GESTATIONAL DIABETES SCREENING

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Sunum Planı

- TARAMA TESTİ TANIM; İDEAL TARAMA TESTİ
- GDM TANIM-TANI İÇİN HANGİ DEĞERLERİ KABUL EDELİM?
- GDM İÇİN TARAMA GEREKLİ Mİ? YAPALIM MI?
- KİMLERE TARAMA YAPALIM?
  - RİSKLİ POPULASYONA/ UNIVERSAL
- NE ZAMAN YAPALIM?
  - İLK TRİMESTER/ 24-28 GH / 32 HAFTADA TEKRARLAYALIM MI?
- HANGİ TESTLE YAPALIM?
  - 50 gr İKİ AŞAMALI/ 75 gr TEK AŞAMALI /DİĞER
Wilson and Jungner classic screening criteria

- The condition sought should be an important health problem. ✓
- There should be an accepted treatment for patients with recognized disease. ✓
- Facilities for diagnosis and treatment should be available. ✓
- There should be a recognizable latent or early symptomatic stage. ✓
- There should be a suitable test or examination. ✓
- The test should be acceptable to the population ✓
- The natural history of the condition, including development from latent to declared disease, should be adequately understood. ✓
- There should be an agreed policy on whom to treat as patients. ✓
- The cost of case-finding (including diagnosis and treatment of patients diagnosed) should be economically balanced in relation to possible expenditure on medical care as a whole. ✓
- Case-finding should be a continuing process and not a “once and for all” project. ✓

Available from: [http://www.who.int/bulletin/volumes/86/4/07-050112BP.pdf](http://www.who.int/bulletin/volumes/86/4/07-050112BP.pdf)
Synthesis of emerging screening criteria proposed over the past 40 years

- The screening programme should respond to a recognized need.
- The objectives of screening should be defined at the outset.
- There should be a defined target population.
- There should be scientific evidence of screening programme effectiveness.
- The programme should integrate education, testing, clinical services and programme management.
- There should be quality assurance, with mechanisms to minimize potential risks of screening.
- The programme should ensure informed choice, confidentiality and respect for autonomy.
- The programme should promote equity and access to screening for the entire target population.
- Programme evaluation should be planned from the outset.
- The overall benefits of screening should outweigh the harm.
IDEAL TARAMA TESTİ

- Kolay uygulanabilir olmalı
- Taranan hastalığın erken tedavisi olmalı
- Yarar maliyet etkin olmalı
- Taranan hastalığın prevalansı yüksek olmalı
- Toplum tarafından benimsenmeli
- Geçerli ve güvenilir test olmalı (sensitivite ↑)
- Tanı testinin spesifisitesi yüksek olmalı
1-28%

A significant proportion (30%) identified as GDM in fact have DM before pregnancy

Is it physiological?

Is it a disease?
Heinrich Gottlieb Bennewitz
- First recorded case of diabetes in pregnancy
- “An unquenchable thirst,” polyuria, glycosuria
- 12 pound infant died during delivery
- Glycosuria and large baby is “one aspect of a wider kind of disease not yet adequately researched”

Hugh Wilkerson
- Use of 50 gram 1 hour screening test (cutoff 130 mg/dL)

J.P. Hoet
- Published “Carbohydrate Metabolism During Pregnancy”
- Described as “metagestational diabetes”
GDM DEFINITION

Any degree of glucose intolerance with onset or first recognition during pregnancy that is not overt diabetes.

Women can be separated into those who were known to have diabetes before pregnancy—pregestational or overt, and those diagnosed during pregnancy—gestational diabetes.

GDM is a state restricted to pregnant women whose impaired glucose tolerance (IGT) is discovered during pregnancy.

