# HOW TO TACKLE A PROBLEM LIKE OBESITY

Professor Paul Gately





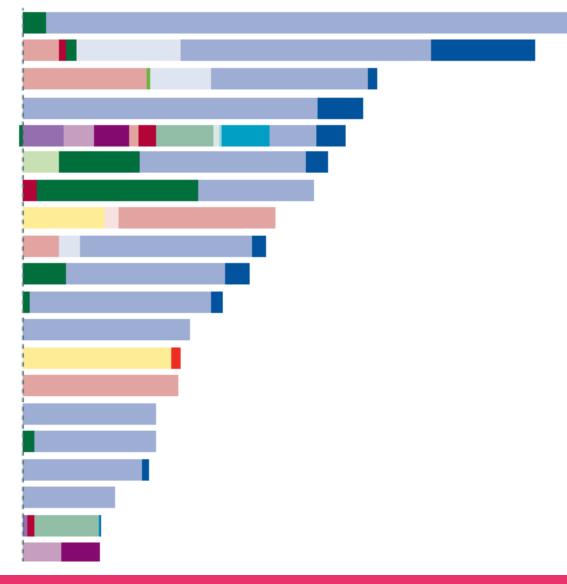


WW Public Health England

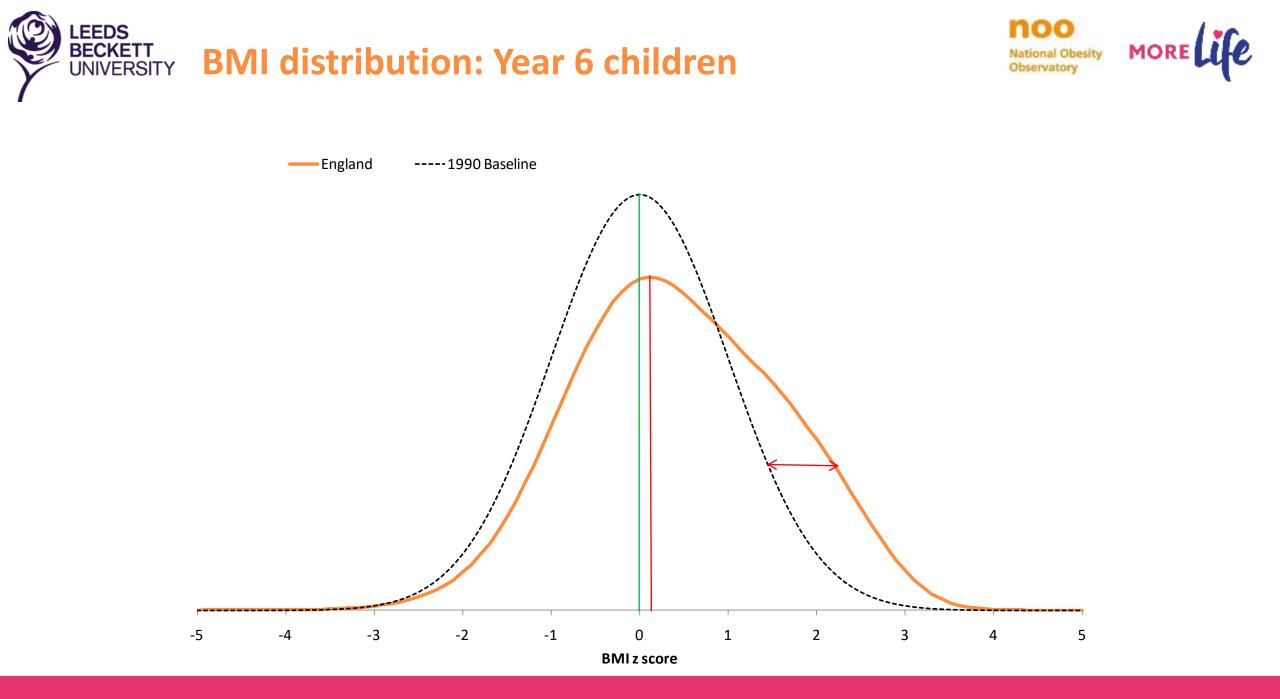


### GLOBAL BURDEN OF DISEASE

High blood pressure Tobacco smoking, including second-hand smoke Household air pollution from solid fuels Diet low in fruits Alcohol use High body-mass index High fasting plasma glucose Childhood underweight Ambient particulate matter pollution Physical inactivity and low physical activity Diet high in sodium Diet low in nuts and seeds Iron deficiency Suboptimal breastfeeding High total cholesterol Diet low in whole grains Diet low in vegetables Diet low in seafood omega-3 fatty acids Drug use Occupational risk factors for injuries





