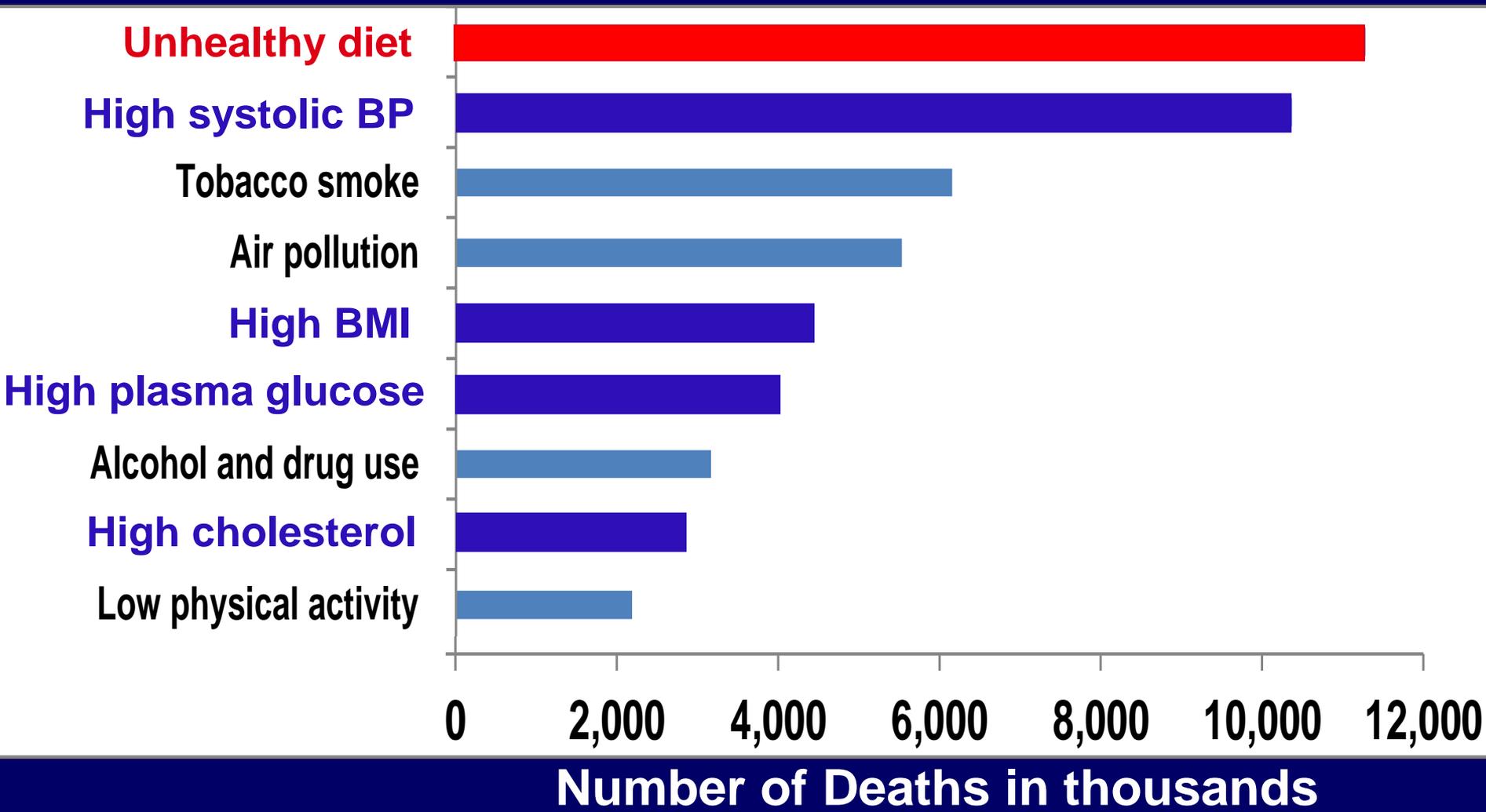


# **Sugar & NCDs**

**Graham MacGregor**  
**Professor of Cardiovascular Medicine**

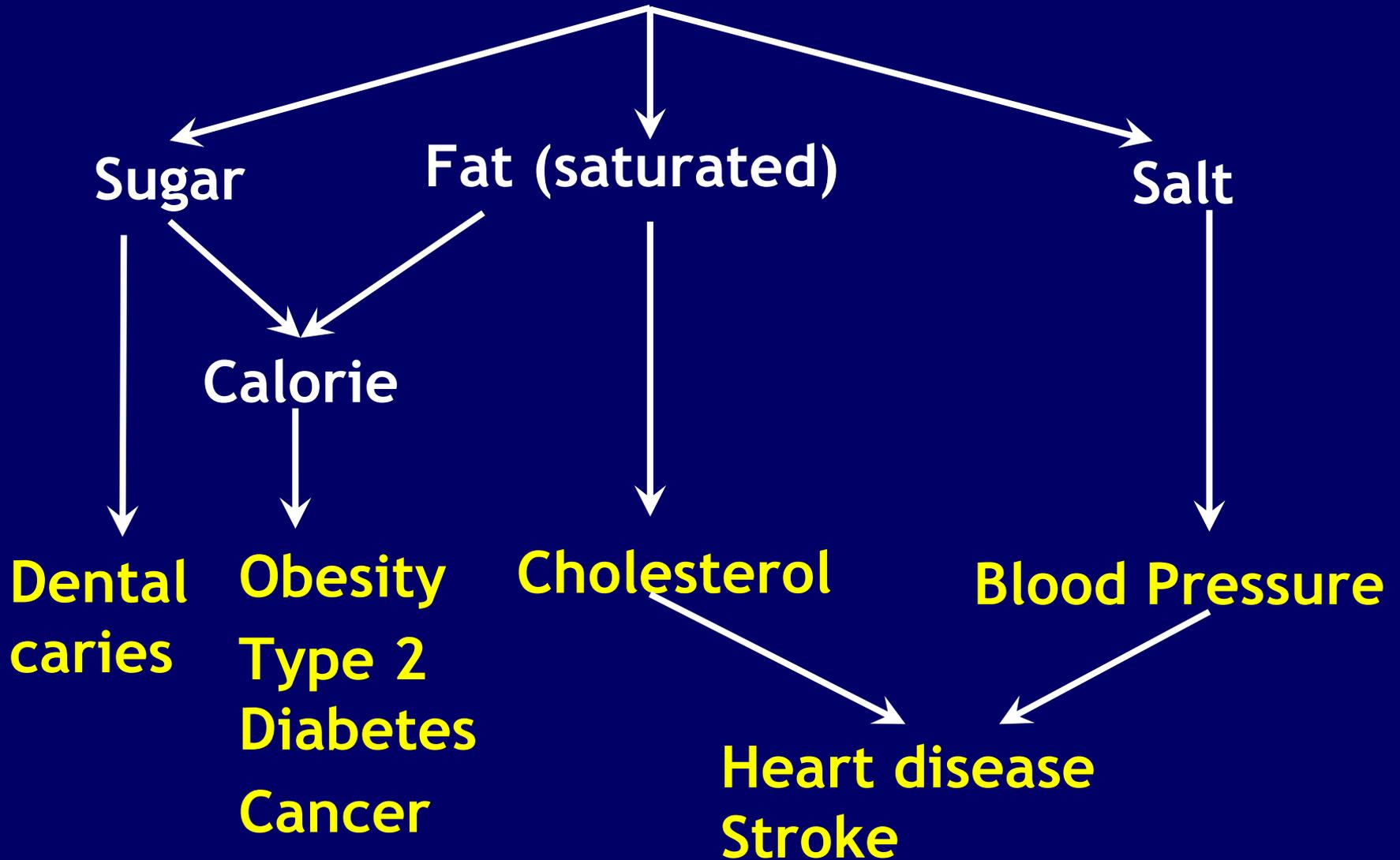
**Wolfson Institute of Preventive Medicine,  
Barts and The London School of Medicine & Dentistry,  
Queen Mary University of London, UK**

# Major Underlying Factors Causing Death - Worldwide



GBD 2013 Risk Factors Collaborators. Lancet 2015;385:117

# Processed foods and soft drinks





# *Why are we getting so fat?*



**A Big Mac, large \_\_\_\_\_ 11 bananas or 18 oranges  
chips and coca cola \_\_\_\_\_ or half a marathon**

# Sugar - Impact on health

- The only cause of dental decay (caries)
- Major source of hidden calories
- Leads to obesity & diabetes