GESTATIONAL DIABETES
GDM is defined as diabetes diagnosed during pregnancy that is not clearly overt diabetes.
Gestational Diabetes Mellitus

Gestational diabetes mellitus (GDM) is one of the most common medical complications of pregnancy. Debate continues to surround both the diagnosis and treatment of GDM despite several recent large-scale studies addressing these issues. The purpose of this document is to 1) provide a brief overview of the understanding of GDM, 2) provide management guidelines that have been validated by appropriately conducted clinical research, and 3) identify gaps in current knowledge toward which future research can be directed.

Background

Definition and Prevalence

Gestational diabetes mellitus (GDM) is a condition in women who have carbohydrate intolerance with onset or recognition during pregnancy. The prevalence of GDM varies in direct proportion to the prevalence of type 2 dia-

...
CLASSIFICATION
Diabetes can be classified into the following general categories:

1. Type 1 diabetes (due to autoimmune β-cell destruction, usually leading to absolute insulin deficiency)
2. Type 2 diabetes (due to a progressive loss of β-cell insulin secretion frequently on the background of insulin resistance)
3. Gestational diabetes mellitus (GDM) (diabetes diagnosed in the second or third trimester of pregnancy that was not clearly overt diabetes prior to gestation)
4. Specific types of diabetes due to other causes, e.g., monogenic diabetes syndromes (such as neonatal diabetes and maturity-onset diabetes of the young [MODY]), diseases of the exocrine pancreas (such as cystic fibrosis), and drug- or chemical-induced diabetes (such as with glucocorticoid use, in the treatment of HIV/AIDS, or after organ transplantation)
Gestational diabetes is hyperglycaemia with blood glucose values above normal but below those diagnostic of diabetes, occurring during pregnancy.

1. Hyperglycaemia first detected at any time during pregnancy should be classified as either:
   - Diabetes mellitus in pregnancy (see recommendation 2)
   - Gestational diabetes mellitus (see recommendation 3)

Quality of evidence: not graded
Strength of recommendation: not evaluated
2-Diabetes in pregnancy should be diagnosed by the 2006 WHO criteria for diabetes if one or more of the following criteria are met:

- Fasting plasma glucose ≥ 7.0 mmol/l (126 mg/dl)
- 2-hour plasma glucose ≥ 11.1 mmol/l (200 mg/dl) following a 75g oral glucose load
- Random plasma glucose ≥ 11.1 mmol/l (200 mg/dl) in the presence of diabetes symptoms.

**Quality of evidence: not graded**

**Strength of recommendation: not evaluated**
Gestational diabetes mellitus should be diagnosed at any time in pregnancy if one or more of the following criteria are met:

- Fasting plasma glucose 5.1-6.9 mmol/l (92-125 mg/dl)
- 1-hour plasma glucose ≥ 10.0 mmol/l (180 mg/dl) following a 75g oral glucose load*
- 2-hour plasma glucose 8.5-11.0 mmol/l (153-199 mg/dl) following a 75g oral glucose load

*There are no established criteria for the diagnosis of diabetes based on the 1-hour post-load value

Quality of evidence: very low
Strength of recommendation: weak
The International Federation of Gynecology and Obstetrics (FIGO) Initiative on Gestational Diabetes Mellitus: A Pragmatic Guide for Diagnosis, Management, and Care

Moshe Hod, Anil Kapur, David A. Sacks, Eran Hadar, Mukesh Agarwal, Gian Carlo Di Renzo, Luis Cabero Roura, Harold David McIntyre, Jessica L. Morris, Hema Divakar
Criteria for diagnosis: The WHO criteria for diagnosis of diabetes mellitus in pregnancy [1] and the WHO and the International Association of Diabetes in Pregnancy Study Groups (IADPSG) criteria for diagnosis of GDM [1,2] should be used when possible. Keeping in mind the resource constraints in many low-resource countries, alternate strategies described in the document should also be considered equally acceptable.