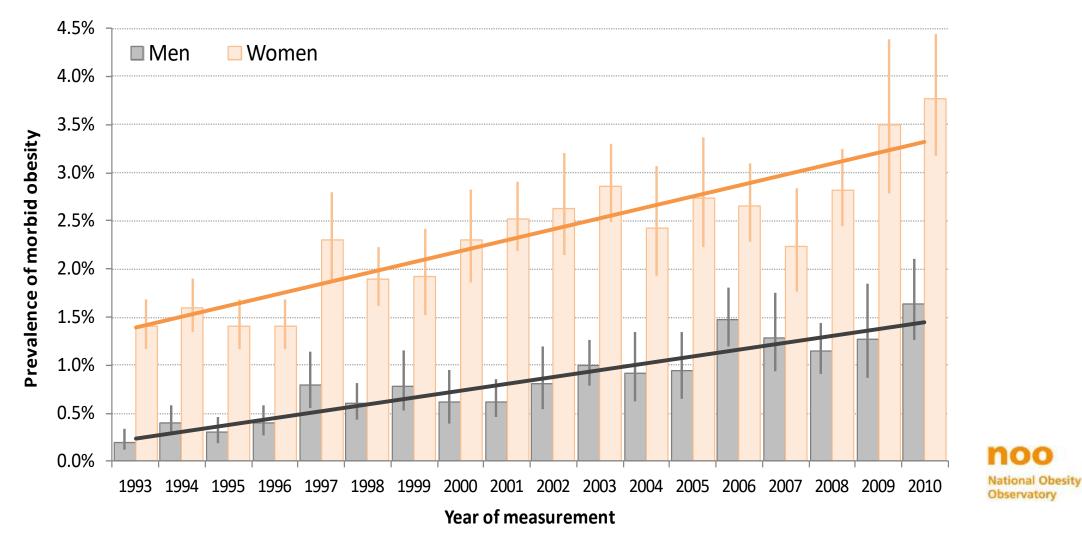


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#### PREVALENCE OF ADULTS WITH SEVERE OBESITY(BMI >40 KG.M<sup>2</sup>)AGED 16+ YEARS: HSE 1993-2010





#### The effects of obesity



#### Health effects

Cardiovascular disease A range of cancers Type II Diabetes Strokes High Blood pressure



#### **Psychological effects**

Depression Anxiety Low quality of life Low self-esteem Body dissatisfaction



**T** = **C** 3.1415

#### Social effects

Lower educational attainment Less likely to be employed More likely to be bullied Lower salary Less likley to marry More Likely to commit suicide

Research shows that obese children have a lower quality of life than children with terminal cancer

