierf 1988	Randomised controlled trial: no Clinical setting: no stayed on a metabolic ward for first 3 weeks No food provided: no Intervention: not dietitian versus other health professional or self-help methods
Schuster 1995	Randomised controlled trial: no Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Sciarrone 1990	Intervention: not dietitian versus other health professional or self-help methods
Shenberger 1992	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods
SimkinSilverman 1995	Intervention: not dietitian versus other health professional or self-help methods
Simon 1997	Intervention: not dietitian versus other health professional or self-help methods
Singh 1990	Intervention: not dietitian versus other health professional or self-help methods
Singh 1990 (2)	Intervention: not dietitian versus other health professional or self-help methods
Singh 1995	Intervention: not dietitian versus other health professional or self-help methods
Singh 1997	Intervention: not dietitian versus other health professional or self-help methods
Sivarajan 1983	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Sjostrom 1992	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods
Smith 1991	Randomised controlled trial: no Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Sopko 1985	No food provided: no Intervention: not dietitian versus other health professional or self-help methods
Sorensen 1992	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Sorensen 1998	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Stamler 1987	Intervention: not dietitian versus other health professional or self-help methods

(Continued)

Stamler 1989	Intervention: not dietitian versus other health professional or self-help methods
Stefanick 1998	Intervention: not dietitian versus other health professional or self-help methods
Step toe 1999	Intervention: not dietitian versus other health professional or self-help methods
Step toe 2001	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Stevens 1993	Blood cholesterol: not measured
Stolley 1997	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Stone 1963	Intervention: not dietitian versus other health professional or self-help methods
Svendsen 1994	No food provided: formula diet Intervention: not dietitian versus other health professional or self-help methods
Taylor 1991	Intervention: not dietitian versus other health professional or self-help methods
Thoresen 1982	Intervention: not dietitian versus other health professional or self-help methods
Timlin 2002	Randomised controlled trial: no Blood cholesterol: not measured
Traeden 1998	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods
Travers 1992	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Trento 2001	Intervention: not dietitian versus other health professional or self-help methods
Tuomilehto 1985	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods
Turnin 1992	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Uusitupa 1994	No food provided: Fats provided Intervention: not dietitian versus other health professional or self-help methods
Vale 2002	Intervention: not dietitian versus other health professional or self-help methods
van Beurden 1990	Randomised controlled trial: no Intervention: not dietitian versus other health professional or self-help methods

(Continued)

van Elderen 1994	Randomised controlled trial: no Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Vanninen 1992	Intervention: not dietitian versus other health professional or self-help methods
Walden 1991	Intervention: not dietitian versus other health professional or self-help methods
Walden 1997	Intervention: not dietitian versus other health professional or self-help methods
Wass 1981	Intervention: not dietitian versus other health professional or self-help methods
Watts 1994	No food provided: no Intervention: not dietitian versus other health professional or self-help methods
WHISG 1998	Intervention: not dietitian versus other health professional or self-help methods
WHO Trial 1980	Intervention: not dietitian versus other health professional or self-help methods
Wierenga 1994	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Wilhelmsen 1986	Drugs: one arm received lipid lowering medication Intervention: not dietitian versus other health professional or self-help methods
Winett 1991	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Wolmarans 1991	No food provided: no Intervention: not dietitian versus other health professional or self-help methods
Wood 1988	Intervention: not dietitian versus other health professional or self-help methods
Wood 1991	Intervention: not dietitian versus other health professional or self-help methods
Woodhill 1978	Intervention: not dietitian versus other health professional or self-help methods
Woollard 1995	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Wylie Rosett 1993	Blood cholesterol: not measured Intervention: not dietitian versus other health professional or self-help methods
Wylie Rosett 1994	Intervention: not dietitian versus other health professional or self-help methods
Wylie-Rosett 2001	Intervention: not dietitian versus other health professional or self-help methods

*(Continued)*

Yanek 2001	Intervention: not dietitian versus other health professional or self-help methods
Zino 1997	Intervention: not dietitian versus other health professional or self-help methods