**No disagreement**

# Sugar - Impact on health

Independent of calorie intake,  
does it predispose to

- Obesity
- Type II diabetes
- Fatty liver

# Food/soft drink industry

Calorie-dense  
Cheap  
Profitable

Transient  
satiety/  
fullness

“Brilliant” marketing  
Any time  
Everywhere

**Eat more**

**Calorie intake ↑**

**Obesity/type 2 diabetes ↑**

# What can we do?

- Tax - High salt, sugar, fat foods
- Subsidise healthy food, e.g. fruit & veg
- Ban unhealthy food advertising & promotions
- Restrict availability
- Reduce portion size
- Reformulation

# Sugar: Spinning a web of influence

## Bubbles of influence

Financially linked with Coca-Cola

○ Groups ○ Doctors



# THE TIMES



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## Fizzy drinks giant pays millions to diet experts

Scandal as scientists deny sugar link with obesity

Alexi Moirous Special Correspondent

Coca-Cola has poured millions of pounds into British scientific research and healthy-eating initiatives to counter claims that its drinks help to cause obesity, an investigation by The Times can reveal.

The drinks giant, a major sponsor of the Olympics, the Fifa World Cup and the Rugby World Cup, has financial links to more than a dozen British scientists, including government health advisers and others who cast doubt on the commonly accepted link between sugary drinks and the obesity crisis.

Many scientists blame increased sugar consumption for Britain's obesity epidemic, which kills up to 53,000 people a year and costs the NHS £5.1 billion annually. A recent report in the *British Journal of Sports Medicine* argued that poor diet was the cause of more disease than physical inactivity, alcohol and smoking combined.

The full scale of Coke's scientific funding can be exposed after the government rejected calls for a sugar tax despite support from Dame Sally Davies, the chief medical officer, the British Medical Association and celebrities such as Jamie Oliver.

It can be revealed that:

● Coke spent millions of pounds setting up the European Hydration Institute (EHI) — an apparently independent research foundation to promote hydration, which has recommended that people consume sports and soft drinks of the sort the company sells.

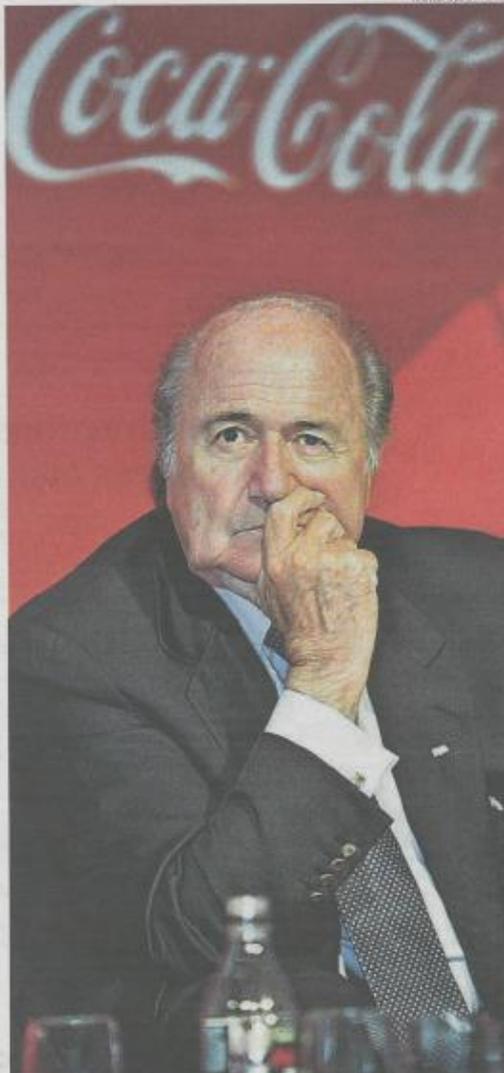
£1 million from Coca-Cola while he provided nutritional advice to leading sports bodies.

● Coke has provided financial support, sponsorship or research funding to British organisations including UKActive, the British Nutrition Foundation, the University of Hull, Homerton University Hospital, the National Obesity Forum, the British Dietetic Association, Obesity Week 2013 and the UK Association for the Study of Obesity.

