Summary table of consultation responses by groups

Acronym	Organisation
ABF	Association of British Food
AC	Age Concern
ACFM	Association of Cereal Food Manufacturers
ASBAH	Association for Spina Bifida and Hydrocephalus
BCCCA	Biscuit Cake Chocolate and Confectionary Alliance
BDA	British Dietetic Association
BDF	Birth Defects Foundation (Newlife)
BINOCAR	British Isles Network of Congenital Anomaly Register
BMA	British Medical Association
BNF	British Nutrition Foundation
BRC	British Retail Consortium
CDC	Centre for Disease Control and Prevention
CRN	Council for Responsible Nutrition
EAC	East Ayreshire Council
FDF	Food and Drink Federation
FOB	Federation of Bakers
FWHM	Friends of Welwyn Hatfield Museums
GFV	Gloucestershire Food Vision
HAS	Help the Aged Scotland
HFMA	Health Food Manufacturers Association
HPANI	Health Promotion Agency for Northern Ireland
HW	Heage Windmill
IFR	Institute of Food Research
IFSBH	International Federation for Spina Bifida and Hydrocephalus
IOB	Institute of Biology
MRC-HNR	Medical Research Council Human Nutrition Research
NABIM	National Association of British and Irish Millers
NAMB	National Association of Master Bakers
NCT	National Childbirth Trust
NCW	National Council of Women

NIFAC	Northern Ireland Food Advisory Committee
PAGB	Proprietary Association of Great Britain
RAND BC	RAND Business Consultancy
RCGP	Royal College of General Practitioners
RCM	The Royal College of Midwives
RCN	Royal College of Nursing
RCOG	Royal College of Obstetricians and Gynaecologists
RCP	Royal College of Physicians
RCPCH	Royal College of Paediatrics and Child Health
SA	Soil Association
SFAC	Scottish Food Advisory Committee
SRHSBs	Society for Research into Hydrocephalus and Spina Bifida's
SSBA	Scottish Spina Bifida Association
TCG	Traditional Cornmillers Guild
VEGA	Vegetarian Economy and Green Agriculture (VEGA)
WFAC	Welsh Food Advisory Committee

INDIVIDUALS			
	Preferred options	**Options rejected**	**Key points**
39 Individuals	Exemption for stone ground	No option rejected	Ensure that traditionally produced organic produced stone ground flour is exempt from fortification for the following reasons: - Young women are unlikely to be helped by additions to wholemeal flour - Older people who are at risk of B12 deficiency are significant consumers of this bread - Existing production processes do not easily allow for fortification - Existing exemption in bread and flour regs - Might result in cessation of production of this type of flour depriving consumers of healthy eating food source
Individual	Option 4	No option rejected	Options 1, 2 & 3 unsuccessful in achieving objective. The masking of vitamin B12 deficiency has been overstated
Individual	Option 2	No option rejected	Prefers option 2 although option 1 is also ok. Reports about people being allergic and having side effects to folic acid in food.
Individual	Option 2	Option 4	Do not agree with medicating population for the sake of a few women. An education campaign would be a good use of taxpayer's money.
Individual	No preferred option	Option 4	Important to be able to buy unadulterated bread. Voluntary approaches don't work and you cannot get sufficient folic acid even from a healthy diet. Folic acid could be added to bread where there is already other 'improvers' but some millers should be allowed to sell unadulterated bread.
Individual	Option 4	No option rejected	Support compulsory fortification of white flour with folic acid
Individual	Option 1 or 2	Option 4	No choice would be inflicted by mandatory fortification
Individual	Option 1 or 2	Option 3 & 4	Object to mass medication especially if non-target groups might be negatively affected. Prefer option 2 and suggest advice is issued through school curriculum. Also suggest folic acid supplements given away for free. Option 1 is also not unethical. Do not agree with option 3. If option 4 is chosen then only mass-produced white bread should be fortified.

Individual	Option 4	No option rejected	Favours option 4 as would target young women. Would also benefit other age groups
Individual	Option 4	No option rejected	Support compulsory fortification of white flour with folic acid
Individual	No preferred option	Option 4	Against mandatory fortification as concerned about detrimental effects later in life. Needs to avoid additives due to allergic reactions. 100% wholemeal flour should be avoided.
Individual	No preferred option	Option 4	No food should be adulterated with chemicals. Shouldn't medicate the majority for the benefit of the minority.
Individual	No preferred option	No option rejected	Concern about impact on osteoporosis and whether general negative effects on the elderly have been considered.
Individual	Option 2	Option 4	Mandatory fortification is a blunderous approach given the numbers of people it involves and would therefore remove choice. Prefer a structured education of pregnant women and free supply of folic acid supplements - option 2
Individual	No preferred option	Option 4	Food is already messed around with enough and folic acid should not be added.
Individual	Option 4	No option rejected	Support option 4 for the following reasons: - difficulty of achieving sufficient folic acid intake through diet alone - potential for reducing suffering and morbidity through reducing NTDs - value added to adult's health through increased consumption of folic acid
Individual	Option 2	Option 1, 3 & 4	Option 2 preferred. Option 1 is clearly not working and options 3 & 4 are too heavy handed nanny state.
Individual	Option 2	No option rejected	Choice for the majority should not be restricted. A price differential in favour of those foods with folate should be encouraged as well as targeted discounts/incentives offered to those women embarking on a pregnancy.
Individual	Option 4	No option rejected	Option 3 - concern about the quantity of food that would be fortified and whether government would subsidise and market it. Option 4 - Concern about risks to the population, consumer choice, medicating healthy people, concern about long term exposure to folic acid
Individual	No preferred option	No option rejected	Should consult arthritis bodies as folic acid can impact on those patients taking methotrexate

Individual	Option 4	No option rejected	Evidence from other countries shows significant reduction in incidence of NTDs following fortification. At appropriate level fortification with folic acid is safe for the majority. Products fortified voluntarily would be at a premium and would not reach the target group i.e. lower income women Most pregnancies are unplanned. Foods fortified with folic acid are bio available.
Individual	Option 4		Has a child with spina bifida as did not know she was pregnant until the first visit by the midwife.
Individual	No preferred option	Option 4	Nothing should be added to food until there is clear evidence of benefits and harmful effects.
Individual	Option 4	No option rejected	Support compulsory fortification of white flour with folic acid
Individual	Option 4	No option rejected	Support compulsory fortification of white flour with folic acid
Individual	Options 2 & 3	Option 1 & 4	More should be done to educate women about folic acid and manufacturers should be encouraged to increase number of products that have folic acid. These products should be clearly labelled. Option 1 is a non-starter as this is an important issue that needs to be addressed. Against mandatory fortification as there is no real benefit to the majority of the population and there is uncertainty about the long-term effects of increased folate intake.
Individual	Option 2	Option 3 & 4	Option 1 should include emphasis to ensure young women are aware that they should take folic acid 3 months before ending contraceptive pill use. Option 2 is preferred as diets are changing and people should be informed about the appropriate dietary choices such as eating folate rich foods and not eating foods such as green potatoes. Option 3 would require additional labelling and there is a risk of over dosage depending on level of fortification. Option 4 is not advisable as in the US there has been a decline in folate levels in women over last 8 years and the UK should not proceed until there is scientifically robust evidence for why things have gone wrong in the US.
Individual	No preferred option	No option rejected	White bread and frozen orange juice were best option in Australia for achieving demographic nutritional improvements.
Individual	No preferred option	Option 4	Biased to weigh the health of one group of people against the other. Is this for political gain?
Individual	Option 2	Options 3 & 4	As the majority of the population are not of childbearing age options 3 & 4 would take away freedom of choice from other members of the population. It would be more sensible to encourage women to take folic acid in advance of pregnancy.

Individual	Option 1	Options 2, 3, & 4	Option 1 targets the correct group and places responsibility on agencies that provide advice. It preserves freedom of choice. Option 2 is unacceptable because of the inclusion of 'a food fortificant'. Option 3 is only acceptable if fortified foods are provided at a uniform cost and are sufficiently available to those who need it. Option 4 is unacceptable due to the restrictions on consumer choice if all flour is fortified.
Individual	Option 2	Option 4	Consumers should have a choice of bread and flour and mandatory fortification might discourage some from eating a balanced diet. Deciding on an appropriate level of fortification might also be a problem. As many people have a mistrust of government initiatives raising awareness of low folic acid intakes might be more effective than forcing people to eat fortified bread.
Individual	Option 2	No option rejected	Should not fortify when the numbers of pregnancies with NTDs are still relatively small. Still learning about potential benefits and risks of folic acid for many other aspects of nervous system function, health and disease. Option 2 would target issue of NTDs in young women Option 3 leaves open possibility of choice for the public Option 4 would still require additional folic acid supplements to be taken and there is misunderstanding & under-estimation of potential long-term risks. Mandatory fortification is both diffuse and hugely disproportionate.
Individual	Option 4	No option rejected	Concerned about slow progress in UK on this issue considering all the evidence available to show the positive effect of fortification implementation in other countries on NTDs. The notion of harm of B12 deficiency is dated to the days prior to treatment of doses of folic acid without blood tests. The planned periconceptual folate option has proved impossible for the majority of at risk pregnancies.
Individual	Option 4	No option rejected	Support compulsory fortification of white flour with folic acid
Individual	Option 4	No option rejected	Support compulsory fortification of white flour with folic acid
Individual	No preferred option	Option 4	There are no apparent health advantages for people in their 60s and a precautionary principle should be adopted. If this proposal is adopted then there should be a range of flours, bread and related foods that are not fortified.
Individual	No preferred option	Option 4	There are options other than fortification, which consider to be an extreme state response. For example there could be a tax on pure flour, or those products not fortified could be labelled as such.

