



TYPE 2 DIABETES MELLITUS CARE PLAN

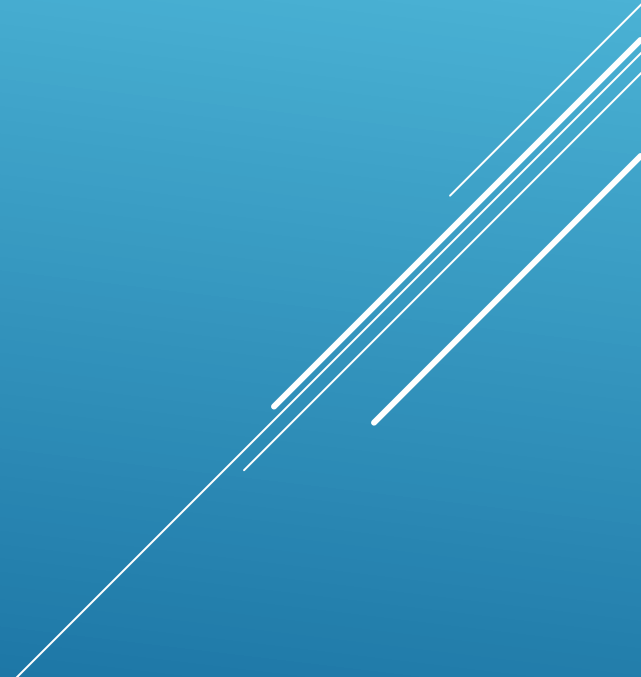
COMPONENT 2: PRESENTATION (POWERPOINT VOICE-OVER)

