Factors Contributing to Overweight and Obesity

HIGHLIGHTS

• In 2003, only four in every 10 Peel adults reported eating the recommended amounts of fruits and vegetables per day.
• The proportion of Peel adults who were physically inactive increased across age groups.
• There is growing recognition that the increasing trend of overweight and obesity is being driven by environmental factors that affect our eating and physical activity behaviours.
• The effective management of weight involves a range of long-term strategies.
• A co-ordinated, sustained, multisectoral approach is required to reverse the increasing trend in obesity.

Introduction

The effective management of weight involves a range of long-term strategies. A recent report by the Ontario Ministry of Health and Long-Term Care emphasizes that the problem of overweight and obesity cannot be solved by individuals on their own or by the health care sector alone. Rather, a co-ordinated, sustained, multisectoral approach is required to reverse the increasing trend in obesity since social and environmental factors strongly influence weight.2

Because obesity is difficult to treat, public health efforts need to be directed toward prevention. This section of the report will address healthy eating, physical activity and environmental factors that influence weight.

Eating Habits

Healthy eating is important for people of all ages. Healthy eating is defined as the amount and variety of safe and culturally appropriate foods that provide the body with all required nutrients and are available in adequate proportions.3-2 The consumption of a variety of healthy foods in appropriate portion sizes is important in achieving and maintaining a healthy weight.5 The amount of food an individual needs each day, from the four food groups, depends on a person’s age, sex, body size, activity level and whether a person is pregnant or breastfeeding.3-2
A healthy diet includes a variety of foods and emphasizes cereals, breads and other grain products, vegetables and fruit, and low-fat products. It is the total of all food choices made over time and is not determined by any one food, meal or day's meals. This concept is modelled on Canada's Food Guide to Healthy Eating, an educational tool to help Canadians four years of age and over to establish healthy eating habits and meet their nutritional needs. The principle behind healthy eating habits is fulfilment of the minimum requirements of the four food groups in Canada's Food Guide to Healthy Eating: Grain Products, Milk Products, Vegetables and Fruit, and Meat and Alternatives.

Canada's Food Guide to Healthy Eating recommends eating five to 10 servings of fruits and vegetables per day. Hence, one indicator of healthy eating is fruit and vegetable consumption. This section of the report will focus on fruit and vegetable consumption in adults.

According to the Canadian Community Health Survey, in 2003, approximately four in every 10 Peel adults (40%) ate the recommended amounts of fruits and vegetables per day (five or more times). This proportion was the same for Ontario (40%). In Peel, adult males (34%) were less likely to report eating five or more fruits and vegetables per day than were adult females (47%).

Figure 18: Proportion of Adults who Consume Fruits and Vegetables Five or More Times per Day by Age Group, Region of Peel, 2003

Source: Canadian Community Health Survey 2003, Statistics Canada, Share File, Knowledge Management and Reporting Branch, Ontario Ministry of Health and Long-Term Care.

In Peel, in 2003, fruit and vegetable consumption was highest among adult residents aged 65 years and older (53%) compared to adults in other age groups (see Figure 18 above).
**Physical Activity**

Physical activity refers to any bodily movement produced by skeletal muscles that results in an expenditure of energy. It plays an important role in energy balance since it uses up calories consumed. Regular physical activity is good for overall health, and provides numerous benefits such as weight control and risk reduction of several health problems such as diabetes, colon cancer and high blood pressure.²³

Canada’s Physical Activity Guide to Healthy Active Living recommends that individuals accumulate 30 to 60 minutes of moderate activity on most days of the week. Active living focuses on including activity in one’s daily routine, such as taking the stairs instead of the elevator, getting off the bus one stop earlier, dancing and family bike rides.³⁴

One indicator of physical activity in the 2003 Canadian Community Health Survey (CCHS) is the Physical Activity Index. This index categorizes an individual as being “active,” “moderate,” or “inactive” based on their total daily Energy Expenditure values.³⁵

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**Figure 19: Proportion of Adults who are Physically Inactive by Body Mass Index (BMI) Category, Region of Peel and Ontario, 2003**

Per cent of adults aged 18 years and older who are physically inactive

<table>
<thead>
<tr>
<th>BMI Category</th>
<th>Peel</th>
<th>Ontario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underweight (BMI&lt;18.5)</td>
<td>55.9</td>
<td>59.3</td>
</tr>
<tr>
<td>Normal weight (BMI 18.5-24.9)</td>
<td>50.7</td>
<td>47.0</td>
</tr>
<tr>
<td>Overweight (BMI 25-29.9)</td>
<td>51.0</td>
<td>48.1</td>
</tr>
<tr>
<td>Obese Class I (BMI 30.0-34.9)</td>
<td>70.0</td>
<td>56.0</td>
</tr>
<tr>
<td>Obese Class II (BMI 35.0-39.9)</td>
<td>68.7</td>
<td>60.6</td>
</tr>
<tr>
<td>Obese Class III (BMI ≥40)</td>
<td>NR</td>
<td>64.3</td>
</tr>
</tbody>
</table>

NR=Not releasable due to small numbers.