Individual	Option 4	No option rejected	Evidence in the US and Canada shows a reduction in NTDs that is not observed in the same time frame in the UK. No evidence to support the hypotheses that folic acid may be harmful. It would be a very good idea if there was a requirement to also add vitamin B12 to flour. Seems strange that there is no option to add vitamin B12.
Individual	Option 4	No option rejected	Doubt that businesses will introduce fortification on a voluntary basis and if they do they will charge extra which means that the poorer households who need these products are unlikely to benefit.
Individual	Option 4	No option rejected	Support compulsory fortification of white flour with folic acid
Individual	Option 1	Options 3 & 4	Totally against mandatory fortification or addition of any substances to food as it masks B12 deficiency. Anything added to food must show a benefit to the whole population. If manufacturers want to add folic acid to food it should be clearly labelled.
Individual	Option 4	No option rejected	Support compulsory fortification of white flour with folic acid
Individual	Option 4	No option rejected	Potential benefits outweigh any possible risks (in relation to anaemia in the elderly and bowel cancer).
Individual	Option 1	No option rejected	Support this option
Individual	Option 4	No option rejected	Support compulsory fortification of white flour with folic acid
Individual	Option 4	No option rejected	Support compulsory fortification of white flour with folic acid
Individual	Option 4	No option rejected	Flour is already fortified and mills already equip to add an extra nutrient and therefore mills could become birth defects and folate deficiency anaemia prevention factories.
Individual		Option 4	Food should not be interfered with, as there are already too many unnecessary additives. Adding folic acid will take away freedom of choice. For this reason, option 3 would be ineffective. Option
Individual	No preferred option	Option 4	The proposal to add folic acid to bread could be detrimental to a lot of people.
Individual	No preferred option	No option rejected	Depending on option chosen, various recommendations given regarding targeting those with epilepsy and young women.
Individual	Option 4	No option rejected	Support compulsory fortification of white flour with folic acid

Individual	Option 2	Options 1 & 4	Opposed to mass medication where the benefit is for such a small minority. However option 1 is not acceptable, as it does not address the issue appropriately. Option 3 is a possibility if uniform implementation and practical problems could be overcome. The drawbacks of option 2 would need to be evaluated after a fair trial and adjustments to the campaign.
Individual	Option 3	Option 4	Disapprove of the proposal to add folic acid as it takes away freedom of choice. One way to ensure choice is to encourage industry to fortify more foods voluntarily and that the products should be labelled.
Individual	Option 2	Option 1, 3 & 4	Option 4 runs counter to consumer choice and will be ineffective as there is no mechanism to force young women to consume bread. For the same reason, option 3 would be ineffective. Option 1 is evidently not working. Option 2 is the preferred option as it can be appropriately targeted and the results monitored by well-established survey methods.
Individual	Option 4	No option rejected	Option 4 is best way to stand up for rights of unborn child. Carry out screening for B12 deficiency in patients over 60 years Ensure food industry takes steps to reduce the risk of over-dosage of folic acid (margarines etc)
Individual	No preferred option	No option rejected	Consider it important for traditionally produced organic stone-ground flour to be excluded from any legislation requiring the addition of folic acid.
Individual	No preferred option	No option rejected	Concern that some older people might disadvantaged since B12 could be masked and for this reason would like the exemption of traditionally produced organic stone ground flour.
Individual	Option 1 or 2	Options 3 & 4	Prefer option 1 but if it is considered necessary to make change then option 2 should be considered to reinforce existing advice. Option 3 should be rejected, as it will make it difficult for the consumer to know which products to choose, either basic ingredients or manufactured items. Adding it to all flour would remove consumer choice.
Individual	Option 4	No option rejected	Support compulsory fortification of white flour with folic acid
Individual	Option 4	No option rejected	Support compulsory fortification of white flour with folic acid
Individual	Options 1 & 2	Options 3 & 4	Object to the mass medication of the population for the benefit of a few individuals.
Individual	Option 4	No option rejected	Support compulsory fortification of white flour with folic acid
Individual	Option 4	No option rejected	As well as preventing NTDs, fortifying flour will virtually eliminate folate deficiency in the population. Minimal costs of this option.

Individual	Options 1 & 2	Option 4	Options 1 & 2 are only ones necessary. The number of elderly who could be adversely affected far outweighs the numbers of babies affected.
Individual	Option 2	Option 4	Concerned that entire population would be medicated, not just target group and it may set a dangerous precedent. Solution should be to address the problem of young women not taking supplements directly.
Individual	Option 4	No option rejected	Fortification would prevent unnecessary anxiety for pregnant mothers to whom the pregnancy came as a surprise.
Individual	Options 1 & 2	Option 4	To attempt to address the problem by dosing the whole population is inappropriate, particularly as young women will still be required to take folic acid supplements. Also the wider risks to the population in relation to cancer and vitamin deficiencies are not properly known.
Individual	Option 4	No option rejected	Support compulsory fortification of white flour with folic acid
Individual	Option 4	No option rejected	Support compulsory fortification of white flour with folic acid
Individual	Option 1	Option 2, 3 & 4	Option 1 is realistic and adequate for the vast majority of the population. Option 2 has cost implications, which may not attract commensurate benefits. Option 3 is a hit and miss approach and there would be cost implications to industry. Option 4 is unacceptable as it ignores the harm to some sectors of the population and it is morally unacceptable to medicate one sector of the population at the expense of another.
Individual	Option 1 or 2	Options 3 & 4	People should be allowed to make a choice about whether to eat products fortified with folic acid. It is unacceptable to medicate the whole population when the target group is such a small percentage. There are negative effects of folic acid in that in can mask vitamin B12 deficiency and folic acid can cause complications with anticonvulsant drugs for epileptics.
Individual	Option 1 or 2	Option 3 & 4	Content with current advice to continue or supplementary advice to be given although consider that advice should be emphasised to increase consumption of naturally folate rich foods rather than supplements. Consider that some groups might be harmed by a policy of voluntary fortification. There is no justification for mandatory addition of a drug to any foodstuff.

Individual	Option 2	Option 1, 3 & 4	Option 2 is a targeted and appropriate response to the issue. Options 1, 3, 4 would be ineffective in terms of failing to prevent the majority of NTDs. Reject option 3 & 4 as they are associated with number of scientific & ethical uncertainties & potential public health risks including: Increased risk of cancer, particularly colorectal cancer· Decreased cognitive function· Increased risk of compromised immunity· Lack of evidence of protection against coronary heart disease
Individual	Options 1 & 2	Options 3 & 4	Options 3 & 4 are too big an intrusion and manipulation with regard to the scale of the problem
Individual	Options 1 & 2	Option 4	Options 1 & 2 provide the most targeted and cost effective way forward. Option 4 is overkill for 900 babies affected per year.
Individual	No preferred option	Option 4	This option is abhorrent but if it did go ahead it only white sliced bread should be fortified. This option would also miss those from cultural backgrounds who do not consume bread.
Individual	No preferred option	Option 3 & 4	The whole population should not be force fed just because some women do not take supplements
Individual	Option 4	No option rejected	Support compulsory fortification of white flour with folic acid
Individual	Option 2	Options 3 & 4	There should be an increased effort to encourage young women to take supplements. Options 3 & 4 take away consumer choice.
Individual	No preferred option	Option 4	Suffer from IBS and increasing intake of folic acid aggravated symptoms. Concern that products other than bread would be affected thus limiting choice further.
Individual	Option 2	Options 1, 3 & 4	Option 1 is currently failing and options 3 & 4 remove personal choice for little benefit
Individual	No preferred option	Option 4	Object to food being contaminated and concern that there are insufficient studies to show the long term effects of folic acid consumption
Individual	Option 4	No option rejected	The issue of B12 masking is spurious and the UK should implement fortification as soon as possible to reduce NTDs
Individual	Option 2	Option 4	Support option 2 with 1 & 3 next. Do not agree with mass medication under any circumstances.
Individual	Option 4	No option rejected	Support compulsory fortification of white flour with folic acid
Individual	Option 1	Option 2, 3 & 4	Continue with current policy, as government should not encourage one diet over another. Option 4 is completely immoral. Option 3 is immoral, as industry should not be encouraged to add anything to their foodstuffs.
Individual	Option 2	Options 3 & 4	Use of vitamin supplements where necessary should be encouraged. Both options 3 & 4 result in the speculative and unnecessary medication of involuntary recipients and set alarming precedents.

Individual	Options 1 & 2	Options 3 & 4	Options 1 & 2 should be supported. Option 3 should be left to the free market to respond to as it wishes. Option 4 should not be supported as it can trigger epileptic seizures and can cause problems with B12 deficiency. It is also impossible to calculate or estimate the intake of folic acid if it is in every flour product.
Individual	Option 4	No option rejected	Support compulsory fortification of white flour with folic acid
Individual	Option 4	No option rejected	Recommend mandatory fortification of flour at a fortification level of 300mcg/100g flour. A number of suggestions for public education campaign: Integrating into regular sex education curriculum· Provide info in leaflet with contraceptive pills· Provide info leaflets in GP practices about folic acid and vitamin B12· Provide folic acid supplement (200 mcg) with contraceptive pill· Public needs to be informed about benefits of extra folic acid· Urgent need to educate over 40s and medical community about wide prevalence of vitamin B12 deficiency in the elderly. The estimation of risk of folic acid using presence or absence of megaloblastic anaemia in a B12 individual, as a criteria is obsolete. Need to monitor effects on population intakes & prevalence of symptoms associated with potential risks. The safe upper limit, which is based on masking of B12 deficiency, is obsolete. Recommend co-fortification with vitamin B12 (10 mcg per 100g flour).
Individual	No preferred option	Option 4	The whole population should not be forced to ingest something against their will.
Individual	Option 4	No option rejected	Favour this option as other options have not worked and the young women that are hard to reach are most likely to have a low intake of folic acid.
Individual	Option 1	Option 4	Freedom of choice is most important issue
Individual	No preferred option	Options 1, 2 & 3	There is already a precedent in the UK for adding fortificants to food. Evidence from US and Canada shows that there has been a reduction in NTDs following introduction of mandatory fortification. Initial results from the US do not show any significant problems resulting from fortification. UK should continue to learn from and work closely with countries that have already carried out fortification.
Individual	No preferred option	Option 4	Concern about the effects on the rest of the population who are not pregnant. Danger that a precedent is being set.
Individual	Options 1 & 2	Options 3 & 4	No ingredients should be included whether voluntarily or by obligation for any other reason than the necessity of the product. There is no objection to options 1 & 2

