Takeaway for a Change

A pilot project to encourage behavioural change within families by raising awareness of and improving attitudes towards healthier options available at local fast food outlets

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Terms of Reference

This report is submitted in fulfilment of the evaluation for the project 'Takeaway for a Change'; funded by Public Health, Wirral; delivered by Wirral Councils Environmental Health and Public Health teams. A pilot project, centred around working with a small community at grass roots level; focusing on gaining their trust to facilitate accurate data gathering whilst increasing their knowledge of healthy eating and inspiring motivation to evoke behavioural change.

In commissioning the work, an evaluation was requested to:

- provide baseline data of the cohort mealtime habits and food preferences
- identify the cohorts' level of knowledge regarding 'healthy eating'
- gain an understanding of perceived barriers to eating healthily/reasons for eating unhealthily
- evaluate the impact of the intervention
- evaluate the sustainability of the intervention
- identify significant themes, behaviours and potential responses to the consultation
- submit a report to assist the debate of future options available to deal with rising obesity trends
- inform the deliberations of the commissioning team and be read and understood by a wide range of audiences

In addition, parts a, b and c, below, were requested for inclusion:-

a) Finance

The amount awarded from the Public Health Outcomes Fund (PHOF) was £36,750; this included provision for backfilling of an Environmental Health Officer post for 6 months at a cost of £20,000, and creation of a project officer post for 3 months at a cost of £3,000. Final spend was £28,143.25 leaving an underspend of £8,606.75. This equated to a total spend per family (including staffing cost) of £131.51.

b) "Do you think the PHOF funding has made a difference?"

In my opinion, targeting resources and focusing attentions at ground level, has delivered a tangible, value for money intervention; which, if monitored, publicised and supported will achieve a sustained impact on reducing obesity levels in similar community groups, as consumption of saturated fats (salts and sugars) will decrease. The initiative supported the school curriculums' healthy eating lessons, by injecting reality into the class room. The grant gave one business the confidence and publicity to change their entire business in order to promote healthier options, and drastically reduce the less healthy options offered.

The dedicated business Environmental Health Practitioner (EHP) commented "the funding has allowed businesses to engage with their customers offering new and varied healthier menu choices which was eagerly received by the customers and business owners as a new income stream had been discovered. The project also allowed EHPs to directly assist members of the community and facilitated referrals to other health care professionals which would never have occurred".

The results, evaluation and feedback sections of this report go into further detail regarding this question.

c)

Healthy eating on the menu

By LEIGH MARLES
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MORE than 200 families in Rock Ferry have signed up to a council-run scheme guiding them towards healthy eating.

Takeaway shops in the town have agreed to carry menus offering healthier options and were given grants to buy low fat frying oils, improved equipment and smaller containers for 'portion control'.

The moves are explained in a report to next week's meeting of Wirral children's trust board, and says the Eat Well Wirral and Takeaway for a Change projects are having an impact on people's diets.

The aim is to allow consumers to still enjoy their favourite food, but with a healthy twist.

For instance, children who had never eaten vegetables are now enjoying them on pizza, and families who routinely bought deep-fried foods for their children are experimenting with more healthy options.

One-to-one surveys with families at the local school and children's centre were used to help develop the scheme.

Education and financial incentives to businesses were introduced to try to bring about a change in practices.

In addition, a grant was provided for printing new menus, in which healthier options were strongly promoted.

Staff training was also offered to attract businesses to join the scheme.

Families were offered a £15 voucher to spend in participating takeaways; only healthier options could be bought and certain foods – for example, sausages – were unavailable.

A second voucher was offered in exchange for comments, after people redeemed the first.

Families were encouraged and guided to make swaps, such as thin-base reduced fat cheese pizza, wholemeal pitta kebabs and boiled rice.

So far, 214 Rock Ferry families have signed up to the scheme and 155 completed both surveys.

The questionnaires showed Chinese food was most popular, closely followed by kebabs and pizzas.

The report highlights a lack of understanding of healthy eating, coupled with a desire for change.

Many people reported shock at what is in fast foods and a keenness to learn more.

Most have now moved towards eating only healthier options from the takeaway, and eating them less often.

Finances also played a part in the changes – when people realised the cost and adverse health effects, they were keen to try an alternative.

.The initiative is a joint venture between public health and environmental services at Wirral Council.

Abstract

This highly innovative healthy eating programme is centred on a significantly deprived area of the Wirral (chosen after consultation with the Joint Strategic Needs Assessment, JSNA) reporting high child and adult obesity levels. A high density of takeaway outlets in this area, which primarily offer unhealthy meal choices, completes the model. It is predicted that many families are reliant on this type of food for the majority of their meals. A two-pronged approach designed to inform and address the above, focused on working closely with a) the businesses, to improve the overall healthiness of their products, and b) families, to educate and guide them to make healthier choices.

Fast food businesses, identified via surveys with local residents, were guided and monitored by EHPs to introduce healthier options to their menus. A joined up approach with 'Eat Well Wirral' provided education and financial incentives (a known barrier) to businesses enabling a change to practices; ensuring consumers purchase inherently healthier products. Interactive and educational workshops for families focused on specific topics where a lack of understanding was highlighted. Reinforcement of adverse health effects and practical solutions supported uptake of the voucher incentive; the opportunity of a 'free healthy meal' from a favoured takeaway.

It became increasingly clear that the participants had a natural desire to be healthier, 98% were excited to try healthier takeaway food, and only 10% of this group disliked the option. Once given direction and guidance, change was embraced from a desire to improve lifestyle; however, it is projected that booster sessions will be required to ensure long term sustainability. Gaining the trust and working face to face with this type of Cohort has proven to be a very successful engagement method which has delivered focus and change within this community.

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Introduction

Wirral has a higher than national average number of overweight children living in its most deprived socio economic wards (JSNA, Wirral NHS). The Local Authority is committed to reducing the disparity between deprived and affluent areas of the Wirral, and with its new public health responsibilities are well placed to support local communities, businesses and families to reduce life impacting child and adult obesity and achieve the Public Health outcomes.

There are a high density of food businesses situated in deprived areas of the Wirral that offer primarily unhealthy meal choices; there is well documented correlation between lower socio economic areas and the constituents who rely on the convenience of fast food for the majority of their families meals (Burgoine, 2014). Eating from fast food outlets is negatively associated with fruit, vegetable and salad consumption; furthermore exercise and a healthy lifestyle (Jeffery et al., 2006). This evidence would suggest that the people most at risk of becoming obese are consuming the least healthy foods; which, in addition, form the main part of their diet.

Can channelling additional (targeted) resources address the issues of obesity at a stage before it is already potentially a problem; and further provide a trigger for families to change their eating habits for the long term? Despite an initial reluctance to engage, it appears the (natural) drive to be healthy, interest/intrigue, enjoyment and sheer shock supported the intervention efforts and provided the springboard to ignite a desire to change.

This report will quantify the lifestyle and psychological reasons behind eating habits and patterns through evidence obtained via direct consultation with the community; it will then go on to analyse the short to medium term sustainability of change in these patterns. The final part of the report questions how far society's attitudes and behaviours towards ‘healthy’ lifestyles are in fact shaped by low or poorly managed budgets, lack of knowledge and misconceptions, habitual behaviours and the (un)availability of accessible healthier food choices.

Methods

A two pronged approach was designed to engage all stakeholders, utilising limited resources, over a 4 month period to achieve maximum impact. Rock Ferry Primary School and Children's Centre were approached to be at the heart of the project; physically linked, they provide education for 0-11 years in the locality. Higher than national average obesity statistics, deprivation, and a high concentration of takeaway outlets, overshadow this small community; deeming it the ideal model to test the proposition.

Preliminary introduction meetings were scheduled with the head mistress and centre manager to secure and encourage ownership and buy-in to the project; further update and progress meetings were attended by the healthy schools co-ordinator and centre staff. This approach enabled idea sharing and facilitated relationship building.

First steps involved recruiting the takeaway outlets families used most frequently; studies show that these are most likely to be in a 1 mile radius of home, or the workplace (Jones, et al., 2007); the same study also notes that neighbourhoods can be 'obesogenic' and that the over consumption of takeaway food is linked to the distribution and density of takeaway outlets. Our initial, basic survey of a cross section of parents at the school had the same outcome, with families purchasing takeaway food only from the businesses near their home, which, as found by Burgoine (2014) and Jones (2007), were within a one mile radius of the school and centre. Ten businesses were highlighted and approached, with seven being suitable for inclusion; the remaining three businesses (which were due for routine food hygiene inspection) were voluntary closed under food hygiene legislation due to conditions found at the time. Financial assistance incentives and increased custom secured business involvement; participants represented a range of cuisines (Chinese, Indian and pizza/kebab), giving a representative sample of fast food options available to consumers.

Marketing and publicity was key to promoting the project; initial graphic ideas were conceived by a local A level student, whose designs lead the marketing campaign subsequently developed by Wirral Council Graphics department. Posters, vouchers (appendix 12), flyers, workshop literature and competition material were designed around the initial concept, which was aimed at children, by default engaging their parents.

It was crucial to ensure the correct message was delivered (and nutritional sampling results could be analysed); EHPs have a limited, basic knowledge of nutrition, as such, it was necessary to enlist the support of a nutritionist. Direction was given to sources of reference; topics including obesity, chronic obstructive pulmonary disease (COPD) and their related illnesses were then studied by project officers. Whilst this approach was appropriate for EHPs, it was unsuitable for delivery to the audience. To ensure the acceptability and engagement of the community (children, adults and businesses), it was vital that the 'healthy eating message' could be conveyed in a simple, adaptable, fun and clear way. This required a change in approach, which resulted in the creation of one of the most important partnerships for the project. The search for appropriate material and guidance lead us to the NHS resource library, where we received assistance from their Senior Health Advisor, Public Health Lifestyle Team of Wirral Community NHS Trust; their knowledge, enthusiasm and passion for creating healthier communities was infectious. This new partnership became the link between tailoring our newly acquired knowledge and its effective delivery. It was agreed that working as a team would deliver a more holistic service and intervention; the lifestyle team could provide support

with: - smoking cessation, being more active, weight management and family related issues. Resources from the library such as ‘fat suits’, occluded arteries, replica food and the ‘Eat Well’ plate delivered the foundations for the workshop concept; sessions appropriate for infants, juniors and parents were developed from this notion.

Food frequency and preference surveys were designed in conjunction with John Moores University, Liverpool (JMU); developed to provide evaluation data both pre and post voucher redemption. Requirements demanded a simple, concise, user friendly format to ensure full cooperation and completion.

