COMBATTING OBESITY AND NCDs IN THE CARIBBEAN: THE POLICY PERSPECTIVE

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TRINIDAD & TOBAGO

MARCH, 2007.

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Summary

Obesity is the most important underlying cause of death in the Caribbean. Furthermore, the alarming increase in obesity in recent decades constitutes a formidable public health and financial challenge to Caribbean countries. Obesity is strongly associated with the major chronic diseases the Caribbean confronts today – cardiovascular disease, type 2 diabetes, hypertension and some cancers. And the disease burden increases with increasing obesity. This paper argues that the increasing weights of the population have implications beyond the clinical impact of obesity and makes the case for a public-health approach to prevention. It concludes with recommendations for specific policy actions that can reverse the increasing and alarming obesity trend.

Introduction

The alarming increase in obesity in recent decades constitutes a formidable public health challenge (Henry 2001). But the increasing weights of the population have implications beyond clinical impact of obesity for a public-health approach to prevention. This paper will argue that substantial reductions in the prevalence of obesity are more likely to come from structural and policy related changes to the environment than from medical interventions targeted to the individual.

Caribbean people are eating too much for their level of activity. But the problem is not merely at the individual and group level. Yet current Caribbean focus is on promoting changes in dietary and physical activity behavior at the individuals and group level. It would be a mistake to continue focusing only on this narrow perspective. This is because exhalting people to change their behaviors to improve the quality of their diet and their physical activity level is unlikely to succeed in an environment in which there are plentiful inducements to engage in opposing behaviors that can lead to a chronic positive energy imbalance. The proposal here is therefore on environmental and population strategies, not in opposition to individual strategies, but in support of them.

Shifting the intervention focus from the individual to the environment is a critical change in the new strategy. This strategy mush however be cognizant that the individual, environmental and social determinants of obesity are all embedded within a global environment. The worldwide epidemic of obesity is more than a set of independent national occurrences. The penetration of Western food systems, labor saving technological advances and consumer culture into societies has led to an obesogenic global environment. The solution to this problem cannot therefore be narrow and individualistic, as in the past.

Prevention through Public Policy

If prevention is to be the major strategy for the long-term control of obesity, we must find a new approach. This new approach must be cognizant not only of the individual and family perspectives but also of the national and global trends and influences. The worldwide epidemic of obesity is more than a set of independent national occurrences. It has been shown that these global increases in obesity are grounded in the globalization of food systems and consumer culture and have increasingly penetrated all societies of the world (Sobal 2001). Global corporations are establishing systems to ensure relatively inexpensive calorie-dense foods to all people in all places at all times (French 2001). Other global processes such as increasingly inexpensive transportation and activity-sparing systems are the underlying causes of increase in global obesity.

Unlike communicable diseases, it is not feasible to remove totally the cause of obesity. Unlike some non-communicable diseases, it is not easy to isolate and manage exposure to a single major obesity – promoting factor. Obesity is complex. The biological, social and economic determinants of obesity are all embedded within a global environment. Any attempt to link obesity to a single cause or a particular food is inherently simplistic and contributes to a reductionist approach and will not lead to sustained obesity control. To effectively combat obesity we need to move beyond biology and beyond behaviors to understand collective social, economic and political structures and cultural changes rather than focusing only on individual physiology and personal characteristics. Prevention programs, which need to have a multi-sectoral approach, are essential to help stem the obesity epidemic. These have been found to be more efficient than individual weight-loss programs, but surprisingly only a few prevention programs have been developed and implemented. These programs should be high on the scientific and political agenda of the region.

This position is different from those who believe that the problem of obesity is simply a consequence of poor personal behaviors - the product of gluttony and laziness. This bias against obese people and an over-emphasis of personal responsibility has resulted in the key role of the environment in the development of obesity being largely ignored. Exalting people to change their behaviors to improve the quality of their diet and their physical activity level is unlikely to succeed in an environment in which there are many inducements to engage in opposing behaviors that lead to a chronic positive energy imbalance.

In the past we have employed largely educational approaches to combat obesity in the Caribbean. A more effective strategy for dealing with this public health problem would appear to be one that goes beyond the educational dimension and deals with those environmental and societal factors that induce the obesity promoting behavior. In this way we may reduce the exposure of the whole population to obesity promoting forces.

Public policy recommendations need to give special attention to our Caribbean reality - small economies with related high transaction costs in an environment of rapidly expanding liberalization of trade in food and services. The establishment of public policies therefore needs to target the driving forces of obesity in both the physical, psychosocial and economic environment. These include food security and safety; access to healthy food; access to information; recreation and physical activity spaces and facilities. Further, public policies on obesity will need to be translated into legislation that safeguards the necessary conditions to develop healthy lifestyles. Policies should be implemented so that at the local level, regulations provide the instruments for putting into practice concrete aspects of the major national policies.

