

## NISB- SENIOR PROJECTS



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voor Sport & Bewegen

## INACTIVITY

What is the problem?

- Inactivity among older adults of all age groups
  - increasing with progressing age, and
  - specific groups, incl. ethnic minorities, low socio-economic status groups and the chronically ill

Research shows:

- 43% of over-65's take too little exercise (PATE standard) and 24% of 75+ are inactive the entire week (OBIN (Injuries and Physical Activity in The Netherlands 2006))

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### Projects at this moment a.o.:

GALM /SCALA	55-65 inactive seniors
SMALL	50-70 for small cities
Short courses Health Prom.	65 +
In Balance	70-95 +
More Exercise for Ethnic Minor.	45-70
Campaign 30 MB for 50 +	exercise buddy, NIB-tv
Communities on the Move	particularly senior groups
Network approach	collaboration local organisations
(Local) Task force	agenda setting
More exercise for Seniors (MBvO)	permanent groups

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## In Balance

Fall prevention program

Posture, awareness, flexibility, and balance, strength

Method based on study of literature and own experiences/pilots

Accent on intrinsic factors

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One in three people aged 65+ living independently fall at least once a year

#### extrinsic risk factors:

environment  
footwear  
assisting device

#### intrinsic risk factors:

balance  
mobility  
muscle strength  
proprioceptive  
medication  
cognition  
mood  
vision  
hearing  
dizziness



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## Target group

- Over-70's with fall related problems, including
  - falling regularly
  - instability
  - using walking devices, such as cane, walker
  - everyone with mobility problems / ADL



- Recruitment:
  - 1) elderly people living in residential care institutions, assisted living and in day care
  - 2) over-70's living independently

via primary care: GP, home care, organizations for the elderly, etc.)

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'In Balance' is a programme/course which focuses on fall prevention and what seniors themselves can do about it.

The project consists of four stages in relation with CHOOSE-moments

### Stage 1: a two-hour informative session

- Video presentation about home safety
- Main causes of falling
- What can be done by themselves
- Information about the course

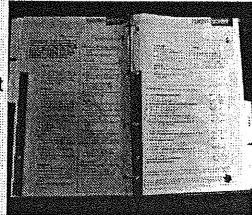


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### Stage 2: Raising awareness

three 2-hour sessions

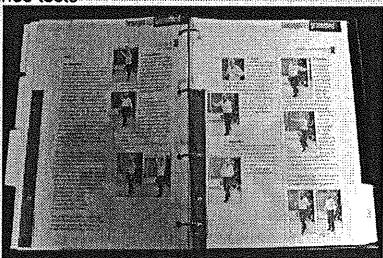
- Tests:
  - active living test
  - fall risk screening test
  - balance test
  - home safety test
- Exercises



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### Stage 3: Balance training

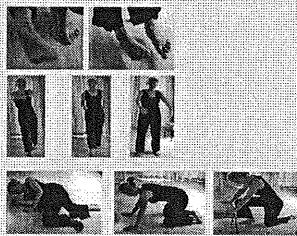
Ten weekly sessions, eight of 1 hour and two double sessions (sessions 2 and 9) because of the administering of balance tests



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### Exercises

- Training general fitness (loosening exercises)
- Foot and ankle, stronger legs (muscle strength)
- Balance training, balance restoration
- Tai Chi: the 'balance dance'
- Daily life routines: getting up from chair, bed, the floor, walking (cane, walker)

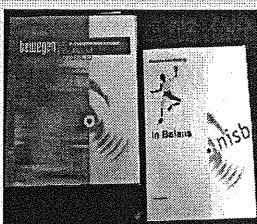


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### Stage 4: Follow up

50% of participants want to keep exercising in:

- Tai Chi classes,
- continus lessons 'In Balance' classes or
- regular 'More exercise for seniors' (MBVO)-classes with a permanent focus on balance aspects and/or home exercises based on the coursebook provided in the course



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### Experiences of participants:

• Mrs A: "Since the walking tips I got during this course, I'm walking much easier with my walker. I keep exercising!"

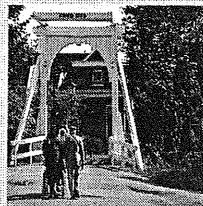


• Mrs B: "I used to be quite afraid of exercising, even if I didn't realise it. Now I dare to do more and more."

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## Results of 'In Balance' training

- 70% found information useful
  - 37% walk better
  - 40% see improved balance
  - 67% has less fear of falling
  - 60% find getting up from chair easier
  - 9% use assisting device less
- Appreciation mark: 7.9 out of 10!



