

Inter99

Description of the diet and exercise groups

By

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General information in the diet and exercise groups

Offer of participation

The offer was given as part of the lifestyle counselling on the examination day. The participant could accept the offer immediately or answer within three months. The offer could also be given when the results of the blood test was available about one month after the examination day. In this case it would be offered persons with newly diagnosed diabetes, reduced glucose intolerance (IGT) or increased cholesterol. Approximately a fortnight prior to the start-up of the diet and exercise group a reminder letter was sent to all registered participants – this was introduced from September 2002. It was possible to participate several times in a diet and exercise group during the study, if it was regarded as valuable to the participant.

Inclusion criteria

Participants in group A (high intensive group) were offered participation in a diet and exercise group if

- the participant was in the upper quintile according to the risk assessment in PRECARD[®]
- the participant was in the lowest four quintiles according to the risk assessment in PRECARD[®] and had one or more of the following risk factors:
 - BMI >30
 - Cholesterol >7,5 mmol/l
 - Blood pressure >160 mmHg systolic/>90 mmHg diastolic
 - Diabetes type 1 or 2
 - Impaired glucose tolerance (IGT)

The group intervention

The group intervention was conducted either by a clinical dietician or specially trained nurses. The clinical dietician was responsible for educating and supervising the nurses. All nurses had followed the clinical dietician through a course, and the clinical dietician had followed and supervised each one of the nurses throughout the course.

From June 2000 every instructor had her own teaching file containing a summary of the content and the structure of the intervention, together with a set of manuals with exact description of the content of the group intervention on every meeting with belonging overheads.

Pedagogical aims and principles

The aim of the diet and exercise groups was

- to give the participant a certain degree of factual knowledge on the importance of diet and exercise to prevention and treatment of lifestyle diseases as heart disease and diabetes and identify where it would be valuable for the participant to change habits.
- to make the participant aware of his/her own habits and the barriers for changing the habits.
- to give the necessary support to change habits.

The principles in the pedagogic were as described in the intervention during the lifestyle counselling: “The motivational conversation, with “Stages of Change” (the transteoretical model) as an important part, “Social Cognitive Theory” and “Health Belief Model”. In addition to this came the group dynamic from the other participants. During the first concept at baseline we worked on the so-called “Empowerment” pedagogic, aiming at giving the participants resources to believe that is it possible to make the necessary changes.

Basic rules

- Confidentiality
- Report if you were unable to come to a meeting
- If you 'fail', this should not be the reason for not coming

The purpose of these basic rules was

- to gain the group's confidence to be able to talk about both success and failure and thereby learn from experiences
- to gain a mutual connection and responsibility for each other in the group
- confidentiality

Structure of the diet and exercise groups

The diet and exercise groups were structured as follows:

- six meetings of two hours within six months – this was changed to seven meetings at three-year-follow-up.
- We aimed at having one month interval between the meetings, however, due to e.g. summer holidays there was a minor variation of time between the meetings
- 15-20 participants per group
- The group composition was chosen at random according to the time of registration
- Every meeting started with a round-table discussion while the remaining time was used for teaching and discussion of topics on diet and exercise.
- It was possible to bring along a spouse/relative/friend at the third meeting.
- During the first meeting the participants' expectations were revealed and the participants' target aims for habit changes were set.
- The principle of making aims and commitments for oneself and with the group/the instructor was somewhat extended during the course
- The dialogue with the participants was somewhat extended during the course.

Repeated measurement on participants in the diet and exercise groups

Participants with increased values (blood pressure, cholesterol) were offered repeated measurements after three-four months. At every group-meeting there was a possibility to have a weight check – this was voluntary.

More details

To get a more detailed description of the meetings, please contact Research Centre for Prevention and Health and have the "Description of the intervention on the diet and exercise groups in Inter99 – 1999 to 2004" sent to you.

To get a more detailed description of the diet and exercise recommendations given, we refer to "Description of the intervention on the lifestyle counselling in Inter99, 1999-2006, on diet and exercise".

The baseline study: March 1999-March 2001

Generally, two different concepts were used at baseline. The reason for this was a change of dietician in October 1999, which gave rise to some adjustments.

Adjustments in the second concept:

- fixed teaching manuals to the instructors

- more dialogue with the participants
- the exercise topic had higher priority

Principles for the content of the teaching in the diet and exercise groups

Diet

Basically, the seven diet advices were used on all participants, however, with modification when dealing with participants with diabetes or increased cholesterol.

The code word was lifestyle, not slimming diet.

Consequently, there was no teaching in diet plans, but more in the general principles of how to compose a healthy diet. Still, in specific cases, diet plans were given to overweight participants who needed something to stick to. It was emphasized that the advices given during the meetings were sufficient to gain a weight loss. The purpose was to avoid that the participants stuck to a plan and were unable to compose a healthy diet by themselves in the future.

Explicitly, focus was drawn on the following three issues:

- The type and the quantity of fat
- The quantity of fruit and vegetables
- The fish consumption

Exercise

More focus on physical activity in the second concept. The principles followed the national diet advices to the population with approximately half an hour of daily exercise of moderate intensity – it might well be in periods of e.g. 10 minutes. No specific kind of exercise was recommended, as it was emphasized that it is important to do the kind of exercise being most attractive to the individual, in order to obtain optimal compliance.

1-year follow-up: March 2000 – March 2002

Generally, there was not much difference in the diet and exercise groups at the baseline's second concept and at 1-year follow-up.

Adjustments:

- Focus changed a little as regards intervention towards the content of cholesterol in the diet – as described in the lifestyle counselling
- the teaching form was developed continuously by means of which it was developed towards more dialogue

3-year follow-up: March 2002 – March 2004

The experiences revealed that the teaching could be optimized even more.

Adjustments:

- Manuals were changed (extra meetings, new topic structure, new overheads)
- The participants received a folder with leaflets and simple recipes. Recipes were also distributed during the meetings
- An extra meeting with group work. The barriers for changing habits were uncovered
- A 'contract' was introduced as tool, where the participant during every meeting should make a note of what he/she would change and/or stick to until the next meeting within diet and exercise habits.

- The participants' readiness for changing habits was assessed more openly at the first meeting and again at the seventh meeting, both by the participants and by the instructor.
- Electronic lifestyle sheets together with an electronic registration of the participants were implemented in the diet and exercise groups.

Principles for the content of the teaching in the diet and exercise groups

Diet

Generally unchanged compared to the second concept at baseline, however, with a few adjustments.

Adjustments:

- Focus on the content of transfatty acids in the diet
- A little more focus on presenting a "heart friendly diet" in a larger context
- Diabetes diet and diet for persons with IGT was presented in a separate meeting with a thorough explanation about carbohydrates and their influence on blood sugar. Sweeteners and light products were discussed as well.
- New topic: taste and taste principles with the purpose of getting good and tasty food, however with a limited fat content.

Exercise

More focus on physical activity. There are different types of muscle work: weight-lifting and fitness/circulation training and their influence on risk factors were emphasized. Physical activity for those with diabetes and IGT was discussed in a separate meeting together with diet advices.