### HALTING THE RISE IN OBESITY AND DIABETES

**Life Stage: Young Adult (18 – 44 years)**

#### INTERVENTION POINTS

<table>
<thead>
<tr>
<th>1. Social Determinants/Health Promotion</th>
<th>2. Primary Prevention/Risk Reduction</th>
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</thead>
<tbody>
<tr>
<td>National food and nutrition policies (support for exclusive breastfeeding, taxing sugary foods, food labelling etc)</td>
<td>Adult Preventive Health Services</td>
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<td>National policies on provision of community spaces for physical activity</td>
<td>Screening for risk factors for NCDs and referral for risk reduction</td>
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<tr>
<td>Health Education/Promotion on avoidance of risk factors for obesity &amp; diabetes</td>
<td>Lifestyle and behaviour change interventions</td>
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<td>Adult Preventive Health Services and guidelines</td>
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<tr>
<td>Social mobilization and media &amp; informational campaigns</td>
<td>4. Care and Treatment</td>
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<tr>
<td>Public awareness and education on obesity</td>
<td>Clinical Protocols for management of excessive weight gain, overweight and obesity; and management of impaired glucose metabolism</td>
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<tr>
<td>3. Screening &amp; Early Detection</td>
<td>Referral resources for development of diabetes self-care skills, family support and health education</td>
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<tr>
<td>Adult Preventive Health Services protocols and standards</td>
<td>Accessible treatment and care services for obesity &amp; diabetes</td>
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<tr>
<td>Work- and community-based weight and blood glucose screening guidelines (18-44 years)</td>
<td>Statutory reporting of diabetes diagnoses for National Register</td>
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<tr>
<td>Referral resources for behavioural intervention, family support and health education</td>
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<tr>
<td>Statutory reporting for Diabetes Register</td>
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</tbody>
</table>

#### Defining Adult Overweight and Obesity

<table>
<thead>
<tr>
<th>Weight Category</th>
<th>BMI</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight</td>
<td>&lt;18.5</td>
<td>An individual is considered morbidly obese if he/she is <strong>100 pounds over</strong> his/her ideal body weight, has a BMI of <strong>40 or more</strong>, or <strong>35 or more and experiencing obesity-related health conditions</strong>, such as high blood pressure or diabetes.</td>
</tr>
<tr>
<td>Normal Weight</td>
<td>18.5 - 24.9</td>
<td></td>
</tr>
<tr>
<td>Overweight</td>
<td>25.0 - 29.9</td>
<td></td>
</tr>
<tr>
<td>Obese</td>
<td>≥30</td>
<td></td>
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</tbody>
</table>

**Waist circumference**, in addition to BMI, indicates higher risk of developing obesity-related conditions if:

- **A male has a waist circumference of more than 40 inches**
- **A non-pregnant female has a waist circumference of more than 35 inches**

#### HEALTH PROMOTION

**Supportive Policies**

- Preconception care of women (before and during child-bearing years)
- Total Worker Health programmes integrating injury and illness prevention.
- National policies on comprehensive health promotion incl. campaigns & informational, behavioural/social and environmental/policy interventions and approaches.
- Nutrition policies for food labelling.

The evidence shows strong risks of obesity are associated with several factors that impact upon women of childbearing age:

- **large for gestational age (LGA) infants to be born to women who are overweight or obese when they become pregnant,**
- **women who gain excess weight during pregnancy,**
- **women who smoke during pregnancy,**
- **women who develop gestational diabetes or**
- **women who are older at first pregnancy**

Therefore, a focus on helping women from becoming overweight or obese before pregnancy, from gaining excess weight during pregnancy, preventing and controlling GDM has been shown effective in reducing obesity in offspring.