## DATA AND ANALYSES

### Comparison 1. Dietitian compared with other health professional or self-help resources

Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
1 Blood cholesterol at final visit	12		Mean Difference (IV, Random, 95% CI)	Subtotals only
1.1 Dietitian versus doctor	4	664	Mean Difference (IV, Random, 95% CI)	-0.25 [-0.37, -0.12]
1.2 Dietitian versus nurse	1	207	Mean Difference (IV, Random, 95% CI)	0.08 [-0.11, 0.27]
1.3 Dietitian versus self-help resources	7	973	Mean Difference (IV, Random, 95% CI)	-0.10 [-0.22, 0.03]
1.4 Dietitian versus counsellor	1	52	Mean Difference (IV, Random, 95% CI)	-0.03 [-0.46, 0.40]
2 LDLcholesterol at final visit	5		Mean Difference (IV, Random, 95% CI)	Subtotals only
2.1 Dietitian versus doctor	1	74	Mean Difference (IV, Random, 95% CI)	-0.2 [-0.54, 0.14]
2.2 Dietitian versus nurse	1	207	Mean Difference (IV, Random, 95% CI)	0.07 [-0.19, 0.33]
2.3 Dietitian versus self-help resources	3	467	Mean Difference (IV, Random, 95% CI)	0.03 [-0.14, 0.19]
2.4 Dietitian versus counsellor	1	52	Mean Difference (IV, Random, 95% CI)	-0.08 [-0.45, 0.29]
3 HDLcholesterol at final visit	7		Mean Difference (IV, Random, 95% CI)	Subtotals only
3.1 Dietitian versus doctor	1	74	Mean Difference (IV, Random, 95% CI)	-0.02 [-0.13, 0.09]
3.2 Dietitian versus nurse	1	207	Mean Difference (IV, Random, 95% CI)	-0.06 [-0.11, -0.01]
3.3 Dietitian versus self-help resources	5	779	Mean Difference (IV, Random, 95% CI)	-0.02 [-0.05, 0.01]
3.4 Dietitian versus counsellor	1	52	Mean Difference (IV, Random, 95% CI)	0.03 [-0.12, 0.18]
4 Diastolic blood pressure at final visit	4		Mean Difference (IV, Random, 95% CI)	Subtotals only
4.1 Dietitian versus self-help resources	3	382	Mean Difference (IV, Random, 95% CI)	0.30 [-1.39, 1.98]
4.2 Dietitian versus counsellor	1	52	Mean Difference (IV, Random, 95% CI)	-1.3 [-5.90, 3.30]
5 Systolic blood pressure at final visit	4		Mean Difference (IV, Random, 95% CI)	Subtotals only
5.1 Dietitian versus self-help resources	3	381	Mean Difference (IV, Random, 95% CI)	-1.77 [-4.40, 0.86]
5.2 Dietitian versus counsellor	1	52	Mean Difference (IV, Random, 95% CI)	-3.70 [-10.58, 3.18]
6 Body weight (kg) at final visit	5		Mean Difference (IV, Random, 95% CI)	Subtotals only
6.1 Dietitian versus self-help resources	4	588	Mean Difference (IV, Random, 95% CI)	-0.42 [-1.02, 0.17]
6.2 Dietitian versus counsellor	1	52	Mean Difference (IV, Random, 95% CI)	-5.80 [-8.91, -2.69]
7 Blood cholesterol at one year	5	502	Mean Difference (IV, Random, 95% CI)	-0.04 [-0.18, 0.09]
7.1 Dietitian versus doctor	0	0	Mean Difference (IV, Random, 95% CI)	Not estimable
7.2 Dietitian versus nurse	0	0	Mean Difference (IV, Random, 95% CI)	Not estimable
7.3 Dietitian versus self-help resources	4	450	Mean Difference (IV, Random, 95% CI)	-0.05 [-0.18, 0.09]
7.4 Dietitian versus counsellor	1	52	Mean Difference (IV, Random, 95% CI)	-0.03 [-0.46, 0.40]
8 Blood cholesterol up to 6 months	10		Mean Difference (IV, Random, 95% CI)	Subtotals only
8.1 Dietitian versus doctor	4	664	Mean Difference (IV, Random, 95% CI)	-0.25 [-0.37, -0.12]
8.2 Dietitian versus nurse	1	207	Mean Difference (IV, Random, 95% CI)	0.08 [-0.11, 0.27]

8.3 Dietitian versus self-help resources	5	702	Mean Difference (IV, Random, 95% CI)	-0.25 [-0.48, -0.02]
8.4 Dietitian versus counsellor	1	52	Mean Difference (IV, Random, 95% CI)	-0.37 [-0.82, 0.08]

## Comparison 2. Dietitian compared with doctor, nurse, counsellor and self-help resources

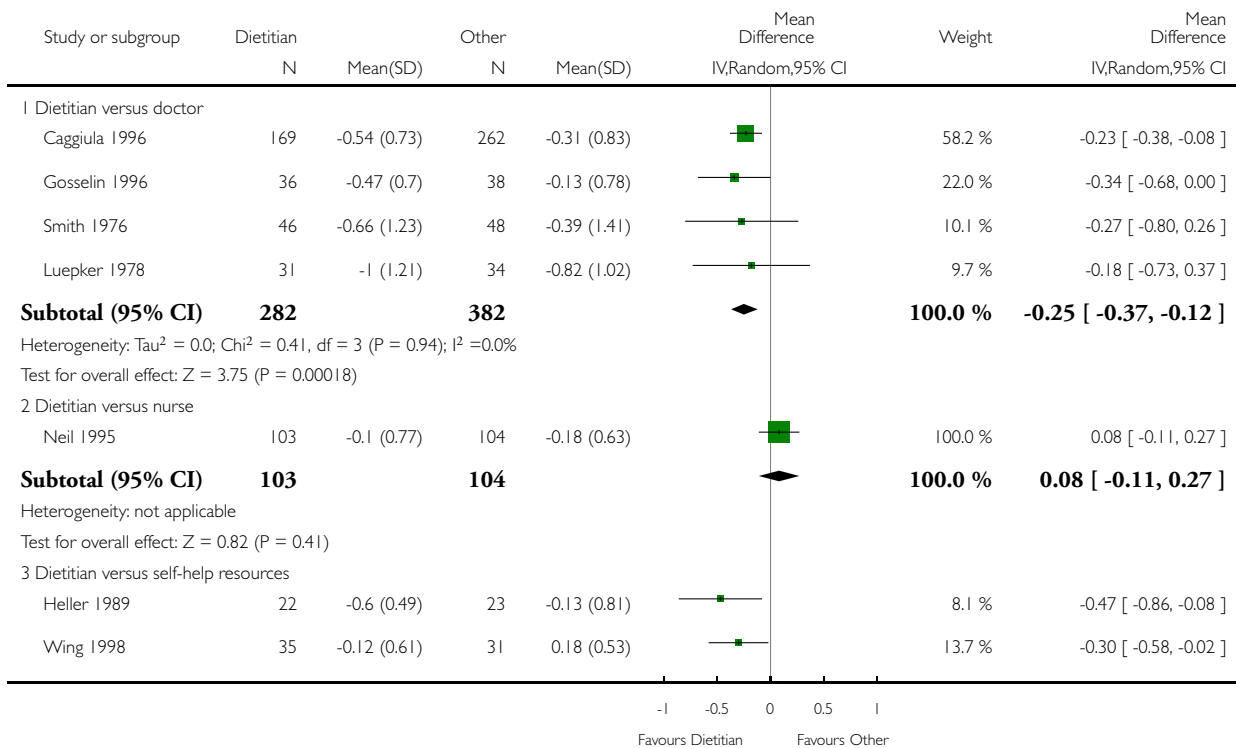
Outcome or subgroup title	No. of studies	No. of participants	Statistical method	Effect size
1 Blood cholesterol at final visit	12	1689	Mean Difference (IV, Random, 95% CI)	-0.14 [-0.23, -0.05]

### Analysis 1.1. Comparison 1 Dietitian compared with other health professional or self-help resources, Outcome 1 Blood cholesterol at final visit.