4.4. Gestational diabetes mellitus

When hyperglycemia detected during routine testing in pregnancy (generally between 24 and 28 weeks) does not meet the criteria of GDM it is called GDM. Diagnostic criteria and glucose cut-off values of GDM have been proposed by a number of organizations and professional groups and are described later in this document.
Gestational diabetes

- Diagnose gestational diabetes if the woman has either:
  - a fasting plasma glucose level of 5.6 mmol/litre or above or
  - a 2-hour plasma glucose level of 7.8 mmol/litre or above. [new 2015]

5.6 mmol/litre = 100.8 mg/dl
7.8 mmol/litre = 140.4 mg/dl
### Diagnostic Criteria for Overt Diabetes and Gestational Diabetes at the First Prenatal Visit (Before 13 Weeks Gestation or as Soon as Possible Thereafter) for Those Women Not Known to Already Have Diabetes

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Fasting Plasma Glucose, ( \text{mg/dL (mmol/L)} )</th>
<th>Untimed (Random) Plasma Glucose, ( \text{mg/dL (mmol/L)} )</th>
<th>HbA1C, %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overt diabetes (type 1, type 2, or other)</td>
<td>( \geq 126 \ (\geq 7.0) )</td>
<td>( \geq 200 \ (\geq 11.1) )</td>
<td>( \geq 6.5% )</td>
</tr>
<tr>
<td>Gestational diabetes</td>
<td>92–125 ((5.1–6.9))</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>Diagnosis</td>
<td>Fasting Plasma Glucose, b mg/dL (mmol/L)</td>
<td>1-h Value, mg/dL (mmol/L)</td>
<td>2-h Value, mg/dL (mmol/L)</td>
</tr>
<tr>
<td>---------------------------------</td>
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<td>----------------------------</td>
</tr>
<tr>
<td>Overt diabetes (type 1, type 2, or other)</td>
<td>≥126 (≥7.0)</td>
<td>NA</td>
<td>≥200 (≥11.1)</td>
</tr>
<tr>
<td>Gestational diabetes</td>
<td>92–125 (5.1–6.9)</td>
<td>≥180 (≥10.0)</td>
<td>153–199 (8.5–11.0)</td>
</tr>
</tbody>
</table>
YAPALIM MI?

YAPMAYALIM MI?
YAPMAYALIM

BİR DİLİM PASTA
450-600 KALORİ
75 gr 300 cal
50 gr 200 cal
There was insufficient evidence to determine if screening for gestational diabetes, or what types of screening, can improve maternal and infant health outcomes.
<table>
<thead>
<tr>
<th>Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>NICE (UK)</td>
</tr>
<tr>
<td>WHO</td>
</tr>
<tr>
<td>ADIPS (Australasia)</td>
</tr>
<tr>
<td>IADSPG</td>
</tr>
<tr>
<td>FIGO</td>
</tr>
<tr>
<td>IDF</td>
</tr>
<tr>
<td>ENDOCRINE SOCIETY (USA)</td>
</tr>
<tr>
<td>GDA (Germany)</td>
</tr>
<tr>
<td>CHINA</td>
</tr>
<tr>
<td>DIPSI (India)</td>
</tr>
<tr>
<td>JDA (Japan)</td>
</tr>
<tr>
<td>BSD (Brasil)</td>
</tr>
<tr>
<td>ADA (USA)</td>
</tr>
<tr>
<td>USPSTF (USA)</td>
</tr>
<tr>
<td>CDA (Canada)</td>
</tr>
<tr>
<td>ACOG (USA)</td>
</tr>
<tr>
<td>NIH</td>
</tr>
<tr>
<td>Japan Society of Obstetrics</td>
</tr>
<tr>
<td>and Gynecology (JSOG)</td>
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<tr>
<td>and Japan Association of</td>
</tr>
<tr>
<td>Obstetricians and Gynecologists (JAOG)</td>
</tr>
</tbody>
</table>
# EUROPE GDM SCREENING