To complete the dual approach, an agreed process was delivered to participating businesses by a dedicated, Senior EHP; it was essential for this team member to adapt from an enforcement dominated role to an educators role, with the enthusiasm to simultaneously ‘sell’ and promote the project, whilst monitoring consistency and conformance. Their commitment to the project secured 100% business participation. Businesses were guided, supported and monitored to introduce healthier alternatives/options to their menus and make provision for healthier preparation and cooking practices. A coordinated approach with ‘Eat Well Wirral’ (Wirral’s healthy eating award) provided additional financial incentives to businesses, enabling a further change to practices; all businesses were therefore expected to adopt the following changes as a minimum: - sole use of the 5 hole salt shakers (provided to replace their 17 hole units), shift to using rapeseed oil (or similar) for deep frying (instead of palm oil), specific draining time for fried foods, offer brown alternatives for breads, rice and pastas where appropriate, increase vegetable percentage in meals and implement use of smaller portion trays. These minimal, cost effective adaptations guaranteed consumers would purchase inherently healthier meals by default. Programmed, pre and mid intervention, nutritional sampling, carried out in partnership with Trading Standards, provided baseline and evaluation data on the significance of these changes; reporting levels of fats, salt and calorific value (appendices 5, 6, 7 and 8).

Relationships with businesses, the centre and school secured, implementation progressed; the project team focused on engaging with families, a total of 285 attend the school and centre. A formal government style approach of any kind was inappropriate; as EHPs, working at ground level, we are aware that communities of this nature generally have a negative view of government officials. Our tactical response? To dress up as vegetables and fast food, creating curiosity, humour and intrigue; however, more importantly, an unintimidating presence, especially for the children. Our presence at the school and centre, each morning, lunchtime and afternoon gradually reduced anxieties and removed barriers; we progressively became an accepted part of the school day. Initial focus was solely to gain trust, to promote the project and support survey completion (appendix 1), which was done face to face (to ensure full participation), in the playground, school and centre; the offer of free takeaway vouchers (2 x £7.50), in exchange for participation, incentivised inclusion. Unfortunately, this approach proved to be labour intensive, which, coupled with the limited window when parents were available for discussions, threatened to sabotage this stage. This was addressed by attending parents evening, afterschool clubs and eventually enlisting the support of all Wirral EHPs at set times to maximise participant inclusion. Voucher codes corresponded with questionnaires, ‘A’ vouchers for the initial survey and ‘B vouchers for the follow-up (appendix 2); these were offered to participants in exchange for feedback after redemption of the first; this stage mirrored the initial process. Voucher redemption was permitted at participating takeaways;

only healthier options could be purchased, deep fried foods with the exception of chips were unavailable. Policing of this was undertaken by the dedicated business EHP, who organised mystery shopping visits. Follow-up surveys were conducted using the same procedure as the initial survey, these focused on participant opinions of the healthier options, business involvement and sustainability of consumption. With limited resources for the second survey, participants who didn't attend the programmed sessions, or weren't available during drop off or collection times were contacted by text and a project officer visited their home in order to conduct the survey. This was incredibly labour intensive and as such not all original participants received their second vouchers.

Competitions designed to promote the project and engage families heightened interest and reinforced the reasoning behind the scheme. A 'healthy hamper' competition, where parents entered by submitting recipes for healthy, convenient family meals, and 'design a healthy T. towel' (for your mum, nan etc.) competition, where children entered by designing a healthy eating message; winners received a printed version of their design. Hampers consisted of wholemeal pastas, rice, breads and chicken, quorn, margarine, lean mince, fruit and vegetables; healthy recipe cards were included, utilising the hamper contents. Budgeting for food was discussed by the head teacher as an issue for most families; it was envisaged the hamper prize would engage parents and provide some support. All children were presented with 'fluffy bugs' and colouring pencils (as some children didn't have any), to support promotion of the project and provide a physical reminder of its purpose.

Separate interactive and educational workshops were provided for adults and children; focusing on specific topics where a lack of understanding was highlighted by the one to one surveys and interactions with families. Healthier chicken fried rice was prepared by the local takeaway and offered to all participants. Participation was recorded via pre and post course feedback sheets (appendices 3 and 4), which were backed up by follow up surveys. Parents were encouraged and guided to make food swaps, both at home and when eating out; choosing thin based pizza, reduced fat cheese, wholemeal pittas and boiled rice, wholemeal breads, pastas and rice, sugar free drinks and reduced fat and salt options as opposed to totally giving up their favourite foods. Physical props such as fat blobs and occluded arteries delivered a visual message regarding risks linked to the overconsumption of fatty foods, whilst a comparison of the calorific values of various takeaway foods against healthier alternatives gave families real life practical solutions and direction. Children's workshops were light hearted and interactive, using visual, kinaesthetic and auditory learning methods. The emphasis was on play for the infants, and active participation for juniors; the key message and theme throughout focused on portion size and making healthier food choices. A brief questionnaire was undertaken with the children a year later to measure knowledge retention levels; the project lead carried this out with three classes, the remainder were undertaken by teachers.

A network of partnership working evolved through communications between Public Health, Sure Start and school; the ripple effect of this enabled the involvement of key departments, which, unbeknown to each, were already working to tackle linked issues at different levels, in a variety of ways. This joining of skillsets and sharing of knowledge delivered new ways of working, which supported the success of the project. It allowed for better service provision for the cohort, via a joining of knowledge and skillsets at 'one stop shop' style events; this highlighted the need for referrals for further support and advice. Health trainers attended the

workshops which maximised the opportunity to engage with the families and encourage lifestyle change; appropriate referrals completed the holistic approach.
The project was publicised in the local press on two occasions.

Barriers

Time proved to be the greatest barrier to overcome in ensuring the success of the project; restraints imposed due to procedural requirements and budget provision dictated the level of involvement, action, management, monitoring and liaison that could take place. This directly affected the level of participation from all parties and determined several outcomes; had an extended timescale been adopted, greater participation, ownership and commitment would have been secured. This was evident in several situations:

- fitting in with the school timetable; Christmas activities, holidays and planned lessons prevented several classes involvement
- teacher understanding, ownership and commitment; the project team didn't get the opportunity to 'sell' the project to the teachers, and only briefly met a few of them prior to the launch. This missed opportunity prevented idea sharing, teacher engagement and to an extent co-operation; this became apparent when class questionnaires were returned half completed and there was little teacher participation in the workshops.
- completion of the family questionnaires was predominantly done at the beginning, middle and end of the nursery and school day to catch as many parents as possible in a short space of time; many parents were busy and would have preferred us visiting their homes; however, this would have been unfeasible due to limited resources and time.
- follow-up/review meetings; ideally these would have been done with all stakeholders, to discuss progress, feedback and review findings to adapt the process. It was impossible to arrange mutually convenient times to meet, thus hindering knowledge and idea sharing.
- development of a specific marketing campaign to increase publicity.

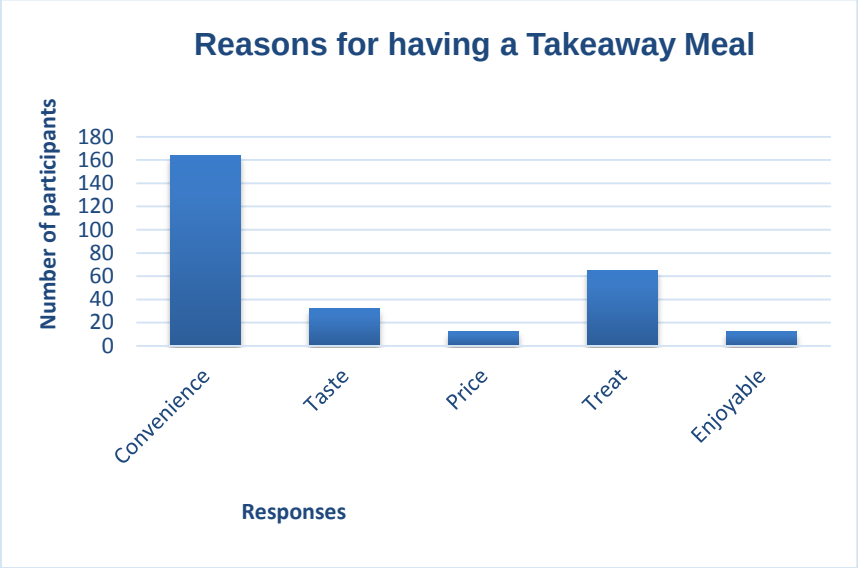
Despite the above, the project team adapted, made provisions where necessary and worked outside regular hours in order to ensure the success of the project.

Results

Findings were conclusive, for the majority of questions posed; where this was queried, supporting evidence was gained. Data from initial and follow-up questionnaires, pre and post workshop feedback sheets and evaluation questionnaires were analysed. Coding responses grouped themes and allowed for quantitative analyses of qualitative data. Business participation was evaluated via total voucher spend.

