Obesity among Egyptian Adults: Prevalence, Key Drivers and the Way Forward

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“Food Policies and their Implications on Overweight and Obesity in MENA"
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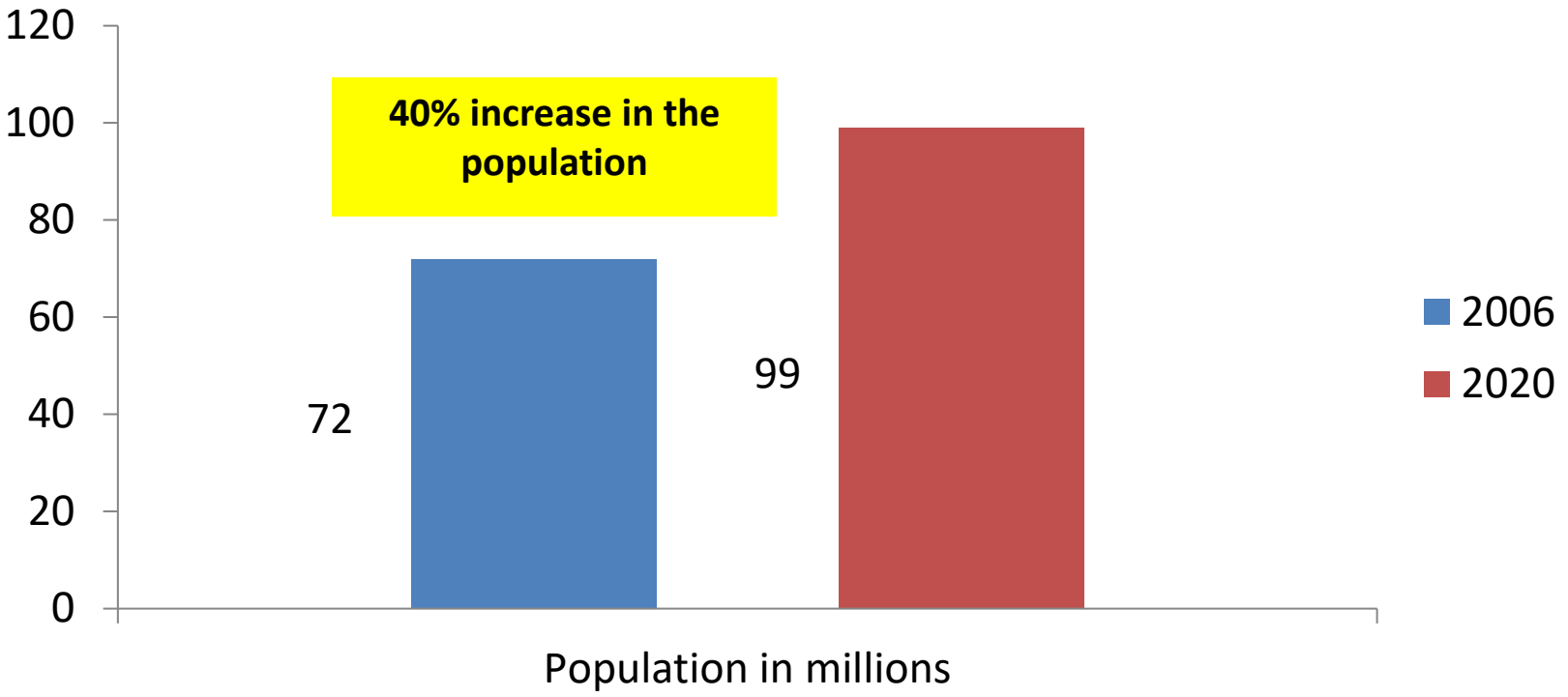
Agenda

1. Background information
2. What drove the growing epidemic of NCDS in Egypt?
3. Obesity: Definition & Measurement
4. Prevalence of Obesity in Egypt within the regional context (EMR)
5. Trend of Obesity in Egypt
6. What drove the growing epidemic of Obesity in Egypt?
7. The way Forward

Background: Egypt

- Total population of about 99. 8 millions in Jan 2020 (CAPMAS)
- Increased from 72.6 millions in 2006
- The population growth rate is **2.56 %**



- **More than half of the population** is between the age range 19-65 years

(2017 census data)

- Life expectancy at birth is increasing (Population is aging (years, 2016)

