

“Eat Smart, Live Healthy: Promoting a Low Glycaemic Index Diet for Diabetes Prevention”



- **Focus Behaviour:** Diet/Nutrition – Low Glycaemic Index (GI) Diabetic Diet

- **Target Population:** Adults aged 40–65 years

- **Module:** Social Epidemiology and Public Health Development (LCHS7000)

- **Type of Presentation:** Public Health Campaign / Practice Intervention

- **Prepared by:**

- **Institution:** University of Wales Trinity Saint David

- **Submission Date:**

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Weekly Activity Breakdown

Session	Session Focus	Topic	Content	Engagement	Goal
Week 1	Introduction to Public Health	Epidemiology Basics	Definition, importance, and how diseases are studied in populations.	Disease Detective Game – identify disease patterns from clues.	Understand the role of epidemiology in public health.
Week 2	Health Promotion	Public Health Campaigns	Concepts of health promotion and examples of health campaigns.	Poster Design Activity – create a campaign poster on nutrition or physical activity.	Recognise how campaigns influence healthy behaviours.
Week 3	Needs Assessment	Community Health Needs	Identifying health problems and priority groups in a community.	Community Mapping Exercise – analyse a sample community profile.	Develop skills to identify health priorities.
Week 4	Planning Interventions	SMART Objectives	Steps in planning a health campaign and setting SMART goals.	SMART Goal Workshop – convert general health goals into SMART objectives.	Learn how to plan effective health interventions.
Week 5	Behaviour Change	Health Belief Model & TPB	Understanding behavioural theories influencing health decisions.	Role-Play Scenario – act out behaviour change situations.	Apply behaviour change theories to real-life health issues.
Week 6	Campaign Implementation	Media & Communication	Using media and communication to promote health messages.	Social Media Campaign Design – create a short health message.	Understand communication strategies in health promotion.
Week 7	Evaluation	Types of Evaluation	Process, impact, and outcome evaluation in health interventions.	Campaign Review Activity – evaluate a mock campaign.	Learn how to assess effectiveness of interventions.
Week 8	Reflection & Presentation	Health Campaign Project	Present a small group health campaign plan.	Group Presentation with posters or slides.	Demonstrate understanding of public health campaigns.

**537
million**

adults are living with
diabetes

**3 in 4
adults with
diabetes**

live in low-and
middle income
countries

**6.7
million**

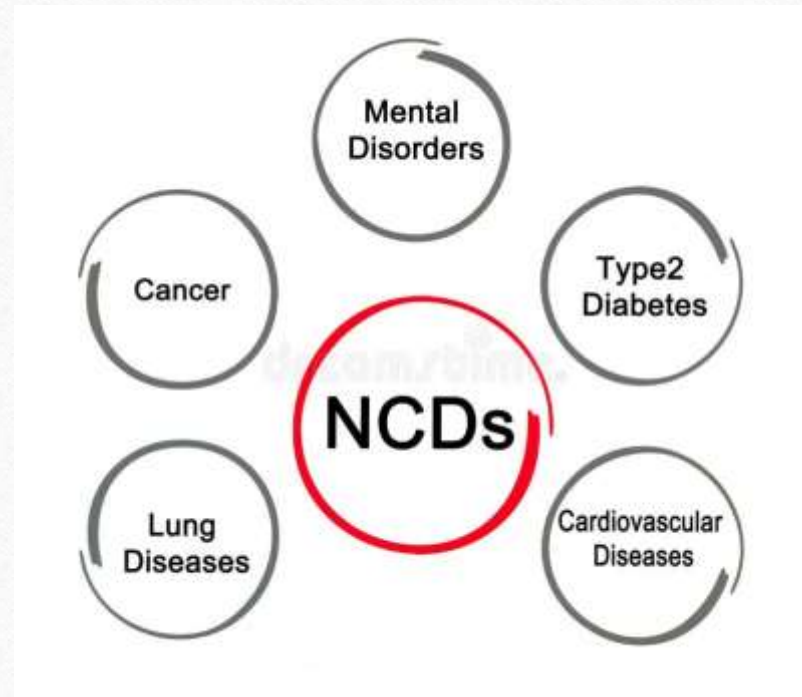
deaths due to
diabetes in 2021

Introduction

- Diabetes is a major global public health problem
- Over **537 million adults (20–79 years)** are living with diabetes worldwide
- Around **90–95% of cases are Type 2 diabetes**
- Diet plays a critical role in diabetes prevention and management (International Diabetes Federation, 2025).
- Public health campaigns promote healthy lifestyle behaviours