<table>
<thead>
<tr>
<th>NO UNIFORMITY</th>
<th>RISK FACTOR BASED</th>
<th>UNIVERSAL 50g2STEP</th>
<th>UNIVERSAL 75gGTT</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWEDEN</td>
<td>ITALY</td>
<td>PORTUGAL</td>
<td>HUNGARY</td>
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<tr>
<td>BELGIUM</td>
<td>UK</td>
<td>SPAIN</td>
<td>AUSTRIA</td>
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<td>FRANCE</td>
<td>DENMARK</td>
<td>CZECH REP.</td>
<td>GERMANY</td>
</tr>
<tr>
<td></td>
<td>FINLAND</td>
<td></td>
<td>IRELAND</td>
</tr>
<tr>
<td></td>
<td>HOLAND</td>
<td></td>
<td>POLAND</td>
</tr>
</tbody>
</table>
4. GDM tanısı için 50 g glukozu ön tarama testi pozitif çıkan gebelerde 100 g glukozu 3 saatlik OGTT ile tanı konulması benimsenmelidir. Ancak alternatif olarak 75 g glukozu 2 saatlik OGTT ile tek aşamalı tanı yaklasımı da kullanılabılır (Sınıf D ortak görüşe dayalı kanıt (4), Sınıf A Düzey 1 kanıt (5)).
Hangi testi yapalım

50 g GCT + 100 g GTT

FPG, HbA1C, RPG, PPG

75 g GTT
### 75gGTT ÖNERENLER

<table>
<thead>
<tr>
<th>GUIDELINE</th>
<th>YIL</th>
<th>ILK VISIT</th>
<th>TEST</th>
<th>24-28</th>
<th>TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>NICE (UK) ONLY RISK+</td>
<td>2015</td>
<td>GDM ÖYKÜSÜ</td>
<td>75GTT</td>
<td>RISK (+)</td>
<td>75gGTT</td>
</tr>
<tr>
<td>WHO ADIPS (Australasia)</td>
<td>2013</td>
<td></td>
<td></td>
<td>ALL</td>
<td>75gGTT</td>
</tr>
<tr>
<td></td>
<td>2014</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IADPSG</td>
<td>2010</td>
<td>ALL</td>
<td>FPG/ HbA1C/ RPG</td>
<td>ALL</td>
<td>75gGTT</td>
</tr>
<tr>
<td>FIGO</td>
<td>2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IDF</td>
<td>2015</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENDOCRINE SOCIETY (USA)</td>
<td>2013</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GDA (Germany)</td>
<td>2014</td>
<td>RISKLI</td>
<td>RPG/FPG</td>
<td>ALL</td>
<td>75gGTT</td>
</tr>
</tbody>
</table>

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**Note:**
- GDM: Gestational Diabetes Mellitus
- 75gGTT: 75g Glucose Tolerance Test
- RPG: Random Plasma Glucose
- FPG: Fasting Plasma Glucose
- HbA1C: Hemoglobin A1C
<table>
<thead>
<tr>
<th>GUIDELINE</th>
<th>YIL</th>
<th>ILK VISIT</th>
<th>TEST</th>
<th>24-28 TEST</th>
<th>75gGTT</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHINA</td>
<td>2011</td>
<td>ALL</td>
<td>FPG/75g 2-hour</td>
<td>ALL</td>
<td>75gGTT</td>
</tr>
<tr>
<td>DIPSİ (India)</td>
<td>2010</td>
<td>ALL</td>
<td>75g 2-hour nonfasting test</td>
<td>ALL</td>
<td>75g 2-hour nonfasting test</td>
</tr>
<tr>
<td>JDA (Japan)</td>
<td>2013</td>
<td>ALL</td>
<td>FPG if + 75gGTT</td>
<td>ALL</td>
<td>FPG if + 75gGTT</td>
</tr>
<tr>
<td>BSD (Brasil)</td>
<td>2014</td>
<td>ALL</td>
<td>FPG if + 75gGTT</td>
<td>ALL</td>
<td>FPG if + 75gGTT</td>
</tr>
</tbody>
</table>
### 50g VEYA 75gGTT ÖNERENLER

