



**Caribbean Institute
for Health Research**

CHILDHOOD OBESITY IN BARBADOS

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Outline

- Overweight and obesity (OWOB) today
- Overweight and obesity (OWOB) trends
- Health impact of OWOB
- Unhealthy diet
- Diet vs exercise
- Response
 - WHO
 - Heads of Govt
 - Chancellor
 - MOH



OVERWEIGHT AND OBESITY (OWOB) TODAY

Newsweek

July 3, 2000 : \$3.50 US

**LIES ABOUT
SOCIAL
SECURITY
BY ALLAN
SLOAN**

newsweek.msnbc.com

**WATER ON MARS
New Hints of Life**

**'ME, MYSELF & IRENE'
The Wild Men of
Comedy**

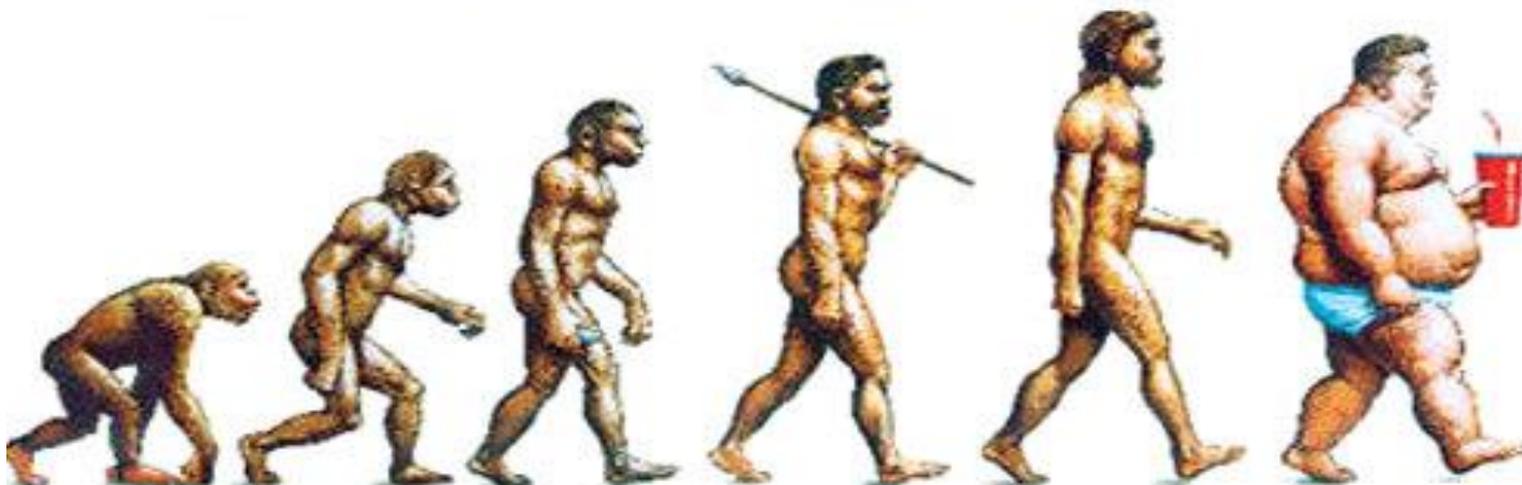
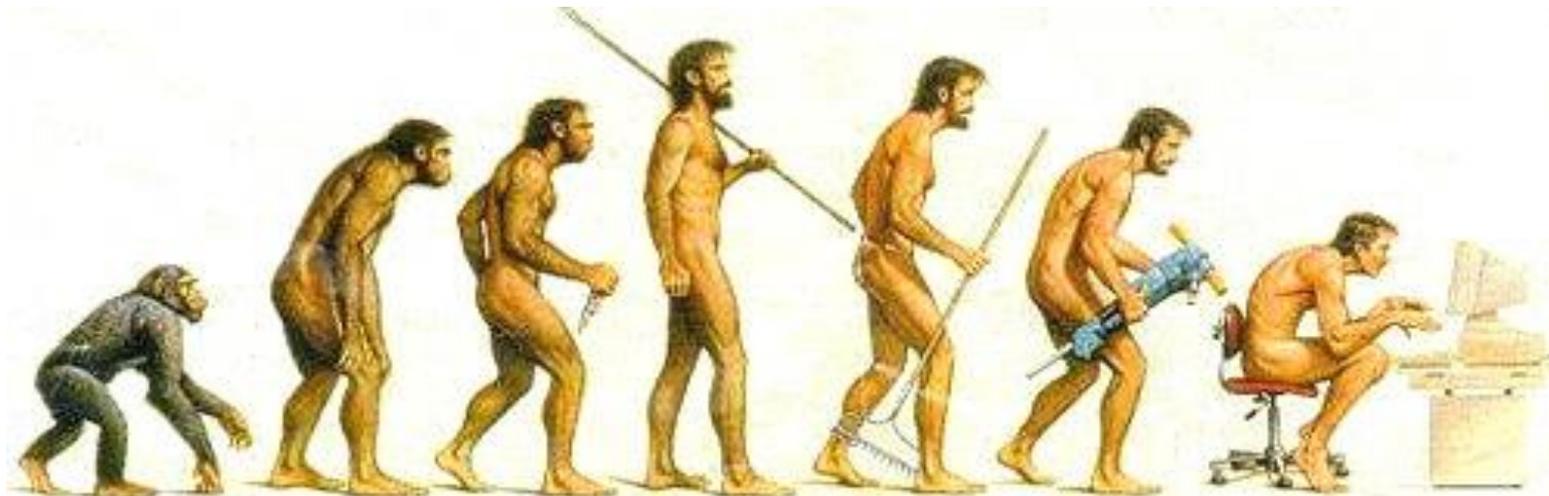
Fat for Life?