In 2013, Spanish researchers found that scientific papers on sugary drinks that were sponsored by or had potential conflicts of interest with the food and drink industry, including Coca-Cola, were five times more likely to find no link with obesity than similar papers that were independently funded. They recommended "special efforts to preclude funding by parties with vested interests at all levels".

Simon Capewell, a board member of the Faculty of Public Health, said: "Coca-Cola is trying to manipulate not just public opinion but policy and political decisions. Its tactics echo those used by the tobacco and alcohol industries, which have also tried to influence the scientific process by funding apparently independent groups. It's a conflict of interest that flies in the face of good practice".

Coke spent €5.6 million (£486 million) setting up the EHI between 2010 and 2015. Guidance and studies funded by the institute often recommend that the public, including children, consume sports and soft drinks of the sort sold by



## Revolution for Fifa after Blatter gets the red card

James Ducker

The leadership of world football was plunged into chaos yesterday after its three most powerful figures were suspended over claims of corruption.

Sepp Blatter's 17-year reign as president of Fifa was brought to an abrupt end as he suffered the humiliation of being banned from the sport. It led to demands for a new leader to be appointed from outside the governing body.

Michel Platini, Fifa's vice-president, who had been lined up as Mr Blatter's successor, and Jérôme Valcke, the secretary-general, were also barred by the organisation's ethics committee as it investigates the claims.

Mr Blatter's tenure is effectively over because his 90-day ban, which is expected to be extended by 45 days, will expire just before Fifa's presidential election in February, when he had already pledged to step down.

In a further blow, the ethics committee announced that Chung Mong-joon, the South Korean former Fifa vice-president, had been banned for six years and fined 100,000 Swiss francs (£67,000) for breaking rules during the 2022 World Cup bidding campaign, which was won by Qatar.

Issa Hayatou, president of the Confederation of African Football since 1998, was appointed acting president of Fifa yesterday despite allegations relating to his own conduct. He has faced censure by the International Olympic Committee (IOC) over bribery claims.

Angel Maria Villar Llona, head of the Spanish Football Association, will provisionally replace Mr Platini as Uefa president — but Mr Villar Llona remains under investigation by Fifa's ethics committee for failing to co-operate with an investigation into the bidding for the 2018 and 2022 World Cups.

The president of the IOC last night called on Fifa to end the scandal by accepting an "external presidential candidate of high integrity". "Enough is enough," said Thomas Bach. "Fifa cannot remain passive. They must act swiftly to regain credibility."

Mr Blatter, 79, and Mr Platini, 60, have been under mounting pressure since Michael Lauber, the Swiss attorney-general, opened a criminal investi-

# Obesity plan for UK by AoS

## 1. Incremental reduction

Sugar 50% ↓ → ↓100 Kcal/person/d

Fat (Sat) 20% ↓ → ↓100 Kcal/person/d

## 2. Only healthy foods promoted/advertised

3. 20% sugar levy (+reformulation)  
— soft drinks → ↓ 50-100 Kcal/person/d

## 4. Public sector strict guidelines

## 5. Uniform colour-coded labelling

# **UK Obesity Plan 2018 Announced by Theresa May**

- **Tax on sugar-sweetened drinks (opportunity to reformulate). Consider other categories.**
- **20% voluntary sugar reformulation by 2020 (PHE)  
(Targets now set)**
- **Will also set targets for reformulation to reduce calorie (fat reduction)**
- **Further restrictions on marketing & promotion**

# Sugar levy 2018

**>8 g/100 ml (8% sugar)                      tax 24p /L**

**5-8 g/100 ml (5-8% sugar)                      tax 18p /L**

**<5 g/100 ml (<5% sugar)                      No tax**

**Most supermarkets ↓ own label drinks <5 g/100 ml**

**Suntory (Lucozade, Ribena) pledged to ↓ <5 g/100 ml**

# Reformulation of unhealthy food

e.g. processed, fast, takeaway, restaurant food

**Food industry slowly reduce salt, sugar & fat  
- No rejection by public**

**Fantastic for Public Health**

**Very little  
cost**

**↓ BP, obesity  
& cholesterol**

**No need to  
change diet**