

A1: Letter of Invitation



12 July 2016

Professor John Coveney Faculty of Medicine, Nursing & Health Sciences Flinders University

Flinders University
Sturt Road, Bedford Park
South Australia 5042
GPO Box 2100
Adelaide SA 5001

Web: www.flinders.edu.au CRICOS Provider No. 00114A

Dear

I write to introduce Ms Bronwyn Ashton who is working with the School of Health Sciences at Flinders University, South Australia. She is undertaking a research project and will be using the results toward the fulfilment of requirements for a PhD. The study being conducted will be reported in a thesis and other relevant publications, and is on the subject of "The future of public health nutrition in food regulation policy: A critical analysis of voluntary fortification policy in Australia". It is hoped that this case study will assist in determining the best strategies for enabling public health professionals to better engage with the food regulation policy process.

Bronwyn would be most grateful if you would assist in this project by volunteering to grant an in-depth telephone interview. While the interview may require about 90 minutes of your time, it would be only on one occasion, and at a time and place of your choosing. Be assured that any information you provide will be treated in the strictest of confidence and that no participant will be individually identifiable in any resulting publication. Of course, your participation is completely voluntary, and you are under no obligation to contribute. You are also entirely free to decline to answer particular questions during the interview, or to discontinue your participation or withdraw the information you provide at any time.

You have been selected to participate in this study because of your considerable expertise and in-depth knowledge in the area of food regulation. Your contact details have been obtained from publically accessible information on the web, or through professional networks. You are being asked to participate as an individual, however, if you would prefer to participate on behalf of your employer/company, please let me know so that we can request their permission.

Since Bronwyn needs to record the interview, she will seek your consent to make an audio recording and to use a transcription of that recording when analysing the data. This will be on the condition that neither your name or identity is revealed in the thesis or any other publication. It may be necessary to make the interview recording available to a professional secretarial service for transcription. However, please be assured that any persons involved will be required to sign a letter of confidentiality stating that your name or identity will not be revealed, and that the confidentiality of all material is respected and maintained.

As this work is being conducted with a team of researchers, it is also possible that the recording and/or transcription of your interview will be made available to other researchers. Again, this is completely voluntary, and will be only on the same strict conditions of anonymity. If you wish, you may read the transcript of your interview before it is used in any data analysis.

Further details about the project and your participation are provided in the attached *Project Information Sheet.* If you are willing to consent to an interview, please complete the *Consent Form* also attached, and return it via email to Bronwyn at ... She will then contact you to arrange a suitable interview time.

Any enquiries you may have concerning this project should be directed to me at the address, telephone or e-mail given above. I thank you for your attention to, and assistance in, this matter.

Yours sincerely

(signed)

JOHN COVENEY

Dean, School of Health Sciences

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project Number 5585). For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on 08 8201 3116, by fax on 08 8201 2035 or by email human.researchethics@flinders.edu.au.

inspiring

ABN 65 524 596 200 CRICOS Provider No. 00114A

A2: Project Information Sheet



Professor John Coveney School of Health Sciences Sturt Rd, Bedford Park SA 5042 GPO Box 2100 Adelaide SA 5001

Web http://www.flinders.edu.au CRICOS Provider No. 00114A

PROJECT INFORMATION SHEET

Project Title: The future of public health nutrition in food regulation policy: A critical analysis of voluntary fortification policy in Australia

Investigators:

Ms Bronwyn Ashton Professor John Coveney Professor Mark Lawrence Dr Cassandra Star

Description of the study:

This research will investigate the development of voluntary fortification policy in Australia and New Zealand between 2002 and 2012, in order to identify opportunities for public health professionals to more efficiently engage with future food regulation policy processes. The study is supported by the School of Health Sciences at Flinders University, and the results will be published in a range of relevant professional publications.

Purpose of the study:

The project aims to understand how and why food regulation policy decisions are made, in order to ascertain the implications for future public health nutrition participation in the policy development process.

What will I be asked to do?

You are invited to take part in an in-depth telephone interview that will take about one to one and a half hours of your time. The questions will be about your experiences with the development of food regulation policy in Australia, with particular reference to voluntary fortification policy developed or reviewed and endorsed by the Food Regulation Ministerial Council between 2002 and 2012.

As the interview is by telephone, it will take place at a time and location of your choosing. If you give your permission, the interview will be recorded, and results transcribed for analysis. You may answer 'no comment' or refuse to answer any of the interview questions, and you may ask for the recording to be stopped at any time during the interview. If you wish, you may request to see the transcript of your interview prior to it being used in any data analysis. Your participation in an interview is completely voluntary,



and you are free to withdraw from the study at any time. You may also withdraw your data at any time.

What benefit will I gain from being involved in this study?

While there is probably no direct personal benefit to you, the sharing of your experiences will hopefully assist public health professionals to more effectively engage with future food regulation policy development processes.

Will I be identifiable by being involved in this study?

All interview recordings will be stored in a secure location that only the research team have access to. A professional transcription service may be used to transcribe recordings, however, the service and their relevant employees, will be required to sign a letter ensuring confidentiality of all materials. Once the interviews have been transcribed, any identifying information will be removed and the transcripts will be stored in a secure location separate from the audio recordings. No identifiable information will be stored with the transcripts or reported in the research in any way. Your comments will not be linked directly to you at all.

Are there any risks or discomforts if I am involved?

The main burden of this research is the time commitment needed for interviews. However, if you wish to, you may choose not to answer all the questions, and you are free to withdraw from the interview at any time without effect or consequence.

The investigators anticipate no other risks from your involvement in this study. However, if you have any concerns regarding anticipated or actual risks or discomforts, please raise them with any of the investigators using the contact details provided above.

How do I agree to participate?

Participation is voluntary. A consent form accompanies this information sheet. If you agree to participate, please read and sign the form, and return it via email to Bronwyn at

If you choose to read the transcript of your interview, you will be asked to sign the consent form again when you are happy with the script.

How will I receive feedback?

Outcomes from the project will be summarised and given to you by the investigators if you would like to see them.

Thank you for taking the time to read this information and we hope that you will accept our invitation to be involved.

This research project has been approved by the Flinders University Social and Behavioural Research Ethics Committee (Project number 5585). For more information regarding ethical approval of the project the Executive Officer of the Committee can be contacted by telephone on 08 8201 3116, by fax on 08 8201 2035 or by email human.researchethics@flinders.edu.au

A3: Participant Consent Form



CONSENT FORM FOR PARTICIPATION IN RESEARCH (by interview)

The Future of Public Health Nutrition in Food Regulation Policy: A Critical Analysis of Voluntary Fortification Policy in Australia.

	over the age of 18 years hereby consent to participate as requested in the letter of uction and information sheet supplied for the research project on food regulation policy.			
1.	I have read the information provided.			
2.	Details of procedures and any risks have been explained to my satisfaction.			
3.	I agree to audio recording of my information and participation.			
4.	I am aware that I should retain a copy of the Information Sheet and Consent Form for future reference.			
5.	I understand that:			
	I may not directly benefit from taking part in this research.			
	 I am free to withdraw from the project at any time and am free to decline to answer particular questions. 			
	 While the information gained in this study will be published as explained, I will not be identified, and individual information will remain confidential. 			
	 I may ask that the recording be stopped at any time, and I may withdraw at any time from the interview or the research without disadvantage. 			
6.	I agree/do not agree* to the tape/transcript* (*delete as appropriate)			
	being made available to other persons in the research team, and on request to other researchers who are considered by the research team to be doing related research, but on condition that my identity is not revealed.			
Partio	cipant's signatureDate			
	fy that I have explained the study to the volunteer and consider that she/he understands is involved and freely consents to participation.			
Rese	archer's name			
Rese	archer's signature Date			
NB:	Two signed copies should be obtained. The copy retained by the researcher may then be used for authorisation of Item 7 if required.			
7.	I, the participant whose signature appears below, have read a transcript of my participation and agree to its use by the researcher as explained.			
Partio	sipant's signatureDate			

APPENDIX B: Methods considered for managing key informant recall problems

Oral History

Method

Oral history is a research method that aims to understand the past and the relation of the past to the present. It does so through the use of in-depth interviews with persons who have lived through events and experiences of interest to the researcher (Gardner 2006).

According to Sacks (2009) the character of oral history projects can be documentary, interpretive, or civic. Documentary projects present and preserve information about a particular topic. Interpretive projects emphasise the meaning and significance of information collected, whilst civic projects progress a specific community goal.

Robertson (2000, p2) defines oral history as consisting of a number of important components:

- a recorded interview in question-and-answer format,
- conducted by an interviewer who has some knowledge of the subject to be discussed,
- with a knowledgeable interviewee speaking from personal participation,
- on subjects of historical interest, and
- which is made accessible to other researchers.

Evaluation

The major epistemological difficulty oral history is its necessary reliance upon memory (Gardner 2006). Whilst the validity of oral history is questioned because of possibly incorrect and fabricated memories, and therefore the evidence collected may contain errors and bias, Robertson (2000, p4) claims it is important to note the following:

- all historical records may contain error and bias and should be used with caution,
- interviewers can focus on specific topics of interest and ask questions of interviewees, but there is no obligation to accept the record as given,
- people most accurately remember what has been particularly important or interesting to them,
- most of what is forgotten is lost soon after an event or experience, but what is remembered after that stage is remembered for a long time,
- in old age, recent rather than long-term memory tends to become impaired,
- information provided can be verified using other means, e.g. questioning an interviewee

- using different angles, or conducting a group interview after individual interviews to compare results,
- truth in the oral history can be contained in the values, attitudes, beliefs and feelings expressed, rather than just in factual accuracy,
- oral history supplements other sources of evidence and does not claim to be the final word in an historical record.

Timeline Follow-Back (TLFB)

Method

Method developed by Sobell and Sobell (1992) for assessing self-reported alcohol consumption. The timeline was developed as a procedure to aid recall of past drinking. Participants are presented with a calendar and asked to provide retrospective estimates of daily drinking over a specified time-period ranging up to 12 months from the interview date. TLFB can be interviewer or self-administered and uses several memory aids to assist with recall. Aids include:

- a visual daily calendar
- key dates on the calendar
- standard drink conversion chart
- black and white days (periods of invariants drinking and extended abstinence)
- discrete events (use of specific events)
- anchor points (drinking behaviour that anchors each event)
- boundary procedure (establishing upper and lower limits for reporting amount consumed)
- exaggeration technique (presenting exaggerated values to help specific definition or descriptions)
- use of any other material participant finds helpful to assist recall (Sobell and Sobell 1992,
 p44).

Evaluation

Technique appears to be extensively empirically evaluated, and shown to be psychometrically sound assessment instrument for obtaining retrospective daily estimates of alcohol consumption (Sobell, Brown et al. 1996).

Limitations relevant to VF study

- only deals with time period up to 12 months prior to interview
- relevance of collecting data relating to personal (drinking) issue vs non-personal public

policy issue of VF?

Lifetime Drinking History (LDH) and Cognitive Lifetime Drinking History (CLDH)

Method

Method noted in TLFB literature that goes beyond the 12-month period of TLFB. LDH is a retrospective interview-based procedure, designed to provide quantitative data on patterns of alcohol consumption starting from the point of onset of regular drinking (Skinner and Sheu 1982; Koenig, Jacob et al. 2009). The method uses a pattern of questioning that asks individuals to describe drinking patterns at the time they first began to drink regularly, and then again for every time their drinking pattern changed significantly. A change in drinking pattern is defined in terms of a change in quantity or frequency of drinking. This enables a retrospective description of alcohol use across the course of a participant's entire life.

CLDH provides a more detailed, cognitive approach to retrospective assessment (Russell, Marshall et al. 1997, p975). Respondents are asked to recall usual activities for specific days of the week during a particular time period, and to think about whether, and what, they drank during those activities. In some ways this combines the TLFB approach with the LDH, but it is more general than the TLFB in that respondents are asked to report what they usually drank, using days of the week to trigger memories of, and association with, usual activities. It also allows respondents to report variability in drinking patterns over a typical week.

In the study by Russell, Marshall et al (1997, p977), before interview, respondents were sent a life event calendar for recording important life events, e.g. marriage, birth of children. At interview, respondents were given a list of alcoholic beverages, as well as a range of models and pictures of different drink sizes. Throughout the interview, respondents were then encouraged to use the life events calendar to remind themselves of what they were doing academically, occupationally and socially during given periods, the activities they engaged in during those periods, and the role and amount of drinking associated with the activities.

Evaluation

Assessment of the LDH has found moderate to fairly high test-retest reliability and validity (Skinner and Sheu 1982; Russell, Marshall et al. 1997). Memory and recall limitations mean the technique has also been examined using concurrent validity methods and prospective assessment of retrospective information from the same individuals (Koenig, Jacob et al. 2009). Results suggest a

good degree of certainty as to the validity and interpretability of the method.

Two versions of CLDH have been tested for reliability (Russell, Marshall et al. 1997). One using fixed time intervals, usually defined as a decade, and the other using "floating" intervals defined by respondents' reports of significant changes in their drinking patterns. Both versions of the CLDH provided highly correlated and comparable estimates of quantity of alcohol consumed and occasions of intoxication over a lifetime.

Retrospective Recall

Description

Retrospective recall involves collecting data about events from the past. It is mainly used to measure and understand change, by adding a dimension of time which can be useful in identifying factors that might have contributed to any change observed (de Vaus 2006). The capacity of a retrospective study to achieve this is dependent on how well an investigator can reconstruct the past from the vantage point of the present, as well as the participant's ability to recall information about the past.

Reliability

Considerable concern is usually associated with retrospective data regarding whether there is greater bias or measurement error than is the case for data about current issues. Measurement error and reliability have generally been shown to have error rates that are related to questions asked, the order of the questions, choices of answer offered, the interviewer, and whether an interview is conducted face-to-face (Beimer, Groves et al. 1991). Improved reliability of recall has been found to occur when:

- using bounded or aided recall methods such as the use of cues, landmark events and context to help date events,
- focusing on particularly important or noteworthy events,
- putting events of interest in the context of a temporal frame of reference,
- ordering questions in chronological order logical sequence, and
- making the task as simple as possible (Dex 1995, p77).

For example, dates of events have been found to be the most difficult for people to remember and should be positioned last in any sequence of questions related to the event. On the whole, the longer the recall period and a further in the past, the lower the reliability of recall data. Although,

differences by participants and salience of the subject matter are important, with highly salient issues being remembered very accurately and consistently irrespective of the time elapsed (Dex 1995, p77). In one study relating to employment, there was insignificant effect on recall error with the length of time over which events were recalled, once the salience of the issue and difficulty had been controlled (Mathiowetz and Duncan 1998).

Post-Then Pre-Evaluation

Method

This type of program evaluation is implemented at one point in time only (Colosi and Dunifon 2006). It is largely used for documenting behaviour change amongst participants of specific intervention programs (Rockwell and Kohn 1989). Participants are queried about a given topic "now" (post-test) and "then" (pre-test) at the completion of an intervention program, rather than both before and after the intervention as is more traditionally the case (Colosi and Dunifon 2006).

First, participants are asked about their current behaviour as a result of the program, and then about their behaviour prior to the program (Rockwell and Kohn 1989). The theory is that after an intervention, a participant's understanding of a subject, and therefore standard of assessing any changes in their own knowledge, skill or attitude is more consistent, and not subject to what is known as response shift bias (Colosi and Dunifon 2006). It is also claimed that a post-then predesign reduces incomplete data sets.

Validity and bias

The post-then pre-method is subject to problems of validity with respect to recall, social desirability bias, effort justification bias, and cognitive dissonance (Colosi and Dunifon 2006). Further, data is only collected from participants that complete an intervention. It is proposed that the best way to address these issues is through the utilisation of a control group. However other methods of increasing credibility include collecting supplementary or complimentary data or adding follow-up data.

Biographical Narrative Interpretive Method (BNIM)

Method

BNIM is a type of life history interviewing that emerged from techniques developed to interview survivors of the Nazi Holocaust (Fielding 2006). It has a therapeutic element that lends itself to use for research on sensitive topics.

The BNIM is as indicated in its title; an interview and analytical method designed to ascertain:

- a biography a person's whole life history or story,
- a narrative how the person tells the story, and
- the interpretive the social interpretation of that story (Corbally and O'Neill 2014, p35).

The interview phase consists of three sub-sessions (Wengraf 2004, p70). In the first interview, only a carefully constructed single narrative question is posed, e.g. please tell me your life's story, including all the events and experiences that have been important to you personally, from wherever you want to begin until the present time. This opening single narrative question is designed to ascertain what participants want to say, not what the interviewer would like them to say (Corbally and O'Neill 2014, p36). The approach is intentionally broad-based, in order to elicit data that empowers individuals to present their narratives on their own terms. Thus, the interviewer mainly listens, takes notes, and doesn't interrupt until the interviewee has finished their story.

The second interview sticks strictly to a sequence of topics and/or words used by the interviewee in the first interview (Wengraf 2004). It is used in order to probe for more narratives about the topics/words. The third interview is used for posing non-narrative questions.

The analytic tool used in the BNIM is formulaic, and follows nine stages for analysing individual cases, and a 10th stage for analysis across cases (Corbally and O'Neill 2014, p37). Whilst the BNIM interview technique can be used to obtain data for analysis using a different analytical method, the BNIM analytic strategy is dependent on the use of the BNIM interview technique for data collection (Wengraf 2001).

Assumptions and limitations

The BNIM is a methodology as well as a method, and therefore has a range of underlying assumptions (Corbally 2011). These particularly relate to social constructionist epistemology and interpretivist paradigm it employs. Thus, the biographical and narrative method assumes that the information provided by interviewees represent a situational interpretation, rather than the 'truth' of what actually happened in the subject of interest.

Whilst it was difficult to find studies that had evaluated the BNIM, or identify work that considered its limitations, it would seem that where there was a need to validate any 'factual' information

provided by interviewees, this would require the inclusion of other 'objective' sources of data when using BNIM. This would also assist with data triangulation.

