



# Health Promotion, Disease Prevention and Disease Management

glucoless

CONFIDENTIAL

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# Glucoloss is a Clinically Proven, Personalised & Adaptive AI Platform, for Prevention and Management of Chronic Disease and Health Promotion

Glucoloss acts as a personal **digital coach** that helps people achieve 150 minutes of **activity** per week and 5%-7% **weight loss**



Activity



Weight



Nutrition



Health Habits



## Clinical Trial at Johns Hopkins

In a clinical trial conducted by Johns Hopkins Endocrinology, Diabetes and Metabolism Division, Glucoless achieved **clinically significant outcomes** on all measures evaluated:

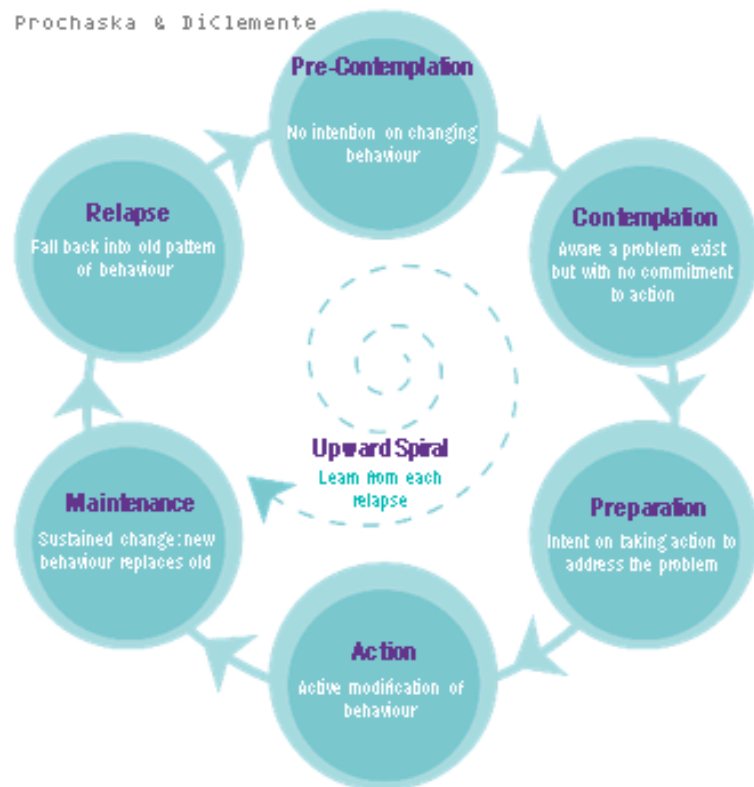
- ▶ Reduction in HbA1C
- ▶ Weight loss
- ▶ Increase in physical activity

*"The fact that the study demonstrated both weight and A1C reductions at only three months suggests that long-term effects will be comparable, if not superior, to existing interventions. This machine learning technology enables fully automated intervention; hence, supporting larger-scale deployment with greater cost-effectiveness potential when compared with human-based diabetes prevention solutions". JMIR 2/27/18*

