

Ultra-Processed Foods



BIG 720G

FAMILY PACK

Whole Grain
HONEY
FIBER

50% MORE
DRINKS

Real Fruit

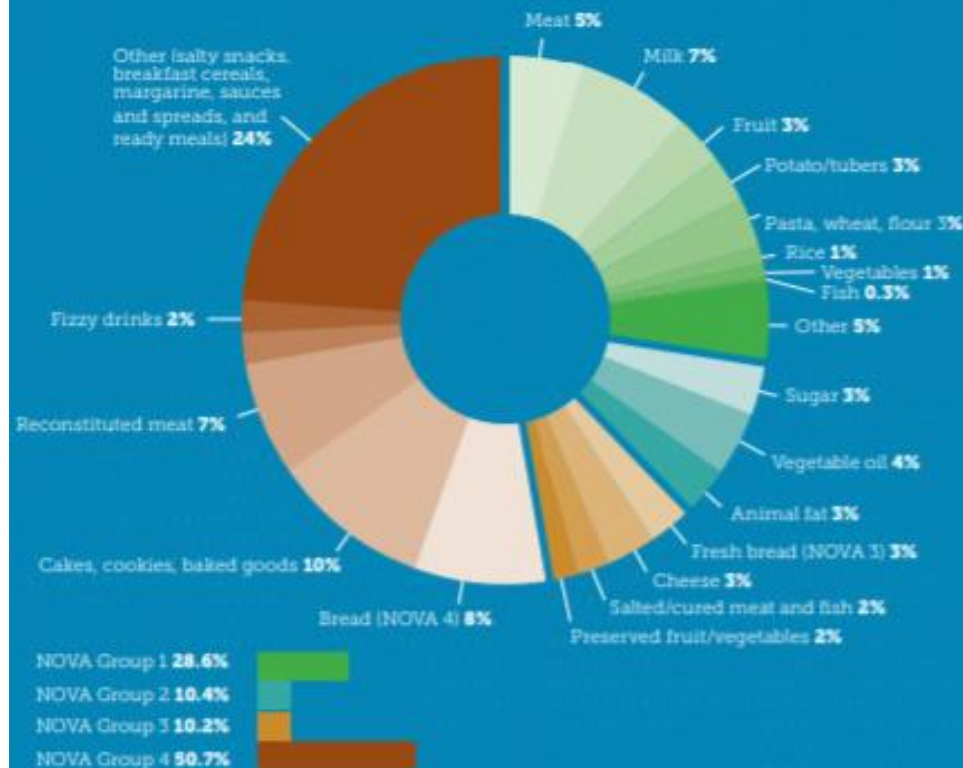
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NOVA categories, definitions and examples

(abbreviated from FAO, 2019)

	Definition	Examples
NOVA 1	<p>Minimally processed and natural foods</p> <p>These include whole fruits and vegetables, whole grains, meat and animal products.</p> <p>Also included are fruits, vegetables, meat and animal products that have been processed using techniques common in household kitchens, such as drying, crushing, grinding, steaming, boiling, roasting, chilling, and freezing.</p>	<p>Single ingredient: Fresh or dried fruit, rice and grains, legumes, leafy greens, starchy roots and tubers, fungi, herbs and spices, pasteurised plain yoghurt, fresh or pasteurised milk, tea, water</p> <p>Multi-ingredient: Pasta, granola cereals, nuts and dried fruit with no additives including sweeteners or salt added by the manufacturer, oval cone</p>
NOVA 2	<p>Culinary ingredients</p> <p>Substances obtained directly from group 1 foods or from nature by industrial processes such as pressing, centrifuging, refining, extracting or mixing. These are used to prepare, season and cook group 1 foods.</p>	<p>Single ingredient: Pressed vegetable oils, butter, sugar and molasses obtained from cane or beet, honey extracted from combs and syrup from maple trees, salt, corn starch</p> <p>Multi-ingredient: Salted butter, iodised salt</p>
NOVA 3	<p>Processed foods</p> <p>Products made by adding group 2 ingredients to group 1 foods. Processes are used to increase shelf life or modify sensory qualities such as taste or form. For example, canning, bottling, and, in the case of breads and cheeses, using non-alcoholic fermentation.</p>	<p>Canned or bottled vegetables and legumes in brine, salted or sugared nuts and seeds, salted, dried, cured, or smoked meats and fish, canned fish (with or without added preservatives), beach bread, fruit in syrup (with or without added anti-oxidants), freshly made unpackaged breads and cheeses.</p>
NOVA 4	<p>Ultra-processed foods</p> <p>Formulations of ingredients made by a series of industrial processes, many requiring sophisticated equipment and technology. They typically contain little or no whole foods, are ready-to-consume or heat up, and are fatty, salty or sugary and depleted in dietary fibre, and made using industrial additives and processes that wouldn't be found in a household kitchen.</p>	<p>Fizzy drinks (sugary or sweetened), crisps and packaged snacks, chocolate, confectionery, ice-cream, mass-produced packaged breads and buns, margarines and other spreads, biscuits, pastries, cakes, breakfast cereals, cereal and energy bars, milk drinks, fruit yoghurts and drinks, 'instant' soups. Many pre-prepared ready-to-heat products including pies and pasta and pizza dishes, poultry and fish 'nuggets' and 'sticks', sausages, burgers, hot dogs, and other reconstituted meat products, and powdered and packaged 'instant' soups, noodles and desserts, instant formulas, follow-on milks, other baby products.</p>