References

Beimer, P., R. M. Groves, L. E. Lyberg, N. A. Mathiowetz and S. Sudman, Eds. (1991). <u>Measurement</u> Errors in Surveys. New York, Wiley.

Colosi, L. and R. Dunifon (2006). What's the Difference? 'Post Then Pre' and 'Pre and Post'. Secondary What's the Difference? 'Post Then Pre' and 'Pre and Post'. Secondary Colosi, L. and R. Dunifon: 1-6.

Corbally, M. and C. O'Neill (2014). "An Introduction to the Biographical Narrative Interpretive Method." <u>Nurse Researcher</u> **21**(5): 34-39.

Corbally, M. A. (2011). <u>Making Sense of the Unbelieveable: A Biographical Narrative Study of Men's Stories of Female Abuse Professional Doctorate, University of Salford.</u>

de Vaus, D. (2006). Retrospective Study. <u>The Sage Dictionary of Social Research Methods</u>. V. Jupp, (Ed). London, SAGE Publications Ltd.

Dex, S. (1995). "The Reliability of Recall Data: A Literature Review." <u>Bulletin de Méthodologie</u> Sociologique **49**(1): 58-89.

Fielding, N. G. (2006). Life History Interviewing. <u>The Sage Dictionary of Social Research Methods</u>. V. Jupp. London, SAGE Publications Ltd.

Gardner, P. (2006). Oral History. <u>The Sage Dictionary of Social Research Methods</u>. V. Jupp, (Ed). London, SAGE Publications Ltd.

Koenig, L. B., T. Jacob and J. R. Haber (2009). "Validity of the Lifetime Drinking History: A Comparison of Retrospective and Prospective Quantity-Frequency Measures." <u>Journal of Studies</u> on Alcohol and Drugs **70**: 296-303.

Mathiowetz, N. A. and G. J. Duncan (1998). "Out of Work, out in Mind: Response Errors in Retrospective Report of Unemployment." <u>Journal of Business and Economic Statistics</u> **6**(2): 221-229.

National Public Health Partnership (2006). The Language of Prevention. <u>Secondary The Language of Prevention</u>. Secondary National Public Health Partnership. Melbourne, NPHP: 1-8.

Robertson, B. M. (2000). Oral History Handbook. Adelaide, Oral History Association of Australia.

Rockwell, S. K. and H. Kohn (1989). "Post-Then-Pre Evaluation." Journal of Extension 27(2).

Russell, M., J. R. Marshall, M. Trevisan, J. L. Freudenheim, A. W. Chan, N. Markovic, J. E. Vana and R. L. Priore (1997). "Test-Retest Reliability of the Cognitive Lifetime Drinking History." <u>American Journal of Epidemiology</u> **146**(11): 971-981.

Sacks, H. L. (2009). Why Do Oral History? <u>Catching Stories: A Practical Guide to Oral History</u>. D. M. DeBlasio, C. F. Ganzert, D. H. Mould, S. H. Paschen and H. L. Sacks. Athens, Ohio, Swallow Press / Ohio University Press.

Skinner, H. A. and W. J. Sheu (1982). "Reliability of Alcohol Use in Disease: The Lifetime Drinking History and the Mast." <u>Journal of Studies on Alcohol</u> **43**(11): 1157-1170.

Sobell, L. C., J. Brown, G. I. Leo and M. B. Sobell (1996). "The Reliability of the Alcohol Timeline Followback When Administered by Telephone and by Computer." <u>Drug and Alcohol Dependence</u> **42**: 49-54.

Sobell, L. C. and M. B. Sobell (1992). Timeline Follow-Back: A Technique for Assessing Self-Reported Alcohol Consumption. <u>Measuring Alcohol Consumption: Psychosocial and Biochemical Methods</u>. R. Z. Litten and J. P. Allen. New York, The Humana Press Inc.: 41-72.

Wengraf, T. (2001). Qualitative Research Interviewing. London, SAGE Publications Ltd.

Wengraf, T. (2004). Biographic Narrative Interpretive Method (Bnim). <u>Encyclopedia of Social Science Research Methods</u>. M. Lewis-Beck, A. Bryman and T. Liao. Thousand Oaks, CA, SAGE Publications, Inc.: 70-71.

APPENDIX C: PowerPoint presentation to aid key informant memory

Public health nutrition and food regulation policy

A CASE STUDY OF
VOLUNTARY FORTIFICATION POLICY (VFP)
IN AUSTRALIA

Research overview

Aim:

To understand the implications of how and why food regulation policy decisions are made for future public health nutrition participation in, and engagement with, the policy process.

Method:

Qualitative research methods are being used to investigate a case study of VFP in Australia.

Research overview (cont.)

Scope:

The focus of the research is on -

- i. policy rather than standards
- ii. VFP developed between 2002 and 2012

Data:

- i. 2004 and 2009 VFP
- ii. documents used in the development of VFP
- iii. interviews with expert stakeholders

VFP Timeline

Key events between 2002 and 2012:

- Approx. 2002 Ministerial Council (ANZFRMC) decision to review existing fortification policy (1995 Revised Standard A9)
- Approx. 2003 Standing Committee (FRSC) establishes working group to progress policy development
- 1 December 2003 Release of FRSC Public Consultation Paper: Fortification of the Food Supply with Vitamins and Minerals: Consultation Paper on Draft Policy Guidelines

VFP Timeline (cont.)

- 5 February 2004 Stakeholder submissions due
- 28 May 2004 ANZFRMC agreed to a Policy Guideline for the Fortification of Foods with Vitamins and Minerals
- From 2004 Food Standards Australia New Zealand (FSANZ) have regard to policy when assessing applications
- 28 October 2005 ANZFRMC agreed to a workshop for officials to consider and potentially solve a range of issues relevant to voluntary fortification
- 23 October 2009 ANZFRMC endorsed a revised Policy Guideline for the Fortification of Foods with Vitamins and Minerals

More recent VFP developments

Key events since 2012:

- 3 July 2015 ANZFRMC decision to clarify intent of
- 20 November 2015 ANZFRMC agreed on a clarification statement:

The intent of the Policy Guideline for the Fortification of Food with Vitamins and Minerals is to not permit voluntary fortification of a food category, or products within a food category, that are high in salt, sugar or fat, or foods with little or no nutritional value. FSANZ should use recognised nutrition profiling tools and initiatives that are capable of identifying foods that are high in salt, sugar or fat, or little or no nutritional value, to determine which foods are appropriate for fortification.

Your role in VFP?

Would you tell me about your involvement in the development &/or review of VFP in Australia?

APPENDIX D: Key informant interview schedule used to guide interviews

PRIOR TO INTERVIEW

Once key informant has agreed to participate, phone to make appointment time. A few days before interview, send preparatory information (clearly marked copies of 2004 and 2009 policies and PowerPoint presentation).

Day before appointment, email/phone to confirm and check that received information sent. If no longer available, reschedule. If information not received, resend.

Confirm phone number to use for interview. Request they have the information sent, and any other relevant information to hand at the time of the interview.

AT INTERVIEW

Housekeeping:

Thank you for making the time to speak with me today. Your participation in this study is very important, and very much appreciated.

This interview is likely to take about 1 to 1½ hours, so I'd like to make sure you are comfortable.

- Q: Do you need to grab a glass of water, or get a cup of tea or coffee? Go to the bathroom?

 [If yes..... Before you go...If no.....next Q as is]
- **Q:** Have you got the information I sent you a couple of days ago (ppt presentation and VFP's)? [If no..... would you get them while you are away from the phone? / before we get going?]
- Q: Would you please turn your mobile phone off while we talk?

[If no.....would you leave it with someone else to be answered? Or put it on silent?]

Reminder of "rights":

Before we get onto the interview questions, I do need to reiterate that your involvement in this research is completely voluntary. So, if you want to skip a question or stop at any time, just say. The same goes should you want to withdraw from the research, which you can do at any time.

I do really appreciate you giving permission for the interview to be recorded, but again, if you want the recording to be stopped at any time, just ask.

[**OR:** I understand you did **not** want your interview recorded, so I want to confirm that anything you say today will not be taped in any way.]

Finally, please remember that our conversation is confidential, so your name (or where you work) won't be connected with any publication that arises from this work.

Q: Does all this make sense? Do you have any questions?

If you have no further questions, and are ready to proceed, I would like to begin recording. Is that ok with you?

INTERVIEW QUESTIONS AND PROMPTS

<u>General Prompts</u>: That's interesting, tell me more about that? What do you mean by that (term)? ...Can you give me some examples? ...What happened next? ...Why? ...How? ...Who was involved?

<u>Recall Prompts:</u> In your memory, were there ever any occasions when?... Other people I have talked to have mentioned.... Do you recollect anything like that?

For the recording, state:

Name of interviewer and interviewee

Date and time of commencement

Introductory question:

Q: Would you tell me whether you are currently involved in food regulation work, and if you are, what is your role?

If key informants no longer involved in food regulation...

Q: What was your most recent food regulatory role, and how long is it since you have been involved in the area?

Specific prompts:

- i) How many years have you worked in food regulation?
- ii) When did you start/stop working in food regulation?
- iii) What has been your predominant role/position or area of interest in that time?

PowerPoint presentation:

Research outline:

Slide (S) 1 – S3: If you have a look at the first few slides of the PowerPoint presentation, you'll see

a very brief summary of what this research is about.

Essentially, we are exploring the future of public health professional engagement with, and participation in, the food regulatory policy processes (i.e. how best to engage, most efficient use of resources, where best to direct efforts). To achieve this, we need to understand more of the how and why of the policy process, from the perspective of a range of expert stakeholders, such as yourself.

As the research best lends itself to qualitative methods, a case study of VFP in Australia (and NZ) method has been chosen.

So far, I have looked at a number of key documents (e.g. 2004/09 policies, consultation paper, stakeholder submissions) used in the development of VFP. The next step is interviewing a range of food regulation experts such as you.

Research scope:

The focus of the research is on food regulation *policy rather than standards*. (However, if a standard has been particularly pertinent to the development or review of VFP, it is important to investigate the relevance).

The time period of interest for the research is VFP developed **between 2002 and 2012** (Although, if you think other time periods are particularly relevant, please feel free to discuss them).

[If asked why...This time period encompasses the development of the 2004 ANZFRMC fortification policy and the 2009 review. It also covers a decade from the time when the development of food regulatory policy and standards was split between the Ministerial Council and the Food Standard Authority., as well as the change from a Ministerial Council to Legislative Forum, and some relevant Codex developments.]

Q: Do you have any questions about the research so far?

[If asked why they have been chosen.... explain that qualitative research draws on the experience of those who have had direct involvement in a particular phenomenon, and that they were identified as a key player in the development of VF &/or food regulation policy]

S4 – S6: I appreciate that recalling details of proceedings from a number of years ago is extremely difficult, so in slides 4, 5 and 6, I have put together a brief timeline of some key events in the

development and review of VFP from 2002 to 2012. As not all the dates and events are publicly available, I have included a number of "approximate dates" that are presumed to have occurred based on Food Regulation Secretariat documentation re processes and procedures for developing policy guidelines.

Q: Is this timeline helpful for reminding you of the time period I'm interested in?

[If no....is there something else I could provide you with that would help?]

Main interview questions:

Given the nature and scope of the research....

Q1. Would you tell me about <u>your involvement</u> in the development (and/or review) of voluntary fortification policy in Australia (New Zealand)?

Specific prompts:

- i) Are you able to add/subtract to the events in the timeline in the PowerPoint?
- ii) Are you able to elaborate on any of these events, e.g. do you know the reason for policy review in 2009? In what format was it progressed? Who progressed it?
- iii) Do you know of anyone else that was involved in VF policy development/review?
- Q2. What is your understanding of the <u>need</u> for the development (and/or review) of voluntary fortification policy in Australia? Do you think the 2004/09 policy addressed that need?
- Q3. Do you think there any particular <u>contextual factors</u> that have impacted on the decision making involved in VF policy (development/review)?

Specific prompts:

- i) history/background,
- ii) political climate,
- iii) general circumstances or events,
- iv) resources available,
- v) facilitating factors/ catalyst,
- vi) changes to Food Standards Code,
- vii) international developments.

Q4. Would you tell me about <u>your experiences</u> of how stakeholder views have been considered and incorporated into VF policy?

Q: Do you think some voices were listened to more than others?

Q: What strategies would you / your organisation employ to ensure your views were considered and incorporated? Which strategies were most effective?

Looking at the 2004/09 VF policies....

Q5. To what extent do you think voluntary fortification policy in Australia/New Zealand is supportive of public health / nutrition principles?

- a) Why do you think this is/is not the case?
- b) Do your answers change if you consider the 2004 versus the 2009 policy?

Specific prompts:

Provide examples of PHN priorities/objectives, e.g.

Objectives -

- i) promote nutritional health and well-being of populations,
- ii) prevent nutrition-related chronic disease and disability,
- iii) address social, economic and environmental determinants of nutritional health,
- iv) ensure equitable access to nutritious food supply,
- v) ensure environmental sustainability.

Principles -

- i) prevention rather than treatment,
- ii) equity,
- iii) efficacy / evidence-based,
- iv) ethics,
- v) community empowerment.

Q6. Do you have any thoughts on what might be <u>potential opportunities</u> for public health nutrition priorities to be advanced in future food regulation policies (and processes)?

Conclusion:

That's the last of my formal questions.

Q: Is there anything else you would like to add to what you've said?

Anything that I haven't asked about that you think is important?

Q: Is there anyone else you think it would be useful for me to interview?

[If yes ...do you have their contact details?]

Q: Do you have any questions before we finish?

THANK YOU FOR YOUR TIME!

Check contact details for sending **transcript and/or results** if they have indicated they want to see them.

Check contact details for other KI names mentioned.

For the recording:

Note the time the interview ended.

APPENDIX E: Criteria for categorising stakeholder groups

Citizens

- 1. An individual or organisation that is:
 - (i) a member of the general public, OR
 - (ii) representing the general public or consumers, OR
 - (iii) representing a *sub-group* of the general public (such as women, or people with a disability), OR
 - (iv) an individual professional or a group of professionals that is altruistic in intent toward the general public or a sub-group of the general public.
- 2. The group or organisation is not fully funded by any sector of the food industry or government. Sponsorship is permitted as long as it does not constitute the majority of operating costs.

Government

- 1. Any department of local, state/territory or federal government within Australia or New Zealand.
- 2. Fully funded by the relevant government.
- 3. Submissions must be written as representative of the relevant government department's views, and not that of an individual using the letterhead or address of their workplace rather than their home address. For example, the submission must use language such as "Queensland Health considers voluntary fortification to be..." rather than "I think/my view is that voluntary fortification should...".

Public Health

<u>Note</u>: In this category, public health is used as a broad, overarching term that incorporates specific fields of public health, such as public health nutrition.

- 1. An *individual* public health professional OR an *organisation* representing public health professionals or undertaking public health related activities.
- 2. The individual or organisation must have an ideology, aim and/or practice that are consistent with the definition of public health below.
- 3. The organisation must not be fully funded by any sector of the food industry or government. Sponsorship is permitted as long as it does not constitute the majority of operating costs.

<u>Definition of Public Health</u>: The art and science of public health practice... seeks to improve health and wellbeing through approaches which focus on whole populations. Priorities are to reduce disparities in health status between social groups and to influence the underlying social, economic, physical and biological determinants. Public health practice informs and empowers individuals and communities, and creates healthy environments through the use of evidence-based strategies, best practice and quality improvement approaches, and effective governance and accountability mechanisms (National Public Health Partnership 2006, p5).

Industry

- 1. Any individual or organisation that is a:
 - (i) Primary producer of food, OR
 - (ii) Manufacturer of food and/or drink products, OR
 - (iii) Wholesale or retail supplier/seller of food and/or drink products, OR
 - (iv) Marketer or advertiser of any food and/or drink product, or food related industry, OR
 - (v) Lobby group/association/organisation acting for, or on behalf of, any of the above industries.
- 2. Fully funded by industry profits or industry membership fees.