# Behaviour Change Science

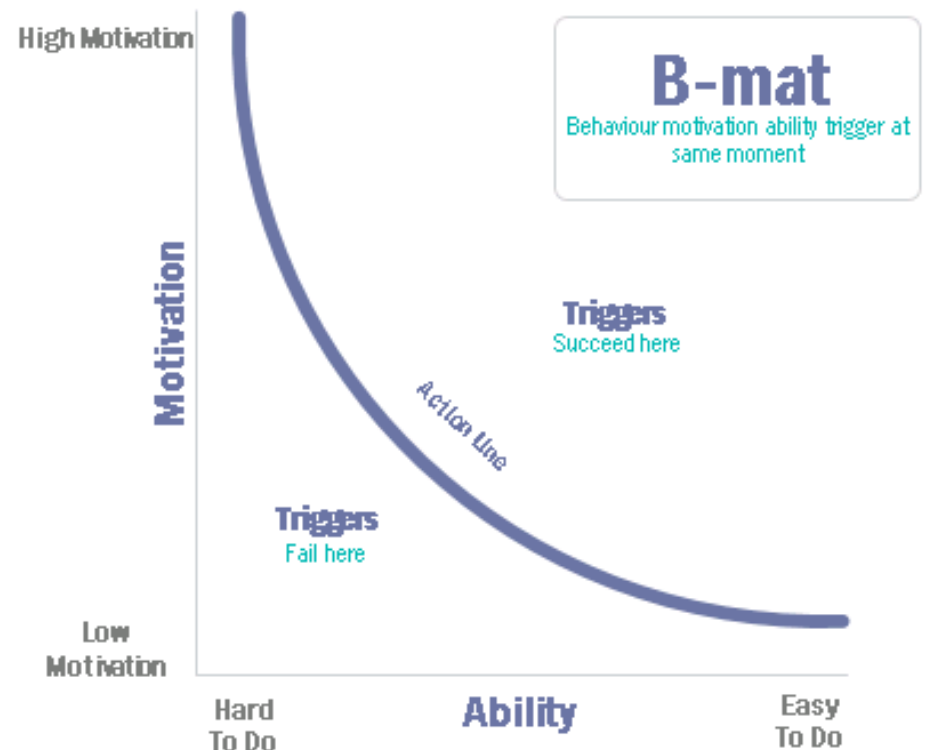
## James Prochaska Cycle of Change

Prochaska & DiClemente



## BJ Fogg's Behaviour Model

www.behaviormodel.org ©2007 BJ Fogg



## Personalised Behaviour Intelligence (PBI)

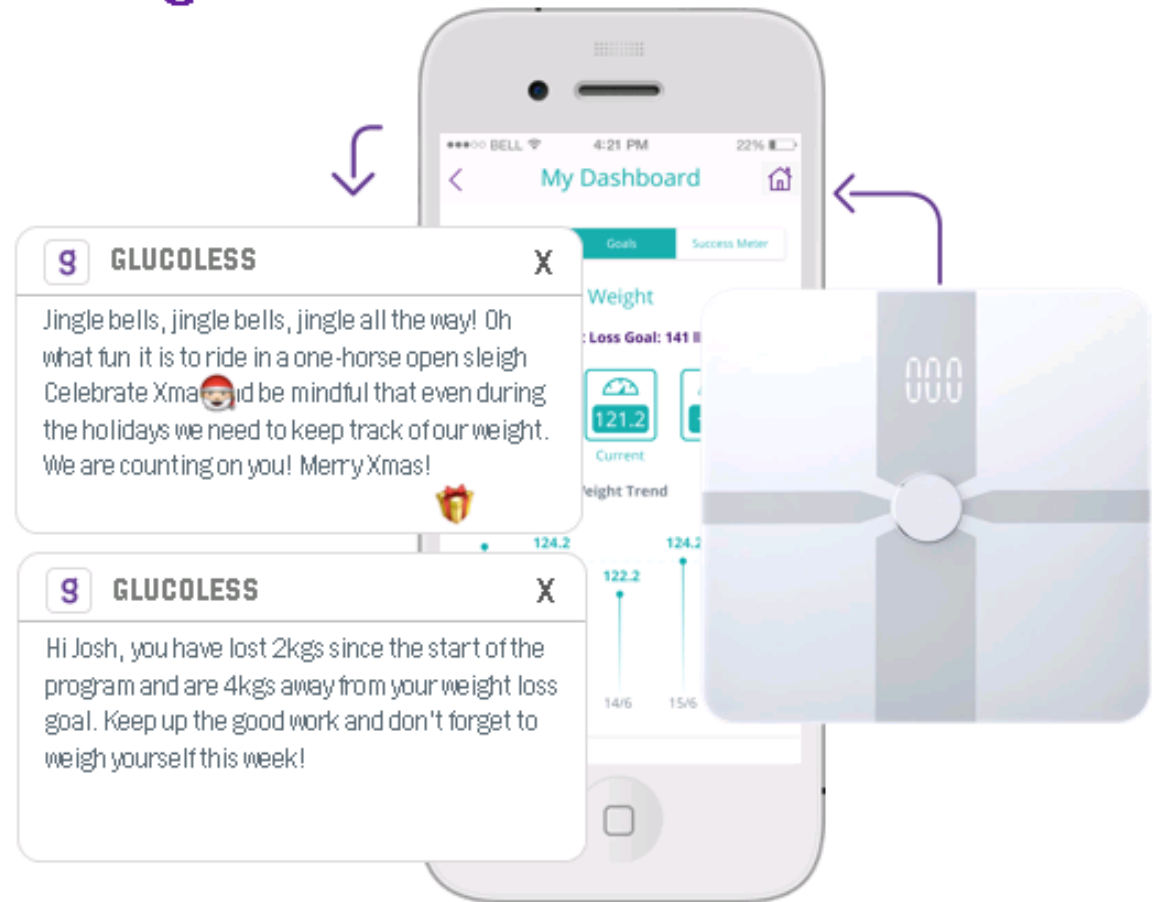
- ▶ Transforming 'data dumps' into personalised meaningful real-time recommendations
- ▶ Continuously processes various aspects of the user's life habits
- ▶ By applying predictive analytics, Glucoless continuously optimises the user's goals and messages, so they will be in the context, time, place, and tone-of-voice that increase the probability of action