Composition of the UK shopping basket (%)



Percentage composition of the average shopping basket according to NOVA food processing category





Each serving (150g) contains

Energy 1046kJ 250kcal	Fat 3.0g LOW	Saturates 1.3g LOW	Sugars 34g HIGH	Salt 0.9g MED
13%	4%	7%	38%	15%

of an adult's reference intake

Typical values (as sold) per 100g: 697kJ/ 167kcal



1. The displacement pathway: As we eat more ultra-processed foods, fresh and healthy foods, such as whole foods, and more wholesome processed foods (such as tinned fish or tomatoes), are displaced from the diet. There is evidence that such displacement is especially prevalent among lower income groups, where fresh produce can be more difficult to access and afford.

2. The junk food pathway:

Many ultra-processed foods are energy-dense and high in added sugars, salt, unhealthy fats, and highly refined carbohydrates, while also typically being low in dietary fibre and essential nutrition. These are the classic 'junk' foods, sometimes described as 'high fat sugar salt' (HFSS) foods.

3. The depletion pathway:

Not all ultra-processed foods are easy to identify. Ultra-processing has contributed to the depletion in nutritional quality of everyday staples, such as bread and breakfast cereals, robbing them of a range of beneficial phytonutrients and antioxidants, edging them towards the 'junk' category. The milling process employed in producing ultra-processed supermarket breads, for example, can destroy various beneficial bioactive compounds and leave them depleted in dietary fibre.

4. The gut health pathway:

The lack of fibre and dietary diversity which characterises diets rich in ultra-processed foods can negatively alter the composition of the human gut microbiome. Additives, such as

emulsifiers and sweeteners, can also diminish the diversity of gut microbiota, thereby affecting how our bodies digest and take up nutrients from our food.

5. The appetite and satiety pathway:

The microbiome, digestive system, and hormone system, help to mediate satiety signalling, by which our body tells us it's full after eating. The capacity of ultra-processed foods to disrupt satiety signalling is the focus of a growing body of research, with a 2021 study exploring the ways in which these foods can "drive compulsive consumption."²⁰

6. The eating pattern pathway:

The disruption of satiety signalling is just one contributing factor in the capacity of ultra-processed products to generate novel eating patterns. These products are often convenient, hyper-palatable, and marketed to be consumed absentmindedly, during distracting activities such as watching television. This can encourage more snacking, less chewing, faster eating, and increased consumption.

7. The early years pathway:

Our eating patterns are influenced from a very early age. Aggressive marketing by formula companies has created a formula feeding culture in the UK, wherein most babies are given infant formula within days or weeks of being born, displacing breastmilk and prompting early cessation of breastfeeding, while also altering the gut microbiome.²¹ Most infant food companies are marketing purée



products as convenient and healthy, even when they are high in free sugars, lacking in texture, and provide a predominance of sweet flavours that bear little resemblance to the natural flavours of fruits and vegetables. This can lead to overeating and a loss of recognition of the food being eaten, inhibiting the learning of chewing skills and the development of a grown-up palate. The introduction of snack foods in infancy can also generate eating patterns focussed on processed foods which track into childhood.²²

Few ultra-processed products will act along each of these pathways simultaneously, but when diets are rich in such foods, the pathways overlap, multiply and interact, to the detriment of our health. It follows that some ultra-processed foods might be more harmful than others, and that it is the overall pattern and quality of the diet that matters.

