Supplementary report to the 2008 Survey of added colours in foods available in Australia

Executive Summary

Following the publication in 2008 of the *Survey of added colours in foods available in Australia* (FSANZ 2008) Food Standards Australia New Zealand (FSANZ) has received new information which has allowed FSANZ to update the estimated dietary exposure of children to added colours. This new information includes:

- updated food consumption data from the 2007 Australian Children's Nutrition and Physical Activity Survey
- revised Acceptable Daily Intake (ADI)[1] from the Joint FAO/WHO Expert Committee on Food Additives (JECFA) for Quinoline Yellow and Sunset Yellow FCF and;
- typical use level data from the confectionery industry on the typical usage levels of five lake colours- Allura Red, Brilliant Blue, Indigotine (Indigo Carmine), Sunset Yellow FCF and Tartrazine.

Based on the new information, FSANZ has conducted an updated dietary exposure assessment for the Australian population sub-groups: children 2-5 years, 6-12 years and 13-16 years. For the updated dietary exposure assessments, new data on typical manufacturer use levels for specific colours from the confectionary industry was combined with existing data from the *2008 Survey of added colours in foods available in Australia*. To ensure the new data was robust, a comparison of the FSANZ 2008 analytical data was compared to the concentrations provided by industry, which showed negligible differences. This similarity provides confidence that the data provided by industry is representative of the use of lake colours in products in the Australian marketplace.

The mean (consumers only) and 90th percentile (representing high consumers) estimated dietary exposures were calculated for each individual colour and population sub-group. Dietary exposures were calculated using the mean analytical concentrations obtained in the 2008 survey (to represent consumption of a range of brands and varieties of foods over time) and the maximum analytical concentrations (to estimate the potential exposures from always consuming products with the highest concentrations of each colour). The use of the maximum analytical concentrations results in an overestimation of exposure to colours in most cases but was included in order to investigate the 'worst case' scenario.

The estimates of exposure presented in this supplementary report to added colours in foods and beverages for all children aged 2-16 years in Australia, even for high consumers (90th percentile) based on maximum analytical concentrations, are well within established ADIs.

The estimated dietary exposure to added colours for children aged 2-16 years of age is lower than reported in the 2008 colours survey. FSANZ has concluded that added colours do not pose a public health and safety concern for children in Australia as part of a balanced diet. FSANZ continues to monitor international developments on the permitted levels of added colours to foods and beverages.

[1] The ADI is an estimate of the amount of a substance in food or drinking water, expressed on a body weight basis, which can be ingested daily over a lifetime without appreciable risk to health.

Table of contents

List of tables

List of figures

Abbreviations

ADI	Acceptable Daily Intake
FAO	Food and Agriculture Organization
EFSA	European Food Safety Authority
FSANZ	Food Standard Australia New Zealand
HBGV	Health-Based Guidance Values
JECFA	Joint FAO/WHO Expert Committee on Food Additives
LOD	Limit of Detection
LOQ	Limit of Quantification
LOR	Limit of Reporting
mg/kg	Milligrams per kilogram
mg/kg bw	Milligrams per kilogram of body weight
WHO	World Health Organisation

1 Background

This is a supplementary report to the 2008 *Survey of added colours in foods available in Australia*. This report is intended to supplement the content of the 2008 survey and the two reports should be read in conjunction.

Health-Based Guidance Values (HBGVs) are the quantitative expression of an oral exposure (either acute or chronic) that would be expected to be without appreciable health risk. An example is the ADI, which is the amount of a food additive that can be consumed on a daily basis over a lifetime without appreciable health risk.

Synthetic and natural colours are added to food and beverages routinely to give the perception of flavour and quality, to meet consumer expectations. The technological functions that colours perform include: offsetting colour loss that can be caused by processing conditions; enhancing colour already present in the food; and protecting flavours and vitamins that may be light sensitive.

In Australia, Standard 1.3.1– Food Additives of the *Australia New Zealand Food Standards Code* (the Code) lists colours permitted for use in food and beverages and the maximum permitted levels for adding colours to food. Like all food additives colours must be declared on the label in the list of ingredients.

1.1 2008 Survey of added colours in foods available in Australia

The *2008 Survey of added colours in foods available in Australia* (FSANZ 2008) analysed the synthetic colours (dyes): Allura Red, Amaranth, Azorubine, Brilliant Black, Brilliant Blue, Brown HT, Erythrosine, Fast Green, Green S, Indigotine, Ponceau 4R, Quinoline Yellow, Sunset Yellow FCF, Tartrazine and two natural colours, Annatto and Cochineal/Carmine in a range of processed foods and beverages. The results of this survey indicated that estimated dietary exposure for a range of population sub-groups to added colours was below the relevant Acceptable Daily Intake (ADI) even for high consumers (FSANZ 2008).The results of this survey provided reassurance to consumers, that there is no human health and safety risk from consuming foods and beverages containing added colours as part of a balanced diet.

New information, available since the publication of the 2008 survey, is detailed below.

1.2 Consumption data from the 2007 Australian National Children's Nutrition and Physical Activity Survey

Since the FSANZ 2008 colours survey, updated consumption data from the 2007 Australian National Children's Nutrition and Physical Activity Survey (ANCNPAS), also known as Kids Eat Kids Play (KEKP) conducted by the Department of Health and Ageing has become available. Given the updated consumption data, dietary exposure estimates have been conducted by FSANZ to supplement the previous 2008 colours survey.

1.3 Revised JECFA ADIs

Since FSANZ completed its colours survey in 2008, the Joint FAO/WHO Expert Committee on Food Additives (JECFA) has reviewed the available toxicological data for Ponceau 4R, Quinoline Yellow and Sunset Yellow FCF. The outcome of this review has resulted in changes to the ADIs for Quinoline Yellow and Sunset Yellow FCF (Table 1).

Table 1 *Summary of the withdrawn and current JECFA Acceptable Daily Intakes (ADI) for Quinoline Yellow and Sunset Yellow FCF*

Additive	Withdrawn JECFA ADI* (mg/kg bw)	Current JECFA ADI† (mg/kg bw)	Comments
Quinoline Yellow	0–10	0–5	JECFA established a temporary ADI pending submission of requested data by 2013.
Sunset Yellow FCF	0–2.5	0–4	JECFA concluded that the toxicological studies completed since Sunset Yellow FCF was last reviewed enabled the ADI to be revised.

** used in the 2008 Survey of added colours in foods available in Australia.*
† FAO/WHO (2011)

1.4 Lake colours

The FSANZ 2008 survey did not specifically analyse for synthetic colours in the 'lake' form. Lake colours are formed when a synthetic dye is combined with a metallic salt substrate such as aluminium hydroxide (Downham and Collins 2000). Due to their insolubility in water and stability to light, lake colours are generally used to colour the coating of panned sugar confectionery (Downham and Collins 2000). After the publication of the 2008 added colours survey, industry provided FSANZ with concentration data on the usage of lake colours in confectionery. This concentration data was used in the revised dietary exposure estimates for children aged 2–16 years.

1.5 Supplementary report

Given the number of changes that have occurred since the FSANZ 2008 survey, FSANZ has prepared a Supplementary report with revised estimates of dietary exposure to added colours for children, based on the new information outlined above.

2 Objectives

The objectives of the Supplementary report were to:

- Estimate the dietary exposure for Australian children aged 2–16 years to individual added colours using revised food consumption data and lake colour concentration data.
- Assess the revised estimated dietary exposure for children aged 2–16 years against the current JECFA ADI's to determine any potential human health and safety risks from the consumption of foods containing added colours.

3 Methodology

3.1 Sampling and method of analysis

For this report, no additional laboratory analysis was conducted to determine the concentration levels of added colours. For detailed information on the types of foods sampled and the method of analysis, please refer to the *2008 Survey of added colours in foods available in Australia* (FSANZ 2008).

Data on the concentration of lake colours was provided to FSANZ from the confectionery industry. This new data has been combined with existing data from the *2008 Survey of added colours in foods available in Australia,* for the purposes of the dietary exposure assessment. A comparison of the analytical data obtained during the 2008 survey to the concentrations later provided by industry showed negligible differences. This similarity (between FSANZ data and industry data) provides reassurance that the data provided by industry is representative of the use of lake colours in products in the Australian marketplace.

3.2 Dietary exposure assessment approach

A dietary exposure assessment (dietary modelling) is a tool used to estimate the exposure to (or intake of) agricultural and veterinary residues, contaminants, nutrients, food additives and other substances from the diet. To estimate dietary exposure to food chemicals, food consumption data is combined with food chemical concentration data. Food regulators have used dietary modelling techniques internationally for many years to determine if dietary exposures to specific food chemicals present an unacceptable risk to public health and safety. Full details of the dietary exposure assessment approach can be found in the *2008 Survey of added colours in foods available in Australia (FSANZ 2008).*

The aim of dietary exposure assessments is to make as realistic an estimate of dietary exposure to food chemicals as possible. FSANZ always ensures the data and methodologies used for dietary exposure assessments are the most up-to-date and the best available. FSANZ notes any limitations associated with the dietary exposure assessment so that the results can be interpreted correctly. The assumptions and limitations for the revised dietary exposure estimates were the same as those listed in the *2008 Survey of added colours in foods available in Australia* (FSANZ 2008).

ANCNPAS, was conducted involving 4,487 children aged 2-16 years. The survey employed a 24 hour recall, with a second 24 hour recall for all 2007 ANCNPAS participants, conducted on a non-consecutive day. The availability of two days of food consumption data for each respondent provides a more realistic estimate of long term consumption of infrequently consumed food because it takes account of those who may eat a food on one day of the survey but not on the other. Using one 24 hour recall may capture an unusual eating occasion for an individual that does not describe how they normally eat. The ANCNPAS was conducted over a seven month time period, from February to August 2007, and the results were released in 2008 with almost 4,000 unique foods were reported as consumed. This data has been used in the dietary exposure assessments for added colours for children aged 2–16 years. The results of the 2007 ANCNPAS were weighted to represent the overall population of Australian children because stratified sampling with non-proportional samples were used in the ANCNPAS survey (full details of the sampling process for the survey can be found on the Australian Department of Health and Ageing website).

Since the 2008 colours survey was conducted, concentration data has been provided to FSANZ by industry for a number of lake colours. Due to the marginal changes in the data the modifications to the dietary exposure assessment using the 1995 National Nutrition Survey (NNS) was minimal for adults and therefore not presented in this supplementary report. The new concentration data has been incorporated into the dietary modelling using the 2007 ANCNPAS consumption data.

Dietary exposure estimates for consumers of foods assumed to contain added colours using the 2007 ANCNPAS consumption data were calculated for two scenarios: the ‘mean colours scenario’ and the ‘maximum colours scenario’. The mean colours scenario used mean analytical concentration results and is considered a more realistic representation of dietary exposure to added colours. The maximum colours scenario uses maximum analytical

concentration data and is a conservative approach used to represent a 'worst case' estimate. More details of the mean and maximum colours scenarios as well as a full food list and colour concentrations used in the dietary modelling were provided in the *2008 Survey of added colours in foods available in Australia.* The mean consumption amounts of each food for each age group used in this report are provided in Appendix 1.

4 Results

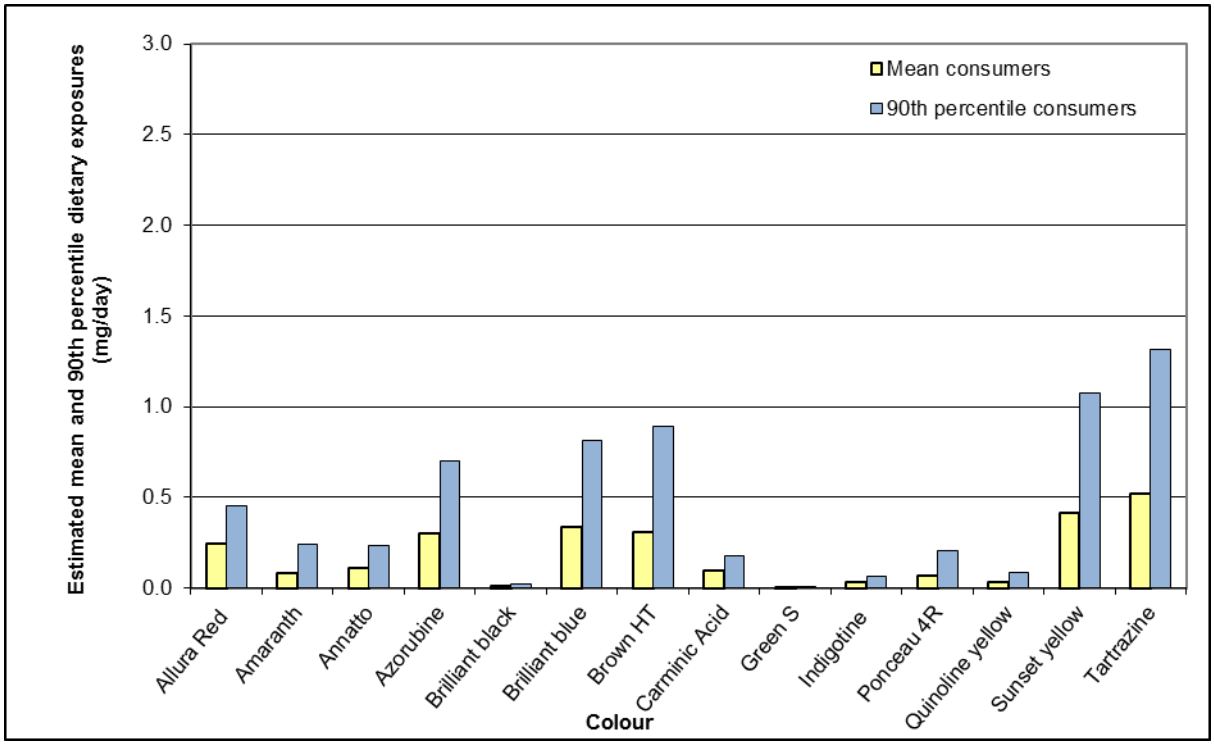
4.1 Mean colours scenario

The results of the dietary exposure assessment for the mean colours scenario are summarised below. Detailed findings for both the mean colours scenario and maximum colours scenario are provided in Table A2.1 of Appendix 2.

Children aged 2-5 years

The estimated mean and 90th percentile (high consumers) dietary exposures (mean colours scenario) for children aged 2–5 years consuming food containing added colours are shown in Figure 1.

Mean and 90th percentile dietary exposures to individual added colours for consumers aged 2–5 years were estimated to be lowest for Green S (0.001-0.002 mg/day respectively) and highest for Tartrazine (0.52 and 1.3 mg/day respectively).