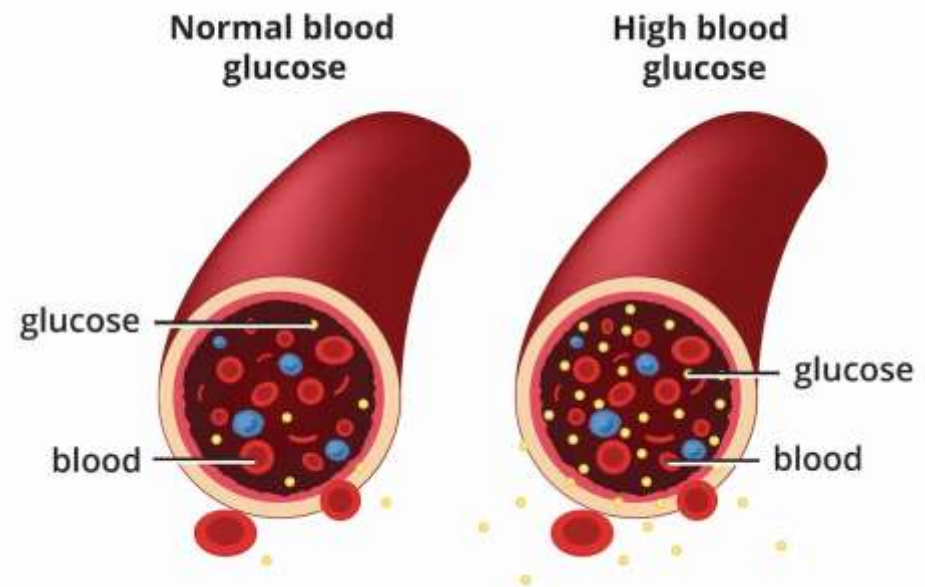
Public Health Context

- Type 2 diabetes is a **chronic non-communicable disease (NCD)**
- Responsible for approximately **6.7 million deaths globally in 2021** (North, 2024).
- Unhealthy diet, obesity, and physical inactivity are major risk factors
- NCDs account for **74% of global deaths** (WHO, 2025)
- Public health focuses on prevention and population-level interventions

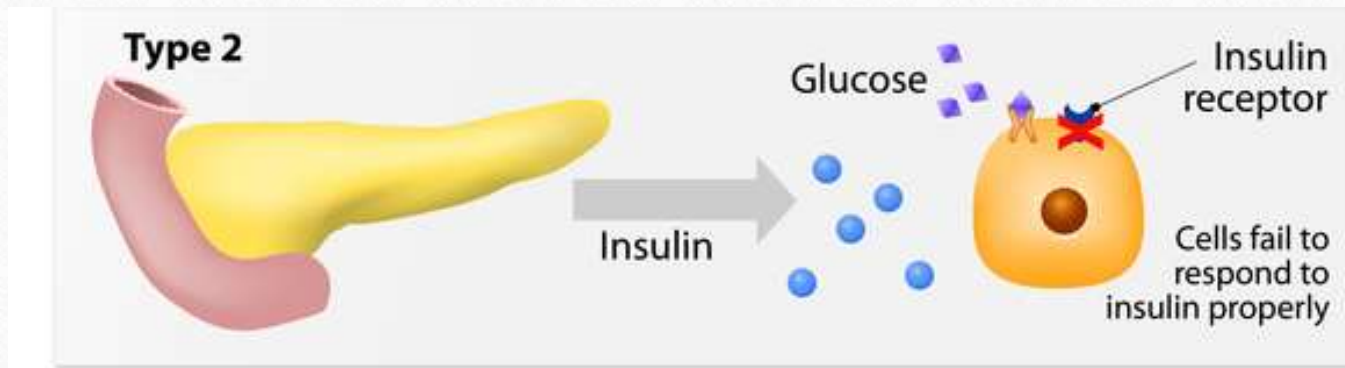


Definition of Diabetes

- Diabetes is a metabolic disorder characterised by chronic hyperglycaemia
- Caused by insufficient insulin production or insulin resistance
- Normal fasting blood glucose: 3.9–5.5 mmol/L
- Diabetes diagnosed when fasting glucose is ≥ 7.0 mmol/L (Bielka *et al.*, 2024)
- Type 2 diabetes strongly associated with lifestyle factors



Epidemiology of Diabetes



- Global prevalence: **537 million adults living with diabetes**
- Expected to reach **643 million by 2030** (International Diabetes Federation, 2025).
- In the UK, approximately **4.3 million people have diabetes**
- About **90% of UK cases are Type 2 diabetes**
- Higher prevalence among adults aged **40–65 years** (North, 2024).