Nutrient profiling is part of this picture. The association between ultra-processed foods and ill health is partly the result of the nutritional composition of these products, and the prevalence of 'high fat, sugar, salt' foods in ultra-processed diets. Efforts to address the excessive consumption of such junk foods, including via reformulation, are likely to be necessary, but ultimately

insufficient in improving dietary health across the population. The removal of nutrients of concern, such as excessive salt or added sugar, from ultra-processed products is likely to confer health benefits, but these products might still undermine health along one of the other pathways. Epidemiological and experimental studies indicate that an ultra-processed diet may increase risks for obesity and related diseases in ways that extend beyond the nutritional composition of the foods consumed.²³

This 'multiple pathways' view suggests that improving dietary health will require action on multiple fronts, with an emphasis on shifting the overall balance of the diet towards fresh and minimally processed whole foods, beginning in infancy. Fortunately, such efforts align with the trajectory needed to resolve the climate and nature crises. Instead of growing commodity crops for processing, we should be growing a more diverse range of fresh foods in agroecological systems. Instead of allowing food manufacturers to inappropriately market and sell unneeded ultra-processed products, we should be enacting policies that support the consumption of the whole foods, of both plant and animal origin, that are known to benefit our health.





That's Agroecology

Fair supply chains



Wasting less



Farm with trees



Farm animal care



Healthy connections

Good food



Nature friendly farming

Nature friendly food



Crop diversity



Sustainable diets



Soil care



Community power



Food connections





<https://www.soilassociation.org/causes-campaigns/ultra-processed-planet/>

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Ultra-processed snacks for babies & young children

Dr Victoria Sibson
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March 30th 2022



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What are optimal feeding practices for babies and young children?

► Babies (0-12 months) (core ref: SACN Life)

- Immediate breastfeeding at birth; exclusive breastfeeding for the first six months of life; continued breastfeeding alongside complementary feeding
- Introduction of a wide range of solid foods around six months of age alongside breastfeeding (with no added salt and sugar, and free sugars)
- Incremental diversification of diet, flavoured complementary feeding period (with complementary feeding)

[Your baby's first solid foods - NHS \(www.nhs.uk\)](http://www.nhs.uk)

- “From about 7 months, your baby will eat three meals a day (breakfast, lunch and tea), in addition to their usual milk feeds, around 4 a day”
- From about 10 months, your baby should eat three meals a day (breakfast, lunch and tea), in addition to their usual milk feeds, around 4 a day”



SNACKS are NOT needed!

What are optimal feeding practices for babies and young children?

HEALTHY
snacks ARE
needed!

- ▶ **Young children (1-4 years)** (<https://www.nhs.uk/conditions/baby/weaning-and-feeding/what-to-feed-young-children/>)
 - ▶ Varied diets comprised of three meals and two healthy snacks, largely based on healthy family foods with some modifications to meet nutrient requirements.
 - ▶ The EatWell guide is meant to be applicable from 2 years of age, and this advises that foods high in fat, salt and sugar (including chocolate, cakes, biscuits, sugary soft drinks, butter, ghee and ice cream) should be eaten less often and in small amounts

start 4 life



Trusted NHS help and advice during pregnancy, birth and parenthood

NHS

My website



What snacks are being marketed for babies & young children, and how?




Ella's kitchen

Hello, I'm organic tomato + basil maize sticks. I'm a fun + tasty finger food made for playing and learning, with less mess.


who am I for? I'm made for babies **from 7 months**. I'm just the right size + shape to help little ones learn to get food into their mouths and keep their little gums busy, whilst being super melty.

storing me: Keep me in a cool, dry place. Use my sticker to keep me crispy!

ingredients - what's inside me

 Organic maize flour 70%,
Organic sunflower oil 15%,
Organic tomatoes 11%, Organic dried apples 2%, Organic dried carrots 2%, Organic dried basil 1%,
Organic dried leeks <1%,
Thiamin (Vitamin B1)* <0.1%,
Other stuff 0%

just good stuff...