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Hazard Ratio (HR) = fall risks in the exercise group with regards to the control group

*Effects of the interventions on time to first fall. After correction for co-founders, expressed in HR (95% confidence intervals)*

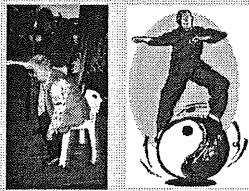
Group	Intervention effect
Functional Walking	1.59 (1.04 to 2.44)
In Balance	1.09 (0.72 to 1.64)
Exercise	1.36 (0.94 to 1.96)
Frail subgroup	
total period	2.95 (1.84 to 5.32)
Prefrail subgroup	
total period	0.62 (0.29 to 1.33)
< 12 weeks	1.18 (0.55 to 2.54)
> 12 weeks	0.39 (0.18 to 0.88)

From week 12 till week 32 the HR is 0.39. The fall risk in that period has been reduced by 61% compared with the control group.

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## Results of "In Balance" training

- fall reduction 61%
- better scores in balance tests (Free University Amsterdam 2006)
- PREFFI-Award 2007



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 A good practice for the local policy

Preffi Award in 1999

EHPA Award in 2000

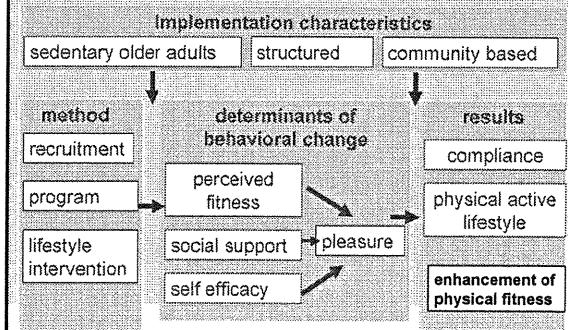
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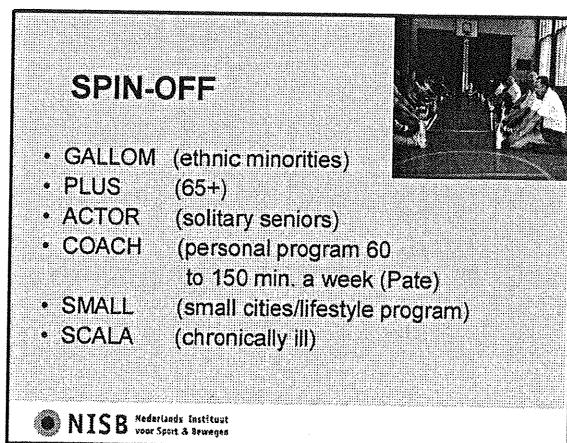
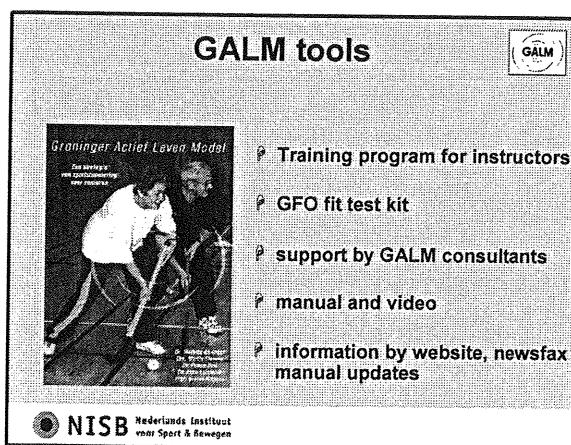
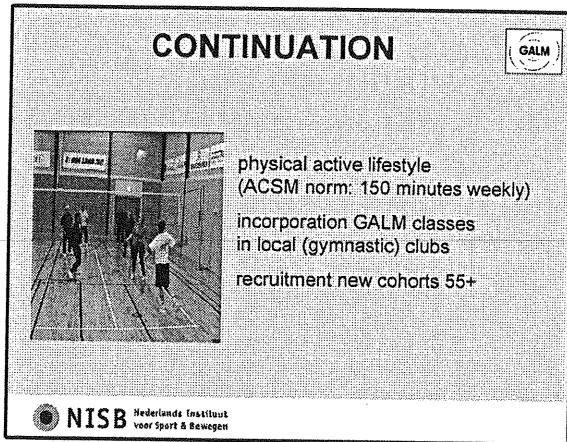
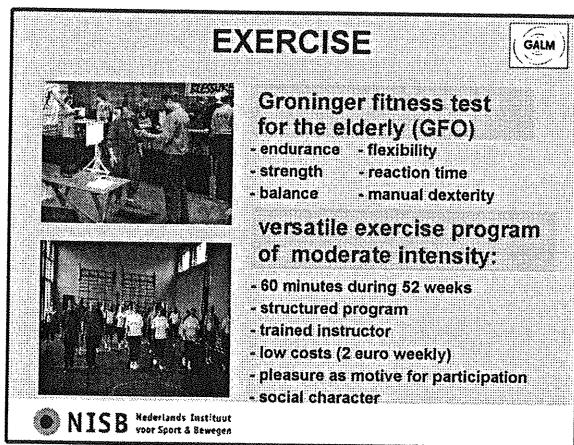
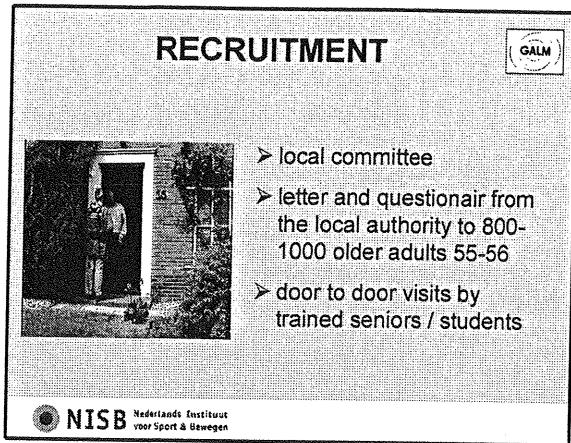
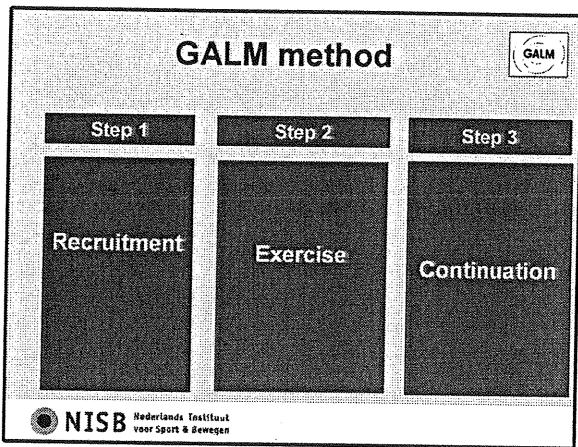
## Behavioural change determinants

