HEALTHY WEIGHT

ACTION PLAN

Tackling Overweight & Obesity as part of Well Bermuda, the National Health Promotion Strategy

Government of Bermuda
Ministry of Health
DEPARTMENT OF HEALTH
HEALTHY WEIGHT ACTION PLAN
Tackling overweight and obesity as part of Well Bermuda, the National Health promotion Strategy

Lead Agency
Health Promotion Office
Department of Health

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Produced by
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Reference as
INTRODUCTION

Overweight and obesity are a world-wide problem, with health authorities globally concluding that obesity is reaching pandemic proportions. The proportion of obese population has grown by 400% in the last 25 years in many high-income countries. In Bermuda, as in other places, overweight and obesity are a major public health concern.

In 2004 a Department of Health study determined Bermuda’s health priorities and identified overweight and obesity as the number one health problem for the country. Following from this, the 2006 National Health Promotion Strategy, Well Bermuda, listed the encouragement of a healthy body weight for height among the primary health promotion goals for the country.

The next steps in the implementation of Well Bermuda is the development of action plans to address the goals in the strategy. The aim of this “Healthy Weight Action Plan”, therefore, is to detail the action framework and initiatives that will be implemented to achieve the goal and objectives of the Well Bermuda strategy, with respect to overweight and obesity.

BACKGROUND

Overweight and obesity present major risks to health. The associated consequences range from increased risk of premature death, to serious chronic conditions such as type 2 diabetes, cardiovascular disease, hypertension and stroke, certain forms of cancer (e.g. hormonally related and large-bowel cancers), and other serious chronic diseases. Respiratory difficulties, chronic musculoskeletal problems, skin problems and infertility are among the non-fatal but debilitating conditions associated with obesity.

The 2006 Health Survey found that 63% of adults in Bermuda were above a normal body weight for height, with 38% overweight (BMI 25.0 – 29.9) and 25% obese (BMI >30). This represents an increase since 1999 when 57% of adults were found to be overweight or obese. The situation for children and adolescents is equally alarming; the 2006 Health Survey found that 36% of 5-10 year olds were overweight or obese, and in 2001 25% of adolescents aged 11 – 17 were found to be overweight. Overweight and obesity and their associated problems also impact significantly on healthcare expenditure, which can range from 4% in the England to 9.4% in the U.S.

The extent of the problem has made this a major public health challenge for Bermuda. Three factors combine to make it a public health problem: its seriousness, prevalence, and its resistance to change. While obesity is both a medical condition and a lifestyle disorder, it is becoming increasingly accepted that the prevention of obesity is an environmental problem not a medical one.

Egger and Swinburn propose that obesity must be viewed from an ecological approach which "regards obesity as a normal response to an abnormal environment", rather than as a personal disorder. Their ecological paradigm proposes that there are three influences on body fat. These influences are biological, behavioural, and environmental and are manipulated by energy intake and expenditure. Epidemics can only be controlled after the modification of environmental factors. Consequently, the "obesogenic" environment must be modified if obesity is to be prevented.

Bermuda must redress the growth in overweight and obesity as a matter of urgency. The Well Bermuda Strategy aims to “Encourage the maintenance of a healthy body weight for height”. This action plan proposes to tackle the problem with a multi-pronged approach placing substantial weight on the role of environmental factors in the promotion of healthier diet and increased physical activity. This approach has demonstrated effectiveness and is the recommended best practice.
HEALTHY WEIGHT OBJECTIVES OF WELL BERMUDA

The National Health Promotion Strategy, Well Bermuda, identified a number of measurable objectives to work towards in the goal to “Encourage the maintenance of a healthy body weight for height”. These benchmarks and data sources are detailed in table 3, but the original objectives were:

1. Decrease the proportion of overweight or obese adults
2. Decrease the proportion of overweight or obese children and adolescents
3. Increase the proportion of adults doing vigorous physical activity 3 times per week
4. Increase the proportion of adolescents doing vigorous physical activity 5 times per week
5. Decrease the proportion of adults who eat fast food meals once per week or more
6. Decrease the proportion of adolescents who skip breakfast regularly
7. Increase the proportion of schools implementing the Nutrition Policy

The Healthy Weight Action Plan will aim to tackle these seven objectives, with a modification to objective 5 and three further objectives added, which will enhance the existing set by focusing on moderate physical activity, consumption of fruits and vegetables and intake of sugar-sweetened beverages.