	M	F	Both
1990	60.8	63.6	**62.2**
2016	68.2	73.0	**70.5**

(WHO: https://www.who.int/countries/egy/en/ and https://www.worldlifeexpectancy.com/country-health-profile/egypt)

EGYPT TOP 20 CAUSES OF DEATH

AGE-STANDARDIZED DEATH RATE PER 100,000 POPULATION

	TOP 20 CAUSES OF DEATH	Rate	World Rank
1.	Coronary Heart Disease	216.82	18
2.	Stroke	95.56	74
3.	Liver Disease	84.71	1
4.	Diabetes Mellitus	35.20	69
5.	Kidney Disease	32.88	20
6.	Influenza and Pneumonia	29.13	99
7.	Alzheimers/Dementia	27.88	33
8.	Liver Cancer	27.42	4
9.	Inflammatory/Heart	23.63	6
10.	Lung Disease	22.61	88
11.	Breast Cancer	21.29	43
12.	Hypertension	14.97	81
13.	Road Traffic Accidents	14.46	108
14.	Endocrine Disorders	13.19	27
15.	Congenital Anomalies	12.32	36
16.	Low Birth Weight	11.53	66
17.	Bladder Cancer	7.98	1
18.	Lymphomas	7.83	17
19.	Lung Cancers	7.50	116
20.	Prostate Cancer	7.17	151

NCDS

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Noncommunicable disease proportionate mortality rate by country group in the Eastern Mediterranean Region, 2015

EMR	Total	62
Group 3	Yemen	61
	Sudan	50
	Somalia	22
	Pakistan	57
	Djibouti	43
	Afghanistan	43
Group 2	Tunisia	85
	Syrian Arab Republic	48
	Morocco	78
	Libya	76
	Lebanon	89
	Jordan	78
	Iraq	54
	Iran (Islamic Republic of)	81
	Egypt	83
Group1	United Arab Emirates	76
	Saudi Arabia	72
	Qatar	66
	Oman	70
	Kuwait	77
	Bahrain	85

0 10 20 30 40 50 60 70 80 90 100

So what drove the growing epidemic of NCDS in Egypt?

Not different from the case globally

(i) **Poverty** (leading to barriers in access to safe, quality, effective and affordable medicines and technology for the prevention, detection, screening, diagnosis and treatment of NCDs);

(ii) I**mpact of the globalization** of marketing and trade of deleterious products to health (leading to tobacco use, harmful use of alcohol and unhealthy diets);

(iii) **Rapid urbanization** (leading to physical inactivity); and

(iv) **Population ageing**

- In other words, the aforementioned drivers increase the risk of NCDs **through** increasing NCDs risk factors including overweight and obesity
  - Overweight and obesity are **major risk factors** for cardiovascular diseases, type 2 diabetes and cancer
  - Overweight and obesity are major contributors to **premature deaths**.

Obesity: Definition & Measurement

- Overweight and obesity are defined as **abnormal or excessive fat accumulation** that presents a risk to health.

- The body mass index (BMI) is a simple index of weight-for-height that is commonly used to **classify** underweight, overweight and obesity in adults.
- The body mass index (BMI) is defined as the weight in kilograms **divided by** the square of the height in metres (kg/m2).
  - A person with a BMI of **25 or more** is considered to be overweight,
  - A person with a BMI of **30 or more** is considered to be Obese

Prevalence of Obesity in Egypt within the regional context (EMR)

- Data for adults aged 15 years and older from 16 countries in the Eastern Mediterranean Region show the highest levels of overweight and obesity in **Egypt, Bahrain, Jordan, Kuwait, Saudi Arabia and United Arab Emirates**.

- The prevalence of overweight and obesity in these countries ranges from
  - **74% to 86%** in women and
  - **69% to 77%** in men.