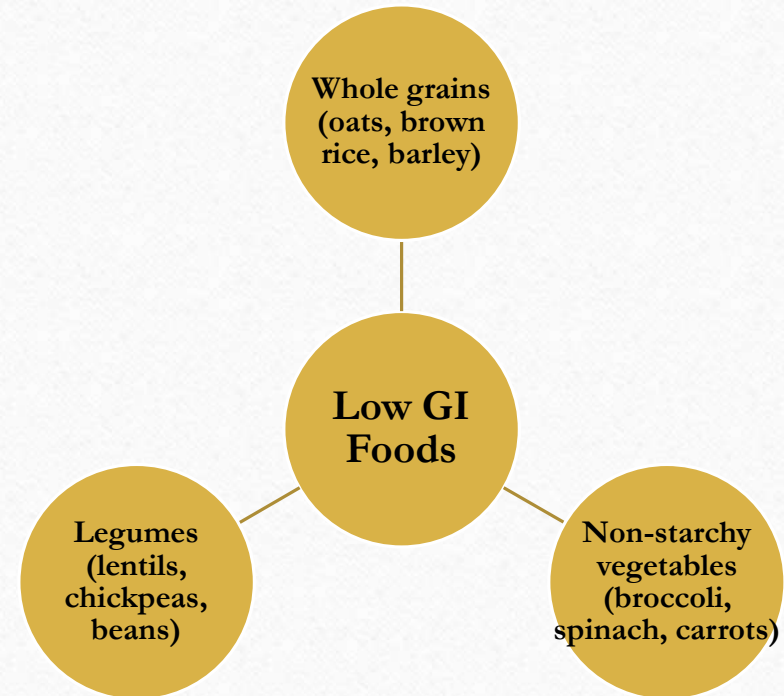
Selected Behaviour: Nutrition

- Diet directly affects **blood glucose control**
- High intake of **refined carbohydrates and sugar increases diabetes risk** (Arshad *et al.*, 2022)
- Obesity is linked to **80–85% of Type 2 diabetes cases**
- Healthy diets reduce risk and improve disease management (Chandrasekaran and Weiskirchen, 2024)
- Public health promotes balanced diets and low-GI foods



Low Glycaemic Index Diet

- Glycaemic Index (GI) measures how quickly carbohydrates raise blood glucose levels
- GI scale ranges from **0–100 based on glucose response**
- **Low GI foods (≤ 55)** release glucose slowly into the bloodstream
- Helps maintain stable blood glucose and improve diabetes control (Zhou *et al.*, 2022)



Target Population

Age

Group:

40–65

years

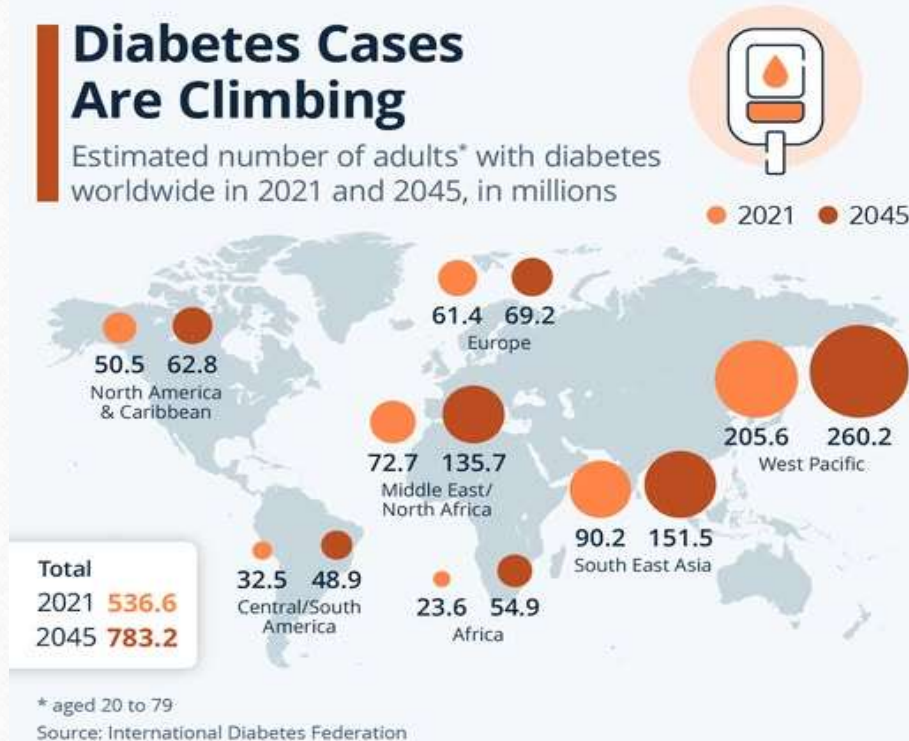


- Risk of Type 2 diabetes increases significantly after **age 40**
- Around **50% of diabetes cases occur in adults aged 40–65** (Chandrasekaran and Weiskirchen, 2024)
- Higher prevalence of obesity and sedentary lifestyle in this age group
- Opportunity for early prevention and lifestyle modification (Zhou *et al.*, 2022)