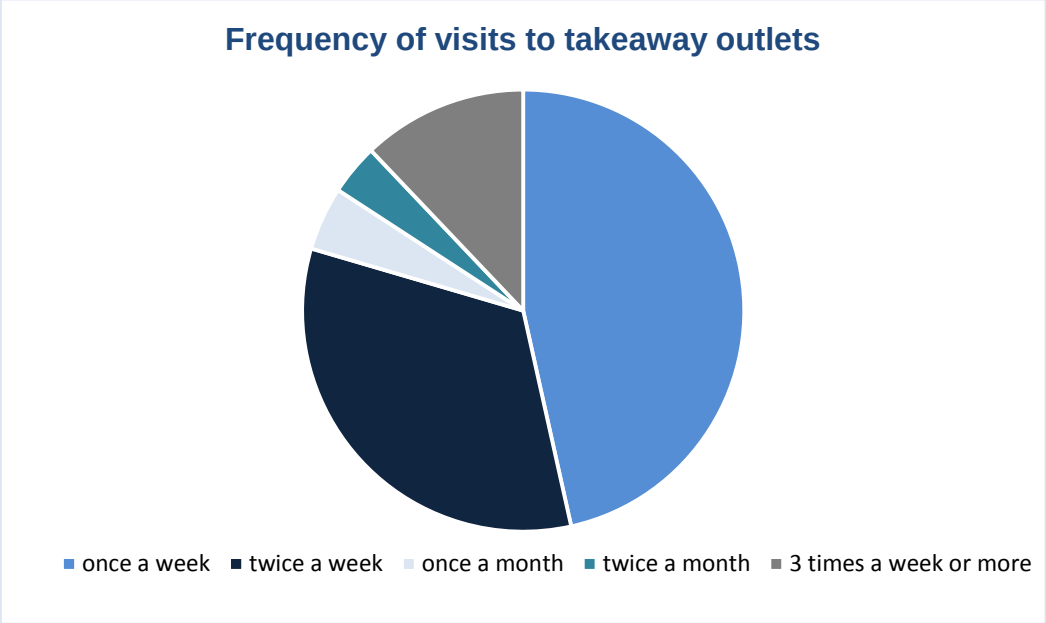
Initial survey

Chart 1



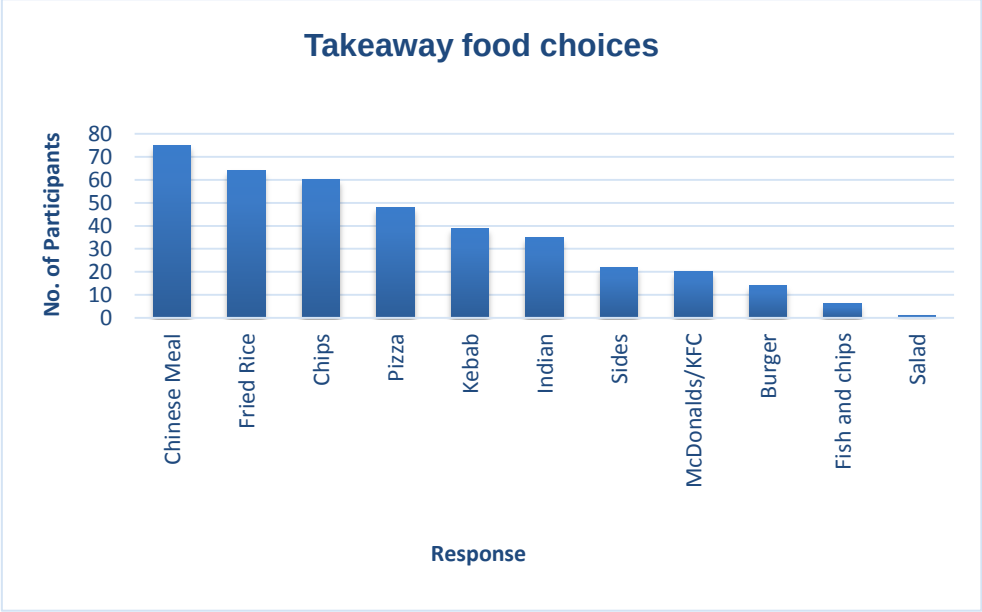
A mere 5 of the 214 participants abstain from consuming takeaway food, with fewer describing it as unhealthy. Over 76% of consumers choosing this option out of convenience. Only 1 parent enforced a total ban on this type of food due to it being unhealthy for her family.

Chart 2



45% of participants consumed takeaways more than once a week. Considering the whole cohort, 92% preferred this option of an evening, whilst 6% would engage in lunchtime and evening consumption; convenience and eating as a family were key factors driving these routines.

Chart 3



Meal choices covered a broad spectrum, with participants having a favourite meal; however, the majority preferred to vary their meal choice at each visit. Chip consumption was a constant with 28% of participants preferring this food type.

Chart 4

Food type	Participants
Nuggets	52
Pizza	51
Fried rice	34
Indian or Chinese Meal	29
sausage	27
Burger	20
Doner kebab	10
Noodles	8
Fish	8

Fewer variables in the children's meal category were recorded; deep fried options accumulated the greatest total, 33% eating similar meals to their parents. Chips accompanied all meals with the exception of noodles and fried rice.

Convenience was the driving factor dictating takeaway collection or delivery; 65 participants (30%) never have their takeaway delivered, primarily because the outlet was within close proximity to their home or commute, less frequent responses advised the business didn't offer that service.

Chart 5

The majority consensus was that healthy food was restricted to fruit, vegetables and salad; only 20% demonstrated an understanding of what was meant by a balanced diet.

Chart 6

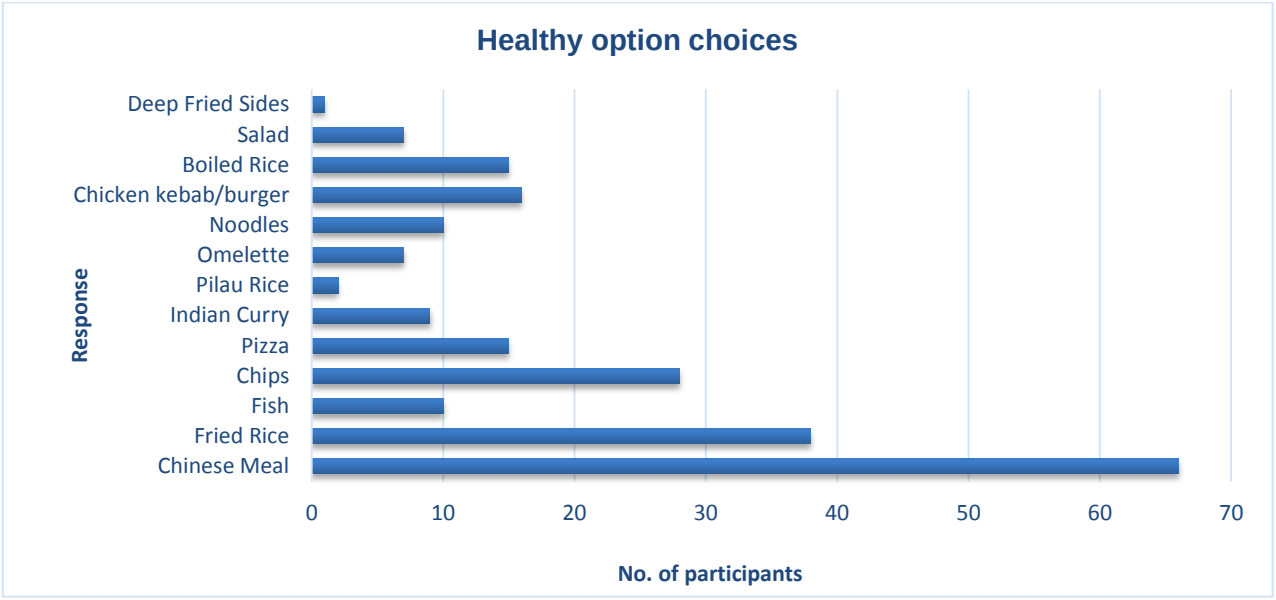
The final question of the initial survey enquired whether the participant would try healthier takeaway food; a resounding 97% said they would, with the remaining 3% committing to partake due to the voucher incentive. 70% of this group had the desire to be healthier or to try something new.

Follow-up survey

67% of the initial cohort engaged to complete the follow-up survey; providing feedback of their healthier options experience: -

- 93% of adult participants enjoyed the healthier option
- 86% of child participants enjoyed the healthier option
- 52% chose the takeaway in their locality
- 15% chose their usual takeaway
- 95% would use the takeaway for healthier options again
- 80% of child participants ate the same as their parents
- 39% stated less grease, salt and more veg enhanced the flavour

Chart 7



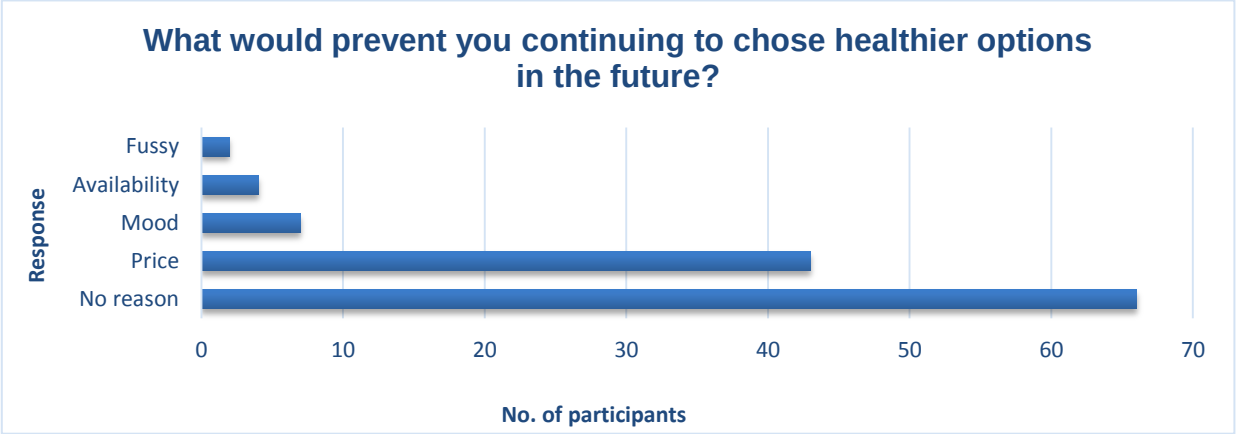
78% of participants chose Chinese cuisine, 22% kebabs and pizza, 20% chips, as a side. 59% of participants could differentiate between the healthy option, with 87% of this group advising the change was preferential. Of those who couldn't taste a difference, 94% said this was a good thing as this would be healthier for them. When questioned, only 10% of participants would not go on to choose a healthier option based on the particular meal consumed.

Chart 8

Business name	Voucher redemption A	Voucher redemption B	Total revenue
The Healthy One	96	161	257
Man Wah	41	77	118
Luigis	111		111
Mr Pizza	30		30
Sylhet Spice	39		39
Yeung Sing	13		13
Indiyah	11		11

The Healthy One was the most frequented premises, this was primarily due to their locality, as convenience was the main factor for choice.

Chart 9

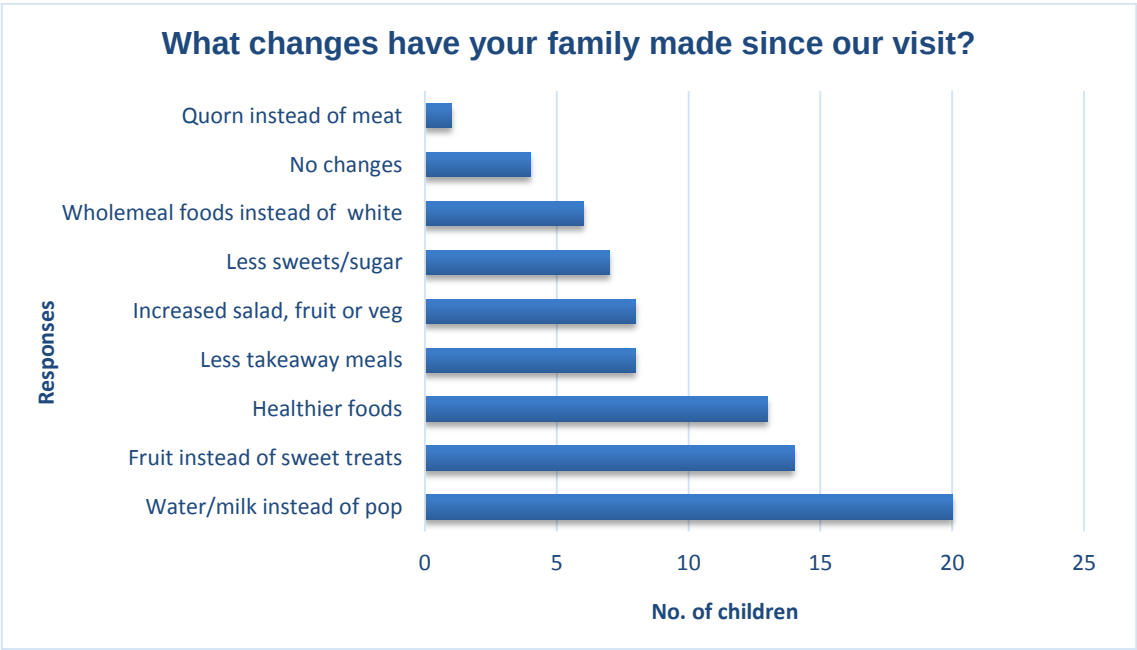


Considering future consumption, 46% of participants had no reason to cease choosing the healthy option after the scheme, removing barriers linked to price and availability increased this group to 79%. The remaining participants stated they may require a 'greasy treat' to lift their mood, otherwise, their choice would usually be the healthier option; therefore, in total 98% would continue with the healthier product. 66% said they were more likely to use a takeaway outlet offering healthier choices than a business that wasn't. Only 1% said they wouldn't use a business that sold healthier options.