## Personalized Intervention – Weight

- ▶ Weight-loss goals are continuously optimised based on the user's real-world achievements
- ▶ Stepping on a scale daily, correlates with weight loss by reminding us of our commitment to health.

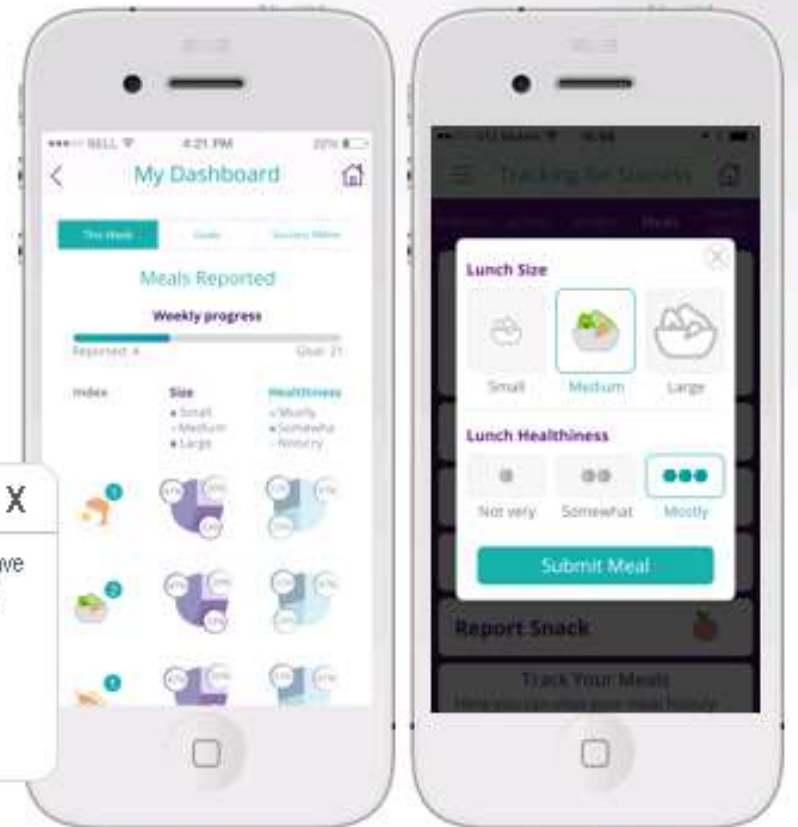


## Personalized Intervention – Diet and Nutrition

- ▶ Empowering and intuitive approach to nutrition tracking – targets dietary awareness rather than “obsessive” calorie counting
- ▶ Subjective reporting to address personal tracking and individual improvement