MONA-ALEXA COSTESCU

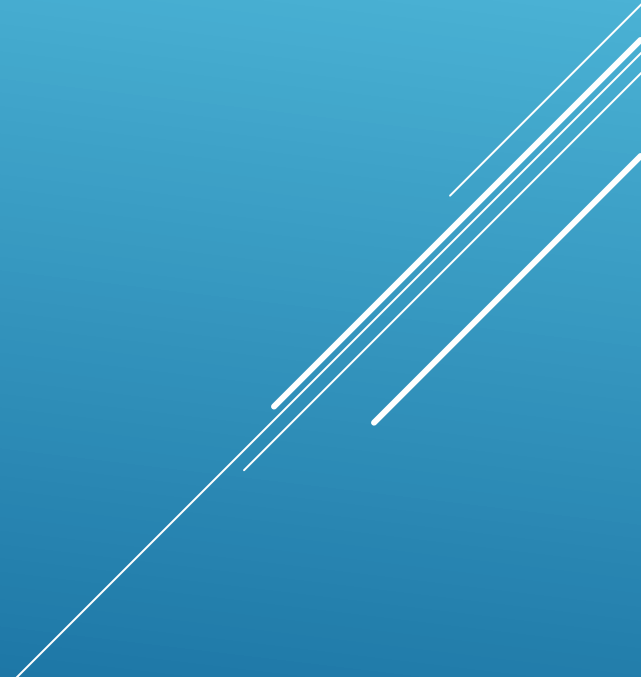
STUDENT ID: 2412771

BMHP5023

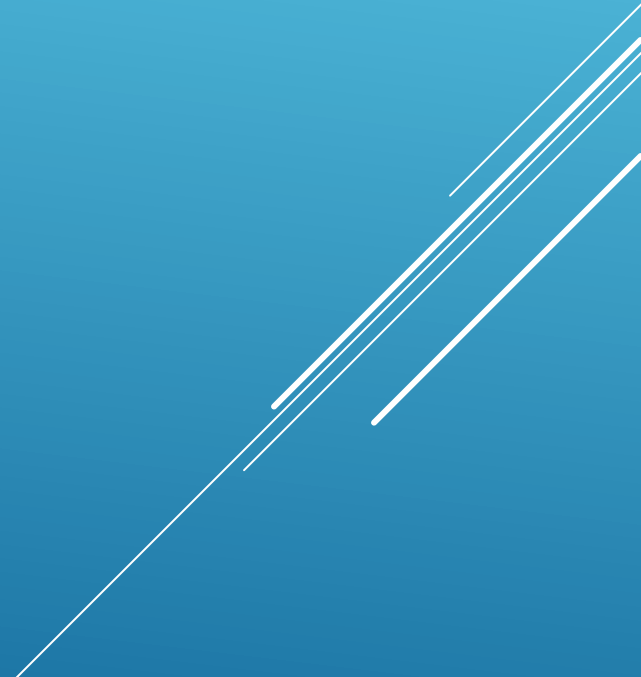
INTRODUCTION

- Chronic metabolic disorder
 - Persistent hyperglycaemia
 - Insulin resistance & β -cell dysfunction
 - Gradual onset / often asymptomatic
 - Strongly lifestyle-associated
 - 90% of UK diabetes cases
 - Managed via NICE NG28
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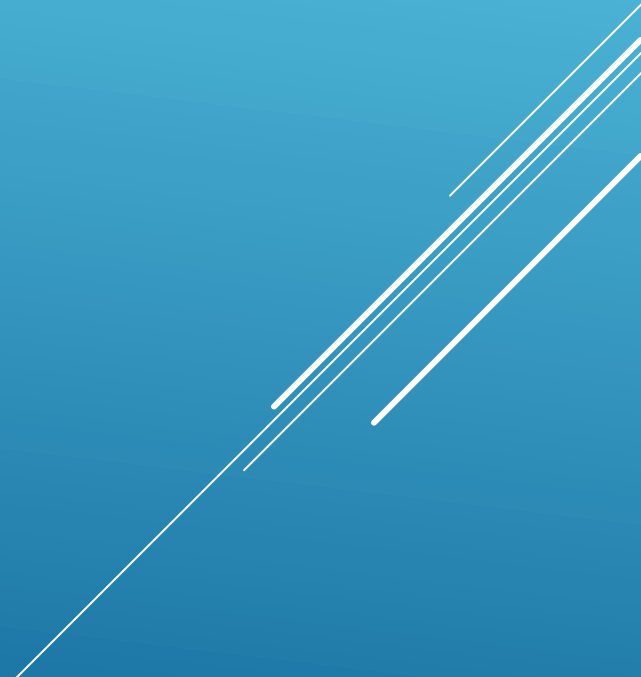
PATIENT PROFILE

- John Smith, 55-year-old male
 - Sedentary occupation
 - BMI 31 (obese classification)
 - Lives alone (social factor)
 - Low physical activity • High processed/sugar diet
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OVERVIEW OF CONDITION

- Impaired glucose regulation
 - Glucose = primary energy source
 - Insulin deficiency/resistance
 - Chronic hyperglycaemia
 - Progressive condition
 - Risk of complications
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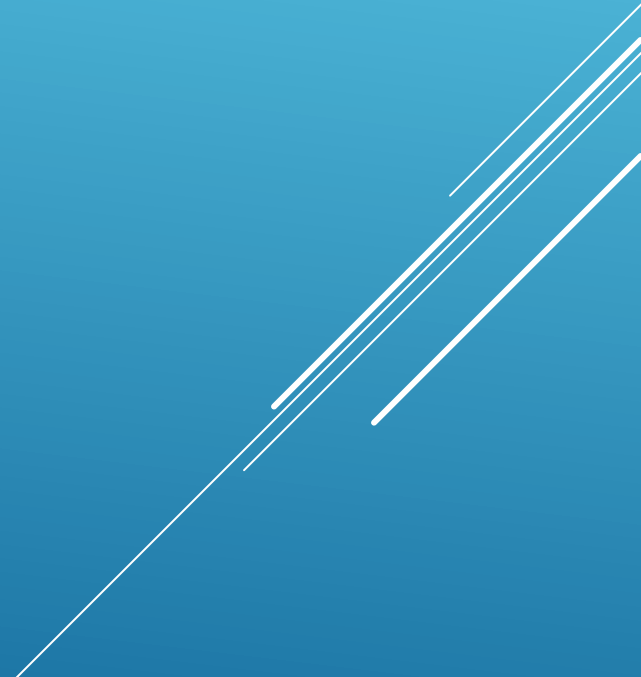
ENDOCRINE SYSTEM