Review: Dietary advice given by a dietitian versus other health professional or self-help resources to reduce blood cholesterol

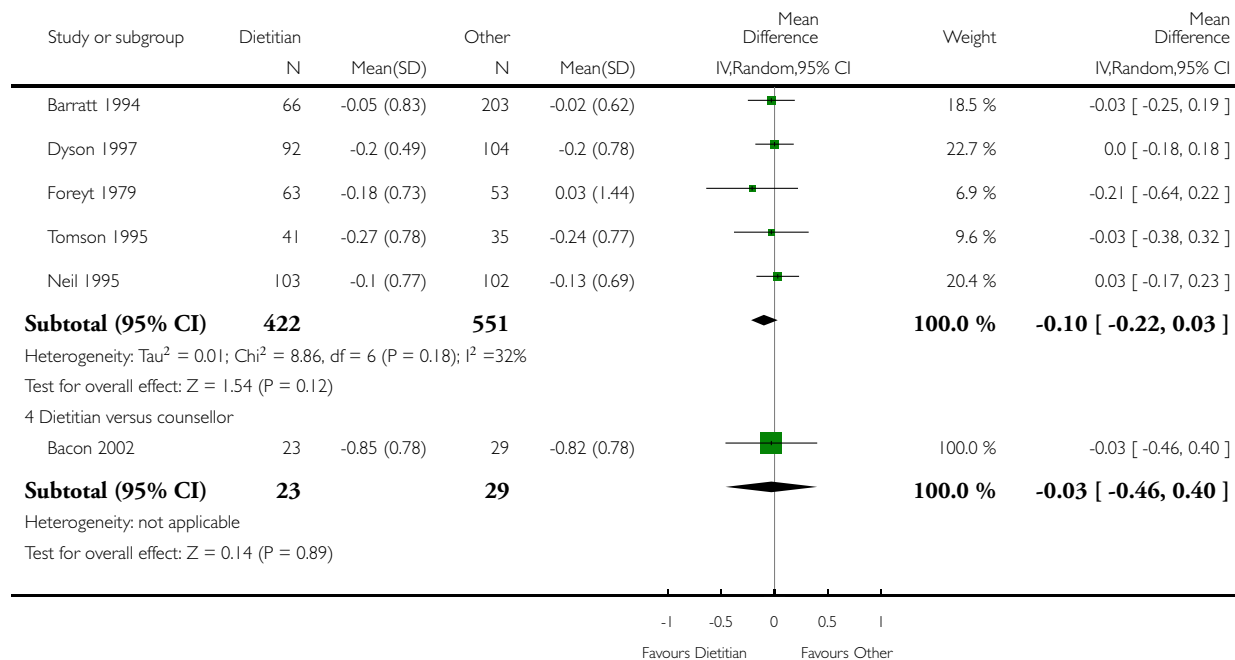
Comparison: 1 Dietitian compared with other health professional or self-help resources

Outcome: 1 Blood cholesterol at final visit



(Continued ...)

(... Continued)