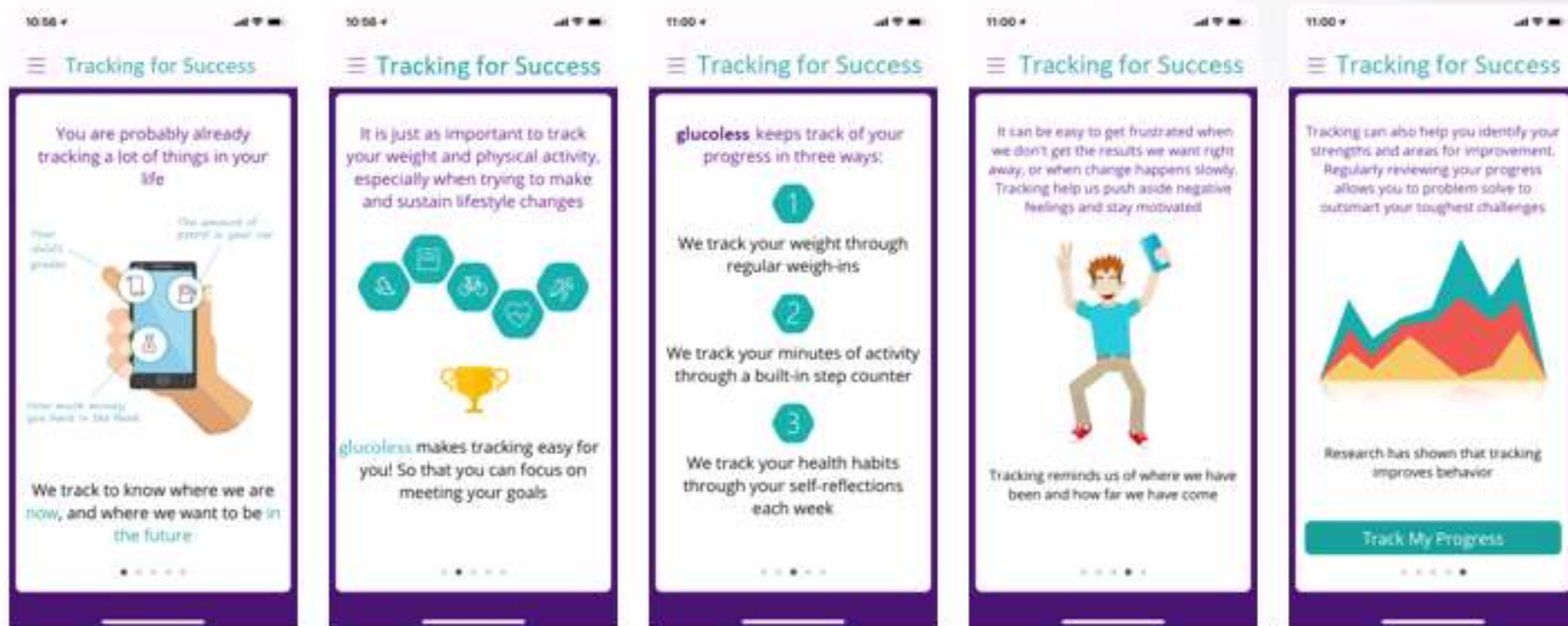
**g** GLUCOLESS **X**

It's lunch time Josh, and we noticed that you have a busy day ahead, so keep your meal small and healthy to have more energy in the afternoon. Don't forget to report your lunch 😊



# Patient Education

## Customisable Patient Education – Tailored to Customer's Specific Emphasis





# Customised From Baker Education Material



## Carbohydrates and Glycaemic Index (GI)

### What are carbohydrates?

- Carbohydrate is found in a variety of food and drink, and provides the body with fuel (energy).
- Carbohydrates break down into glucose during digestion and raises blood glucose levels.
- Many foods containing carbohydrate also provide dietary fibre, vitamins and minerals.
- The amount and type of carbohydrate you eat will affect your blood glucose levels.