Individual	Option 1	Option 4	Education is available to everyone should they choose to take it in. We cannot legislate for those who choose not to take advice. The current practice of advising women should remain in place.
Individual	Option 2	No option rejected	Option 2 is the best option although none of the options are likely to reduce NTDs

NGOS INCLUDING CHARITIES AND OTHER ORGANISATIONS RECEIVING MIXED FUNDING			
Respondent	**Preferred options**	**Options rejected**	**Key points**
AC	Option 4	No option rejected	Support a level of fortification of 300ug/100g flour. Support conditional upon removal of voluntary fortification, monitoring of health effects and policy review within 5 years. Would like safeguards for health of older people in the form of a programme of awareness of Vitamin B12 deficiency, control of overage and warnings on taking folic acid supplements.
ASBAH	Option 4	Option 3	Option 4 will increase folate intake in the target group will work. This option will ensure NTD pregnancies will be reduced avoiding trauma and disability. No evidence of harm from those countries that have already fortified. There would be a net benefit to the general population if voluntary fortification is also controlled. Folate deficient older people would also benefit from increased consumption. There are economic benefits of choosing option 4. Option 3 would be rejected on the grounds that industry is unlikely to fortify voluntarily on a universal or widespread scale. Fortified foods tend to be at a premium and so would not be consumed by the target group.
BDF	Option 4	No option rejected	Despite action by Newlife and Government to encourage increased uptake of folic acid, most women are not taking supplements prior to conception. Many pregnancies are unplanned and in addition many women are confused about the dose of folic acid they should be taking and when they should take it. Populations who already have folic acid added to their food have not suffered any unwanted side effects and may even be experiencing other health benefits such as a reduction in cardiovascular disease.
BINOCAR	Option 4	No option rejected	Advising women to take supplements is of no use when women have an unplanned pregnancy. Adding folic acid to flour could prevent many NTD pregnancies in the UK.

FWHM	No preferred option	No option rejected	Ensure that traditionally produced organic produced stone ground flour is exempt from fortification for the following reasons: - Young women are unlikely to be helped by additions to wholemeal flour - Older people who are at risk of B12 deficiency are significant consumers of this bread - Existing production processes do not easily allow for fortification - Existing exemption in bread and flour regs - Might result in cessation of production of this type of flour depriving consumers of healthy eating food source
HAS	Option 2	No option rejected	Option 2 will avoid the risks to the elderly whilst acknowledging that young women of childbearing age would benefit from greater awareness of the benefits of folate.
HPANI	Option 4	Options 1 & 2	Support this option as public education campaigns have been shown to be ineffective at sustaining supplement intake long term and although education campaigns should continue they are not acceptable as the only policy. 50% of pregnancies are unplanned. Reducing the numbers of NTD pregnancies will have a significant impact on those caring for NTD sufferers. Recognise risk of masking of vitamin B12, those with diabetes and those who are overweight and specific advice should be given to these people. In addition, there are limitations in the techniques for determining B12 deficiency and further work needs to be done to develop these. Fortifying a staple food will also have a worthwhile contribution to the intakes of the general population.
IFSBH	Option 4	No option rejected	Mandatory fortification is necessary to effectively prevent neural tube defects as even with a healthy balanced diet intake is below the necessary level to prevent NTDs. Countries that have implemented fortification have seen a reduction in the level of NTDs but there is evidence to show that campaigns are ineffective. Voluntary fortification would discriminate against those who cannot afford to buy these products, therefore the target group would not benefit. Fortification is a way of maximising consumption for the entire population.

NCT	Options 2 & 4	Options 1 & 3	Option 1 is rejected because it is unlikely to achieve the Government's objective of reducing NTD affected pregnancies. Option 3 is not suitable as an option because those women most at risk of unplanned pregnancies are least likely to choose fortified food or take folic acid supplements. Also current voluntary fortification is resulting in higher than recommended intakes of folic acid in certain groups. Option 4 would not impinge on consumer choice if it is added in line with current bread fortification legislation. Consumer should however be improved by amending current labelling requirements. Steps should be taken to target coeliac sufferers and sufficient information should be given to the public to ensure understanding for the mandatory route. Care must be taken about possible overage and the potential consequences of fortification should be monitored closely, including any increases in B12 deficiency. Option 2 should be used in conjunction with option 4 but not on its own as it has been shown to be ineffective. Greater supplement intake might be achieved by the following: - target high risk groups - work with families, peers and organisations providing access to these groups - include practical steps to make action easier - ensure that advice is embedded in a structure and delivered in a committed and relevant way - be sustained over a long period of time - using a health claim might make it easier for women to identify relevant foods and supplements. - develop wider messages and programmes targeted at young women from lower socio economic backgrounds - incorporating consistent messages in school nutrition programmes and incorporating nutritional advice and support into post-natal care.
NCW	Option 4	No option rejected	Support mandatory fortification of all flours, wheat and corn with the exception of whole-wheat. This will preserve consumer choice whilst promoting the nation's health.
SRHSB's	Option 4	Option 3	Option 1 & 2 should continue in the event of mandatory fortification. Option 3 would not be a viable alternative as it would require consumer knowledge and would be uncontrolled and difficult to monitor. Option 4 is recommended because: - only a quarter of women follow the health advice about folic acid and 50 % of pregnancies are unplanned. - there is no evidence of risks from other countries that have fortified over many years. - older people may benefit from additional folate. - risk of vitamin B12 deficiency is minimal at the doses recommended by SACN. - two expert committees (COMA and SACN) have come out in favour of mandatory fortification.

SSBA	Option 4	Options 1, 2 & 3	Option 1 has little impact in reducing NTD pregnancies in the UK. Option 2 is not effective as it relies too heavily on consumer knowledge and awareness. Option 3 is not recommended as companies will only fortify premium products and so won't reach low socio economic groups. Voluntary measures cannot offer sufficient safeguards in terms of dosage and monitoring and evaluation. Support option 4 alongside control voluntary fortification and advice about supplement use. This would limit the risk of intakes over the recommended upper level with regard to B12 and colon cancer. Scotland has an even greater requirement for fortification as there is an increased prevalence there compared with the rest of the UK. The USA has seen no adverse effects of fortification.
VEGA	Options 2, 3 & 4	No option rejected	Options 2,3 & 4 should be integrated except that those flours not already fortified should be exempt. Flours other than wheat should be considered for those who cannot or do not consume wheat. Appropriate labelling and information should be provided to avoid confusing messages. Flours from GM crops should be fortified but allowances made for exemptions and additions as public attitudes and abstentions develop.
Which	No option supported	No option rejected	Option 2 needs to be developed further in the meantime of any other decision. Crucially it needs to be better explained of the importance of taking folic acid supplements before pregnancies. Option 3 must take into account the need to control voluntary fortification. Also all foods fortified must be clearly labelled. If option 4 is to go ahead, the following should happen first: - better understand the relationship between folic acid levels and cancer risk - practicalities of limiting folate intakes below 1mg per day - a process for monitoring vitamin B12 deficiency in older people needs to be established. - ensure consumer choice can be maintained.

INDUSTRY			
Respondent	**Preferred options**	**Options rejected**	**Key points**
ABF	Options 2 & 3	Options 1 & 4	Option 1 does not address the current issue. Option 2 is important as women will still need to take a supplement so educating women about supplements and folate rich foods will remain essential. Education campaigns should be part of school curriculum's and through doctor's surgeries. Option 3 would allow changes in patterns of consumption to be taken into account and could be regulated through a best practice code which would identify foods most appropriate for fortification. It would also allow consumer choice. The Government would need to support fortification because of the associated negative effects of increased intakes. If option 4 were carried out the target group would still be required to take supplements and this option would not allow consumer choice. There would be additional costs to industry if separate streams needed to be installed.
ACFM	Options 2 & 3	Option 1	Option 1 would be ineffective as a means of increasing folate intake. Option 2 should be implemented by doing more through schools and GPs and educating women about eating folate rich foods. Supermarkets should also be encouraged to display messages on folate rich foods. However evidence shows that supplements are not necessarily the way to achieve an increased folate intake in the target group. Option 3 is likely to be most effective at reaching the target group as breakfast cereals contribute significantly to the diets of young women. Voluntary fortification allows for flexibility if patterns of consumption were to change. A best practice code should be drawn up to include foods recommended for fortification and by how much. This option allows for consumer choice. The scope of option 3 would be restricted by legislation on addition of nutrients and derogations would be needed to overcome this. Option 4 would only be supported if breakfast cereals could continue to be fortified voluntarily, within a code of practice. ACFM believe mandatory fortification is contradictory to public health recommendations to increase consumption of whole grains. There would be an additional cost to industry and mandatory fortification would be against the spirit of harmonisation in the EU. Monetary aspects of this option have not been fully explored e.g. the monitoring of the health impact, costs of increases in twinning with other countries, the negative impact on export markets and implications for the organic produce industry. If mandatory is introduced it should be at a level to allow voluntary to continue. ACMF believe the safety assessment regarding upper intakes is unrealistic and overly conservative.