The public policy approach advocated here is consistent with the Caribbean Charter on Health Promotion and the Caribbean Cooperation in Health in that it can help to organize strategies that work both to support healthy lifestyles among individuals and influence policy that will create opportunities for social and cultural change. (CARICOM 1993,1998) Here the emphasis will be on environmental and population strategies, not in opposition to individual strategies, but in support of them.

This policy approach is in keeping with the principles of the Caribbean Charter for Health Promotion.

Obesity and its consequences pose a formidable threat to Caribbean development. The extent to which this threat can be averted is directly related to how bold and how urgent the response/actions by national governments can be mounted. The policy options are in fact investments in public health and human capital with enormous short and long term gains. Some require little direct funding. All require political commitment.

THE POLICY INTERVENTIONS

Evidence suggests that the most effective interventions to change diet and physical activity patterns at the population level

- 1. Adopt an integrated, multi-disciplinary and comprehensive approach
- 2. Involve complementary range of actions
- 3. Work at individual, community, environmental and policy levels

Implementation of such environmental-based strategies to encourage and support behavior change will probably require the involvement of of people from relevant sectors outside health. Schools, worksites, and local municipalities/ neighborhoods are likely settings for change.

Based on the scientific evidence that modifying diets and physical activity can reduce obesity, the challenge is to identify the policy options to achieve this in the Caribbean. The recommendations in this paper are based on two critical observations (1) changing behaviors related to diet and lifestyle requires sustained efforts and these should be pursued, and (2) opportunities exist that do not require individual behavior change and these can lead to more rapid benefits. The recommendations to change diet and lifestyle factors in the Caribbean are as follows:

- 1. Regulating and modifying the food supply (to make health foods available)
- 2. Fiscal (incentives and disincentives) (to make health foods affordable)
- 3. Educating individuals and communities (to make healthy lifestyle choices)

POLICY INTERVENTIONS TO COMBAT OBESITY & NCDs

LICY OPTIONS	Potential Impact (in 5 years)	Feasibility (political/practical/ financial)
GULATIONS & STANDARDS		
Require that calorie (& fat) content is prominent on marketed foods so that the public can make healthy substitutes.	xx	xxx
Implement legislative framework and science- based food safety regulatory systems to serve the needs of exporters, importers and consumers	xxx	xxx
Set standards that restrict the promotion of foods high in sugar, refined starch and saturated fat and trans fat to children on TV and elsewhere.	xxx	х
Require manufacturers to use national dietary guidelines on product packages.	xx	xxx
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XXX = VERY HIGH; XX = HIGH; X = MODERATE

POLICY INTERVENTIONS TO COMBAT OBESITY & NCDs

POL	LICY OPTIONS	Potential Impact (in 5 years)	Feasibility (political/practical/ financial)
FIS	CAL		
(Ind	centives & disincentives)		
1.	Levy taxes on selected foods high in fat, sugar, and calories.	XXX	х
2.	Incentives that subsidize low calorie, nutritious foods.	XXX	XX
3.	Incentives for employers to provide facilities and opportunities for diet and weight management programs	XXX	xxx

XXX = VERY HIGH; XX = HIGH, X = MODERATE

POLICY INTERVENTIONS TO COMBAT OBESITY & NCDs

POL	LICY OPTIONS	Potential Impact (in 5 years)	Feasibility (political/practical/ financial)	
EDUCATION/SCHOOLS				
1.	Make compulsory physical education in schools	xxx	xx	
2.	Make compulsory weight management modules and counseling techniques as part of the education of teachers and health care workers.	xxx	xx	
3.	Discontinue the excessive use of sugar-and fat-containing foods offered in cafeterias and school vendors and encourage students to make healthy diet and lifestyle choices.	xx	xx	
4.	Introduce massive, sustained and varied messages to the public that "calories count".	XX	х	
xxx	(= VERY HIGH, XX = HIGH,	X = MO	DERATE	

FOOD REGULATION & STANDARDS - RECOMMENDATIONS

This paper proposes:

- regulatory guidelines for people in the food service sector taking into account nutritional considerations, e.g. legislation on nutritional labelling, code of advertising, healthy choices for fast food franchises
- strengthened regulatory bodies, through training and monitor the use of dietary guidelines in the food industry and trade.
- making it compulsory for the private sector to "include" nutritional aspects in the manufacturing, processing and packaging of foods, including the conservation of nutrients and nutrition labelling.
- making it compulsory for food service establishments (hotels, restaurants, fast food outlets and vendors) to display information about caloric and fat content of meals e.g. on menus, place mats and food wrappers.

Justification

* Studies in the USA show that Trans fat labeling would be highly cost effective (http://www.cfsan.fda.gov/~lrd/fr03711a.html).