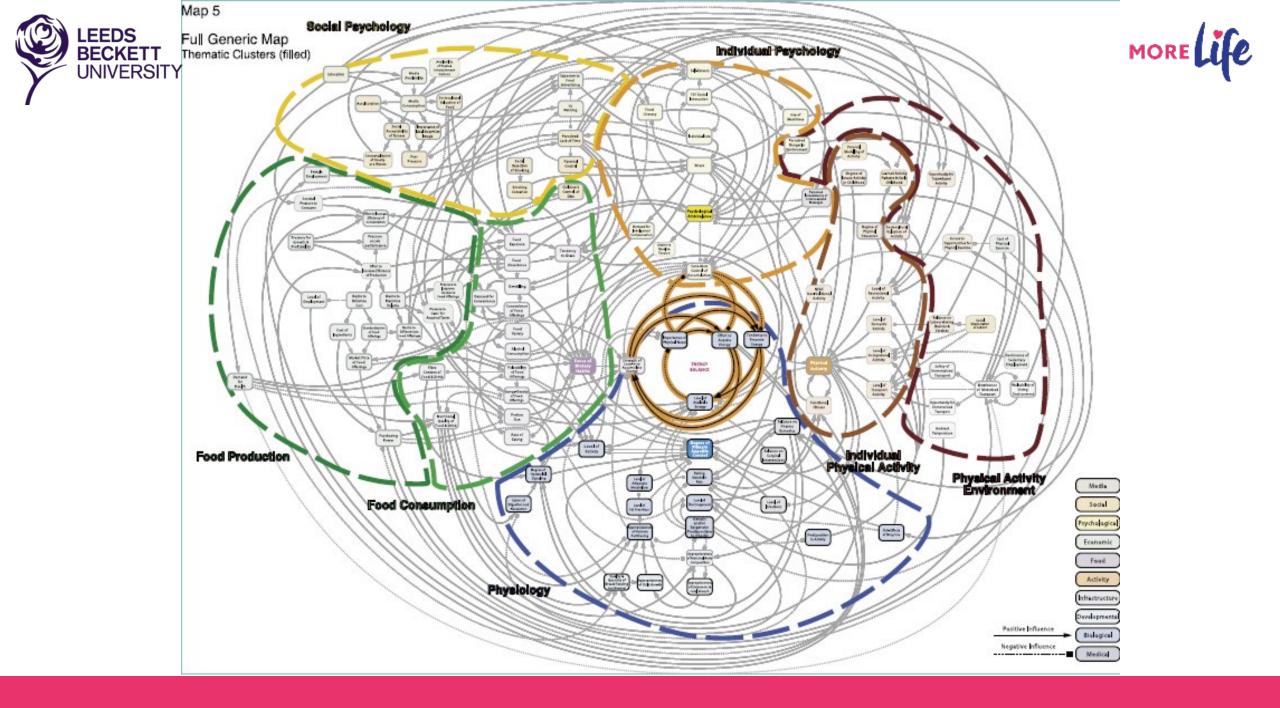




## SIMPLE ISN'T IT?









### COMMON RESPONSES TO COMPLEX PROBLEMS

- Retreat
- Despair
- Believe the problem is beyond hope
- Assign blame, figure out who is responsible
- Simple solutions
- Leave the problem to others