BCCCA	Options 2 & 3	Option 4	Mandatory fortification would put UK biscuit and cake manufacturers at a disadvantage against their European competitors who use unfortified flour. If it were to proceed the following things should be taken into account: - labelling - if products where flour only forms a small part of the product are required to be labelled it will be misleading to the consumer. - exports - as fortification is not allowed in a number of European countries it could cause rejection of such products. - labelling costs - the requirement to fortify could result in many products being required to change their labels and could incur costs in the region of %5 million for this sector alone. Therefore there appears to be a disproportion in burden and costs and confusion if flour were to be fortified. BCCCA are concerned about information of adverse effects of additional folic acid such as multiple births, colorectal cancer and cognitive decline.
Boots	Options 2 & 4	No option rejected	Support increased education and building on current activity with renewed effort. Consider that mandatory fortification is likely to benefit young women and unplanned pregnancies. Would support proposals to monitor B12 status in the elderly to ensure that there are no adverse effects. Also important to consider the cost implications of mandatory fortification.
BRC	No option supported	No option rejected	BRC are not qualified to make a decision on mandatory fortification but would like the following considerations to be taken into account: - BRC members agree that the most appropriate legislative tool to encompass any new requirement would be the bread and flour regulations. - Flour is more suitable technologically. If bread were chosen a premix would be required and it is likely miscalculations could occur. There are also 50 flourmills against 4000 bakeries so flour fortification would mean that monitoring and enforcement were easier. - Retailers would be willing to discuss reformulation of products currently fortified with folic acid. - Declaration of folate and other vitamins on the ingredients list of all products containing flour could be misleading for the consumer depending how much flour is in the product. - Mandatory fortification will have a big impact of imports and exports. It will be difficult to get suppliers in countries such as France (who are against fortification) to reformulate the batches they produce for export to the UK. Ireland is a particular concern as it would be detrimental for BRC members to end up with different fortification schemes in the two countries. - There is concern about the messages that will be allowed in light of the legislation on nutrition and health claims and believes that an education campaign is crucial - A scheme for monitoring vitamin B12 deficiency should be introduced. - Detailed guidelines should be published alongside any decision taken by Ministers.

CRN	Options 2 & 3	No option rejected	A combination of options 2 & 3 should be used as this allows both supplementation and structured voluntary fortification with a higher level of targeted education. The advantage of food supplements is they deliver folic acid in small and accurate unit-dose forms. By fortifying a wide range of staples any avoidance of a food group would be less likely to compromise folic acid intake. The fact that there are significant differences in bioavailability between foods and supplements must be taken into account. Folates in foods are much less bio available than folic acid in supplements and so to achieve a 400ug intake between 600ug and 800ug of folates might be required. Option 4 will cause barriers to trade in the EU. It is also important that consumer choice and availability of supplements is not affected by the eventual policy.
FDF	Options 2 & 3	Option 1	Option 1 does not address the current issues. Although current steps to educate women do not appear to be working, still believe it is worth pursuing. Industry should be encourages to display messages on folate rich foods and in supermarkets. However, experience shows that supplements are not necessarily the way to achieve an associated increase in folate intake in vulnerable women, as this requires pro-activity and has an associated cost. Option 3 is likely to be effective in targeting the at risk group and industry would like to be able to continue voluntarily fortifying in a responsible manner. There is some concern about the impact of the forthcoming regulation on addition of nutrients and also that the legal responsibility for adding folic acid would fall on industry. This concern could be relieved by the appropriate setting of conditions. If option 4 were introduced industry would wish to continue fortifying voluntarily but within a code of practice. The FSA should have discussions at EU level if the decision is taken for mandatory fortification. Various surveillance programmes should be put in place to mediate the risks of B12 deficiency. The biscuit and cake industry would be put at a significant disadvantage against their European competitors who use unfortified flour. Some manufacturers might have to install separate flour streams with and without folate in order to be able to export products and this would incur significant costs. Labelling of products containing folic acid would also be a significant barrier to trade with other countries. Flour millers expect the cost of adding folic acid to be in the region of £1M
FOB	Option 2	Option 1	Option 1 requires more pro-activity than is currently undertaken and is therefore not acceptable. Option 2 should be carried out whichever option is decided as there is a need to encourage the taking of folic acid supplements and awareness of consumption of folate rich foods. Under present arrangements FOB have not fortified their products to any significant extent. Should be decision for mandatory fortification be taken, it is strongly recommended that it should be done at the flour milling stage as it would be the only practical application of such an option.

Foodaware	Option 4	Option 3	Although dietary intakes are sufficient to meet dietary requirements they are not sufficient to protect against NTDs. Folate supplementation might also be useful for brain function in older people. Mandatory fortification is necessary as those most at risk are the most difficult to reach group. An advantage of option 4 is that only one staple food needs to be fortified thus it will only need to be implemented in one sector of the food industry. Voluntary fortification would need to be restricted so that intakes are not excessive and the issue of those who do not and cannot eat bread needs to be addressed. General support for an education campaign. However there are some concerns about the ethics of extensive fortification for the interests of one group and there is some concern about the adverse consequences on the B12 status of older people. Ongoing monitoring of the folate status of the population as a whole should be implemented. The question of how to offer choice needs to be addressed. Option 3 should be rejected as evidence shows that other initiatives around the world have not been effective and it would also not be easy to control.
HFMA	Options 2 & 4	No option rejected	Favour consumer choice rather than mandatory fortification but in this case there is an overriding public health rationale due to the high incidence of NTDs amongst economically deprived groups and also the evidence from the US that mandatory fortification reduces NTDs but does not increase masking of B12 deficiency. A policy for mandatory fortification should be supported by increased promotion of the importance of taking supplements before women become pregnant. Also a strategy for monitoring and detecting B12 deficiency should be put in place. Voluntary fortification should be prohibited and coeliacs should be given appropriate advice.
HW	No preferred option	No option rejected	Ensure that traditionally produced organic produced stone ground flour is exempt from fortification for the following reasons: - Young women are unlikely to be helped by additions to wholemeal flour - Older people who are at risk of B12 deficiency are significant consumers of this bread. - Existing production processes do not easily allow for fortification - Existing exemption in bread and flour regs - Might result in cessation of production of this type of flour depriving consumers of healthy eating food source.

Kellogg's	Options 3 & 4	No option rejected	Evidence from other countries show that mandatory fortification can co-exist with voluntary fortification, which is a valuable additional help in achieving the desired goal. No adverse effects have been detected in the USA during the 9 years in which their policy of joint mandatory and voluntary fortification have been in place. Fortified breakfast cereals benefit low folate consumers significantly more than other sources currently available. Breakfast cereals are a very minor contributor of excessive folic acid, relative to other sources for those aged 65 yrs and over.
NABIM	No preferred option	No option rejected	Option 1 would have no impact on the flour milling sector or the target population. Some form of education campaign would be required regardless of the option chosen. Voluntary fortification would avoid problems associated with labelling and international trade and would allow consumer choice. However, it would be difficult to achieve widespread fortification, which the Government desires. Mandatory fortification would achieve widespread intakes but would raise concerns about consumer choice. It is considered appropriate that mandatory fortification should be in line with the bread and flour regulations. Other things to take into account are labelling and claims, trade (to ensure fortified products could be exported) and imports (care needs to be taken that manufacturers do not switch to imported unfortified flour, thus going against the policy goal.
NAMB	No preferred option	Option 1 & 3	Option 1 is not viable if the Government wish to tackle the problem. Option 2 appears to have had limited success and has made little or no difference to the incidence of NTDs. There is no evidence to suggest that a more pro active or high profile campaign will encourage young women to take supplements and eat more folate rich foods. It takes a very long time to change public perceptions, attitudes and behaviours, therefore how long would a campaign have to run for. Opposed to option 3 as it should not be for the food industry to decide which foods to fortify. There is also no indication of what foods young women eat and how over consumption can be prevented. In the 90s a HEA campaign to encourage baking industry to fortify was unsuccessful and there was a considerable amount of wastage. Option 4 is the only viable option although the following needs to be taken into account: - bread is not the preferred option as it would be the most costly, difficult to control and monitor and constitutes the biggest administrative burden. Fortifying bread poses problems because of the small amounts involved and it would need to be added by means of a premix. There is the issue of how much testing and monitoring would be required to ensure right levels were being added. There would be disproportionate costs to craft bakers due to the small volumes of bread produces. If the bread route is chosen an option could be to fortify only 800g sliced wrapped bread, involving mainly plant bakeries, although they would likely object to being singled out in this way. - If flour were fortified it would remove a lot of the uncertainties about the amount of folic acid being added.

			The number of flourmills involved is considerably less and therefore testing and monitoring costs will be lower. Systems are already in place in flourmills. - bread-making flour is not a feasible option as there is no such thing. Flour milled for bread can also be used in many other products. To fortify all flour would require a change to the bread and flour regulations. - labelling needs consideration. The scope of the bread and flour regulations could be extended to include folic acid and this would have no cost implications for industry. However it is likely the Government will want to publicise the fact that folic acid has been added. Declaring folic acid in all products would have huge cost implications due to the minute amounts of flour in many products. Declaring all the fortificants in flour will have similar cost implications to only declaring just folic acid. If fortificants are to be declared, consideration needs to be given to the threshold for declaration. Also non pre-packed products and pre-packed products for direct sale need to be considered. - publicising the presence of folic acid and whether it constitutes a claim needs to be considered and guidance would have to be prepared for industry.
Nutragen	Option 1 & 4	No option rejected	Evidence shows that only 50% of pregnancies are planned and therefore support option 4 combined with option 1. Also recommend that a slightly broader fortification target may be required.
PAGB	Options 1 & 2	No option rejected	Support increased promotion of current advice. There is evidence to suggest that the HEA education campaigns in the 90s were successful in increasing awareness of the importance of folic acid supplementation. The Government is currently running an NHS Healthy Start Vitamins Scheme, which is aimed at targeting those in minority groups, and this scheme provides supplements to women throughout their pregnancies.
RAND BC	No preferred option	No option rejected	Provides evidence that health & economic gains of fortification far outweigh the losses for the US population & that an increase in the fortification level in the US deserves further consideration in order to maximise net gains.