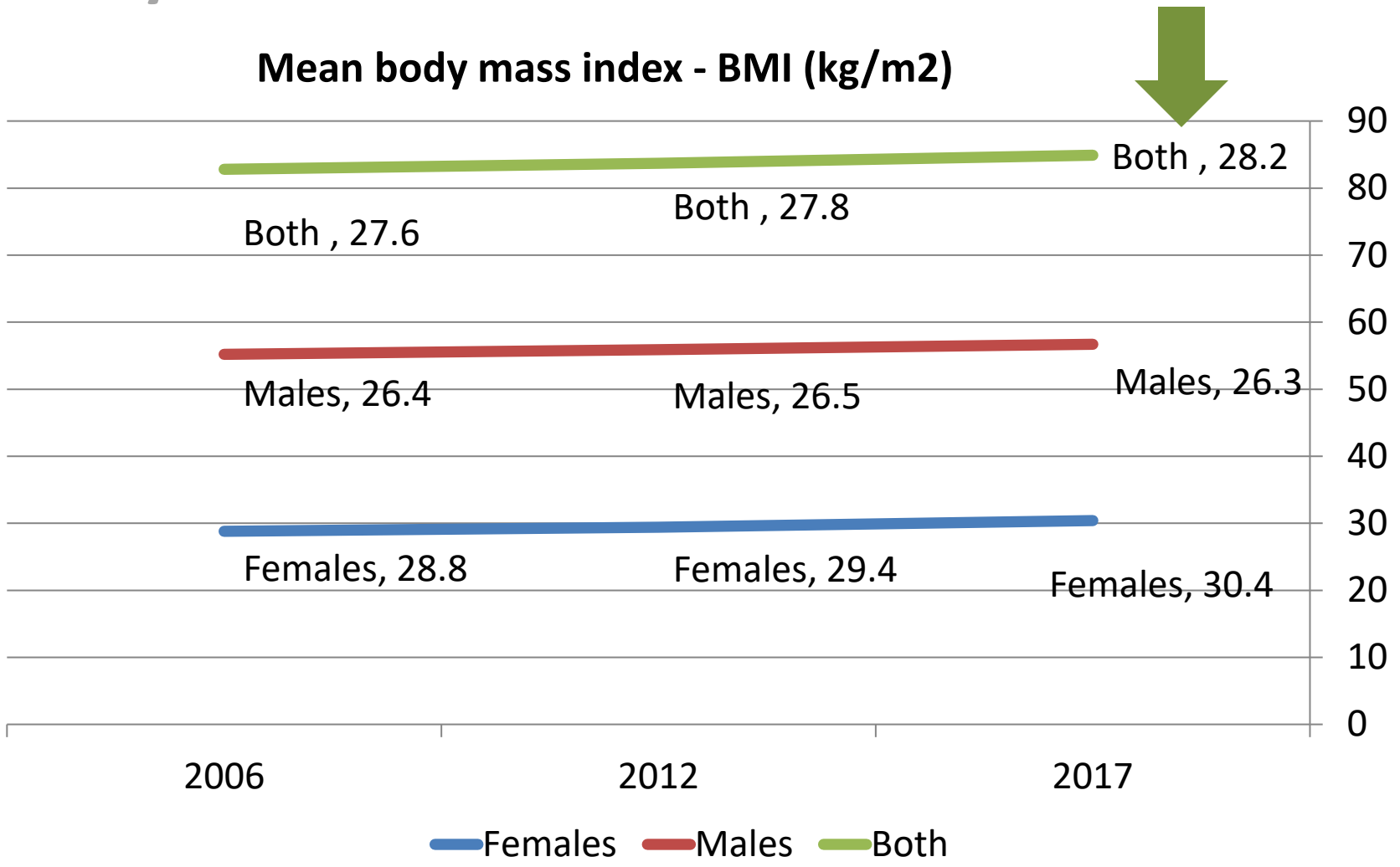
Trend of Obesity in Egypt