### Which foods contain carbohydrates?

#### Healthy carbohydrate choices:

- Wholegrain bread, Crispbread
- Wholegrain breakfast cereal
- Grains (e.g. Barley, Quinoa)
- Pasta, Noodles
- Rice
- Wholegrain flour, Wholemeal flour
- Lentils, Legumes
- Starchy vegetables (Potato, Corn, Sweet potato)
- Fruit
- Milk, Yoghurt



#### Less healthy carbohydrate choices:

- Biscuits
- Cakes, Pastry
- Sugar, Agave syrup, Rice malt syrup, Coconut sugar etc.
- Jam, Honey, Maple syrup
- Chocolate, Confectionary
- Regular soft drink, Cordial
- Fruit juice
- Potato crisps, Corn chips
- Icecream, Custard



#### Foods that do not contain significant carbohydrate:

- Meat, Chicken, Fish, Tofu, Eggs, Cheese
- Oil, Avocado, Nuts
- Sugar free drinks, Artificial sweeteners
- Non-starchy vegetables: Lettuce, Tomato, Broccoli, Cauliflower, Zucchini, Eggplant, Bok choy, Okra, Carrots etc.

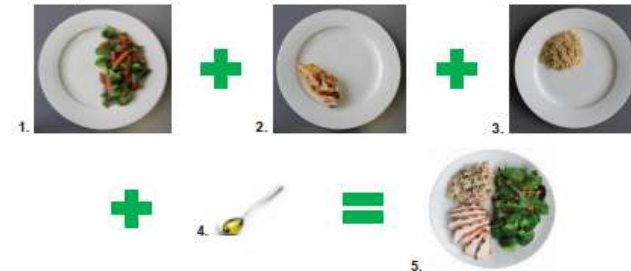


## Making healthy meals

Choosing a new recipe or adapting a family favourite to create a healthy meal can be achieved with some simple strategies — make room for vegetables, use a suitable cooking method and select the right ingredients.

### Take a balanced approach

- Prioritise vegetable — aim for half of your recipe, chopping board and plate to be vegetables
- Pick a protein — fish, skinless chicken, lean red meat, lentils, egg or tofu
- Choose a lower GI carbohydrate — corn or sweet potato, pasta or quinoa, grain bread or barley
- Add a splash of healthy fat — cook with canola or drizzle olive oil on salad vegetables



### Reducing energy (kJ) and staying satisfied

Simple swaps can transform meals into lower energy (kJ) options and boost vegetable intake. If you are aiming to reduce weight, reducing energy (kJ) intake by 2000kJ/day is often the target.

Transform this	Into this...	Energy (kJ) saved
2 cups pasta with 1 cup vegetables and cream sauce	1 cup pasta with lean mince and tomato sauce plus 2 cups vegetable or salad as a side dish	≈1040kJ
2 cups rice, 200g chicken and 1 cup stirfry vegetables	1 cup cooked rice, 100g skinless chicken or tofu and 2 cups stirfry vegetables	≈1480kJ