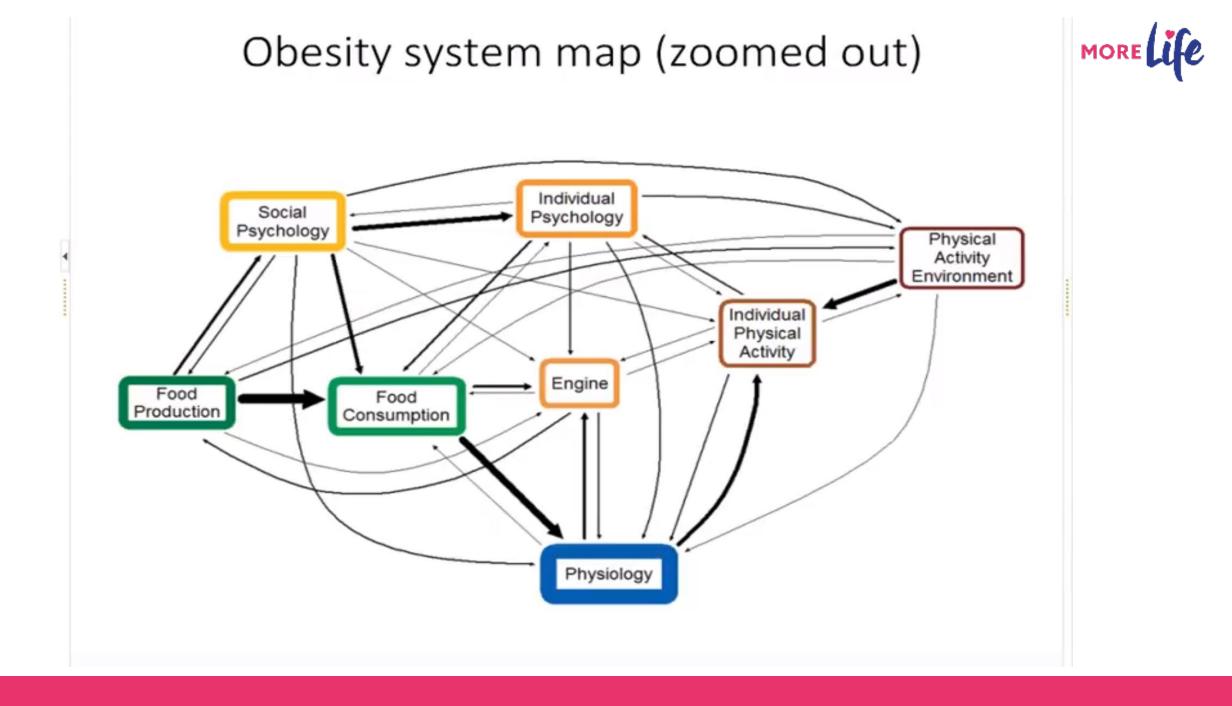
### COMMON RESPONSES TO COMPLEX PROBLEMS

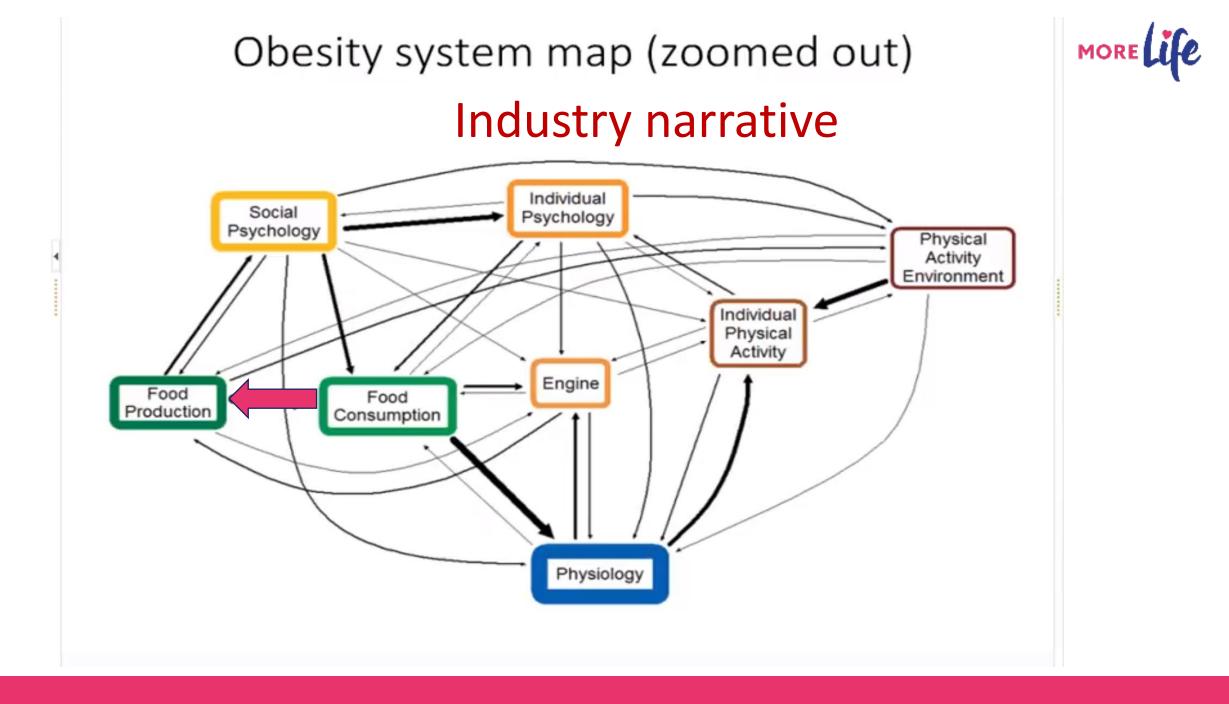


# DIFFERENT PROBLEMS DIFFERENT SOLUTIONS



	Simple	Complicated	Complex	
	Bake cake	Rocket to moon	Raise a child	
Problem definition	Clear	Some uncertainty	Lots of uncertainty	
Rules	Same apply every time	Continuously improved until repeatable	No direct transference from context to context	
Expertise	Not really required	Requires high levels in specific areas	Not needed to develop a common understanding: may be helpful	
Success	Follow protocol	Experiment to develop protocol	Adaption & continuous learning	