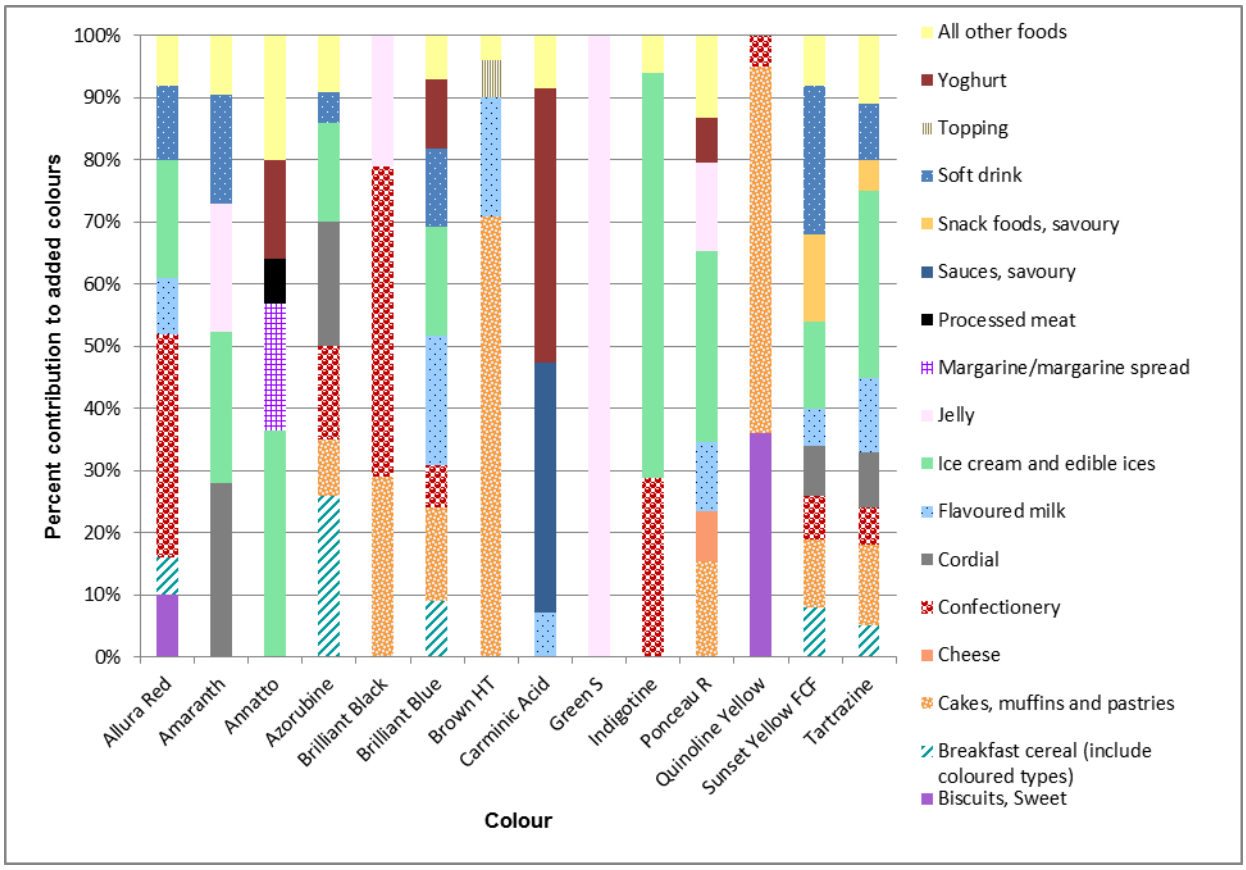


Note: *Only those colours with reported analytical detections have been graphed.*
******* *Mean colours scenario*

Figure 1 Estimated mean and 90th percentile dietary exposures for consumers aged 2–5 years*

Major contributing foods

The major contributors (≥5%) to the overall estimated dietary exposures to individual added colours from food and beverages for children aged 2-5 years are shown in Figure 2.



***Note:** Per cent contribution of each food group is based on total dietary exposure for all consumers in the 2–5 years age group. Only those colours that were found in three or more food groups have been graphed. If the food is not a major contributor for the population sub-group it is not shown in the graph.*

Figure 2 Major contributors to dietary exposures of individual colours for children aged 2–5 years

For each colour, foods and beverages that made the greatest contribution to estimated dietary exposure in children aged 2–5 years were:

- Allura Red – Confectionery and ice cream and edible ices
- Amaranth – Cordial and ice cream and edible ices
- Annatto – Ice cream and edible ices and margarine spread
- Azorubine – Breakfast cereal and cordial
- Brilliant Black – Confectionery (including sugar and chocolate types) and cakes, muffins and pastries
- Brilliant Blue – Flavoured milk and ice cream and edible ices
- Brown HT – Cakes, muffins and pastries and flavoured milk
- Carminic acid – Yoghurt and savoury sauces
- Green S – Jelly
- Indigotine – Ice cream and edible ices and confectionery
- Ponceau 4R – Ice cream and edible ices and cakes, muffins and pastries
- Quinoline Yellow – Cakes, muffins and pastries and sweet biscuits
- Sunset Yellow FCF – Soft drink and savoury snack foods

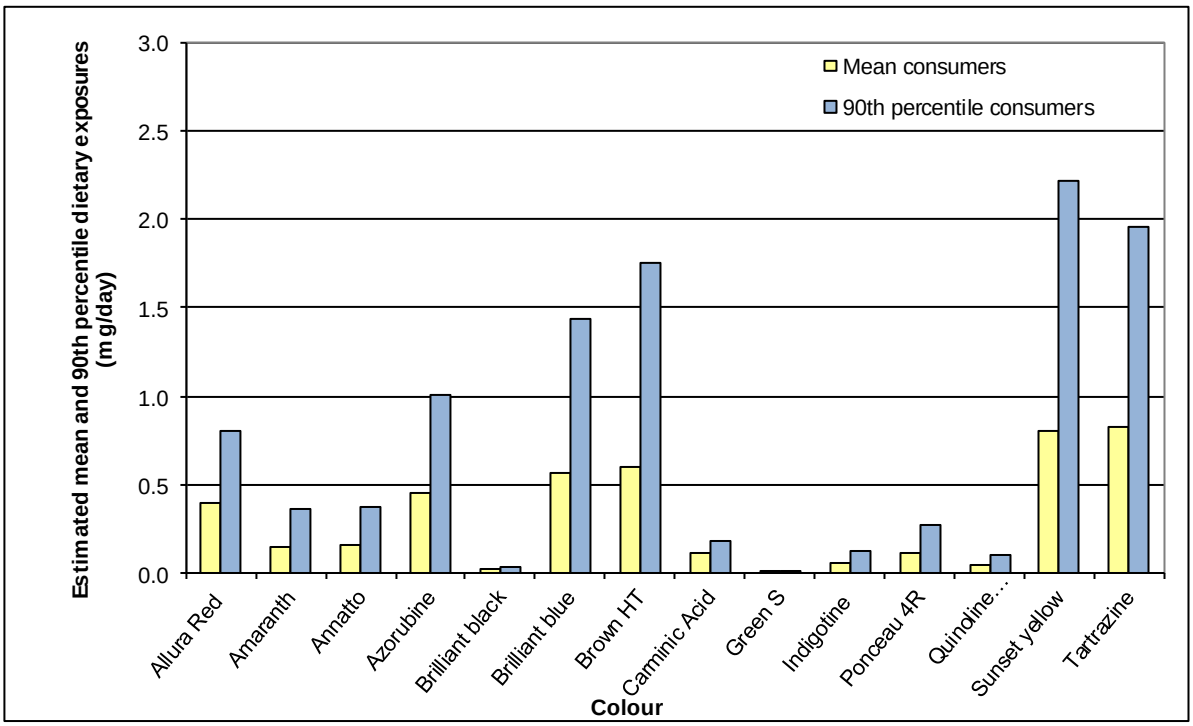
- Tartrazine – Ice cream and edible ices and cakes, muffins and pastries

More specific details about the major food group contributors for each added colour are presented in Table A3.1 of Appendix 3.

Children aged 6–12 years

The estimated mean and 90th percentile dietary exposure (mean colours scenario) for children aged 6–12 years consuming food containing added colours are shown in Figure 3.

The mean and 90th percentile dietary exposures to individual colours for children aged 6–12 years were estimated to be lowest for Green S (0.002–0.003 mg/day respectively). The highest mean estimated dietary exposure was from Tartrazine (0.82 mg/day) and the highest 90th percentile estimated dietary exposure was from Sunset Yellow FCF (2.22 mg/day).

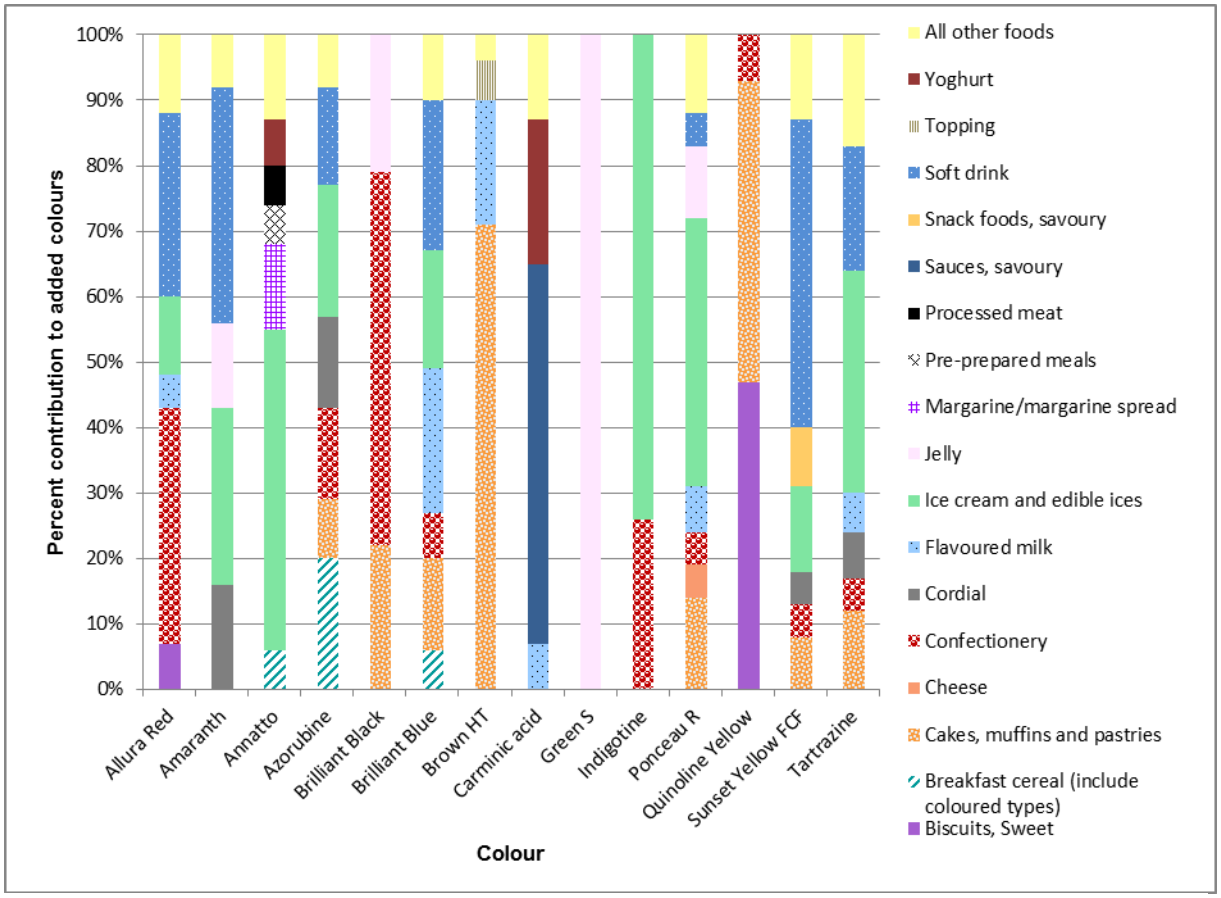


Note: *Only those colours with reported dietary exposures have been graphed.*
******* *Mean colours scenario*

Figure 3 Estimated mean and 90th percentile dietary exposures for consumers aged 6–12 years*****

Major contributing foods

The major contributors (≥5%) to the overall estimated dietary exposures to individual added colours from food and beverages for children aged 6–12 years are shown in Figure 4. More specific details regarding the major food group contributors for each added colour for this age group are presented in Table A3.2 of Appendix 3.



***Note:** Per cent contribution of each food group is based on total dietary exposure for all consumers in the 2–5 years age group. Only those colours that were found in three or more food groups have been graphed. If the food is not a major contributor for the population sub-group it is not shown in the graph.*

Figure 4 Major contributors to dietary exposures of individual colours for children aged 6–12 years

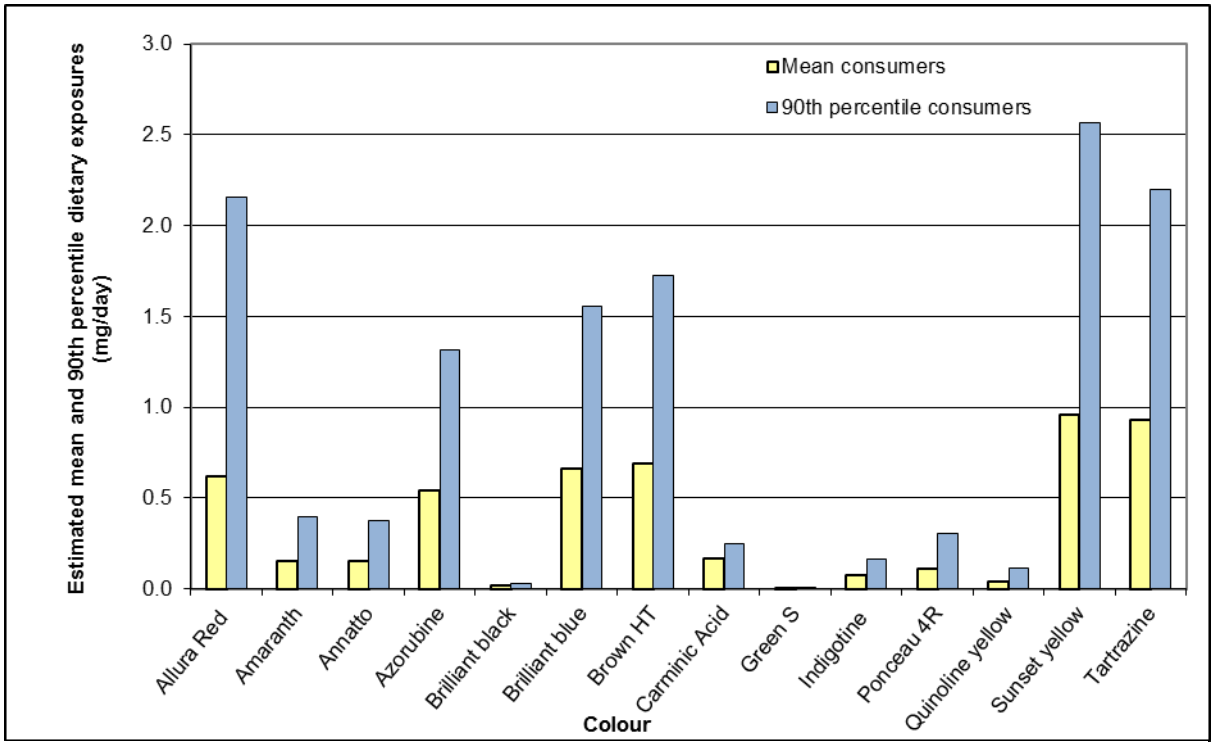
For each colour, foods and beverages that made the greatest contribution to dietary exposure in children aged 6–12 years were:

- Allura Red – Confectionary and soft drink
- Amaranth – Soft drink and ice cream and edible ices
- Annatto – Ice cream and edible ices and margarine spread
- Azorubine – Ice cream and edible ices and breakfast cereal
- Brilliant Black – Confectionary and cakes, muffins and pastries
- Brilliant Blue – Soft drink and flavoured milk
- Brown HT – Cakes, muffins and pastries and flavoured milk
- Carminic acid – Savoury sauces and yoghurt
- Green S – Jelly
- Indigotine – Ice cream and edible ices and confectionary
- Ponceau 4R – Ice cream and edible ices and cakes, muffins and pastries
- Quinoline Yellow – Sweet biscuits and cakes, muffins and pastries
- Sunset Yellow FCF – Soft drink and ice cream and edible ices
- Tartrazine – Ice cream and edible ices and soft drink.