Rationale for the Campaign

Diabetes Cases Are Climbing

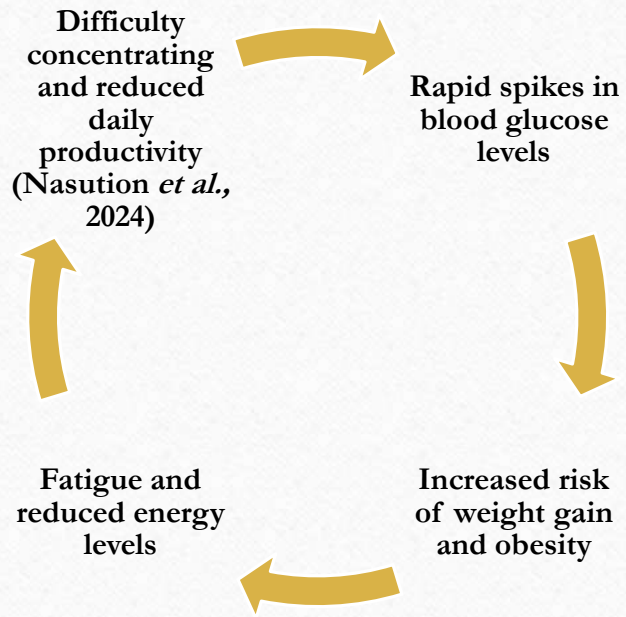
Estimated number of adults* with diabetes worldwide in 2021 and 2045, in millions



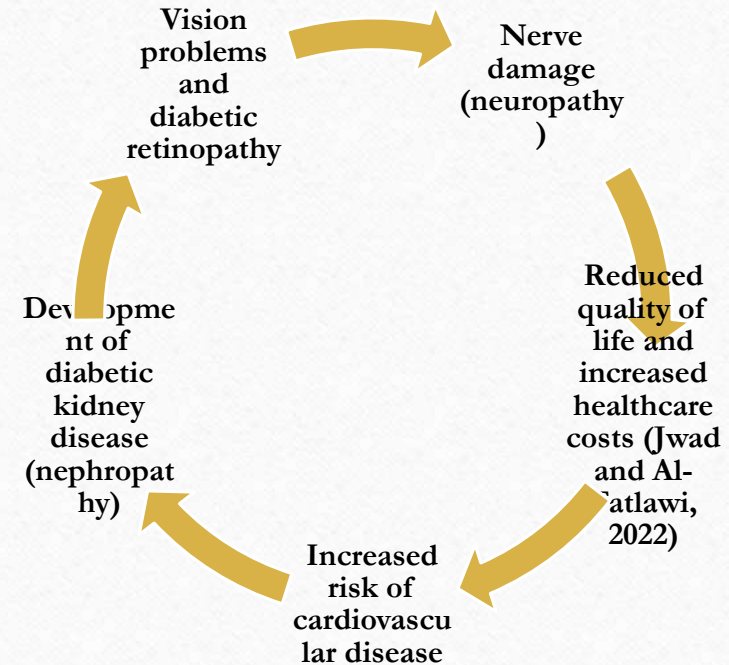
- Diabetes prevalence continues to rise globally
- Over **537 million adults currently live with diabetes worldwide**
- Many adults lack knowledge about healthy dietary practices
- Community-based education can improve health behaviours

Consequences of Poor Diet

Short Term



Long Term



Aim of the Campaign

- Promote healthy dietary behaviour among adults aged **40–65 years**
- Encourage consumption of **low glycaemic index foods**
- Improve blood glucose control and reduce diabetes risk
- Support long-term diabetes prevention and management