NO added sugar or salt
NO concentrates
NO additives or colourings
JUST yummy organic snacks for babies
I contain only naturally occurring sugars 

Warning: I'm not suitable for babies under 7 months old. When a baby over 7 months is munching me, make sure they're sitting down and are supervised by a grown-up to reduce the risk of choking.

 Find out about my packaging + how we're good to our planet at ellacycle.co.uk

800 Call us on

Ella's kitchen

tomato + basil
melty sticks

7+  **finger food**



 TRUST

To what extent are commercial snacks for babies & young children ‘ultra-processed’?

UK data (pers comm)

	Grand Total (n=494)	Baby Cereals (n=71)	Baby Biscuits & Rusks (n=26)	Baby Juices & Drinks (n=3)	Baby Fruit Products, Desserts & Yogurts (n=108)	Baby Snacks (n=96)	Baby Savoury Meals & Dishes (n=177)	Other Baby Food (n=13)
Nova.Score								
minimally processed	41.2%	41.4%	4.0%	79.4%	72.9%	23.9%	34.0%	45.0%
processed	30.0%	5.5%	23.0%		9.6%	28.3%	56.2%	40.0%
ultra processed	28.8%	53.1%	73.0%	20.6%	17.5%	47.8%	9.8%	15.0%

In most food categories, UPFs had higher energy, fat, saturated fat, sugars & sodium content, & lower fibre content, compared to the minimally processed and processed ones.

Potential actions to address UPF consumption (incl snacks) among babies & young children

- National dietary guidelines which emphasize preference for fresh or minimally processed foods & avoidance of UPFs AND make specific recommendations for early years
 - Better support for breastfeeding
 - UPF taxes & subsidies for minimally processed foods
 - Mandatory FOPL & other improvements in marketing & labelling
 - Promotion & advertising restrictions, especially for UPF marketed for IYC ('the Code' as a template for breastmilk substitutes) AND enforcement
 - (Reformulation but also stronger regulations on the composition of foods & drinks marketed for IYC, drawing on the NPM of WHO Europe)



HIGHER in sugar

LOWER in sugar



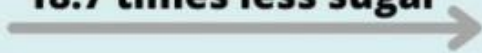
10 times less sugar



1.8 times less sugar



18.7 times less sugar



#SugarAwarenessWeek



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Thank you



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So what?

- ▶ The Diet and Nutrition Survey of Infants and Young children from 2011 reported a high proportion of infants and toddlers were consuming commercial infant snacks:
 - ▶ 34% of 4-6 month olds
 - ▶ 62% of 7-9 month olds
 - ▶ 60% of 10-11 month olds
 - ▶ 42% of 12-18 month olds were consuming commercial infant snacks
- ▶ Extrapolating from the Grammatikaki paper an estimated 16-30% of infants aged 4 to 11 months could be eating ultra-processed baby snacks
- ▶ An analysis by Neri et al (2021) of the UK National Diet and Nutrition Survey data from 2008-2014 reported that **among children aged between 2 and 5 years old, close to two thirds (61%) of total mean energy intake came from UPFs**

Why does it matter that infants & young children are consuming ultra-processed snacks? (1/2)

Negative health effects:

- UPFs displace unprocessed & minimally processed foods & drinks. Poor quality diets in infancy are associated with excess weight gain by school age (Okubo et al, 2015)
- The majority of UPF drinks & foods marketed to infants & young children are unhealthy, typically being high in sugar & their packaging may encourage overeating & dental decay

Negative impacts on the environment:

- There are important concerns about the sustainability and environmental impact associated with the production, packaging & waste disposal, distribution & use of discretionary, commercially produced baby foods and drinks (IBFAN, 2021; Crawley & Westland, 2017), many of which are UPFs

“[UPFs are] hyperpalatable & convenient products that are grossly inferior imitations of minimally processed foods & freshly prepared dishes & meals”*



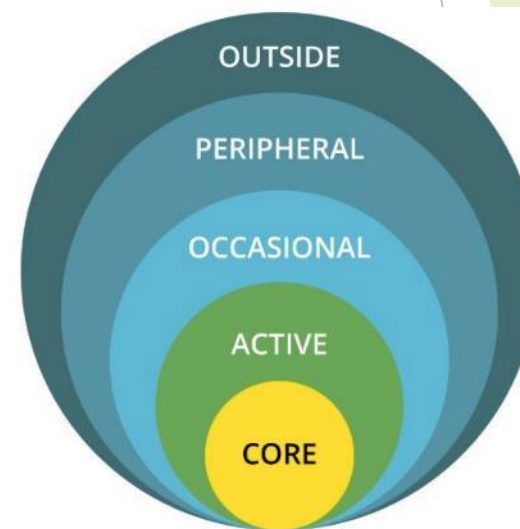
BwD Food Resilience Alliance

What it is, why we need it, where its going.