**Six Million Kids
Are Seriously Overweight.
What Families Can Do.**

By Geoffrey Cowley & Sharon Begley



Evolution of the Problem



Obesity-

Definition based on BMI

- Pediatrics
 - Obese - BMI > 95% for gender and age
 - At risk/overweight - BMI=85-95%
- Adults
 - Obese – BMI > 30
 - Overweight – BMI=25-30

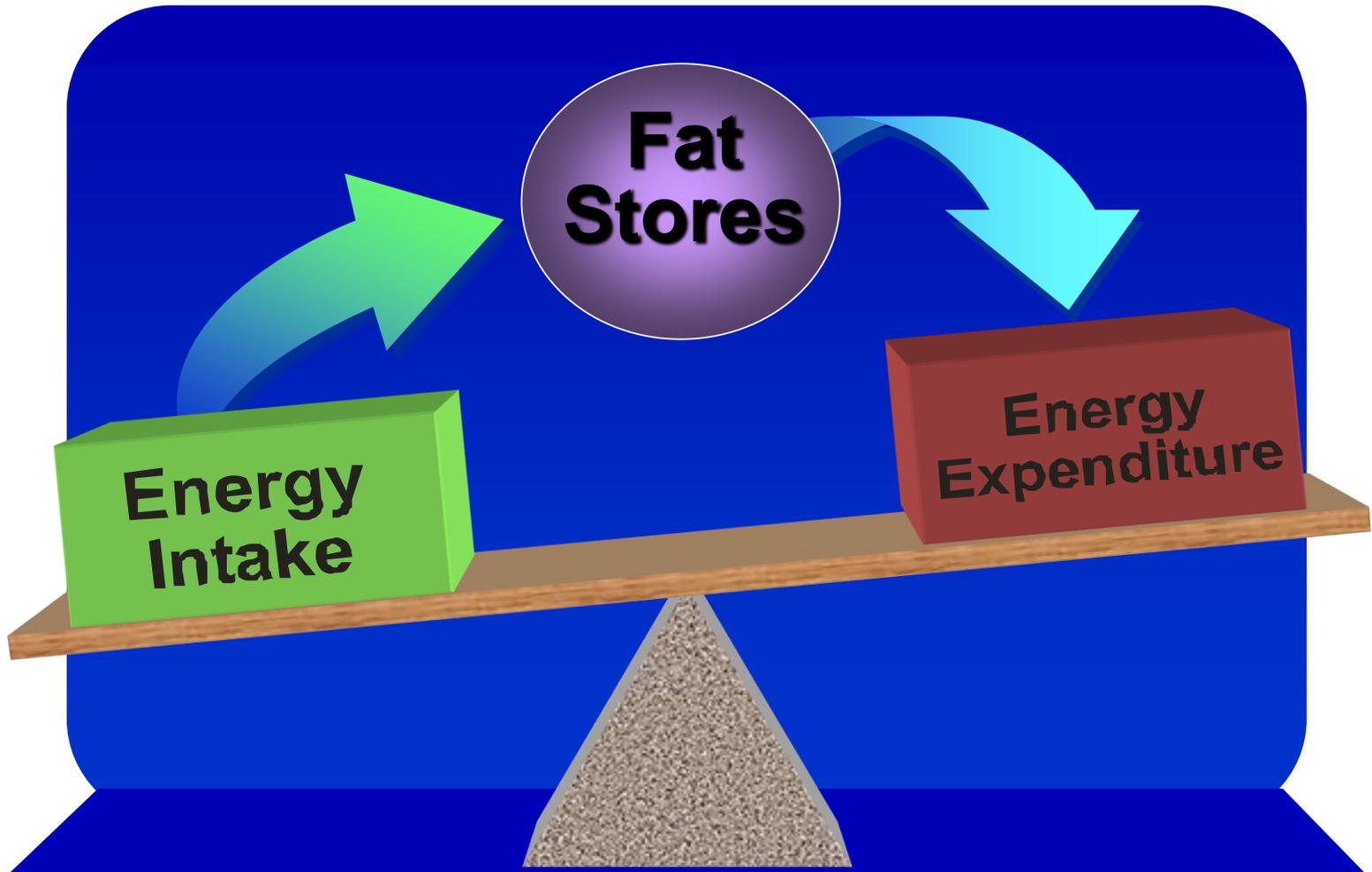
Global epidemic



Tanzania

- USA 50% increase in obese children in last decade
- Affects 20% of US children (same as Barbados)
- Similar prevalence to US: Latin America, Caribbean, Middle East, Northern Africa, Central-Eastern Europe