SMART Objectives

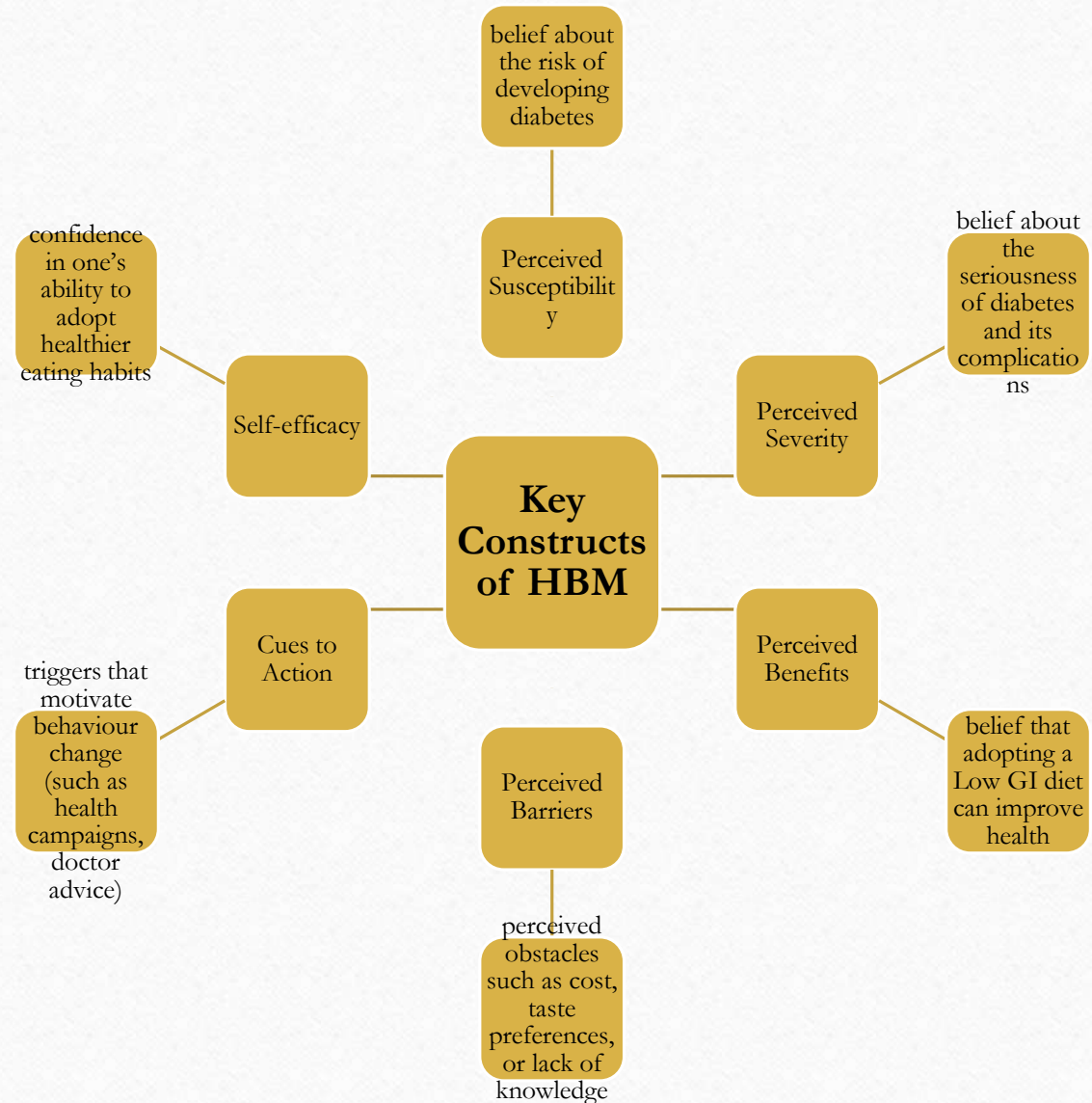
Additional Campaign Objectives:

- Increase awareness of Low GI foods among participants
- Encourage replacement of high GI foods with healthier alternatives
- Improve dietary habits and blood sugar management

SMART Objective	Description
<i>Specific</i>	Increase participants' knowledge about Low Glycaemic Index (GI) foods and their role in controlling blood glucose levels.
<i>Measurable</i>	Achieve at least 30% improvement in participants' knowledge scores through pre- and post-session questionnaires.
<i>Achievable</i>	Deliver 6 weekly educational sessions including nutrition education, meal planning guidance, and healthy cooking demonstrations.
<i>Relevant</i>	Supports diabetes prevention and management by encouraging replacement of high-GI foods with healthier alternatives.
<i>Time-bound</i>	Objectives will be achieved within an 8-week community campaign programme targeting adults aged 40–65 years.

Behaviour Change Theory

- The **Health Belief Model (HBM)** explains how individual beliefs influence health behaviours
- Commonly used in public health to promote behaviour change
- Focuses on how people perceive health risks and benefits (Yenew *et al.*, 2023)



Campaign Structure

Component	Description
<i>Programme Duration</i>	6–8 week community-based intervention programme
<i>Nutrition Education Sessions</i>	Educational sessions explaining diabetes, blood sugar control, and the benefits of a Low GI diet
<i>Healthy Cooking Demonstrations</i>	Practical demonstrations showing how to prepare healthy Low GI meals
<i>Group Discussions</i>	Interactive discussions where participants share experiences, challenges, and strategies for healthy eating
<i>Diet Planning Workshops</i>	Guided sessions to help participants create personalised healthy meal plans

Weekly Session Plan

Week	Session Topic	Key Focus
Week 1	Introduction to Diabetes and Nutrition	Overview of diabetes, risk factors, and the importance of diet
Week 2	Understanding Glycaemic Index	Explanation of GI values and identifying low GI foods
Week 3	Healthy Meal Planning	Creating balanced meals and portion control
Week 4	Cooking Demonstration	Preparation of healthy low GI meals
Week 5	Food Label Reading	Understanding nutritional labels and sugar content
Week 6	Maintaining Healthy Habits	Strategies for sustaining healthy dietary behaviour