APPENDIX F: Major representations of the problem of voluntary fortification in the key document data presented by stakeholder group

Table F.1: Citizen Submitters (n=9)

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
HEALTH OF PUBLIC HEALTH	The problem of voluntary fortification is about: protecting public health and safety; improving food-related health problems of all age groups; demonstrated population health need (i.e. Codex principles) - should not be for 'potential nutritional benefit'; minimising negative effect on public health (e.g. from excess nutrient intake, unknown and long-term effects on health, chronic disease).	RESPONSIBLE fortification is for health reasons IRRESPONSIBLE fortification is for commercial gain Related to problem representation of RISK Also related to problem representation of CONSISTENCY WITH OTHER POLICIES (specifically, national nutrition policy)	"I agree with the high order policy principles, particularlyprotecting public health and safety and promoting consistency with the nutrition policies and guidelines" (C1) "The key issue for consideration in relation to voluntary fortificationis improvement in health of all age groups of New Zealanders" (C2) "(Submitter) shares your concerns for the food-related health problems of many New Zealanders" (C2) "This supports the principle of responsible fortification for public health rather than commercial gain" (C3) "We support fortification where there is a demonstrated need and not merely a potential population nutritional benefit" (C4) "(Submitter) does not believe that a 'potential' health benefit is sufficient reason to permit voluntary fortification. There must be a demonstrated need and evidence that voluntary fortification will address this." (C5) "(submitter) supports a fortification policy for both mandatory and voluntary fortification, consistent with Codex principles" (C5)
RISK	Voluntary fortification is represented as a	Related to problem	"Foodsshould not be able to be fortifiedif there is

Main Problem	Meaning	Child nodes /Related	Examples of use
Representation	problem of risk: to public health and safety; for consumers (?presumably of health problems?); of excessive nutrient intake; of unknown and long-term effects on health; of increased consumer confusion and deception from increased choice and variety of voluntarily fortified 'junk' foods.	representations of HEALTH, MISLEADING CONSUMERS and CONSUMER CHOICE. Need compulsory MONITORING, LABELLING and a strong REGULATORY FRAMEWORK to minimise risks. Lack of dietary data and SCIENTIFIC EVIDENCE to support policy change and with which to measure and monitor risk of increased nutrient intake. Using CODEX PRINCIPLES will minimise risk to public health and of consumer deception.	any risk for consumers" (C2) "(Submitter) prefers option 3where there is reasonable certainty of minimal risk to public health" (C2) "There must be a low risk of excess vitamin or mineral intake or adverse nutrient interaction for all population groups. However, in some cases the long-term effects on public healthare unknown. Policy options must be considered within a sound risk-based approach." (C4) "While liberal fortification policy will provide consumers with an increased range of products this does not necessarily outweigh the risks associated with fortifying foods" (C5) "The greater the range of foods that can be fortified."
MISLEADING AND DECEIVING CONSUMERS	With respect to: the need for, and "healthiness" of, voluntarily fortified foods; what is a balanced diet and what foods are good for health; specific nutrients being portrayed as "magic bullets";	related to problem representations of HEALTH and LABELLING Consumers need PROTECTION from misleading and deceptive conduct by food and marketing	"It is important that consumers' perception of a well-balanced diet is not altered to view foods as a 'magic bullet' solution" (C4) "Foods high in fat, sugar and sodium should not be permitted to be fortified because consumers may be misled about 'healthy' food choices" (C4) "If a fortificant is not able to be used by the body

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
	bioavailability of nutrient.	industries	consumers will be misled" (C4)
	Marketing and labelling of voluntarily fortified foods is considered misleading and causes consumer confusion. Education campaigns cannot negate deception of marketing campaigns.		"Fortification and the subsequent marketing of fortified foods has the capacity to mislead or deceive consumers. The use of health and nutrient claims to sell these products will send the message to consumers that they need to consume fortified foods in order to be 'healthy', and that a fortified product is 'better for you' than the non-fortified equivalent. The prevention of misleading and deceptive conduct must become a high order principle if consumers are to be confident that fortification is in their best interests, not just in the interests of the food industry." (C5) "If the food is fortified with a vitamin or mineral that is not bioavailable than it will not be effective in addressing a demonstrated health need, and will mislead consumers as to the health benefits associated Unless the nutrient is bioavailable there is no health benefit in fortifying" (C5)
			"One of the most important key public health issues omitted from discussion is the fact that widespread fortification could severely distort consumers perceptions of nutrition and what constitutes a healthy diet." (C5) "No consumer education will ever compare with the
			persuasive marketing techniques that are often used to convince consumers that they need a particular product" (C5)
			"Fortification policy must protect consumers from inappropriate voluntary fortification and ensure that

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
			any marketing or labelling does not mislead consumers about the virtues of a product either in its own right or when compared to other products." (C5)
ECONOMIC BENEFIT FOR INDUSTRY	Voluntary fortification is portrayed as a HEALTH issue, but in reality it is a problem of providing economic benefit for industry. Voluntary fortification will provide significant economic benefit for the food industry by exploiting consumer confusion and misleading consumers with respect to the health benefits of fortified foods.	reasons IRRESPONSIBLE fortification is for commercial gain	"This supports the principle of responsible fortification for public health rather than commercial gain." (C3) "Not voluntary fortified for commercial gain/interest only" (C3) "Manufacturers' decision to voluntarily fortify foods is ultimately a business or marketing decision" (C5) "Producing the water under standard 2.9.4 allowed the manufacturer to get the product into the marketplace and reap the economic benefits as quickly as possible." (C5) "Decisions on product development and innovation (are) not primarily about improving the health of consumers, but about establishing a new and possibly niche product in order to gain a competitive marketing and financial edge." (C5)
CONSUMER CHOICE	Maintaining a range of both fortified and non-fortified foods for consumers to choose from. Also, refuting the argument from the consultation paper that consumer choice	Increased choice means increased RISK of consumer confusion and chronic disease.	"Limiting food vehicles may ensure consumer choice is maintained if consumers do not wish to buy a fortified food." (C4) "This optionalso maintains a range of fortified foods for consumer choice." (C4)

Main Problem Representation	Meaning	Child nodes / Related Problem Representation	Examples of use
	is a key driver for a change in voluntary fortification policy.		"The consultation paper states that consumer choice is the key driver for voluntary fortification. Increased choice should not be the driving force behind fortification The driving forceshould be demonstrated health need, restoration or nutrition equivalence." (C5)
LABELLING	It is difficult to determine whether labelling is a problem representation emanating directly from submitters, or whether it emerges as a result of specific questions in the consultation paper. Compulsory labelling considered important to protect consumers and assist them to make informed choices.	Labelling related to problem representations of MISLEADING CONSUMERS and CONSUMER CHOICE.	"The listing of any and all additives to food should be compulsory." (C2) "Clear information on nutrition panel. Provision of information should be compulsory." (C3) "Fortified foods must be labelled. However, our concern is that manufacturers may use labelling to lead consumers tohave unrealistic expectations Therefore, we are opposed to health claims being allowed on fortified food." (C4) "When consumers are choosing a food product they must be aware if the product is fortified The label must specify the amount of the fortificantthe % of the RDIwhether it is a natural source of the nutrient or if it has been fortified." (C5)
INTER- RELATIONSHIP WITH OTHER POLICIES	This is a smaller theme, but something raised by a few submitters. Policy most commonly referred to is that of national nutrition policy and dietary guidelines, as well as Codex principles. However, the relationship between policies for voluntary fortification, health claims and food type dietary supplements (FTDS) are	Related to problem representation of HEALTH	"I agree with the high order policy principles, particularlypromoting consistency with the nutrition policies and guidelines." (C1) "We are pleased that the consultation paper recognises the inter-relationships between the FTDS, novel foods and nutrition and health claims policy development processes" (C4) "Suitable food vehicles in line with national nutrition

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
	also raised.		policies" (C4)
			"(Submitter) supports the fortification policy based on the Codex principles for fortification." (C5)
			"Policy on voluntary fortification shouldbe consistent with nutrition policy and dietary guidelines" (C5)
			"It is difficult to discuss the issue of fortification without considering policy on food-type dietary supplements and health claims" (C5)

Table F.2: Government Submitters (n=10)

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
PUBLIC HEALTH	Policy problem representation is about: health, development and well-being of children and families; demonstrated public health need or benefit (Codex principles); not 'potential nutritional benefit'; "serious" nutrition and health-related issue for addressing nutrient deficiency at the population level; nutrition/health need must be demonstrated by up-to-date scientific evidence; population health, not individual health; not meant for addressing obesity and chronic disease.		"The continued fortification of some food vehicles should be managed under government regulationto address public health issues or deficiencies." (G3) "Voluntary fortification is permitted where a demonstrated population nutritional need (as per Codex principles), can be established." (G4) "Current Codex principles on fortification have a proven track record in protecting public health and safety" (G4, G8) "The major concern from a public health perspective is the potential to alter dietary patterns further away from core, fresh foods and towards 'extra' foods" (G4, G8) "Fortification is not generally considered part of public health initiatives to reduce the prevalence of obesity, cardiovascular disease and diabetes. However, there is a risk that voluntary fortification may actually increase the risk of these diseases because less healthy foods could be marketed as 'healthy' because of the added nutrients." (G6) "The decision to fortify should be made on public health groundsnot on commercial groundsfortification is a serious health-related decision, which should be made on health grounds." (G6) "Promotion of public health and safety needs to be

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
			given a great deal of emphasis in the high order principles. Protecting the health and safety of the public is the primary consideration for fortification of foods. Improved public health outcomes and net benefit to the community are key." (G9)
			"An improved public health nutrition outcome must be demonstrated before voluntary fortification of foodshould be considered." (G9)
			"Voluntary fortification should only be permitted where there is evidence of a demonstrated need and public health benefit to either the target population or the population at large" (G8)
			"It is inappropriate to be considering individual health needs for the population-based food policy." (G8)
RISK	It is possible the problem representation of risk is informed by the key concepts of 'risk management' and 'risk assessment'		"Fortification should be permitted only for those nutrients for which there is a low degree of risk/large margin of safety" (G1)
	used in the development of all food standards. However, it also seems to refer to the risk: of misleading and confusing consumers; of excessive nutrient intake; of emerging, unknown and long-term		"The continued fortification on some food vehicles should be managed under government regulation and risk management strategies" (G3)
			"Recently emerging information regarding the risks of fortification and supplementation raises public health and safety concerns. There is considerable
	effects on health; that VF will alter food supply, dietary patterns and increase chronic disease;		risk and emerging evidence that increasing the range of voluntarily fortified foods has the potential to adversely affect the food supply and alter dietary patterns toward a more highly processed,

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
	to public health and safety; of deceptive and unregulated behaviour by industry;		unhealthy diet The potential to increase consumer confusion about food and nutrition issuesis of major concern." (G4)
	of blurring legal line between food and drugs; because insufficient scientific data will make it difficult to apply the usual food regulatory risk management framework.		"Given the paucity and only recently emerging information on the risks of supplementation, it will be difficult to apply a risk management framework (i.e. the risks are largely unknown or are only recently been discovered)." (G4, G8) "There is a risk that voluntary fortification may actually increase the risk of these (chronic) diseases Distortion of the food supply may raise the risk of effects on nutrient bioavailability in unexpected ways and confusion for the consumer The potential negative impacts and risks need to be identified and managed." (G6)
			The intention of the Codex principles is "to prevent the indiscriminate addition of essential nutrients to foods thereby decreasing the risk of health hazard due to essential nutrient excess, deficits or imbalances." (G7)
			"Recent research highlights the potential risks of supplementation and fortification. In determining the policy on fortification, it should be noted that a liberal fortification policy provides risk of long-term (and in many cases unknown) adverse public health outcomes from excessive intake of added vitamins and minerals, and/or inappropriate nutrient interactions. (G7) "At a time when there is a national effort to

Main Problem	Meaning	Child nodes /Related	Examples of use
Representation		Problem Representation	
			address obesity and promote a message of healthy weight for the population, it should be recognised that a range of voluntarily fortified foods increases the risk of adversely affecting the food supply. It has been demonstrated that altering dietary patterns toward a more highly processed, unhealthy diet, will contribute to the epidemic of overweight and concomitant increased risk of chronic diseases and associated health care costs." (G7)
			"A liberal voluntary fortification policy increases the risk of adversely affecting the food supply." (G9)
			"Fortified foods that put public health and safety at risk should not be allowed" (G9)
			"Voluntary fortification should be selected only ifthere is low risk of excess intake of the vitamin or mineral, adverse nutrient or other interaction for all population groups." (G9)
			"Voluntary fortification should only be permitted where there isevidence that health benefits outweigh any health risks for the population at large." (G8)
			"Option 1 provides the least risk of long-term (and in many cases unknown) adverse public health outcomes from excessive intake of added vitamins and minerals, and/or inappropriate nutrient interactions. It minimises the risk of adversely affecting the food supply and altering dietary
			patterns toward a more highly processed,

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
			unhealthy diet, contributing to the epidemic of overweight and associated increased risk of chronic diseases and associated health care costs It minimises the risk of blurring the current distinction between food and drugs in the Australian food regulatory system." (G8)
			"Voluntary fortification should be considered where there are no risks of excessive intake" (G5)
SCIENTIFIC EVIDENCE (and lack thereof)	Policy should be based on up-to-date and adequate scientific evidence. Policy problem should be the level of scientific		"There is inadequate up-to-date dietary and food composition data available on which to base a change of voluntary fortification policy." (G4, G8)
	evidence required to justify fortification. Concept of 'potential nutritional benefit' is not scientific. Scientific evidence of adverse effects from		"The inadequate up-to-date dietary intake and food composition data on which to base policy decisions is a serious flaw with this policy development and as such is not responsible practice." (G4)
	long-term vitamin and mineral supplementation raises concerns about a change in policy. Data available (i.e. dietary intake data and food composition database) are out of		"What does the concept 'potential nutritional benefit' really mean? Such a term puts food regulation at the hypothesis stage instead of the results/ conclusion/ evidence base stage of the scientific process" (G4)
	date and inadequate for demonstrating a public health need for fortification, or a need for any change in policy. Acting without such evidence is irresponsible and seriously flawed government practice. It is also inappropriate use of public funds.		"It is excellent that the need for updated food intake, biochemical status and food composition data is acknowledged. However, there are no plans for any such work at the national level and thus this policy development will remain based on inadequate and out-of-date data." (G4, G8)
	Also, no evidence to support claims that consumer demand and/or consumer		"A fundamental element of fortification policy should be up-to-date information on dietary intake

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
	choice are driving change in voluntary fortification policy.		and food composition. At present, there is inadequate up-to-date dietary and food composition data available on which to base a change of fortification policy." (G7)
			"Proposed policy optionsare <u>not evidence- or science-based due to lack of current data</u> . It is irresponsible to consider the role of voluntary fortification of the Australian food supply without adequate information. There is an <u>urgent</u> and <u>essential</u> need for updated and ongoing national nutrition survey data, updated food composition data, dietary modelling, before making decisions about changes to voluntary fortification policy." (G9)
			"Australian dietary intake and food composition data is inadequate to demonstrate a need for fortificationIn addition, there is no quantitative data about the usage of dietary supplements." (G9)
			"'Risk management framework' needs to be defined. This will rely heavily on dietary modelling. 1995 national nutrition survey data is already outdatedTherefore, any fortification modelling will need to be very conservative." (G9)
			"There is a lack of clarity on the term 'potential nutritional benefit'. The scientific principles need to be clearly defined to prevent disparate interpretations. Fortification should only occur in the circumstances outlined in the Codex Alimentarius." (G9)

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
			"There is no data to support a change in voluntary fortification policy on public health nutrition grounds." (G9)
			"It is difficult to see how good policy can be developed with this lack of data" (G8)
			"The concept of 'potential nutritional benefit' is unclear. Such a term that puts food regulation at the hypothesis stage instead of the results/conclusion/ evidence-based stage of the scientific process This (term) is a nonsense and has no place in evidence-based science and food regulation." (G8)
			"Several statements referring to 'consumers' are made without evidence to support their assertions: e.g. 'Consumers are becoming increasingly interested in the foods they are eating and are expecting a greater choice of foods at the point of purchase'. There is no evidence given to support this statement." (G8)
			"Public health evidence does not indicate a role for fortification in dealing with the population health problems of chronic diseases". (G8)
MISLEADING AND DECEIVING CONSUMERS	With regard to: the need for, and perceived greater health value of, voluntarily fortified foods the use of non-evidence-based nutrition and health claims creating increased confusion for consumers;	Compulsory labelling of fortified foods represented as necessary to ensure consumers are not mislead by inflated claims of benefit by	"Existing policy principles should be expanded to include statements concerning nutritional claims (i.e. they should not be misleading) and that nutrients added should be stable and bioavailable." (G1) "Consumers should not be misled to believe that

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
	bioavailability of nutrient. The use of Codex principles would help prevent misleading and deceptive practices used by industry.	manufacturers Includes issues of consumer confusion, loss of confidence and trust	these products are necessary in order to achieve an adequate diet." (G1) "considerable potential for misleading and further confusing consumers via the promotion of nonevidence based so-called 'potential nutritional benefits'" (G4) Codex principles "will also help prevent practices which may mislead or deceive the consumer." (G7) "Voluntary fortification provides considerable potential for misleading and further confusing consumers through promotion of non-evidence-based claims of 'potential nutritional benefits'" (G7) "There are issues relating to truth in claims and consumer deception when terms like this are used." (referring to 'potential nutritional benefit') (G8) "Labelling and claimsCannot be misleading or deceptive. Should claims be permitted on voluntarily fortified foods (and DHS is not in favour of this)" (G8)
ECONOMIC BENEFIT / SALES AND MARKETING / INDUSTRY INNOVATION	Even though voluntary fortification is generally promoted as a health issue, the key reason for a change in policy (and thus problem representation) is to provide the food industry with commercial benefits.		"Voluntary fortification is largely undertaken to achieve a market advantage" (G2) "It is not consumer demand that is driving the fortification of foods but manufacturers who are seeking to find a new niche market" (G4) "The decision to fortify should be made on public health groundsnot on commercial grounds." (G6) "A major driver of voluntary fortification appears to

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
			be that it provides a sales/ marketing edge. The paper could be honest and state this explicitly." (G8)
			"The additional rationale of providing a sales/marketing edge is not sufficient reason to incorporate into a set of policy guidelines for fortification particularly where health and safety issues are paramount. This should always be a secondary issue to public health and safety issues." (G8)
			"A 'potential nutritional benefit' may not necessarily address specific need or deliver a specific benefit. If the concept of potential nutritional benefit is intended to allow industry innovation a benefit may not be delivered even though potentially it could. (Submitter) recommends either removing the wording 'and that it will address this need or deliver this benefit' or amending the wording to read 'and that it could address this need or deliver this benefit'." (G5)
			"Voluntary fortification should enable industry innovation while ensuring public health and safety." (G5)
CHOICE	Maintaining a range of both fortified and non-fortified foods for consumers to choose from.	Several submitters specifically counter the claim that voluntary	"Voluntary fortification would need to preserve consumer choice while delivering some nutritional benefit" (G5)
	Also, refuting the argument from the consultation paper that consumer choice is a key driver for a change in voluntary	fortification is being demanded by consumers	"Please provide the evidence that consumers are 'expecting a greater choice'. Restricted availability of non-fortified foods is a real issue for consumers.