Children aged 13–16 years

The estimated mean and 90th percentile dietary exposures to added colours for children aged 13–16 years consuming food containing colours are shown in Figure 5.

The mean and 90th percentile dietary exposure to individual added colours for consumers aged 13–16 years were estimated to be in the range of 0.001–0.96 mg/day and 0.004–2.57 mg/day, respectively. The highest mean and 90th percentile dietary exposure for children aged 13–16 years was from Sunset Yellow FCF. The lowest mean and 90th percentile estimated dietary exposures were from Green S.



Note: *Only those colours with reported dietary exposures have been graphed.*
******* *Mean colours scenario*

Figure 5 Estimated mean and 90th percentile dietary exposures for consumers aged 13–16 years*

Major contributing foods

The major contributors (≥5%) to the overall estimated dietary exposures to individual added colours from food and beverages for children aged 13–16 years are shown in Figure 6. More specific details regarding the major food group contributors for each added colour for this age group are presented in Table A3.3 of Appendix 3.

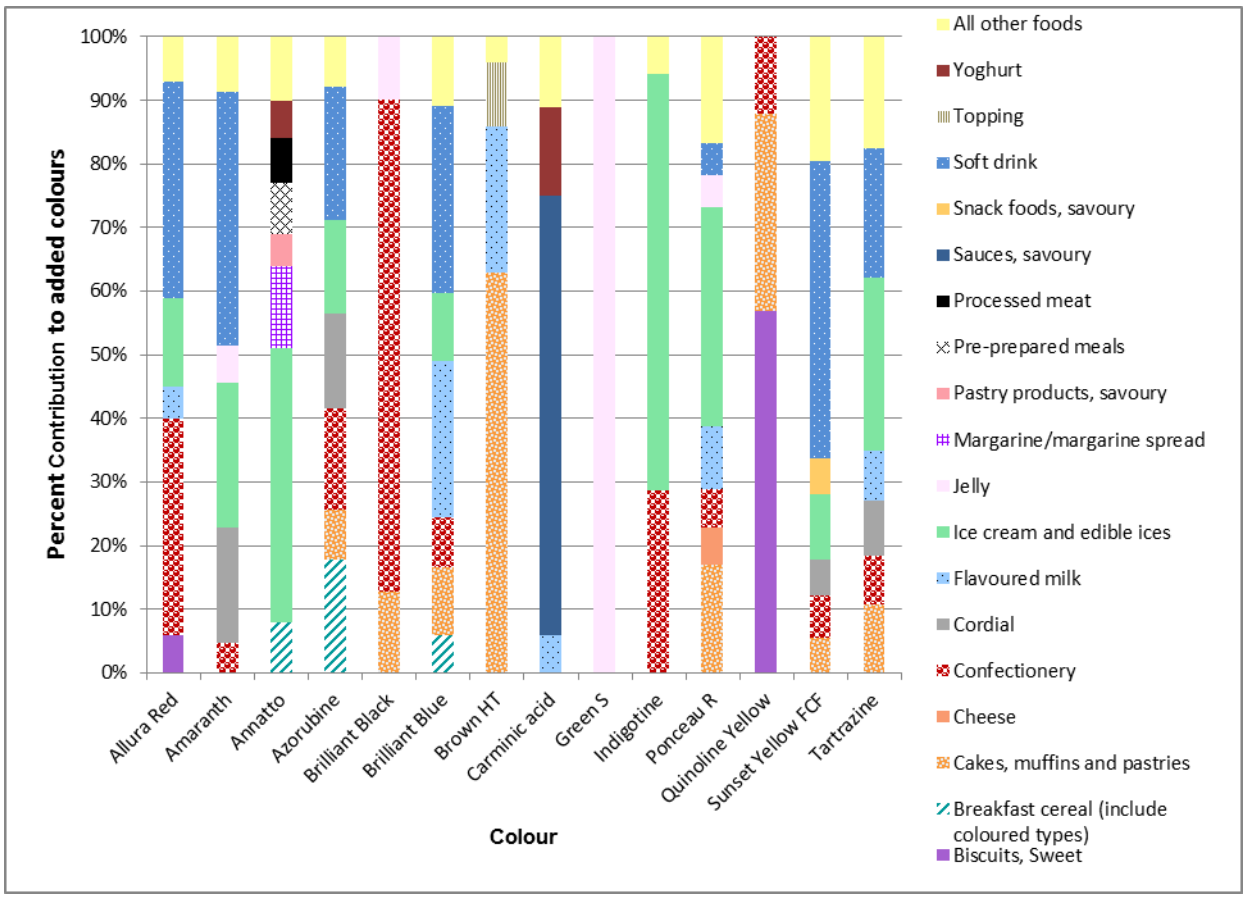


Figure 6 Major contributors to dietary exposures of individual colours for children aged 13–16 years

For each colour, foods and beverages that made the greatest contribution to dietary exposure in children aged 13–16 years were:

- Allura Red – Soft drink and confectionary
- Amaranth – Soft drink and ice cream and edible ices
- Annatto – Ice cream and edible ices and margarine spread
- Azorubine – Soft drink and breakfast cereal
- Brilliant Black – Confectionary and cakes, muffins and pastries
- Brilliant Blue – Soft drink and flavoured milk
- Brown HT – Cakes, muffins and pastries and flavoured milk
- Carminic acid – Savoury sauces and yoghurt
- Green S – Jelly
- Indigotine – Ice cream and edible ices and confectionary
- Ponceau 4R – Ice cream and edible ices and cakes, muffins and pastries
- Quinoline Yellow – Sweet biscuits and cakes, muffins and pastries
- Sunset Yellow FCF – Soft drink and ice cream and edible ices
- Tartrazine – Ice cream and edible ices and soft drink.

•

4.2 Maximum colours scenario

An assessment of estimated dietary exposures to individual added colours at the 90th percentile (consumers only) using maximum colour concentrations found:

- Dietary exposures to individual added colours for children aged 2–5 years at the 90th percentile were estimated to be in the range of 0.05–6.6 mg/day.
- Dietary exposures to individual added colours for children aged 6–12 years at the 90th percentile were estimated to be in the range of 0.07–11.01 mg/day.
- Dietary exposures to individual added colours for children aged 13–16 years at the 90th percentile were estimated to be in the range of 0.09–12.2 mg/day.
- For all age groups studied, the highest mean dietary exposure was from Tartrazine and the lowest was from Green S.

5 Risk characterisation

In November 2009, the European Food Safety Authority (EFSA) established health-based guidance values (ADI) for Ponceau 4R, Quinoline Yellow and Sunset Yellow FCF of 0.7, 0.5 and 1 mg/kg bw respectively (EFSA 2009a, b,c). Since these values were substantially lower than the ADI values established by JECFA many years earlier all the available toxicological data for these three colours was reviewed by JECFA at its 74th meeting (FAO/WHO 2011). At the 74th JECFA meeting the Committee noted that many of the key toxicological studies had not been considered in the EFSA review. The changes made by JECFA at its 74th meeting to the Quinoline Yellow and Sunset Yellow FCF ADI values are listed in Table 1. In this supplementary report the estimated dietary exposures, using mean concentration data, for these colours were compared with their respective JECFA ADI. ADIs for all other colours remain unchanged and are those used in the 2008 Survey report, as set out in Table 2.

Table 2 *ADIs used for added colours (see Table 1 for* Quinoline Yellow and Sunset Yellow FCF ADIs)

INS	Additive	JECFA ADI (mg/kg bw)
129	Allura Red	0–7
123	Amaranth	0.05
160b	Annatto	0–0.4
122	Azorubine	0–4
151	Brilliant Black	0–1
133	Brilliant Blue	0–12.5
155	Brown HT	0–1.5
120	Cochineal/Carmine	0–5
127	Erythrosine	0–0.1
143	Fast Green	0–25
142	Green S	0–5
132	Indigotine	0–5
124	Ponceau 4R	0–4
102	Tartrazine	0–7.5

Children aged 2–5 years had mean and maximum (90th percentile) estimated dietary exposure below 5% of the acceptable daily intake (ADI) for all added colours (Figure 7). The colours with the highest mean and maximum (90th percentile) estimated dietary exposure expressed as a percentage of their respective ADIs were Annatto and Brown HT.

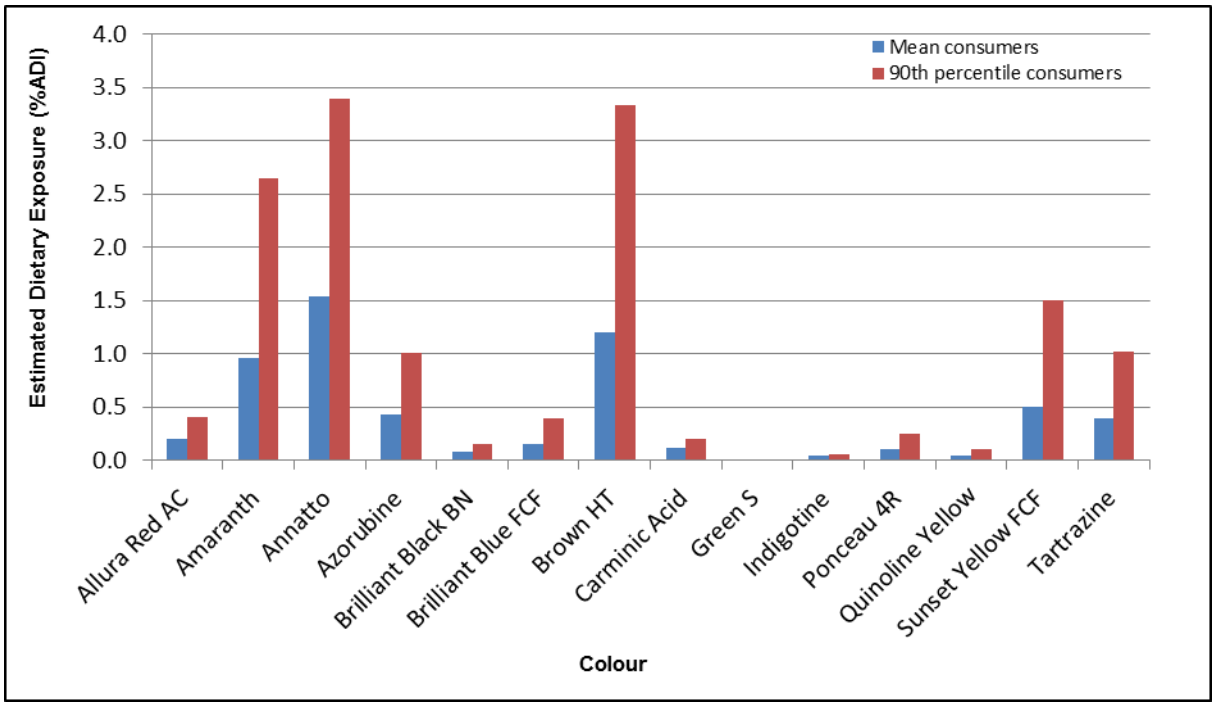


Figure 7 Estimated mean and maximum (90th percentile) dietary exposure to added colours for children aged 2–5 years as a percentage of the ADI

All children aged 6–12 years had mean and 90th percentile estimated dietary exposure below 5% of the ADI for all added colours (Figure 8). The colours with the highest mean and 90th percentile estimated dietary exposure expressed as a percentage of their respective ADIs were also Annatto and Brown HT.

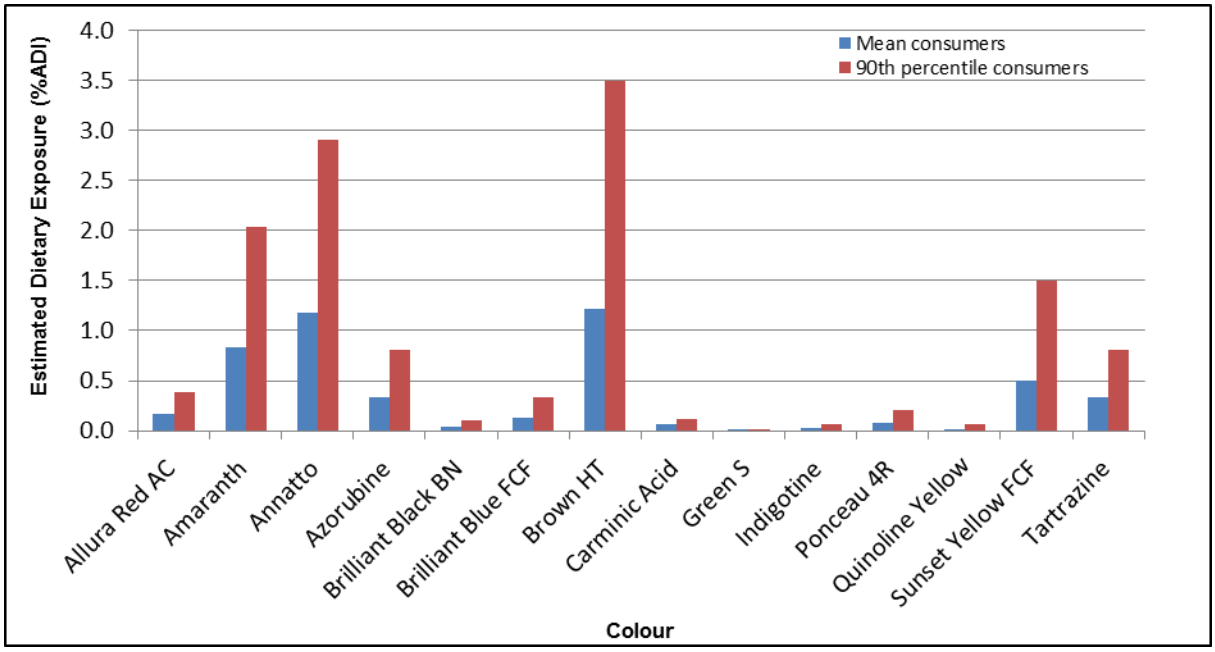


Figure 8 Estimated mean and maximum (90th percentile) dietary exposure to added colours for children aged 6–12 years as a percentage of the ADI

Children aged 13–16 years had mean and maximum (90th percentile) estimated dietary exposures below 5% of the acceptable daily intake (ADI) for all added colours (Figure 9). The colours with the highest mean and maximum (90th percentile) estimated exposures expressed as a percentage of their respective ADIs were Brown HT and Annatto.