philosophy of active living	community based character
motivation theory	self efficacy, social support, perceived fitness, pleasure
process character of change (relapse theory)	feed back instruments (GFO) introduction + follow up
social marketing	sedentary older people
group dynamics	versatile, structured program
play theory	trained instructor

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## The Groningen Active Living Model



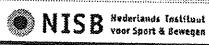


## Evaluation 1

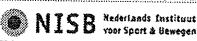
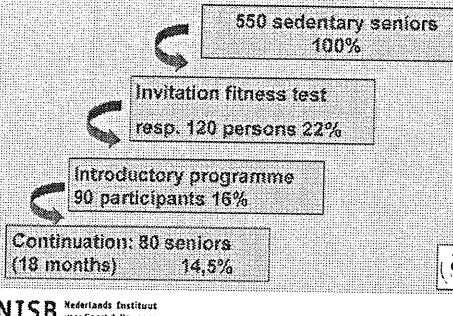
• Approached Seniors	815.000
• Number of participants	83.000
• Number of groups	app. 4.000
• Participating municipalities	(70%) 299

### Personal characteristics

• age (average)	59 year
• men-women	45%/55%
• chronic disease	71%
• overweight	60%
• low SES	30%

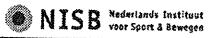


## Response and compliance in standard project (n=1000)



## Evaluation 2

- GALM: an innovative behavior change method
- 14,5 % of the sedentary people stays active
  - the feasibility on a national scale has been proved
  - the method fits in the local and provincial and national policy and infrastructure
  - coalition between university and innovation/implementation institute
  - effects for fitness and health
    - improved fitness: strength, endurance, coordination, flexibility in the shoulder
    - improved health: sleep, blood pressure, perceived health



## NISB and Activities for the 50+

### Products a.o.

- Phys. Act. and Health: manual, cd-R, leaflets, website
- GALM: manual, website
- FLASH : instruction booklet for nursing homes, toolkit
- Campaign 30 MB: website, Plusbox (nursing homes)
- Newsletters
- Video: Bewegen doe je zo! (50+ in action)
- Manual: Local Task Force 50+ and network approach
- Instructors/ exercise leaders: competency profile
- Advice/consultancy