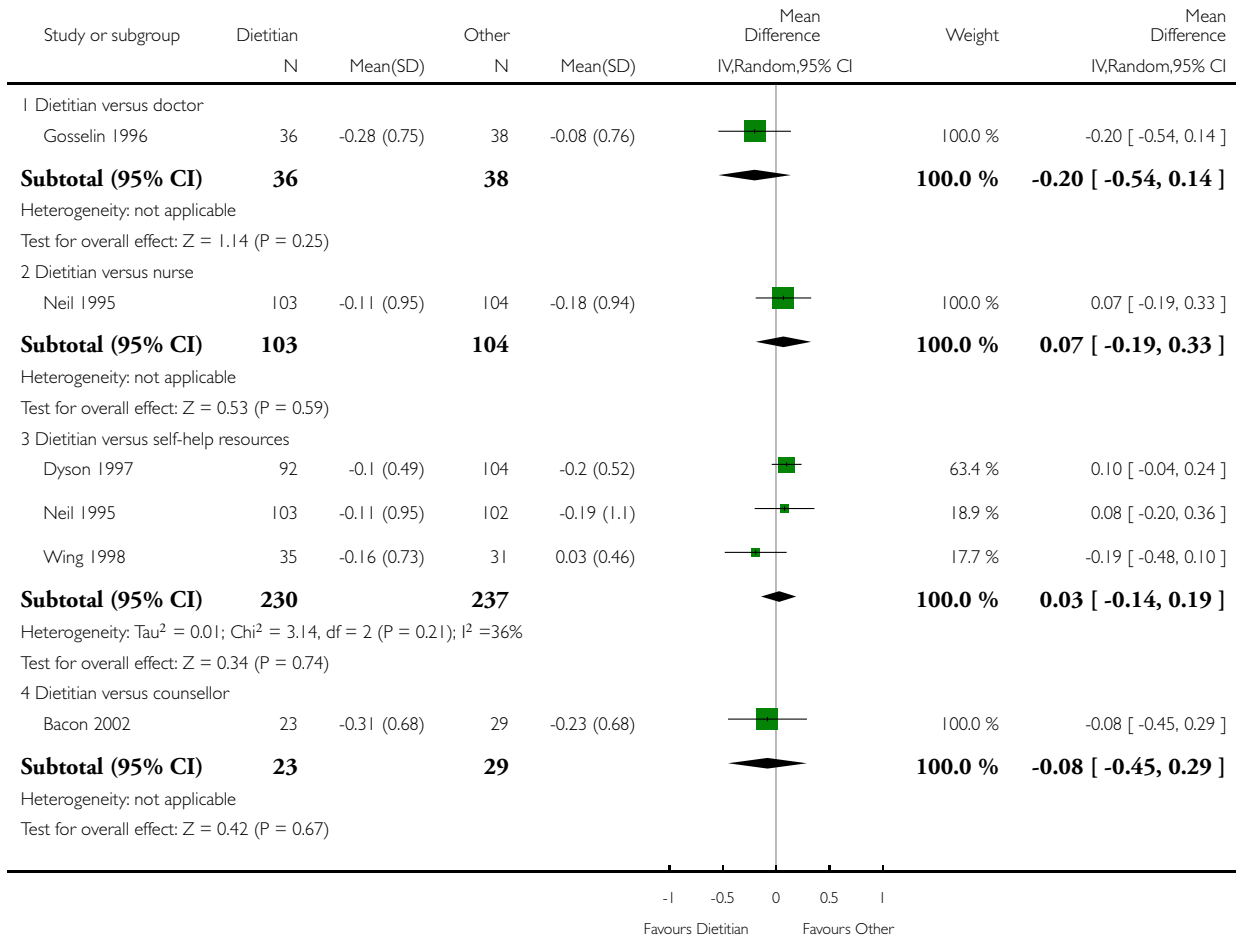


**Analysis 1.2. Comparison 1 Dietitian compared with other health professional or self-help resources, Outcome 2 LDLcholesterol at final visit.**

Review: Dietary advice given by a dietitian versus other health professional or self-help resources to reduce blood cholesterol

Comparison: 1 Dietitian compared with other health professional or self-help resources

Outcome: 2 LDLcholesterol at final visit

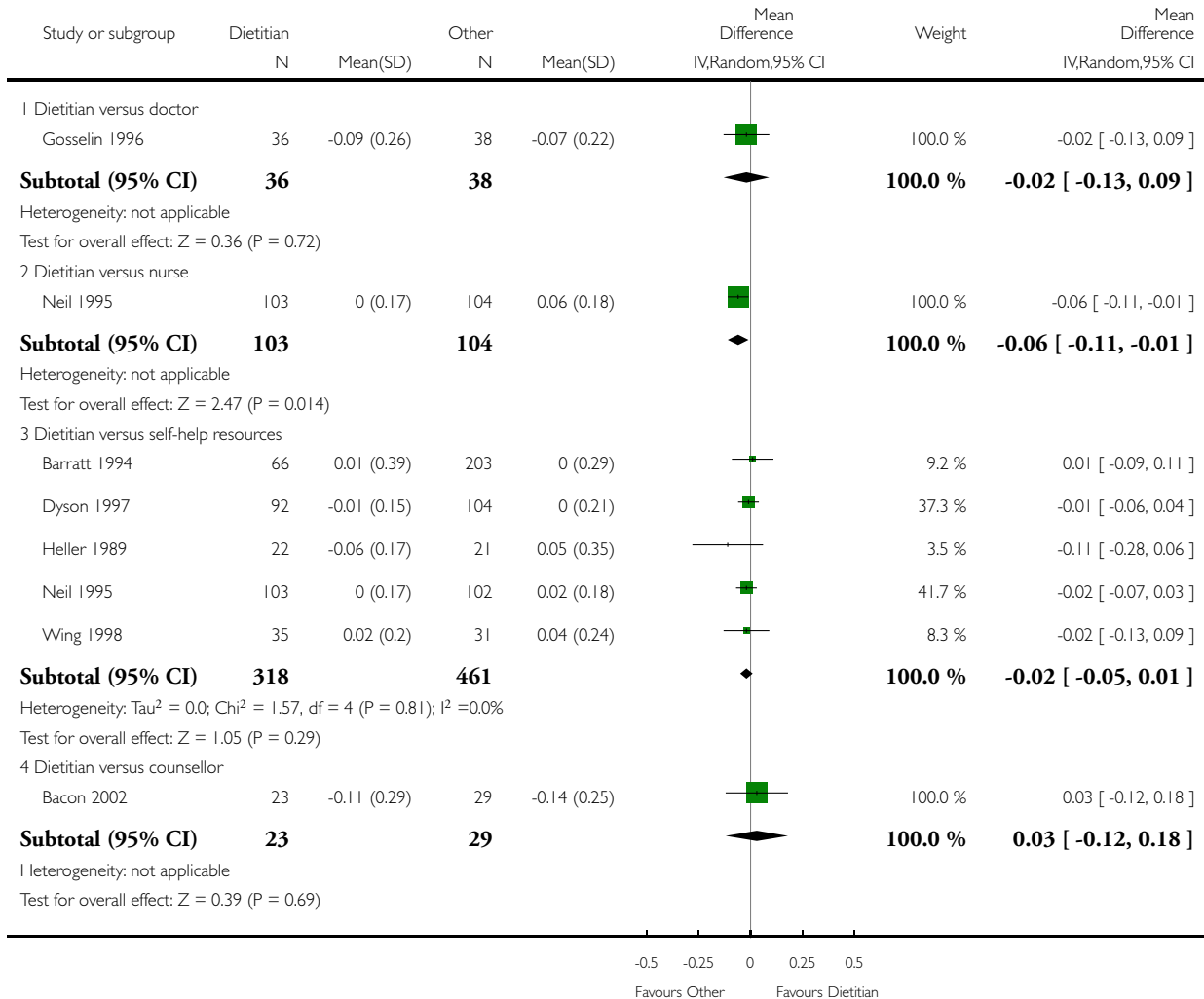


### Analysis 1.3. Comparison 1 Dietitian compared with other health professional or self-help resources, Outcome 3 HDLcholesterol at final visit.