SA	Option 2	Option 4	Oppose option 4 as it removes consumer choice, is a disproportionate measure and would bolster the health image of nutritionally poor processed foods. If option 4 is selected organic products should be exempt, as well as wholemeal flour. In addition, the FSA should address food production processes such as the Chorley Wood bread-making process, which results in reduced levels of natural folate. The current advice of option 1 should be improved. In addition birth control pills cause a lowering of folic acid reserves in the body and women should be informed of this disadvantage. In addition the Cochrane Review of 21 studies on folic acid concluded that there is not enough evidence to evaluate whether folic acid supplementation has any effect on the clinical outcomes for mother and baby. Option is not supported as not convinced that fortification is effective. Fortification also forces people to consume synthetic amounts of the synthetic substance their whole lives and can lead to excessive intakes in some. There are particular concerns with masking of B12 deficiency in the elderly. SACN admit that there are concerns about the safety of high intakes of synthetic folic acid but that natural folate is safe. There are also concerns about folic acid being produced from genetically modified sources. Soil Association, supported by Doves, Shipton and FWP Matthews (organic flour millers) are all opposed to the option of mandatory fortification. The long-term effects of synthetic folic acid intake remain unknown. It was noted that in the US there was a decline in folate levels in women following mandatory fortification. Some women have a mutation that reduces the body's ability o metabolise and retain folic acid and this may account for the 200 cases of NTDs per year. Possible methods to improved folate levels in food include: - choosing suitable agricultural cereal varieties as folate levels are highly effected by the choice of variety. - production of white flour removes almost half the naturally present folate. - Chorley-Wood process, which has an accelerated fermentation process, decreases the health benefits of bread. - blanching/freezing operations can destroy up to 50% of folic acid levels. - folic acid is destroyed by food irradiation. - the issue of green potatoes needs to be addressed.

TCG		Option 4	Concerns with option 4 because of the following: - most members do not have the equipment to add folic acid to flour. - it will threaten the integrity of their products. - disproportionate response to the problem - burden and costs of regulation - threat to a traditional artisan craft. Would like the possibility that there is a range of labelled non folic acid bread and flour products, not just wholemeal. There should also be an opt out for small, traditional and organic flour millers, or those who produce less than 650 tonnes of flour per year.
Waitrose	Options 1, 2, 3 & 4	No option rejected	Option 1 should remain in place. Option 2 needs to continue and be developed although it is not the whole solution. Alongside education, retailers should be encouraged to highlight products, which supply folic acid in the diet. Option 3 is already occurring in many products such as breakfast cereals although appreciate that it is not having the desired effect with regard to decreasing neural tube defects. However agree with SACN that mandatory fortification is put in place then voluntary fortification should be discouraged. Those foods already fortified should be allowed to remain. In favour of option 4 as consider flour to be a suitable vehicle for fortification. Recommend that folic acid is added in line with the current bread and flour regulations. If fortification is implemented consideration needs to be given to those who avoid wheat and also vitamin B12 deficiency should be closely monitored.

ACADEMICS AND LEARNED SOCIETIES			
Respondent	**Preferred options**	**Options rejected**	**Key points**
BBSRC	No preferred option		Support desire to reduce NTDs in the target population & appreciate effectiveness of a whole population strategy to achieve this purpose. However recommend caution in this approach given the low target group & the potential for systemic exposure to unmetabolised folic acid which may provoke deleterious effects. Evidence provided on the following areas: - Folic acid and cancer - Folic acid & its inter-relationship with effects of vitamin B12 deficiency - Unmetabolised folic acid
BNF	No preferred option	No option rejected	Option 1: Do not support as poor uptake of folic acid supplements among women prior to conception & because of unplanned pregnancies. Option 2: Not adequate in isolation but would be a necessary adjunct to either option 3 or 4. Option 3: To avoid intakes exceeding UL would be important to achieve control over which foods are fortified & levels of folic acid in supplements. Combined with option 2, this option has potential for success, however: Motivation of millers, manufacturers and retailers to voluntarily fortify food may be limited. Some sectors of food industry expressed concern about potential requirement to stop fortification as many products are manufactured for a global market that does not have restrictions on folic acid fortification. Important to follow SACN's recommendations of monitoring folate status & potential benefits and adverse effects. Would need to target foods eaten by women in socioeconomically deprived areas. Pricing may be an issue if these foods are more expensive than non-fortified options. Option 4: Research concerning folate & cancer still emerging so maybe premature to proceed with mandatory fortification. With regard to B12, seems to be complex interplay, e.g. folate may protect against cognitive decline in people who are folate replete but accelerate decline in those with low B12 status. Another issue is consumer concern about the impact of mandatory fortification on choice & also issues for food industry.
MRC-HNR	Option 4	Options 1 & 2	Support the recommendation for fortification with controls on fortification. This will narrow the distribution of intakes in the population, reducing numbers with low intakes, whilst controlling numbers with intakes above 1mg/day. Options 1 & 2 do not tackle the problem and option 3 risks increasing the prevalence of high intakes.
NS	Option 2 & 4	Options 1 & 3	Option 1 is not supported considering the significant proportion of women who do not plan their pregnancies or follow advice on supplementation. Option 2 should be implemented regardless of which option is chosen.

			Option 3 is rejected because it is unlikely to reach the target groups. Option 4 is acceptable only with the controls recommended by SACN.
Royal Free Hampstead	Option 4	No option rejected	Recommend mandatory fortification as there is no evidence for an increase in vitamin B12 deficiency at the levels recommended.
Trinity College, Dublin	Option 4		Requirement for mandatory fortification should apply to flour for bread use. There would be a 'lag period' until fortification was implemented and this would allow proof of any unacceptable risk to emerge from the USA/Canada. Voluntary folic acid should be restricted but not banned. Very highly fortified foods, such as spreads, that have very variable intakes should not be allowed to be fortified with high levels. Taking supplements is an elective practice. Unfair that people who decide to take folic acid supplements ought to be able to interfere with general public health policy.
University of Oxford	Option 2	Option 4	Targeted publicity techniques could be used more effectively than previous campaign (1996-99). Targeted campaign would only treat the targeted group and not the rest of the population. Reject option 4 for following reasons:· Insufficient knowledge of possible harmful effects. Some evidence of potential harm was published after SACN report. Control of voluntary fortification and advice about supplement use are restrictions on consumer choice and would be very difficult to achieve. Will cause confusion if public told they MUST take folic acid supplements for pregnancy but MUST NOT take at any other time. If mandatory fortification is implemented then monitoring (as recommended by SACN) is essential but concerned that it will be rejected by government as too expensive. Also problem of liability. If folic acid increases the incidence of cancer then fortification would have to be stopped, which would cause alarm in the population. FSA would lose credibility and be held responsible for a wrong decision because they did not ensure that fortification was safe before introducing it. Important to consider whether potential harm to the many exposed to folic acid is outweighed by the benefits to the few. Conclude that if fortification is introduced the FSA has a duty to inform the public that, based on recent research, an increasing number of scientists have some doubt about whether folic acid is good for everyone, and this concern should be made public, particularly to those groups that could be at risk.

HEALTH PROFESSIONALS INCLUDING ROYAL COLLEGES			
Respondent	**Preferred options**	**Options rejected**	**Key points**
BDA	Options 2 & 4	No option rejected	Option 2 should be used alongside option 4 to continue to encourage supplement intake. This should be built into information and activities targeted at young people and back up by adequate training of professionals. Specific advice should be given to those groups that do not consume flour e.g. coeliacs Option 4 is the only effective was to redistribute the folic acid intakes and improve intakes. BDA supports fortification in line with the bread and flour regulations to allow consumer choice. Monitoring of possible high intakes in other groups of the population should occur.
BMA	Option 4	Option 1	Clear that current approach is not working. Recommend mandatory fortification of all flour, not just wheat flour as this will target ethnic minorities and those who cannot tolerate gluten. In order to mitigate against excessive folic acid intake and the associated risk of delayed diagnosis of B12 deficiency it is recommended that voluntary fortification is controlled and that a level of 300ug/100g if used for fortification.
IOB	Option 2	Option 4	Consider option 2 to be the most appropriate. Option 4 is not desirable given the lack of certainty regarding consumer choice of safe levels or of bread consumption between different sectors of the population.
MWF	Option 4	No option rejected	Support the introduction of fortification as experience has shown that advice of this nature is rarely heeded, particularly in deprived areas.
RCGP	Option 4	No option rejected	If mandatory fortification goes ahead there are various areas, which should be monitored. Also note that SACN have flagged up the possibility of B2 deficiency and this should be examined in greater detail before any recommendations can be made.
RCM	Options 1 & 2	No option rejected	Support option 1 but only in conjunction with option 2 as alone it would not be effective. Option 4 is unlikely to be fully effective and supplements would still need to be taken. Compulsory fortification runs counter to the notion that individuals must take personal responsibility for their own health. Costs to industry are also likely to be borne by consumers. Option 3 is unworkable because of the costs to industry and that they may be unwilling to voluntarily engage in the widespread fortification of foods. It might also result in some having a level of folate that is too high.

RCN	Option 4	No option rejected	Fortification of flour will result in the reduction in the incidence of neural tube defects. Introduction of such measures in other countries has yielded enormous benefits.
RCOG	Option 4	No option rejected	Health education strategies have failed to ensure that the majority of women take supplements preconceptionally and therefore would support fortification but with further research into the adverse population effects.
RCP	No preferred option	No option rejected	Fortification is appropriate considering flour is already adulterated although some might object to forced fortification. Concern that ethnic minorities who do not eat bread or coeliacs.
RCPCH	Options 2 & 4	No option rejected	Supports option 2 in so much that it is consistent with FSAs and DHs advice on healthy eating. Supports option 4 with measures to reduce voluntary fortification.

