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INDIVIDUAL LEVEL LIFESTYLE INTERVENTION: IS IT THE “MAGIC PILL” TO PREVENT T2D?

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Over the past few decades, lifestyle interventions consisting of exercise and diet behavioral modifications have proven to be highly efficacious in preventing type 2 diabetes (T2D). Consequently, various public health agencies across the world have invested in implementing intensive lifestyle intervention programs among individuals at risk to reduce their T2D risk via individual level behavior changes. Many such programs reported the intervention was effective among compliant participants. However, they also revealed important challenges in the widespread translation of lifestyle intervention to prevent T2D in real-world settings, such as difficulties in reaching all potentially eligible individuals, high participant attrition rates, and non-optimal post-curriculum weight loss. Using data from a diabetes prevention program implemented in 36 sites across the United States, we found that lifestyle intervention is less successful among participants living in neighborhoods with socioeconomic disadvantages, independent of their individual level socioeconomic characteristics.¹ These observations expand our previous findings that participants with lower personal socioeconomic status made fewer improvements after intervention,² potentially due to their constrained resources to make such improvements, highlighting the critical role of socioeconomic status at both personal and neighborhood levels for successful prevention of T2D. Our findings call for enhanced diabetes prevention strategies that not only target individual behavioral changes but also intervene the social context of this disease for individuals living in socioeconomically disadvantaged neighborhoods. Meaningful improvements in neighborhood disadvantages of vulnerable populations could be important in stemming the global epidemic of diabetes.

References:

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