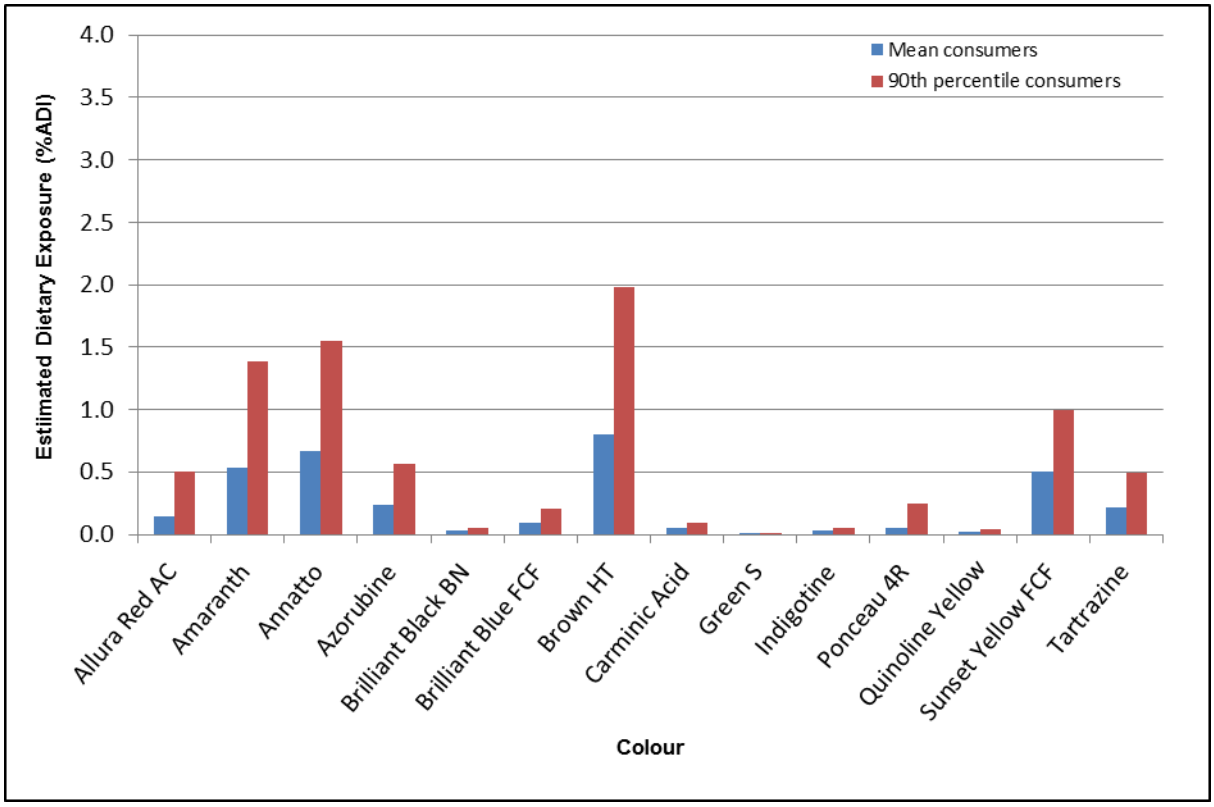


Figure 9 Estimated mean and 90th percentile dietary exposure to added colours for children aged 13–16 years as a percentage of the ADI

The exposure to each colour was calculated as a percentage of the ADI for 90th percentile (high consumers) in the maximum colours scenario. Table 3 shows the reduction in exposure as a percentage of the ADI between the results reported in the 2008 survey report and this 2012 supplementary report for Amaranth. In the 2008 colours survey, exposure to Amaranth was the highest as a percentage of the ADI at 85% for 2–5 year old consumers at the 90th percentile (high consumers). The revised dietary exposure to Amaranth for 2–5 year old consumers at the 90th percentile (high consumers) was lower at 31% of the ADI. This trend was also observed for 6–12 year old consumers at the 90th percentile (high consumers) for Amaranth (Table 3).

Table 3 *Consumers at the 90th percentile expressed as a percentage of the ADI using the maximum colours scenario*

Colour	Consumers aged 2–5 years		Consumers aged 6–12 years	
	2008 survey	2012 report	2008 survey	2012 report
Amaranth	85%	31%	65%	34%

Please refer to Appendix 4, for complete information on the dietary exposure assessment results for the maximum colours scenario.

6 Discussion

The findings of this revised dietary exposure assessment showed an overall reduction in estimated dietary exposure to colours in 2 to 16 year olds in comparison to the FSANZ 2008 colour survey. For example, the dietary exposure to Sunset Yellow FCF for high consumers aged 13–16 years was estimated to be 2.57 mg/day in the current study. When this exposure is compared to the high consumers for a similar age group (13–18 years) in the 2008 survey, the dietary exposure to Sunset Yellow FCF was 5.19 mg/day. This equates to a reduction from 5% of the ADI in 2008 to 1% of the JECFA ADI in the current supplementary report. There was a reduction in both the estimated exposure (mg/day) and percentage of the ADI for all colours investigated in this supplementary report.

Across the two studies, the major contributors of dietary exposure to added colours in all age groups generally remained consistent. The reduction in estimated dietary exposure levels expressed as a percentage of the respective ADI for some added colours may be a result of some or all of the following factors:

- The inclusion of the recent 2007 ANCNPAS survey consumption data rather than the 1995 NNS consumption survey used in the FSANZ 2008 colours survey may mean there are different food consumption amounts for some food groups assumed to contain added colours.
- The 2007 ANCNPAS survey contains a second non-consecutive day of recall data which provides a more realistic estimate of 'usual' consumption and results in a distribution of dietary exposure estimates such that the 90th percentile value is closer to the centre of the distribution than it would be if based on records for one day only. The 1995 NNS had records for one day per person.
- The revision of the ADI for Sunset yellow FCF, where the ADI was increased from 0–2.5 mg/kg/bw to 0–4 mg/kg bw.

In the current study the dietary exposure was also calculated for the *Maximum Colours Scenario*. In this scenario high consumers (90th percentile) of food and beverages containing colours were also well below the respective JECFA ADI for each added colour. The highest dietary exposure was estimated for Tartrazine at 12.2 mg/day in 2012 compared to 26.71 mg/day in the 2008 colours survey (FSANZ 2008), resulting in a reduction in estimated dietary exposure to Tartrazine as a percentage of the JECFA ADI from 6% in 2008 (FSANZ 2008) to 0.5% of the JECFA ADI in 2012. The estimated dietary exposure to Amaranth was calculated as part of the maximum colours scenario in 2008 and was found to be 85% of the JECFA ADI for consumers aged 2–5 years at the 90th percentile (high consumers). In the 2012 revised estimate this decreased to 31% of the JECFA ADI.

In summary, the estimated dietary exposure to added colours in food and beverages does not pose a health concern to Australian consumers, in particular children. The 2008 colours survey (FSANZ 2008) also concluded that exposure levels to added colours in food and beverages did not pose a public health and safety concern for Australian adults. Together, these two reports provide reassurance that estimated dietary exposure to added colours in foods and beverages is not a public health and safety concern for the Australian population.

7 Conclusion

This report confirms the findings of the FSANZ 2008 added colours survey for children. It reiterates that the current estimated dietary exposure of children to added colours in food and beverages in Australia remains well within the ADI. For each colour investigated in this report, the estimated dietary exposure was <5% of the ADI in all cases, including for high consumers. The findings of this report confirm that dietary exposure to added colours in food and beverages does not pose a public health and safety concern for children in Australia.

As there are no public health and safety concerns for children or adults in Australia arising from eating foods containing these colours, FSANZ does not propose any immediate risk management action. However, FSANZ will continue to monitor international developments and changes to permissions for added colours in foods and beverages.

Notwithstanding the conclusion, FSANZ recognises that some people prefer to avoid certain food colourings. For this reason, any colouring additive in a food must be declared on the label of that food. Consumers can use this label information to identify products where they are present and avoid such products if they wish to do so.

8 References

Department of Health and Aging (2007). *2007 Australian National Children's Nutrition and Physical Activity Survey*. Canberra. (Also available from: http://www.health.gov.au/internet/main/publishing.nsf/Content/phd-nutrition-childrens-survey)

Downham A, and Collins P, (2000) Colouring our foods in the last and next millennium. International Journal of Food Science and Technology 35:5–22.

European Food Safety Authority, (2009a) Scientific Opinion on the re-evaluation of Ponceau 4R (E 124) as a food additive. downloaded from: http://www.efsa.europa.eu/en/efsajournal/doc/1328.pdf on 10 February 2012

European Food Safety Authority, (2009b) Scientific Opinion on the re-evaluation of Quinoline Yellow (E 104) as a food additive. downloaded from: http://www.efsa.europa.eu/en/efsajournal/doc/1329.pdf on 10 February 2012

European Food Safety Authority, (2009c) Scientific Opinion on the re-evaluation of Sunset Yellow FCF (E 110) as a food additive. downloaded from: http://www.efsa.europa.eu/en/efsajournal/doc/1330.pdf on 10 February 2012

FAO/WHO 2011, (2011) Seventy-fourth meeting, 14–23 June 2011 summary and conclusions
issued 4 July 2011
ftp://ftp.fao.org/ag/agn/jecfa/JECFA_74_Summary_Report_4July2011.pdf

Food Standards Australia New Zealand, (2008) *Survey of added colours in foods available in Australia.* Food Standards Australia New Zealand, Canberra. http://www.foodstandards.gov.au/_srcfiles/Colours%20Survey_Final%20Report%2022%20Oct%2008%20_2_.pdf. Accessed 29 August 2011.

9 Appendices

Appendix 1 Table A1.1: Mean food consumption for consumers

Food name	Mean food consumption for consumers (grams per day)		
	2-5 years	6-12 years	13-16 years
Advocaat	NC	NC	NC
Bacon	22	26	30
Bar, Chocolate, Cherry/Fruit	16	21	23
Bar, Fruit Based	21	22	20
Bar, Fruit Based, with Cereal-based Coating	NC	NC	NC
Bar, Peppermint Crackle, Choc Coated	NC	12	26
Bar, Wafer, nuts, caramel, choc coated	11	17	24
Bar, Yoghurt Based, Rice Crisp, Choc	10	12	10
Beef, crumbed	NC	NC	NC
Beverage Flavouring, Dry Mix, Non-Chocolate	4	4	5
Beverage Flavouring, Non-Chocolate	12	22	NC
Biscuit Mix, Dry	NC	NC	NC
Biscuit, Sweet, Choc Chip/Dipped	13	16	19
Biscuit, Sweet, Choc Coated	NC	NC	3
Biscuit, Sweet, Fruit Filled	11	15	15
Biscuit, Sweet, Jam Filled	17	15	21
Biscuit, Sweet, Sandwich, Cream & Jam Filled	17	15	25
Biscuit, Sweet, Sandwich, Cream Filled	14	18	21
Biscuit, Sweet, Wafer, Chocolate Cream Filled	16	11	12
Biscuit, Sweet, Wafer, Cream Filled, Non-chocolate	8	13	18
Biscuit, Sweet, Tartlet	8	7	NC
Biscuits, Savoury, Flavoured	16	19	23
Biscuits, Savoury, Rice Crackers	NC	NC	NC
Biscuits, Sweet, Fruit	15	9	24

NC = Not Consumed

Food name	Mean food consumption for consumers (grams per day)		
	2-5 years	6-12 years	13-16 years
Biscuits, Sweet, Iced	12	14	15
Biscuits, Sweet, Marshmallow	9	15	16
Biscuits, Sweet, Marshmallow & Jam, Choc Coated	12	16	22
Biscuits, Sweet, Plain	14	16	21
Boiled Lolly	8	11	10
Breakfast Bar, Not Further Specified	12	14	16
Breakfast Cereal, Biscuit, Fruit	25	26	36
Breakfast Cereal, Biscuit, No Fruit	20	28	41
Breakfast Cereal, Bran	22	38	60
Breakfast Cereal, Coloured	21	23	37
Breakfast Cereal, Puffed/Formed/Flakes, Fruit	24	41	54
Breakfast Cereal, Puffed/Formed/Flakes, No Fruit	21	31	42
Bun, Sweet, Iced	29	37	35
Cake, Chocolate, Dry Mix	NC	NC	NC
Cake, Chocolate, Iced/Uniced	33	46	48
Cake, Fruit	25	44	63
Cake, Lamington	24	31	35
Cake, Not Further Specified	26	45	67
Cake, Plain Dry Mix	NC	NC	NC
Cake, Plain/Flavoured Iced	30	28	30
Cake, Plain/Flavoured Uniced	34	42	46
Cake, Sponge, Choc, Cream Filled	16	33	42
Cake, Sponge, Roll Jam/Cream	23	35	46
Cake, Sultana/Date Iced/Uniced	48	64	63
Cake, Tea	NC	NC	NC
Caramel/Toffee, Choc Coated	13	14	15
Cheese Spread	11	7	12

NC = Not Consumed

Food name	Mean food consumption for consumers (grams per day)		
	2-5 years	6-12 years	13-16 years
Cheese, Bocconcini/Mozarella	19	22	38
Cheese, Cheddar	19	22	26
Cheese, Colby	20	22	21
Cheese, Edam/Gouda	12	12	20
Cheese, Processed	14	15	15
Cheese, Processed Light	14	14	15
Cheesecake, Fruit Topped	15	45	66
Chewing Gum	3	4	3
Chips, Hot Potato	47	65	84
Chocolate, Candy Coated	10	13	29
Chocolate, Filled	10	20	22
Coconut Ice	48	18	21
Cones, Ice cream	3	4	5
Confectionery, CHO Modified, Not Chocolate	5	9	8
Confectionery, Sugar Type Soft/Jelly	11	19	35
Cordial Concentrate, Blackcurrant	23	27	50
Cordial Concentrate, Citrus	31	38	49
Cordial Concentrate, Non-Citrus	33	31	37
Cordial, Blackcurrant	128	NC	NC
Cordial, Citrus	67	151	105
Cordial, Not Further Specified	121	168	260
Cordial, Non-Citrus	NC	142	NC
Corn Relish	3	3	5
Crème Caramel	NC	NC	NC
Crisp, Corn	15	27	38
Crisp, Potato, Flavoured	15	17	15
Crisp, Prawn	8	13	15

NC = Not Consumed

Food name	Mean food consumption for consumers (grams per day)		
	2-5 years	6-12 years	13-16 years
Curry Paste	3	9	6
Custard Powder, Dry	NC	NC	NC
Custard, Vanilla	81	103	109
Custard/Dairy Dessert, Chocolate	83	74	74
Dairy Dessert, Chocolate, Dry Mix	NC	NC	NC
Dairy Dessert, Other Flavours	76	80	83
Dairy Dessert, Vanilla, Dry Mix	NC	NC	NC
Dips	19	17	19
Donuts, Pink Topping	34	38	51
Dressing, thousand island	5	9	10
Drink Base, Fruit	NC	4	NC
Dry Drink Base, Fruit	3	NC	1
Fish Fingers	40	45	61
Fish, Battered/Crumbed	44	57	78
Flavoured Milk, Chocolate	127	184	218
Flavoured Milk, Coffee	74	181	307
Flavoured Milk, Other	148	169	227
Frankfurters	35	36	44
Fromage Frais, Fruit Flavour	NC	NC	NC
Fruit Chutney	11	9	16
Fruit Drink, Apple	116	143	135
Fruit Drink, Apple Blackcurrant	97	173	186
Fruit Drink, Grape	NC	NC	NC
Fruit Drink, Lemon	NC	NC	NC
Fruit Drink, Orange	139	164	232
Fruit Drink, Orange Mango	144	178	290
Fruit Drink, Pineapple	150	147	154