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
	fortification policy, by challenging the lack of evidence to support this claim.		For example, in a whole supermarket aisle devoted to breakfast cereals, there are now only one or two choices that remain unfortified. Furthermore, recent supermarket policy is narrowing consumer choice down to one or two main brands and a 'home' brand." (G4)
			"Several statements referring to 'consumers' are made without evidence to support their assertions: e.g. 'consumers are becoming increasingly interested in the foods they are eating and are expecting a greater choice of foods at the point of purchase'. There is no evidence given to support this statement. The statements that 'rising interest and awareness in diets and the relationship between health and nutrition is fuelling a desire for more choice' and 'consumer interests in fortification being diverse' are made without reference to evidence." (G8)
LABELLING	Information about fortification should be a compulsory requirement for the food label. Concern regarding the limited understanding consumers have about the information on a food label, and the potential for this policy to lead to further		"Supplementation should be stated compulsorily on the label with some qualification of its equivalence to a standard serve of a traditional significant source of the nutrient being supplemented. Consumers should not be misled to believe that these products are necessary in order to achieve an adequate diet." (G1)
	confusion as well as deception of consumers.		"Our concern is the public's in ability to make sense of a growing amount of information on a panel, including an associated concern being the difficulty of reading for older people and also for those with

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
			low levels of literacy. FSANZ has conducted research into food labels and this, as well as the need for further research, needs to be considered. (Labelling and claims) cannot be misleading or deceptive." (G8)
INTER- RELATIONSHIP WITH OTHER POLICIES	Policy problem is inextricably linked with other national policy (including nutrition policy, health claims and FTDS), and should not be developed in contradiction		"Appropriate vehicle for fortification, consistent with national dietary guidelines Foods that are not consistent with the national dietary guidelines should not be fortified." (G2)
	or in isolation.		"Any health claims must meet the prerequisites of the health claims policy." (G2)
			"In conclusion, Queensland Health believes this policy must be progressed in conjunction with (not in isolation) policies on food type dietary supplements and nutrition, health and related claims. They are integrally linked and this paper has not adequately considered progress of either of the other policies."
			"Changes to policy principles for Nutrition, Health and Related Claims, Fortification of the Food Supply with Vitamins and Minerals, Food-Type Dietary Supplements must be considered together. These three issues have significant overlap and it is important that they be presented together to promote informed decision-making." (G9)
			"Fortification policy needs to be consistent with other national nutrition policy (Food and Nutrition Policy, Eat Well Australia, Dietary Guidelines, Australian Guide to Healthy Eating). The policy also

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
			needs to be considered in conjunction with other food regulation policy such as nutrition, health and related claims." (G8)
			"Consistency with national nutrition policies is stated as a goal of fortification. Dietary guidelines are <u>food based</u> not <u>nutrient based</u> - therefore it is difficult to see how the addition of vitamins and minerals to foods (not normally containing these nutrients) can be consistent with increasing consumption of fruits and vegetables for instance, particularly given the lack of understanding of efficacy of nutrients removed from their food substrate." (G8)
NO PROBLEM	Is there really a problem at all? No evidence that Codex principles have failed, therefore difficult to justify a change of policy.		"Given that Australian policies, guidelines and research indicates that Australians need to eat more fresh, minimally processed foods, it is difficult to justify the consideration of yet more foods which do not fit into this category. Nor is it proper that public funding should be spent on introducing and supporting yet more regulation to assist in the introduction of foods that do not have a clear health benefit." (G4)
			"Current Codex principles on fortification have a proven track record in protecting public health and safety, delivering information to consumers, and protecting against fraud. There is no evidence that these policies are failing to do that." (G4, G8)
PROBLEM OF	Definitions used for important terms relevant to the policy are not evidence-		"The stated definition is inadequate and open to interpretation This is a nonsense and has no place

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
DEFINITION	based, are open to interpretation, and in some cases, are a 'nonsense'.		in evidence-based science and food regulation The Codex definition is more appropriate as it refers to the reason for fortification." (G8)
WHO'S IN CHARGE?	Who's in charge of determining this policy? Government or industry? Should be government but seems to be industry.		"Distortion of the food supply may be a significant outcome of industry-driven uncontrolled fortification. This distortion may raise the risk of effects on nutrient bioavailability in unexpected ways and confusion for the consumer in interpreting health education material and assessing their own intake." "It needs to be made clear who will have the responsibility and mandate for action in promoting consistency with national nutrition policies and guidelines. It should also be made clear that the Government sets the standards and policy." "It needs to be clearly stated who the policy
			guidelines are for and how they will be enforced." "The organisation which has responsibility for food modelling for intake should be specified."
			"A serious consequence of freedom of choice for industry is that it will create a difficult situation for maintaining current food composition databases, and thus decreasing the value and accuracy of survey data. This will make the accurate assessment of nutrient intakes difficult." (All quotes from G6)
RESPONSIBILE POLICY DEVELOPMENT	It is irresponsible government practice to decide on, or change, policy without upto-date and adequate baseline scientific		"The inadequate up-to-date dietary intake and food composition data on which to base policy decisions is a serious flaw with this policy development and

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
	evidence.		as such is not responsible practice." (G4) "It is irresponsible to consider the role of voluntary fortification of the Australian food supply without adequate information." (stated twice - G9)
REGULATORY FAILURE	The key reason for requiring a change in voluntary fortification policy is to address the regulatory failures of the 1985 New Zealand Dietary Supplements Regulations.		"In New Zealand we have seen an increase in the range of food-type dietary supplements in the market place over the last couple of years. This could be attributed to a number of reasons but most likely reflect: industry/consumer demand; a vitamins and minerals standard that is no longer adequate to meet industry/ consumer demands; and a ready alternative regulatory avenue (in the New Zealand Dietary Supplements Regulations 1985) under which the products can be produced and marketed." "As a result, there continues to be a trend for food-type products to be sold under the Dietary Supplements Regulations. These regulations allow food products that do not meet the requirements of the Code to be sold in New Zealand even though they are, in the main, 'general purpose foods'. The Dietary Supplements Regulations were never intended to cover such products. The scope of the regulations was originally intended to cover only a range of vitamin and mineral products and other nutrients that might be contained in tablet, capsule or powder form."
			"From a New Zealand perspective, it is hoped that the policy guidance on fortification and food-type

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
			dietary supplements will address both actual (food- type dietary supplements-food system) and potential (food-medicines) regulatory failures in a way that ensures public health, consumer and industry interests are all given due consideration."
			"In light of this, (submitter) would support policy options for overarching policy guidance on fortification that provide for broader provisions in the Food Standards Code for added vitamins and minerals This approach would allow industry an avenue for food innovation, while maintaining a clear separation between highly fortified foods (food-type dietary supplements) and general-purpose food."
			"It is not clear whether current policy options proposed by FRSC would support the continued availability of the bulk of food-type dietary supplements currently available for sale in New Zealand under the Dietary Supplements Regulations. "
			"The impact of this in New Zealand would be that a large range of products would have to be removed from the market."
			"Voluntary fortification would require an amendment to current regulations to reflect the complexity of the food continuum." (All quotes from G5)
ENFORCEMENT	Voluntary fortification is seen as a sales/marketing issue, therefore the		The key issues for consideration in relation to voluntary fortification are "Clear, enforceable

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
	problem from a government perspective is ensuring enforceable legislation.		requirements for the products able to be fortified, labelling, limits for addition, claims and overages for nutrient to be added." (G2)
			"Government may incur additional costs in enforcing the requirements of the fortified products." (G2)
RESOURCES/ COST	Changing, monitoring and enforcing a new policy requires resources that would be better spent on public health and nutrition education programs. Any 'potential' health gains from voluntary fortification need to be carefully weighed against the potential to increase rates of chronic disease and health care costs.		"Supporting an expanded system of voluntary fortification has the potential to direct public funds away from other public health strategies for limited public health benefit. Funds would be better spent on comprehensive nutrition education programs, regular food intake surveys and updated food composition data which would in turn provide more concrete data on which to base fortification decisions." (G4) "Voluntary fortification has considerable potential to contribute to the epidemic of overweight and related chronic disease and associated health care costs. The cost of this needs to be very carefully
			weighed against any so-called 'potential nutritional benefits'" (G4) "Current nutrition education and health promotion programs do not have the capacity to address such complex issues. Therefore, specific funds would need to be directed (and indeed would be better spent) in this area." (G4) "As already indicated, such policy also has the
			potential to redirect urgently needed funds from more beneficial public health and nutrition

Meaning	Child nodes / Related Problem Representation	Examples of use
		education programs." (G4)
		"Unless additional resources are allocated to both enforcement and public health messages about healthy eating, it is extremely unlikely that governments will be able to keep abreast of these key areas." (G4, G8)
		"Given that Australian policies, guidelines and research indicates that Australians need to eat more fresh minimally processed foods it is difficult to justify the consideration of yet more foods which do not fit into this category. Nor is it proper that public funding should be spent on introducing and supporting yet more regulation to assist in the introduction of foods that do not have a clear health benefit." (G4)
		"As identified in the consultation paper, there are costs associated with supporting any expanded system of voluntary fortification. This in turn has the potential to direct funds away from other public health strategies for limited public health benefit. The arguments for fortification would have been better supported had there been evidence from cost benefit analyses of alternative public health measures (health promoting activities/comprehensive nutrition education programs) that would provide a similar or better outcome. In the absence of such an analysis and evidence, it is suggested any option that redirects funds from
	Meaning	

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
			and to update food composition data, which would in turn provide more concrete data on which to base fortification decisions, should not be considered." (G7)
			"Public funds would be better directed toward other public health strategies such as comprehensive nutrition education programs, regular food intake surveys, and updated food composition data." (G9)
			"This raises the issue of the limited amount of money available and whether it would be better spent on coordinated community-based social marketing campaigns to change public intake. A report by the Cancer Council of Australia, for example, listed a national campaign promoting fruit and vegetables as a cost-effective and feasible strategy to contribute to reducing cancer costs." (G8)
			"Nutrition education is severely underfunded now. The introduction of fortified foods would add to confusion and would divert what little there is to addressing this confusion." (G8)

Table F.3: Industry Submitters (n=24)

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
ECONOMIC BENEFIT	VF represented as an opportunity for economic benefit for industry, via product innovation, increased sales and profit, trade, and growth, as well as responding to consumer demand, market forces, global trends and globalisation. NB: These, and other aspects of this problem representation are further described in the far-right column, and the rows below enclosed in dotted, rather than solid lines		
PRODUCT INNOVATION	Within the PR of economic benefit, product innovation is a particularly important aspect for submitters. Innovation is considered necessary to create the opportunity for the increased sales, profit, trade, growth etc that in turn create the economic benefit. "Wellness and nutrition market" also an important aspect of product innovation and economic benefit specifically mentioned by 2 submitters. Also described as "nutritionally enhanced foods that have potential health benefits".	FOOD VEHICLES Limiting the types of foods that can be fortified with 'arbitrary criteria' represented detrimental to product innovation, associated marketing programs and economic benefit. Other submitters though, consider some restriction regarding food vehicles is necessary for ensuring consumer trust and confidence in VF foods. MARKETING Associated with product innovation and assisting	

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
		consumers to meet their needs.	
TRADE	VF is represented as an opportunity for local food companies to compete in international markets.		
GLOBAL TRENDS and GLOBALISATION	Globalisation is represented as both a threat and opportunity for economic benefit. VF considered important for keeping up with global trends, such as nutrigenomics.		
INCREASED SALES/PROFIT	VF represented as an opportunity for increased sales and profit.		
INDUSTRY GROWTH	VF represented as enabling the industry to evolve rather than have future commercial and economic prospects restricted.		
EQUITY	Equitable opportunity all manufacturers to VF and equitable permission to VF all foods are represented as important for attaining economic benefit.		
MARKET FORCES	VF represented as an opportunity to respond to market forces.		
CREDIBILITY of industry and VF foods	Economic benefit can only be attained if the credibility of the food industry is assured and maintained. To achieve this, for some submitters VF permissions must only be allowed where there is 'valid	Credibility viewed as important for developing long-term markets, but any regulation regarding demonstration of benefit	

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
	reason'.	should not restrict INNOVATION.	
ECONOMIC LOSS	One submitter represented VF as a COMMERCIAL and ECONOMIC THREAT because more VF foods will likely reduce sales of their product, i.e. over-the-counter nutrient supplements		
RISK	With respect to VF, risk is generally represented as ensuring minimal risk to public health, particularly with respect to ensuring minimal risk of excess nutrient consumption from the use of VF foods. For one submitter though, ensuring minimal risk of excess consumption of nutrients is an individual responsibility. Risk also refers to reducing the risk of sub optimal nutrient intakes among the population via consumption of VF foods. VF should not increase the risk of adversely altering dietary intakes and should not drive people away from core foods. Several submitters suggest that fortification above current RDI level will be useful for reducing risk of chronic disease. Risk of increased cost of fortified foods, and availability of non-fortified foods are not represented as problematic, because	NO RISK Two submitters claim there is no evidence of any risk with VF, and if any exist, they can be mitigated with RESPONSIBLE POLICY. Unless VF would have a deleterious effect on public health, there should be no limit on FOOD VEHICLES.	"a reasonable certainty of minimal risk to public health" (IN8) One submitter suggests the "strong 'antifortification' lobby" use of risk to argue against VF, is an "unjustified" argument. (IN19) "There is minimum risk with this option as there is no evidence that the market will be flooded with fortified products – other countries with less constraining legislation than Australia do not exhibit this issue. Besides, Vitamin and mineral supplements (TGA controlled) are readily available in the supermarket and no health issue has arisen." (IN8) "It is important that the credibility of the food industry is maintained therefore the addition of vitamins and minerals to foods without valid reason should not be permitted even where there is reasonable certainty of minimal risk to public health. We support the above four points as valid." (IN7) "Maintaining dietary balance and variety, voluntary fortification should not increase the risk

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
	of experience from other countries.		of consumers limiting their food choices. (IN6)
	A science, and evidence-based, risk management framework applied to VF		Fortification guidelines should not risk adverse effects on nutrient bioavailability." (IN6)
	regulation is represented as a means of protecting the public from any risk and safety concerns. Not all nutrients have equal risk, and therefore fortificants could be divided into different categories and ascribed different regulatory approaches, based on the level of risk. Warning statements should be required on labels of foods containing nutrients that might create adverse or unknown effects from interactions between the fortificant and other nutrients or medications. For two submitters, risk also refers to the financial risks involved in product formulation when there may be limited uptake of a product in the marketplace by consumers.		"If a risk categorisation approach were used, it could be that for fortification with low risk vitamins or bioactive substances there could be a permission for use, provided a company held evidence of a public health benefit, that could be provided for verification on request. For nutrients and other substances that may be assessed to carry more than minimal or low health risk a more regulated system with pre-approval would be appropriate." (IN24) "More importantly, public health nutritionists have also argued there may be harm from the consumption of higher level of added nutrients because of potential adverse nutrient interactions or even increased risk of disease" (17) "However the evidence for such effects is all from trials using supplements of nutrients at much greater levels than are currently permitted in fortified foods" (18, 19) (IN24) "The AFGC further considers that foods to which vitamins and minerals have been added voluntarily make a contribution, sometimes significantly to achieving adequate intake for the population and consequently reducing the risk of sub-optimal intakes." (IN23) The EU Proposal states however "evidence from

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
			Member States and third countries, where voluntary fortification is allowed without many or any restrictions, show that the feared proliferation of fortified foods has been fairly limited. Today in these countries, according to data provided by the manufacturers, such foods represent 1% - 6% of the food supply, a percentage that has remained stable in recent years." (IN19) "Moreover, there is substantial evidence to indicate that intakes of certain vitamins greater than RDI are beneficial to health and could reduce the risk of certain chronic diseases." (IN18)
SAFETY	VF foods should not exceed the current RDI's and should be within safe nutrient levels. Safety also refers to microbiological contamination, or food safety.		the fisk of certain emoine diseases. (iiv16)
EVIDENCE	Permissions for VF should be scientifically justifiable. Also described as evolving, plausible and generally accepted scientific knowledge, and credible science. Evidence represented as an important means of identifying and dealing with any impacts of VF (whether positive or negative) Need more up to date and regular monitoring of national dietary intakes and eating habits. However, educators must be more flexible and adaptive in	RISK Credible science should underpin risk assessments for VF. Evidence of risk to health should be available before particular foods or nutrients are excluded from VF permissions BIOAVAILABILITY & CLAIMS Scientific understanding of	"solid scientific proof" (IN17) "lifestyles of today do not allow for the eating practices of 50 years ago" (IN21) Evidence from nutrition research is represented as having shown "a shift from minimum vitamin and mineral requirements to optimal vitamin and mineral requirements beneficial in chronic disease and better health". (IN9)

Main Problem	Meaning	Child nodes /Related Problem	Examples of use
Representation		Representation	
Representation	communicating healthy eating. More consumer research required to better understand the impact of VF on food choices. One submitter particularly concerned about the significant impact of VF on the accuracy and validity of food and nutrition research, and consequently the evidence required for demonstrating a need for VF. This is particularly the case for maintaining up-to-date and precise food composition databases that are used for both research and nutrition advice.	nutrient bioavailability should be evident before claims are allowed. HEALTH & NUTRITION Evidence represented as showing optical nutrition is beneficial for health and preventing chronic disease. Also suggest evidence supports the use of VF at levels greater than current RDI's. Concepts of restoration, nutritional equivalence, substitute foods and claimable foods considered conservative and outdated. These concepts considered no longer consistent with current eating practices, or based on sound scientific knowledge. Optimal nutrition, not deficiency, is represented to be the appropriate driver of	
LABELLING	Considered necessary for providing sufficient for consumers to make an informed choice and with which to	fortification. Provision of information in the form of nutrition and health CLAIMS on labels, but also	Fortification will be "useful in bettering the health of all New Zealanders", but ultimately should be a matter for individual consumer choice with the
			1