GOVERNMENT INCLUDING OTHER COUNTRIES			
Respondent	**Preferred options**	**Options rejected**	**Key points**
CDC	No preferred option	No option rejected	Not appropriate to use findings by Morris et al (2007) when formulating folic acid fortification policies in countries other than the USA.
EAC	Option 1 & 2	No option rejected	As folate is aimed at a specific area of the population, a combination of options 1 & 2 should take place. Mass medication of the population is questionable.
GFV	Option 4	No option rejected	There are substantial benefits of option 4 in terms of reduced numbers of NTDs. However, improved education campaigns should run alongside fortification. Essential to communicate to all of the risks and benefits and to communicate to industry, in particular artisan bread and pastry companies, the additional costs that might be incurred.
MP for Peterborough	Option 4	No option rejected	This method of increasing folate intakes in the target group will work and will ensure a reduction in the numbers of NTD pregnancies. Combined with controls on voluntary fortification, there will be a net benefit to the whole population, including older people. Evidence shows that rebalancing folate intakes in this way will result in no additional elderly people exceeding upper limits of folate. There has been no evidence from the US to suggest an increase in those diagnosed with B12 deficiency.
MSP (Dundee East)	Option 4	No option rejected	SNP supported the addition of folic acid in Scotland. Many pregnancies are unplanned and folic acid supplements are not taken. There is also evidence of a reduction in NTDs in other countries that have introduced this policy.
MSP (Green for Highlands and Islands)	Option 2	Options 3 & 4	Folate levels in food can be improved if the length of time between harvesting and consumption is reduced. Introducing fortification might dilute messages and awareness about the importance of good quality local food. Options 3 & 4 are more costly, increase B12 masking and bowel cancer and are unlikely to achieve the folate levels needed to reduce risk of NTDs.
MSP (SNP)	Option 4	No option rejected	SNP supported the addition of folic acid in Scotland. Many pregnancies are unplanned and folic acid supplements are not taken. There is also evidence of a reduction in NTDs in other countries that have introduced this policy.

NIFAC	No preferred option	Option 1	There is an overwhelming view that action should be taken. Alternative options should be explored and pilot programmes developed such as the proactive prescription of supplements to non pregnant women. The majority supported mandatory fortification of most standard breads whilst a minority recommended the FSA increased efforts to encourage women to take folic acid supplements and change their diet to increase the consumption of folate rich foods. If mandatory fortification were to go ahead, the Agency should modify and monitor voluntary fortification.
SFAC	No preferred option	Options 1 & 4	Option 1 was deemed unsuitable. Option 2 should be enhanced with a specific campaign for hard to reach groups. However it should not be seen as a stop gap while waiting for further information to become available. Option 3 would be used for commercial gain and not health reasons and there are therefore dangers of over consumption. Option 4 was deemed unsuitable.
WFAC	Option 4	No option rejected	Option 4 was supported provided safeguards recommended by SACN were put in place. A continuing effort to increase awareness of the need for folate was also supported.

	Total number options	Option 1	Option 2	Option 3	Option 4	No option supported
Individuals	**150**	**19 (13%)**	**31 (21%)**	**2 (1%)**	**37 (25%)**	**61 (41%)**
NGOs	**16**	**0 (0%)**	**3 (19%)**	**1 (6%)**	**10 (63%)**	**2 (13%)**
Industry	**33**	**3 (9%)**	**11 (33%)**	**7 (21%)**	**6 (18%)**	**6 (18%)**
Health Professionals	**13**	**1 (8%)**	**4 (31%)**	**0 (0%)**	**7 (54%)**	**1 (8%)**
Government	**11**	**1 (9%)**	**2 (18%)**	**0 (0%)**	**5 (45%)**	**3 (27%)**
Academics	**8**	**0 (0%)**	**2 (25%)**	**0 (0%)**	**4 (50%)**	**2 (25%)**
Total	**231***	**24**	**53**	**8**	**69**	**75**

*This number is greater than the total number of responses as multiple options were supported

Summary table of consultation responses by view

Acronym	Organisation
ABF	Association of British Food
AC	Age Concern
ACFM	Association of Cereal Food Manufacturers
ASBAH	Association for Spina Bifida and Hydrocephalus
BCCCA	Biscuit Cake Chocolate and Confectionary Alliance
BDA	British Dietetic Association
BDF	Birth Defects Foundation (Newlife)
BINOCAR	British Isles Network of Congenital Anomaly Register
BMA	British Medical Association
BNF	British Nutrition Foundation
BRC	British Retail Consortium
CDC	Centre for Disease Control and Prevention
CRN	Council for Responsible Nutrition
EAC	East Ayreshire Council
FDF	Food and Drink Federation
FOB	Federation of Bakers
FWHM	Friends of Welwyn Hatfield Museums
GFV	Gloucestershire Food Vision
HAS	Help the Aged Scotland
HFMA	Health Food Manufacturers Association
HPANI	Health Promotion Agency for Northern Ireland
HW	Heage Windmill
IFR	Institute of Food Research
IFSBH	International Federation for Spina Bifida and Hydrocephalus
IOB	Institute of Biology
MRC-HNR	Medical Research Council Human Nutrition Research
NABIM	National Association of British and Irish Millers
NAMB	National Association of Master Bakers
NCT	National Childbirth Trust
NCW	National Council of Women
NIFAC	Northern Ireland Food Advisory Committee

PAGB	Proprietary Association of Great Britain
RAND BC	RAND Business Consultancy
RCGP	Royal College of General Practitioners
RCM	The Royal College of Midwives
RCN	Royal College of Nursing
RCOG	Royal College of Obstetricians and Gynaecologists
RCP	Royal College of Physicians
RCPCH	Royal College of Paediatrics and Child Health
SA	Soil Association
SFAC	Scottish Food Advisory Committee
SRHSBs	Society for Research into Hydrocephalus and Spina Bifida's
SSBA	Scottish Spina Bifida Association
TCG	Traditional Cornmillers Guild
VEGA	Vegetarian Economy and Green Agriculture (VEGA)
WFAC	Welsh Food Advisory Committee

Option/ question	Comment	Respondent
General comments		
	Depending on option chosen, various recommendations given regarding targeting those with epilepsy and young women.	Individual
Option 1 – do nothing		
For option 1		
	Support this option	11 individuals
	This option should continue in the event of option 4	1 individual SRHSBs Waitrose
	Preserves freedom of choice	Individual
	Support this option combined with option 2 as alone it would not be effective	RCM
	This option if sufficient to address the problem, although could be combined with option 2 if necessary	1 individual SRSHBs Waitrose
	If this option is chosen there should be an emphasis on connecting the commencement of folic acid 3 months before cessation of the contraceptive pill.	1 individual SRSBHs Waitrose
	Option 1 is realistic and adequate for the vast majority of the population.	1 individual SRHSBs Waitrose
	Provides the most targeted and cost effective way forward	Individual

	This option should take place as folate is aimed at a specific area of the population	EAC
	The current advice of option 1 should be improved. In addition birth control pills cause a lowering of folic acid reserves in the body and women should be informed of this disadvantage.	SA
Against option 1		
	Current state of affairs is clearly not working	4 Individuals BMA
	Does not adequately address the problem	2 Individuals ABF MRC HNR NAMB FDF NCT NIFAC
	Ineffective as a means of increasing folate intake and therefore reducing NTD pregnancies in the UK.	ACFM SSBA
	Requires more proactivity than is currently undertaken and is therefore not acceptable.	FOB
	This option is unsuitable	SFAC
	No impact on flour milling sector or target population	NABIM
	Option 1 is not supported considering the significant proportion of women who do not plan their pregnancies or follow advice on supplementation.	NS
	Do not support as poor uptake of folic acid supplements among women prior to conception & because of unplanned pregnancies.	BNF
Option 2 - Campaigns		
For option 2		

	Support this option for following reasons: - allows consumer choice - folate is aimed at a specific area of the population - avoids the risks to the elderly whilst acknowledging that young women of child bearing age would benefit from greater awareness of the benefits of folate. - consistent with FSAs and DHs advice on healthy eating. - education is key to achieving the objective - might be effective than fortification due to mistrust of government initiatives - directly addresses the problem of young women not taking supplements - most targeted and cost effective way forward - A combination of options 2 & 3 should be used and this allows both supplementation and structured voluntary fortification with a higher level of targeted education. Food supplements deliver folic acid in small and accurate unit-dose forms. - should continue in the event of mandatory fortification - should continue regardless of option chosen - evidence to suggest that the HEA education campaigns in the 90s were successful in increasing awareness of the importance of folic acid supplementation. The Government is currently running an NHS Healthy Start Vitamins Scheme which is aimed at targeting those in minority groups and this scheme provides supplements to women throughout their pregnancies. - Important as women still need to take supplements - appropriate response to the issue - justified use of taxpayers money in place of mandatory fortification - This option addresses the issue of freedom of choice and will prevent any allergic or other adverse reactions - appropriately targeted and the results monitored by well established survey methods. - this option should be combined with option 3	22 Individuals Foodaware IOB WFAC EAC HAS RCPCH CRN SRHSBs NABIM NS PAGB ABF Boots BCCCA
	Suggest a more structured education campaign of pregnant women alongside a free supply of folic acid supplements	2 Individuals
	This option is preferable as dietary habits have changed over the year's thus increasing folate intake. However things such as consumption of green potatoes needs to be addressed.	Individual
	The drawbacks to this option should be evaluated after a fair trial and adjustments to the campaign.	Individual
	If this option is chosen advice should emphasize consumption of naturally folate rich foods rather than supplements.	Individual
	Use of vitamin supplements where necessary should be encouraged.	Individual