Started 2018 with launch of Eat Well Move more strategy

- ▶ Vision has always been to have a ‘Peoples movement’
- ▶ Yes we passed this through council
- ▶ #metoo #blacklivesmatter
- ▶ Change always starts with the Activists
- ▶ Covid has given us a kick.
- ▶ 2020 the Food Alliance became the Food Resilience Alliance.



HEALTHIER PLACE, HEALTHIER FUTURE
OUR PENNINE LANCASHIRE

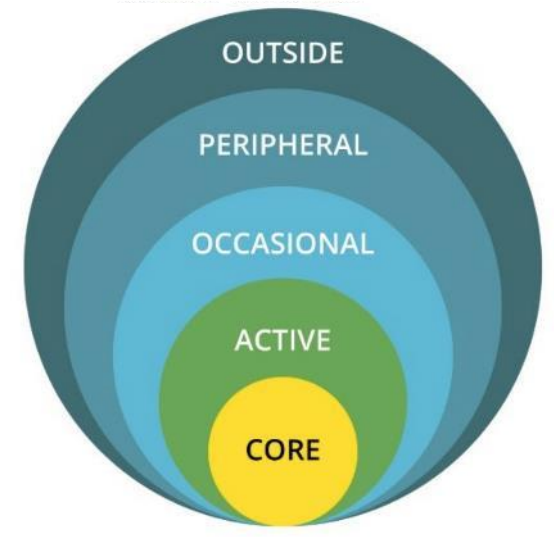
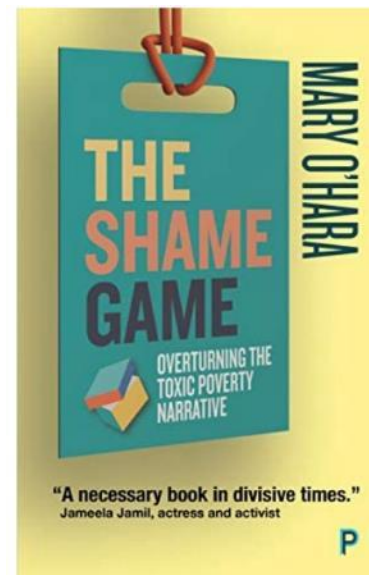
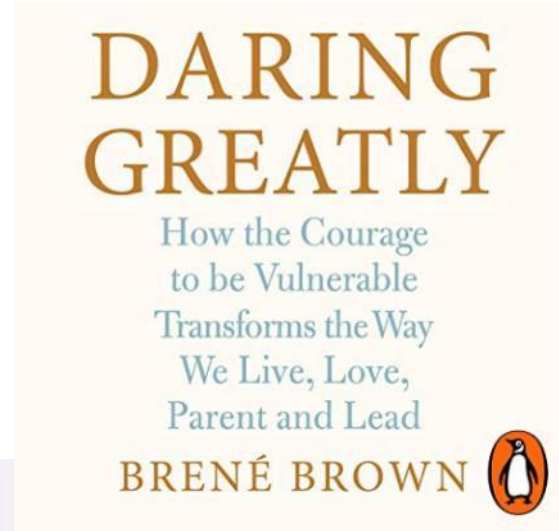
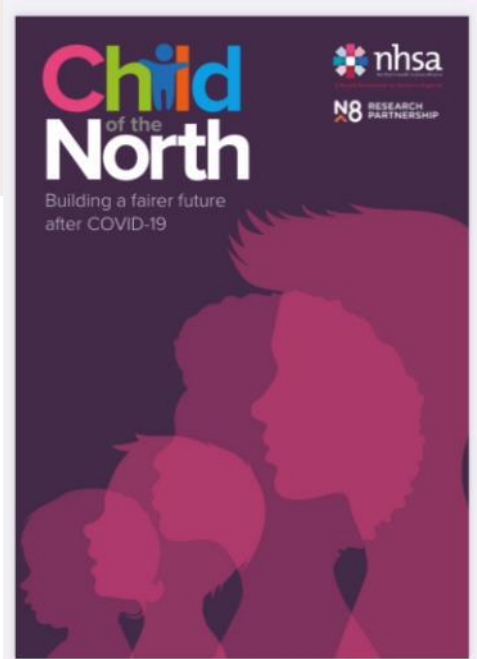
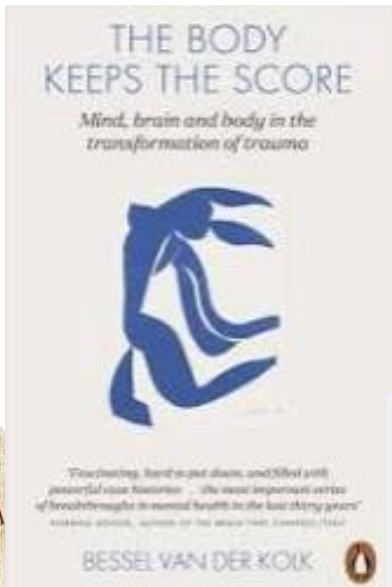
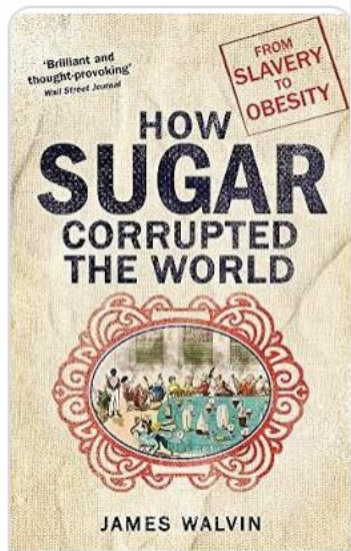
Its all about connections and collaboration