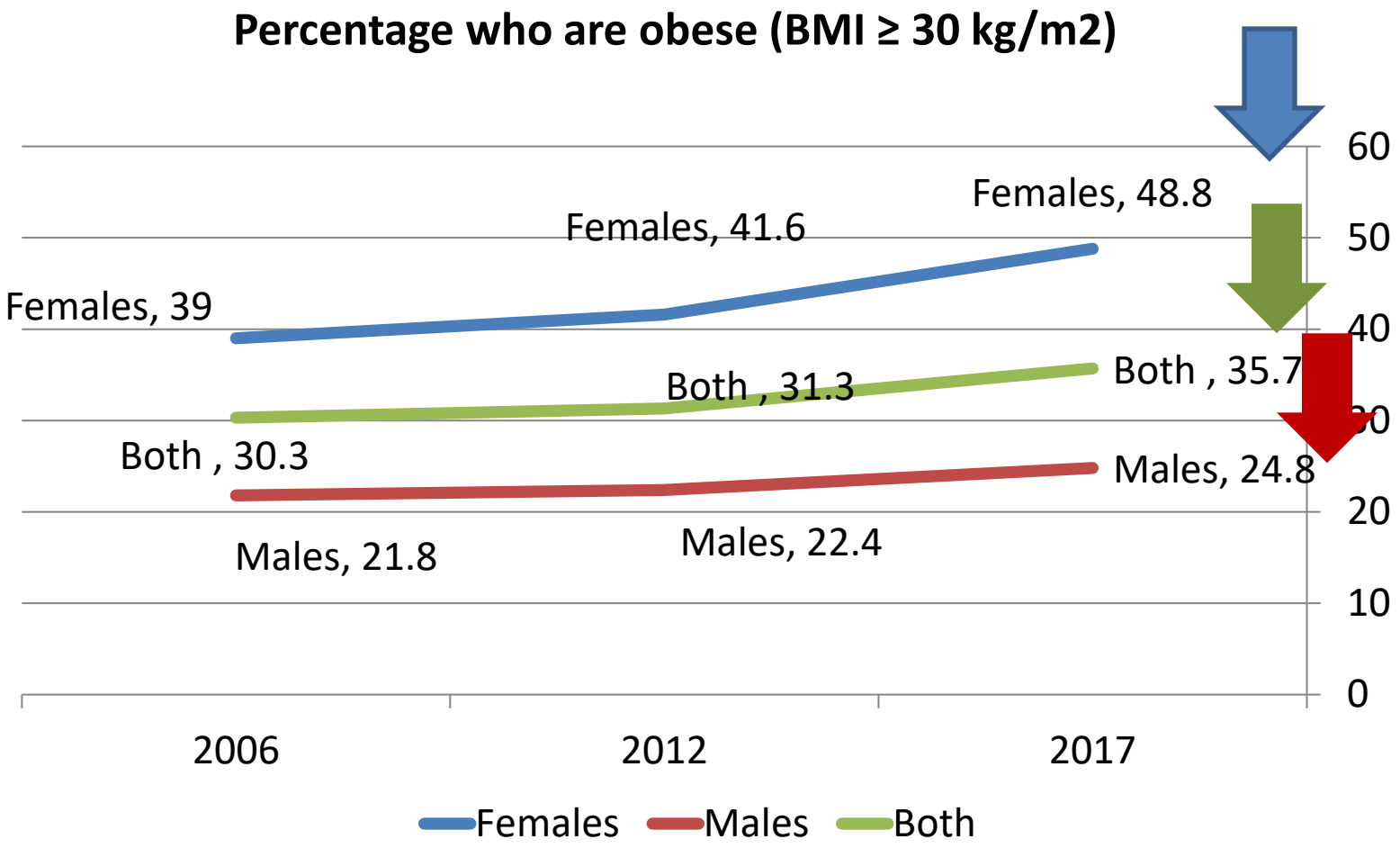
WHO STEPwise approach to chronic disease risk factor surveillance