Workshop surveys

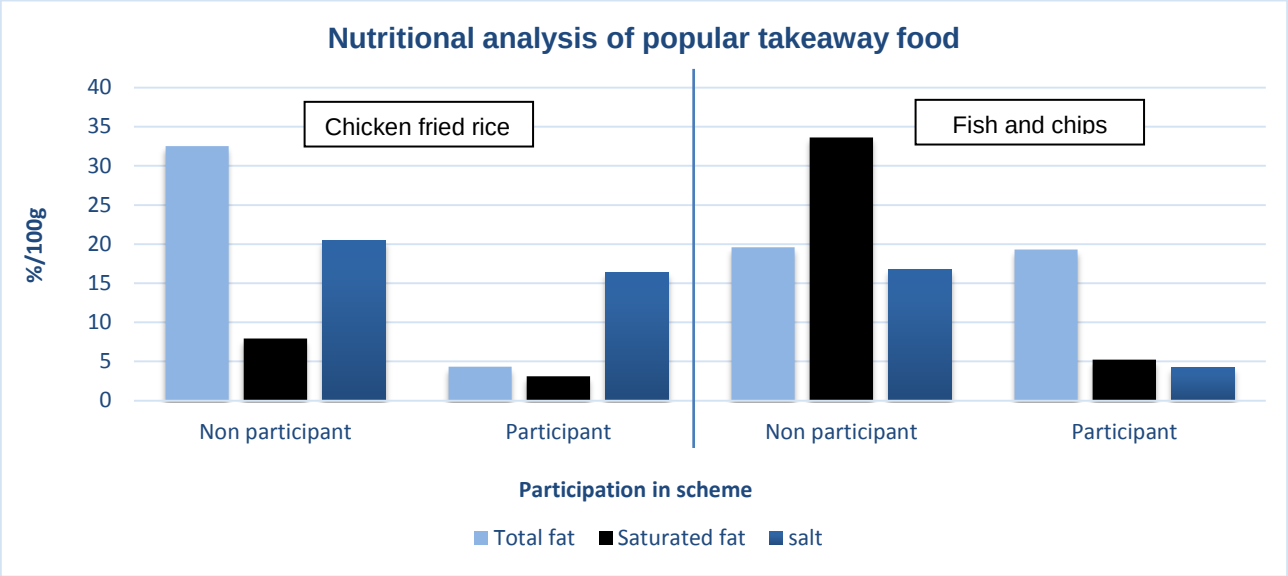
78% of follow up participants attended a workshop, with 54% reporting it was worthwhile (10% said it wasn't, the remainder were incomplete answers); 48% reported they learned something new. At the 1 year survey, 69% of children who attended the school workshop remembered the intervention; 90% were aware of the effects of eating too much fat and sugar, 85% were aware of simple swaps to create a healthier diet. Thirty five families and two centre staff were referred to health trainers for further support, ten agreed to action plans.

Chart 10



Business sampling

Chart 11



- Fish and chips from the non-participant contained 33%/100g saturated fat, compared to 5.2%/100g at the participating outlet.
- In the same comparison, salt content was 16.7%/100g and 4.2%/100g respectively.
- Chicken fried rice from the non-participant contained 32.5%/100g fat, compared with 4.3%/100g at the participating outlet.
- In the same comparison, salt content was 20.4%/100g and 16.3%/100g respectively.

Evaluation

To my knowledge, this project is unique; interventions targeting takeaway providers have been implemented across local authorities nationwide; however, linking consumer to provider, from nursery stage to adult is a new concept. One that has demonstrated positive results, delivered a foundation, 'way in' and strategic model for tackling obesity in deprived socio-economic communities. There is little escape from our modern "obesogenic" environments (Burgoine et al, 2014), characterised by the ubiquitous availability of palatable, energy-dense and inexpensive foods; currently, legislation fails to address this health and economically crippling issue. However, evidence obtained from the cohort suggests that simple, economical changes can begin to address this issue on a relatively large scale.

Perhaps controversial, it has been suggested that food, rather, specific components of food, such as fat and sugar, are as addictive as heroine; however, research is in its embryonic stage, therefore reliance is on the currently available consistent evidence that it is the psychological compulsion to eat that is addictive, not the food itself (Hebebrand et al., 2014). This compulsion, in basic terms, is triggered by a release of dopamine, initiated when eating, which stimulates a reward response; a complex subject, inappropriate for further discussion in this report. However, this reward response behaviour is a significant factor in choice of food consumption, therefore relative to this project. Albayrak et al., (2014) states that eating addiction can be chemically and/or behaviourally based; predisposed individuals under specific environmental conditions can become addicted to food as with any other substance. It is in these contexts that this section discusses the reasoning behind consumer food choices (within the boundaries of this study), offers evidential responses to the issue and, suggests other motivating factors for takeaway consumption.

Initially unwilling to engage, parents were wary and intent on avoiding our company; our consistent and persistent presence facilitated a breakdown in barriers, which, for the majority, opened up a forum for discussion, focusing on food and its place within the family; cooking, purchase and consumption being key topics. An extensive understanding was gained during these discussions, which, unfortunately, was inappropriate to document (for further analyses) at the time; therefore no evidence to support this exists. However, the knowledge is included in this text to inform this report.

98% of participants consume takeaway food, at least once a week, 45% reporting twice a week or more; both parents and children, highlighting the scale of the issue. However, in reality we became aware that for many families, takeaway consumption is more likely to be up to five times a week. Despite our 'friendly' appearance adults were reluctant give responses consistent with their lifestyle regarding levels of consumption; we concluded this was out of embarrassment. Although only 5 participants acknowledged takeaway food as being unhealthy, the majority displayed awareness that it wasn't the best food they could consume; however, their reasoning for this assumption unbeknown to them. Family constraints, including budgeting, routine, time management, knowledge and skill were the underlying influences for takeaway consumption; convenience being the motivator for 77% of consuming participants. Delivery was expected by most, further enhancing the convenience expectation. The reward/response behaviour, as studied and critically reviewed by many academics was less than half as significant, with only 30% of participants offering this as a reason for consuming takeaway foods once a week or more.

The project team were made aware that many children attended school on an empty stomach and for some, their mid-day meal was likely to be the only one of the day. Signs of deprivation and behavioural issues were apparent, with literacy an issue for many adults; it was evident numerous parents were unable to balance routines, such as their children attending school frequently, and on time, with their own lives/needs. Experiences informed us that dictating to this cohort, would be fruitless and succeed purely in removing them further from any intervention efforts at a level where choice or conscious decisions were required.

Habit is defined as the urge to engage in behavioural routine, where withdrawal creates anxiety and tension; therefore, considering the main factors for consumption, each is significant as a foundation for habitual behaviour. Leading us to the assumption that removing the source of the issue (takeaway establishments) may only result in the uptake of other, accessible, relatively cheap 'convenience', 'energy dense foods'. One model, to address the issue, as proven in this study, focuses on basic education relating to 'real-life' scenarios, showing parents (and children) exactly how much fat, salt and sugar is in common foods and drink, especially takeaways, then progressing to demonstrating the effects of consumption; concluding sessions with effortless ways to reduce these damaging levels, whilst still enjoying a takeaway and everyday foods. Bringing shock tactics, fun and interaction into the equation proved to create a lasting impression for the participants. The model is completed with participation from takeaway establishments, without whom the intervention would have minimal impact.

Only 28% of follow up survey parents attended the workshop, and whilst a further 10% expressed an interest for inclusion, the majority failed to participate, despite the availability before, during and after school. The same apathetic behaviour was displayed when initially enlisting families for the project; even the incentive of free food failed to attract the masses, it was tenacity and persistence that succeeded in signing up the majority of families, a resource intensive method. Workshop sessions during the day, were attended by the majority when scheduled to replace usual, mums and tots groups; sessions delivered at other times were poorly attended. Lack of participation was also questioned during the competition stage, where less than 10% of school parents entered. This behaviour wasn't reserved for our efforts, indeed it was routine. It became apparent by the noticeable lack of attendance at the sure start centre, where a plethora of activities, interventions and groups were offered to the community; Zumba, parenting classes, rhyme time, buggy fitness and a range of fitness classes, to name but a few were offered, usually free, to local parents, with a crèche facility if required. During our time spent in the community, we witnessed classes continually empty or with less than five participants; one of the fitness classes had been changed to an over 50s exercise group due to the lack of attendance! Mums and baby/toddler groups were the most popular sessions during our presence, which attracted between 4-15 parents.

This lack of engagement was accepted practice at the centre, where we were advised leaflet drops to houses in the community, library and local takeaway advertising were frequently carried out, to little effect. It would appear that 'free' is worthless in this context; and/or requiring something in return (even an opinion) creates a negative response? Is it that habitual behaviour or requirement to do something different/change is too onerous for the majority this cohort? Behavioural psychology wasn't analysed in this study and, as such, the questions raised are merely assumptions. However, it is necessary to consider this behaviour when assessing credibility and impact of the scheme, as it has a direct impact on outcome.

Contradictory to the above, is the response that 70% of participants wanted to be healthier; more importantly we were made aware that lack of knowledge, habitual behaviour and lack of confidence, was sabotaging this change. This is where the voucher incentive and workshop sessions provided a break in the cycle, with 97% of participants willing to try a healthier takeaway meal.

This two pronged approach, demonstrated there is a market for healthier foods, which is both commercially viable and consumer friendly. Of greatest significance, is that a typical participating business (without exception) offered deep fried food containing at least 50% less fat; all consumers therefore, by default consumed an inherently healthier meal. Similarly, salt content was reduced, and fat for stir-frying changed, delivering these health benefits directly to the consumer. Moreover, participants advised food was fresher, more appealing and the extra vegetables enhanced the flavour, 86% enjoyed the healthier option, and had no reason to cease ordering that option if it was available, and priced competitively. Cost was a restrictive and beneficial (negative) factor in choice, in that participants who stated this as a preventative, would eat more takeaways if they were cheaper, whilst those consuming it more frequently opted for chips and other deep fried sundries, creating an affordable convenient meal. It is this group of participants that will receive the greatest health benefits derived from the changes made without their knowledge. Health benefits will be two-fold for those who also opt for the healthier option, increasing their consumption of healthier rice, wholemeal foods and vegetables etc.