- ▶ Bronze first, then going for Gold
- ▶ Food is part of everyone's life, it is the business of everyone.
- ▶ Good food is a social determinant of health.
- ▶ Trauma informed helps to understand our eating behaviours
- ▶ Public Health drives safe food provision.
- ▶ Food is a key focus of the prevention of ill health, the NHS is looking 'upstream'.



HEALTHIER PLACE, HEALTHIER FUTURE
OUR PENNINE LANCASHIRE

Some underpinning thinking, just a little of what's out there.



The conversation is so big it requires local focus. The Pledge

- ▶ 1 Good food daily for everyone
- ▶ 2 Understand the whole food system (need for an academy)
- ▶ 3 Physical place to reflect good food
- ▶ 4 Zero tolerance of food waste



HEALTHIER PLACE, HEALTHIER FUTURE
OUR PENNINE LANCASHIRE

1. Good food ... everyone has an opinion, its more than food crisis.

- ▶ That's ok:- were an alliance
- ▶ Everyone is on a journey
- ▶ Fundamental principles
 - ▶ NHS Eat Well
 - ▶ Sugar Smart
 - ▶ Recipe for Health
 - ▶ Food Standards





2. Why a Food academy?

To go beyond giving out food parcels we need to collectively understand the inter-connections between how we: produce, process, transport, buy, consume & dispose of the food we eat and the way this affects us as individuals and communities.

How we practice activism.

3. What does a good food community look like? Place


-  Restaurants
-  Allotments
-  Edible sites
-  Witton Greenhouses
-  Routes to school
-  Culturally diverse
-  Pay it forward
-  Food clubs
-  20 minute community



4 . Zero tolerance of food waste

- ▶ Firmly linked to our Climate emergency strategy.
- ▶ If food waste were a country it would be recorded as the 3rd highest contributor to green house gases.
- ▶ Back to the need for an academy. The need to look closely at and understand the whole supply chain
- ▶ Collaboration with local farmers and producers.

Call to action

- ▶ Sign up
- ▶ Read the pledge & assess where you are now
- ▶ Connect with others through meaningful conversations
- ▶ Contribute to the whole
- ▶ Collaborate to take the alliance further
- ▶  publichealthadmin@blackburn.gov.uk

Vision

That we'll have the gold award by 2025