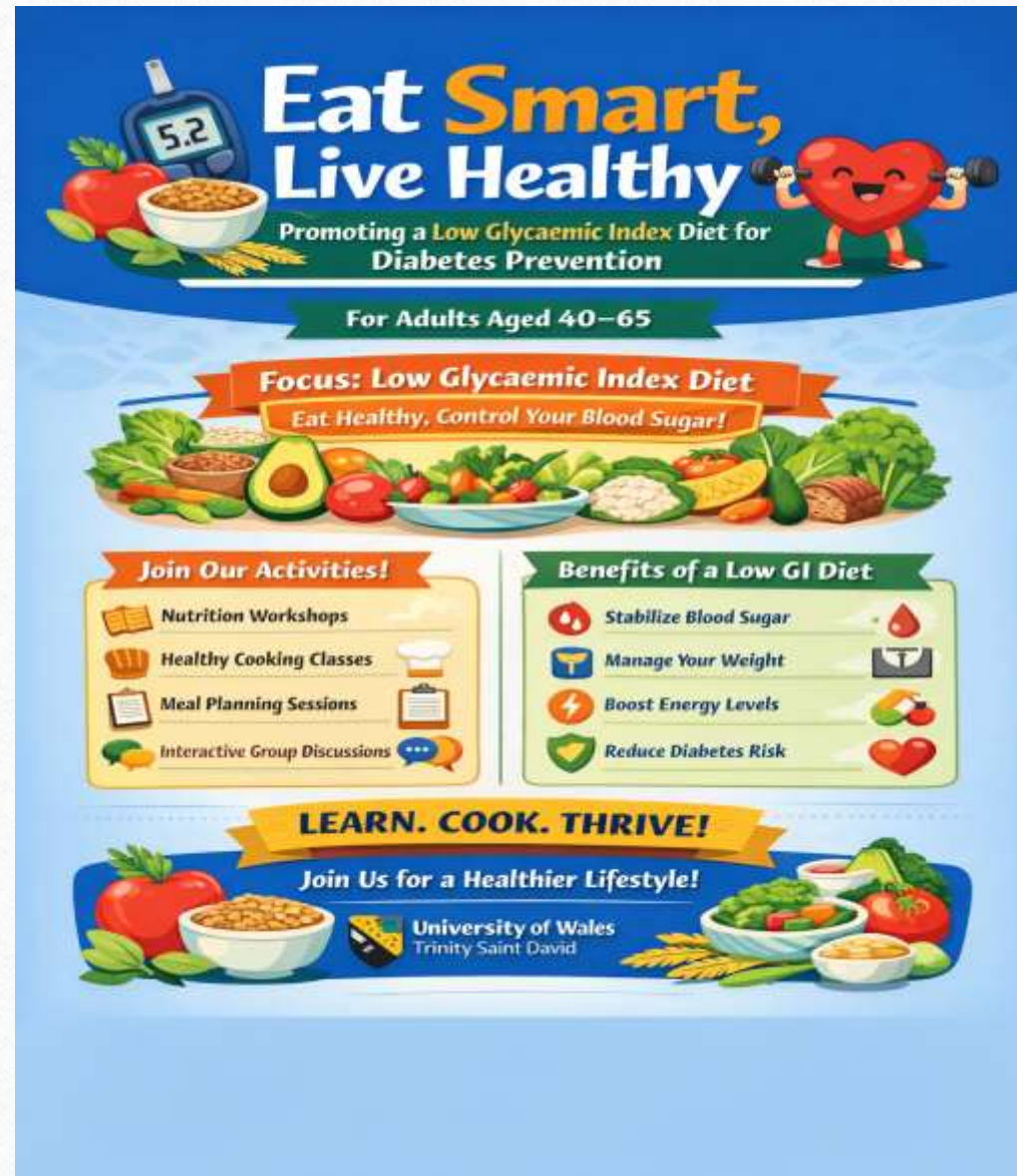
Key Health Messages



fibre-rich foods such as whole grains (brown rice, oats, Limit whole wheat bread) and sugary foods and beverages instead of refined grains including sweets, soft drinks, and sugar, salt, and

Campaign

Poster



Campaign Promotion Strategy

Promotion Method	Description
<i>Community Posters and Flyers</i>	Display posters and distribute flyers in community centres, clinics, pharmacies, and local markets to raise awareness about the campaign.
<i>Social Media Awareness Campaigns</i>	Use social media platforms to share educational posts, campaign information, and healthy dietary tips.
<i>Health Workshops</i>	Organise community workshops and information sessions to educate participants about diabetes prevention and healthy eating.
<i>GP Referrals</i>	Encourage general practitioners and healthcare professionals to refer patients who may benefit from the programme.

Stakeholders and Partnerships

Mendelow's Matrix Category	Stakeholder	Role in the Campaign
Key Players (High Power / High Interest)	Local Health Authorities	Provide funding, public health guidance, and support for implementing the campaign within the community
Key Players (High Power / High Interest)	Diabetes UK	Provide educational resources, national guidelines, and awareness materials for diabetes prevention (Turaga, 2025)
Keep Informed (Low Power / High Interest)	Dieticians and Nutritionists	Deliver nutrition education sessions, meal planning guidance, and healthy cooking demonstrations
Keep Informed (Low Power / High Interest)	Community Health Organisations	Help recruit participants, promote the campaign locally, and support community engagement

Evaluation Methods

Process Evaluation

- Monitor **attendance and participation levels** during the programme
- Collect **participant feedback** through questionnaires and discussions
- Assess delivery of sessions and engagement with activities (Amini and Rahmani, 2023)