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
	Current labelling regulation considered sufficient to ensure adequate information for consumer choice, as well as prevent false and misleading labelling statements. Consumers should have the right to choose the type of products they consume, and in order to do this there needs to be adequate information available in the form of labelling.	enable consumers to make healthy choices. Recommend use of Codex Principles for health and nutrition claims regulation, thereby promoting international POLICY CONSISTENCY. Provision of information, via labelling, claims, education and MARKETING PROGRAMS considered important for assisting CONSUMER CHOICE of VF foods.	Communication of the health benefits and the use of VF products as part of a "balanced diet and lifestyle" is important for assisting consumers. "Informed consumers will be able to select from a wider range of foods based on their nutritional needs" (IN21/11).
CLAIMS	Part of PR of labelling, nutrition and health claims represented as informing consumers about VF foods. Represented as a "consumer right" to be informed. As health claims currently illegal, manufacturers are using alternative regulations (e.g., NZDSR) to inform consumers of the vitamin and mineral content of products. Claims represented as providing assistance for consumers to decipher nutrition information on labels that research indicates they find CONFUSING. Delays in development of standards for	CONSUMER ACCEPTANCE, CONFIDENCE and TRUST in VF foods: Evidence presented by 1 submitter that suggests "consumers are less accepting of functional foods that they do not perceive as healthy". There is also "a high degree of scepticism about the accuracy of nutrition claims on labels".	"responsible use of health and nutrition claims" (IN13) Current regulations regarding 'claimable foods' are considered paternalistic, restrictive, and encroaching on the "consumer's right to make informed purchasing decisions" (IN17) "Industry must be given the opportunity to use nutrition and health claims The considerable benefits that can ensue from fortification will be lost if such claims are not developed or are proscribed". (IN19) "it is essential that food manufacturers should be able to communicate freely, accurately and nonmisleadingly about the composition and health benefits of their products" (IN24/6)

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
	both fortification and health claims are called "untenable".		
NUTRITION	VF represented as a problem of nutritional inadequacy. Individual foods, individual diets and the food supply are viewed as nutritionally inadequate. This problem of widespread inadequate micronutrient intake among general population, caused by increasingly busy and pressured lives, different family structures, changing dietary needs, continual dietary change, and inadequate consumption of fruit and vegetables. VF therefore, provides a way of enhancing the nutritional quality of foods, diets and the food supply. VF also represented as delivering nutritional needs of, and potential nutritional benefits for, both Australian and international populations. VF considered useful in restoring nutrients depleted or lost in food processing, and providing alternative sources of nutrients e.g., calcium fortified juice as substitute or 'alternative' for dairy foods Also a means of nutritional enhancement of foods that have an intended health benefit. VF should also be used for optimising health and nutrient intakes, promoting health and well-being, and preventing	RDI's and concepts of restoration, nutritional equivalence, substitute foods and claimable foods considered conservative and out-dated. It is argued these concepts are no longer consistent with current eating practices or based on SOUND SCIENTIFIC KNOWLEDGE, and that optimal nutrition, not nutrient deficiency, should be the driver of fortification policy VF considered a more COST-EFFECTIVE and targeted option than mandatory fortification to address public health and nutrition issues. OPPORTUNITY to improve nutritional status and health of public, at NO COST to government. VF is viewed as a means of reducing RISK of sub-optimal nutrient intakes, ensuring a variety of foods from which	

Main Problem	Meaning	Child nodes /Related Problem	Examples of use
Representation		Representation	
Representation	chronic disease. Whilst it is believed possible to obtain well-balanced nutrient intake from well-balanced diet, gap between ideal and actual dietary intakes means nutrient intakes are sub-optimal and fortification necessary to ensure adequate nutrient intakes for all. Customers should also be provided with the opportunity to achieve optimal health and nutrition. Therefore, it is recommended that a specific policy principle be included that addresses nutrient enrichment, not just restoration and nutrition equivalence. Substantial evidence believed to show nutrient intakes above current RDI's are beneficial for health and may reduce risk of chronic disease. Thus, VF also represented as problem of inadequate RDI	consumers can meet their nutritional needs, and assisting customers in the maintenance of nutritionally adequate diets. Nutrition and health both considered CREDIBLE reasons for VF permissions.	
	levels. RDI's no longer considered adequate for determining nutrient deficiency or appropriate nutrient levels for fortification.		
HEALTH	Representation of VF as a health problem closely linked with the representation of VF as a nutrition problem. Therefore, VF represented as responding to health needs and providing health benefits. It is also represented as an opportunity for	consumer demand driving need for VF as public search for ways to optimise health. EVIDENCE from nutrition research is believed to have shown a shift from minimum	Significant potential for community to gain the "positive impact of foods on public health" (IN9) fortification will be "useful in bettering the health of all New Zealanders" (IN17) VF has "great potential in preventative health care" and the ageing population and rising health

Main Problem	Meaning	Child nodes /Related Problem	Examples of use
Representation		Representation	
	optimising health. Traditional use of VF for addressing nutrient deficiencies among the population supported, but knowledge of nutritional requirements believed to be increasingly showing the importance of increased micronutrient intake in maintaining optimal health and preventing chronic disease. Nutrient requirements for optimal health represented as greater than traditional RDI levels Protecting public health and safety within a science-based, risk management framework, also important	to optimal vitamin and mineral requirements as beneficial in preventing chronic disease and attaining better health. VF considered a more COST-EFFECTIVE and targeted option than mandatory fortification to address public health and nutrition issues. VF is an OPPORTUNITY to improve nutritional status and health of public, at NO COST to government. Reducing the COST and RISK of diet-related disease among the population	the food supply becomes increasingly important". (IN9) "a shift from minimum vitamin and mineral requirements to optimal vitamin and mineral requirements beneficial in chronic disease and better health" (IN9)
RESTRICTIVE REGULATION	Regulation represented as too restrictive, inequitable and inconsistent to allow industry innovation or for community to gain public health benefit. (IN9) (IN12) (IN14) Current regulations also represented as restrictive with respect to consumer choice, nutrition claims and trade. (IN23) (IN17) Several submitters represent regulations as overly restrictive because they believe there should be no restriction on types of foods that can be fortified, or nutrients	Submitter claims several reasons a more liberal policy required, including: NUTRITIONAL INADEQUACY among the population, CONSUMER DEMAND for fortified foods as alternatives for fussy eaters, nutrient requirements for OPTIMAL HEALTH being greater than traditional RDI levels, and	Regulation represented as too restrictive for community to gain the "positive impact of VF foods on public health". (IN9) Submitter states restrictive VF policy "universally disliked by the food industry as unworkable, diving foods into 'good and 'bad' ". This is believed to confuse consumers about "'choosing a wide variety of foods' to form a balanced diet" and contradict the "well-known fact that there are no good or bad foods but only food or bad diets". (IN18) "in an increasingly global market the maintenance of a restrictive regulatory system for fortification with a goal of maintaining the nutritional integrity

Main Problem	Meaning	Child nodes /Related Problem	Examples of use
Representation	that can be used. (IN18) Submitters want more regulatory flexibility for manufacturers and demand "reciprocal rights" for VF between primary and "alternative" (usually called substitute) foods. (IN9) Submitters also believe current regulatory loopholes need to be addressed. (IN10). Concern expressed about loss of economic revenue for Australian industry, resulting from VF products being produced in, and imported from, New Zealand under the NZDSR. (IN14) Submitter particularly concerned about regulatory interface between foods and drugs and potential for inequitable regulation of foods and drugs. Regulatory failure identified as already occurring with respect to health claims, but also food manufacturers' use of Formulated Supplementary Sports Foods Standard as a means of getting fortified products into market. (IN15) The use of more liberal fortification policies in other countries given as example of responsible, liberal regulation without creating increased risk to health. Risk that availability of non-fortified foods will be limited not viewed as a problem.	manufacturing and science (e.g. encapsulation and genomics) enabling greater use of novel foods and ingredients. (IN24)	of the food supply has become unachievable and unrealistic". (IN24/3)) VF represented as "a platform for innovation within the food industry", but such innovation should be allowed "in the spirit of minimum effective regulation" (IN13)

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
	(IN18)		
CONSUMER DEMAND	Submitters represent industry desire for innovation using VF as ultimately a response to CONSUMER DEMAND. Submitters suggest considerable increase in sales of VF products as evidence of consumer demand for VF foods. It is also considered inappropriate that consumer demand is not included as a separate specific order policy principle for VF in the consultation paper, and ultimately in the final policy paper. The problem of consumer demand is also viewed as meeting the complex lifestyles,	Consumer demand also expressed as a desire to provide for CONSUMER CHOICE, i.e. provide consumers with alternative foods from which to "consume a given vitamin or mineral, based on palatability and convenience". (IN14)	
	and changing dietary patterns of consumers, as well as providing alternatives for fussy eaters.		
	Changing CONSUMER DEMAND represented as both a 'threat' and 'opportunity' for industry to attain economic benefit.		
	Submitters believe VF will allow manufacturers to meet CONSUMER NEEDS, DEMANDS, BENEFITS & EXPECTATIONS.		
CONSUMER CHOICE	VF also represented as a problem of CONSUMER CHOICE another PR. Submitters suggest consumer needs are changing and VF can provide alternative	INFORMATION, via LABELLING, CLAIMS, EDUCATION and MARKETING PROGRAMS considered important for	Current regulations regarding 'claimable foods' are considered paternalistic, restrictive, and encroaching on the "consumer's right to make informed purchasing decisions". Consequently,

Main Problem	Meaning	Child nodes /Related Problem	Examples of use
Representation		Representation	
	options, by enabling more choice. Submitters believe consumers should have the right to choose the type of products they consume, and tailor them to their individual needs.	assisting consumer choice to be an informed choice, in order to tailor use of VF foods to individual needs. CONSUMER TRUST and ACCEPTANCE of VF foods and related claims also relevant to consumer choice. Consumer choice also represented as important for consumers to attain health and nutrition benefits of VF foods.	manufacturers are using alternative regulations (e.g., NZDSR) to inform consumers of the vitamin and mineral content of products. (IN17) "Informed consumers will be able to select from a wider range of foods based on their nutritional needs" (IN21/11). "consumers are less accepting of functional foods that they do not perceive as healthy" (IN24/5). provide consumers with alternative foods from which to "consume a given vitamin or mineral, based on palatability and convenience". (IN14)
POLICY CONSISTENCY			
MONITORING and EVALUATION			
DEFINITION			

Table F.4: Public Health Submitters (n=10)

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
PUBLIC HEALTH	VF is represented as a public health issue, that should be used for addressing population wide nutrient deficiency. Food sources of nutrients should be promoted first, before any consideration of fortification.		
	VF should: address demonstrated health need		
	support public health efforts to reduce obesity		
	decrease social disparities.		
	Concerns re detrimental effects of VF to health, such as:		
	excessive nutrient intakes		
	as yet unknown / recently emerging problems, e.g. fractures, cancer, reduced effectiveness of medications and even death		
	long-term consequences, particularly obesity and chronic disease		
SCIENTIFIC EVIDENCE	VF requires:		
	evidence of demonstrated health need		
	monitoring.		
	Scientific evidence required for:		
	developing, monitoring & regulating VF policy		

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
	preventing excess intake or harm from unknown effects of VF.		
	Biochemical evidence required, not just dietary data. VF policy affects nutritional databases -> inaccurate data & results for dietary surveys.		
RISK	VF presents risk of: excess intake unknown & long-term effects / public health problems altering dietary patterns interactions with other nutrients and medications limited public understanding & education re issues limited benefit because of cost and lack of understanding. Risk unknown because nutrients and nutrient interactions not completely understood. Risk assessment needs to consider long- term health and cumulative impacts, not just single nutrients. Risk different for different population groups. Increased knowledge and regulation, decreases risk.		"managing the risk of consumers limiting their food choices to a narrow range of fortified foods and missing out on certain nutrients as a result." (PH9) "a risk associated with voluntary fortification is the possible restricted availability of nonfortified foods. This is particularly apparent in regard to breakfast cereals which have been allowed fortification for a number of years. Amongst a whole aisle of breakfast cereals there are only 2-3 varieties that remain unfortified" (PH6) "Supplements of beta-carotene were expected to reduce risk of cancer, but instead were found to increase the risk (see appendix 1 for evidence of adverse effects)." (PH3) "A risk analysis must go beyond the evaluation of single nutrients to include the impact of food fortification on eating and disease patterns over the long term." (PH3) "this option poses a greater risk of adversely altering dietary patterns and could provide

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
			inconsistencies with national nutrition policies." (PH10)
POLICY CONSISTENCY	Consistency with Codex Principles priority for most submitters, because Codex believed to cover issues of public health, scientific evidence, risk and misleading consumers. However, consistency with FTDS & HC also important. 1 submitter suggests consistency with dietary guidelines not possible because food based not nutrient based.		
NUTRITION	Voluntary fortification is viewed as a complex nutrition issue required for correcting nutritional deficiency, not for increasing sales or consumer choice. Food sources of nutrients should be promoted first, before any consideration of fortification.		
	Should only be used where: demonstrated need, not potential nutritional benefit widespread need in population, not for individuals		
	food vehicles are natural sources of nutrient, not in 'unhealthy'/non-nutritious foods		
	1 submitter suggests the use of qualifying and disqualifying criteria for food vehicles		

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
	needed to ensure consistency with nutrition policy.		
NO POLICY PROBLEM	VF represented as unnecessary, therefore there is no policy problem. Also, nothing wrong with current policy (based on Codex) and no evidence of failure or being outdated		
OPPORTUNITY	VF is represented as an opportunity to respond to the 'problems' of nutritional inadequacy of the food supply, consumer demand, and global food trends. Thus, VF provides an opportunity to improve the nutritional status of individuals and populations, as well as provide economic benefit for industry.		
NUTRITIONALLY INADEQUATE FOOD SUPPLY	VF is required to restore nutrients lost in processing (restoration), as well as to nutritionally 'augment' the food supply in order to provide 'optimal' nutrition for individuals and the wider population.		
CONSUMER DEMAND	The nutritional inadequacies of the food supply are considered to provide opportunities for fortification, in response to consumer demand and keeping up with global food trends. 2 submitters specifically state VF is not required to address consumer demand and choice issues. These submitters also	Several submitters specifically counter the claim that voluntary fortification is being demanded by consumers.	

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
	suggest many consumers want 'unadulterated' food supply (i.e. nonfortified foods)		
LABELLING	3 submitters suggest compulsory labelling of fortified foods is necessary to ensure consumers are not mislead by inflated claims of benefit by manufacturers. These submitters urge a CAUTIONARY approach to policy with adequate funds for compulsory labelling and education campaigns. However, concern expressed that only marketing, not education campaigns will be funded. For 2 submitters VF represented to be a problem of INADEQUATE label information. Consumers' inability to interpret food labelling information also problematic, and clear and informative labelling (that includes nutrition and health claims and a statement promoting a well-balanced diet) is required to "educate consumers" about VF.		"'clear, informative and non-misleading' claims and label information that reinforce the educational activities of 'authoritative nutrition organisations' required." (PH9)
MISLEADING & DECEIVING CONSUMERS	Submitters concerned consumers will be misled re the nutritional quality of fortified food in order for industry to gain economic benefit via the sales and marketing of these products. Submitters particularly concerned that	COMPULSORY LABELLING of fortified foods represented as necessary to ensure consumers are not MISLEAD by inflated claims of benefit by manufacturers	
	misleading VF and claims will:	Includes issues of consumer	

Main Problem	Meaning	Child nodes /Related Problem	Examples of use
Representation	alter dietary patterns exacerbate obesity epidemic create other adverse effects, e.g. excessive nutrient intake Problem of VF represented as ensuring consumers are not mislead by inflated claims of benefit, or that their confusion re nutrition and health be used for sales and marketing purposes. Consumers require protection via education and compulsory labelling.	confusion, loss of confidence and trust in both the food industry and food regulatory system, education and labelling, loss of choice.	
CONSUMER KNOWLEDGE / CONFUSION / UNDERSTANDING	For 3 submitters, issues and risks of VF too complex for consumers to understand. Consumers also confused about healthy choices. Therefore, not possible to make an informed choice. Submitters believe education won't help because too much information to put on a label. Therefore, require strict regulation of any fortification allowed. 2 other submitters represent the problem of VF as a problem of consumers having inadequate knowledge of nutrition and health. In order to "educate consumers" the submitters suggest clear and informative labelling, that would include nutrition and health claims, as well as a statement promoting a well-balanced diet.		Consumers' inability to interpret food labelling information has 1 submitter calling for "clear, informative and non-misleading' claims and label information that reinforce the educational activities of 'authoritative nutrition organisations'" (PH9)

Main Problem	Meaning	Child nodes /Related Problem	Examples of use
Representation		Representation	
ECONOMIC BENEFIT	Submitters state that economic benefit for industry is NOT a sound rationale for increased voluntary fortification but consider it to be the main reason for a change in policy. Thus, key problem is NOT sales/marketing or industry innovation - this may be a consequence but should not be a determinant of VF. When economics is the key driver of fortification, creates indiscriminate use of VF. Industry desire for economic benefit creates CONFLICT OF INTEREST with public health. For one submitter though, VF does provide opportunity for economic benefit for industry, whilst also providing health benefit.		
MONITORING &	Submitters claim current and future VF		
EVALUATION	policy and its impact on dietary intake, health, sales etc requires regular monitoring and evaluation. Also considered vital to ensure the health benefit is realised, and that manufacturers' claims are not misleading consumers.		
USE OF RESOURCES	Submitters claim the cost of a change in policy is significant, and that resources would be better spent on evidence-based public health programs. Developing new		

Main Problem Representation	Meaning	Child nodes /Related Problem Representation	Examples of use
	VF policy also diverts scarce resources from public health nutrition programs, consumer education, dietary surveys, & government monitoring and enforcement of other policy.		
ENFORCEMENT / REGULATORY BURDEN / REGULATORY FAILURE	3 submitters indicate a change in VF policy will increase the regulatory burden on government, blur the distinction between foods and drugs, and make adequate and appropriate monitoring and enforcement of the legislation unlikely. Submitters also suggest the burden of proof will now be on government rather than industry, and any additional funds required to deal with these regulatory burdens will not be provided. NZ Dietary Supplement Regulations also considered to be a major regulatory failure and one of the underlying reasons for VF policy revision However, 2 submitters view current regulation as restrictive, and want a regulatory balance that is flexible enough to allow fortification opportunities, but		
RESPONSIBLE / IRRESPONSIBLE	1 submitter states no evidence presented to support claimed health benefits of VF.		
	Therefore, health benefits assumed rather than researched and consequently		

Main Problem	Meaning	Child nodes /Related Problem	Examples of use
Representation		Representation	
POLICY	considered IRRESPONSIBLE government practice to base policy on no evidence.		
	However, another submitter claims VF will allow both nutrient restoration and nutritional enhancement of the food supply, whilst still protecting public health and safety. Therefore, it is responsible policy.		

