

Integrating Fitbit wearable devices into diabetes care leads to significant improvements in blood glucose and HbA1C, finds Health2Sync clinical study in Taiwan

- *Wearing Fitbit devices with Health2Sync glucose control app clinically proven to help both users and healthcare providers to control and better manage the symptoms of Type 2 diabetes*
- *Results from the study in Taiwan revealed an improvement in patients' health conditions, with participants recording higher levels of physical activity, reduced HbA1C, fasting blood glucose and LDL-C, and higher blood glucose measurement frequency*
- *The Health2Sync Patient Management Platform allows healthcare providers to seamlessly monitor patients' information and provide remote consultative advice where necessary*

[Taiwan]– November 3, 2020 – Health2Sync, the number one diabetes management app in Taiwan and Japan, today announced the results of their clinical study in Taiwan, demonstrating that combining Fitbit wearable devices with their Health2Sync Patient Management Platform can help users control and better manage the symptoms of Type 2 diabetes mellitus (T2DM). In the study¹, conducted with four of Taiwan's leading diabetes clinics, participants recorded significant average improvements in key indicators, such as reduced HbA1C, fasting blood glucose and LDL-C, and higher blood glucose measurement frequency -- a valuable proof of concept for using Fitbit wearables with diabetes care protocols and solutions.

The study found:

- Average glycated haemoglobin (HbA1C) decreased 0.33%, while patients who did moderate to high-intensity activity duration of at least 150 mins per week, saw their average HbA1C² decrease 0.66%
- Average fasting blood glucose (BG) decreased 10.92 mg/dL
- Average low-density lipoprotein cholesterol (LDL-C) decreased 11.55 mg/dL
- Weight reduction of up to 2 kilograms among some patients
- Increased frequency in moderate to high intensity activity to 7.03 times a week among some patients

Conducted over a three-month period ending in July 2020 in conjunction with the Neng-Chun Diabetes Clinic, Da-Ya Chang-An Clinic, Yier Clinic and Banqiao Da-Jun Clinic, the study, with patient consent, lets the patients' doctors track the progress and lifestyle changes of 95 participants with T2DM. Prior to the commencement of the study, doctors at the four clinics established benchmarks for all participating patients based on blood glucose tests at the start of the trial, then on a self-monitored weekly basis throughout the study period.

Each participant was given a [Fitbit Inspire HR](#) and the participants voluntarily agreed to connect their Fitbit wearable data with the Health2Sync diabetes management app to track their progress throughout the program. Physical activity data generated from each person's Fitbit device was integrated into the Health2Sync app, which housed other health metrics such as patients' HbA1c, BG and cholesterol levels. This let doctors seamlessly monitor patients' information on the Health2Sync Patient Management Platform and provide remote consultative advice where necessary.

¹ The study was conducted on 95 participants, ages 18- 60.

² The term HbA1c refers to glycated haemoglobin. Diabetics with higher levels of HbA1c face greater risk of developing diabetes-related complications.



Dr. Kuo-Liang Lu of Da-Ya Chang-An Clinic in Taiwan, said: "The results speak for themselves. We saw a reduction in some of our patients' weight by an average of two kilograms and fasting BG levels of study participants from Da-Ya Chang-An clinic decreased 11.10 mg/dL within 3 months³, leading to significant health improvements."

Dr. Neng-Chu Yu of Neng-Chun Diabetes Clinic said: "Type 2 diabetes, with the right lifestyle changes – medication adherence, increased activity, and better diet – can lead to major improvements in control of blood glucose levels. The integration of Fitbit data with Health2Sync let me easily view my patients' activities and self-monitored data, enabling me to make necessary suggestions and give guidance to help patients for further improvement."

Diabetes is a chronic condition that, if not managed, can lead to health complications like blindness, kidney failure, heart attacks, stroke and lower limb amputation.⁴ It remains the second highest cause in premature mortality, after cancer, among major non-communicable diseases in Taiwan⁵ and its prevalence has posed economic burdens such as increased personal and healthcare spending and loss of work productivity.⁶

A holistic approach to managing T2DM requires lifestyle changes, which includes medication adherence, exercise and proper diet. The integration with Fitbit wearable devices and activity data is key to helping to promote healthier behaviours and improve participants' health outcomes. Participants received reminders for weekly exercises via their Health2Sync App, which promoted an increased frequency in moderate to high intensity activity at 7.03 times a week. The increased levels of activity corresponded with an improvement in patients' health conditions.