Review: Dietary advice given by a dietitian versus other health professional or self-help resources to reduce blood cholesterol

Comparison: 1 Dietitian compared with other health professional or self-help resources

Outcome: 3 HDLcholesterol at final visit

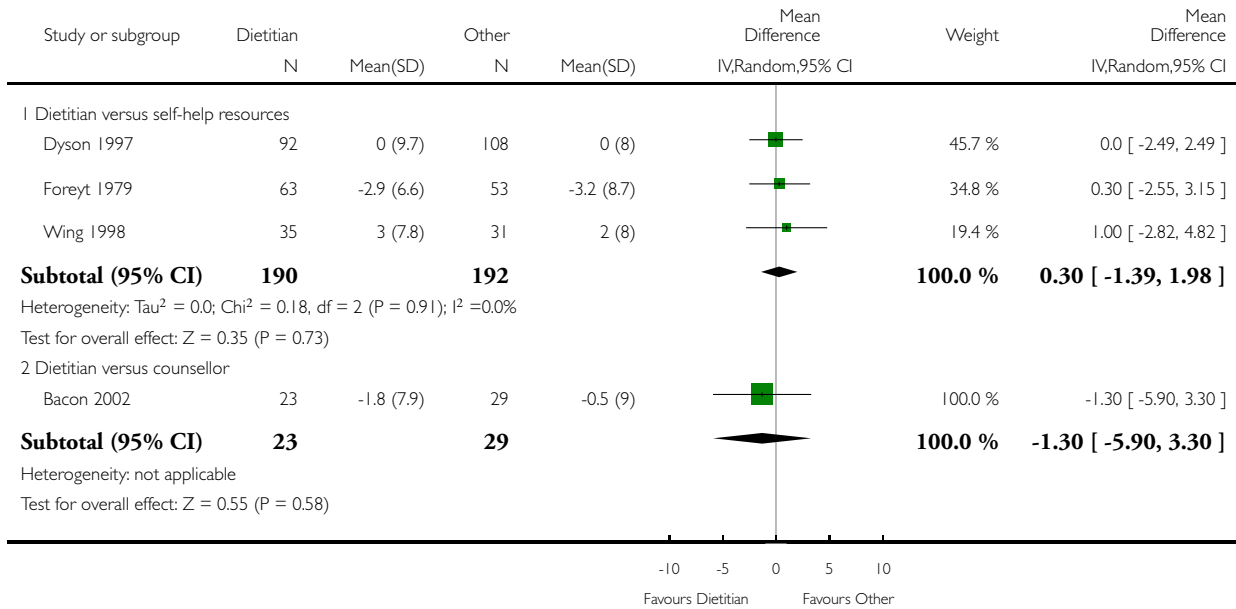


**Analysis 1.4. Comparison 1 Dietitian compared with other health professional or self-help resources, Outcome 4 Diastolic blood pressure at final visit.**

Review: Dietary advice given by a dietitian versus other health professional or self-help resources to reduce blood cholesterol

Comparison: 1 Dietitian compared with other health professional or self-help resources

Outcome: 4 Diastolic blood pressure at final visit

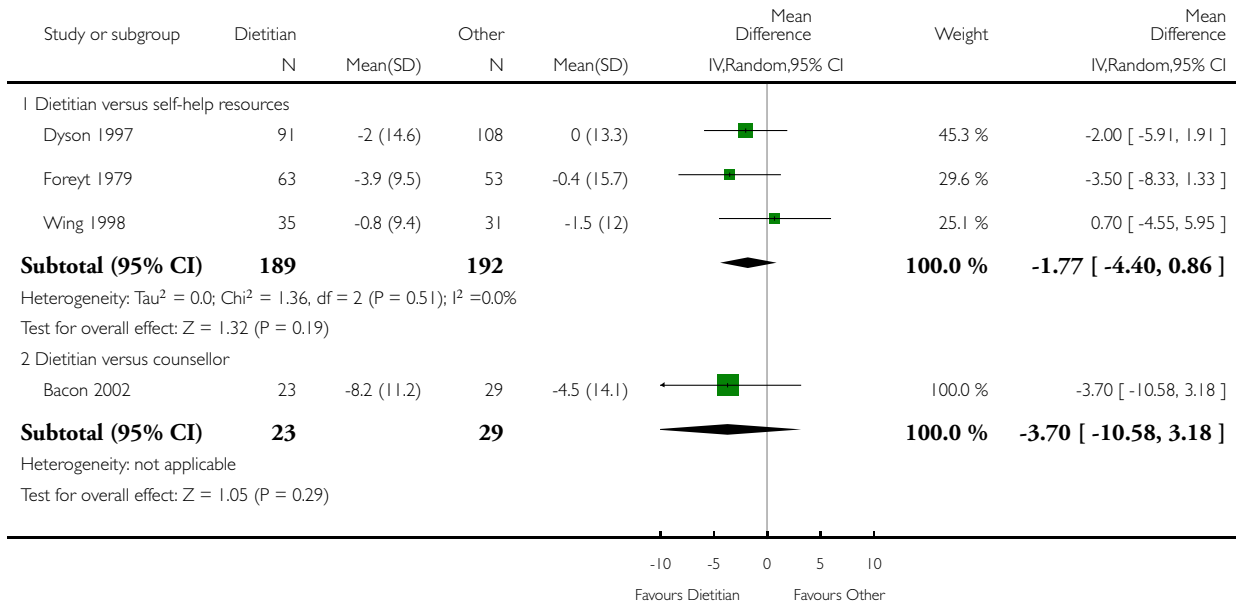


**Analysis 1.5. Comparison 1 Dietitian compared with other health professional or self-help resources, Outcome 5 Systolic blood pressure at final visit.**