# Tools for Long Term Engagement

Personalised Gamification adapted to the user journey

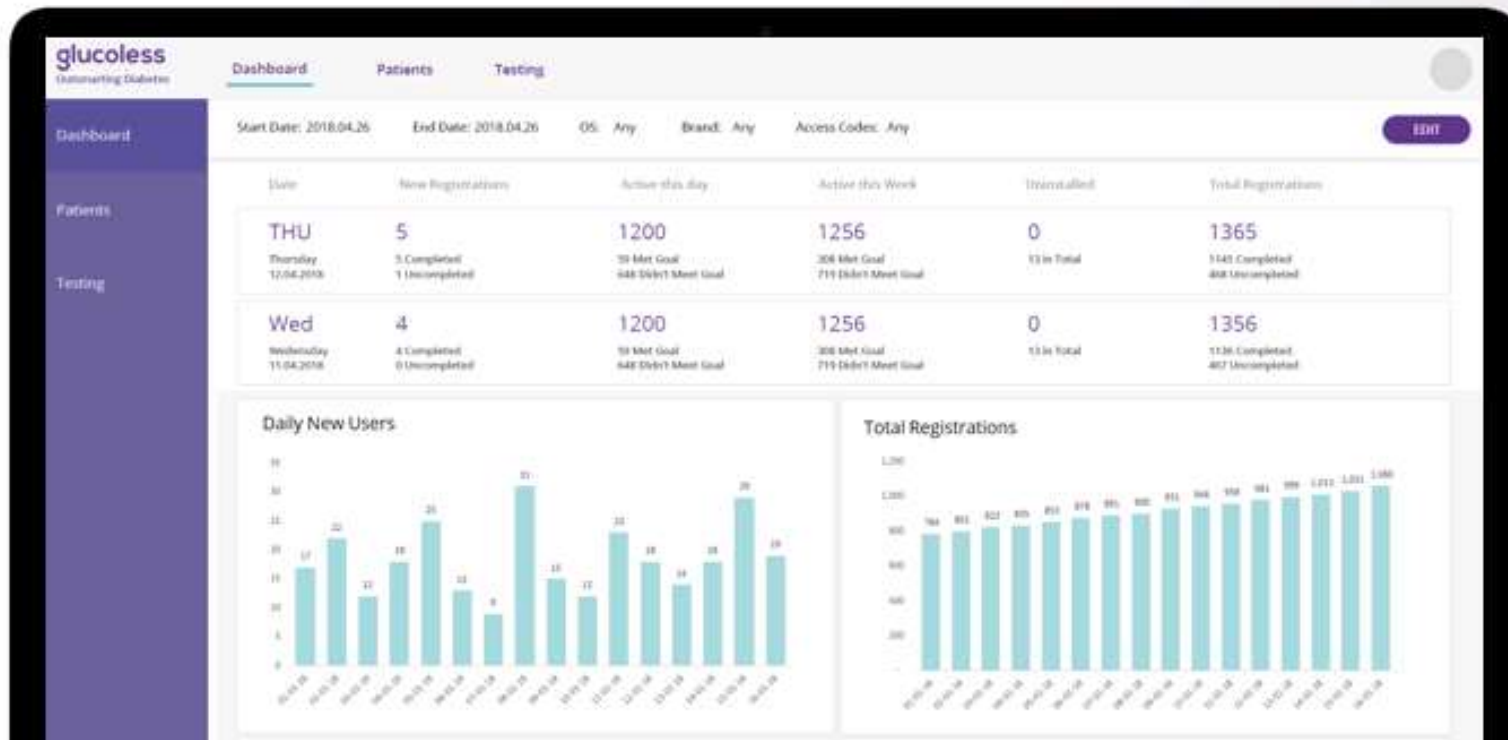


Social tools to support the user in his journey



# Management Dashboard

Gluciless' dashboard enhances the health coach's ability to follow-up on his/her patients in a much more personalised and just-in-time manner.



## Where are we at?

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- The app has now been adapted for the Australian market
- Baker education material has been integrated
- Consumer testing currently underway with 25 clients
- Evaluation of this testing and fine tuning
- Funding application for small RCT
- Fine tuning and pathways to open market

**Many Thanks For Your Attention**