The 2006 Health Survey found that a high proportion of adults eat fast food meals once per week or more; however, this threshold is felt to be excessively restrictive of individuals’ choice and nutritionally unnecessary. The new wording will be modified to encourage moderation and will thus read: “Decrease the proportion of adults who eat fast food meals three times per week or more”. The 2006 Health Survey found that 13% of adults in Bermuda do so.

The 2006 Health Survey found that 18% of adults were largely sedentary (engaged in less than 10 minutes of moderate activity daily), and only 65% engaged in moderate physical activity at least 5 days of the week. Regular moderate physical activity has extensive health benefits and is often more achievable and likely to be sustained in the longer term. Therefore, the eighth objective will be to “Increase the proportion of adults doing moderate physical activity 5 times per week”.

Likewise, the 2006 Health Survey found that only 17% of adults consume at least three portions of fruits or vegetables per day (est.), compared to 1999 when 34% did so. This is substantially lower that the recommended intake, therefore the action plan will also include a ninth objective to “Increase the proportion of adults who eat 5 portions of fruit and vegetables daily”.

A high intake of sugar-sweetened beverages has been identified as a highly probable ecological factor contributing to the causes of the obesity epidemic. There is no local data on residents’ consumption of sugary drinks; however, given the anecdotal indications of high intake and its contribution to the problem, a tenth objective will be added: “Decrease the intake of sugar-sweetened beverages by adults, adolescents and children”.

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THE HEALTHY WEIGHT ACTION FRAMEWORK

Bermuda, like many other countries, has experienced in the past century a change in dietary habits, which now include more energy-dense, nutrient-poor foods with high levels of sugar and saturated fats. Substantial shifts have also occurred globally towards less physically demanding work and increasingly sedentary lifestyles, due to automated transport, technology in the home and more passive leisure activities. The aim of the Action Plan is, therefore, to reduce the prevalence of obesity and associated health problems by encouraging healthy eating and increased physical activity.

Unhealthy foods are too convenient, attractive, cheap, accessible, culturally acceptable and persuasively promoted and marketed. By contrast, physical activity has been on the decline globally, as a result of social, environmental and lifestyle changes. The action plan will seek to counteract these effects and promote healthier food choices and increased physical activity.

At the 2006 symposium to launch Well Bermuda, stakeholders with an interest in the overweight and obesity problem gathered to determine the priority actions needed for the healthy weight goal to be realised (See Appendix 1). These were identified as:

1. Promote the healthy weight message in a simple, accessible, consistent manner that is meaningful to the public
2. Promote policies and legislation that will make healthy choices the easier option
3. Implement Nutrition Policy in schools and promote increased physical activity for students.

In addition, Well Bermuda proposes that the Ottawa Charter for Health Promotion provides a sound foundation for defining the action areas to structure health promotion activities. They are: to build healthy public policy, create supportive environments, strengthen community actions, develop personal skills, re-orient health services, and build alliances. These will provide the basis for an action framework.

The Healthy Weight Action Framework is detailed in Table 1. It adheres to the principles identified as priority actions, and proposes specific initiatives to promote a healthier diet and increased physical activity by addressing each of the Ottawa Health Promotion Charter action areas. The action framework also ensures that all the Well Bermuda Healthy Weight Objectives are addressed. Additional initiatives that may be included in the future are listed in Appendix 2.
Table 1: The Healthy Weight Action Framework