APPENDIX G: Major representations of the problem of voluntary fortification in the data from the in-depth telephone interview presented by key informant stakeholder group

Table G.1: Citizen Key Informants (n=3)

Main Problem Representation	Meaning	Child nodes/Related Problem Representations	Examples of use
COMMERCIAL	Voluntary fortification (VF) is represented as a commercial problem, particularly when it is used in conjunction with nutrition and health claims in order to create a 'health halo' for sales and marketing purposes. This creates concern that consumers will be misled regarding the nutritional quality of VF foods, as well as healthy eating principles. International trade an important influence on the representation of VF as a commercial problem. Concept of consumer choice also considered to be associated with industry innovation and competition, rather than a genuine consumer need.	Sales and marketing Marketing via 'health halo' Misleading consumers International trade Consumer "choice"	"you know this policy guideline on voluntary fortification, that's tinkering at the margins, because most of the ways in which this will be used will be for manufacturer's who just want to make marketing claims on whatever the latest fad isthis will just move with the fashions of the time." [Laura] "I mean this is inevitable. The food industry's aim is to sell products. And aim to sell profitable products. And, and the profitable products are the ones that have as little as possible of the expensive ingredients, and as much as possible of the cheap ingredients. So, even, and that even applies to which vitamins are gonna go into foods. You put plenty of the, of the you know, B1, B2, B3; they're cheap as chips. So, you can stick huge amounts of them into it, give the product a good 'health halo'Yeah, I think it's probably to just make them attractive. I mean it just increase sales; the 'health halo' works." [Rebecca] "And I think potentially a little bit of distrust in industry that they were going to use in this case fortification as a marketing opportunity, and that there would be the risk of consumers being misled by claims that imply or state health benefits associated with some of the nutrients that might be added but not necessarily added at levels that would be significant. And then also the concern about, what implications that

		might have for the public's perception of what a healthy diet is and what healthy foods are and why particular food groups are important." [Charlotte]
		"Trade is so important now to FSANZ and to food law. It mentions it all the time. It's very important to the food industry as well." [Rebecca]
		"what also used to come out regularly was this theme around consumer choice and giving consumers more choice and that was always going to be a good thing, because consumers wanted some, wanted to be able to have something that was, breakfast cereal that was fortified with this, yet you know there's also the flip side to that, is that by simply creating these things the industry is creating demand for them. Therefore, it seems like consumers are demanding these products but it, they're actually, it's the marketing that's creating the demand for the products. So often the choice aspect was, was conveyed as a rationale for, for doing these sorts of things" [Charlotte]
NOT PUBLIC HEALTH	VF should be a public health problem, but policy not supportive. Policy too "open slather" and lacking clarity, making	"So, do I think this is a significant public health, has got capacity to have significant public health outcomes? No, I don't." [Laura]
	interpretation problematic VF represented as unjustified by reasons of evidence or public health. VF currently allowed is inconsistent with Dietary	"I think this is the limitation with something that's a policy guideline as well, is that there wouldn't have been the level of clarity that we would like as to what is consistent with nutrition policies for example." [Charlotte]
not need, and gain no health benefit nutrients used in VF food products. rarely requested by, or required for	Guidelines, and most of population does not need, and gain no health benefit from nutrients used in VF food products. Also, rarely requested by, or required for public	"I don't think they support public health at all. I mean is there any public health reason for using a highly-sugared product like (product name) and adding nutrients to it? I mean is this really the right thing to do?" [Rebecca]
	health. Public health represented as being	"Now that's under the FSANZ governance framework, and it's a new statementand we were very concerned about

	sidelined and excluded from food regulation decision making		that Cause it's, it's actually sort of consumer confidence in the quality and safety of food produced, but the public health has gone." [Rebecca] "We're just concerned that health is sort of seems to be dropping off the back of the wagon." [Rebecca]
POWER	Food industry, particularly AFGC, represented as having immense power and influence in food regulatory policy. Industry boast of having 'friends in high places' and use bullying tactics (verbal and physical) to silence and intimidate other stakeholders. Vested interests? Political context? Consultation bias? (see below for these)	"I was told by a very senior executive in the food industry at one stage that "I could say what I liked 'cause they had friends in high places" [CHUCKLE] Mind you it wasn't the only time this particular person said it to me. (Person) also said it to me at about the same time at a, when the (State) Government was doing a big thing on obesity in children And (person) shouted at, at me in Parliament House in	
	Key bureaucrats also represented as wielding power and intimidation tactics at times.		(place) When I'd, when I'd won some debate or argument or something or other [CHUCKLES]. But yeah, look they do have friends in high places." [Rebecca]
	FSANZ represented as having had power and independence removed. Although one KI suggests FSANZ lacking in leadership despite the difficult policy environment. Ministers represented as exerting power and authority to overturn FSANZ decisions, particularly in recent decisions re VF. However, power struggles continue in background regarding decisions made. Some health-related organisations also		"and was almost physically attacked you might say [LAUGHS]by someone from the food industry [LAUGHS]. Who I like to say almost, because (person), it was actually the head of (organisation) at the time, and (person) sort of cornered me in a very small space and stuck (their) face two inches away from mine, and screamed (their), yelled (their) head off at I was going out and I think (person) was lifting up (their) hand to open the door, but another politician came along and said 'are you all right? ' and I said 'yes, I'm quite sure (person's) lifting (their) hand to open the door not to hit me' [CHUCKLES]." [Rebecca]
represented as wielding significant power and influence, e.g., medical organisations like AMA and RACGP, but also Heart Foundation and Dental Association.		"there was a meeting. It was when they were looking at that self-substantiation process and trying to get people on board with that, that (person) did chair a particular meeting, consultation meeting in (place). And that was my first interaction with (person) [LAUGHS]. I know (person) actually	

shot down a comment that I made quite, quite some, blast I thought it was. That was my first conversation, first interaction with (person), and (person) was quite happy to put me in my place [LAUGHS]." [Charlotte]

"I think FSANZ was you know, should be given far more responsibility for actually doing things rather than just doing someone else's, whatever the government of the day says they have to do. I would like them to be an independent authority, who can do what needs to be done...They only get to do what someone else tells them to do. Which means that they always have to really be subservient to whichever party is in government. And I think that's absolutely the wrong way to set food law up. So, that we need an independent statutory authority that can do things according to evidence." [Rebecca]

"if FSANZ was playing a leadership role, it could have done this more creatively first time round. But, it didn't and it never, and it almost never does. The amount of work that we have to do inside just to get to some of the public positions it makes. So FSANZ is, is, doesn't help itself. The policy environment, I agree, is challenging for it, but FSANZ could do a lot more within. And the current policy, and the current environment federally is as good as it's ever been for FSANZ to do more, but it's not." [Laura]

"the request by industry for the fortification, voluntary fortification of breakfast cereals. So FSANZ received that request. FSANZ made a standard and put it up to the Ministerial Council, and the Ministers weren't happy with what FSANZ put up. They shouldn't have been because I was very unhappy about it too. And that's why they made that policy clarification." [Laura]

		"the Heart Foundation who are always quite powerful in these thingsAnd if this does work, and particularly because we, when you have <i>medical</i> groups and <i>powerful</i> groups like the AMA, then you're probably likely to achieve somethingAnd still if we had diabetes all working together on the same thing, that would be very powerful as well." [Rebecca]
VESTED INTERESTS	Both politicians and health-related organisations have conflicts of interest with food industry, which significantly impacts on decision making. Recent developments regarding front of pack labelling have provided significant context and revealed vested interests and at play.	"I well remember the, the decision to review the existing fortification policy and it was, it was very heavily influenced by (Federal Health Minister) who at the time I was quite annoyed with because (person) was, had a conflict of interest with (food company) somebody or other had, had unearthed the fact that (Federal Health Minister) was actually acting at times, in a paid capacity, as a lobbyist for, for (food company)." [Rebecca]
		"But I do remember we, we felt that (person) was not, (person) was sort of sticking (their) oar in for want of a better expression, (person) only was involved very strongly in that whole discussion, and we felt (person) had a conflict of interest. So, it was conflict of interest that was, potential conflict of interest that was a, a concern." [Rebecca]
		"I think the current Minister Federally, you know, (person) nearly lost (person's) head over, over front of pack health labelling, over carrying the industry's can on front of pack." [Laura]
		"But the reason it took four years was because of industry objections to absolutely everything we were trying to do. And even though they shouldn't've known about it, somebody was telling them." [Rebecca]
CONSULTATION BIAS	Bias toward industry interests viewed as influencing policy development and outcomes.	"it was really about balancing everyone's interests, but the feeling that they were usually balanced more in favour of being more permissive for industry." [Charlotte]

Bias viewed as given toward food industry by government bodies, whilst public health is sidelined and excluded from discussions. Public health stakeholders then bullied for their criticism of decisions that are not viewed as representative of public health.

Consultation with consumer organisations considered obligatory rather than

health.

public health.

Consultation with consumer organisations considered obligatory rather than genuine, and consumer reps consider themselves at the bottom of the consultation importance hierarchy or "pecking order" - even lower than public

POLITICAL CONTEXT

Conservative side of politics represented as generally unsupportive of public health, and Labor more supportive. However, support received by Labor in Opposition, rarely translated into action when in Government, unless a particularly strongwilled politician willing to act on evidence rather than industry lobbying.

"I guess those of us in the public health area tend to think very strongly that there's much more voice given to food industry and trade concerns than there is to public health concerns. 'Cause we were all complaining that, that we thought food industry dominated what food standards did, and what food industry wanted food industry generally got." [Rebecca]

"I think my general experience and I guess it wasn't necessarily just specific to this case, but my general experience was we were consulted because we were the (main) consumer group. So, there was an element of we have to, that's why we're, we're asking you. I think also feeling much lower in the pecking order compared to industry groups, government, sort of other government jurisdictions... or public health even. So, then I would put the consumer, sort of the consumer group really as, the lower, lower level of, of priority when it comes to who you need to make happy." [Charlotte]

"well it's interesting because, I think that we always sort of were of the view that...a Liberal Government was going to be more aligned with industry interests and that certainly was the feeling in my early days at (organisation). I think there was a little bit more hope when it came to the Labor Government being in power and sometimes it was the Labor Government at the State and Territory levels, that we could rely on to be influencing or, or raising those public health concerns at that, around the, the Ministerial Council table and the FRSC level as well... And that's not to say that a Labor Government isn't also going to be sympathetic to industry interests but, yeah I think it just also depends on how much of a priority prevention and health, community health is, public health is a priority for a particular government".

[Charlotte]
"I think almost everyone working in public health would, would think it is much easier to actually get a meeting with and discuss things with the Labor Party, at least when they're in opposition, than it is with the Coalition" [Rebecca]
"I think it would be sticking your head in the sand to pre, to pretend that there are not strong political implications in all of this. And it was the Coalition Government that really sort of changed FSANZ's role, so that they became what I always call the 'handmaiden', you know that had to just do what someone else said." [Rebecca]

Table G.2: Government Key Informants (n=4)

Main Problem Representation	Meaning	Child nodes/Related Problem Representation	Examples of use
COMMERCIAL	Voluntary fortification is represented to be a commercial problem. It is desired by industry to add value, innovate and create a 'health halo' for foods which are then marketed using health and nutrition claims. It is also a consequence of a global food supply and the associated need for harmonisation of regulations for trade reasons. For VF, this is further exacerbated by a narrowing of the delineation between foods and dietary supplements, with supplement companies now applying to add nutrients to foods. At the time of the policy development, trade agreements with New Zealand such as the TTMRA and the NZDSR, also created problems for the policy.		"With voluntary (fortification), it's really about giving permissions to industry, so that they can make new products." [Natalie] "I think that there is a real push from industry for productivity and a push from industry to get product differentiation, and so they're looking for any opportunity to add value to their products. The interesting thing about the Vitamin D in breakfast cereal, if you look at who the applicant for that is; it's not a food manufacturer and it's not a government it's a vitamin company, who wants to sell more vitamins. So, you know of course it's all driven by money, isn't it?" [Natalie] "Obviously, they, they do it to sell product or they wouldn't do it." [Gabriella] "And I do believe that we did have an issue at one point with the, what was it called, the MMTTP or something with New Zealand around this fortification? Where basically foods with vitamins and minerals in, made in New Zealand, where those, where fortification wasn't permitted, could actually come into Australia, but you couldn't actually fortify in Australia. I think that play, played into this a little bit as well. So, you've gotta look at those broader international agreements and bigger contexts sometimes come into play." [Gabriella]
NOT PUBLIC HEALTH	Fortification however, should be a public health problem, but mandatory	Distortion of food supply	"I mean I, I'm not, I'm not a big fan of voluntary fortification I have to say. I'd rather there wasn't any." [Natalie]

fortification is the appropriate response to addressing nutrient inadequacies in the food supply or dietary inadequacies among the population. Voluntary fortification is considered unnecessary for public health purposes, and likely to result in a distortion of the food supply. The intent of the VF policy, therefore, is described as preventing the fortification of 'junk food', as well as preventing the distortion of the food supply with the indiscriminate addition of nutrients.

VF policy is not supportive of public health and is significantly influenced by industry. Overarching food regulatory policy specifies public health considerations should include chronic disease, not just food safety, and it is important food regulatory policy does not actively work against public health nutrition. However, food regulatory policy is also not meant to be used as a proactive or preventative public health nutrition tool.

"The problem with voluntary is you don't know whether it's gonna be picked up by one manufacturer, two manufacturers or all manufacturers. So, it's very difficult to then predict whether it's going to have any benefit to the community or whether it's gonna have any risks. And, so my view has always been that if there's a serious public health issue that needs to be resolved then we should do it properly and it should be mandatory. And the idea of a whole lot of subsequent permissions for voluntary in this that and the other, is just making it incredibly unpredictable." [Natalie] "But we were very anxious as a jurisdiction that we didn't just get a proliferation of a whole lot of nutrients getting chucked into the food supply, and that we could, we didn't want to have crap food being able to be turned into healthy

"the problem is though we've got one day we have an application for this, the next day we have an application for that, the next minute we have an application for that, and if you add that, that and that up, you could end up getting too much of some nutrients in the food supply and you get distortion as a result." [Natalie]

food by virtue of it having had a few nutrients thrown into it.

So, we were pretty keen to try and find ways to stop that

happening" [Natalie]

Response given by Gabriella to the interview question 'do you think the policy is supportive of public health principles?: "Ooo [SIGHS], I actually, I've, I've struggled a, with a lot of these policies, I think that, that the language in them is not particularly clear, there's lots of wriggle room." [Gabriella] "it's not always the role of the food regulation system to fix something, but to, but we can play our part, we can do our bit... And a lot of the time it's not about proactively doing

things; it's about not actively working against. And I see this example of the possible fortification of cereal on vitamin D, being the situation that, because of actually contradicting the other public health interventions in nutrition by allowing more fortification, if you see what I mean?... It's not about acting to actually put something in place, and play a big role, but it's being cognisant in, when you make decisions that we're not acting against maybe the Dietary Guidelines or other nutrition and public health interventions." [Gabriella] Voluntary fortification is represented as a "And it talks about how (FSANZ) need to consider any policy, INTERPRETATION problem of policy interpretation, Ministerial policy guideline that (FSANZ) receive. And the particularly of policy wording and key language in the FSANZ Act is "have regard to". And that terms. Different stakeholders interpret (FSANZ) have had legal advice as to what does "have regard wording differently, and therefore have to" mean? And my shorthand version is "to give genuine different expectations of policy consideration". So, when people, sometimes people think application and outcomes. that (FSANZ) follow every word of the policies because (FSANZ) have to, and that's not the case. (FSANZ) have more The interpretation of policy is particularly latitude than that." [Isabel] different between jurisdictions and FSANZ. FSANZ's interpretation of the "(FSANZ) look at all of the general and specific policy policy is more legally focused and based principles, and (FSANZ) give genuine consideration to them. on different considerations than those of Then (FSANZ) assess the impact of applying them, and how the jurisdictions. Consequently, VF policy they would then contribute to or otherwise, a net community is often developed or reviewed in benefit." [Isabel] response to FSANZ decisions on "with words like 'little or no nutritional value that have no applications that are not what other demonstrated health benefit', they're expressed in, in jurisdictions expected, e.g. calcium in policy term, and when people have various expectations on sugar free gum led to 2009 policy review; whether you've followed that policy or not, they all have vitamin D in breakfast cereals led to 2015 their own views on what that means." [Isabel] clarification statement. "because 'value' is such a, value-laden word, if it was 100% sugar, would that have no nutritional value or would that have value? So, it's all in the eye of the interpreter." [Isabel]