<table>
<thead>
<tr>
<th>GUIDELINE</th>
<th>YIL</th>
<th>ILK VISIT</th>
<th>TEST</th>
<th>24-28</th>
<th>TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADA (USA)</td>
<td>2017</td>
<td>RİSKLİ HASTA</td>
<td>75gGTT</td>
<td>ALL/İLK VİSİT (⁻)</td>
<td>75gGTT/50gGCT+100g GTT</td>
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<tr>
<td>USPSTF (USA)</td>
<td>2014</td>
<td></td>
<td>ALL</td>
<td></td>
<td>75gGTT/50gGCT+100g GTT</td>
</tr>
<tr>
<td>CDA (Canada)</td>
<td>2013</td>
<td></td>
<td>ALL</td>
<td></td>
<td>75gGTT/50gGCT+75gGTT</td>
</tr>
<tr>
<td>GUIDELINE</td>
<td>YIL</td>
<td>ILK VISIT</td>
<td>TEST</td>
<td>24-28</td>
<td>TEST</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>------</td>
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<td>---------------------</td>
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</tr>
<tr>
<td>ACOG (USA)</td>
<td>2015</td>
<td>GDM ÖYKÜSÜ</td>
<td>50gGCT+100 GTT</td>
<td>ALL/İLK VİSİT (-)</td>
<td>50gGCT+100gGTT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>BİLİNEN IGT</td>
<td>BMI&gt;30</td>
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<tr>
<td>NIH</td>
<td>2013</td>
<td>ALL</td>
<td>RPG</td>
<td>ALL</td>
<td>50gGCT+100gGTT</td>
</tr>
<tr>
<td>Japan Society of Obstetrics and Gynecology (JSOG) and Japan Association of Obstetricians and Gynecologists (JAOG)</td>
<td>2014</td>
<td>ALL</td>
<td>RPG</td>
<td>ALL</td>
<td>50g/RPG(≥100mg/dl) if + 75gGTT</td>
</tr>
</tbody>
</table>
# Recommended Criteria for Diagnosis of GDM with OGTT

<table>
<thead>
<tr>
<th></th>
<th>Fasting</th>
<th>One hour post-load</th>
<th>Two hour post-load</th>
<th>Three hour post-load</th>
</tr>
</thead>
<tbody>
<tr>
<td>**75 g OGTT (plasma glucose) *</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>NICE (2015)</td>
<td>≥5.6 (110)</td>
<td>≥7.8 (140)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IADPSG (2010), WHO (2013), ADA (2017)</td>
<td>≥5.1 (92)</td>
<td>≥10.0 (180)</td>
<td>≥8.5 (153)</td>
<td></td>
</tr>
<tr>
<td>**100 g OGTT (plasma or serum glucose) †</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACOG/C-C</td>
<td>≥5.3 (95)</td>
<td>≥10.0 (180)</td>
<td>≥8.6 (155)</td>
<td>≥7.8 (140)</td>
</tr>
<tr>
<td>NDDG</td>
<td>≥5.8 (104)</td>
<td>≥10.6 (191)</td>
<td>≥9.2 (166)</td>
<td>≥8.0 (144)</td>
</tr>
<tr>
<td>O’Sullivan</td>
<td>≥5.0 (90)</td>
<td>≥9.2 (166)</td>
<td>≥8.1 (146)</td>
<td>≥6.9 (124)</td>
</tr>
</tbody>
</table>

IADPSG=International Association of Diabetes and Pregnancy Study Groups; ACOG=American College of Obstetricians and Gynecologists;; ADA=American Diabetes Association; C&C=Carpenter & Coustan criteria; NDDG=National Diabetes Data Group; WHO=World Health Organization. *One threshold should be equalled or exceeded for diagnosis of gestational diabetes. †Two thresholds should be equalled or exceeded for diagnosis of gestational diabetes.
KIME YAPALIM