<table>
<thead>
<tr>
<th>ACTION AREA</th>
<th>HEALTHY DIET</th>
<th>PHYSICAL ACTIVITY</th>
<th>OBJECTIVES ADDRESSED1 (REF. NUMBER)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build healthy policy</td>
<td>1. Reformulate taxation structure to favour healthy foods over unhealthy foods 2. Schools to implement Nutrition Policy</td>
<td>3. Partner with Department of Transport to encourage decreased use of cars 4. Partner with the Ministry of Education to promote a schools physical activity policy</td>
<td>(4) Increase the proportion of adolescents doing vigorous physical activity 5x p/w (5) Decrease the proportion of adults who eat fast food meals 3x p/w (7) Increase the proportion of schools implementing the Nutrition Policy (8) Increase the proportion of adults doing moderate physical activity 5x p/w</td>
</tr>
<tr>
<td>Create supportive environments</td>
<td>5. Vending machines in Government buildings to have only healthy options 6. Partner with Dept. of Parks to promote increased use of parks, beaches &amp; railway trails 7. Partner with the Corporation of Hamilton to promote a walking city</td>
<td></td>
<td>(8) Increase the proportion of adults doing moderate physical activity 5x p/w (10) Decrease the intake of sugar-sweetened beverages</td>
</tr>
<tr>
<td>Strengthen community actions</td>
<td>8. Campaign to educate food vendors on benefits of promoting healthier foodsii</td>
<td>9. Encourage use of stairs instead of elevators in Government and businesses</td>
<td>(3) Increase the proportion of adults doing vigorous physical activity 3x p/w (4) Increase the proportion of adolescents doing vigorous physical activity 5x p/w (5) Decrease the proportion of adults who eat fast food meals 3x p/w (6) Decrease the proportion of adolescents who skip breakfast regularly (8) Increase the proportion of adults doing moderate physical activity 5x p/w (9) Increase the proportion of adults who eat 5 portions of fruit &amp; vegetables daily (10) Decrease the intake of sugar-sweetened beverages</td>
</tr>
<tr>
<td>Develop personal skills</td>
<td>10. Social marketing campaign to educate the public on the dangers of obesity, and the benefits of increased physical activity and healthy eating, and how to achieve thisiii</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reorient health services</td>
<td>11. Promote Wellness Clubs in schools</td>
<td></td>
<td>(7) Increase the proportion of schools implementing the Nutrition Policy (4) Increase the proportion of adolescents doing vigorous physical activity 5x p/w</td>
</tr>
<tr>
<td>Build alliances</td>
<td>14. Develop stronger ties with editors, reporters and personalities in radio, TV and print media</td>
<td></td>
<td>All objectives</td>
</tr>
</tbody>
</table>

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1 All Action Areas seek to address the two primary objectives of the Healthy Weight goal: To decrease the proportion of overweight or obese adults (1) and children and adolescents (2).

ii For example, supermarkets not to stock junk food at check outs at children’s eye level; and restaurants to promote small portions more actively

iii Include, for example, 5 a day, whole grains, water, sugary drinks, trans fats, reading food labels, sugar and sodium intake, meal preparation, breastfeeding

iv For example, public health nurses, family practitioners, paediatricians, health teachers, social workers

v Partner with, for example, KEMH Family Practice Department and Bermuda Medical Association
The initiatives proposed in the Healthy Weight Action Framework will need to be operationalised through a varied and extensive range of activities. The key deliverables can be identified at the outset, which will also provide a mechanism to monitor progress with respect to outputs. (Table 2).

