

Clinical trials of lifestyle modification

TrialResults-center www.trialresultscenter.org

1 diabetes type 2

Trial	Treatments	Patients	Trials design and methods
lifestyle modification vs control			
DPS (Lindstrm) , 2003 n=522 follow-up: 3.2y	individualized counseling aimed at reducing weight and intake of total and saturated fat, and increasing intake of fiber and physical activity versus control	Patients overweight with impaired glucose tolerance (WHO 1985 criteria)	Parallel groups open Finnish
Fang , 2004 n=178 follow-up:	-	subject with impaired glucose tolerance	Parallel groups China
JDPP (Sakane) , 2005 n=240 follow-up:	-	patients with impaired glucose tolerance (WHO 1999 criteria)	Parallel groups Japan
Keen , 1982 n=241 follow-up:	-	subject with impaired glucose tolerance	Parallel groups
Kosaka , 2005 n=356/102 follow-up: 3.64 y	to maintain body mass index (BMI) of <24.0 kg/m ² and of <22.0 kg/m ² , respectively, by diet and exercise. In the intervention group, detailed instructions on lifestyle were repeated every 3-4 months versus control	men with impaired glucose tolerance (WHO criteria 1980)	Parallel groups open Japan
Pan , 1997 n=530 follow-up: 6 y	three active treatment groups: diet only, exercise only, or diet plus exercise versus control	Patients with impaired glucosetolerance (WHO 1985 criteria)	Parallel groups open China
Tao , 2004 n=60 follow-up: 31 months	-	patients with impaired glucose tolerance (WHO 1999 criteria)	Parallel groups China

continued...

Trial	Treatments	Patients	Trials design and methods
US-DDP (lifestyle) (Knowler) , 2002 n=1079/1082 follow-up: 2.8 years	lifestyle-modification intervention versus placebo	nondiabetic patients with elevated glucose and high risk for diabetes	Parallel groups open
lifestyle modification + metformin vs control			
IDDP (Ramachandran) , 2006 n=531 follow-up: 2.5 y	advice on lifestyle modification, metformin, or both versus given standard health care advice (control)	native Asian Indians with impaired glucose tolerance	Parallel groups open India
Jarret , 1979 n=204 follow-up: 4.3 y	carbohydrate restriction with phenformin 50 mg daily versus carbohydrate restriction alone	men with impaired glucose toleranc	Parallel groups open

More details and results :

- prevention for diabetes type 2 in all type of patients at <http://www.trialresultscenter.org/go-Q341>
- prevention for diabetes type 2 in people with impaired glucose tolerance at <http://www.trialresultscenter.org/go-Q416>

References

DPS (Lindstrm), 2003:

Lindstrm J, Eriksson JG, Valle TT, Aunola S, Cepaitis Z, Hakumki M, Hmlinen H, Ilanne-Parikka P, Keinnen-Kiukaanniemi S, Laakso M, Louheranta A, Mannelin M, Martikkala V, Moltchanov V, Rastas M, Salminen V, Sundvall J, Uusitupa M, Tuomilehto J Prevention of diabetes mellitus in subjects with impaired glucose tolerance in the Finnish Diabetes Prevention Study: results from a randomized clinical trial. J Am Soc Nephrol 2003;14:S108-13 [12819313]

Fang, 2004:

WHO Expert Committee on Diabetes Mellitus: second report. World Health Organ Tech Rep Ser 1980;646:1-80 [6771926]

Fang YS, Li TY, Chen SY Zhongguo Linchuang Kangfu 2004;8:6562-3g

JDPP (Sakane), 2005:

Sakane N [Japan Diabetes Prevention Program] Nippon Rinsho 2005;63 Suppl 2:488-92 [15779427]

Keen, 1982:

Keen H, Jarrett RJ, Ward JD, Fuller JH Borderline diabetics and their response to tolbutamide. Adv Metab Disord 1973;2:Suppl 2:521-31 [4720382]

Kosaka, 2005:

Kosaka K, Noda M, Kuzuya T Prevention of type 2 diabetes by lifestyle intervention: a Japanese trial in IGT males. Diabetes Res Clin Pract 2005;67:152-62 [15649575] [10.1016/j.diabres.2004.06.010](https://doi.org/10.1016/j.diabres.2004.06.010)

Pan, 1997:

Pan XR, Li GW, Hu YH, Wang JX, Yang WY, An ZX, Hu ZX, Lin J, Xiao JZ, Cao HB, Liu PA, Jiang XG, Jiang YY, Wang JP, Zheng H, Zhang H, Bennett PH, Howard BV Effects of diet and exercise in preventing NIDDM in people with impaired glucose tolerance. The Da Qing IGT and Diabetes Study. Diabetes Care 1997;20:537-44 [9096977]

Tao, 2004:

Tao LL, Deng YB, Fan XB, Bao QDm Zhongguo Linchuang Kangfu 2004;8:2912-3g

US-DDP (lifestyle) (Knowler), 2002:

Knowler WC, Barrett-Connor E, Fowler SE, Hamman RF, Lachin JM, Walker EA, Nathan DM N Engl J Med 2002;346:393-403 [11832527]

IDDP (Ramachandran), 2006:

Ramachandran A, Snehalatha C, Mary S, Mukesh B, Bhaskar AD, Vijay V The Indian Diabetes Prevention Programme shows that lifestyle modification and metformin prevent type 2 diabetes in Asian Indian subjects with impaired glucose tolerance (IDPP-1). Diabetologia 2006;49:289-97 [16391903] 10.1007/s00125-005-0097-z

Jarret, 1979:

Jarrett RJ, Keen H, Fuller JH, McCartney M Worsening to diabetes in men with impaired glucose tolerance ("borderline diabetes"). Diabetologia 1979;16:25-30 [761734]

2 impaired fasting glucose

3

Trial	Treatments	Patients	Trials design and methods
lifestyle modification vs control			
US-DDP (lifestyle) (Knowler) , 2002 n=1079/1082 follow-up: 2.8 years	lifestyle-modification intervention versus placebo	nondiabetic patients with elevated glucose and high risk for diabetes	Parallel groups open

More details and results :

- prevention for impaired fasting glucose in all type of patients at <http://www.trialresultscenter.org/go-Q342>

References

US-DDP (lifestyle) (Knowler), 2002:

Knowler WC, Barrett-Connor E, Fowler SE, Hamman RF, Lachin JM, Walker EA, Nathan DM N Engl J Med 2002;346:393-403 [11832527]

Entry terms: metformin, Metformin, Dimethylguanylguanidine, Dimethylbiguanidine, Glucophage,