HERKESE/UNIVERSAL

RİSKLİ POPULASYONA - NICE
GDM RISK FACTORS

- BMI above 25-30 kg/m²
- previous gestational diabetes
- Prediabetes / Impaired glucose metabolism
- minority ethnic family origin with a high prevalence of diabetes. (Latino, Native American, Caribbean, Chinese, Asian, Indian subcontinent, Aboriginal, Torres Strait Islander, Pacific Islander, Maori, Middle Eastern, non-white African)
- previous macrosomic baby weighing > 4500 g or > 90th centile
- family history of diabetes (first-degree relative with diabetes)
- PCOS, acanthosis nigricans
- Age >25-35-40 years
- Corticosteroid, antipsychotic use
- history of CVD, PAOD (Peripheral Arterial Occlusive Disease), cerebral vascular disease
- hypertension (>140/90 mmHg or on therapy for hypertension)
- HDL cholesterol level <35 mg/dL (0.90 mmol/L) and/or a triglyceride level >250 mg/dL (2.82 mmol/L)
- Current fetal macrosomia or polyhydramnios
- a sister with hyperglycaemia in pregnancy
- physical inactivity
- high parity,
- excessive weight gain in the index pregnancy,
- short stature,
- a past history of poor pregnancy outcome (abortion, fetal loss),
- multifetal pregnancy
- Vitamin D deficiency
- Maternal history of low birth weight
Dysglycemia: IFG and/or IGT
Prediabetes (ADA)

- FPG 100–125 mg/dL (5.6–6.9 mmol/L)
- 2-h PG 140–199 mg/dL (7.8–11.0 mmol/L)
- A1C 5.7–6.4% (39–47 mmol/mol) or 10% increase in A1C
Risk Stratification for GDM

- **High Risk Group (Indians mostly)**
  - BMI $\geq 30$; PCOD; Age $> 35$ years
  - F h/o DM; Ethnic predisposition; Acanthosis
  - Previous h/o GDM, IGT, Macrosomic baby

- **Low Risk Group**
  - Age $< 25$, BMI $< 23$, No F h/o DM or IGT
  - No bad obstetric history; No ↑ risk ethnicity

- **Intermediate Risk Group**
  - Not falling in the above two classes
Risk-based Testing

- **Low Risk**
  - Of ethnic group with low GDM prevalence
  - No diabetes in 1st degree relatives
  - Age <25 years
  - Weight normal before pregnancy
  - No history of abnormal glucose metabolism
  - No history of poor obstetric outcome

- **Average Risk**
  - Not low or high risk

- **High Risk**
  - Severe obesity
  - Strong family history of type 2 diabetes
  - History of GDM, impaired glucose metabolism, or glucosuria

- **No need to test**
- **Test at 24-28 weeks**
- **Test immediately**
<table>
<thead>
<tr>
<th>FIRST TRIM</th>
<th>24-28 GW</th>
<th>32 GW REPEAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>RISK (+)</td>
<td>R/O PGD</td>
<td>D/G GDM</td>
</tr>
<tr>
<td>ACOG</td>
<td>FIGO</td>
<td>IADPSG</td>
</tr>
<tr>
<td>CDA</td>
<td>ENDOCRINE SOCIETY</td>
<td>ENDOCRINE SOCIETY</td>
</tr>
<tr>
<td>ADA</td>
<td>NICE (H/0 GDM)</td>
<td></td>
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<tr>
<td>DDG/DGGG</td>
<td></td>
<td></td>
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<tr>
<td>IDF</td>
<td></td>
<td></td>
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<td>ADIPS</td>
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</table>
Prediction of gestational diabetes mellitus in the first trimester, comparison of fasting plasma glucose, two-step and one-step methods: a prospective randomized controlled trial

M. Ilkin Yeral · A. Seval Ozgu-Erdinc · Dilek Uygur · K. Doga Seckin · M. Fatih Karsli · A. Nuri Danciyan
7.5 mmol/l = 135 mg/dl
7.8 mmol/l = 140.4 mg/dl
8 mmol/l = 144 mg/dl
Candy bar versus 50-gram glucose monomer drink (one trial, 60 women): More women receiving the candy bar, rather than glucose monomer, preferred the taste of the candy bar (RR 0.60, 95% CI 0.42 to 0.86). Infant outcomes were not reported.