Table 2: Healthy Weight Initiatives and Key Deliverables

<table>
<thead>
<tr>
<th>HEALTHY WEIGHT INITIATIVES</th>
<th>KEY DELIVERABLES (DEADLINE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reformulate taxation structure to favour healthy foods over unhealthy foods</td>
<td>Approved Cabinet Memorandum (2007)</td>
</tr>
<tr>
<td></td>
<td>Reformulated taxation structure in place (2009)</td>
</tr>
<tr>
<td>2. Schools to implement Nutrition Policy</td>
<td>School Nutrition Policy implemented in 100% of government and private schools (primary+) (2008)</td>
</tr>
<tr>
<td>3. Partner with Department of Transport to encourage decreased use of cars</td>
<td>Launch Joint campaign (2008)</td>
</tr>
<tr>
<td>4. Partner with the Ministry of Education to promote a schools physical activity policy</td>
<td>Physical activity policy for schools approved by Ministries of Education and Health (2008)</td>
</tr>
<tr>
<td>5. Vending machines in Government buildings to have only healthy options</td>
<td>Cabinet Office Policy approved (2008) and implemented in 50% of buildings (2009)</td>
</tr>
<tr>
<td>6. Partner with Dept. of Parks to promote increased use of parks, beaches and railway trails</td>
<td>Launch Joint campaign (2008)</td>
</tr>
<tr>
<td>7. Partner with Corporation of Hamilton to promote a walking city</td>
<td>Launch Joint campaign (2009)</td>
</tr>
<tr>
<td>8. Campaign to educate food vendors on benefits of promoting healthier foods</td>
<td>Buy-in from the 3 major supermarkets (2007)</td>
</tr>
<tr>
<td></td>
<td>Buy-in from Restaurant Division of Chamber of Commerce (2008)</td>
</tr>
<tr>
<td></td>
<td>Buy-in from 7 major employers (2008)</td>
</tr>
<tr>
<td>10. Social marketing campaign to educate the public on the dangers of obesity, and the benefits of increased physical activity and healthy eating, and how to achieve this</td>
<td>TV, radio and plasma screens presence (2007)</td>
</tr>
<tr>
<td></td>
<td>Posters and flyers in public places and households (2007)</td>
</tr>
<tr>
<td></td>
<td>Education campaign via beauticians &amp; barbers (2007)</td>
</tr>
<tr>
<td></td>
<td>Screenings in beauticians, barbers &amp; supermarkets (2007)</td>
</tr>
<tr>
<td></td>
<td>Raised public awareness of risks and benefits (2008)</td>
</tr>
<tr>
<td>11. Promote Wellness Clubs in schools</td>
<td>Wellness Clubs in all private and public schools (primary+) with a high incidence of overweight (2009)</td>
</tr>
<tr>
<td>12. Train health workers in counselling obese patients</td>
<td>Conduct training workshops (2007)</td>
</tr>
<tr>
<td></td>
<td>Monitor number of health professionals engaged (2007)</td>
</tr>
<tr>
<td>13. Partner with physicians to promote clinical preventive services</td>
<td>Health professionals self-reported evaluation (2008)</td>
</tr>
<tr>
<td>14. Develop stronger ties with editors, reporters and personalities in radio, TV and print media</td>
<td>Fortnightly media presence of healthy weight issues (2007)</td>
</tr>
</tbody>
</table>
EVALUATION AND MONITORING

Evaluating health promotion initiatives is difficult, at best. Nevertheless, it is essential to identify in advance how we will know if the actions have made a difference, and what kind of difference we have made.

With respect to the former (have the actions made a difference) the Action Framework will be monitored using the key deliverables listed in Table 2. This will ensure that we have a short-term assessment of the extent to which the initiatives are being implemented, in order to make necessary adjustments along the way. Using the key deliverables’ deadlines, the Health Promotion Office will seek to understand the extent to which the initiatives are reaching target group and being adopted, implemented and maintained.

With respect to efficacy or outcomes (what kind of difference have we made), our key focus are the healthy weight objectives and benchmarks, which will be measured quantitatively using various data sources. The nature of public health initiatives is such that outcomes can only be expected in the long-term; nevertheless, we will seek to monitor on an ongoing basis using the evaluation data sources detailed in Table 3.

Table 3: Outcome Evaluation of Healthy Weight Objectives

<table>
<thead>
<tr>
<th>Outcome Evaluation via Objectives</th>
<th>Baseline Measure* &amp; Source</th>
<th>Evaluation Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Decrease the proportion of overweight or obese adults</td>
<td>63%</td>
<td>2006 Health Survey</td>
</tr>
<tr>
<td>2. Decrease the proportion of overweight or obese children and adolescents</td>
<td>36% (5-10s) 25% (11-17s)</td>
<td>2006 Health Survey 2001 Teen Survey</td>
</tr>
<tr>
<td>3. Increase the proportion of adults doing vigorous physical activity 3 times per week</td>
<td>20%</td>
<td>2006 Health Survey</td>
</tr>
<tr>
<td>4. Increase the proportion of adolescents doing vigorous physical activity 5 times per week</td>
<td>29%</td>
<td>2001 Teen Survey</td>
</tr>
<tr>
<td>5. Decrease the proportion of adults who eat fast food meals three times per week or more</td>
<td>13%</td>
<td>2006 Health Survey*</td>
</tr>
<tr>
<td>6. Decrease the proportion of adolescents who skip breakfast regularly</td>
<td>31%</td>
<td>2001 Teen Survey</td>
</tr>
<tr>
<td>7. Increase the proportion of schools implementing the Nutrition Policy</td>
<td>88%</td>
<td>2007 Budget Book*</td>
</tr>
<tr>
<td>8. Increase the proportion of adults doing moderate physical activity 5 times per week</td>
<td>65%</td>
<td>2006 Health Survey*</td>
</tr>
<tr>
<td>9. Increase the proportion of adults who eat 5 portions of fruit and vegetables daily</td>
<td>17%</td>
<td>2006 Health Survey*</td>
</tr>
<tr>
<td>10. Decrease the intake of sugar-sweetened beverages by adults, adolescents and children</td>
<td>No data</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

