

Combined Diet and Physical Activity Promotion Programs to Prevent Type 2 Diabetes Among People at Increased Risk

Intervention Characteristics of Comparative Studies of More vs. Less Intensive Combined Diet & Physical Activity

Intervention Details

Author, Year, PMID*	Arm	Weight loss goal	Core: # sessions contact time (h) duration (mo)	Total: # sessions contact time (h) duration (mo)	Exercise: individual sessions	Exercise: group sessions	Customized exercise program	Trainer supervision	Diet: individual sessions	Diet: group sessions	Customized diet program	Meetings with dietician
Ackermann 2014 24740868	More intense	>=7% initial weight	16 sessions + web portal NR 4-6 mo	16 sessions + web portal NR 4-6 mo	option to interact with a virtual lifestyle support coach	option to participate in group discussions via email and through online forum postings	No	No	No	No	No	No
	Less intense	>=7% initial weight	16 sessions NR 4-6 mo	16 sessions NR 4-6 mo	No	No	No	No	No	No	No	No
Cole 2013 23589326	More intense	NR	4 sessions 7.5 h 3 mo	4 sessions 7.5 h 3 mo	No	No	Unclear	No	Yes	Yes	Unclear	No
	Less intense	NR	>=1 >=4 3 mo	>=1 >=4 3 mo	No	No	Unclear	No	Yes	Yes	Unclear	No

Diabetes Prevention and Control: Combined Diet & Physical Activity Programs– Evidence Table, More vs. Less Intensive

Author, Year, PMID*	Arm	Weight loss goal	Core: # sessions contact time (h) duration (mo)	Total: # sessions contact time (h) duration (mo)	Exercise: individual sessions	Exercise: group sessions	Customized exercise program	Trainer supervision	Diet: individual sessions	Diet: group sessions	Customized diet program	Meetings with dietician
Dunbar 2010 No PMID	More intense	>5% reduction	6 sessions 12 h 12 mo	18 sessions 15 h 30 mo	No	Yes	No	No	No	Yes	No	No
	Less intense	>5% reduction	6 sessions 12 h 12 mo	6 sessions 12 h 30 mo	No	Yes	No	No	No	Yes	No	No
Gagnon 2011 21489843	More intense	5-10% reduction	59 sessions 44 h 12 mo	59 sessions 44 h 12 mo	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
	Less intense	None	50 sessions 38 h 12 mo	50 sessions 38 h 12 mo	No	Yes	No	No	No	Yes	No	Yes
Katula 2011 23498294	More intense	5-7% reduction	24 sessions NR 12 mo	44 sessions NR 12 mo	Yes	Yes	No	No	Yes	Yes	No	Yes
	Less intense	None	6 sessions NR 12 mo	6 sessions NR 12 mo	Yes	No	No	No	Yes	No	No	Yes

Author, Year, PMID*	Arm	Weight loss goal	Core: # sessions contact time (h) duration (mo)	Total: # sessions contact time (h) duration (mo)	Exercise: individual sessions	Exercise: group sessions	Customized exercise program	Trainer supervision	Diet: individual sessions	Diet: group sessions	Customized diet program	Meetings with dietician
Kosaka 2005 15649575	More intense	BMI ≤22 kg/m ²	16 sessions NR 48 mo	16 sessions NR 48 mo	Yes	No	No	No	Yes	No	No	No
	Less intense	BMI ≤22 kg/m ²	8 sessions NR 48 mo	8 sessions NR 48 mo	Yes	No	No	No	Yes	No	No	No
Liao 2002 12196418	More intense	Not a goal	≥72 sessions ≥36 h 6 mo	≥72 sessions ≥36 h 24 mo	Yes	No	Yes	Yes	No	No	Yes	Yes
	Less intense	Not a goal	≥72 sessions ≥36 h 6 mo	≥72 sessions ≥36 h 24 mo	No	No	No	Yes	Yes	No	No	Yes
Ma 2013 23229846	More intensive	7% reduction	12 sessions 18-24 h 3 mo	24 sessions NR 15 mo	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Less intensive	7% reduction	12 sessions 18-24 h 3 mo	12 sessions NR 15 mo	Yes	No	No	No	Yes	No	No	No