- * Through voluntary action or regulation partially hydrogenated fat can be eliminated from the diet and the costs can be extremely low, and does not require consumer education and behavior change.
- * Even though the effect of labeling itself may have a smaller effect on consumer behavior, it will have a major effect on manufacturers' behavior.
- * Changing manufacturing processes can eliminate the partial hydrogenation of vegetable oils, which destroys omego-3 fatty acids and creates trans-fatty acids.

FISCAL RECOMMENDATIONS

This paper recommends the implementation of incentives and disincentives to:

- (1) balance the importation of fatty foods (e.g. milk and meat) and the low fat foods (grains and other cereals).
- (2) increase the production, supply and consumption of legumes, ground provisions, fruits and vegetables and low fat foods to meet the recommended national dietary goals.
- (3) increase production of a wide variety of appealing low fat, high complex carbohydrate and high fiber foods.
- (4) promote and implement dietary guidelines and exercise habits at worksites.
- (5) promote the building of bicycle paths, swimming pools and recreation centers.

Further it recommenda imposition of small increases in consumer taxes on selected high calorie, non-nutritious foods.

Justification

These recommendations are based on the our Caribbean reality but influenced by the experience from some taxation policy elsewhere, e.g.: In California, a 8.25% tax on non-essential foods decreased snack sales by 10%, and generated \$200 million in revenue, but the tax was repealed one year later due to public resistance and the difficulty in implementation. (Horgen KB, 1998). Clearly, public support for media and other policy initiatives is essential (Horgen KB1998) But since then 18 states have begun to levy special taxes on soft drinks, candy, chewing gum or snack foods. However the taxes appear to be too small to act as a disincentive to purchase the products and thus may not have direct impact on dietary intake. However, about \$1 billion is raised annually from these taxes nationally, and revenues are used to fund health promotion programs. (Jacobson MF, 2000).

For more than 10 years Canada has introduced a 7% national goods and services tax plus a 15% regional sales tax. Basic groceries are exempt which eating establishments, vending machines, alcohol, soft drinks and snack foods are taxed. (Revenue Canada 2007) However, unlike the USA, revenues are not earmarked for health promotion programs.

Taxes should be of sufficient magnitude to affect sales of high energy, now nutrient foods (Nestle 2000) The effect would be a changed price structure for food that favors purchase of more nutritious food choices (Jefferey, 2001)

Physical activity can be promoted through the removal of sales taxes on exercise equipment and the offering of tax incentives to employers who provide employees with fitness facilities (Nestle 2000).

EDUCATION/ SCHOOLS RECOMMENDATIONS

Specific recommendations are to:

- incorporate in the curriculum of colleges and universities a well designed course on diet, nutrition, health and physical education, and also ways to promote behavior change.
- plan and implement healthy lifestyle programs incorporating nutrition education, exercise and healthy school meal choices.
- launch and maintain massive public education campaigns to inform the public of the recent advances in knowledge about healthy eating and physical activity using the mass media radio, television, newspaper, posters and leaflets. This should be done on the basis of audience segmentation.
- regulate the local networks and cable companies to restrict advertising of foods with adverse effects particularly on children's programs.
- designate secure areas earmarked for promotion of physical activity e.g. parks, community centers, recreation grounds.
- provide incentives for various worksite programs to promote healthy lifestyles including health, dietary practices and physical exercise through awareness, skills development and motivation.

Justification

The strongest evidence for the preventability of obesity comes from the successful management in children and importantly, most do not carry their overweight status to adulthood. Studies have shown that children 6-18 years can engage in moderate to vigorous activity for a median of 90 to

100 minutes per week Further, even brief messages about nutrition can influence behavior and that the magnitude of the effect is related to the intensity of the intervention. Children should therefore be encouraged to be as active as possible. The goal should be to increase daily physical activity and play rather than through competitive sport or structured exercise (Flodmark 1993; Deitz, 1993; Epstein 1985 & 1994; Davis 1994.

Television viewing represents the principal source of inactivity for most children and adolescents in developed countries and long periods of viewing have been linked to prevalence of obesity. Television viewing is also associated with increased consumption of high energy snacks (Deitz 1985, 1986; Gortmaker 1990).

CONCLUSION

Effective control obesity requires a shift away from the traditional focus on clinical management and individual behavior change towards strategies which deal with the environment in which such behaviors occur. The successful challenge to obesity therefore lies not in medical interventions at the individual level but in the public policy domain which can create the environment for individual behavior change.

Vital to the success of this approach will be the participation of health officials, educators, legislators, businesses and planners in various health promoting actions. This new public policy approach needs to be instituted to attack this epidemic in a multisectoral way.

Through a combination of regulation, incentives and education this paper proposes to increase physical activity and the consumption of healthier foods and in so doing blunt the epidemic of obesity and Non-communicable diseases in the Caribbean.

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