Obesity is caused by long-term positive energy balance



Obesity: environmental factors- increased energy intake

- **Increased intake of**
 - Sweeteners, salt, & fat
 - Processed foods,
 - Refined carbohydrates
 - Snacks
 - Sweetened beverage
 - Reduced intake of fruits and vegetables
- **Factors:**
 - Access, low price
 - Supersized portions
 - Eating out
 - Marketing



Obesity: environmental factors- decreased energy expenditure

- Excess TV; computer, & play station time
- Children are home alone
- Decreased physical activity at school & at home
- Transportation by car or school bus
- Neighborhood safety
- Few public parks, sidewalks, swimming pools ..etc
- Sedentary lifestyle



Childhood obesity- environmental factors: TV

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- 25 hours/week
- Half the ads are for food
- Obesity increases 2% /hour of viewing
- Strongest predictor of subsequent obesity

'HE'S IN TRAINING FOR THE OLYMPICS'

HIGHEST FEMALE (15YR+) OVERWT/OBESITY IN THE WORLD (WHO 2011)

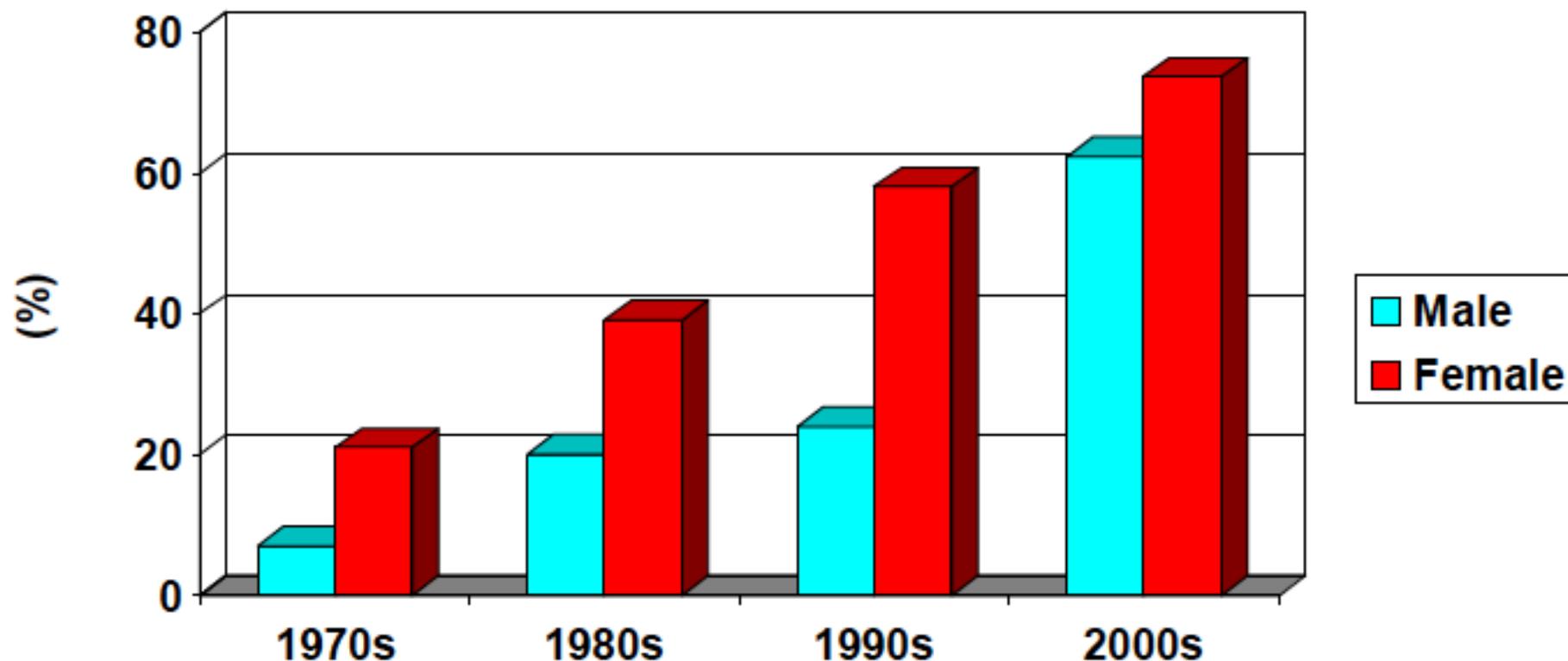
Rank	Country	%
1	Nauru	82
2	Tonga	81
3	Micronesia	79
4	Cook Is.	73
5	Samoa	72
6	Niue	70
7	Kuwait	67

Rank	Country	%
8	Barbados	63
9	Palau	62
10	Trinidad	61
11	Dominica	60
12	Egypt	59
13	USA	55
14	Jamaica	53