NC = Not Consumed

Food name	Mean food consumption for consumers (grams per day)		
	2-5 years	6-12 years	13-16 years
Fruit Drinks, Other Flavours	127	153	160
Fruit Leather, Sugar Added	9	11	10
Gherkins	19	7	7
Glace Cherry	5	NC	NC
Ice Confection, Water/Juice based, Not Further Specified	38	53	66
Ice Cream Vanilla, Choc Fudge	44	77	97
Ice Cream, Caramel/Coffee	14	59	60
Ice Cream, Chocolate, Choc Chip	NC	NC	NC
Ice Cream, Chocolate, Confectionery/Nut	NC	84	56
Ice Cream, Chocolate, Not Further Specified	NC	NC	NC
Ice Cream, Chocolate, No Additions	41	58	72
Ice Cream, Filled Cone, All Flavours, Choc/Nut Top	NC	NC	NC
Ice Cream, Low Fat, Choc	NC	NC	NC
Ice Cream, Not Further Specified	133	155	169
Ice Cream, Other Flavours	44	56	79
Ice Cream, Other Flavours, Nuts/Confectionery/Additions	NC	NC	NC
Ice Cream, Stick/Bar, Choc, Choc Coated	34	34	34
Ice Cream, Stick/Bar, Chocolate	31	46	38
Ice Cream, Stick/Bar, Flavoured, Choc Coated	34	34	34
Ice Cream, Stick/Bar, Not Further Specified	NC	NC	NC
Ice Cream, Stick/Bar, Other Flavours	33	35	35
Ice Cream, Stick/Bar, Other Flavours, Biscuit & Choc coated	30	37	40
Ice Cream, Stick/Bar, Regular Fat, Choc Coated	NC	NC	NC
Ice Cream, Stick/Bar, Vanilla, Choc Coated	30	39	39
Ice Cream, Stick/Bar, Vanilla, Choc/Nut Coated	32	46	34
Ice Cream, Vanilla	33	54	65
Ice Cream, Vanilla & Fruit	25	48	95

NC = Not Consumed

Food name	Mean food consumption for consumers (grams per day)		
	2-5 years	6-12 years	13-16 years
Ice Cream, Vanilla, Confectionery	29	48	71
Ice Cream, Vanilla, Confectionery/Fruit	52	46	61
Ice Cream, Vanilla, No Additions, Low Fat	NC	NC	90
Indian Curry Dish	57	128	117
Jam, All Flavours	8	10	12
Jam, Artificially Sweetened	3	7	12
Jelly Crystals	NC	27	NC
Jelly Crystals, Made up	70	86	81
Juice, Apple & Blackcurrant	158	195	210
Juice, Carrot	NC	NC	NC
Juice, Grape	101	154	171
Juice, Not Further Specified	NC	NC	NC
Juice, Orange	114	163	203
Juice, Orange Mango	123	172	206
Juice, Pear	93	105	NC
Juice, Pineapple or Prune	96	141	161
Juice, Tropical	119	150	197
Lasagne, Meat	101	135	175
Lasagne, Vegetable	28	35	222
Liqueur, Coffee Flavour	NC	NC	17
Liqueur, Other Flavours	NC	NC	NC
Liquorice, Allsorts	21	10	6
Liquorice, Plain	10	22	34
Luncheon Meat	26	25	34
Margarine/Margarine Spread	6	7	8
Margarine/Margarine Spread, Reduced Fat	6	7	7
Marshmallow	8	13	11

NC = Not Consumed

Food name	Mean food consumption for consumers (grams per day)		
	2-5 years	6-12 years	13-16 years
Mineral Water, Fruit	113	194	203
Mixed Alcoholic Drinks, Creamy	28	NC	NC
Mixed Alcoholic Drinks, Non-Cola, with Vodka	NC	32	677
Mousse, Chocolate	47	71	66
Muesli Bar, Fruit	17	17	21
Muesli Bar/Bar, with Yoghurt	17	19	22
Muffins, Sweet, Chocolate	23	39	73
Mustard Pickle	4	4	6
Noodle, Asian Style Sauce	126	186	216
Noodle, Asian Style, Not Specified as to type, Cooked	NC	NC	NC
Noodle, Asian Style, Not Specified as to type, Uncooked	NC	NC	NC
Noodles, Asian Style Egg, Cooked	NC	NC	NC
Noodles, Asian Style Egg, Uncooked	NC	NC	NC
Noodles, Asian Style Wheat, Cooked	34	78	73
Noodles, Asian Style Wheat, Uncooked	52	60	109
Noodles, Asian Style, Fried	NC	84	NC
Noodles, Instant, Cooked	65	95	125
Noodles, Instant, Uncooked	23	43	40
Other Vegetable Juices	180	131	142
Pasta & Sauce Dry Mix, Cream Based	5	16	8
Pasta & Sauce, Cream Based	66	103	180
Pasta & Sauce, Tomato Based	62	68	89
Pasta, Cheese Filled, Cooked	44	55	NC
Pasta, Egg, Cooked	53	34	117
Pasta, Egg, Uncooked	50	80	27
Pasta, Filled Not Further Specified	NC	NC	NC
Pasta, Meat Filled, Cooked	70	99	172

NC = Not Consumed

Food name	Mean food consumption for consumers (grams per day)		
	2-5 years	6-12 years	13-16 years
Pate, Seafood	NC	NC	NC
Peanuts, Choc Coated, Candy Shell	NC	92	40
Pie, Apple	50	71	111
Pie, Cheese and Spinach	59	82	90
Pie, Chicken & Vegetable	72	111	109
Pie, Custard	41	41	59
Pie, Lemon Meringue	NC	46	128
Pie, Meat	65	86	102
Pie, Meat, Reduced Fat	NC	NC	NC
Pie, Shepherds	80	104	168
Pie, Steak & Bacon	44	83	115
Pie, Sweet	14	26	26
Pizza, Meat	68	105	146
Pizza, No Meat	45	73	146
Popcorn, flavoured	NC	NC	NC
Popcorn, Sugar Coated, Coloured	9	10	15
Pork Bun	NC	NC	NC
Salami	11	14	25
Sauce, Bearnaise	NC	NC	3
Sauce, Cheese	15	31	43
Sauce, Cheese, Dry Mix	NC	NC	NC
Sauce, Plum	16	16	19
Sauce, Seafood Cocktail	NC	NC	NC
Sauce, Simmer, Indian Curry	9	27	31
Sauce, White	53	58	68
Sauce, White, Dry Mix	9	6	NC
Sausage Roll	42	63	73

NC = Not Consumed

Food name	Mean food consumption for consumers (grams per day)		
	2-5 years	6-12 years	13-16 years
Sausage, Continental	27	42	53
Sherbet	11	10	11
Slice, Choc, Dry Mix	NC	NC	NC
Slice, Not Further Specified	20	38	44
Snack, Cheese Flavour, Extruded	14	16	17
Snack, Chick Pea Based	NC	NC	NC
Snack, Non-Cheese Flavour, Extruded	13	13	20
Soft Drink, Energy Drink	NC	200	211
Soft Drink, Lemonade	121	199	248
Soft drink, Not Further Specified	111	187	213
Soft Drink, Non-Fruit	110	176	263
Soft Drink, Other Fruit	116	182	213
Soy Beverage, Chocolate	193	NC	187
Soy Beverage, Other Flavours	204	147	194
Sports Drink, All Flavours	324	280	316
Spring Roll/Dim Sim Meat/Vegetable	43	51	86
Stick/Bar, Vanilla Ice Cream, Fruit Ice Confection	18	25	NC
Thick shake, Strawberry	150	182	196
Topping, Caramel	16	10	18
Topping, Chocolate	12	15	25
Topping, Other Flavours	11	20	15
Turkish Delight, Choc Coated	NC	10	12
Vodka	NC	NC	5
Vol au Vent, Cheese & Vegetable	NC	NC	NC
Wedges	33	57	73
Yoghurt, Frozen, Fruit Flavour	48	77	77
Yoghurt, Fruit/Muesli	78	80	116

NC = Not Consumed

Food name	Mean food consumption for consumers (grams per day)		
	2-5 years	6-12 years	13-16 years
Yoghurt, Not Further Specified	78	76	70
Yoghurt, Plain	53	77	94
Yoghurt, Vanilla	76	86	131

NC = Not Consumed

Appendix 2

Table A2.1: Mean and maximum food sub-group concentrations (mg/kg) used in the dietary modelling

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
11	Fruit Drink, Orange	243, 441														
		Mean Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
13	Fruit Drink, Orange Mango	248, 437														
		Mean Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
14	Cordial, Blackcurrant (as consumed basis)	231, 232, 517, 521														
		Mean Colours Scenario	0	0	0	1.25	0	0	0	0	0	0.125	0	0	0	0
		Maximum Colours Scenario	0	0	0	4	0	0	0	0	0	0.5	0	0	0	0
15	Cordial, Citrus (as consumed basis)	229, 230, 235, 236, 237, 238, 512, 513, 518, 519, 522, 523, 524, 526														

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
		Mean Colours Scenario	0	0	0	0	0	0	0.75	1.17	0	0.36	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	0	0	3.6	4.8	0	4	0	0	0	0
16	Cordial, Non-Citrus (as consumed basis)	227, 228, 233, 234, 239, 240, 514, 515, 516, 520, 525														
		Mean Colours Scenario	0	0.09	0	0.7	3.91	0	0.46	0.56	0	0	0	0	0	0
		Maximum Colours Scenario	0	0.54	0	4.4	28	0	2.2	3.2	0	0	0	0	0	0
19	Soft Drink, Lemonade	535														
		Mean Colours Scenario	0	0	0	0	0	0	0	0	0	2.5	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	0	0	0	0	0	2.5	0	0	0	0
20	Soft Drink, Other Fruit	267, 268, 269, 270, 271, 272, 274, 278, 280, 282, 286, 275, 276, 277, 279, 285, 527, 528, 532, 533, 534, 536, 537, 538, 539, 540, 541														
		Mean Colours Scenario	0	0.08	0	1.48	0.31	0.19	12.30	3.76	0	0	0	0	0	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
		Maximum Colours Scenario	0	1.3	0	30	6	2.5	54	44	0	0	0	0	0	0
21	Soft Drink, Non-Fruit	262, 283, 273														
		Mean Colours Scenario	0	0	0	0	13.67	0	0	3.67	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	23	0	0	11	0	0	0	0	0	0
22	Soft Drink, Energy Drink	255, 284														
		Mean Colours Scenario	0	0	0	0	0	0	0	0	0	2.5	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	0	0	0	0	0	2.5	0	0	0	0
23	Mineral Water, Fruit	263, 264, 265, 266, 281, 531														
		Mean Colours Scenario	0	0	0	0	0	0	1.33	8.83	0	0.42	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	0	0	8	48	0	2.5	0	0	0	0
24	Sports Drink, All Flavours	252, 253, 254, 256, 257, 529, 530														
		Mean Colours Scenario	0	0	8.29	0	0	0	5.57	0.72	0	2.15	0	0	0	0
		Maximum Colours Scenario	0	0	58	0	0	0	32	2.5	0	10	0	0	0	0
25	Custard Powder, Dry	141, 142														

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
		Mean Colours Scenario	0	0	0	0	0	0	13.5	15.5	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	0	0	17	16	0	0	0	0	0	0
30	Pasta, Meat Filled, Cooked (as consumed basis)	151														
		Mean Colours Scenario	0.147	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0.147	0	0	0	0	0	0	0	0	0	0	0	0	0
33	Noodles, Asian Style Egg, Uncooked	154														
		Mean Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
34	Noodle, Asian Style, NS as to type, Uncooked	154, 155, 156, 158														
		Mean Colours Scenario	0.06	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
35	Breakfast Cereal, Puffed/Formed/ Flakes, Fruit	144														
		Mean Colours Scenario	3.3	0	0	0	0	0	0	0	0	0	0	0	0	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
		Maximum Colours Scenario	3.3	0	0	0	0	0	0	0	0	0	0	0	0	0
36	Breakfast Cereal, Biscuit, Fruit	143, 431														
		Mean Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
37	Breakfast Cereal, Coloured	145, 146, 433, 603														
		Mean Colours Scenario	0	0	4.5	0	28.5	0	12.63	9.63	0	13.13	0	0	0	0
		Maximum Colours Scenario	0	0	18	0	82	0	24	31	0	34	0	0	0	0
39	Cones, Ice cream	168, 202														
		Mean Colours Scenario	0.6	0	0	0	0	0	7	7	0	1.25	0	0	0	0
		Maximum Colours Scenario	1.2	0	0	0	0	0	14	14	0	2.5	0	0	0	0
40	Biscuits, Sweet, Fruit	178, 615														
		Mean Colours Scenario	0	0	1.25	0	0	0	1.25	1.25	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	2.5	0	0	0	2.5	2.5	0	0	0	0	0	0
42	Biscuit, Sweet, Fruit Filled	165, 620														

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
		Mean Colours Scenario	3.1	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	3.1	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Biscuit, Sweet, Jam Filled	174, 612														
		Mean Colours Scenario	0.25	0	26	0	0	0	7	0	0	0	0	0	0	0
		Maximum Colours Scenario	0.25	0	52	0	0	0	14	0	0	0	0	0	0	0
44	Biscuit, Sweet, Tartlet	170														
		Mean Colours Scenario	0	0	68	0	0	0	2.5	2.5	0	2.5	0	0	0	0
		Maximum Colours Scenario	0	0	68	0	0	0	2.5	2.5	0	2.5	0	0	0	0
45	Biscuits, Sweet, Iced	162, 164, 623														
		Mean Colours Scenario	0	0.13	2.67	0	0	2.33	1.67	2.5	0	8.83	0	0	0	0
		Maximum Colours Scenario	0	0.25	8	0	0	7	2.5	2.5	0	24	0	0	0	0
46	Biscuits, Sweet, Marshmallow	167, 175														
		Mean Colours Scenario	0	0.13	11.5	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0	0.25	23	0	0	0	0	0	0	0	0	0	0	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
47	Biscuit, Sweet, Sandwich, Cream & Jam Filled	163, 166														
		Mean Colours Scenario	0	0	5.75	0	0	0	1.25	1.25	0	0	1.25	0	0	0
		Maximum Colours Scenario	0	0	9	0	0	0	2.5	2.5	0	0	2.5	0	0	0
48	Biscuit, Sweet, Sandwich, Cream Filled	163, 166, 176, 177, 179, 610, 621, 622, 624														
		Mean Colours Scenario	0	0.05	8.83	0	0	0	10.11	5.11	0	0.89	0.28	0	0	0
		Maximum Colours Scenario	0	0.25	43	0	0	0	33	12	0	8	2.5	0	0	0
49	Biscuit, Sweet, Wafer, Cream Filled, Non-chocolate	613, 614														
		Mean Colours Scenario	0	0	4	0	0	0	4.25	1.25	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	8	0	0	0	6	2.5	0	0	0	0	0	0
50	Biscuit, Sweet, Wafer, Chocolate Cream Filled	169, 614														
		Mean Colours Scenario	0	0	4	0	0	0	3	0	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	8	0	0	0	6	0	0	0	0	0	0	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
51	Biscuit, Sweet, Choc Chip/Dipped	172, 180														
		Mean Colours Scenario	0.13	0.13	0	0	0	0	0	0	0	1.25	0	2.5	0	0
		Maximum Colours Scenario	0.25	0.25	0	0	0	0	0	0	0	2.5	0	5	0	0
52	Biscuit, Sweet, Choc Coated	160, 161, 173, 611, 617, 619														
		Mean Colours Scenario	1.63	0	9.5	0.83	0.42	0	10.58	4.08	0	6.58	0	0	0	0.42
		Maximum Colours Scenario	4.9	0	30	5	2.5	0	32	17	0	37	0	0	0	2.5
54	Biscuits, Sweet, Marshmallow & Jam, Choc Coated	171, 175														
		Mean Colours Scenario	0	0.13	0	0	4	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0	0.25	0	0	8	0	0	0	0	0	0	0	0	0
55	Biscuits, Savoury, Flavoured	191, 192, 193, 196, 197, 200, 201, 618														
		Mean Colours Scenario	1.06	0	0	0	0	0.31	1	6.06	0	0.31	0	0	0	0
		Maximum Colours Scenario	5.2	0	0	0	0	2.5	8	46	0	2.5	0	0	0	0
56	Cake, Plain/Flavoured Uniced	651														