	2006	2011	2012	2017
Egypt	*	*		*

If we look at data gathered on obesity and relevant behaviors, we will find

Overweight and Obesity

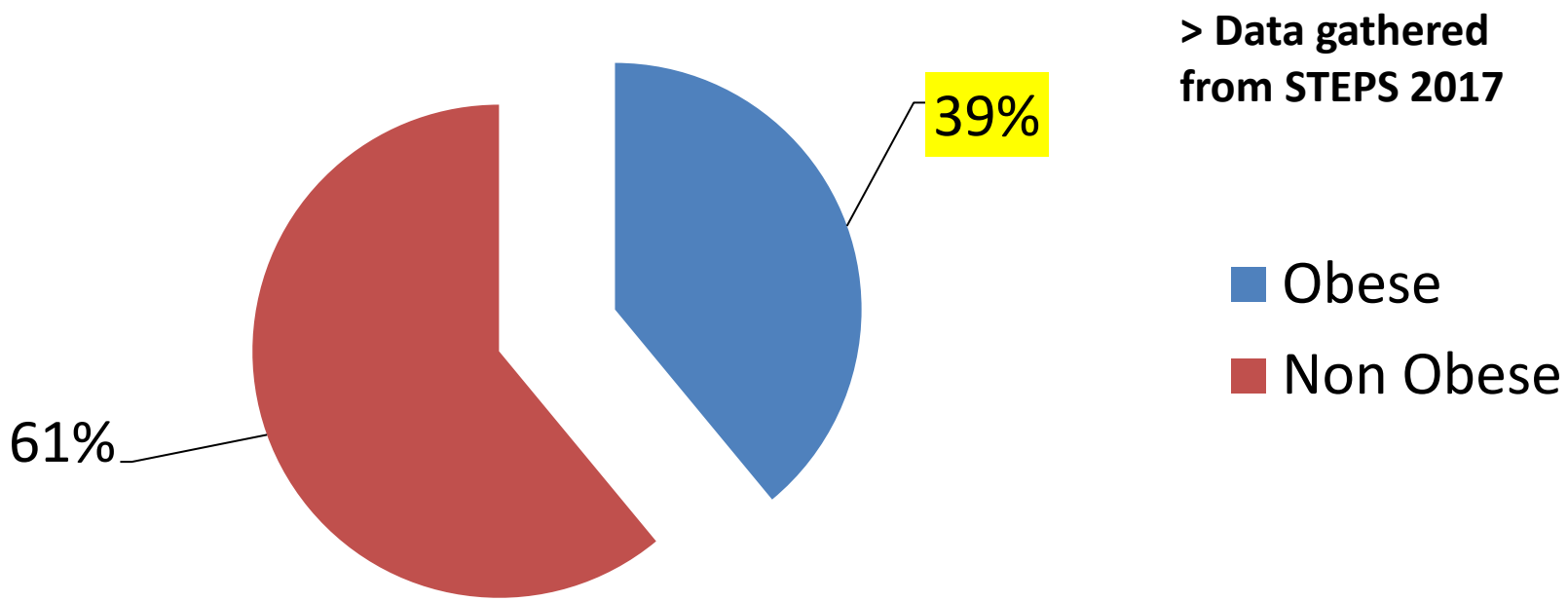



Percentage who are obese (BMI ≥ 30 kg/m2)
60
50
40
30
20
10
0
Females, 39
Females, 41.6
Females, 48.8
Both , 30.3
Both , 31.3
Both , 35.7
Males, 21.8
Males, 22.4
Males, 24.8
2006
2012
2017
Females
Males
Both

Obesity recent data in Egypt
100 Million Healthy Lives Initiative

- Data on obesity were also obtained from obesity screening done under ***'100 Million Healthy Lives Initiative''***
- It was a nationwide screening campaign for HCV and NCDs risk factors aimed at outreaching half of the Egyptian adults
- It was the largest of its kind across the entire globe.
- NCD risk factors screened were
  - Body Mass Index,
  - Diabetes and
  - High Blood Pressure.

Prevalence of Obesity (BMI≥ 30) based on the data gathered by 100 million healthy lives initiative