OVERWEIGHT AND OBESITY (OWOB) TRENDS

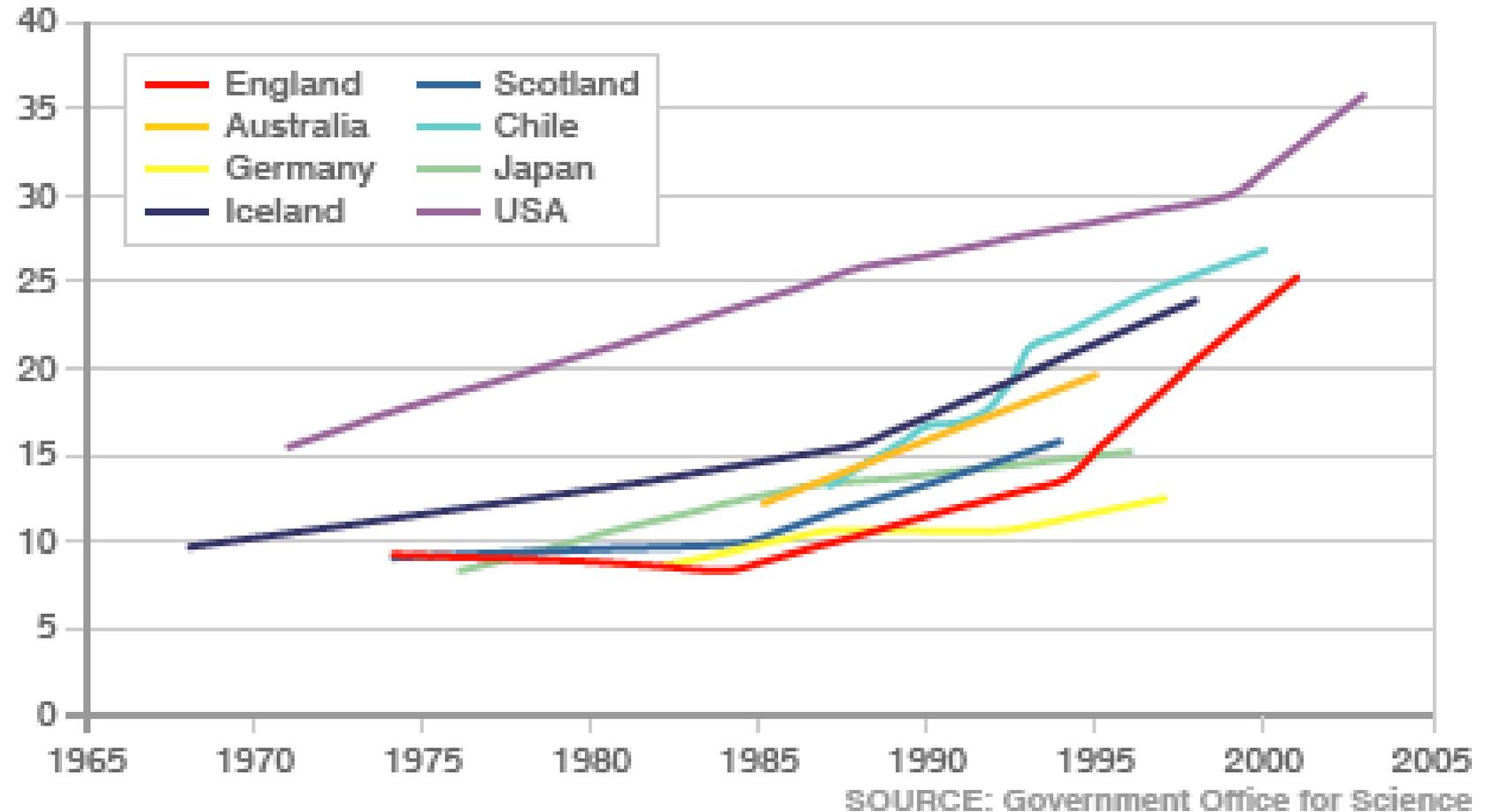
ADULT OVERWEIGHT/OBESITY TRENDS IN THE CARIBBEAN



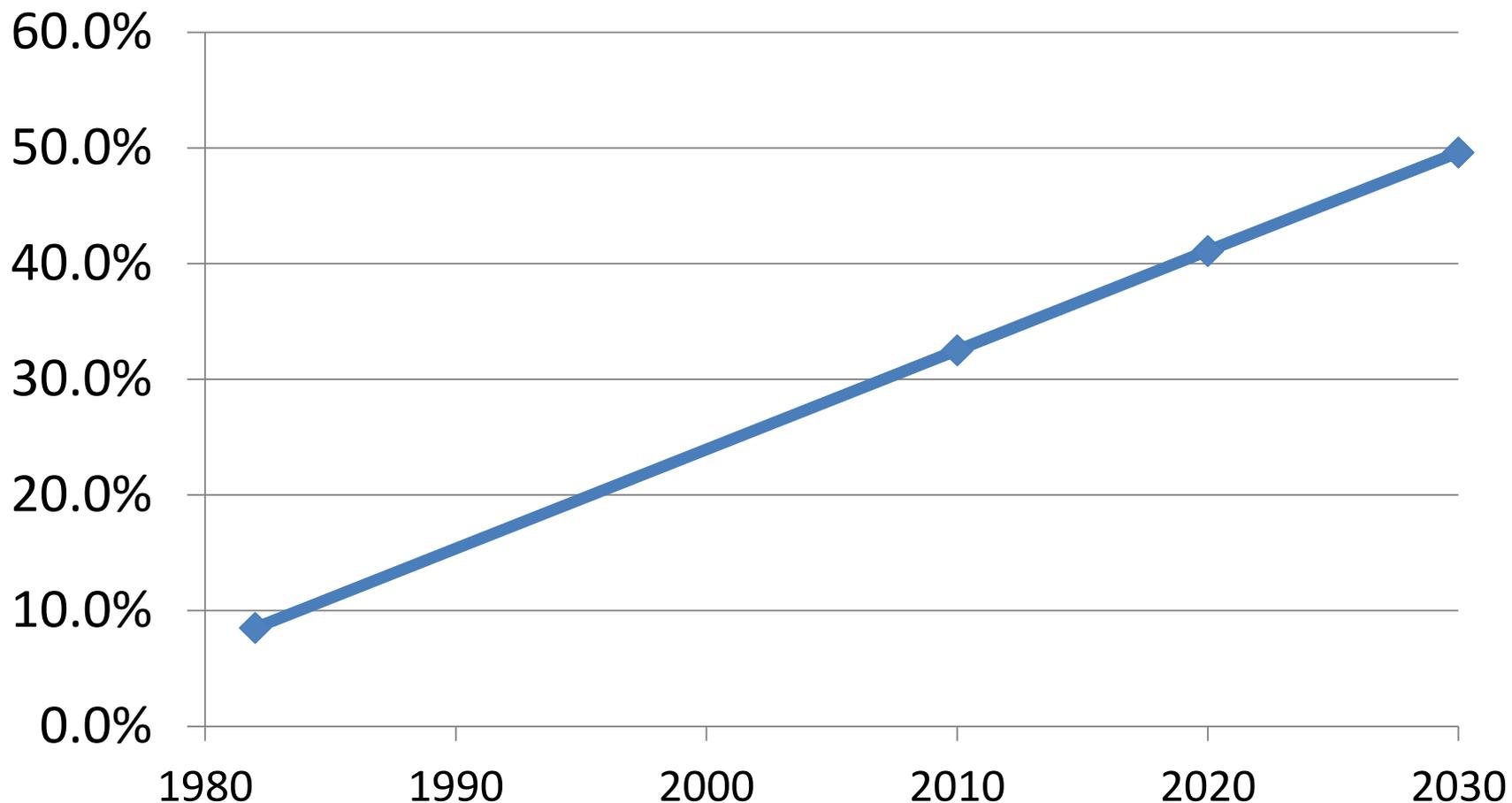
Childhood obesity

INCREASING NUMBER OF OVERWEIGHT CHILDREN AROUND THE WORLD

Percentage overweight



% Barbadian Children 9 and 10 years old who are overweight or obese

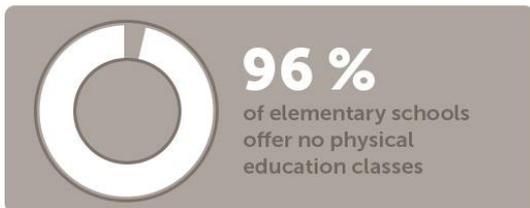
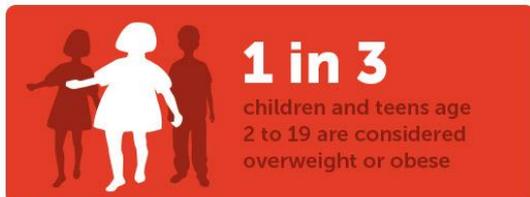


Barbadian children 9 and 10 years in 2010 (Gaskin, P)

- 33% of 9-10 year old were overweight/obese
- 12% had high blood pressure
- Blood pressure was related to body size
- Children were 270% more likely to be OWOB when annual household income <BBD 9000
- Eating dinner with the family every night was associated with 45% lower rate of OWOB

CHILDHOOD OBESITY BY THE NUMBERS

Many U.S. kids are overweight or obese, and most don't exercise.



Source: CDC

WHO Global School Health Survey (GSHS) 2012 (26 schools in Barbados)



31.5%
overweight
14.4%
Obese



70 %
low levels
of physical
activity



65.3%
Sedentary
lifestyle
after school



Girls were at a slightly higher rate of overweight and obesity when compared to boys.

Complications specific to children ...