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
		Mean Colours Scenario	0	0	0	0	0	0	2.5	5	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	0	0	2.5	5	0	0	0	0	0	0
57	Cake, Plain/Flavoured Iced	207, 226, 400, 403, 650														
		Mean Colours Scenario	0	0	1.4	0.5	0.5	1	4.7	3.7	0	6.8	0	6	0.5	0.5
		Maximum Colours Scenario	0	0	7	2.5	2.5	2.5	21	16	0	29	0	12	2.5	2.5
58	Cake, NFS	205, 207, 208, 209, 210, 214, 215, 216, 217, 226, 397, 398, 399, 400, 401, 403, 404, 406, 625, 649, 650, 651														
		Mean Colours Scenario	0.08	0.41	0.45	0.12	2.5	1.64	6.07	8	0	3.40	0	1.33	0.12	7.41
		Maximum Colours Scenario	0.25	3.7	7	2.5	25	19	89	41	0	29	0	12	2.5	82
60	Cake, Sultana/Date Iced/Uniced	649														
		Mean Colours Scenario	0	0	0	0	0	0	2.5	10	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	0	0	2.5	10	0	0	0	0	0	0
62	Cake, Chocolate, Dry	203, 204, 206, 212, 213														

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
	Mix															
		Mean Colours Scenario	0	0	0	0	0	8.2	0	2	0	3.2	0	0	0	25.6
		Maximum Colours Scenario	0	0	0	0	0	41	0	10	0	16	0	0	0	110
63	Cake, Tea	397														
		Mean Colours Scenario	0	0	0	0	0	0	2.5	13	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	0	0	2.5	13	0	0	0	0	0	0
64	Cake, Chocolate, Iced/Uniced	216, 406														
		Mean Colours Scenario	0	0	1.25	0	4.75	0	1.25	1.25	0	15	0	0	0	50
		Maximum Colours Scenario	0	0	2.5	0	7	0	2.5	2.5	0	21	0	0	0	82
65	Cake, Fruit	398, 399, 625, 649														
		Mean Colours Scenario	0	0	0	0	0.63	0.63	0.63	26	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	2.5	2.5	2.5	41	0	0	0	0	0	0
68	Cake, Lamington	205, 208, 401														
		Mean Colours Scenario	0.13	0	0	0	8.33	0	29.67	6.33	0	0	0	0	0	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
		Maximum Colours Scenario	0.25	0	0	0	25	0	89	19	0	0	0	0	0	0
69	Donuts, Pink Topping	220, 223														
		Mean Colours Scenario	0	0.13	0	1.25	1.25	2.5	0	0	0	2.5	0	0	0	0
		Maximum Colours Scenario	0	0.25	0	2.5	2.5	2.5	0	0	0	2.5	0	0	0	0
70	Cake, Sponge, Roll Jam/Cream	209, 210, 215, 217														
		Mean Colours Scenario	0.13	0.93	0	0	3.25	6.75	0.63	0	0	1.88	0	0	0	13.25
		Maximum Colours Scenario	0.25	3.7	0	0	7	19	2.5	0	0	5	0	0	0	44
71	Cake, Sponge, Choc, Cream Filled	210, 217														
		Mean Colours Scenario	0.25	0	0	0	3	4	1.25	0	0	3.75	0	0	0	26.5
		Maximum Colours Scenario	0.25	0	0	0	6	8	2.5	0	0	5	0	0	0	44
75	Pie, Apple	224														
		Mean Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
77	Slice, Choc, Dry Mix	211														
		Mean Colours Scenario	0	0	0	0	0	0	0	0	0	0	0	0	0	45

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
		Maximum Colours Scenario	0	0	0	0	0	0	0	0	0	0	0	0	0	45
78	Biscuit Mix, Dry	219														
		Mean Colours Scenario	0	0	0	0	0	2.5	2.5	2.5	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	0	2.5	2.5	2.5	0	0	0	0	0	0
80	Pie, Sweet	224, 648														
		Mean Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
83	Pie, Custard	225														
		Mean Colours Scenario	0	0.25	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0	0.25	0	0	0	0	0	0	0	0	0	0	0	0
85	Vol au Vent, Cheese & Vegetable	369														
		Mean Colours Scenario	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	1.8	0	0	0	0	0	0	0	0	0	0	0	0	0
86	Pie, Chicken & Vegetable	367, 631, 637, 641														
		Mean Colours Scenario	0	0	0	0	0	0	0.63	0	0	0	0	0	0	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
		Maximum Colours Scenario	0	0	0	0	0	0	2.5	0	0	0	0	0	0	0
88	Pie, Cheese and Spinach	368														
		Mean Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
89	Pie, Meat	359, 360, 361, 362, 363, 364, 630, 633, 634, 635, 636, 638, 639, 642, 643														
		Mean Colours Scenario	0.2	0	0	0	0	0	0.67	0.67	0	0	0	0	0	0
		Maximum Colours Scenario	0.25	0	0	0	0	0	2.5	10	0	0	0	0	0	0
92	Sausage Roll	348, 365, 366														
		Mean Colours Scenario	0.08	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
93	Pizza, Meat	357														
		Mean Colours Scenario	0.25	0.25	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0.25	0.25	0	0	0	0	0	0	0	0	0	0	0	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
94	Spring Roll/Dim Sim Meat/Vegetable	353														
		Mean Colours Scenario	0	0	0	0	0	0	0	2.5	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	0	0	0	2.5	0	0	0	0	0	0
95	Pork Bun	352														
		Mean Colours Scenario	0	0	2.5	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	2.5	0	0	0	0	0	0	0	0	0	0	0
96	Pasta & Sauce Dry Mix, Cream Based	350, 354, 355														
		Mean Colours Scenario	6.08	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	18	0	0	0	0	0	0	0	0	0	0	0	0	0
98	Pasta & Sauce, Cream Based (hydration factors applied)	350, 354, 355														
		Mean Colours Scenario	2.03	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	6	0	0	0	0	0	0	0	0	0	0	0	0	0
99	Lasagne, Meat	347, 351														
		Mean Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
		Maximum Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
102	Margarine/Margarine Spread	37, 39, 40, 41, 416, 417, 418, 419, 420, 424, 425, 426, 427, 428, 429														
		Mean Colours Scenario	3.48	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	8.4	0	0	0	0	0	0	0	0	0	0	0	0	0
103	Margarine/Margarine Spread, Reduced Fat	38, 421, 422, 423, 430														
		Mean Colours Scenario	5.3	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	5.3	0	0	0	0	0	0	0	0	0	0	0	0	0
105	Glace Cherry	88														
		Mean Colours Scenario	0	0.25	96	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0	0.25	96	0	0	0	0	0	0	0	0	0	0	0
107	Sausage, Continental	186														
		Mean Colours Scenario	0	0	0	0	0	2.5	2.5	0	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	0	2.5	2.5	0	0	0	0	0	0	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
108	Frankfurters	181, 182, 183, 184														
		Mean Colours Scenario	3.53	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	8.1	0	0	0	0	0	0	0	0	0	0	0	0	0
111	Indian Curry Dish	345, 356														
		Mean Colours Scenario	0	0	0	0	0	1.25	1.25	1.25	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	0	2.5	2.5	2.5	0	0	0	0	0	0
113	Yoghurt, Vanilla	13, 20, 22, 30														
		Mean Colours Scenario	0.43	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0
114	Yoghurt, Fruit/Muesli	11, 12, 14, 15, 16, 17, 18, 19, 21, 23, 29, 468, 473, 474, 478, 480, 481														
		Mean Colours Scenario	0.39	1.15	0	0	0	0.15	0	0	0	1.15	0	0	0	0.15
		Maximum Colours Scenario	1.7	5.8	0	0	0	2.5	0	0	0	17	0	0	0	2.5

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
115	Yoghurt, NFS	11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 30, 465, 466, 467, 468, 473, 474, 478, 480, 481														
		Mean Colours Scenario	0.39	0.9	0	0	0	0.11	0	0	0	0.85	0	0	0	0.11
		Maximum Colours Scenario	1.7	5.8	0	0	0	2.5	0	0	0	17	0	0	0	2.5
116	Dips	375, 376, 377, 378, 379														
		Mean Colours Scenario	0.2	0.36	0	0	0	0.5	0.5	0	0	0	0	0	0	0
		Maximum Colours Scenario	1	1.8	0	0	0	2.5	2.5	0	0	0	0	0	0	0
118	Cheese, Cheddar	557, 560, 561, 562, 563, 564, 566, 567, 568, 569, 570														
		Mean Colours Scenario	0	0	0	0	0	0.45	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	0	5	0	0	0	0	0	0	0	0
121	Cheese, Processed	31, 32, 33, 35, 36														
		Mean Colours Scenario	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
		Maximum Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
122	Cheese Spread	34														
		Mean Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
123	Cheese, Processed Light	32														
		Mean Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
124	Ice Cream, Vanilla	66, 69, 70, 75, 77														
		Mean Colours Scenario	0.62	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	1.3	0	0	0	0	0	0	0	0	0	0	0	0	0
125	Ice Cream, Vanilla & Fruit	72														
		Mean Colours Scenario	1.4	0	6	0	0	0	0	0	0	2.5	0	0	0	0
		Maximum Colours Scenario	1.4	0	6	0	0	0	0	0	0	2.5	0	0	0	0
126	Ice Cream, Vanilla, Confectionery	71, 74, 78														

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
		Mean Colours Scenario	7.22	0	0	0.83	2.33	0.83	1.67	0.83	0	0.83	0	0	0	0.83
		Maximum Colours Scenario	16	0	0	2.5	7	2.5	2.5	2.5	0	2.5	0	0	0	2.5
127	Ice Cream, Vanilla, Confectionery/Fruit	71, 72, 74, 78														
		Mean Colours Scenario	5.76	0	1.5	0.63	1.75	0.63	1.25	0.63	0	1.25	0	0	0	0.63
		Maximum Colours Scenario	16	0	6	2.5	7	2.5	2.5	2.5	0	2.5	0	0	0	2.5
128	Ice Cream, Chocolate, No Additions	64, 453, 464														
		Mean Colours Scenario	0	0	0	1.67	6.67	3	14.67	37.67	0	8	6.67	0	0	0.83
		Maximum Colours Scenario	0	0	0	2.5	20	9	30	71	0	24	20	0	0	2.5
129	Ice Cream, Vanilla, No Additions, Low Fat	75														
		Mean Colours Scenario	0.58	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0.58	0	0	0	0	0	0	0	0	0	0	0	0	0
130	Ice Cream Vanilla, Choc Fudge	78														
		Mean Colours Scenario	0.25	0	0	0	7	2.5	2.5	2.5	0	0	0	0	0	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
		Maximum Colours Scenario	0.25	0	0	0	7	2.5	2.5	2.5	0	0	0	0	0	0
131	Ice Cream, Chocolate, NFS	64, 76, 449, 453, 464														
		Mean Colours Scenario	0	0	0	1	4.5	2.3	10.6	22.6	0	34.4	4	0	0	12.2
		Maximum Colours Scenario	0	0	0	2.5	20	9	30	71	0	140	20	0	0	56
132	Ice Cream, Chocolate, Choc Chip	76, 449, 453, 464														
		Mean Colours Scenario	0	0	0	1.25	5.63	2.88	13.25	28.25	0	43	5	0	0	15.25
		Maximum Colours Scenario	0	0	0	2.5	20	9	30	71	0	140	20	0	0	56
133	Ice Cream, Chocolate, Confec/Nut	65, 76, 449, 453, 464														
		Mean Colours Scenario	0.31	1.9	0	1	4.5	2.3	10.6	22.6	0	34.4	4	0	0	12.2
		Maximum Colours Scenario	0.62	3.8	0	2.5	20	9	30	71	0	140	20	0	0	56
134	Ice Cream, Other Flavours	68, 71, 73, 74, 452, 459, 462, 463														
		Mean Colours Scenario	8.66	0	0	0.31	2.88	0	3.19	14.38	0	4.13	0	0	0	0.31
		Maximum Colours Scenario	16	0	0	2.5	14	0	12	110	0	28	0	0	0	2.5

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
135	Ice Cream, Caramel/Coffee	71, 73, 74, 78, 452, 459														
		Mean Colours Scenario	8.66	0	0	0.42	1.17	0.42	0.83	0.42	0	0.42	0	0	0	0.42
		Maximum Colours Scenario	16	0	0	2.5	7	2.5	2.5	2.5	0	2.5	0	0	0	2.5
137	Ice Cream, Other Flavours, Nuts/Confec/Additions	65, 67, 73, 74, 78, 452, 459, 462														
		Mean Colours Scenario	3.98	0.76	0	0.31	2	0.31	2.13	14.06	0	3.82	0	0	0	0.31
		Maximum Colours Scenario	13	3.8	0	2.5	9	2.5	12	110	0	28	0	0	0	2.5
138	Ice Cream, Low Fat, Choc	64, 65														
		Mean Colours Scenario	0.31	1.9	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0.62	3.8	0	0	0	0	0	0	0	0	0	0	0	0
139	Ice Cream, NFS	64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 449, 452, 453, 459, 462, 463, 464														
		Mean Colours Scenario	2.71	0.25	0.27	0.34	2.39	0.64	3.68	10.48	0	9.43	0.91	0	0	2.89
		Maximum Colours Scenario	16	3.8	6	2.5	20	9	30	110	0	140	20	0	0	56

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
140	Ice Cream, Stick/Bar, Vanilla, Choc Coated	57, 455, 456														
		Mean Colours Scenario	0.25	0	0	6.67	8.33	7.33	10.33	32.33	0	0	0.83	0	0	0
		Maximum Colours Scenario	0.25	0	0	20	25	22	31	97	0	0	2.5	0	0	0
141	Ice Cream, Stick/Bar, Choc, Choc Coated	60, 457														
		Mean Colours Scenario	0	0	0	6.5	0	0	0	5.25	0	8.5	0	0	0	50.75
		Maximum Colours Scenario	0	0	0	8	0	0	0	8	0	9	0	0	0	99
143	Dairy Dessert, Vanilla, Dry Mix	299														
		Mean Colours Scenario	0	0	0	0	0	0	2.5	2.5	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	0	0	2.5	2.5	0	0	0	0	0	0
144	Ice Cream, Stick/Bar, Flavoured, Choc Coated	56, 60, 455, 456														
		Mean Colours Scenario	5.5	0	0	6.25	6.25	5.5	7.75	24.88	0	2	0.63	0	0	24.75
		Maximum Colours Scenario	11	0	0	20	25	22	31	97	0	8	2.5	0	0	99