Review: Dietary advice given by a dietitian versus other health professional or self-help resources to reduce blood cholesterol

Comparison: 1 Dietitian compared with other health professional or self-help resources

Outcome: 5 Systolic blood pressure at final visit

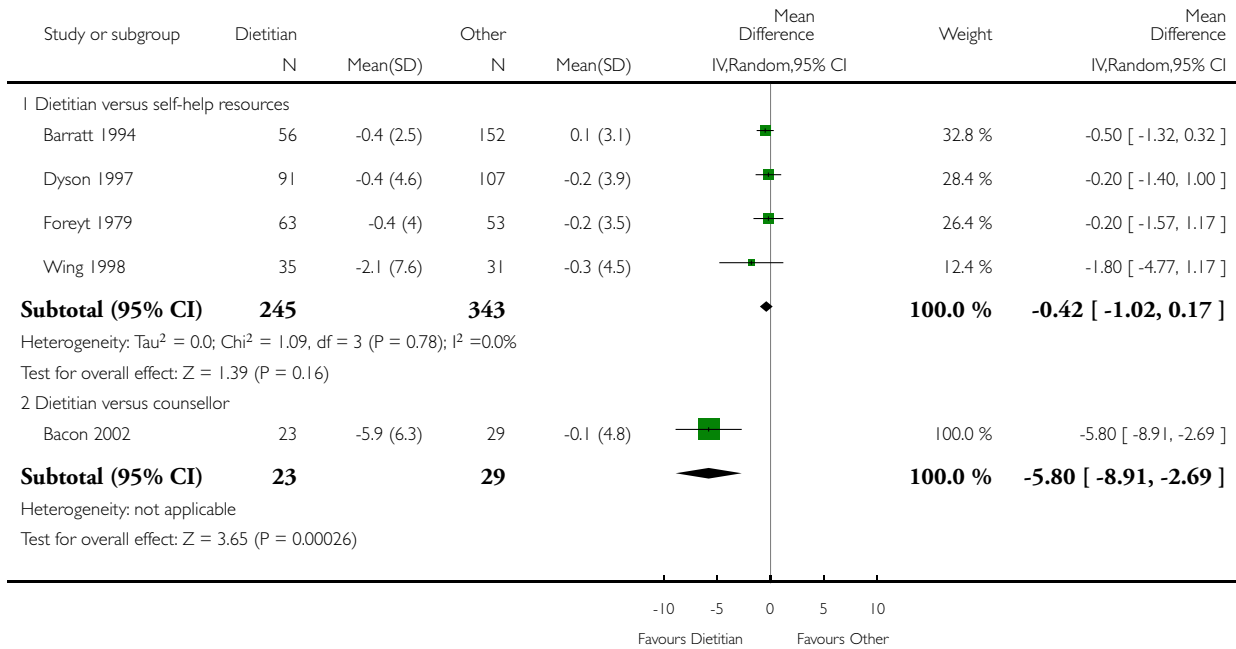


**Analysis 1.6. Comparison 1 Dietitian compared with other health professional or self-help resources, Outcome 6 Body weight (kg) at final visit.**

Review: Dietary advice given by a dietitian versus other health professional or self-help resources to reduce blood cholesterol

Comparison: 1 Dietitian compared with other health professional or self-help resources