Outcome Evaluation

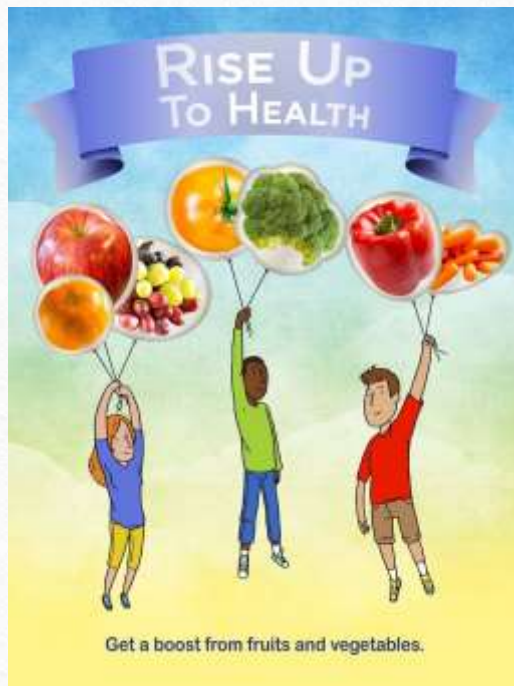
- Measure **improvement in knowledge about Low GI diets** using pre- and post-programme surveys
- Assess **changes in dietary behaviour**, such as increased consumption of low GI foods
- Evaluate whether campaign objectives and targets were achieved

Expected Outcomes



of long-term diabetes and understanding of health
 Betteres blood glucose control (Turaga, et al, 2025) among participants
 Improved dietary choices and meal planning
 Create healthy knowledge about practice Low Glycaemic Index foods

Benefits and Challenges of Behaviour Change



- Positive behaviour change promotes physical health, mental wellbeing, and stronger social relationships, enhancing community health.
- Identifies barriers preventing the adoption of healthier behaviours using health behaviour theories like the Health Belief Model and the Theory of Planned Behaviour.
- Understanding these obstacles aids in explaining the challenges some individuals face in changing behaviour.
- The campaign proposes effective solutions, including education, social support, and motivation techniques to help individuals adopt healthier lifestyles.

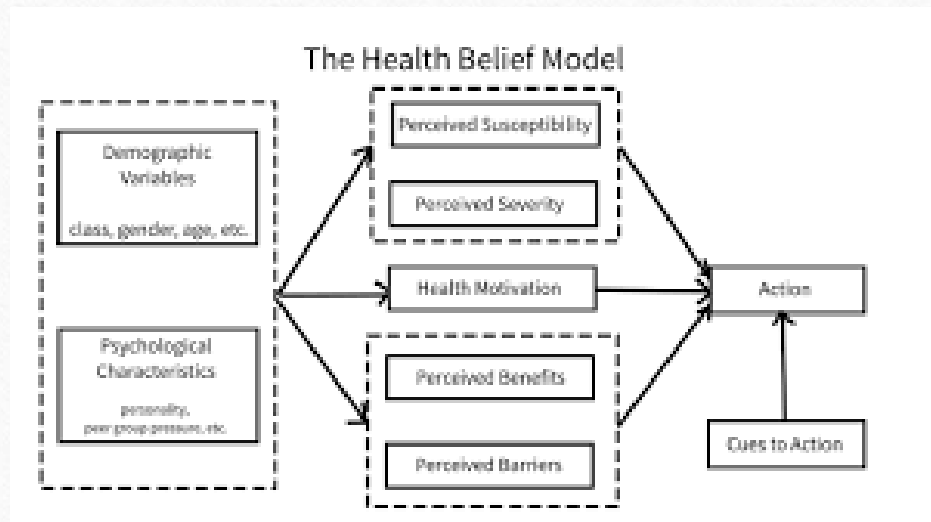
Physiological Benefits of Behaviour Change

- Implementing healthier lifestyles, including physical exercise and better nutrition, offers significant physiological benefits.
- Regular exercise strengthens the heart and enhances the cardiovascular system by increasing blood flow and reducing heart disease risk.
- A balanced diet helps maintain healthy body weight and prevents obesity (Welsh et al., 2024).
- Such lifestyle changes reduce the risk of chronic diseases such as diabetes and hypertension.
- Healthy behaviors boost the immune system, aiding in infection resistance.
- These changes improve sleep quality and increase daily energy levels, promoting productivity.
- Overall, small healthy changes contribute to disease prevention and long-term wellbeing.

Sociological Benefits

- Social well-being and relationship strengthening in families and communities can be enhanced through behavior change.
- Engaging in community physical activities or health programs promotes involvement and participation.
- Such activities foster supportive networks where individuals motivate one another towards healthier lifestyles.
- Family relationships improve when members engage in healthy activities together, leading to stronger bonds.
- Encouraging healthy behaviors helps establish positive social norms, further motivating community members.
- This collective engagement reduces social isolation by aligning individuals around common goals and activities.

