GECKO
Genetics Education Canada: Knowledge Organization
Centre d'éducation en génétique canadien: Connaissances organisées
POINT OF CARE TOOL

Diabetes: Family history clinical decision support tool for risk assessment and management

Routine screening for type 1 diabetes is not recommended.

Those deemed to be average/increased risk for type 2 diabetes as determined by a risk calculator*, should undergo screening using a fasting plasma glucose (FPG) and/or glycated hemoglobin (A1C), should begin at age 40 and repeated every 3-5 years.

There are many risk factors for type 2 diabetes such as age, gender, past and current medical history, as well as family history. With regards to family history an individual is considered at increased risk if:

- They have a first degree relative with type 2 diabetes
- They are a member of a high-risk population (e.g. Arab, Asian (e.g. Chinese, Vietnamese, Filipino, Korean etc), Black (e.g. African, Afro-Caribbean, etc.), Indigenous, Latin American, South Asian ancestry)
    - Note: Because of the high prevalence of hemoglobinopathies among some high-risk populations the accuracy of HbA1C as a reliable screening tool maybe considerably reduced. Additionally, those from high-risk populations may have HbA1C levels that differ from those of European ancestry at the same level of glycemia.

Those with several additional risk factors and those at a very high risk (50% or higher) as determined by a risk calculator* should have screening with FPG and/or HbA1C earlier and/or more frequently (6-12 months).

Resource

*The Canadian Diabetes Risk Assessment Questionnaire (CANRISK) is a statistically valid tool. Available at https://www.healthycanadians.gc.ca/en/canrisk CANRISK has not been validated in individuals <40 years of age.

References

Diabetes Canada Clinical Practice Guidelines Expert Committee. *Diabetes Canada 2018 Clinical Practice Guidelines for the Prevention and Management of Diabetes in Canada*. Can J Diabetes. 2018;42(Suppl 1):S1-S325.