Notes: BMI calculations exclude pregnant women.

Data not age standardized.

Source: Canadian Community Health Survey 2003, Statistics Canada, Share-File, Knowledge Management and Reporting Branch, Ontario Ministry of Health and Long-Term Care.
According to the CCHS, in 2003, more than half (54%) of Peel adults, aged 18 years and older, reported being physically inactive which was higher than the proportion reported for Ontario (50%). In 2003, the proportion of adults who reported being physically inactive increased with body mass index (BMI) category from 47% of Ontario adults with a normal weight to 64% of those in the Obese Class III category (see Figure 19 on previous page). A higher proportion of Peel residents who were obese were physically inactive compared to their Ontario counterparts.

In 2003, physical inactivity similarly increased across age groups from 41% of 18- to 24-year-olds to 58% of adults aged 65 years and older in Peel (see Figure 20 below). Physical inactivity was comparable among Peel adult males (54%) and females (54%) in 2003 (data not shown).

Figure 20: Proportion of Adults who are Physically Inactive by Age Group, Region of Peel, 2003

Source: Canadian Community Health Survey 2003, Statistics Canada, Share File, Knowledge Management and Reporting Branch, Ontario Ministry of Health and Long-Term Care.
**Environment**

There is growing recognition that the increasing trend of overweight and obesity is being driven by environmental factors that affect our eating and physical activity behaviours. “Our biology has evolved to the point that we eat when food is available and rest when we do not have to be physically active. We have created an environment in which food is inexpensive, readily available, served in large portions, and heavily advertised. This ‘obesogenic’ environment has eliminated the need for physical activity in our jobs and our schools and provides us with engaging ways to spend our leisure time being sedentary. Sedentary activities are heavily promoted. Our food and physical activity policies support high energy intake and low physical activity. Our cultural values have allowed supersizing to become popular.” Under these conditions, overweight and obesity occurs more often.

**Sprawling Neighbourhoods**

Evidence shows that people who reside in spread-out, car-dependent neighbourhoods are likely to walk less, weigh more, and suffer from obesity and high blood pressure and consequently diabetes, cardiovascular and other diseases, as compared to people who live in more efficient, higher density neighbourhoods. The fairly recent trend of living in sprawling suburbs with design features that discourage walking and bicycling, and which encourage residents to drive more, may contribute to the epidemic of obesity.

There have been high levels of growth in housing development in Peel, resulting in an increase in low-density housing starts (the number of residential units on which construction is begun). Low-density housing is dominant in Peel, although in selected areas new development is taking higher density forms. Sprawling low-density development has been a widespread trend in Peel for the last 10 years. As previously noted, one of the concerns with sprawl and low-density development is car dependent and physically inactive neighbourhoods.

Compared to most Canadian municipalities, Peel was one of three municipalities where residents relied least on cycling and walking for commutes. In fact, the proportion of community trips on foot or by bicycle decreased in Peel between 1996 and 2001. The level of walking and cycling in communities are influenced by population density, settlement patterns, location of places of work compared to residences, cost and service level of transit, climate, lifestyle choices, and the availability of convenient pathways and bike lanes.

In 2001, the median commuting distance for Peel residents was 10.6 kilometres which decreased slightly during the previous five years. This slight decrease in commuting distances was accompanied by an increase in the proportion of Peel residents using the public transit network. Public transit usage grew 6.4% between 1996 and 2001.
In order to create environments that promote healthy weights, these issues need to be addressed. The Chief Medical Officer of Health for Ontario has recently recommended a comprehensive, multisectoral strategy to help Ontarians achieve and maintain healthy weights, and enjoy healthy lives. The health sector, governments, food and recreation industries, workplaces, schools, parents and caregivers, communities and individuals all have a role to play to reverse the increasing trend in obesity (see Figure 21 below).

**Figure 21: Roles that People and Organizations Have to Play towards Creating Environments that Promote Healthy Weights and Healthy Lives for Ontarians**

- **The health sector** can promote healthy eating and physical activity as a means to improve health and prevent chronic diseases.
- **Governments** can establish policies that promote healthy eating, physical activity and healthy environments.
- **The food and recreation industries** can develop and promote products and services that encourage healthy eating and physical activity.
- **Schools** can provide an environment that encourages healthy eating and regular physical activity, and helps students develop the knowledge and skills to make healthy choices.
- **Communities** can create an environment that encourages healthy eating and regular physical activity.
- **Individuals** can make healthy eating choices and become more active.
- **Workplaces** can provide an environment that promotes healthy eating and regular physical activity.
- **Parents and caregivers** can adopt and model healthy behaviours (breastfeeding, healthy eating and regular physical activity).