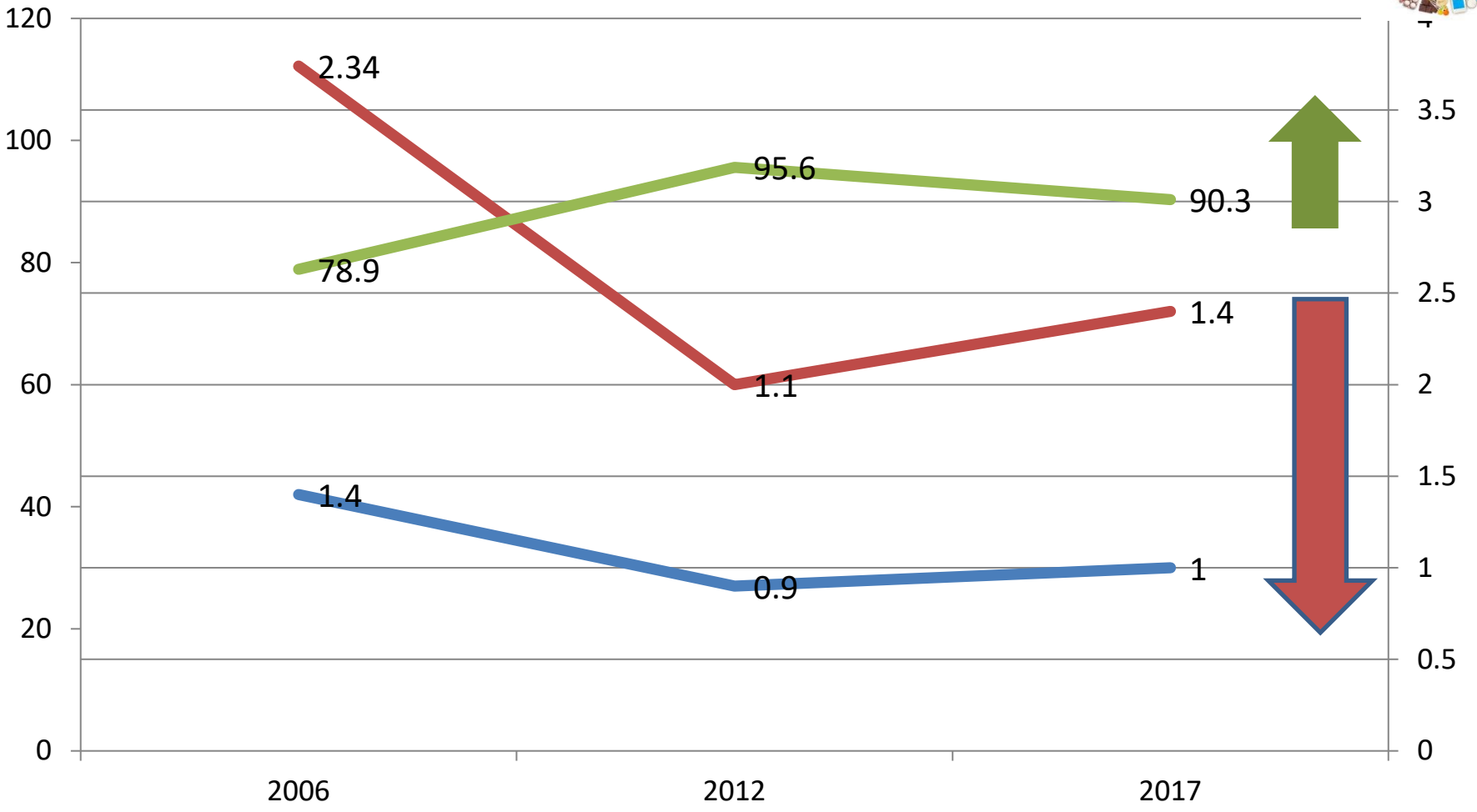
What drove the growing epidemic of Obesity in Egypt?

1. Low levels of consumption of healthy diet
2. Increased levels of physical inactivity
3. Poor implementation and enforcement of WHO Best Buys
4. Poor capacity for obesity early detection, treatment and care within the health system