* Measures have been updated since original Well Bermuda report
ACTION STAKEHOLDERS

The Healthy Weight Action Plan will seek the endorsement and support of the following stakeholders, who represent our key public health partners in the implementation of this Action Plan and in the achievement of a healthier body weight for height for all Bermuda’s residents.

Association of School Principals  Department of Youth, Sport & Recreation  
Bermuda Diabetes Association  Diabetes Education Centre  
Bermuda Dieticians Association  Epidemiology & Surveillance Unit, DoH  
Bermuda Heart Foundation  Family Practice Department, KEMH  
Bermuda Hospitals Board  Health Insurers’ Association  
Bermuda National Centre  Healthy Schools Programme, DoH  
Bermuda Medical Association  Media  
Bermuda Union of Teachers  Ministry of Education  
Child Health Programme, DoH  Ministry of Health  
Child & Family Services  Ministry of Transport  
Community Health Nursing Programme, DoH  National Office for Seniors & the Physically Challenged  
Corporation of Hamilton  Nutrition Services, DoH  
Department of Parks  Physicians  
Department of Planning  Statistics Department

NOTES & REFERENCES

APPENDIX 1: OBESITY ACTION PLAN DRAFTED AT WELL BERMUDA SYMPOSIUM

BREAKOUT EXERCISE AT WELL BERMUDA SYMPOSIUM

**GOAL:** Encourage maintenance of a healthy body weight for height

**This goal is about:** Prevention of weight gain and achievable reduction of weight (5-10%)  

<table>
<thead>
<tr>
<th>ACTIONS</th>
<th>OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identify three priority action areas for this goal</td>
<td>Describe how to evaluate progress on each action area</td>
</tr>
<tr>
<td>1. Promote the healthy weight message in a simple, accessible, consistent manner that is meaningful to the public (e.g. offer screenings at sporting events, national celebrations, supermarkets, etc.)</td>
<td>Monitor awareness of healthy weight message</td>
</tr>
</tbody>
</table>
| 2. Promote policies and legislation that will make healthy choices the easier option (e.g. taxation to favour healthy foods, remove junk from supermarket check-out counters, restaurants to promote reduced portions more) | Government vending machines will have only healthy options  
Public report eating less unhealthy foods |
| 3. Implement Nutrition Policy in schools and promote increased physical activity for students | Reduce childhood overweight as measured by five, ten and fifteen year old school health assessments |

**Lead agency:** Health Promotion Office  
**Contact:** Jennifer Attride-Stirling
APPENDIX 2: ACTION AREAS FOR FURTHER CONSIDERATION

Through the consultation process a number of very worthwhile initiatives were proposed. Many fell beyond the scope of the action plan due to timelines, available resources for implementation and scope as defined by the targeted healthy weight objectives of the action plan. Nevertheless, these initiatives merit ongoing consideration and are recorded here for future inclusion in the action plan, as the proposed two year plan rolls forward.

Initiatives to increase physical activity and improve diet
1. Amend legal framework regarding the importation of carrots to Bermuda to facilitate access to high quality carrots throughout the year
2. Partner with the Community Education Programme to introduce a course on healthy family cooking
3. Partner with the Department of Planning to promote:
   3.1. Improvements in sidewalk availability and pedestrian crossings
   3.2. Inclusion of sidewalks on all new construction throughout the Island
   3.3. Inclusion of showers in new office buildings
4. Promote improvements to railway trails (e.g. lighting, surfaces, benches)
5. Promote introduction of “walking bus” for school children