Author, Year, PMID*	Arm	Weight loss goal	Core: # sessions contact time (h) duration (mo)	Total: # sessions contact time (h) duration (mo)	Exercise: individual sessions	Exercise: group sessions	Customized exercise program	Trainer supervision	Diet: individual sessions	Diet: group sessions	Customized diet program	Meetings with dietician
Nilsen 2011 22117618	More intense	5% reduction	11 sessions >35 h 18 mo	11 sessions >35 h 18 mo	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
	Less intense	5% reduction	3 sessions NR 18 mo	3 sessions NR 18 mo	Yes	No	No	No	Yes	No	No	No
Patrick 2013 23759410	More intense	"Weight loss"	36 sessions 24 h 12 mo	36 sessions 24 h 12 mo	Yes	Yes	Unclear	No	Yes	Yes	Unclear	Unclear
	Less intense 1	"Weight loss"	NA (3 text messages/ week and access to web-tutorials) NA 12 mo	NA NA 12 mo	web tutorials; could communicate via text message if they had questions	No	Unclear	No	web tutorials; could communicate via text message if they had questions	No	Unclear	No
	Less intense 2	"Weight loss"	NA (weekly emails and access to web-tutorials) NA 12 mo	NA NA 12 mo	web tutorials	No	Unclear	No	web tutorials	No	Unclear	No

Author, Year, PMID*	Arm	Weight loss goal	Core: # sessions contact time (h) duration (mo)	Total: # sessions contact time (h) duration (mo)	Exercise: individual sessions	Exercise: group sessions	Customized exercise program	Trainer supervision	Diet: individual sessions	Diet: group sessions	Customized diet program	Meetings with dietician
Saito 2011 21824948	More intense	5% reduction	9-11 sessions NR 36 mo	9-11 sessions NR 36 mo	Yes	No	Yes	No	Yes	No	Yes	Yes
	Less intense	5% reduction	4 sessions NR 36 mo	4 sessions NR 36 mo	Yes	No	Yes	No	Yes	No	Yes	Yes
Weinstock 2013 23843020	Telephone individually (IC)	≥5% initial weight	16 individual sessions NR 12 mo	28 individual sessions NR 24 mo	Yes	No	Unclear	Yes	Yes	No	Unclear	Yes
	Conference calls (CC)	≥5% initial weight	16 group sessions NR 12 mo	28 group sessions NR 24 mo	No	Yes	Unclear	Yes	No	Yes	Unclear	Yes

* Of primary study.

Abbreviations

BMI, body mass index

h, hour

mo, month

NR, not reported

Intervention Goals

Author, Year, PMID*	Arm	Exercise goal	Diet goal	Calories	Carbohydrates (of daily energy consumed)	Fat (of daily energy consumed)	Fiber (per day)
Dunbar 2010 No PMID	More intense	Moderate level physical activity >4 h/wk	None	NR	NR	< 30% (< 10% from saturated fat)	≥15 g/1000 cal
	Less intense	Moderate level physical activity >4 h/wk	None	NR	NR	< 30% (< 10% from saturated fat)	≥15 g/1000 cal
Gagnon 2011 21489843	More intense	Moderate activity to 60 min/d	None	NR	NR	NR	NR
	Less intense	None	None	NR	NR	NR	NR
Katula 2011 23498294	More intense	Moderate physical activity with a goal of 180 min/wk	None	Goal of 1,200–1,800 kcal/d	NR	NR	NR
	Less intense	None	None	NR	NR	NR	NR
Kosaka 2005 15649575	More intense	None	None	NR	NR	NR	NR
	Less intense	None	None	NR	NR	NR	NR
Liao 2002 12196418	More intense	70% of heart rate reserve	45% total calories from protein, <200 mg cholesterol	NR	55%	<30%	NR
	Less intense	None	20% total calories from protein, and <300 mg cholesterol	NR	50%	30%	NR
Nilsen 2011 22117618	More intense	Improvement in exercise capacity of one MET	None	NR	NR	NR	NR

Author, Year, PMID*	Arm	Exercise goal	Diet goal	Calories	Carbohydrates (of daily energy consumed)	Fat (of daily energy consumed)	Fiber (per day)
	Less intense	None	None	NR	NR	NR	NR
Saito 2011 21824948	More intense	Individual	None	NR	55-60% total energy intake	20-25% total energy intake	Additional where necessary
	Less intense	Individual	None	NR	55-60% total energy intake	20-25% total energy intake	Additional where necessary
Weinstock 2013 23843020	Telephone individual calls (IC)	Individual goal setting	Individual goal setting	NR	NR	NR	NR
	Conference calls (CC)	Group goal setting	Group goal setting	NR	NR	NR	NR

* Of primary study.

Abbreviations

cal, calorie

d, day

h, hour

kcal, kilocalories

MET; metabolic equivalent

mg, milligram

min, minute

wk, week