	This option should be implemented by doing more through schools and GPs and educating women about eating folate rich foods. Supermarkets should also be encouraged to display messages on folate rich foods.	ACFM
	Should be used alongside option 4 to encourage supplement intake. Should be built into information and activities targeted at young people and backed up by adequate training of professionals. Specific information should be given to those groups who do not consumer flour e.g. coeliacs	BDA
	Although current campaigns are not working further campaigns should be pursued such as encouraging industry to display messages on folate rich foods and in supermarkets.	FDF
	Alternative options should be explored such as the proactive prescription of supplements to non pregnant women.	NIFAC
	This option should be enhanced with a specific campaign for hard to reach groups. However it should not be seen as a stop gap whilst waiting for further information to become available.	SFAC
	Folate levels in food can be improved if the length of time between harvesting and consumption is reduced. Introducing fortification might dilute messages and awareness about the importance of good quality local food.	MSP
	Options 2, 3 & 4 should be integrated except that those flours not already fortified should be exempt. Flours other than wheat should be considered for those who cannot or do not consume wheat. Appropriate labelling and information should be provided to avoid confusing messages. Flours from GM crops should be fortified but allowances made for exemptions and additions as public attitudes and abstentions develop.	VEGA
	Option 2 needs to continue and be developed although it is not the whole solution. Alongside education, retailers should be encouraged to highlight products which supply folic acid in the diet.	Waitrose
	Option 2 needs to be developed further in the meantime of any other decision. Crucially it needs to be better explained of the importance of taking folic acid supplements before pregnancies.	Which?
	A price differential in favour of those foods with folate should be encouraged as well as targeted discounts/incentives offered to those women embarking on a pregnancy.	Individual
	Support but only in conjunction with options 3 or 4.	BNF
	Targeted publicity techniques could be used more effectively than previous campaign (1996-99). Targeted campaign would only treat the targeted group and not the rest of the population.	Uni of Oxford

	Improved education campaigns are crucial alongside fortification	GFV
Against option 2		
	Option 2 has cost implications which may not attract commensurate benefits.	Individual
	Evidence shows that supplements are not necessarily the way to achieve an increased folate intake in the target group.	ACFM
	Experience shows that supplements are not necessarily the way to achieve an increase in folate intake in vulnerable women, as this requires proactivity and has an associated cost.	FDF
	Option 2 appears to have had limited success and has made little or no difference to the incidence of NTDs. There is no evidence to suggest that a more pro active or high profile campaign will encourage young women to take supplements and eat more folate rich foods. It takes a very long time to change public perceptions, attitudes and behaviours, therefore how long would a campaign have to run for.	NAMB
	Option 2 is not effective as it relies too heavily on consumer knowledge and awareness.	SSBA
	public education campaigns have been shown to be ineffective at sustaining supplement intake long term and although education campaigns should continue they are not acceptable as the only policy.	HPANI
	Evidence shows that campaigns are ineffective	IIFSBH
Other		
	Option 2 should be used in conjunction with option 4 but not on its own as it has been shown to be ineffective. Greater supplement intake might be achieved by the following: - target high risk groups - work with families, peers and organisations providing access to these groups - include practical steps to make action easier - ensure that advice is embedded in a structure and delivered in a committed and relevant way - be sustained over a long period of time - using a health claim might make it easier for women to identify relevant foods and supplements. - develop wider messages and programmes targeted at young women from lower socio economic backgrounds - incorporating consistent messages in school nutrition programmes and incorporating nutritional advice and support into post-natal care.	NCT

	A number of suggestions for public education campaign:· Integrating into regular sex education curriculum· Provide info in leaflet with contraceptive pills· Provide info leaflets in GP practices about folic acid and vitamin B12· Provide folic acid supplement (200 mcg) with contraceptive pill· Public needs to be informed about benefits of extra folic acid· Urgent need to educate over 40s and medical community about wide prevalence of vitamin B12 deficiency in the elderly.	Individual
Option 3 - Voluntary		
For option 3		
	Manufacturers should be encouraged to increase the number of products with added folic acid. These products should be clearly labelled.	Individual
	Acceptable only if outlets are obliged to provide products at uniform cost and at sufficient availability to those who need them.	Individual
	A possibility if practical problems of industry co-operation and uniform implementation could be overcome.	Individual
	One way to ensure choice is to encourage industry to fortify more foods voluntarily and that the products should be labelled.	Individual
	Government should not be recommending one diet over another	Individual
	Would allow for changes in patterns of consumption and could be regulated through a best practice code. It would allow consumer choice. This option would need Government support due to the negative effects of increased intakes.	ABF
	Likely to be most effective as breakfast cereals contribute significantly to the diets of young women. Also allows for flexibility if patterns of consumption change. A best practice code should be drawn up to include foods recommended for fortification and by how much. The scope of this option would be restricted by legislation on addition of nutrients and derogations would be needed to overcome this.	ACFM
	Support this option combined with option 2	BCCCA
	By fortifying a wide range of staples any avoidance of a food group would be less likely to compromise folic acid intake. The fact that there are significant differences in bioavailability between foods and supplements must be taken into account. Folates in foods are much less bio available than folic acid in supplements and so to achieve a 400ug intake between 600ug and 800ug of folates might be required to be consumed.	CRN

	This option is likely to be effective in targeting the at risk group and industry would like to be able to continue to fortify in a responsible manner. There is some concern about the impact of the forthcoming regulation on addition of nutrients and also that the legal responsibility would fall on industry. This concern could be relieved by the appropriate setting of conditions.	FDF
	Options 2,3 & 4 should be integrated except that those flours not already fortified should be exempt. Flours other than wheat should be considered for those who cannot or do not consume wheat. Appropriate labelling and information should be provided to avoid confusing messages. Flours from GM crops should be fortified but allowances made for exemptions and additions as public attitudes and abstentions develop.	VEGA
	Allows consumer choice	Individual
	Voluntary folic acid should be restricted but not banned.	Individual
	Support this option although some restrictions and considerations may be necessary	BNF
	Evidence from other countries show that mandatory fortification can co-exist with voluntary fortification which is a valuable additional help in achieving the desired goal. No adverse effects have been detected in the USA during the 9 years in which their policy of joint mandatory and voluntary fortification have been in place. Fortified breakfast cereals benefit low folate consumers significantly more than other sources currently available. Breakfast cereals are a very minor contributor of excessive folic acid, relative to other sources for those aged 65 yrs and over.	Kellogg's
	The safety assessment regarding upper intakes is unrealistic and overly conservative.	ACMF
Against option 3		
	Too hit and miss as there is no mechanism to force young women to consume appropriate quantities of bread	2 Individuals
	Premium products would not reach young women	Individual ASBAH SSBA NS NCT

	Cost implications to industry	Individual RCM
	Takes away consumer choice	2 individuals
	Disproportionate response	2 individuals
	Nothing should be added to foodstuffs	2 individuals
	Industry unlikely to fortify on a wide scale	ASBAH RCM
	Dangers of over consumption in some groups and sets alarming precedents	SFAC 3 Individuals NCT Royal College of Midwives
	Used for commercial gain only	SFAC
	Has not been effective in other countries around the world	Foodaware
	Difficult to control and monitor	Foodaware SRHSBs
	Existing fortification is not having desired effect in terms of increasing intakes of folic acid	Waitrose
	Voluntary measures cannot offer sufficient safeguards in terms of dosage and monitoring and evaluation.	SSBA
	This option should be left to the free market to respond to as it wishes.	Individual
	This option will increase the risks of B12 masking and bowel cancer	MSP
	Unlikely to achieve the levels required to reduce numbers of NTDs	Individual MSP
	Should not be left to industry to decide which foods to fortify	NAMB
	HEA campaign to encourage fortification of baked goods, was unsuccessful	NAMB
	No indication of how over consumption can be prevented	NAMB
	Increased labelling would be required	Individual

	Difficult for the consumer to know which products to choose	Individual
	Very highly fortified foods, such as spreads, that have very variable intakes should not be allowed to be fortified with high levels.	Individual
	Associated with number of scientific & ethical uncertainties & potential public health risks	Individual
Other		
	Voluntary fortification would avoid problems associated with labelling and international trade and would allow consumer choice. However, it would be difficult to achieve widespread fortification which the Government desires.	NABIM
	Option 3 must take into account the need to control voluntary fortification. Also all foods fortified must be clearly labelled.	Which?
	Foods already fortified should be allowed to remain in place	Waitrose
	A policy for mandatory fortification should be supported by increased promotion of the importance of taking supplements before women become pregnant.	HFMA
Option 4 - Mandatory		
For option 4		
	Other options will be ineffective in reducing NTDs	2 Individuals
	Issue of masking of vitamin B12 has been overstated	4 Individuals Royal Free Hamsted SRHSBs

	Support compulsory fortification	20 Individuals HPANI 2 MSPs NAMB NCW Nutragen RCOG RCP Royal Free Hamsted
	May benefit other sectors of the population at an appropriate level	3 individuals BDF Foodaware HPANI IFSPH MP for Peterborough SRHSBs
	This action would be independent of choice variables in the target group.	Individual
	This option would increase intakes in the target group and reduce morbidity and suffering caused by NTDs	Individual ASBAH Boots Foodaware HPANI MP for Peterborough GFV
	It is difficult to achieve sufficient folic acid intake from diet alone	Individual Foodaware IFSBH

	Evidence from other countries shows significant NTD reduction following fortification with no adverse effects	3 Individuals BDF HFMA IFSBH MP for Peterborough 2 MSPs RCN SRHSBs
	50% of pregnancies are unplanned	3 Individuals BDF Boots BINOCAR HPANI 2 MSPs Nutragen SRHSBs
	Fortified foods are more bio available	Individual
	If fortified products are introduced voluntarily they are likely to be at a premium and will therefore not reach poorer households.	Individual IFSBH
	Benefits outweigh any possible risks	Individual
	Flour is already fortified so mills are equipped to add additional nutrients.	Individual
	Other options have not worked	Individual
	Young women that are hard to reach are most likely to have low intake of folic acid	Individual

	Support fortification conditional upon removal of voluntary fortification	Age Concern BMA NIFAC WFAC Foodaware HFMA MP for Peterborough MRC HNR NS RCPCH SSBA
	Alongside fortification efforts should be taken to monitor any health effects	Individual AC BDA HMFA NCT Waitrose
	There should be a policy review in 5 years.	AC
	The health of older people should be safeguarded by an awareness programme and warnings on supplements.	AC
	Would provide economic benefits	ASBAH
	No evidence of any harm	ASBAH
	Will effectively redistribute folic acid intakes	BDA MP for Peterborough MRC HNR
	Will allow consumer choice if fortification in line with the bread and flour regulations	BDA
	All flour should be fortified, not just wheat flour as this will target ethnic minorities and those who cannot tolerate gluten	BMA
	Only one staple food needs to be fortified and therefore only one sector of the food industry will be affected	Foodaware