- Endocrine regulation of glucose
 - Pancreas (islets of Langerhans)
 - β -cells $\rightarrow$ insulin secretion
 - Insulin-mediated glucose uptake
 - Liver: glycogenesis & glycogenolysis
 - Maintains homeostasis
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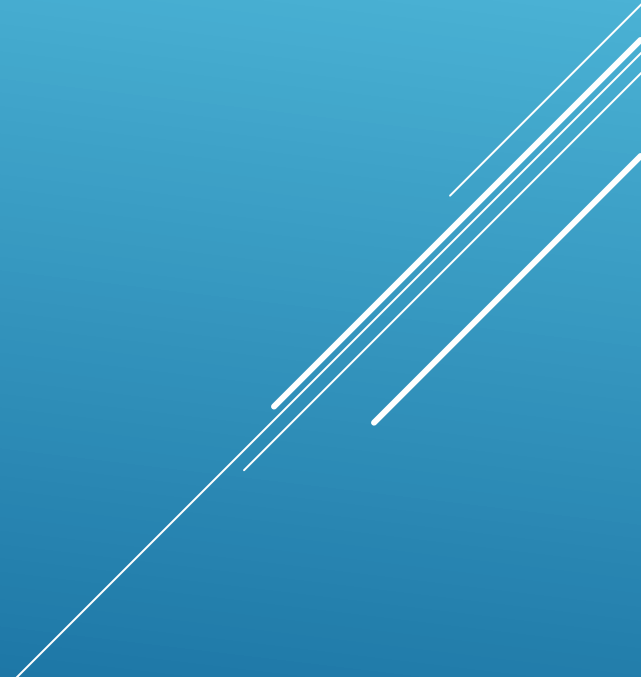
PHYSIOLOGY

- Postprandial glucose increase
- Insulin secretion (pancreas)
- Insulin receptor binding
- GLUT4-mediated uptake
 - Glucose utilisation/storage
- Negative feedback regulation