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
145	Ice Cream, Stick/Bar, Other Flavours, Biscuit & Choc Coated	56														
		Mean Colours Scenario	11	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	11	0	0	0	0	0	0	0	0	0	0	0	0	0
147	Ice Cream, Filled Cone, All Flavours, Choc/Nut Topped	46, 50, 51, 61, 450, 451, 460														
		Mean Colours Scenario	0.38	0.06	0.36	10.71	4.57	6	6.64	24	7.14	5.57	8.29	0	0	6.36
		Maximum Colours Scenario	1.5	0.25	2.5	55	14	16	23	100	50	22	32	0	0	42
148	Ice Cream, Stick/Bar, Chocolate	58														
		Mean Colours Scenario	0.25	0	0	0	0	0	2.5	0	0	0	0	0	0	0
		Maximum Colours Scenario	0.25	0	0	0	0	0	2.5	0	0	0	0	0	0	0
149	Ice Cream, Stick/Bar, Other Flavours	42, 56, 59, 454														
		Mean Colours Scenario	4	0	0	0	2.63	5.5	0	0	0	40.63	0	0	0	0
		Maximum Colours Scenario	11	0	0	0	8	13	0	0	0	160	0	0	0	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
150	Ice Cream, Stick/Bar, NFS	42, 44, 45, 46, 49, 50, 51, 56, 57, 58, 59, 60, 61, 62, 450, 451, 454, 455, 456, 457, 460														
		Mean Colours Scenario	1.21	0.02	0.12	5.14	4.60	4.10	3.93	13.24	2.38	10.52	2.88	0	0	6.95
		Maximum Colours Scenario	11	0.25	2.5	55	29	22	31	100	50	160	32	0	0	99
151	Stick/Bar, Vanilla Ice Cream, Fruit Ice Confection Coating	44, 45, 49, 62														
		Mean Colours Scenario	0.74	0	0	0	7.25	0	0.63	0.63	0	0.63	0	0	0	0
		Maximum Colours Scenario	1.4	0	0	0	29	0	2.5	2.5	0	2.5	0	0	0	0
152	Ice Confection, Water/Juice based NFS	43, 47, 48, 52, 53, 54, 55, 62, 63														
		Mean Colours Scenario	0.17	0	1.61	0.56	2.67	1	3.5	6.28	0	2.28	0	0	0	0
		Maximum Colours Scenario	1.3	0	12	2.5	19	9	18	43	0	13	0	0	0	0
153	Thickshake, Strawberry	10														
		Mean Colours Scenario	0	0	16	0	0	0	2.5	0	0	2.5	0	0	0	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
		Maximum Colours Scenario	0	0	16	0	0	0	2.5	0	0	2.5	0	0	0	0
154	Yoghurt, Frozen, Fruit Flavour	26, 27, 28, 458														
		Mean Colours Scenario	1.02	1.26	0.63	0.63	0	0	0	0	0	0.63	0	0	0	0
		Maximum Colours Scenario	2.8	3.1	2.5	2.5	0	0	0	0	0	2.5	0	0	0	0
155	Crème Caramel	306, 308														
		Mean Colours Scenario	0	0	0	0	0	0	2.5	6	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	0	0	2.5	6	0	0	0	0	0	0
156	Custard, Vanilla	300, 310														
		Mean Colours Scenario	0.32	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0.64	0	0	0	0	0	0	0	0	0	0	0	0	0
157	Custard/Dairy Dessert, Chocolate	298, 307, 313, 471														
		Mean Colours Scenario	0	0.08	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0	0.25	0	0	0	0	0	0	0	0	0	0	0	0
158	Fromage Frais, Fruit Flavour	303, 304, 309, 311														
		Mean Colours Scenario	1.4	0.66	0	0	0	0	0	0	0	0	0	0	0	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
		Maximum Colours Scenario	5.6	1.4	0	0	0	0	0	0	0	0	0	0	0	0
159	Dairy Dessert, Chocolate, Dry Mix	312														
		Mean Colours Scenario	0	0	0	0	0	0	0	0	0	0	0	0	0	7000
		Maximum Colours Scenario	0	0	0	0	0	0	0	0	0	0	0	0	0	7000
160	Dairy Dessert, Other Flavours	301, 302, 303, 304, 305, 309, 311, 469, 470, 472, 475, 479														
		Mean Colours Scenario	0.84	1.99	0	0	0	0	1.63	4.42	0	0	0	0	0	0
		Maximum Colours Scenario	5.6	6.3	0	0	0	0	11	34	0	0	0	0	0	0
162	Cheesecake, Fruit Topped	221														
		Mean Colours Scenario	0	0.25	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0	0.25	0	0	0	0	0	0	0	0	0	0	0	0
163	Soy Beverage, Chocolate	25, 547														
		Mean Colours Scenario	0	0	0	0	0	0	0	0	0	1.25	0	0	0	1.25
		Maximum Colours Scenario	0	0	0	0	0	0	0	0	0	2.5	0	0	0	2.5

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
164	Soy Beverage, Other Flavours	24, 546														
		Mean Colours Scenario	0	0	0	0	1.25	0	0	5	0	1.25	0	0	0	1.25
		Maximum Colours Scenario	0	0	0	0	2.5	0	0	10	0	2.5	0	0	0	2.5
165	Flavoured Milk, Chocolate	1, 2, 3, 4, 5, 7, 8, 549, 550, 552, 553, 554														
		Mean Colours Scenario	0	0	0	0	0	0	0	0	0	3.88	0	0	0	2.08
		Maximum Colours Scenario	0	0	0	0	0	0	0	0	0	21	0	0	0	2.5
167	Flavoured Milk, Other	6, 9, 10, 542, 543, 548														
		Mean Colours Scenario	0	1.07	2.67	0	0.83	1.25	3	7.25	0	0.42	0	0	0	0
		Maximum Colours Scenario	0	3.2	16	0	2.5	5	13	41	0	2.5	0	0	0	0
168	Jelly Crystals, Made up (as consumed basis)	290, 291, 292, 293, 294, 295, 296, 297, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585														
		Mean Colours Scenario	0	0	1.66	2.58	2.18	2.21	2.09	2.92	0.02	0.73	0	0	0.11	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
		Maximum Colours Scenario	0	0	38.10	39.68	31.75	26.98	17.54	32.61	0.40	10.63	0	0	0.40	0
169	Topping, Caramel	331, 332, 501, 502, 505, 510														
		Mean Colours Scenario	0	0	0	0	0	0.42	2.17	17	0	1.25	0	0	0	0.83
		Maximum Colours Scenario	0	0	0	0	0	2.5	7	49	0	2.5	0	0	0	2.5
171	Sauce, Plum	341														
		Mean Colours Scenario	0	77	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0	77	0	0	0	0	0	0	0	0	0	0	0	0
172	Sauce, Seafood Cocktail	334														
		Mean Colours Scenario	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	1.2	0	0	0	0	0	0	0	0	0	0	0	0	0
173	Sauce, Cheese, Dry Mix	337														
		Mean Colours Scenario	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	1.4	0	0	0	0	0	0	0	0	0	0	0	0	0
174	Sauce, White, Dry Mix	338														
		Mean Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
		Maximum Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
175	Sauce, Béarnaise	333														
		Mean Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
176	Sauce, Simmer, Indian Curry	339														
		Mean Colours Scenario	0	0	16	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	16	0	0	0	0	0	0	0	0	0	0	0
178	Gherkins	79														
		Mean Colours Scenario	0	0	0	0	0	0	0	0	0	2.5	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	0	0	0	0	0	2.5	0	0	0	0
179	Mustard Pickle	81														
		Mean Colours Scenario	0	0	0	0	0	0	0	2.5	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	0	0	0	2.5	0	0	0	0	0	0
182	Chips, Hot Potato	325, 326, 644, 645, 646														
		Mean Colours Scenario	0.13	0	0	0	0	0	0	0	0	0	0	0	0	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
		Maximum Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
183	Crisp, Potato, Flavoured	380, 381, 382, 385, 386, 387, 393, 411, 413														
		Mean Colours Scenario	0.07	0.07	0.67	0	0	0	0.28	0	0	0.28	0.28	0	0	0
		Maximum Colours Scenario	0.25	0.25	6	0	0	0	2.5	0	0	2.5	2.5	0	0	0
184	Crisp, Corn	383, 394, 407, 410, 609														
		Mean Colours Scenario	0	0	1.5	0	0	0	3.7	1	0	1	0	0	0	0
		Maximum Colours Scenario	0	0	2.5	0	0	0	11	2.5	0	2.5	0	0	0	0
185	Popcorn, flavoured	388														
		Mean Colours Scenario	7	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	7	0	0	0	0	0	0	0	0	0	0	0	0	0
186	Popcorn, Sugar Coated, Coloured	129														
		Mean Colours Scenario	0	0	0	0	12	0	5	2.5	0	2.5	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	12	0	5	2.5	0	2.5	0	0	0	0
187	Crisp, Prawn	396														

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
		Mean Colours Scenario	0	0	0	0	0	0	2.5	0	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	0	0	2.5	0	0	0	0	0	0	0
188	Snack, Cheese Flavour, Extruded	384, 392, 408, 409, 415, 602, 606														
		Mean Colours Scenario	0	0	0	0	0	0	83.57	38.21	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	0	0	279	118	0	0	0	0	0	0
189	Snack, Non-Cheese Flavour, Extruded	390, 391, 395, 414														
		Mean Colours Scenario	0	0.08	0	0	0.63	0	6.25	1.25	0	0.63	0	0	0	0
		Maximum Colours Scenario	0	0.25	0	0	2.5	0	20	2.5	0	2.5	0	0	0	0
191	Topping, Chocolate	327, 328, 499, 507														
		Mean Colours Scenario	0	0	0	0	0	0	0	12.75	0	0.63	0	0	0	23.75
		Maximum Colours Scenario	0	0	0	0	0	0	0	51	0	2.5	0	0	0	84
192	Topping, Other Flavours	329, 330, 331, 332, 498, 500, 501, 502, 503, 504, 505, 506, 509, 510, 511														

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
		Mean Colours Scenario	0	0	0	12.53	9.33	9.77	3.57	9.4	0	0.5	0	0	0	0.33
		Maximum Colours Scenario	0	0	0	170	61	75	17	49	0	2.5	0	0	0	2.5
193	Jam, All Flavours	80, 84, 85, 86, 87, 626														
		Mean Colours Scenario	0	0	0	0	0.42	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	2.5	0	0	0	0	0	0	0	0	0
194	Jam, Artificially Sweetened	627, 628														
		Mean Colours Scenario	0	0	6	0	0	0	0	0	0	0	7	0	0	0
		Maximum Colours Scenario	0	0	12	0	0	0	0	0	0	0	14	0	0	0
195	Jelly Crystals	290, 291, 292, 293, 294, 295, 296, 297, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585														
		Mean Colours Scenario	0	0	10.44	54.35	13.76	20.13	67.67	108.70	0.11	5.04	0	0	0.76	0
		Maximum Colours Scenario	0	0	240	1000	200	170	1000	1500	2.5	67	0	0	2.5	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
197	Caramel/Toffee, Choc Coated	103														
		Mean Colours Scenario	0	0	2.5	0	0	2.5	0	2.5	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	2.5	0	0	2.5	0	2.5	0	0	0	0	0	0
198	Chocolate, Filled	96, 97, 99, 101, 103														
		Mean Colours Scenario	0	0	0.5	0.5	0.5	1	0.5	1.5	0	0.5	0	0	0	0
		Maximum Colours Scenario	0	0	2.5	2.5	2.5	2.5	2.5	2.5	0	2.5	0	0	0	0
199	Chocolate, Candy Coated	89, 90, 98, 599														
		Mean Colours Scenario	0	0.08	30.75	0	4.25	4.63	22.88	19.63	0	13	0.63	0	3.25	0
		Maximum Colours Scenario	0	0.25	86	0	17	16	66	68	0	35	2.5	0	13	0
201	Bar, Chocolate, Cherry/Fruit	91, 594														
		Mean Colours Scenario	0	0	16.5	3.5	0	0	0	1.25	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	24	7	0	0	0	2.5	0	0	0	0	0	0
204	Peanuts, Choc Coated, Candy Shell	94														
		Mean Colours Scenario	0	0	86	0	0	0	66	68	0	35	0	0	0	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
		Maximum Colours Scenario	0	0	86	0	0	0	66	68	0	35	0	0	0	0
205	Bar, Peppermint Crackle, Choc Coated	95														
		Mean Colours Scenario	0	0	0	0	0	0	0	0	0	2.5	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	0	0	0	0	0	2.5	0	0	0	0
206	Turkish Delight, Choc Coated	92, 102, 600														
		Mean Colours Scenario	0	0	0	0	0	16.33	12.33	1.67	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	0	35	27	2.5	0	0	0	0	0	0
207	Bar, Yoghurt Based, Rice Crisp, Choc	319														
		Mean Colours Scenario	0	0	0	0	0	2.5	0	2.5	0	2.5	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	0	2.5	0	2.5	0	2.5	0	0	0	0
209	Muesli Bar/Bar, with Yoghurt	323														
		Mean Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0.25	0	0	0	0	0	0	0	0	0	0	0	0	0
210	Bar, Fruit Based	324														