- **Persistence of obesity at adulthood:**
 - Overweight adolescents have a 70% chance of becoming overweight adults.
 - Increases to 80% if one or both parents are obese.
- **Obese 6-year-old has a 25% chance of becoming obese adult**
- **Obese 12 year old has a 75% chance of becoming an obese adult.**

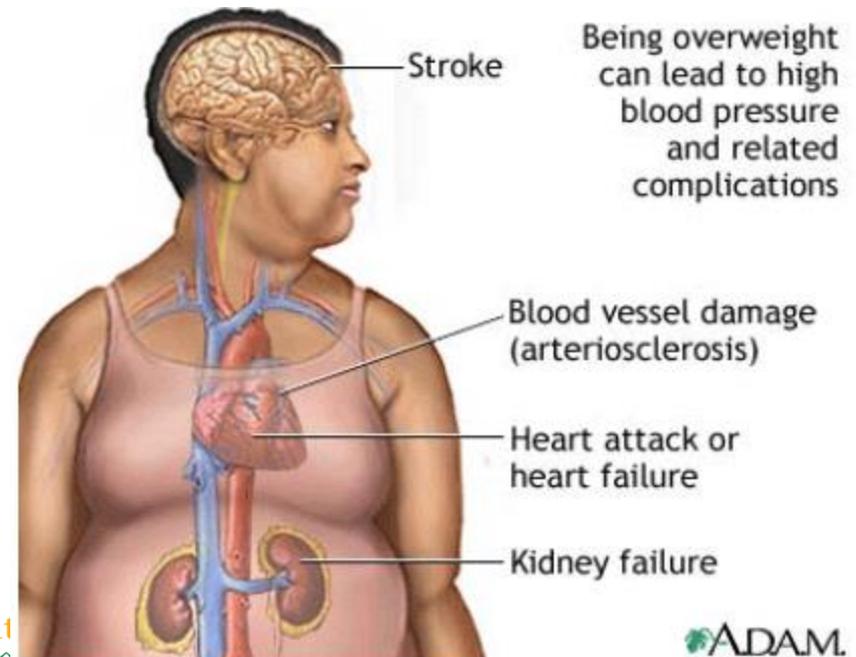


HEALTH IMPACT OF OWOB

Obesity

health risks

- Diabetes (type 2)
- Hypertension and heart disease
- Neurologic complications
- Respiratory disease
- Orthopedic conditions
- Psychosocial disorders
- Hyperlipidemia
- GI manifestations
- Menstrual disorders