Outcome: 6 Body weight (kg) at final visit



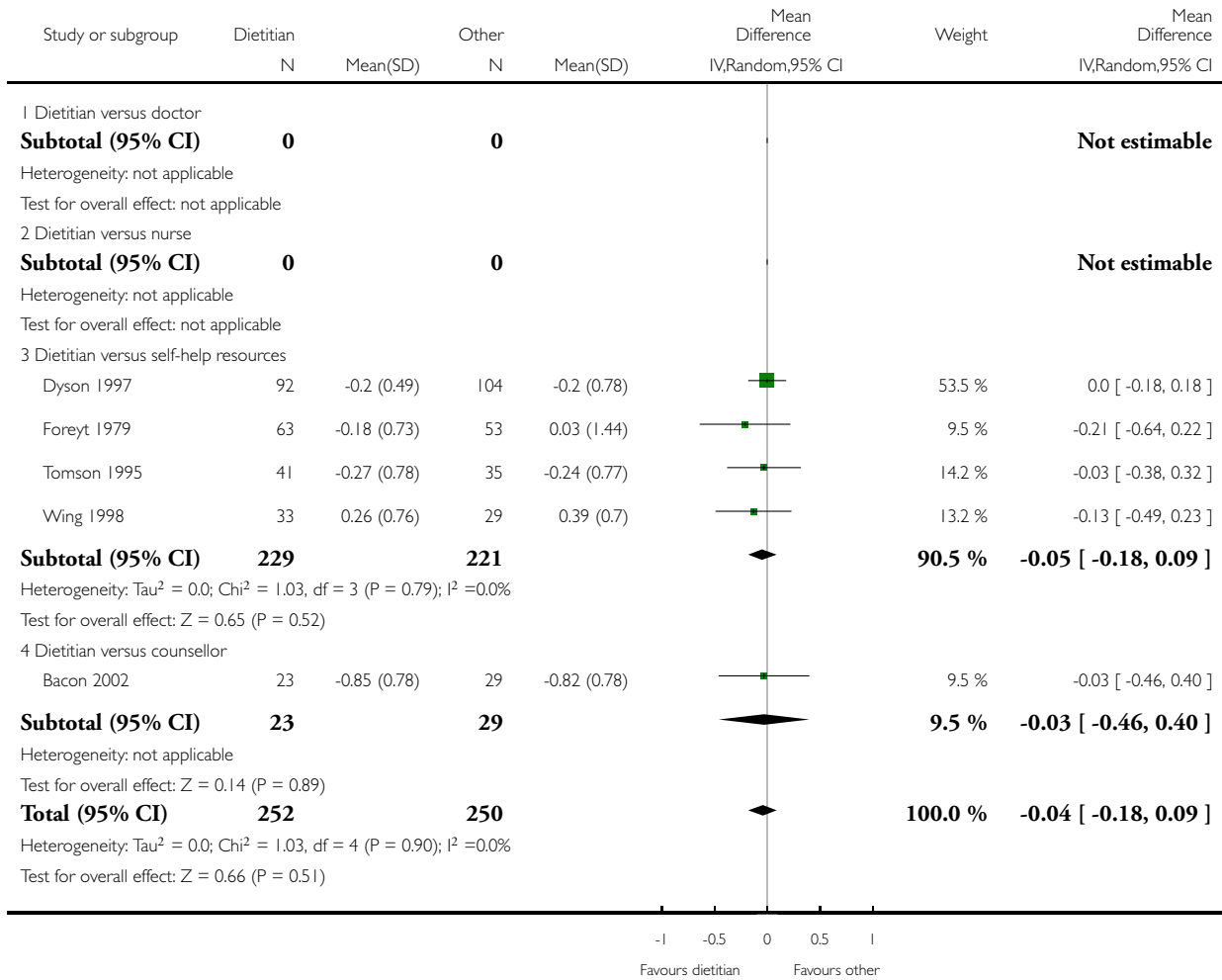


**Analysis 1.7. Comparison 1 Dietitian compared with other health professional or self-help resources, Outcome 7 Blood cholesterol at one year.**

Review: Dietary advice given by a dietitian versus other health professional or self-help resources to reduce blood cholesterol

Comparison: 1 Dietitian compared with other health professional or self-help resources

Outcome: 7 Blood cholesterol at one year

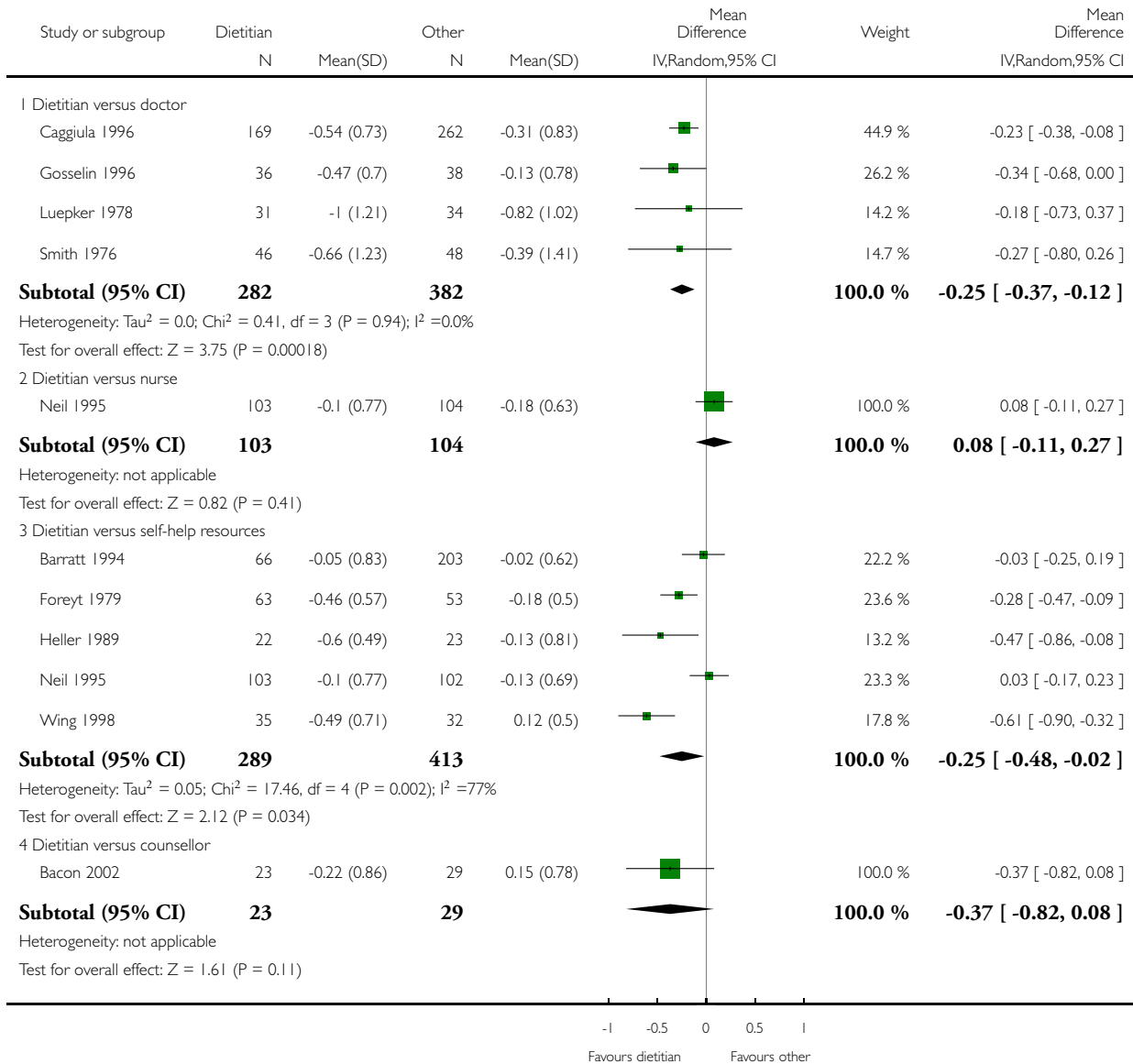


**Analysis 1.8. Comparison 1 Dietitian compared with other health professional or self-help resources, Outcome 8 Blood cholesterol up to 6 months.**