Most adults answered on behalf of their children advising they were 'fussy' and wouldn't experiment with other foods; resulting in almost half of child participants consuming energy dense, nutrient replete deep fried foods. When given a choice, excluding the latter, 80% of children ate the same meal as their parent, with 83% enjoying the healthier option. Workshop feedback was 100% positive from child participants, 90% of adult responses were also encouraging; participants commented on enjoying the sessions, being more health conscious, wanting to cook more at home and being surprised at the levels of fat, salt and sugar in foods.

Obstacles and considerations

School reported having arguments with parents regarding lunch box contents; taking responsibility to the extreme, chocolate and sweet snacks were banned. Unsurprisingly, the head faced many disgruntled parents, voicing their rights to freedom of choice. Building and maintaining a good working relationship with the school, families and surrounding communities was imperative for the success of the project, engaging with families was done with careful, consideration to ensure the intervention had maximum impact. Unfortunately, a handful of constituents (from outside the community) disagreed with the scheme and, despite lengthy explanation, labelled the project a waste of taxpayers' money. Falsely accusing the project of encouraging people to eat takeaways, increase fast food outlets and support unhealthy lifestyles. A specific marketing campaign, focusing on scheme objectives, would address these concerns, publicise participating businesses and support healthier eating. The limited marketing undertaken (due to time and accessibility) had a negative effect on number of follow-up participants, general public understanding of the project, attendance at workshops and exposure to health trainer sessions for those in greatest need.

Follow up survey sessions/2nd voucher incentive failed to engage with the projected number of participants, requiring two additional weeks' resources. Appointments at participants' homes

were arranged in order to achieve maximum engagement; however, time ran out. Follow-up voucher incentive sessions were hindered by cold, wet and windy weather; parents raced in and out of the playground not wishing to wait.

Covert operations alerted the dedicated business EHP to criminal activity involving the vouchers; cannabis was being exchanged for their equivalent cash value. The co-operative, fully supportive food business operator (FBO), barred the dealer and their family from the premise; intelligence was passed to the police. Consequently, all businesses were reminded of the terms and conditions relating to 'family' voucher spend. Voucher integrity was analysed and discussed in great detail pre-launch; aligning convenience and security with the provision for reimbursement and evaluation proved challenging. Achieving equilibrium of these factors became an unfeasible task; emphasis was therefore directed towards business monitoring and voucher validity to ensure genuine redemption activity. Consideration for the safety of equipment, documents and personal effects was necessary, as attempts to remove these items were prevented on several occasions. These, and other incidences, whilst generally isolated, highlight the community environment, value of food and gravity of some situations the project team found themselves in. EHP skillsets are adaptable and capable of defusing/dealing with contentious situations due to exposure in an enforcement setting; an academic background is vital, however, interpersonal, communication and resourcefulness are essential qualities required to achieve acceptance and deliver impact in such deprived socio-economic communities.

Two people signed up to the initial voucher incentive twice; highlighting this at the end of the sessions allowed for refusal of subsequent voucher participation for those involved. This would potentially be avoidable with the use of electronic surveys, linked to a database of eligible participants; however, data protection and sensitivity would be considerations. The technology was unavailable for this project. Data analysis and coding was a colossal task, hindered by lack of knowledge; simple adaptations to surveys, such as numbering questions would have assisted with this task.

Feedback from the annual children's survey was skewed as a percentage of pupil numbers are transient. A number of the surveys were incomplete, with a large percentage half answered; ironically, the majority of detailed surveys were completed by infant classes. Surveys were therefore pitched at an understandable level, and other factors effected completion. The credibility of answers relating to food swaps were considered, in that, are children fully aware of parental changes/choices? This was however disregarded when school feedback relating to knowledge of healthy eating was positive.

One business unwittingly gave away 'free' garlic bread with voucher spends over £12; this was a usual incentive offered, and only occurred with online ordering. Monitoring on Facebook alerted and supported enforcement of correct practices. One business reverted back to the original oil in the deep fat fryer as they were unable to keep the healthier oil at the required cooking temperature. The business remained in the scheme and was prevented from selling deep fried foods. This action directly increased the amount of rice that was sold, indirectly supporting healthier eating by exclusion; this menu adaptation however, is not financially viable. Some participants placed telephone and online orders which included excluded items on the scheme; upon collection businesses had to deal with disgruntled customers, who either had to leave their entire order or remove the excluded items. Businesses addressed this by erecting signs, and the topic was reiterated at future survey sessions. All businesses received

several mystery shopping visits; each fully compliant. Staff frequently spent time during busy service to explain the scheme, foods in/excluded and small ingredient changes customers may not have first been aware of such as ‘sweet and sour chicken’ being served without batter.

Feed back

Rock Ferry Primary School – "[The class based sessions were very good and enabled teachers to follow up on healthy eating choices. This is something we regularly do through personal, social and health education half days, 'Funfoodchef' sessions and 'Healthy Schools' week. The cook and midday assistants reported uptake of veg, salad and fruit had increased. Over the weeks, we have been doing sessions on healthy eating. Teachers report that children seem slightly more aware of the harmful effects of too much sugar and fat in their diet. They seem to have more awareness of diabetes and heart attacks. They have an increased knowledge and awareness about the types of food (and drinks) that contain too much sugar and fat; and how they can adapt to make healthier choices.]"

Rock Ferry Sure Start Centre –"[initial meetings helped to build relationships and share ideas; timescales were short and advertising materials were developed quickly. On reflection, an advertising strategy may have been useful to engage with the wider community. The project supported meeting our Key Performance Indicators. Sessions undertaken when existing groups usually take place had higher than usual attendance figures, the other sessions were less well attended. Presence in the centre promoted the scheme, however, it was difficult to complete paperwork when dropping off or picking children up. Parents were surprised by the information in the presentation; one parent will never give her child Haribo again as a result. Parents engaged well, and enjoyed the healthier food tasting, although many were disappointed that they weren't taught how to cook]"

Business A (Chinese cuisine):- this is the flagship business for provision of healthier takeaway food in the borough, making changes to cooking practices and ingredients prior to the project. This business is growing, in one of Wirrals most deprived socio-economical wards; committing fully to the project, the FBO 'gold plated' changes, offering predominantly healthier products not only by default. Mr Lam (FBO) commented "free vouchers are the most attractive and motivating factors. It would be interesting to find out whether the other caterers continue with the changes after the scheme. I understand it is expensive to monitor and not a legal requirement. I know customers want healthier food, but it is down to caterers to tell them which and what is healthy."

Business B (Chinese cuisine):- using the vouchers initially didn't require too many changes for this business; however, the use of rapeseed oil in their fryers, was expensive and wouldn't reach temperature during busy times. Their equipment is old and therefore unsuitable for repeated use with this type of oil. The FBO main comments were that adults mainly spent the vouchers, taking the usual choice away from the children.

Business C (Chinese cuisine), Business D (Pizzeria and Kebab house), Business E (Pizzeria), Businesses F and G (Indian cuisines):- gave similar feedback, stating the project was beneficial and positively affected their customers eating habits; they felt there would have been a greater impact if the project timescale was extended. All will continue to offer healthier choices.

In a paper evaluating business involvement, Raynor (2015) concludes that the majority of businesses still offer healthier options, reporting that consumers wanted to be healthier. Businesses commented positively on grant funding, voucher provision and parental engagement; and negatively on project promotion and the short timescale of the intervention. Businesses will make further changes to encourage healthy eating; reducing portion size, cost.

Recommendations

The following recommendations are offered to encourage and support sustained change within the context discussed:-

- Arming parents with the confidence to make changes, or at least question what they are eating is crucial; a huge step in the right direction for this cohort as 74% were unaware of what healthy food/healthy diet is.
- Short, simple, practical cookery sessions for parents, held at their child's school, would encourage and inform. Providing guidance on meal planning, budgeting and shopping, with continuation sessions covering labelling, fats, salts and sugars and the linked health risks with over consumption, would empower families to make lasting changes.
- Issuing families with simple food/menu planners, shopping lists and approximate daily/weekly costings would provide many with a focus and starting point to change their food consumption routines. An effective, yet simple intervention.
- Business participation is key (Butland et al 2014), their inclusion and co-operation delivers a vehicle for change. Consumers will ultimately opt for convenience and value; therefore, if the food consumed is healthier by default, consumption of energy dense food will naturally decrease. Empowering and educating consumers increases the probability that a healthier choice will be made, therefore achieving maximum impact.
- Businesses report that healthier ingredients e.g. oils, are far more expensive than less healthy ones; a collective 'switch' to a sole supplier would make such ingredients more accessible to a greater number of businesses
- Provision of items such as dance mats, and engaging activities, such as nature walks, allotment sessions or cycle trips at schools and community centres would encourage children who dislike sports to be more active. The workshops were inclusive, and catered for all, however, it was apparent that children with weight issues felt unable/excluded from participating in physical activities.
- Appropriate support, in the way of access to facilities, activity classes and lifestyle support (to name but a few) was available in the community to empower families in deprived areas to live healthier, fulfilling lives. These services are not accessed to their full potential; questioning value for money and actual impact. A multi-agency approach, focusing resources on community issues, engaging at their level, may add value to these services in such communities
- Similar to the Licensing Act 2003, premise license holders are required to ensure and maintain the wellbeing of their customers. Could this responsibility be applied to takeaway food business operators, and thus see the licensing of takeaway food premises?
- Many parents reported their children had a greater understanding of what they ate and drank and were keen to make healthier choices and be involved when purchasing food in the supermarket. The children were keen to show the project team what they had learned at every occasion. Lessons at school in practical/real life food purchasing, planning and budgeting from an early age would empower the next generation to make healthier choices and dictate food provision. Trips to farms, allotments, supermarkets, food bank etc. encompassing the entire food chain (positive and negative) would give children a holistic view of their food environment; as currently, the majority are so far removed from where natural food actually comes from! Engaging the wider community as a whole has the potential to encourage ownership and pride, supporting our future generations.

Conclusion

Evidence supporting removal of convenience food (and delivery) from the locality would have maximum impact on consumption; whilst this is an unviable option, if for no other reason than who are we to dictate or prevent choice; the simple measures discussed in this report would, by default, create a healthier overall product, maintaining the economic development of business in these deprived areas. After all, society has accepted it is too controversial to simply expect smokers, alcoholics and drug addicts to quit; 'eating addiction' elicits comparable responses according to current scientific research; therefore requires equivalent reactions. Planning law restrictions and limitations are currently unsupportive of the removal of hot food takeaways; however, the over saturation of such businesses is not only a strain on the economic viability of all businesses in these already struggling communities, but a support system for obesity. Several local authorities throughout the UK are positively responding to the obesity crisis using planning policies to address the over proliferation of fast food outlets within their area. Supplementary Planning Documents (SPD) aim to address the growth in, and abundance of such businesses (A5 use) by restricting location and concentration. St. Helens, Halton and Rochdale, to name a few authorities in the North West, have adopted such policies. At the time of concluding this report, Plymouth Council, have adopted a ban on the opening of any hot food takeaway on one of its high streets as the local residents have excess weight issues. Licensing of A5 premises could be a way forward with limitations and conditions, governing the sale of food, revocation of licenses for breaches would quickly and significantly impact rising obesity trends and create a supply and demand for cost effective healthy ingredients to support sustained business change.