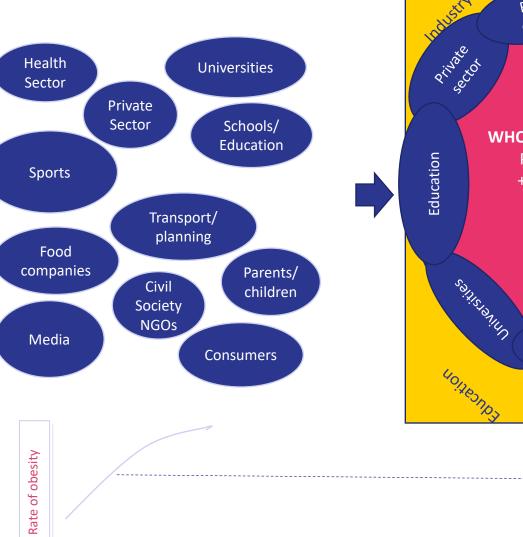
#### **CURRENT SITUATION**

Years

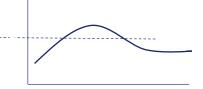
#### PARADIGM SHIFT











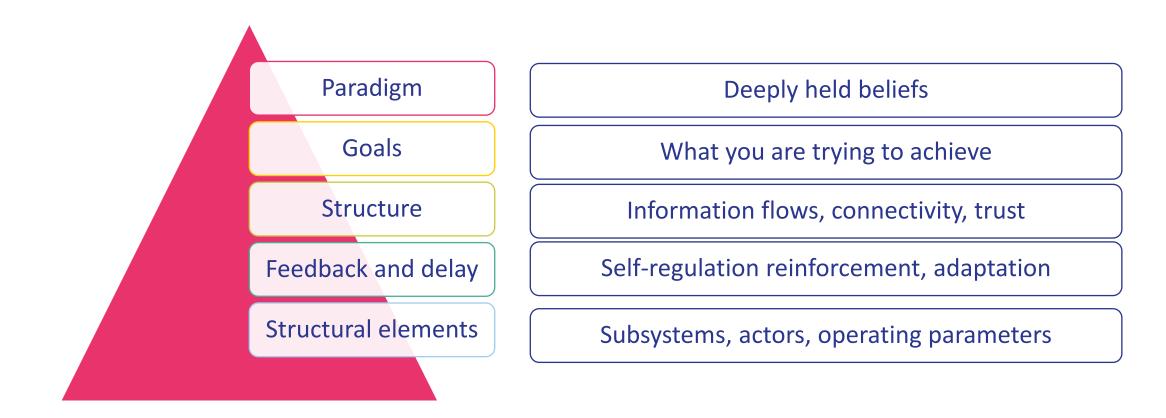


# SYSTEMS SCIENCE CAN HELP

	Reductionist	Systems thinking	Systems Science
Problem exploration	Isolate parts	Focus on interconnections explore emergent nature of the whole	Network science
Goal	Solve a problem	Develop shared understanding of the problem, approach, progress	
Nature of Problem	Understood objectively	Multiple causes, no single solution perspective and context matter	Microsimulation modelling



## **OPPORTUNITIES TO ACHIEVE CHANGE**



# FROM SYSTEMS THEORY TO SYSTEMS PRACTICE







MORE

#### 'to provide a tried and tested approach and tools, so that within 5 years every local authority can create a local whole systems approach to tackling obesity'