50-gram glucose polymer drink versus 50-gram glucose monomer drink (three trials, 239 women): Mean difference (MD) in gestation at birth was -0.80 weeks (one trial, 100 women; 95% CI -1.69 to 0.09). Total side effects were less common with the glucose polymer drink (one trial, 63 women; RR 0.21, 95% CI 0.07 to 0.59), and no clear difference in taste acceptability was reported (one trial, 63 women; RR 0.99, 95% CI 0.76 to 1.29). Significantly fewer women reported nausea following the 50-gram glucose polymer drink compared with the 50-gram glucose monomer drink (one trial, 66 women; RR 0.29, 95% CI 0.11 to 0.78). No other measures of maternal morbidity or outcomes for the infant were reported.

50-gram glucose food versus 50-gram glucose drink (one trial, 30 women): Women receiving glucose in their food, rather than as a drink, reported fewer side effects (RR 0.08, 95% CI 0.01 to 0.56). No clear difference was noted in the number of women requiring further testing (RR 0.14, 95% CI 0.01 to 2.55). No other measures of maternal morbidity or outcome were reported for the infant.
75-gram oral glucose tolerance test (OGTT) versus 100-gram OGTT (one trial, 248 women): Women given the 75-gram OGTT had a higher relative risk of being diagnosed with GDM (risk ratio (RR) 2.55, 95% confidence interval (CI) 0.96 to 6.75). This difference was borderline in terms of statistical significance, and evidence was considered to be of very low quality when assessed by GRADE. No data were reported for the following additional outcomes prespecified for assessment in GRADE: caesarean section, macrosomia > 4.5 kg or however defined in the trial, long-term type 2 diabetes maternal, long-term type 2 diabetes infant and economic costs.

75-gram oral glucose tolerance test (OGTT) World Health Organization (WHO) criteria versus 75-gram OGTT American Diabetes Association (ADA) criteria (one trial, 116 women): No clear differences in included outcomes were observed between women who received the 75-gram OGTT and were diagnosed using criteria based on WHO (1999) recommendations and women who received the 75-gram OGTT and were diagnosed using criteria recommended by the ADA (1979). Outcomes measured included diagnosis of gestational diabetes (RR 1.47, 95% CI 0.66 to 3.25), caesarean birth (RR 1.07, 95% CI 0.85 to 1.35), macrosomia defined as > 90th percentile by ultrasound or birthweight equal to or exceeding 4000 g (RR 0.73, 95% CI 0.19 to 2.79), stillbirth (RR 0.49, 95% CI 0.02 to 11.68) and instrumental birth (RR 0.21, 95% CI 0.01 to 3.94).

Authors’ conclusions

Evidence is insufficient to permit assessment of which strategy is best for diagnosing GDM.
Authors’ conclusions

This review found interventions including providing dietary advice and blood glucose level monitoring for women with pregnancy hyperglycaemia not meeting GDM and T2DM diagnostic criteria helped reduce the number of macrosomic and LGA babies without increasing caesarean section and operative vaginal birth rates. It is important to notice that the results of this review were based on four small randomised trials with moderate to high risk of bias without follow-up outcomes for both women and their babies.

Interventions for pregnant women with hyperglycaemia not meeting gestational diabetes and type 2 diabetes diagnostic criteria (Review)

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- RİSK DEĞERLENDİRMESİ YAPACAK YETERLİ VAKİT OLMAYAN KLİNİKLERDE UNIVERSAL TARAMA YAPALIM
- 50 g İKİ AŞAMALI VEYA 75 g TEK AŞAMA YAPILABİLİR
- İLK VİSİTTE AKŞ MUTLAKA BAKALIM
İLGİNİZ İÇİN TEŞEKKÜR EDERİM