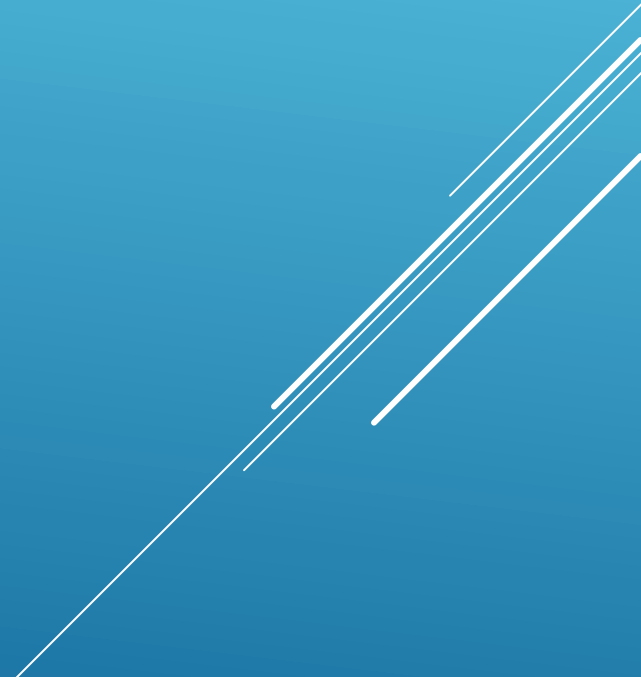
PATHOPHYSIOLOGY

- Peripheral insulin resistance
 - Impaired glucose uptake
 - Compensatory hyperinsulinemia
 - Progressive β -cell dysfunction
 - Chronic hyperglycaemia
 - Inflammation & vascular damage
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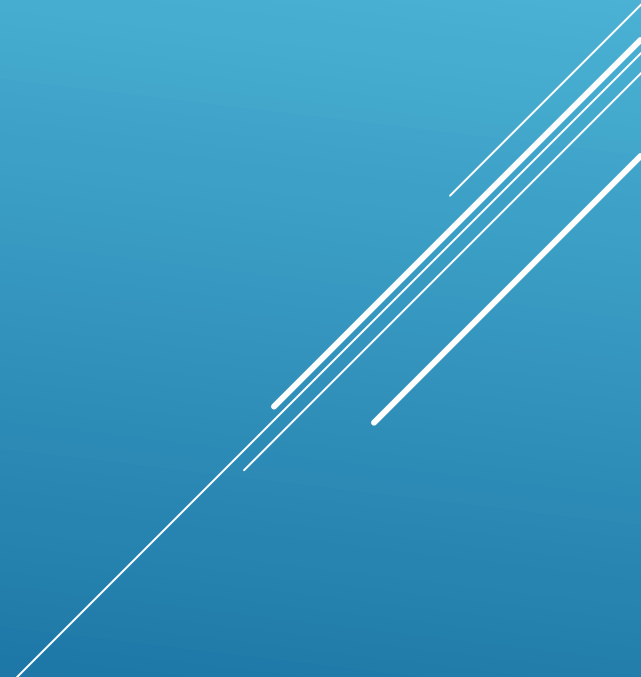
IMPACT ON THE BODY

- Macrovascular complications
 - Coronary heart disease & stroke
 - Microvascular complications
 - Neuropathy, nephropathy, retinopathy
 - End-organ damage
 - Reduced quality of life
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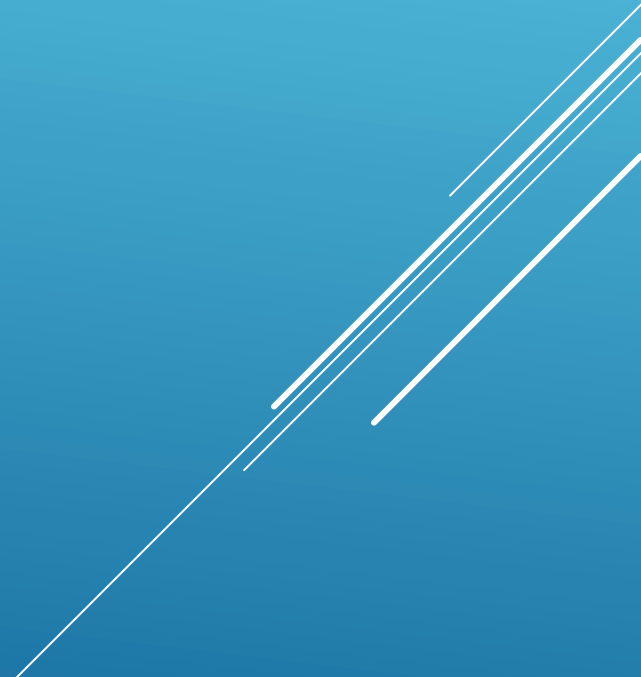
RISK FACTORS