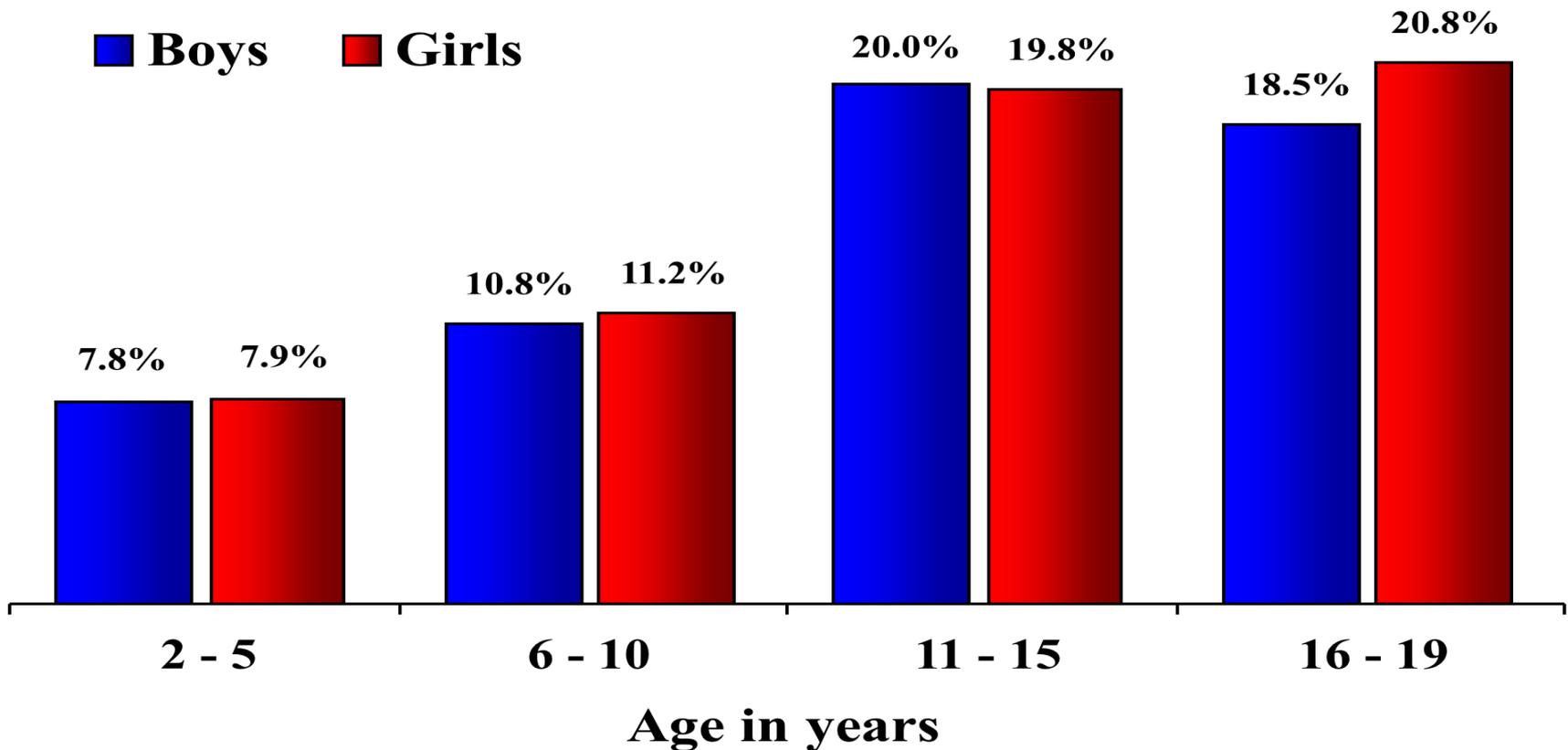


Obesity and type 2 diabetes

- Tenfold increase in prevalence of type 2 DM
- OGTT given to 167 obese, asymptomatic multiethnic youth
 - Impaired Glucose Tolerance (IGT)
 - 25% ages 4 – 10
 - 21% ages 11 – 18
 - Type 2 DM in 4% obese adolescents

Childhood obesity hypertension

Percentage of overweight children
with BP in 95th percentile



Note: Based on a retrospective study of 18,618 patients.

Source: Dr. Rappaport

Obesity: psychological disorders

- Difficult to be specific
- Stigmatisation
- Low self esteem
- Depression
- Discrimination

RED FLAG

- Premature deaths from obesity and overweight, 2nd only to tobacco-related deaths in USA.
- **Obesity will surpass tobacco as the leading cause of death worldwide in the next decade.**



Caribbean Unity in Health
LOVE THAT BODY

IN ALL AGE GROUPS

OBESITY HAS LEFT ITS MARK

Nutrition & Death in the Caribbean

Heart disease

Cancer

Diabetes

Hypertension

Stroke

57% mortality is nutrition-related

Sudden premature deaths

- On average
 - 1 heart attack per day
 - 2 strokes per day
- Premature deaths (<70 years)
 - 1 out of 3 heart attacks (2/week)
 - 1 out of 4 stroke (3 /week)
- Data from Barbados National Registry, MOH, CDRC, UWI

Social determinants of child obesity



- Marketing to children
- Childcare
- School environment
- Agricultural law
- Trade
- Food systems
- Enforcement
- Built environment
- Fiscal measures



UNHEALTHY DIET

Marketing to children

- Nestle and others still **promoting breast milk substitutes** and depressing breast feeding rates
- Chefette and others in Barbados **branding** blackboards, calendars, school supplies in primary schools
- Marketing **influences** children's preferences, requests, consumption
- Result: **30% children's calories from sweets, drinks, salt snacks, fast food**



Caribbean Unity in Health
LOVE THAT BODY

St. Phillip Primary School tour





DIET VS EXERCISE

HOW CAN THE FAMILY GET GOOD NUTRITION WHEN....

- **Our domestic agriculture policy lacks adequate incentives for the production of fruits and vegetables**
- **Our food imports encourage the consumption of high energy dense, manufactured foods**
- **Many schools canteens and vendors promote high energy dense foods with little nutrient value**
- **Our local and cable networks heavily advertise fast foods, especially on children's programmes**
- **The cost of healthy options is unaffordable to many**

Myth vs truth

- **Myth:** just exercise more and eat what you want.
- **Truth:** exercise alone generally won't work (it takes 2 hours of brisk walking to burn off 500 calories – small chocolate and small pack of chips).



RESPONSE

- WORLD HEALTH ORGANISATION**
- CARICOM HEADS OF GOVT**
- CHANCELLOR OF UWI, SIR GEORGE ALLEYNE**
- MINISTRY OF HEALTH, BARBADOS**

Recognise that behaviour change alone will not be enough

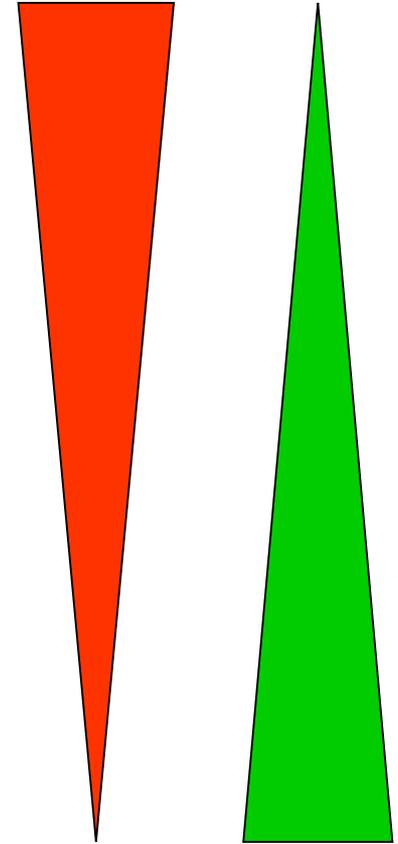


REQUIRED STRATEGIC CHANGES

- Health staff training
- Public education
- Behavior change efforts
(School, work, community)
- Fiscal (dis) incentives
- Regulation & standards

Effort
(Past)

Effort
(Future)



Caribbean Unity in Health
LOVE THAT BODY

WHAT MUST WE DO?