	Specific Advice should be given to those at high risk	HPANI NCT
	Advice on supplementation is rarely heeded, particularly in deprived areas	MWC
	Would not impinge on consumer choice if added in line with current bread fortification legislation.	NCT
	Education strategies have failed to ensure women take supplements periconceptionally.	RCOB
	Two expert Committees (COMA and SACN) have come out in favour of mandatory fortification	SRHSBs
	Flour is a suitable vehicle for fortification	Waitrose
	Support fortification of flour except those that are not already fortified should be exempt.	VEGA
	Stands up for rights of unborn child	Individual
	Support fortification in bread for flour use. There would be a 'lag period' until fortification was implemented and this would allow proof of any unacceptable risk to emerge from the USA/Canada.	Individual
	Recommend mandatory fortification of flour at a fortification level of 300mcg/100g flour.	Individual
	Evidence from US and Canada shows that there has been a reduction in NTDs following introduction of mandatory fortification. Initial results from the US does not show any significant problems resulting from fortification. UK should continue to learn from and work closely with countries that have already carried out fortification.	Individual
	There is evidence to show that health & economic gains of fortification far outweigh the losses for the US population & that an increase in the fortification level in the US deserves further consideration in order to maximise net gains.	RAND BC
Against option 4		

	Disproportionate response to the problem/oppose mass medication for the minority	16 individuals EAC Foodaware SA TCG
	Restricts consumer/freedom of choice	17 Individuals ABF Foodaware SA IOB RCM BNF
	Deals only with symptoms of a much larger problem	Individual
	Concern about effects on other sectors of the population, particularly those with allergies exacerbated by additives	Individual
	Oppose addition of additional substances to bread/food in general	5 individuals
	Oppose addition of substances to food unless there is clear evidence of benefits and harmful effects	Individual
	No real benefits to majority of population	Individual
	Decline in folic acid intakes in women in the US since introduction of mandatory fortification	individual SA
	Should not weigh health of one group against another	Individual
	Addition of folic acid might discourage some from eating a balanced diet	Individual
	A precautionary principle should be adopted	Individual
	There are no health advantages for people in their 60s	Individual
	Fortification can mask B12 deficiency	3 Individuals
	Any fortificant must demonstrate a benefit to the whole population	Individual
	May be negative effects of other sectors of the population	2 Individuals IOB

	This option will be ineffective as there is no mechanism to force young women to consumer bread.	Individual
	The number of elderly affected outweigh the number of babies affected	Individual
	Sets a dangerous precedent	3 Individuals
	Young women will still be required to take supplements	2 Individuals ABF RCM
	Risks about cancer and vitamin deficiencies are not properly known	Individual BCCCA
	Folic acid can cause complications with anti-convulsant drugs for epileptics and can trigger seizures and can aggravate the symptoms of IBS	3 Individuals
	Oppose mandatory fortification	2 individuals SFAC SA(supported by Doves, Shipton and FWP Matthews)
	Would miss those from cultural backgrounds who do not consume bread	Individual RCP
	No studies to show long term studies of folic acid consumption	Individual Soil Association
	Impossible to calculate or estimate the intake of folic acid if it is in every flour product	Individual
	Cost to various sectors of the industry (labelling, installing new streams)	ABF ACFM BCCCA FDF TCG BNF
	Contrary to public health messages on consumption of whole grains.	ACFM

	Against spirit of harmonisation in the EU/barrier to EU trade	ACFM CRN
	Disadvantage UK biscuit and cake manufacturers against European competitors	BCCCA FDF
	Concern about effects on multiple births	BCCCA
	Unlikely to achieve the levels required to reduce numbers of NTDs	MSP
	Bolster health image of nutritionally poor processed foods	SA
	Cochrane Review concludes that there is insufficient evidence to demonstrate whether folic acid supplementation has either a positive or negative effect on the unborn baby	SA
	Fortification forces consumption of artificial substances. SACN admit that there are concerns about the safety of high intakes of synthetic folic acid but that natural folate is safe.	SA
	There are also concerns about folic acid being produced from genetically modified sources.	SA
	Some women have a mutation that reduces the body's ability to metabolise and retain folic acid and this may account for the 200 cases of NTDs per year.	SA
	Costs are likely to be borne by consumers	RCM
	Threaten integrity and artisan craft of traditional products	TCG
	Concern that negative impacts on the elderly population, in particular those suffering from osteoporosis, will not be considered	Individual
	Still learning about potential benefits and risks of folic acid for many other aspects of nervous system function, health and disease.	Individual
	Associated with number of scientific & ethical uncertainties & potential public health risks	Individual
	Support mandatory fortification alongside monitoring of certain areas.	RCGPs

	Insufficient knowledge of possible harmful effects. Some evidence of potential harm was published after SACN report. Control of voluntary fortification and advice about supplement use are restrictions on consumer choice and would be very difficult to achieve. Will cause confusion if public told they MUST take folic acid supplements for pregnancy but MUST NOT take at any other time. If mandatory fortification is implemented then monitoring (as recommended by SACN) is essential but concerned that it will be rejected by government as too expensive.	Uni of Oxford
	Also problem of liability. If folic acid increases the incidence of cancer then fortification would have to be stopped, which would cause alarm in the population. FSA would lose credibility and be held responsible for a wrong decision because they did not ensure that fortification was safe before introducing it. Important to consider whether potential harm to the many exposed to folic acid is outweighed by the benefits to the few.	Uni of Oxford
Other		
	If mandatory fortification is enforced only white bread should be fortified	Individual
	If mandatory fortification is enforced non-fortified flour/other non-fortified products should be available	2 individuals
	Organic produced stone ground flour/small traditional millers should be exempt from fortification	41 individuals HW FWHM TCG SA
	Continue fortifying voluntarily but within a voluntary code of practice	ACFM FDF
	The FSA should have discussions at EU level if the decision is taken for mandatory fortification.	FDF
	Various surveillance programmes should be put in place to mediate the risks of B12 deficiency/risks to the general population	FDF RCOG Foodaware
	White bread and frozen orange juice were best option in Australia for achieving demographic nutritional improvements.	Individual
	If mandatory fortification is enforced it should be done at flour milling stage/in line with Bread and Flour Regulations	FOB NABIM NAMB Waitrose

	If fortification is introduced the FSA has a duty to inform the public that, based on recent research, an increasing number of scientists have some doubt about whether folic acid is good for everyone, and this concern should be made public, particularly to those groups that could be at risk.	Uni of Oxford
	Industry should be informed of any additional costs which may be incurred.	GFV
	Although not qualified to comment on mandatory fortification, the following should be taken into account: - BRC members agree that the most appropriate legislative tool to encompass any new requirement would be the bread and flour regulations. - Flour is more suitable technologically. If bread were chosen a premix would be required and it is likely miscalculations could occur. There are also 50 flour mills against 4000 bakeries so flour fortification would mean that monitoring and enforcement were easier. - Retailers would be willing to discuss reformulation of products currently fortified with folic acid. - Declaration of folate and other vitamins on the ingredients list of all products containing flour could be misleading for the consumer depending how much flour is in the product. - Mandatory fortification will have a big impact of imports and exports. It will be difficult to get suppliers in countries such as France (who are against fortification) to reformulate the batches they produce for export to the UK. Ireland is a particular concern as it would be detrimental for BRC members to end up with different fortification schemes in the two countries. - There is concern about the messages that will be allowed in light of the legislation on nutrition and health claims and believe that an education campaign is crucial - A scheme for monitoring vitamin B12 deficiency should be introduced. - Detailed guidelines should be published alongside any decision taken by Ministers.	BRC
	If option 4 is to go ahead, the following should happen first: - better understand the relationship between folic acid levels and cancer risk - practicalities of limiting folate intakes below 1mg per day - a process for monitoring vitamin B12 deficiency in older people needs to be established. - ensure consumer choice can be maintained.	Which?
	Cost implications of mandatory fortification need to be considered	Boots
	The needs of those who cannot eat bread needs to be addressed.	Foodaware HFMA Waitrose VEGA
	Suggest a slightly broader fortification target might be required	Nutragen

	Flours from GM crops should be fortified but allowances made for exemptions and additions as public attitudes and abstentions develop.	VEGA
	If manufacturers want to add folic acid to food it should be clearly labelled to avoid confusing messages	Individual VEGA
	Only white sliced bread should be fortified if this option were to go ahead	Individual
	There are options other than fortification which consider to be an extreme state response. For example there could be a tax on pure flour, or those products not fortified could be labelled as such.	Individual
	The FSA should address food production processes such as the Chorley Wood bread-making process which results in reduced levels of natural folate. Need to consider other methods to improve folate levels in food including: - choosing suitable agricultural cereal varieties as folate levels are highly effected by the choice of variety. - production of white flour removes almost half the naturally present folate. - Chorley-Wood process which has an accelerated fermentation process decreases the health benefits of bread. - blanching/freezing operations can destroy up to 50% of folic acid levels. - folic acid is destroyed by food irradiation. - the issue of green potatoes needs to be addressed.	SA
	It would be a very good idea if there was a requirement to also add vitamin B12 to flour.	Individual
	Recommend co-fortification with vitamin B12 (10 mcg per 100g flour).	Individual
	Emerging evidence should be taken into account	BNF
	Not appropriate to use findings by Morris et al (2007) when formulating folic acid fortification policies in countries other than the USA.	CDC
	Also note that SACN have flagged up the possibility of B2 deficiency and this should be examined in greater detail before any recommendations can be made.	RCGP

Option 1	Numbers	Percentages
For	28	56%
Against	20	40%
Other	2	4%
Totals	50	
Option 2		
For	37	80%
Against	7	15%
Other	2	5%
Totals	46	
Option 3		
For	11	21%
Against	37	71%
Other	4	8%
totals	52	
Option 4		
For	125	39%
Against	115	36%
Other	80	25%
totals	320	