- Modifiable: obesity, diet, inactivity
 - Non-modifiable: age, genetics
 - Ethnicity-related risk
 - Increasing UK prevalence
 - Major public health concern
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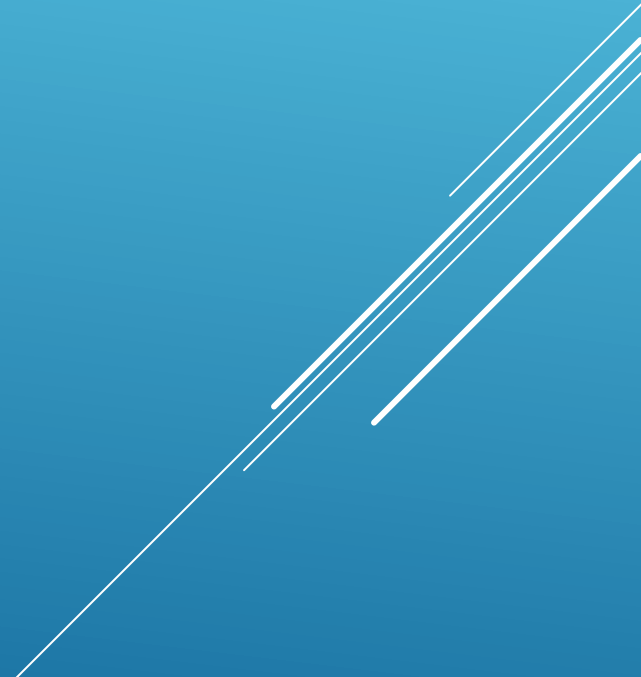
PATIENT-SPECIFIC RISKS

- BMI 31 (obesity-related risk)
 - Sedentary lifestyle
 - High refined sugar intake
 - Poor nutritional habits
 - Lives alone (adherence risk)
 - Increased complication risk
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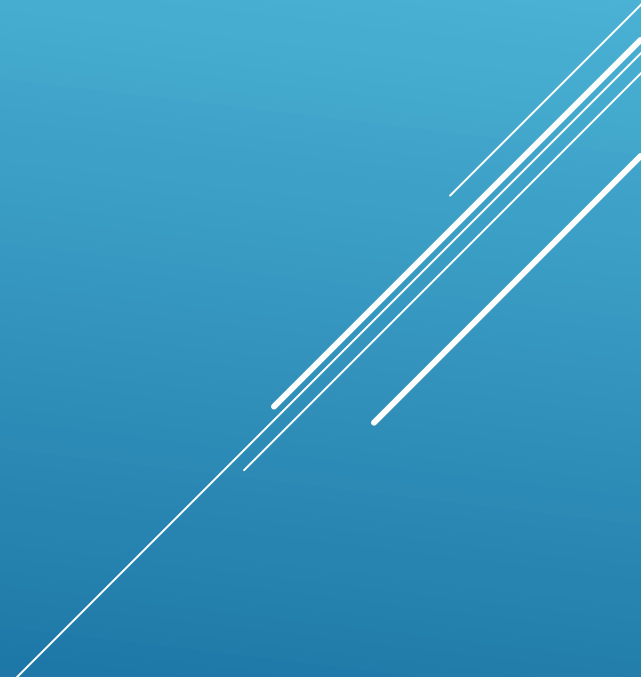
CARE PLAN GOALS

- Achieve glycaemic control (HbA1c)
 - Promote weight reduction
 - Prevent micro/macrovascular complications
 - Improve cardiovascular health
 - Enhance quality of life
 - Person-centred approach
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CARE INTERVENTIONS

- Dietary modification (low GI, high fibre)
 - ≥ 150 mins/week physical activity
 - Structured weight management
 - 5–10% weight loss improves outcomes
 - Metformin (first-line therapy)
 - Smoking & alcohol reduction
 - Structured education (self-management)
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MONITORING

- HbA1c (3–6 monthly)
 - Capillary blood glucose
 - Blood pressure monitoring
 - Lipid profile assessment
 - Weight & BMI tracking
 - Regular clinical review
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COMMUNICATION, ETHICS AND CONCLUSION

- Person-centred care delivery
 - Shared decision-making
 - Informed consent
 - Confidentiality & data protection
 - Cultural competence
 - Nursing and midwifery Council Code
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- Chronic but manageable condition
 - Endocrine dysfunction
 - Lifestyle central to management
 - Early intervention essential
 - Evidence-based care (NICE)
 - Improves patient outcomes

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