Behaviour Change Theories & Barriers: Health Belief Model (HBM)

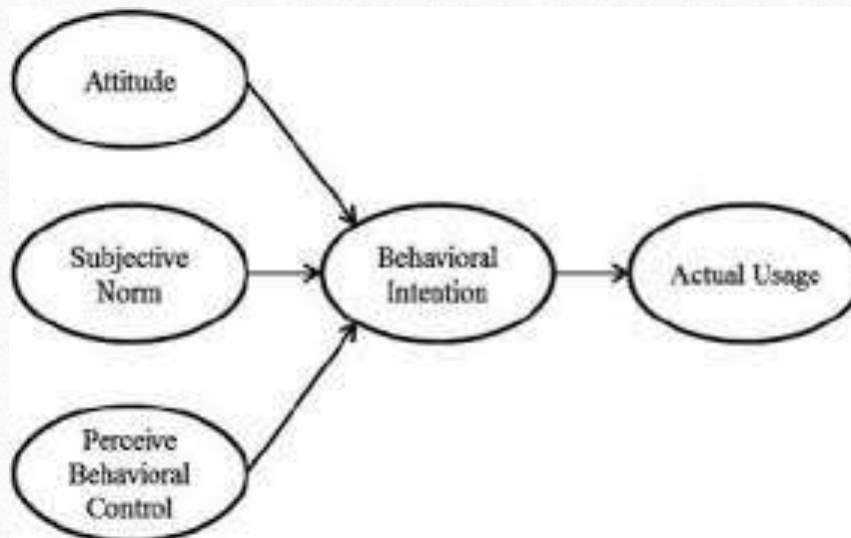


- The Health Belief Model (HBM) explains health behaviors based on personal beliefs regarding health threats and the value of actions.

Key components include:

- **Perceived susceptibility:** The risk of acquiring an illness.
- **Perceived severity:** The serious nature of the condition.
- **Perceived benefits:** The advantages of changing behavior.
- **Perceived barriers:** Obstacles to taking action.
- Common reasons for the failure to adopt healthier behaviors include lack of motivation, limited time, and complexity of changes.
- Understanding these barriers helps health campaigns create effective strategies for encouraging positive behavior change.

Behaviour Change Theories & Barriers: Theory of Planned Behaviour (TPB)



- The Theory of Planned Behaviour (TPB) identifies three key factors influencing individual behavior:
- **Attitude toward the behaviour:** Reflects whether the individual's perception of the behaviour is positive or negative.
- **Subjective norms:** Represents the influence of family, friends, or societal expectations on the individual's decision-making.
- **Perceived behavioural control:** Indicates the individual's confidence in their ability to effectively perform the behaviour.

Behaviour Change Theories & Barriers: Transtheoretical Model (Stages of Change)

- The Transtheoretical Model outlines behavior change as a gradual process involving several stages.
- **Precontemplation:** Individuals are not considering behavior change.
- **Contemplation:** Individuals recognize the issue and contemplate change.
- **Preparation:** Individuals organize and prepare to take action in the near future.
- **Action:** Individuals actively adopt new healthy behaviors such as increased physical activity or improved diet.
- **Maintenance:** Individuals work to sustain their new behaviors over the long term.
- Understanding these stages aids health campaigns in supporting behavior change effectively at each step.

Challenges to Behaviour Change

- Personal obstacles complicate behaviour change towards healthier lifestyles.
- Many individuals lack awareness of the health risks associated with unhealthy lifestyles, reducing motivation to change.
- Barriers include limited access to healthy foods, safe exercise areas, or affordable health-related facilities.
- Long-standing food preferences and cultural traditions hinder dietary changes.
- Lack of motivation and confidence can discourage attempts to adopt new behaviours.
- Busy lifestyles and work commitments limit time for exercise and healthy food preparation.
- These factors collectively decrease individuals' willingness to adopt healthier behaviours and the effectiveness of health promotion campaigns.

Campaign Solutions to Overcome Barriers

- The health campaign presents practical measures to overcome barriers to behavior change.
- It utilizes workshops, information sessions, and posters to educate on health risks and benefits of healthy living.
- Group activities and community exercise programs foster social support and motivation among participants.
- Strategies such as goal setting and progress tracking are incorporated to enhance commitment to health objectives.
- The campaign promotes affordable or free physical exercise options to maximize participation, regardless of financial constraints.
- Behavioral nudges, reminders, incentives, and social media are employed to encourage positive behaviors.
- Overall, successful behavior change is achieved through knowledge provision, motivation, and community support.

Conclusion

- The presentation emphasises the importance of promoting positive health behaviour change through an effective health campaign.
- The campaign focuses on encouraging healthier lifestyles, including improved diets and physical activity, to prevent chronic illnesses and enhance overall health.
- It outlines the physiological, sociological, and psychological benefits of adopting healthy behaviours, which can improve physical well-being, strengthen social connections, and support mental health.
- The presentation discusses common barriers to behaviour change as highlighted by health behaviour theories, such as the Health Belief Model, Theory of Planned Behaviour, and the Transtheoretical Model.



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Thank
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