"We are thrilled to see such optimistic results in the clinical study. We believe that innovations in Fitbit wearable devices and Fitbit health solutions have a major role to play in the global effort against diabetes – whether it is in reducing the onset of diabetes, or helping patients to better manage their condition – and we look forward to further expanding on our partnership with Fitbit," said **Ed Deng, CEO at Health2Sync**.

"The behavioural changes exhibited by study participants reinforces our belief that Fitbit amplifies our intrinsic motivation to adopt healthier habits, which can make all the difference when dealing with a condition like Type 2 diabetes where lifestyle factors play such a big role," said **Steve Morley, Vice President of International Health Solutions & General Manager of Asia Pacific at Fitbit**. "Together with the seamless experience that Health2Sync provides for patients and their health providers to track key indicators, they create a powerful solution that makes it simpler and more convenient to manage conditions like Type 2 diabetes."

In September last year, Fitbit and Health2Sync collaborated to allow the integration of Fitbit's health, sleep and fitness wearable data with the Health2Sync app (with user consent) to support Health2Sync's 520,000 users in Japan and Taiwan to better manage their conditions, like Type 2 diabetes. The new platform gives users who have a Fitbit account access to an in-app dashboard that includes the option to agree to share their wearable data from their Fitbit devices⁷, including heart rate, sleep and physical activity, alongside recent blood glucose readings from Health2Sync depicting if levels fall within, above, or below the healthy range.

³ Average fasting blood glucose levels of study participants from Da-Ya Chang-An clinic decreased 11.10 mg/dL compared to the study average of 10.92 mg/dL

⁴ "Diabetes" World Health Organization, 2020. <https://www.who.int/news-room/fact-sheets/detail/diabetes>.

⁵ IC Chen., Yu NC. "A Decade of Diabetes Care in Taiwan." Diabetes research and clinical practice. U.S. National Library of Medicine, 2014. <https://pubmed.ncbi.nlm.nih.gov/25550058/>.

⁶ Wong LC., Tsai CY., Chou HK., Tsai MT., Tsai WH., Chou.P., and Shen ST. "Healthcare costs associated with progressive diabetic retinopathy among National Health Insurance enrollees in Taiwan, 2000-2004." BMC Health Services Research, May 26, 2010. <https://bmchealthservres.biomedcentral.com/articles/10.1186/1472-6963-10-136>

⁷ Includes [Fitbit Sense](#), [Fitbit Versa 3](#), [Fitbit Charge 4](#), [Fitbit Inspire 2](#), among others.



About Fitbit, Inc. (NYSE: FIT)

Fitbit helps people lead healthier, more active lives by empowering them with data, inspiration and guidance to reach their goals. Fitbit designs products and experiences that track and provide motivation for everyday health and fitness. Fitbit's diverse line of innovative and popular products include Fitbit Sense™, the Fitbit Versa™ family of smartwatches, Fitbit Charge 4™, Fitbit Inspire 2™, and Fitbit Ace 2™ activity trackers, and Fitbit Aria Air smart scale. Fitbit products are carried in approximately 39,000 retail stores and in 100+ countries around the globe. The Fitbit platform delivers personalized experiences, insights and guidance through leading software and interactive tools, including the Fitbit and Fitbit Coach apps, and Fitbit OS for smartwatches. Fitbit's paid subscription service, Fitbit Premium™, provides advanced analytics and actionable guidance in the Fitbit app to help you reach your health and fitness goals. Fitbit Premium + Health Coaching provides one-on-one virtual coaching with expert health coaches and personalized plans based on your Fitbit data. Fitbit Health Solutions develops health and wellness solutions designed to help increase engagement, improve health outcomes, and drive a positive return for employers, health plans and health systems. Fitbit and the Fitbit logo are trademarks or registered trademarks of Fitbit, Inc. in the U.S. and other countries. Additional Fitbit trademarks can be found www.fitbit.com/legal/trademark-list. Third-party trademarks are the property of their respective owners.

About Health2Sync

Health2Sync scales diabetes care by providing a digital engagement platform that is comprised of a mobile App for diabetics, cloud-based analytics, and cloud platform for healthcare providers. The smart analytics algorithms provide users with personalized education and guidance based on their biometric and behavior data captured. With the cloud platform, healthcare providers can easily take control of patients' condition through the analyzed data.

Health2Sync is the largest diabetes management platform in Asia (excl. China) and proven to help users improve their outcome. Health2Sync has supported partners including pharmaceuticals, private payers, and the public payor to provide diabetics with innovative services. In 2017, 2018 and 2019 Health2Sync was selected as Top 10 Diabetes App globally by Healthline.