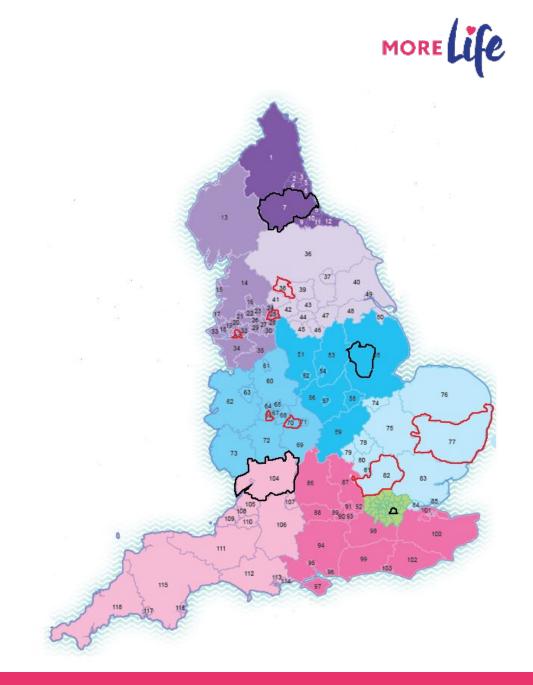


- 3 <sup>1</sup>/<sub>2</sub> year "action research"
- 11 LA Pilots

203

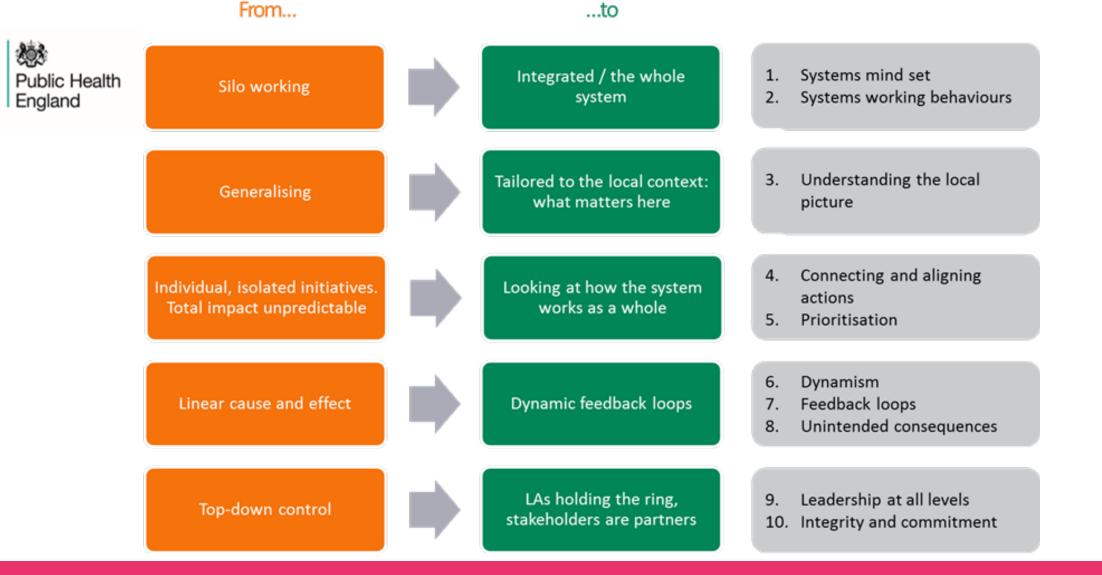
England

- Co-developing & testing
- Guide and tools
- Process & impact evaluation



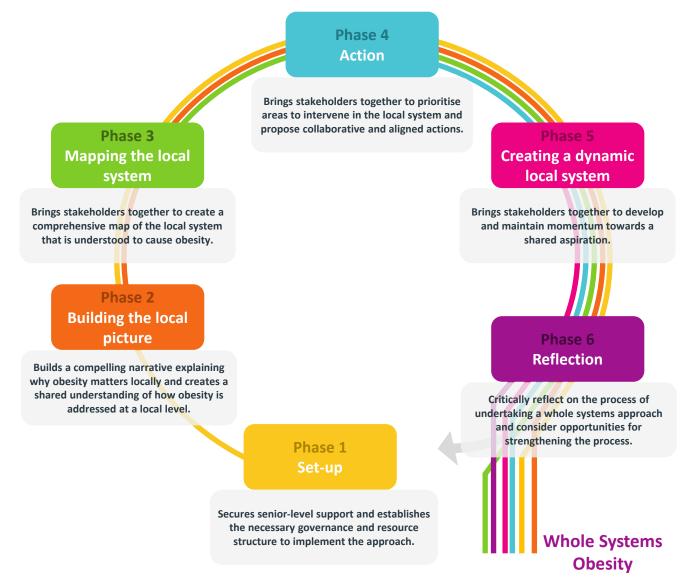
## Introduction section: what is a WSA

MORE

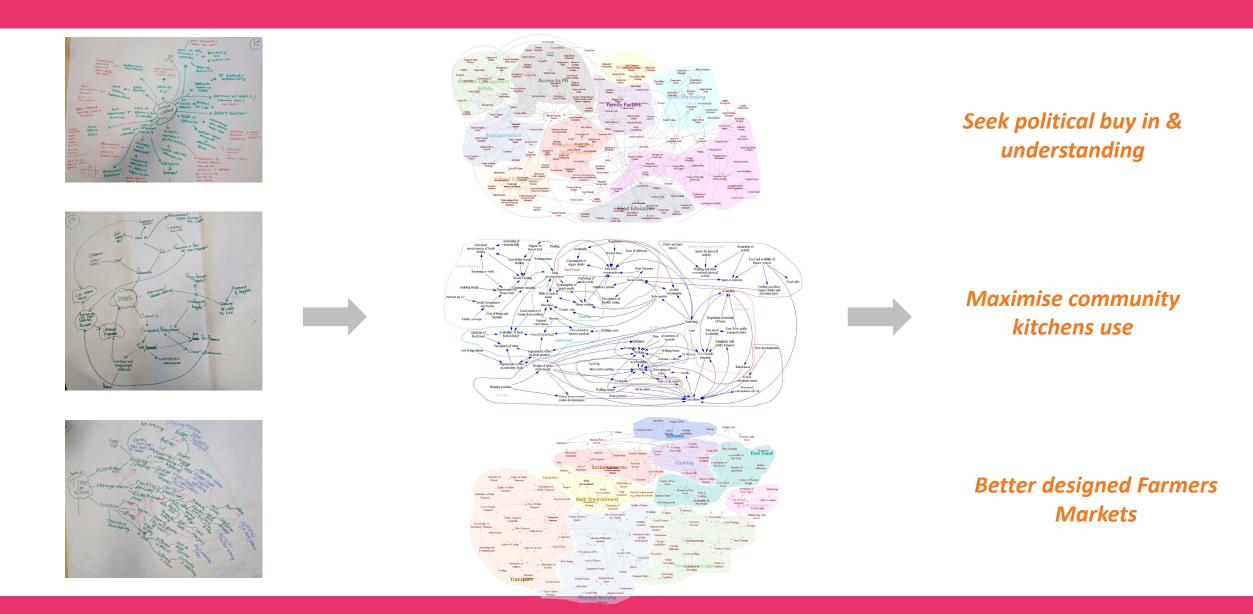


# A co-produced process





### IN PRACTICE / CONTEXT IS KEY!









### SCHOOLS/COMMUNITIES/WORKPLACE?















# PARTNERING WITH INDUSTRY MORE Life

- Specialist Service
- •From health to community centre!
- •Training in store health champions
- •"its more real here"
- •"makes me think"
- •"more friendly"







Over **1000** families have completed a OneLife Suffolk Community Programme **3/4** children had a healthier weight on completing the programme

100 programmes delivered in schools as part of the Healthy Schools Package **15,000** children have received a Tier 1 intervention (assemblies, workshops and events) **5,500** children have attended a health and wellbeing school assembly or event

MORELife

Two Thurds of children we work with live in the most deprived areas



# SUMMARY

- Obesity is a major public health problem
- Obesity is a complex problem
- Change continues but is it effective?
- New approaches to obesity are required
- New mindsets are essential

# THANK YOU P.GATELY@LEEDSBECKETT.AC.UK







Public Health England