Our analysis (appendices 5, 6, 7 and 8) clearly demonstrates the nutritional benefits of meals obtained from participating food businesses. Chicken fried rice, a very popular dish amongst participants had more than 50% less saturated fat compared to the same product from a non-participating business. Following the same example, fish and chips had 84% less saturated fat from a participating business. The simple changes adopted by participating businesses were cost prohibitive for the majority, the grant funding bridged this gap; linked with the new customer base, this provided a sustainable change. Supplier price increases would effect this change, therefore strategies to address this factor, as suggesting in the recommendations (prior to supply and demand dictating it) would address this. Legislating the clear display of nutritional content of food purchased from takeaways, restaurants and cafes would enable families to make an informed choice about the foods they consume. Retailers, competing for business would be forced to make financially viable changes to offer healthier options.

The Children's Health Fund (appendix 14) are suggesting a duty on sugar, a current poll shows 95% of the general public are in support of such an intervention; the health, quality of life and healthcare cost savings are astounding. Similar measures to address salt and fat could be adopted, the cumulative effect of these, in conjunction with the aforementioned recommendations would tackle obesity at national and local levels.

After spending many weeks at the heart of this community, it is obvious that its residents want to change; families have busy lives and continue in cyclic lifestyle that they are unable to break. Offering solutions alone delivers negligible outcomes; however, guidance, support, clear direction and gaining trust from the outset create a catalyst for modification of lifestyle. Booster sessions are likely to ensure long-term sustainability; however, many families report that they enjoyed the taste and feeling of eating healthier and wished to continually improve

their diets. Further education/practical sessions at school for families would support and cement their goals; coupled with promotion and competitively priced healthier foods, significant, sustained, behavioural change would (and did) naturally follow. The acknowledgement of local fast food businesses as a vehicle for positive change in the community by offering incentives to allow them to make small changes to their practices proved a to be a major component in the success of this intervention.

Obesity is the National Health Service and global populations' heart stopping ticking time bomb in relation to the nation's health. Our abilities to deliver and sustain adequate interventions must be adopted now to assure a healthier future for generations to come. Whilst policies are necessary to initiate change, greatest impact can be achieved by interacting with communities at grass roots level; these practices do not take years to be adopted. The irony is, that as long as local authorities accept planning applications for fast food takeaways and chains such as Pizza hut to be opened in their grounds, the message to consumers is surely a mixed and confusing one.

Acknowledgements

I would like to thank the following: Colin Clayton, my manager, for his encouragement and support; Fiona Johnstone for her time and belief in the potential of the project; Gareth Hill, for providing so much invaluable information, enthusiasm and pointing us in the direction of key supporters; members of Wirral NHS Health Advisory Team, especially Phil Rhodes for his passion, inventive ideas and unwavering team work. Special thanks go to Jon Hardwick for his dedication, energy and dogged determination to encourage, support and monitor businesses to ensure credibility of the scheme; the project officers and my friends and colleagues in Environmental Health who enabled the project to be a success due to their dedication and desire to go above and beyond; and finally, to my children, who designed the original marketing artwork, dressed up and got involved purely to assist in making a difference.

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Footnotes

Ethical approval: participants gave written informed consent (appendices 10 and 11). All other data analysed were in the public domain.

Appendices

Appendix 1	Initial survey (A)
Appendix 2	Follow-up survey (B)
Appendix 3	Adult pre workshop survey
Appendix 4	Adult post workshop survey
Appendix 5	Child workshop survey
Appendix 6	Certificate of analysis, fish and chips, participant
Appendix 7	Certificate of analysis, chicken fried rice, participant
Appendix 8	Certificate of analysis, fish and chips, non-participant
Appendix 9	Certificate of analysis, chicken fried rice, non-participant
Appendix 10	Participant comments
Appendix 11	Participant consent form
Appendix 12	Participant information sheet
Appendix 13	Voucher
Appendix 14	Children's Health Fund information

Appendix 1

‘Take Away for a Change’

Initial family survey November 2013

Parent/guardian name:

Children’s names and ages:

Postcode:

Do you eat takeaway food; e.g. chips, curry, kebab, Chinese?	Yes				No
Why? Is it because they are quick, easy tasty, cheap, expensive, you don’t like it, other reason(s)?					
Do your children eat takeaway food?	Yes				No
Mostly at lunchtime, evening, or both?	Lunch		Evening		Both
Why?					
Usually how many times a week?	1 2 3 4 5 6 7 8 9 10 11 12 13 14				
Why?					
What are your favourite takeaway meals?					
What are your children’s favourite takeaway meals?					
Name your favourite places to get your takeaway?					
Do you have your takeaway delivered, how often?	Always	Most times	Sometimes	Rarely	Never
Why?					
What is your understanding of healthy food?					
Would you try takeaway meals with less fat and/or salt in them? Why?	Yes			No	
Would you try it if it was free?	Yes			No	

Project Officer …… Date …… Code: ……

Appendix 2

‘Take Away for a Change’

Follow up family survey November 2013

Parent/guardian name:

Children’s names and ages:

Postcode:

Did you spend your £15 voucher? If no, why?	Yes	No		
Where did you spend it and why there?				
Would you use this takeaway again? If no why not?	Yes	No		
What healthy option did you choose? Why?				
Did you enjoy it?				
Did your children eat the healthy option? Did they like it?				
Could you see/taste the difference in the takeaway that you had?				
If so, was this good or bad? Why?				
Did you and/or your children attend a workshop? Was it worthwhile? If no why? What did you learn? Anything?	Parent	Child	None attended	
	Yes	No		
Do you still get takeaway meals? Why?	As often as before	More often	Less often	No
Have you chosen healthy options since using the voucher? What?				
Has your favourite meal choice changed to a healthy option?				
Will you continue to pick the healthy option or try it again if you haven’t already?				
What would/has prevented you from continuing to pick the healthy option?				
If a takeaway sold healthier options would you use them?	More	wouldn’t use	no difference	

Project Officer …… Date …… Code: ……

Appendix 3

Pre course levels

Name: Date: Time:

Please rate the following statements, CIRCLE YOUR ANSWER - **1 being very poor to 5 being very good.**

1. Your understanding of being healthy.

   1 2 3 4 5

2. Your knowledge of what healthy food is.

   1 2 3 4 5

3. Are you happy with what your family eats the majority of time?

   1 2 3 4 5

4. Do you know how much fat, salt and sugar is too much?

   1 2 3 4 5

5. Do you know which type of food you should only eat occasionally?

   1 2 3 4 5

6. Do you know which foods you should eat most of?

   1 2 3 4 5

7. Are you aware of how your daily meals should be made up in relation to protein, carbohydrate, fruit and veg?

   1 2 3 4 5

8. Your knowledge of how much food is the right amount per meal for your children?

   1 2 3 4 5

9. What do you hope to gain from the session?.....
   ……
   ……
   ……
   .....
   .....
   ……
   ……

Thank you for completing this form, you will be asked to complete a feedback sheet at the end.

Appendix 4

Post course feedback

Name: Date: Time:

Please rate the following statements, CIRCLE YOUR ANSWER - **1 being very poor to 5 being very good.**

10. Your understanding of being healthy.

    1 2 3 4 5

11. Your knowledge of what healthy food is.

    1 2 3 4 5

12. Are you happy with what your family eats the majority of time?

    1 2 3 4 5

13. Do you know how much fat, salt and sugar is too much?

    1 2 3 4 5

14. Do you know which type of food you should only eat occasionally?

    1 2 3 4 5

15. Do you know which foods you should eat most of?

    1 2 3 4 5

16. Are you aware of how your daily meals should be made up in relation to protein, carbohydrate, fruit and veg?

    1 2 3 4 5

17. Your knowledge of how much food is the right amount per meal for your children?

    1 2 3 4 5

18. What did you gain from the session?.....
    ……
    ……
    ……

10. What would have improved the session?
    ……
    ……
    ……
    ……

Thank you for completing this form.

Appendix 5

Takeaway For A Change

1. Do you remember the pizza and burger coming into school? What did they talk to you about?
.....

2. Why should we eat less fat and sugar? .....
.....

3. What foods or drink can you swop to be healthier, for example, brown rice instead of white rice?.....

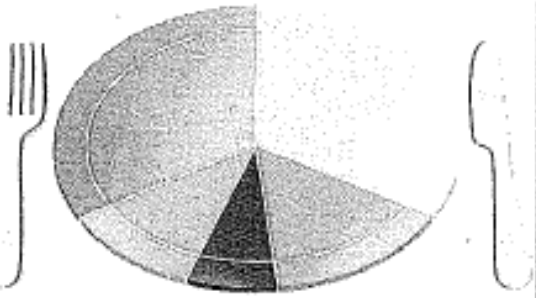
4. What swops have you or your parents made since our visit?
.....

5. Do you know how much food is the right amount for you? Think of the Zimbabwe hand jive?
.....

6. Can you draw lines to where these food groups should be on the plate; the large coloured parts mean we should eat more of this food the smaller coloured parts mean we should eat less.

Fruit and vegetables

the eatwell plate



Bread, rice and pasta

Milk and dairy

Meat, eggs, fish and beans

High fat and sugar foods

2

Certificate of Analysis or Examination carried out under the Food Safety (Sampling and Qualifications) (England) Regulations 2013

To: Steve Wiggins

Metropolitan Borough of Wirral
Trading Standards Division
Town Hall
Brighton Street
Wallasey
Merseyside
CH44 8ED

Report No : AR-13-WP-006398-01
Sample No : 405-2013-33006141
Page : 1 of 2
Status : N: Genuine

I, the undersigned Public Analyst for Metropolitan Borough of Wirral

certify that at on the 18 November 2013

the sample marked:

Date sample Taken	Reference Number, Description, etc	Weight or Measure
31/10/2013	10688 [redacted] Seal No: 01632647 Informal	

was received by me from you

I certify that the sample was analysed by me or under my direction and the results are as follows:

Moisture	51.5	g/100 g
Crude Protein (Nx6.25) (Kjeldahl)	6.99	g/100 g
Ash	1.6	g/100 g
Total fat	13.5	g/100 g
Saturated fatty acids	1.04	g/100 g
Monounsaturated fatty acids	8.41	g/100 g
Polyunsaturated fatty acids	3.31	g/100 g
Total Trans Fatty Acids	<0.1	g/100 g
Sodium	0.103	g/100 g
Energy value (kcal)	255	kcal/100 g
Energy value (kJ)	1070	kJ/100 g
Total Carbohydrate	26.41	g/100 g
Total sugars	0.3	g/100 g

My opinion and observations are:

As regards the energy value of the food, 11.0% was derived from protein, 41.4% from carbohydrates and 47.6% from fat.