#### PRIMARY PREVENTION

**EVIDENCE**

- Multi-component social media interventions can lead to improved diet, physical activity behaviours. Use of mobile phone apps showed reductions in participants' bodyweight, BMI, waist circumference and body fat, based on frequency of programme use. Benefits accrued to persons taking a proactive approach to everyday problems. Important features of effective apps were frequent self-recording of weight, personalisation of the intervention (counselling and individualized feedback), and a social support system which acts as a motivational tool.
- **Lifestyle/behaviour change interventions for diet and physical activity,**
  - emphasizing motivational interviewing, and self-determination theory are associated with long-term effects.

#### SCREENING AND EARLY DETECTION

**Obesity**

- All adults should be screened for obesity.
- Adults with BMI of 30 or higher, should be offered referral to intensive multi-component behavioural interventions.

**EVIDENCE**

Referral to intensive behavioural intervention programs that include a variety of activities, are successful in helping people manage their weight. These programs:

- **include 12 to 26 sessions in the first year**

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**Defining Adult Overweight and Obesity**

- An individual is considered morbidly obese if he/she is **100 pounds over** his/her ideal body weight, has a **BMI of 40 or more**, or **35 or more and experiencing obesity-related health conditions**, such as high blood pressure or diabetes.

**Comments**

- **A male has a waist circumference of more than 40 inches**
- **A non-pregnant female has a waist circumference of more than 35 inches**
# HALTING THE RISE IN OBESITY AND DIABETES

## Life Stage: Young Adult (18 – 44 years)

### Diabetes

- **All asymptomatic adults**: Screen for type 2 diabetes with an informal assessment of risk factors, or use a validated tool.
- **Blood glucose testing in adult clients of any age considered if overweight or obese (BMI ≥ 25)** and having one or more risk factors (test using either fasting plasma glucose, 2-hr plasma glucose after 75g oral glucose tolerance test, or HbA1c).
- **All persons should be tested beginning at age 45 years.** If normal, repeat at a minimum 3-year interval. Those with prediabetes should be tested yearly.

### CARE AND TREATMENT

- **Obesity management:**
  - Behavioural Interventions (minimum 12 weeks' duration)
  - Combined pharmacologic and behavioural intervention
- **A complete medical evaluation should be performed at the initial visit to confirm the diagnosis and classify diabetes.**
- **Diabetes care and treatment should be provided by a team to improve lifestyle management.**
- **Statutory reporting for Diabetes register**

### EVIDENCE

The comprehensive medical evaluation should ideally be done on the initial visit, although components can be done as appropriate on follow-up visits.

- **History, Physical examination and Laboratory investigations (e.g. HbA1C, lipids, microalbuminuria, GFR )**
- **Referrals for initial care management**
  - Eye care professional
  - Family planning for women of reproductive age
  - Registered dietitian for medical nutrition therapy
  - Diabetes self-management education and support
  - Comprehensive oral health examination
  - Mental health professional, if indicated.

### QUALITY OF CARE

- **Routine vaccinations according to age-related recommendations**
  - Annual Influenza
  - Pneumonia vaccine
  - Hepatitis B

### EVIDENCE

Complete medical evaluation of Diabetic:

- Detect diabetes complications and potential comorbid conditions.
- Review previous treatment and risk factor control in patients with established diabetes.
- Begin patient engagement in the formulation of a care management plan.
- Develop a plan for continuing care.

Health professionals treating obesity, should utilize disciplines that offer expertise in dietary counseling, physical activity, and behavior change through direct, formal relationships or an indirect referral.

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**KEY:**

- **BMI = Body Mass Index**
- **DOH = Department of Health**
- **GFR = Glomerular Filtration Rate**

### REFERENCES

10. ADA Diabetes Care 2017: page S14; S27, S33 [http://care.diabetesjournals.org/content/diacare/suppl/2016/12/15/40.Supplement_1.DC1/DC_40_S1_final.pdf](http://care.diabetesjournals.org/content/diacare/suppl/2016/12/15/40.Supplement_1.DC1/DC_40_S1_final.pdf)