Review: Dietary advice given by a dietitian versus other health professional or self-help resources to reduce blood cholesterol

Comparison: 1 Dietitian compared with other health professional or self-help resources

Outcome: 8 Blood cholesterol up to 6 months

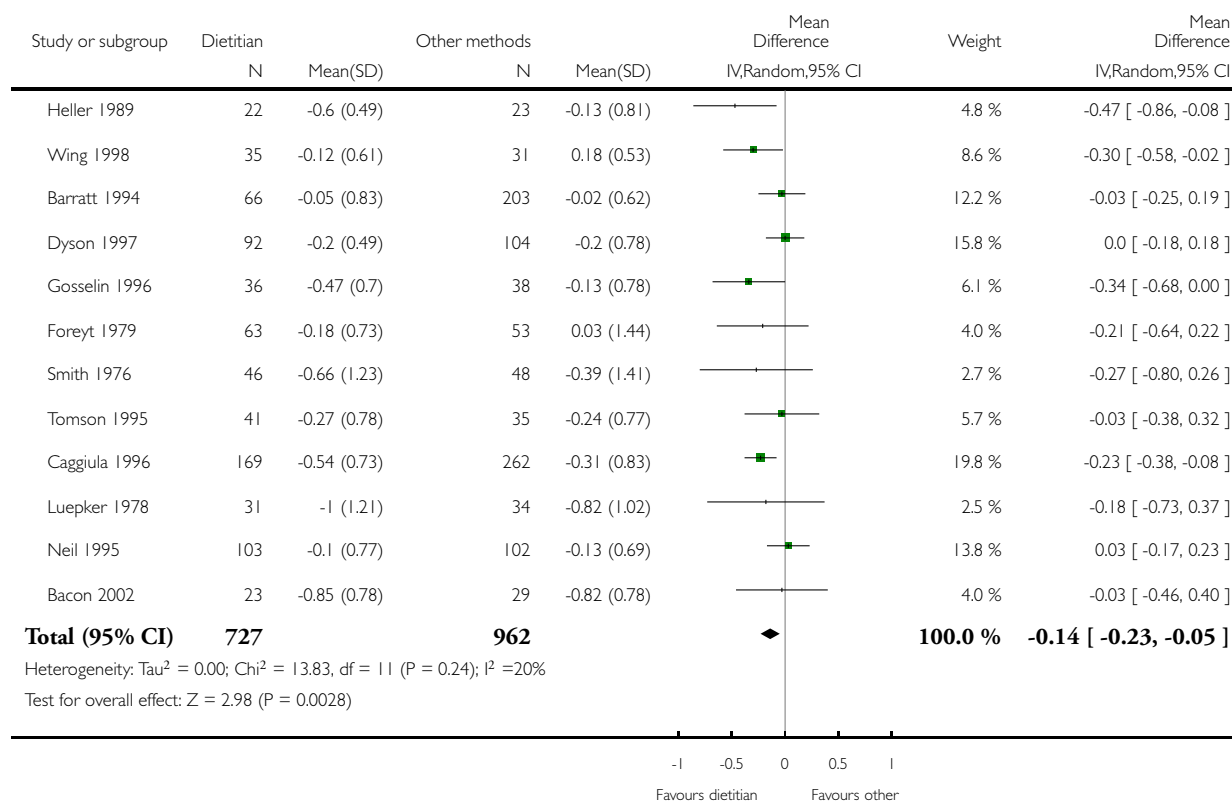


## Analysis 2.1. Comparison 2 Dietitian compared with doctor, nurse, counsellor and self-help resources, Outcome 1 Blood cholesterol at final visit.

Review: Dietary advice given by a dietitian versus other health professional or self-help resources to reduce blood cholesterol

Comparison: 2 Dietitian compared with doctor; nurse, counsellor and self-help resources

Outcome: 1 Blood cholesterol at final visit



## WHAT'S NEW

Last assessed as up-to-date: 22 May 2003.

Date	Event	Description
20 October 2008	Amended	Converted to new review format.

## HISTORY

Protocol first published: Issue 1, 1999

Review first published: Issue 1, 2001

Date	Event	Description
23 May 2003	New citation required and conclusions have changed	Substantive amendment

## CONTRIBUTIONS OF AUTHORS

All co-reviewers were active in the design of the review and in providing comments on revisions of the manuscript. Julian Higgins was responsible for giving statistical advice. Shah Ebrahim and Carolyn Summerbell were primary advisors for the review. Lee Hooper and Paul Little duplicated the application of inclusion/exclusion criteria and Lee Hooper duplicated the data extraction from included studies. Rachel Thompson was the principal author and instigator of the review and participated in all aspects of the review. Rachel Thompson is guarantor for the review.

## DECLARATIONS OF INTEREST

Rachel Thompson, Carolyn Summerbell, Lee Hooper and Diane Talbot are dietitians. This review was funded in part by the British Dietetic Association.

## SOURCES OF SUPPORT

### Internal sources

- Systematic Reviews Training Unit, Institute of Child Health, UK.

### External sources

- British Dietetic Association, UK.

## INDEX TERMS

### Medical Subject Headings (MeSH)

\*Diet; \*Dietetics; \*Health Personnel; \*Patient Participation; Cholesterol [\*blood]; Hypercholesterolemia [blood; prevention & control]; Nurses; Patient Education as Topic [methods]; Physicians; Randomized Controlled Trials as Topic

## MeSH check words

Humans