The Guideline Daily Amounts for adults include the following :-

Energy 2000 kcal
Fat - 70g
Saturated Fat - 20g
Sugars - 90g
Sodium calculated as salt 6g

The analysis indicated that the sample contained the following percentages of these GDAs per 100g

Energy 12.8%/100g
Fat 19.3%/100g,
Saturated Fat 5.2%/100g,
Sugars 0.33%/100g,
Salt 4.2%/100g,

I further certify that the sample had undergone no change which would affect my results, opinion or observations.

Appendix 7

Certificate of Analysis or Examination carried out under the Food Safety (Sampling and Qualifications) (England) Regulations 2013

To: Steve Wiggins

Metropolitan Borough of Wirral
Trading Standards Division
Town Hall
Brighton Street
Wallasey
Merseyside
CH44 8ED

Report No : AR-13-WP-006404-01
Sample No : 405-2013-33006146
Page : 1 of 2
Status : N: Genuine

I, the undersigned Public Analyst for Metropolitan Borough of Wirral

certify that at on the 18 November 2013

the sample marked:

Date sample Taken	Reference Number, Description, etc	Weight or Measure
11/11/2013	10579 [redacted] Seal No: 01632566 Informal	

was received by me from you

I certify that the sample was analysed by me or under my direction and the results are as follows:

Moisture	56.7	g/100 g
Crude Protein (Nx6.25) (Kjeldahl)	9.20	g/100 g
Ash	1.2	g/100 g
Total fat	3.0	g/100 g
Saturated fatty acids	0.61	g/100 g
Monounsaturated fatty acids	1.50	g/100 g
Polyunsaturated fatty acids	0.73	g/100 g
Total Trans Fatty Acids	<0.1	g/100 g
Sodium	0.389	g/100 g
Energy value (kcal)	183	kcal/100 g
Energy value (kJ)	776	kJ/100 g
Total Carbohydrate	29.90	g/100 g
Total sugars	0.1	g/100 g

My opinion and observations are:

As regards the energy value of the food, 20.1% was derived from protein, 65.4% from carbohydrates and 14.5% from fat.

The Guideline Daily Amounts for adults include the following :-

Energy 2000 kcal
Fat - 70g
Saturated Fat - 20g
Sugars - 90g
Sodium calculated as salt 6g

The analysis indicated that the sample contained the following percentages of these GDAs per 100g

Energy 9.2%/100g
Fat 4.3%/100g,
Saturated Fat 3.1%/100g,
Sugars 0.11%/100g,
Salt 16.3%/100g,

I further certify that the sample had undergone no change which would affect my results, opinion or observations.

X 2

Appendix 8

Certificate of Analysis or Examination carried out under the Food Safety (Sampling and Qualifications) (England) Regulations 2013

To: Steve Wiggins

Metropolitan Borough of Wirral
Trading Standards Division
Town Hall
Brighton Street
Wallasey
Merseyside
CH44 8ED

Report No : AR-13-WP-006406-01
Sample No : 405-2013-33006148
Page : 1 of 2
Status : N: Genuine

I, the undersigned Public Analyst for Metropolitan Borough of Wirral

certify that at on the 18 November 2013

the sample marked:

Date sample Taken	Reference Number, Description, etc	Weight or Measure
11/11/2013	10580 [redacted] Seal No: 01632621 Informal	

was received by me from you

I certify that the sample was analysed by me or under my direction and the results are as follows:

Moisture	51.1	g/100 g
Crude Protein (Nx6.25) (Kjeldahl)	6.61	g/100 g
Ash	2.2	g/100 g
Total fat	13.7	g/100 g
Saturated fatty acids	6.71	g/100 g
Monounsaturated fatty acids	5.20	g/100 g
Polyunsaturated fatty acids	1.06	g/100 g
Total Trans Fatty Acids	<0.1	g/100 g
Sodium	0.404	g/100 g
Energy value (kcal)	255	kcal/100 g
Energy value (kJ)	1070	kJ/100 g
Total Carbohydrate	26.39	g/100 g
Total sugars	0.2	g/100 g

My opinion and observations are:

As regards the energy value of the food, 10.4% was derived from protein, 41.4% from carbohydrates and 48.2% from fat.

The Guideline Daily Amounts for adults include the following :-

Energy 2000 kcal
Fat - 70g
Saturated Fat - 20g
Sugars - 90g
Sodium calculated as salt 6g

The analysis indicated that the sample contained the following percentages of these GDAs per 100g

Energy 12.8%/100g
Fat 19.6%/100g,
Saturated Fat 33.6%/100g,
Sugars 0.22%/100g,
Salt 16.7%/100g,

I further certify that the sample had undergone no change which would affect my results, opinion or observations.

Appendix 9

Certificate of Analysis or Examination carried out under the Food Safety (Sampling and Qualifications) (England) Regulations 2013

To: Steve Wiggins

Metropolitan Borough of Wirral
Trading Standards Division
Town Hall
Brighton Street
Wallasey
Merseyside
CH44 8ED

Report No : AR-13-WP-006388-01
Sample No : 405-2013-33006133
Page : 1 of 2
Status : N: Genuine

I, the undersigned Public Analyst for Metropolitan Borough of Wirral

certify that at on the 18 November 2013

the sample marked:

Date sample Taken	Reference Number, Description, etc	Weight or Measure
08/11/2013	10706 Seal No: 01632541 [redacted]	

was received by me from you

I certify that the sample was analysed by me or under my direction and the results are as follows:

Moisture	54.7	g/100 g
Crude Protein (Nx6.25) (Kjeldahl)	12.1	g/100 g
Ash	1.5	g/100 g
Total fat	6.5	g/100 g
Saturated fatty acids	1.58	g/100 g
Monounsaturated fatty acids	3.23	g/100 g
Polyunsaturated fatty acids	1.35	g/100 g
Total Trans Fatty Acids	<0.1	g/100 g
Sodium	0.493	g/100 g
Energy value (kcal)	208	kcal/100 g
Energy value (kJ)	875	kJ/100 g
Total Carbohydrate	25.20	g/100 g
Total sugars	0.5	g/100 g

My opinion and observations are:

As regards the energy value of the food, 23.3% was derived from protein, 48.5% from carbohydrates and 28.2% from fat.

The Guideline Daily Amounts for adults include the following :-

Energy 2000 kcal
Fat - 70g
Saturated Fat - 20g
Sugars - 90g
Sodium calculated as salt 6g

The analysis indicated that the sample contained the following percentages of these GDAs per 100g -

Energy 10.4%/100g
Fat 32.5%/100g,
Saturated Fat 7.9%/100g,
Sugars 0.55%/100g,
Salt 20.4%/100g,

I further certify that the sample had undergone no change which would affect my results, opinion or observations.

Appendix 10

"Yes I love them, eat them all the time, I have eight children to feed at home so it quick, cheap and easy, but most of all I love the taste." (Participant 205)

"It's a weekend treat, we sit together as a family and watch the telly with our meal." (Participant 53)

"I seldom have a takeaway due to my child's allergies, maybe once every 6 weeks when we have a meet up with friends, save one person having to do all the cooking." (Participant 215)

"In a good week we will have a takeaway every day, I don't like cooking and it means we all eat together." (Participant 17)

"We have about 6 a week, it fits in with our routine and when I can't be bothered cooking or making my child lunch then we have a takeaway." (Participant 127)

"We are most likely to have it as the evening meal once we've gotten in from school as it's quick and easy." (Participant 40)

"The children have a hot lunch at school so we eat it together at night." (Participant 143)

"It can cost up to £20 per visit, that money could buy almost an entire week's shop, if they brought the price down we'd go a lot more." (Participant 139)

"We go on the same day every month, payday; it is the only day we can afford to eat out." (Participant 104)

"I unfortunately have too many takeaway meals, and it fits around my shift times. I have no other choice but to have these meals as it is all that is on offer locally." (Participant 202)

"We have two very young children, we are very tired at the moment, it is just simply ease that means we have takeaways at both mealtimes. It won't be like this forever though." (Participant 218)

"I eat any takeaway foods; Pizza, Chinese, Kebab, Curry." (Participant 19)

"Indian, Chinese, Pizza anything really I like it all." (Participant 126)

"I never have my takeaway delivered, it easier and quicker for me to go and collect it." (Participant 26)

"We love The Healthy One, we all really enjoyed our meal." (Participant 172)

"We tried noodles for the first time and really enjoyed them." (Participant 18, Healthy One)

"It was too far from where we live, it tasted ok however wouldn't travel to use again." (Participant 129, Healthy One)

"It was bland and dry most of it went into the bin." (Participant 147, Healthy One)

"We had a chicken curry which we shared as a family it had more onions than usual however it really improved the taste." (Participant 25, Man Wah)

"We chose it because it is known to be good, we weren't disappointed it was much tastier than other takeaway meals we've had." (Participant 111, Luigi's)

"It was nice, we use there all the time." (Participant 84, Mr Pizza)

"Children have been buying thin crust, wholemeal pizza with (a minimum of two) vegetables on, and enjoying them thoroughly. Before the scheme, they were unaware that fruit and vegetables could be eaten on pizza." (Luigis)

Appendix 11

PARTICIPANT CONSENT FORM

Research Project: **Takeaway for a Change**

Researchers: **Nicola Pulford – Project Lead Officer**
Claire Raynor – Project Officer

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1. I confirm that I have read and understand the information provided for the above study. I have had the chance to think about the information, ask questions and have had these answered satisfactorily. ☐

2. I understand that any personal information I give during the study will be kept private and confidential and any information about my name and address will be removed. ☐

3. I agree to take part in the above study ☐

4. I agree to take part in a follow up questionnaire after I have received your voucher ☐

5. I consent to photographs of my child being taken during workshop and questionnaire sessions which will be used in council publications/ press release Yes/No

Name of Parent/ Guardian _____

Signature of Parent/ Guardian _____

Names of children _____

_____

_____

Date _____

Code _____

Participant information sheet

Research Project: '**Takeaway for a Change'**

Researchers: **Nicola Pulford – Lead Project Officer**
Claire Raynor – Project Officer

You are being invited to take part in the above research study. It is your choice whether you want to join in. Please take time to read the following information and if there is anything that is not clear or if you would like more information please ask one of the project team.

1. What is the purpose of the study?

Rock Ferry Primary School and Children's Centre have been chosen as they are at the heart of a busy community. The aim of this project is to work with takeaway businesses to help them make small changes to offer meals that are just as tasty but are better for us. Takeaway businesses will be given grants to help them make these changes in their business.

Takeaway businesses that agree to take part in the project will be offering these new options of meals and drinks. The options will be made by changing the oil they use to fry food, lowering the amount of salt & sugar in meals and offering fruit drink options.