- **Food-based dietary guidelines: targets**
- **Public policy – across sectors**
- **Food industry – production, manufacturing, processing, preparing**
- **Institutions – schools, hospitals, workplaces, etc..**
- **General public**

WORLD HEALTH ORGANISATION

Dr. Chan, DG WHO, June 10, 2013

“**Globalization** of unhealthy lifestyles...is a **political** issue. It is a **trade** issue. It is an issue for **Foreign Affairs...**

Few Governments prioritize Health over Big Business”

World Health Organization “Recommendation on the marketing of foods and non-alcoholic beverages to children”

RECOMMENDATION 3

To achieve the policy aim and objective, Member States should consider different approaches, i.e. stepwise or comprehensive, to reduce marketing of foods high in saturated fats, trans-fatty acids, free sugars, or salt, to children.

RECOMMENDATION 5

Settings where children gather should be free from all forms of marketing of foods high in saturated fats, trans-fatty acids, free sugars, or salt. Such settings include, but are not limited to...schools, school grounds and pre-school centres, playgrounds... and during any sporting and cultural activities that are held on these premises.

CARICOM Heads of Government, July 2016



CARICOM communiqué 37th CARICOM Heads of Government Conference, July 4-6, 2016 highlights renewed commitment to NCDs

“As the Tenth Anniversary of the historic Port of Spain Declaration ‘Uniting to fight the Non-Communicable Diseases (NCDs)’ draws near, the Heads of Government recognised the progress made in addressing the issue. They acknowledged, however, that progress was variable and agreed to adopt a more holistic approach. In this regard, they pledged to address issues such as the

- ***banning of smoking in public places;***
- ***trade related measures;***
- ***banning advertisement of potentially harmful foods which specifically target children;***
- ***elevating taxes on foods high in sugar, salt and trans-fats.”***

REGULATION

- A KEY POLICY ISSUE

The LAW is a powerful instrument of Public Health

- Immunization
- Seat Belt
- Lead Exposure
- Smoking Control
- Alcohol Control

- DIET????



Caribbean Unity in Health
LOVE THAT BODY

Taxes on sugar-sweetened beverages

- 2011 – France and Hungary
 - 2014 – Mexico
 - 2015 – Chile, Barbados, Dominica
 - 2016 - ? Belgium, Britain??
 - India, Phillipines, Indonesia – considering
- CDRC doing research on SSB tax price, sales, process in Barbados, in discussions with Dominica

Barbados implements tax on sugar sweetened beverages: \$ 5.70 vs \$ 6.10



UWI CHANCELLOR: Sir George Alleyne

- The influences that promote child obesity violate the rights of the child and the state has the non-delegable responsibility to safeguard those rights.
- Our lawyers promote research and argument and agitate that the state must not violate the rights of our children.
- Physical exercise is as important as physics in schools.
- Our social scientists should be involved in establishing the economics of the prevention of childhood obesity
- There is need for and value of research that will demonstrate how best to frame the issue and how best to create images needed to galvanize action across the many sectors of the state, particularly the government which has the prime responsibility for changing the ***obesogenic environment, e.g. support taxes on unhealthy foods.***



What we do in the **physical and fiscal environment** has more potential for impact than health education and one-to-one counselling

STOP



www.facebook.com/montereybayholistic

Childhood Obesity

Educate Our Youth!

National Plan of Action for Childhood Obesity Prevention and Control

National NCD Commission, National Nutrition Centre, MOE, MOH Healthy Caribbean Coalition, health Professionals working in primary health care. Support of PAHO/WHO



Stakeholders

Governmental	Civil Society and Private Sector
Ministry of Health	PAHO/WHO
Ministry of Education	UN Agencies
Ministry of Agriculture	Private Sector
Ministry of Youth Affairs and Sports	Academia (UWI)
Town Planning	Private sector
Ministry of Commerce	

Aim/Goal

- To reverse the upward trends in obesity by 2019
- (Target: to reverse the upward trends in obesity by 5% in 2019)

Objectives

- To improve increase exclusive breastfeeding at 6 months by 20% by 2019;
- To reduce prevalence of low physical activity in adolescents by 30%;
- To develop and implement policies and regulations to reduce the impact on children of marketing of foods and non- alcoholic beverages high in saturated fats, trans fatty acids, free sugars or salt; and
- To have at least 70 schools designated Health Promoting Schools by 2019

FIVE (5) strategic actions

- Strengthening coordination and management of obesity prevention
- Strengthen breastfeeding practices
- Promoting physical activity
- Develop and implement dietary regulatory and fiscal policies
- Implement health promoting school initiatives

The Action Plan



WHAT CAN CIVIL SOCIETY DO?

- Civil society network
- Set your priorities
- Advocacy
- Watchdog – hold government accountable
- Support positive government actions



Thank
You