		"Interesting it, when we think it's very clear, and then we some years later will get an inquiry from a member of the public or an industry that says, 'I've interpreted clause XXX this way, and my question is whatever it is'. And we go back and say 'oh' that's not what we thought it meant'! [LAUGHS]." [Isabel] "I remember having arguments about the policy and the nuances of the words and that sort of stuff. I can't remember the detail, the arguments, but I remember having lots of debate within, between the jurisdictions around the wording."" [Natalie]
ROLE OF FOOD REGULATION	VF is a food regulatory problem that relates to the overarching role of food regulation; either to prevent immediate (food safety) or long-term harm (chronic disease).	"So, at the heart of underneath all of this is the question is it the place of regulation to prevent negative health impacts, or is it the place of regulation to shape the positive stuff? So, okay, so this is, this is what the intent, revision would've been for; this ongoing tension of do we use regulation to proactively shape or do we only use regulation to make sure we don't get the wrong outcome." [Matilda] "I think the really critical element of the ongoing debate, and I think it's a healthy debate to continue to be had, which is this thing about intent, that you would revisit on a really regular basis, about you know, what's the role of regulation in shaping people's consumption patterns? And so, the notion about what, what you're allowed to do with vitamins and minerals and the, the flow on effect then about consumption of the foods themselves, is, was at the heart of all of that conversation." [Matilda] "I think that's at the heart of it. Because it is this question about, well you know, at the one end is, no well you shouldn't allow fortification of everything, anything at all, because what you should be doing is getting people to eat

		the right diet, you know through to the end of the, the conversation which is, the other end of the conversation which is, well you know, is regulation really just about making sure that you're not gonna eat anything that is gonna kill you?" [Matilda]
		"Why are we talking about this again? Who's died this week? And that, that's the tension, isn't it? But as a regulator, you know where, where you're trying to balance your, your effort, in terms of things which are acute, people dying issues, with that long-term, and the balance between knowing what's the theory about the, the long-term consumption outcomes and the, the lack of real clarity around, you know, what people's motive, motivating food consumption choices actually are. When you try and put all of that together, and then say, so what's the role of regulation in this? You go, gee I don't know. What sort of difference can I make?" [Matilda]
		"But you know the dilemmas that we've got here, once you say well the job of food regulation isn't not, isn't just to make sure that it, that what you put in your mouth doesn't kill you by poisoning you, to then go well how can it actually, how can we shape the food supply so that it delivers the best public health outcome, without recognising that that also depends on a whole lotta other factorsthat have changed, the influence of which, have changed over time." [Matilda]
LOSS AND LACK OF EXPERTISE	VF is also represented as a problem of a lack, loss, outsourcing and devaluing of technical expertise among policy staff and policy experts. Commonwealth staff are represented as deficient in technical knowledge and relying on jurisdictions to	"The problem for nutrition I think is that everybody is an expertAnd everybody likes to think they're an expert." [Natalie] "So, when I had a conversation with my manager this morning I sort of like where would you go to for heart surgery advice? You'd go to a heart surgeon. So why

provide expertise. However, jurisdictions are losing expertise because of staff and funding cuts. Further, nutrition expertise is not recognised as credible because everybody has a relationship with food, and therefore everybody is an 'expert'.

A further problem is the lack of technical expertise and understanding among high-level decision makers (FRSC, Ministers). Combined with the lack of definitive evidence of long-term harm, the ongoing debate about food regulatory policy becomes emotional and philosophical rather than evidential. For the non-technical person, it is far easier to understand immediate harm from food-borne illness, than make the link between current dietary intake and long-term health outcomes.

Public health nutrition needs an 'attitudinal shift', as currently not well received by policy developers and other stakeholders because viewed 'self-righteous'. Need to demonstrate what can do.

wouldn't you go to a nutritionist for nutrition advice? And the point I was making is that people make it up and they read it in the paper and they write what's in the paper. And the response was yes, but everybody has a relationship with food. And I think that is true. Everybody eats and everybody wants to have their views on food." [Natalie]

"I think there is unfortunately a problem at the moment in...in governments outsourcing their technical expertise. And so, you get decisions being made within government But they're not getting the right amount and input from technical experts. And to be fair, some technical experts are unable to helicopter up to taking a more policy approach, so there's a sort of policy technical divide that I think is emerging and where policy people are devoid of technical knowledge and technical people are criticised for being too detailed. And I think somehow, we have to bridge that gap and make sure that governments continue to invest in good quality high level technical advice and valuing it at a high level. And I think that if you look at the Commonwealth nutrition section for instance, every five minutes there's a different person there. It's really hard to know how the Commonwealth even works anymore. And so, it's left to jurisdictions in some ways to bring to the table the technical expertise, and most of us are trying to do that almost off the side of our desks. So, I think there needs to be greater investment in, and recognition and understanding of, the technical expertise in terms of the longer-term ramifications of fortification decision making." [Natalie]

"The problem is the, the (sigh) our positions around the country have been shrinking recently." [Natalie]

"So, I think this is a really, really complex issue. And when you try and ask politicians to make decisions about

			something as complex as how regulation impacts on consumption patterns at this level of complexity, you know, it's pretty hard to actually know what the right decision is it's really hard to understand what you're talking about. You know as a non, as a non-nutritionist you know, for me, it took me, it took me, i'd probably even say years, to really get a good understanding about why we were even talking about this stuff." [Matilda]
			"So, you know, it's really easy to talk about you know, here's a scientific argument around why you shouldn't let X number of E coli appear on a food sample, but it's much more difficult to actually think about well you know, what, what's the sensible way of coming to a position on whether or not you know calcium in chewing gum is a problem or not? You either have a philosophical view about it or you don't." [Matilda]
			"Well, the science underlying consumption patterns, that about whether you let people make choices or you don't let people make choices and you protect them, is, is then a philosophical position. I think that when you come to this stuff, this, this policy space is riddled with that." [Matilda]
FOOD REGULATORY PROCESS	Other problem representations relate to the process of developing policy. These include: Little thought is given to the long-term ramifications of policy decisions or any precedent that is set for future policy decisions. The burden of proof of harm lies with the government and public health, rather than	Precedent setting Burden of proof Policy isolation	"And I think that what we probably don't do well in policy, is think about the precedent setting and long-term ramifications of positions. And I think there's probably some more, there's, there's probably another step in the process that doesn't exist at the moment, of people thinking about, so what are the ramifications of this, and what are the perverse outcomes that might happen further down the track? And I really don't think enough thought is given to that." [Natalie]
	industry. Applications and policies are considered in		"I actually think with the vitamins and minerals they saw that we're already putting twelve or fifteen or sixteen other

	isolation, rather than conjointly, or with a	vitamins in, why can't they just bung this one in?" [Gabriella]
	broader view. Consequently, without good evidence rather than ideological argument, reducing the regulatory burden will continue to take precedence over public health.	"So, in many respects we're often flouted by the fact that we have to prove that there is risk and harm associated with a proposal, when the applicant doesn't have to, you know, where, where's the proof of the problem? They don't have to prove that it's safe. We have to prove that it's harmful." [Natalie]
		"the way the system works is you assess each individual application as a one off, rather than in the overall scheme of things" [Natalie]
		"the problem is though we've got one day we have an application for this, the next day we have an application for that, the next minute we have an application for that, and if you add that, that and that up, you could end up getting too much of some nutrients in the food supply and you get distortion as a result. But because you've assessed each one individually, we've got a problem. And that still is to a certain extent a problem; that we still assess each application on its individual merits and we don't look at it in the context of, well how many other permissions for this nutrient are in the food supply?" [Natalie]
POLITICS	VF is also a problem of politics. In the end, the final version of the policy comes down to Ministerial Council votes, which are highly influenced by senior bureaucrats and FRSC members. On occasion though, a Minister has a personal view about an issue and will vote accordingly. Food regulatory policy is also a problem of politics. It is a balancing act finding middle ground between the 'polar opposite'	"You know the whole FRSC and Food Regulation Standing Committee's got ten jurisdictions to get agreement on, and different jurisdictions come and go in terms of their you know, colours of, of political persuasion and involvement of whether it's primary industry being lead or health being lead and then the, the likes of, you know So, it actually becomes quite challenging even to negotiate policy within governmentBut you know getting, in order to get something through Ministerial Council you need a majority vote. So, you need six out of the ten to agree to something to

	views of industry, public health and consumers. Vested interests are also at play. Further, different Government Departments (Health, Agriculture) have divergent views, and some politicians or jurisdictions have very strong views they use to 'champion' particular policies.	get something through. So, there's a fair bit of work that's needed to do to get everybody lined up." [Natalie] "So, I think that everybody heard all of the comments and that, and stakeholder views were incorporated, but in the end the decisions were, were always shaped by the political climate of the day. In it's broad, in its small 'p' political sort of sense, rather than big 'P' political party view I think it was always about votes What could you get through? What, what do we really want it to look like?" [Matilda] "After all, the Ministers are all politicians!" [Gabriella]
POWER	Another problem representation is that of power or establishing that Ministers are in charge, not FSANZ. Policies are developed by Ministers to give guidance to FSANZ, about the assessment of industry applications to amend the Food Standards Code.	"They were actually gonna resolve that a few years ago, but I guess that industry is just too powerful." [Gabriella] "we have decision-making bodies like the Office of Best Practice Regulation that make sure that we're only putting in place regulations where they are going to have proven benefits. And so, it's very difficult to get regulations through unless you can prove that it's got definite benefits. So sometimes even with all the best will in the world from the public health people on FRSC and at FSANZ, it might be the Office of Best Practice Regulation that says this is too much of an impost on industry. And there is a lot of rhetoric in the community around that there's too much red tape already, so wherever possible there is a desire to reduce red tape." [Natalie]

Table G.3: Industry Key Informants (n=3)

Main Problem Representation	Meaning	Child nodes/Related Problem Representations	Examples of use
POWER	FRSC represented as particularly powerful as that is where the (policy) development takes place. Public health also viewed as very powerful because it is strongly represented among jurisdictions and FRSC members, with eight jurisdictions represented by Health Minister / Department and two represented by Agriculture. Public health related public servants viewed as driving policy process and having a high level of influence with Ministers. Public health nutritionists (PHN), particularly in some jurisdictions, represented as especially influential with Food Regulatory Ministers. PHN viewed as having more influence than food industry. Food industry views believed to get less 'traction'. PHN viewed as having an 'adversarial' and 'moral high ground approach' in debates which is considered unhelpful. PHN also well represented at FSANZ, but FSANZ represented as limited in power	Decision making power (held by FRSC, public servants, public health, Ministerial Council, but less so by FSANZ)	"FRSC is where, where the (policy) development takes place." [Chantelle] "And part of that is possibly attributed to food policy being handled in portfolios that are primarily health portfolios. And only in New South Wales is the portfolio the, the lead Minister on the Forum, a non-Health Minister, or a Minister who does not also have health responsibilities. And so it's a very strong public health view. So, there's probably a, a question is really, is there any need for further public health engagement [CHUCKLES] when you've got such strong public health interests already reflected in the membership of, of the policy making arrangement for the joint system, and for Australia more generally?" [Chantelle] "It (the policy process) was very much driven by the public servants in the Department of Health. So, although they consulted, it was pretty much drafted, even FSANZ didn't really control the process, they, they were involved in what, what the implications would be for regulation, but they didn't really drive it." [Nicholas] "once it got to that level and there was the Ministerial Council which included Ministerial representation from each of the jurisdictions, so the States as well as the Commonwealth and New Zealand, there was much more of um, an influence from public health nutritionists who worked in the Department of Health were much more vocal and influential in getting their views put forward through the Minister to the Ministerial Council."

[Nicholas]

"Generally, we find that our, our views are taken on board to a lesser and greater extent, but we don't get the traction that we would wish on, on policy issues when FRSC is developing them." [Harry]

"I think because the nature of some of the criticism of the food industry does get traction in the mindset of, of some of the policy makers, without it being terribly well founded...Even in the debates right up to the World Health Organisation, there's a continuing debate about whether we should even be involved in policy development because industry is there to make a profit, you know and therefore you know so conflicted they can't provide sensible input." [Harry]

"The main problem is that people keep making the mistake, and it's really the mistake of you know, largely the public health sector, but it feeds through into the nutritionists who are employed by the Departments, who ultimately have to brief the Ministers. I mean I don't really blame the Ministers they just you know, they're, they're heavily reliant on their advice ultimately from the Departments." [Harry]

"Well, look first of all I think public health is pretty well represented with nutrition staff at FSANZ itself. I mean one, one change that has occurred is there's now a Chief Public Health Nutritionist... You know there had been a chief scientist but there wasn't someone at almost the same level from a public health nutrition point of view. And there's a number of senior nutritionists who've been there for a long time; ... they've got a technical point of view, but certainly they have a public health point of view." [Nicholas]

"FSANZ is on, usually sits at the table on these working groups. And so, it can be quite frustrating at times if after policy

			guidelines are in place, there are concerns expressed by FSANZ about the opaqueness of them, or the difficulty of working with them, when they're actually at the table at the time that they're developed. And so, so you know, I think they're, that's an area that has been worked on over time, but it has been a criticism in the past. And FSANZ provide expert advice; not only in terms of how they might end up using them but because a number of the people who work for FSANZ are experts in their own right, and their input is, is highly valuable." [Chantelle]
COMMERCIAL	VF is a commercial problem, particularly one of marketing and creating a point of difference from competing products and creating a 'health halo' in the minds of customers. However, marketing does not always translate into sales, unless fairly unique ingredient such as phytosterols. VF also a problem of trade, particularly incorporating the NZDSR into joint Australian and New Zealand Food Standards Code. Such collaboration of Australian and NZ regulations sought to enable harmonisation of systems for ease of trade.	Marketing via 'health halo' Sales International trade Harmonisation of food standards between countries	"of course, I would parenthetically say, mostly people are doing this for marketing reasons really, not for public health reasons; let's be honest." [Nicholas] "I think the impact of those things on sales is always pretty limited. Unless you've got something really unique. And it's probably not so much traditional vitamins and minerals. It's probably things like, well I guess, you know, [product name] and [product name] is the perfect example; when you have a sort of functional ingredient. That's when you get some take up, some impact on salesmy own view is that particularly for vitamins and minerals, people are a bit blasé about it they think it's a bit, oh well it's a generally healthy thing but they, they're not really looking at food as important supplements in the same way as they might take a [vitamin supplement product name]. They just sort of think it adds to the general halo of healthiness." [Nicholas] "It's just the marketing of it. You know one, one company has said we're going to market our products and another one hasn't." [Nicholas] "And so there was definitely concern about, about that it was just again seen as a purely marketing thing, rather than really

as a health you know in some way, a health intervention or policy of some kind." [Nicholas]

"And I think you know, it's a bit like, well in some cases, I mean again I guess the problem is that in this case it was only voluntary. So, there's always a suspicion I think with voluntary that it's being done for a purely marketing advantage, and I'm not denying that that's the main driver that you know a company has for doing something like that" [Nicholas]

"And recognise that the food industry is wealth generating; it does rely on being able to be competitive and to make money. We work in global markets in a, and Australia is a global market; we get food being imported into Australia." [Harry]

"Because New Zealand in particular, but also Australia to a, a slightly lesser degree, we are exporters of food. And to that extent having regard to the international standards which are established, not only for food safety reasons but for easing, making international trade more probable, possible, reference to Codex is, is very important...in terms of making sure that we do have consistency." [Chantelle]

"But one of the reasons for updating this policy was that New Zealand at the time had, and we still have, standards around supplemented foods. And those are foods with higher levels of vitamins and minerals in them than are currently permitted by the Food Standards Code. So, one of the objectives of the joint system was to accommodate in the future, some, potentially all, of the arrangements that New Zealand had, so that we could have you know a broader opportunity for the food supply in Australia and New Zealand: a) to be homogenous; and b) to be broader and allow more voluntary vitamins and minerals to be added. And so, the, when the Food Standards Code was signed into commencement in 2002, the

			understanding from the New Zealand side, was that our provisions and our regulations around supplemented food, would sit in (the) wings, until such time as they could accommodate, be accommodated within the Food Standards Code over time. So, that was the, the background with which New Zealand participated in the policy development. What we were wanting was a voluntary arrangement that would <i>allow</i> for those admissions to take place. So, there was a very, a very practical goal there, to you know, share to a greater extent the voluntary fortification that New Zealand had undertaken in the past years, before joining the joint system." [Chantelle] "the regulations, the food related ones, recognised, I think it's about forty-four or forty-five of the fifty standards in the Food Standards Code that are shared between Australia and New Zealand, to try and <i>align</i> as far as possible, all the other requirements associated with food standards. So, that all the labelling requirements, all the <i>claims</i> requirements, all of the identity, the ingredient listing, all of that, is now all <i>completely</i> aligned. The, basically the, the <i>key</i> exception, is in the area of fort, of fortification." [Chantelle]
EVIDENCE	Science has the ultimate authority for food regulatory decision making and should be the authority upon which policy and standards are based.	Authority of science	"I think it's become much more science based Much more rigorous in the sense of scientific assessmentover that time 'Cause quite often it's a frustrating, non-science-based interference by politicians on some of the policy making." [Nicholas]
	However, often regulations suffer from 'non-science' based interference from politicians (Ministers), jurisdictions and 'non-evidence based' public health		"I think it's, at least at the FSANZ level, I think it's a wonderful organisation and it's very strong from a scientific point of view." [Nicholas]
	campaigns such as the current call for a sugar tax.		"Well we know thatwhen FSANZ first got the application, inspection of the science suggested that there was no reason why the application shouldn't be approved and the food

standards code be amended... However, a number of stakeholders and particularly the jurisdictions arced up about that and said no you can't do that because it's contrary to the policy.... Now you know that was against the backdrop of an extremely rabid anti-sugar campaign that's now been going on for almost three years. And that in itself is really unfounded in science; it's just a whipping up of the issue by, well I don't know why they're doing it, but you know the, the players who, who were doing it, against a very, very low evidence of, of, of, to support their views. But somehow or other the jurisdictions have got whipped up in it, and I suspect some of the politicians might be of that view as well." [Harry]

"So, we have the interesting situation that the contextual, the contextual environmental of it, has, has you know, queered the whole process, to the extent we have our regulator, which we're all supposed to, to support in terms of its you know, its resourcing and its ability to make findings based on sound science, having been turned around by a policy direction that was driven by non-science. You know I think we should all, all be rather worried by that outcome; perhaps not surprised, but certainly worried." [Harry]

"I'm just thinking back to my time... that was one that was at my time. And certainly, there was a lot of consideration and well some research that went into whether that would impact on people's consumption of dairy products overall. Now I thought it came out pretty clearly that it wouldn't, and, and, and that was quite comforting to the [organisation] I would say in terms of allowing it. So, but it was based on you know, decent, reasonably decent research, as much as you could predict these things, and also looked at the experience in other countries where it was allowed." [Nicholas]

PUBLIC HEALTH and NUTRITION

VF policy represented as very supportive of, strongly aligned with and even skewed toward, public health.