Free takeaway food vouchers (up to £15 per family) will be given to families who attend Rock Ferry Primary School or Children's Centre, after completing a short questionnaire about takeaway food with one of the project team who visit the school. If you agree to complete a follow-up questionnaire, to let us know what you thought of the new options, you will receive more vouchers (up to £15 per family). All vouchers are to be spent at takeaway businesses in the scheme on the new takeaway options only.

This study will work alongside Wirral's Healthy Eating Award 'Eat Well Wirral'. The study is being funded by Wirral Borough Council Public Health.

1. Do I have to take part?

No. It is up to you if you want to or not. If you do, you will be given this information sheet and asked to sign a participant consent form. If you do not take part you will not be entitled to the free vouchers on offer.

2. What will happen to me if I take part?

You will be asked some questions by one of our project team. Your answers will be recorded on a survey form. The survey sessions will be held in the school hall of Rock Ferry School and Children's Centre, during the week of 18th November 2013. The first 85 families at the children's centre to participate will be entitled to the free food vouchers, all families of Rock Ferry School will be entitled.

3. Are there any risks / benefits involved?

There are no risks, discomforts or inconvenience that should arise from the research. We have received formal permission to conduct the surveys for this project by the Rock Ferry Primary School and our employer, Wirral Council.

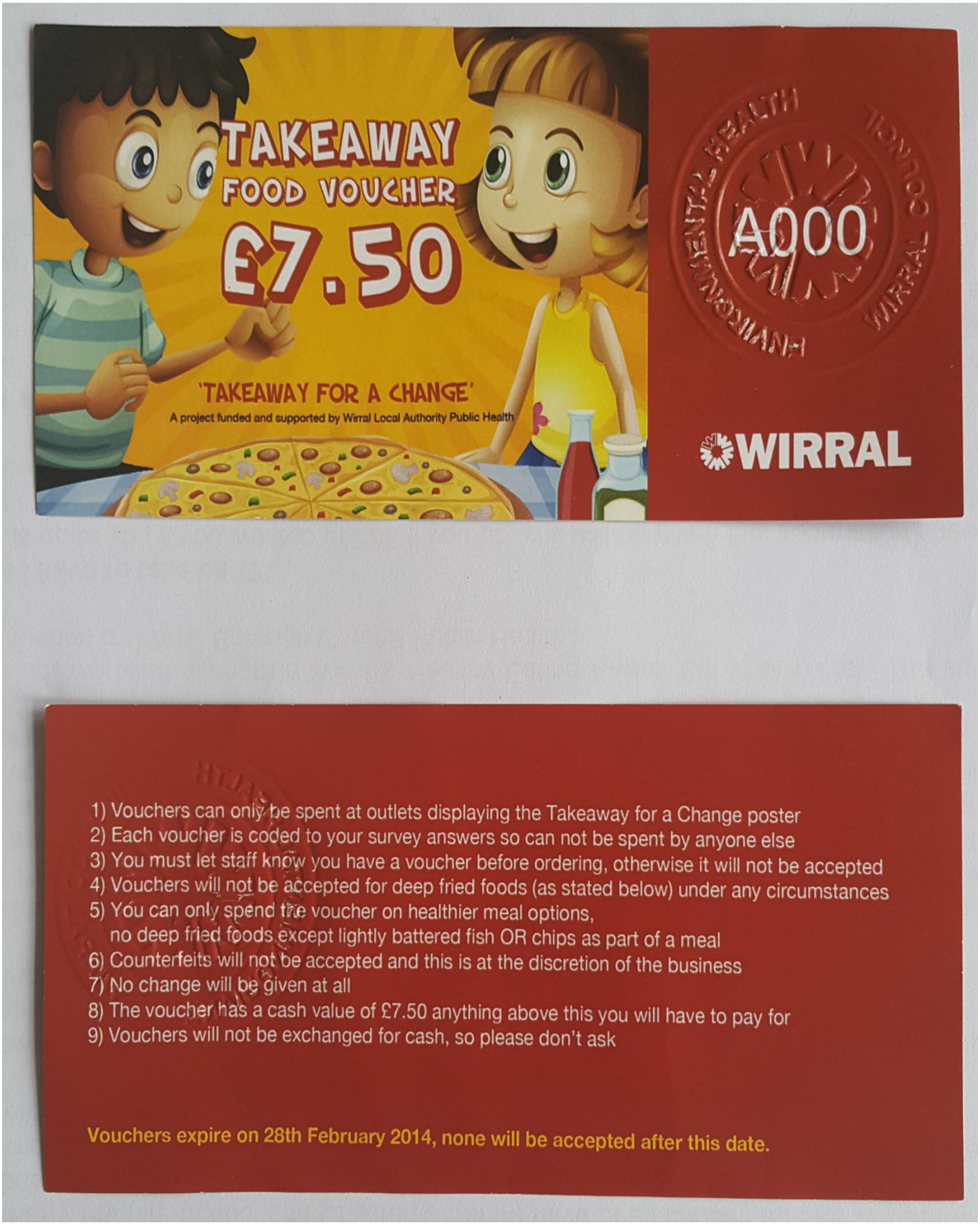
4. Will my taking part in the study be kept confidential?

Information collected will be kept private and confidential, and your personal details will be removed; the school/children's centre you attend will not be identified.

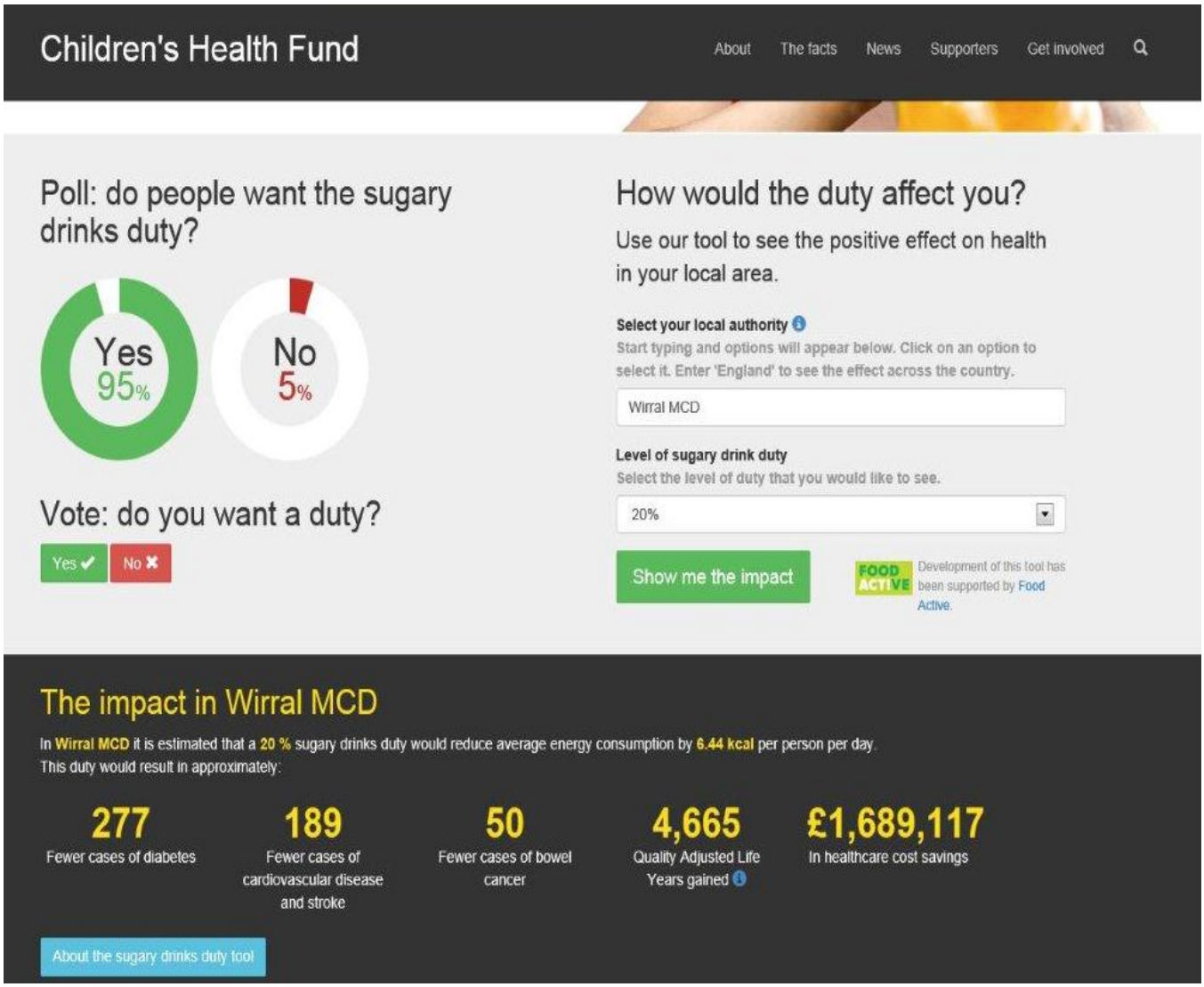
Contact Details of Researcher's

Should you need to do so, the best way of contacting us is on the e-mail addresses below: nicolapulford@wirral.gov.uk or claireraynor@wirral.gov.uk

Appendix 13


TAKEAWAY
FOOD VOUCHER
£7.50
'TAKEAWAY FOR A CHANGE'
A project funded and supported by Wirral Local Authority Public Health
A000
WIRRAL
1) Vouchers can only be spent at outlets displaying the Takeaway for a Change poster
2) Each voucher is coded to your survey answers so can not be spent by anyone else
3) You must let staff know you have a voucher before ordering, otherwise it will not be accepted
4) Vouchers will not be accepted for deep fried foods (as stated below) under any circumstances
5) You can only spend the voucher on healthier meal options,
no deep fried foods except lightly battered fish OR chips as part of a meal
6) Counterfeits will not be accepted and this is at the discretion of the business
7) No change will be given at all
8) The voucher has a cash value of £7.50 anything above this you will have to pay for
9) Vouchers will not be exchanged for cash, so please don't ask
Vouchers expire on 28th February 2014, none will be accepted after this date.

Appendix 14


Children's Health Fund
About
The facts
News
Supporters
Get involved
Poll: do people want the sugary drinks duty?
Yes 95%
No 5%
Vote: do you want a duty?
Yes
No
How would the duty affect you?
Use our tool to see the positive effect on health in your local area.
Select your local authority
Start typing and options will appear below. Click on an option to select it. Enter 'England' to see the effect across the country.
Wirral MCD
Level of sugary drink duty
Select the level of duty that you would like to see.
20%
Show me the impact
FOOD ACTIVE
Development of this tool has been supported by Food Active.
The impact in Wirral MCD
In Wirral MCD it is estimated that a 20 % sugary drinks duty would reduce average energy consumption by 6.44 kcal per person per day.
This duty would result in approximately:
277
Fewer cases of diabetes
189
Fewer cases of cardiovascular disease and stroke
50
Fewer cases of bowel cancer
4,665
Quality Adjusted Life Years gained
£1,689,117
In healthcare cost savings
About the sugary drinks duty tool