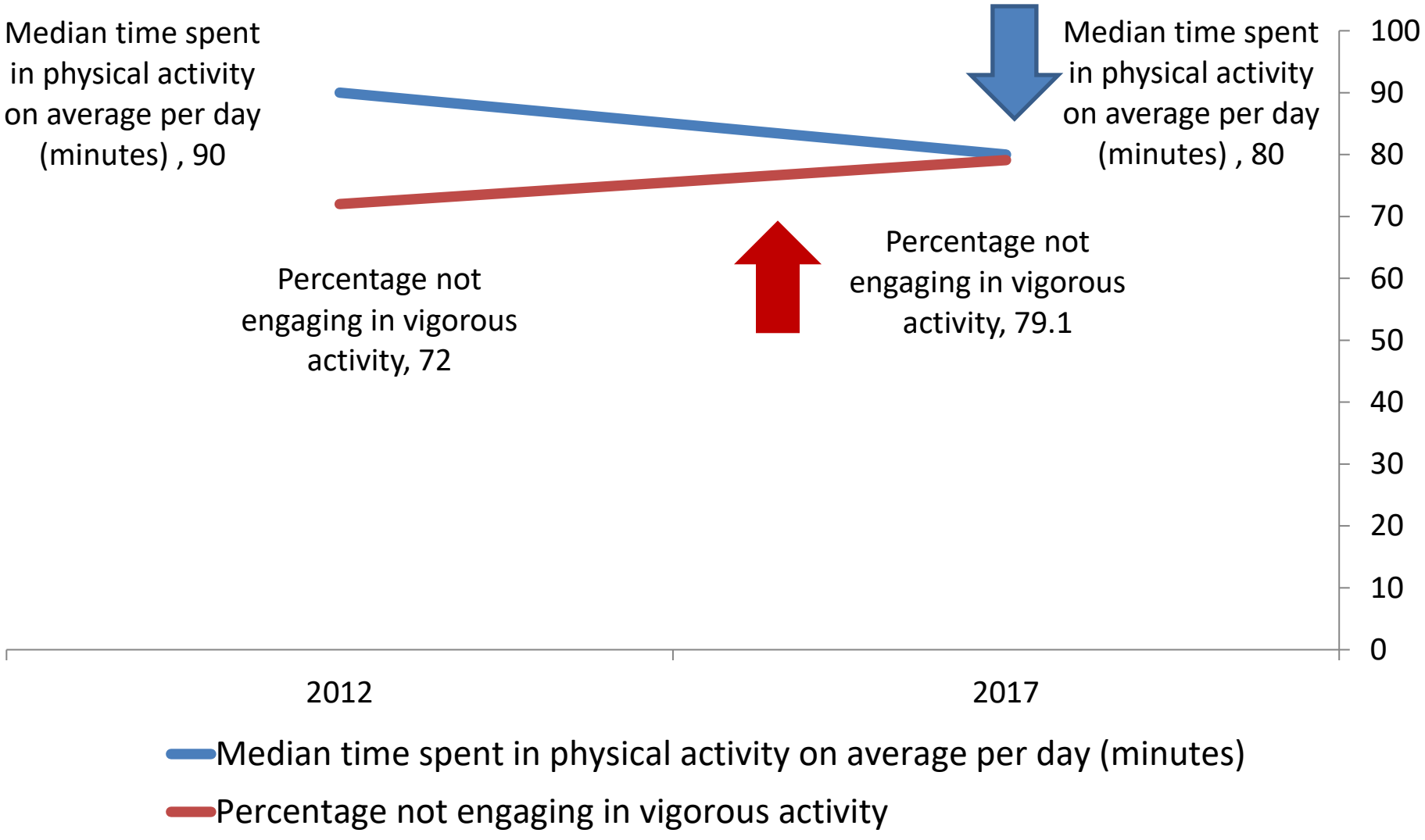
STEPwise Survey 2017

NCDs Country Capacity Survey 2017

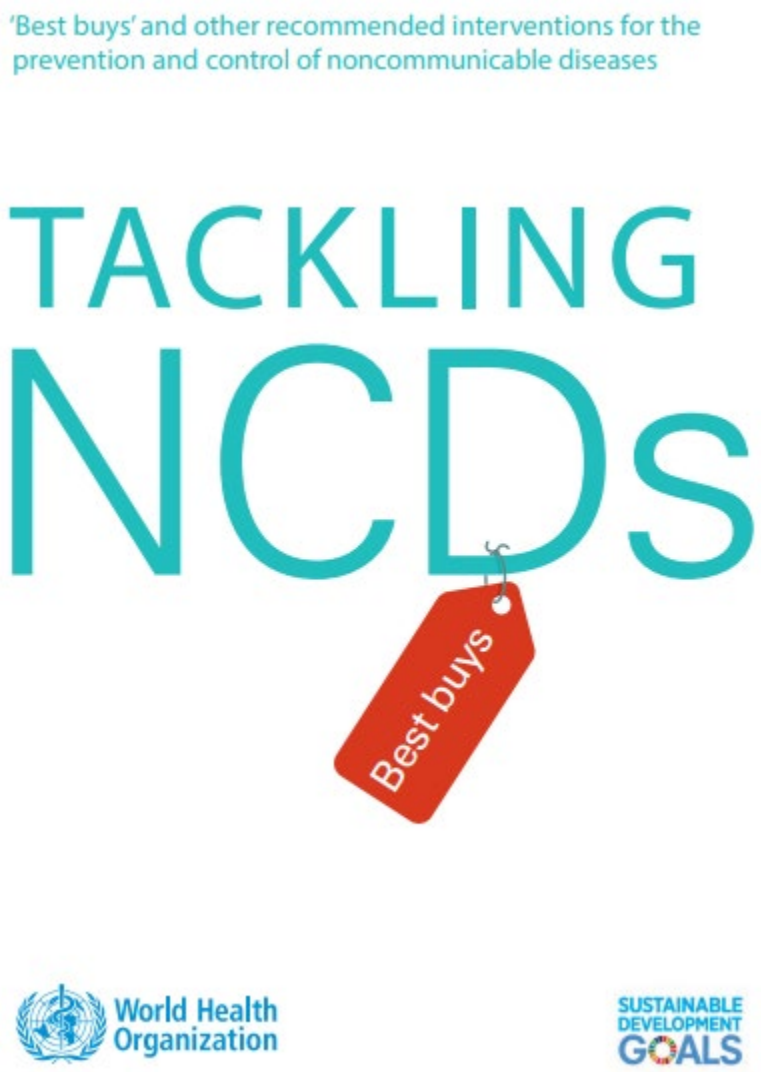
1. Healthy Diet



2. Physical Activity



3. Best buys



- **'Best buys'**: effective interventions with cost effectiveness analysis (CEA) ≤ I$100 per DALY averted in LMICs
- **Effective interventions** with CEA >I$100 per DALY averted in LMICs
- **Other recommended interventions** from WHO guidance (CEA not available)

Effective interventions

1. **Eliminate industrial trans-fats** through the development of legislation to ban their use in the food chain

Based on NCDS CCS 2017 http://www.emro.who.int/noncommunicable-diseases/publications/index.html

Member State has implemented the following measure to reduce unhealthy diets: b. Adopt national policies that limit saturated fatty acids and virtually eliminate industrially produced trans fatty acids in the food supply		Sub-indicator 7b		
	Country	Not Achieved	Partially achieved	Fully Achieved
Group 1	Bahrain			1
	Kuwait			1
	Oman			1
	Qatar			1
	Saudi Arabia			1
	United Arab Emirates			1
	Total	**0%**	**0%**	**100%**
	Egypt	1		

Effective interventions

2. **Reduce sugar consumption** through effective taxation on sugar-sweetened beverages

Based on NCDS CCS 2017 http://www.emro.who.int/noncommunicable-diseases/publications/index.html

3) **Is your country implementing any of the following fiscal interventions? (for taxes, please respond "Yes" only if excise taxes and/or special VAT/sales tax rates are applied)**

taxation on alcohol	○ Yes	○ No	○ Don't Know
taxation on tobacco (excise and non-excise taxes)	● Yes	○ No	○ Don't Know
taxation on sugar sweetened beverages	○ Yes	● No	○ Don't Know
taxation on foods high in fat, sugar or salt	○ Yes	● No	○ Don't Know
price subsidies for healthy foods	○ Yes	● No	○ Don't Know
taxation incentives to promote physical activity	○ Yes	● No	○ Don't Know