VF itself represented as a problem of addressing nutritional inadequacies in the food supply, as well as nutritionally inadequate individual dietary intakes.

The problem of individual dietary inadequacies caused by sub-optimal nutrient intakes in some sections of population. VF should be used to address dietary inadequacy by fortifying foods people do eat, rather than insisting on individual dietary change.

Dietary inadequacy also viewed as the consequence of poor overall diet, rather than specific, problematic foods, i.e. not 'good foods and bad foods' but 'good diets and bad diets'.

Nutritional equivalence also represented as important.

nutritionally inadequate individual dietary intakes nutritionally inadequate food supply

Response given by KI-IN3 to the interview question 'do you think the policy is supportive of public health principles?':

"Oh absolutely! Absolutely. Ahhh... For example...public health policies cover everything in that first bullet point. So, 'where there's a need for increasing intake of a vitamin and min, or mineral'. So, that's, that would be where you would fit folate fortification or folic acid fortification, and you know, where you're trying to target specific population groups. And any of the special foods or medical foods or whatever; those fit into that, that category there. The Vitamin D fortification undertaken in Australia - that's one of those deficiencies... 'Generally accepted scientific and evidence that an increase in the intake can deliver a, a health benefit'. So, that would be to take into account future, the future proof the policy, and very much in the public health area... 'Nutritional profile of foods to be maintained in, at pre-processing...'. Not so much a public health issue, but public health consequences... And the same for the last one 'to enable alignment with primary food (through nutritional equivalence) '. Really where it I think reference to the nutrition policies and guidelines in Australia and New Zealand in the third bullet is, is a very strong link with the nutrition policies of both countries. So yeah, I mean just those two indicate very strong influence of public health policies and approaches." [Chantelle]

"I think the, that the fundamental need is... the recognition that there are still pockets of consumers or you know, subgroups of consumers or the population, which for one reason or another are sub-optimal in their vitamin intakes against recommendations. Now, I suspect you're always gonna get a few of those, but the pockets are too, too large to ignore, and the concerns are too great.... So, the rationale behind it; is that we I suppose, is we now have the science which tells us that

population intakes are, are sub-optimal in certain groups. And so, we can either have mandatory fortification or allow voluntary fortification to address that." [Harry]

"If we cannot get consumers to eat the foods they eat, you know which are available and construct a balanced diet, in other words if they're not getting the nutrients from the foods that they do eat because they refuse to eat the ones that they should eat, why don't we just fortify the foods that they do eat?" [Harry]

"And that's where the voluntary fortification, the current voluntary fortification of breakfast cereals by a whole range of vitamins and minerals was derived from. And you know the more recent data suggests that, you know generation of, of, of child after child has benefited from that in Australia. Which, and they wouldn't've been enjoying the health they, they currently do, if we, more, more subserviently to the public health sector...you know breakfast cereals are a very, very sound food. You know, particularly 'cause they're taken with milk, so the combination of them is, is, is particularly good. Breakfast cereal manu, well it's a good, it's a good food, generally a good food it's part of the you know, part of the recommendations in the dietary guidelines" [Harry]

"And [person] gave a whole lot of data on modelling, showing

"And [person] gave a whole lot of data on modelling, showing how much, I particularly remember riboflavin was contributed by fortified foods. And that if they were taken away much greater proportion of people would below the RDI or you know some way at risk of that." [Nicholas]

Table G.4: Public Health Key Informants (n=3)

Main Problem Representation	Meaning	Child nodes/Related Problem Representation	Examples of use
POWER	VF policy viewed as a good example of the power relationship between public health and food industry. Food industry viewed as having significant political power and influence in its own right. Food industry represented as having more power and influence over policy development than public health and citizen stakeholders. Powerful and conflicted interests at play at each level of policy decision making process A significant shift in power was apparent in the late 2000's when Non-Health Departments such as Agriculture took on a greater role in the decision-making process. This enabled industry to have greater influence with issues of innovation, trade harmonisation etc. Also, power at an individual level with a clash of personalities among stakeholders, i.e. strong, passionate, representatives from each group conflicting against each other during the policy development process.	Political power Power shift Vested interests Personal power	"Voluntary fortification to me is a very strong marker of the power relationship between commercial interests and public health interests. It's a policy position that completely supports the interests of the commercial food sector, and in particular the highly-processed food sector, the unhealthy end of the food spectrum, and it completely undermines basic public health nutrition principles. So, it couldn't have a starker example of the undermining of public health protection and the promotion of commercial exploitation." [Jack] "And inevitably the consequences being that policy decisions and food standards have come out in terms of what the commercial interests have sought and generally not reflected consumer and public health interests. And voluntary food fortification case study is a very good example of that." [Jack] "Yes, my experience is that they're (public health views) not well received and I guess lack the sort of power that food industry groups might have." [Jessica] "And food industry has a lot of power, so. Don't think I mentioned that, but they do. Political power and influence and they also have the ability to put together well constructed, well written, heavily supported documents that are quite professional. Whereas sometimes other organisations who rely on volunteers are scraping together responses." [Bridget]

"And it's throughout the food regulatory system. So, it's within the staffing within FSANZ, within the executive within FSANZ. It's particularly prominent in the Board of FSANZ. That would be where it is perversely and obscenely established to privilege food manufacturers' interests. We've actually got those with food manufacturing interests being presented as representing public health interests, which is just an insult. And it carries on through the various levels right up to the Ministers. So that we've seen progressive weakening of the ability to address public health concerns at the Ministerial level, so that we've now got a situation where non-Health Ministers have voting power on the Ministerial Council. Even when there are public health concerns, it can be Ministers with a clear conflict who can vote on those sorts of issues." [Jack] "The other thing that strikes me with this is, and I can't remember the exact timing...but you know in food regulation there seem to be a point of time where whole of government responses became more, more the norm. So, up until the period of time, probably up until around '08 I think, there was more nutrition people would respond to nutrition relevant policies. And then the, and I think it coincides with...when there was a, a change that allowed the Ag Minister to be the replacement Minister. Or, and I'm not sure, I can't remember whether it was the lead Minister as well, but we kept, we continued to have Health as lead Ministers, but Ag Departments had to be more involved, and had to agree to the position. And so, what happened then, is commercial interests became more evident in the policy process, because of course the Agriculture Department represents viable business. And so, I think the power shift, and the emphasis shift, occurred in food

			regulatory decision making at that time." [Bridget] "And so, what you had was the whole voluntary fortification issue, was a clash of personalities, with very, very strongdifferent interests and different beliefs around what should happen with the food supply, and in particular the composition of the food supply. So, you had one very powerful personality, and quite well placed within the government, and then [person] moved across to the Food Authority, who was very experienced, knew how the processes worked, knew how to work within government, was a strong [professional] and [person] was able to frame debates and form networks with like-minded people and had international contacts with [professional] expertise. And [person] was very passionate, and very hard-working in what [person] perceived as protecting public health from [person's] perspective. And at the same time, you had really powerful personalities in the food industry and in government, other sectors of government outside health sector, who were just as strongly driven to push a commercial perspective and quite, sometimes in ignorance but often in full understanding that it could be damaging to public health. So, it was a clash of personalities and crude power in that sense." [Jack]
COMMERCIAL	VF is a commercial problem that is the consequence of the neoliberal philosophy for deregulation, and the increased scale and speed of global food trade. Neoliberal philosophy very institutionalised within government and perpetuated through selection of staff, bias toward industry views in	Global food trade Neoliberalism Sales and marketing via 'health halo' Economic growth Deregulation	"my opinion is that almost 99% of the time it's driven by commercial interests" [Bridget] "You'd say over 80 or 90% can be explained by context. And, in particular it's a context of global food trade and needing to or wanting to pursue a harmonisation agenda with other regulatory authorities, particularly North America, to not create barriers for global food trade. And possibly even a stronger context was the neoliberal agenda

consultations etc.

VF is also a problem of trade arrangements with New Zealand (i.e. TTMRA), and NZ not repealing their dietary supplements regulations (NZDSR) as originally promised.

VF is mainly used for marketing and sales purposes, particularly to give a 'health halo' to processed foods.

Food industry lobbying and demand for economic growth means FSANZ objectives for commerce and trade given priority over public health and safety, even though legally lower priority.

of deregulation and attempting to remove so-called red tape for both policy-making...for writing policies and specifically making food standards." [Jack]

"There's always been global, well for hundreds of years there's been global food trade; it's just the size of it. And given the technological ability to modify food and markets and so on, the opportunities there just increase the scale and the speed at which that global food trade occurs. The neoliberal agenda probably has been in various facets around for centuries as well, but since the 80's in particular, it's just been so much more extreme. And it's also interesting culturally that it's seen as a good thing and I think relative to previous times this goes so much more unchallenged in the mainstream and it's just a business as usual, accepted as a common-good type approach." [Jack]

"I believe it's part and parcel of it; if you're going to pursue that agenda (neoliberalism), then you self-select, people self-select whether they will make themselves available for a position to exercise those contexts. But I think it weeds out people who don't play the game and pursue a deregulation and a commercial agenda and would prioritise public health over those. Those people tend to have opportunities removed. They tend to get subtle and not so subtle pressure put on them." [Jack]

"There's also a strong expectation, possibly poorly founded, poorly informed, that there'll be large markets and dollars to be gained from a highly processed and junk food and functional food type development into the future. And so while ever that is going to be an objective of the government at a high policy level and claimed a commercial opportunity, it would be very unlikely that a lot of teeth and strength would be given to protecting public health

			concerns and interests in the context of that broader policy agenda." [Jack]
			"So, one would be the Trans-Tasman Mutual Recognition Agreement, or whatever it's called. And New Zealand not repealing their Dietary Supplements Regulation. And that's put a fair amount of pressure I would have thought, on Australian Ministers to kind of just accept that that's going to be the case. And even though they (NZ) had agreed to rescind it or repeal it or whatever. So, I think that's been part of the issue." [Jessica]
			"I think probably there has been a lot of food industry engagement and demand. Because they see it (VF) as a selling point, and it fits well with the agenda in terms of making new products, and health is one of the selling factors etc, etc." [Jessica]
			"And in fact, you know, be 'kinda' nice to get rid of voluntary fortification. 'Cause the minute you have, the minute there's a mechanism for fortification and then a labelling of that fortification for benefit, then it's a marketing tool, and I think that's probably mostly where it's utilised." [Bridget]
			"That's the other thing that occurred with all of this assessment is the increasing focus on deregulation and cutting red tape, and you know, the Office of Deregulation and all those sort of organisation, organisational perspectives. So, I think what that has done is somehow worked to undermine the caution and assessment that Government would normally pay some things in favour of industry self-regulation." [Bridget]
NOT PUBLIC HEALTH	VF should be represented as a public health problem, but commercial and trade	Public health views dismissed	"I think there's also the other objectives that relate to trade and a level playing field and all of those sorts of things that

objectives given priority.

Also, relevance and importance of public health nutrition principles for VF, are often questioned, disputed and rejected.

Codex guidelines such as demonstrated public health need, nutritional equivalence and restoration ignored or not understood Impact of VF on obesity and chronic disease not taken seriously by decision-makers

Codex guidelines
Obesity & chronic
disease
Associated health

care costs

are also given the same kind of priority as public health and informing consumers even though they are further down on the priority list." [Jessica]

"I don't think they (public health views) have been considered well, generally. I think there's often an attempt to kind of, not belittle, but not take them very seriously. I think there's often much more credence given to food industry views. I think they're basically, in many cases, they've just missed problems that might be raised by submissions that we might have put in, and sometimes they're just not even acknowledged." [Jessica]

"It (public health) was considered, it was noted almost, but the, the seriousness or *weight* of the arguments that were provided around nutrition, were not considered important unless there was some immediate human risk." [Bridget]

"So, it (public health) was really a, it was seen as more of a moral motherhood kind of statement argument rather than a scientific argument. It was seen as not really having that much impact." [Bridget]

"Often there's some contesting of the importance or relevance of points that're brought up (e.g. Dietary Guidelines) So, certainly contested and debated, dismissed at times. [Bridget]

"Well I guess there were those basic issues around things like the Codex guidelines on addition of nutritive substances to food. Talking about the requirement for a public health need and all those other requirements that go with that; so that the vehicle chosen is appropriate and the amount that's delivered is worthwhile etc etc. And that in certain cases there is a place for fortification but basically the whole idea of voluntary fortification where it's certainly not

		justified or where it's justified on the basis of poor evidence, is not something that we would have supported or still support, would still not support." [Jessica]
		"So, I think public health in terms of food really looks like a population free from all, with reduced risk of chronic disease that are diet-related. That's not really apparent in the system. I think there would be a real <i>reshaping</i> of the system to emphasise different policy guidance, if that were the case. So, I think some of these applications and submissions that we get tied up with busy work for, are really not contributing to public health and are detrimental. So, I think there needs to be a reprioritising, and perhaps a, a review of the system and its impact for chronic disease prevention and health outputs." [Bridget]
		"So, when we start looking at issues like linking the prevalence of obesity to deregulation agendas and non-communicable disease prevalence to deregulation agendas, and we start saying we have to get more serious and stronger with our policy interventions. Then even, then even governments will have to sit up and pay attention, because they'll start to see the outcomes of hospital admissions from NCD's, and the problems of having a less fertile land to produce food, and the pollution that comes from processing food. The costs associated the economic costs alone, let alone all the moral issues of harm to the population; that might start tipping the debate. The costs forgone will outweigh the potential profits that can be made from exporting junk food." [Jack]
LOSS OF	Decision makers stripped of skill, quality	"And so, both the personality level and the technical level of
EXPERTISE	and diversity, in favour of more generically skilled staff. Thus, policy makers' ability to	staffing within the food regulatory system, and the quality and diversity of expertise narrows, and public health skills

frame debates for protecting public health and safety reduced.

Lack of understanding of both VF and key public health principles by policy development staff viewed as problematic. Nutrition advice, relevance and importance not well understood, creating indifference to, and disparagement of, public health concerns.

Public health nutrition expertise within jurisdictions has also shrunk dramatically around the country, with many positions lost in recent years, adding to the difficulty of having expertise recognised and accepted.

and expertise has been flicked out of many of the decision-making positions within the food regulatory system. And replaced with just generic, people with generic skills or expertise and skills that don't threaten the commercial agenda" [Jack]

"We were told that there was nothing wrong with things like vegemite that had all those B group vitamins in them. And [person themselves] used vegemite when [person] had little sores at the edge of [person's] mouth, and it worked perfectly for that deficiency. [PAUSE. LAUGHTER]. So basically, [person's] level of understanding was such that it really didn't penetrate... in terms of, hang on, we've got real serious concerns here, and from an n=1 study on what wasn't even diagnosed as a deficiency, you're saying that VF is a good thing and there are no harmful aspects to it etc, etc." [Jessica]

"There was a difficulty around people's ability to see where an individual food product fortification - how that would impact on a total diet." [Bridget]

"I mean you had to use specific food products to get people to understand the implications of what you were talking about. But then everybody had their own particular attachments to foods, so for example, foods that were iconic brands and that they considered not harmful."

[Bridget]

"So, there's, I guess there's not a clear understanding and direction around nutrition impact in food reg at that government policy level." [Bridget]

"I mean I think that we, when we had (organisation) years back...yeah it was really obvious then that there needed to be a specialist, expertise, you know. And I think, so I just

		have to say that my belief is that expertise that was around the table then, is slowly diminishing. Although in some jurisdictions it's still there, but there was a time where there was quite strong representation in <i>every</i> jurisdiction. And I think now more and more they're just relying on one or two or where they have someone who has expertise who's still employed." [Bridget]
		"Expertise and I think content knowledge is, is diminishedand people" [Bridget]
		"So, and that's all, what also has happened as a result of that is that there's less people within government who have the ability to assess. So, that workforce is stepped outside. So, over time that's going be more and more problematic I think." [Bridget]
POLITICS	Politics rather than scientific evidence viewed as determining policy outcomes. Political barriers to public health and consumer views being heard Government Ministers rarely willing to	"And, you know part of all this regulatory stuff is, it is the politics And so, we have a situation where the evidence says one thing, but the politicians are not agreeing with it or not accepting it and making decisions based on political imperatives." [Jessica]
	'stand-alone' in decision-making; will almost always go with majority view. Labor Governments generally more supportive of public health than Liberal Governments	"The structural barriers and political barriers to public health and consumer interests having significant influence over major issues is pretty remote, particularly where it's seen as inconsistent with the interests of food manufacturers." [Jack]
	Governments	"And there was a feeling that, I think, there was a sort of, a some of these, some products or you know, that this battle's already been lost, sort of thing. So, the gates, you know, the horse has bolted in lots of ways. So, why would you hang our Minister out [CHUCKLE] over some of these things" [Bridget]
		"So, it, it's, it's also how willing individuals are to, to upset

industry if you like [СНОСКІЕ] And how naïve they are [СНОСКІЕ] And certainly, some Ministers are way less naïve than others." [Bridget]
"Who the Minister is, what their position is, what Government is in, really does seem to impact on the weight of big public health issues and the willingness to, to consider good nutrition and healthy diet above other, other aspects" [Bridget]