others (specify)	○ Yes	○ No	○ Don't Know

Other recommended interventions

1. Promote and support exclusive breastfeeding for the first 6 months of life

Legislation/regulations fully implementing the International Code of Marketing of Breast-milk Substitutes

Egypt partially achieving indicator

2. Implement subsidies to increase the intake of fruits and vegetables

3. Implement nutrition labelling to reduce total energy intake (kcal), sugars, sodium and fats

Other recommended interventions

4. Replace trans-fats and saturated fats **with** unsaturated fats **through** reformulation, labelling, fiscal policies or agricultural policies

5. Limiting portion and package size to reduce energy intake and the risk of overweight/obesity

Other recommended interventions

6. Implement nutrition education and counselling in different settings

6. Implement mass media campaign on healthy diets, including social marketing to reduce the intake of total fat, saturated fats, sugars and salt, and promote the intake of fruits and vegetables

4. Health system capacity

- No evidence-based national guidelines/protocols/standards are available for the management of obesity through a **primary care approach**
- Counseling capacity for Health care staff
- Availability of Medications

The Way Forward

1. Effectively implement ***Egypt Multisectoral Action Plan For Noncommunicable Diseases Prevention and Control 2018 – 2022***

Framework Element	Baseline	Target 2022	Target 2025
Diabetes and obesity	15.5% diabetes 35.7% Obesity	Halt the rise in diabetes & obesity	Halt the rise in diabetes & obesity

2. Effectively adopt, implement and enforce WHO best buys
3. Strengthen health system for early detection, treatment and care for obesity and NCDs
4. Institutionalize and strengthen the surveillance system for obesity to carefully monitor trend and assess progress towards achieving national target for obesity by 2022

Thank You