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
		Mean Colours Scenario	0	0.83	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0	0.83	0	0	0	0	0	0	0	0	0	0	0	0
211	Bar, Fruit Based, with Cereal-based Coating	320, 322														
		Mean Colours Scenario	0	0	0	0	1.25	7.5	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	2.5	15	0	0	0	0	0	0	0	0
212	Fruit Leather, Sugar Added	314, 315, 316, 317, 318, 590, 591														
		Mean Colours Scenario	0.2	0.50	0	0	24.93	0	0	0	0	8.43	0	0	0.36	0
		Maximum Colours Scenario	0.25	1.2	0	0	160	0	0	0	0	42	0	0	2.5	0
213	Confectionery, Carbohydrate Modified, Not Chocolate	589, 592, 593														
		Mean Colours Scenario	0	0	3.67	0	0	0	15	1.67	0	0.83	0	0	0	0.83
		Maximum Colours Scenario	0	0	11	0	0	0	45	2.5	0	2.5	0	0	0	2.5
214	Coconut Ice	130														
		Mean Colours Scenario	0	0	0	0	2.5	2.5	0	0	0	0	0	0	0	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
		Maximum Colours Scenario	0	0	0	0	2.5	2.5	0	0	0	0	0	0	0	0
216	Liquorice, Plain	131														
		Mean Colours Scenario	0	0	25	0	0	0	2.5	2.5	0	25	0	0	0	0
		Maximum Colours Scenario	0	0	25	0	0	0	2.5	2.5	0	25	0	0	0	0
217	Liquorice, Allsorts	134														
		Mean Colours Scenario	0	0	0	0	9	0	5	2.5	0	2.5	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	9	0	5	2.5	0	2.5	0	0	0	0
218	Marshmallow	128														
		Mean Colours Scenario	0	0	0	0	16	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	16	0	0	0	0	0	0	0	0	0
219	Boiled Lolly	100, 110, 111, 112, 127, 587, 595, 596, 598, 601														
		Mean Colours Scenario	0.05	0.05	27	0.25	3.6	0	3.55	2.65	0	5.1	0.5	0	0	0
		Maximum Colours Scenario	0.25	0.25	160	2.5	28	0	9	14	0	27	2.5	0	0	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
221	Confectionery, Sugar Type Soft/Jelly	109, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 132, 133, 135, 136, 137, 138, 139, 140, 588, 596, 601														
		Mean Colours Scenario	0	0.01	12.93	0.46	8.98	0.09	5.56	7	0	4.33	1.4	0.26	0	0
		Maximum Colours Scenario	0	0.25	160	12	65	2.5	68	72	0	27	33	6	0	0
222	Sherbet	586														
		Mean Colours Scenario	0	0	0	2.5	0	0	21	0	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	0	2.5	0	0	21	0	0	0	0	0	0	0
224	Chewing Gum	105, 106, 107, 108, 597														
		Mean Colours Scenario	0	2.75	4	0	0	0	0	0	0	0.5	8.2	0	0.5	0
		Maximum Colours Scenario	0	11	15	0	0	0	0	0	0	2.5	41	0	2.5	0
225	Vodka	495														
		Mean Colours Scenario	0	0	0	0	23	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	23	0	0	0	0	0	0	0	0	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
226	Advocaat	488														
		Mean Colours Scenario	0	0	0	0	0	0	10	28	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	0	0	10	28	0	0	0	0	0	0
228	Mixed Alcoholic Drinks, Creamy	489, 490, 491, 492, 493														
		Mean Colours Scenario	0	0	0	0.5	0.5	0.5	1.6	40.4	0	2.2	0	0	0	1
		Maximum Colours Scenario	0	0	0	2.5	2.5	2.5	8	154	0	6	0	0	0	2.5
229	Liqueur, Other Flavours	484, 485, 486, 487, 496														
		Mean Colours Scenario	0	0	0	2.6	0	0	12.4	22.1	0	5.6	0.5	0	0	0
		Maximum Colours Scenario	0	0	0	7	0	0	56	68	0	28	2.5	0	0	0
230	Mixed Alcoholic Drinks, Non-Cola, with Vodka	258, 259, 260, 261, 482, 483														
		Mean Colours Scenario	0	0	0	0	2.5	0	6.83	1.25	0	0.83	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	15	0	36	2.5	0	2.5	0	0	0	0
231	Beverage Flavouring, Dry Mix, Non-Chocolate	287, 288, 289														
		Mean Colours Scenario	0.57	0.28	0	0	0	0	0	0	0	0	0	0	0	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
		Maximum Colours Scenario	1.7	0.59	0	0	0	0	0	0	0	0	0	0	0	0
232	Curry Paste	336, 340, 343, 344														
		Mean Colours Scenario	0	0	7.75	0	16.5	5.75	18.63	0	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	19	0	66	23	72	0	0	0	0	0	0	0
233	Breakfast Bar, NFS	319, 320, 321, 322, 323														
		Mean Colours Scenario	0.05	0	0	0	0.5	3.5	0	0.5	0	0.5	0	0	0	0
		Maximum Colours Scenario	0.25	0	0	0	2.5	15	0	2.5	0	2.5	0	0	0	0
235	Fruit Drinks, Other Flavours	243, 247, 248, 434, 437, 438, 439, 440, 441, 442, 443														
		Mean Colours Scenario	0.17	0	0	0	2.27	0	0	0	0	0.86	0	0	0	0
		Maximum Colours Scenario	0.25	0	0	0	25	0	0	0	0	7	0	0	0	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
236	Cordial, NFS (as consumed basis)	227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 252, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 526														
		Mean Colours Scenario	0	0.04	0	0.44	1.48	0	0.54	0.78	0	0.19	0	0	0	0
		Maximum Colours Scenario	0	0.54	0	4.4	28	0	3.6	4.8	0	4	0	0	0	0
237	Drink Base, Fruit (as consumed basis)	444														
		Mean Colours Scenario	0	0	0	0	0	0	17.5	44.17	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	0	0	17.5	44.17	0	0	0	0	0	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
239	Soft drink, NFS	262, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 282, 283, 285, 286, 527, 528, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541														
		Mean Colours Scenario	0	0.07	0	1.29	1.60	0.16	10.71	3.63	0	0.08	0	0	0	0
		Maximum Colours Scenario	0	1.3	0	30	23	2.5	54	44	0	2.5	0	0	0	0
241	Pasta, Filled NFS (as consumed basis)	150 151														
		Mean Colours Scenario	0.07	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0.15	0	0	0	0	0	0	0	0	0	0	0	0	0
242	Noodles, Asian Style, Fried	152, 153														
		Mean Colours Scenario	0.46	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0.67	0	0	0	0	0	0	0	0	0	0	0	0	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
243	Biscuits, Savoury, Rice Crackers	190, 194, 195, 198, 199, 391, 414, 605														
		Mean Colours Scenario	0.62	0	0	0	0.63	0	4.38	0.94	0	0.63	0	0	0	0
		Maximum Colours Scenario	1.9	0	0	0	2.5	0	20	2.5	0	2.5	0	0	0	0
244	Fish Fingers	370, 371, 374														
		Mean Colours Scenario	0.33	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0.5	0	0	0	0	0	0	0	0	0	0	0	0	0
245	Cordial Concentrate, Blackcurrant	231, 232, 517, 521														
		Mean Colours Scenario	0	0	0	6.25	0	0	0	0	0	0.63	0	0	0	0
		Maximum Colours Scenario	0	0	0	20	0	0	0	0	0	2.5	0	0	0	0
246	Cordial Concentrate, Citrus	229, 230, 235, 236, 237, 238, 512, 513, 518, 519, 522, 523, 524, 526														
		Mean Colours Scenario	0	0	0	0	0	0	3.75	5.86	0	1.79	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	0	0	18	24	0	20	0	0	0	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
247	Cordial Concentrate, Non-Citrus	227, 228, 233, 234, 239, 240, 514, 515, 516, 520, 525														
		Mean Colours Scenario	0	0.45	0	3.5	18.23	0	2.32	2.82	0	0	0	0	0	0
		Maximum Colours Scenario	0	2.7	0	22	140	0	11	16	0	0	0	0	0	0
248	Dry Drink Base, Fruit	444														
		Mean Colours Scenario	0	0	0	0	0	0	210	530	0	0	0	0	0	0
		Maximum Colours Scenario	0	0	0	0	0	0	210	530	0	0	0	0	0	0
251	Noodles, Asian Style Wheat, Cooked (as consumed basis)	157, 158, 159														
		Mean Colours Scenario	0.17	0	0	0	0.83	0	0	3	0	0	0	0	0	0
		Maximum Colours Scenario	0.25	0	0	0	2.5	0	0	9	0	0	0	0	0	0
252	Noodles, Asian Style Egg, Cooked (as consumed basis)	154														
		Mean Colours Scenario	0.08	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0.08	0	0	0	0	0	0	0	0	0	0	0	0	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
253	Noodle, Asian Style, NS as to type, Cooked (as consumed basis)	154, 155, 156, 157, 158, 159														
		Mean Colours Scenario	0.10	0	0	0	0.42	0	0	1.5	0	0	0	0	0	0
		Maximum Colours Scenario	0.25	0	0	0	2.5	0	0	9	0	0	0	0	0	0
255	Sauce, Cheese (as consumed basis)	337														
		Mean Colours Scenario	0.08	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0.08	0	0	0	0	0	0	0	0	0	0	0	0	0
256	Sauce, White(as consumed basis)	338														
		Mean Colours Scenario	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0
		Maximum Colours Scenario	0.01	0	0	0	0	0	0	0	0	0	0	0	0	0
257	Beverage Flavouring, Non-Chocolate (as consumed basis)	287, 288, 289														
		Mean Colours Scenario	0.02	0.006	0	0	0	0	0	0	0	0	0	0	0	0

Food Sub-Group Number	Food Sub-Group	Survey Sample Number	Annatto	Cochineal/ Carmine	Allura Red	Amaranth	Azorubine	Ponceau 4R	Sunset Yellow FCF	Tartrazine	Green S	Brilliant Blue	Indigotine	Quinoline Yellow	Brilliant Black	Brown HT
		Maximum Colours Scenario	0.07	0.01	0	0	0	0	0	0	0	0	0	0	0	0

NFS – not further specified

Appendix 3

Table A3.1: Major contributing foods to the dietary exposure of added colours for population groups aged 2-5 years (% contribution)

	Allura Red	Amaranth	Annatto	Azorubine	Brilliant Black	Brilliant Blue	Brown HT	Carminic Acid	Green S	Indigotine	Ponceau 4R	Quinoline Yellow	Sunset Yellow FCF	Tartrazine
Biscuits, Sweet	10	NA	<5	<5	NA	<5	NA	<5	NA	<5	<5	36	<5	<5
Breakfast cereal (include coloured types)	6	NA	<5	26	NA	9	NA	NA	NA	NA	NA	NA	8	5
Cakes, muffins and pastries	<5	<5	<5	9	29	15	68	<5	NA	NA	15	59	11	13
Cheese	NA	NA	<5	NA	NA	NA	NA	NA	NA	NA	8	NA	NA	NA
Confectionery	36	<5	<5	15	50	7	<5	<5	NA	29	<5	5	7	6
Cordial	NA	28	NA	20	NA	<5	NA	<5	NA	NA	NA	NA	8	9
Flavoured milk	9	NA	NA	<5	NA	21	17	7	NA	NA	11	NA	6	12
Ice cream and edible ices	19	24	36	16	NA	17	<5	<5	NA	66	30	NA	14	30
Jelly	<5	21	NA	<5	21	<5	NA	NA	100	NA	14	NA	<5	<5
Margarine/margarine spread	NA	NA	20	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Processed meat	NA	NA	7	NA	NA	NA	NA	NA	NA	NA	<5	NA	<5	NA
Sauces, savoury	<5	NA	<5	<5	NA	NA	NA	40	NA	NA	<5	NA	<5	NA
Snack foods, savoury	<5	NA	<5	<5	NA	<5	NA	<5	NA	<5	NA	NA	14	5
Soft drink	12	17	NA	5	NA	12	NA	<5	NA	NA	<5	NA	24	9
Topping	NA	<5	NA	<5	NA	<5	9	NA	NA	NA	<5	NA	<5	<5
Yoghurt	<5	<5	16	NA	NA	11	<5	44	NA	NA	7	NA	NA	NA
All other foods	8	10	20	9	NA	7	6	8	NA	6	13	NA	8	11

Note: grey shading indicates that the food is not a major contributor for the age group
NA = Not Analysed

Table A3.2: Major contributing foods to the dietary exposure of added colours for population groups aged 6-12 years (% contribution)

	Allura Red	Amaranth	Annatto	Azorubine	Brilliant Black	Brilliant Blue	Brown HT	Carminic acid	Green S	Indigotine	Ponceau 4R	Quinoline Yellow	Sunset Yellow FCF	Tartrazine
Biscuits, Sweet	7	NA	<5	<5	NA	<5	NA	<5	NA	<5	<5	47	<5	<5
Breakfast cereal (include coloured types)	<5	NA	6	20	NA	6	NA	NA	NA	NA	NA	NA	<5	<5
Cakes, muffins and pastries	<5	<5	<5	9	22	14	71	<5	NA	NA	14	46	8	12
Cheese	NA	NA	<5	NA	NA	NA	NA	NA	NA	NA	5	NA	NA	NA
Confectionery	36	<5	<5	14	57	7	<5	<5	NA	25	5	7	5	5
Cordial	NA	16	NA	14	NA	<5	NA	<5	NA	NA	NA	NA	**5**	**7**
Flavoured milk	5	NA	NA	<5	NA	22	19	7	NA	NA	7	NA	<5	6
Ice cream and edible ices	12	27	49	20	NA	18	<5	<5	NA	71	41	NA	13	34
Jelly	<5	13	NA	<5	21	<5	NA	NA	100	NA	11	NA	<5	<5
Margarine/margarine spread	NA	NA	13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pre-prepared meals	NA	NA	6	NA	NA	NA	NA	NA	NA	NA	<5	NA	<5	<5
Processed meat	NA	NA	6	NA	NA	NA	NA	NA	NA	NA	<5	NA	<5	NA
Sauces, savoury	<5	NA	<5	<5	NA	NA	NA	58	NA	NA	<5	NA	<5	NA
Snack foods, savoury	<5	NA	<5	<5	NA	<5	NA	<5	NA	<5	NA	NA	9	<5
Soft drink	28	36	NA	15	NA	23	NA	<5	NA	NA	5	NA	47	19
Topping	NA	<5	NA	<5	NA	<5	6	NA	NA	NA	<5	NA	<5	<5
Yoghurt	<5	<5	7	NA	NA	<5	<5	22	NA	NA	<5	NA	NA	NA
All other foods	12	8	13	8	NA	10	6	13	NA	4	12	NA	13	17

Note: grey shading indicates that the food is not a major contributor for the age
NA = Not Analysed

Table A3.3: Major contributing foods to the dietary exposure of added colours for population groups aged 13-16 years (% contribution)

	Allura Red	Amaranth	Annatto	Azorubine	Brilliant Black	Brilliant Blue	Brown HT	Carminic acid	Green S	Indigotine	Ponceau 4R	Quinoline Yellow	Sunset Yellow FCF	Tartrazine
Biscuits, Sweet	6	<5	<5	<5	NA	<5	<5	<5	NA	<5	<5	57	<5	<5
Breakfast cereal (include coloured types)	<5	NA	8	18	NA	6	NA	NA	NA	NA	NA	NA	<5	<5
Cakes, muffins and pastries	<5	<5	<5	8	13	11	63	<5	NA	NA	17	31	6	11
Cheese	NA	NA	<5	NA	NA	NA	NA	NA	NA	NA	6	NA	NA	NA
Confectionery	34	5	<5	16	77	8	<5	<5	NA	29	6	12	7	8
Cordial	NA	19	NA	15	NA	<5	NA	<5	NA	NA	NA	NA	6	9
Flavoured milk	5	NA	NA	<5	NA	25	23	6	NA	NA	10	NA	<5	8
Ice cream and edible ices	14	24	43	15	NA	11	<5	<5	NA	66	35	NA	11	28
Jelly	<5	6	NA	<5	10	<5	NA	NA	100	NA	5	NA	<5	<5
Margarine/margarine spread	NA	NA	13	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Pastry products, savoury	NA	NA	5	NA	NA	NA	NA	<5	NA	NA	NA	NA	<5	<5
Pre-prepared meals	NA	NA	8	NA	NA	NA	NA	NA	NA	NA	<5	NA	<5	<5
Processed meat	NA	NA	7	NA	NA	NA	NA	NA	NA	NA	<5	NA	NA	NA
Sauces, savoury	<5	NA	<5	<5	NA	NA	NA	69	NA	NA	<5	NA	<5	NA
Snack foods, savoury	<5	NA	<5	<5	NA	<5	NA	<5	NA	<5	NA	NA	6	<5
Soft drink	34	42	NA	21	NA	30	NA	<5	NA	NA	5	NA	50	21
Topping	NA	<5	NA	<5	NA	<5	10	NA	NA	NA	<5	NA	<5	<5
Yoghurt	<5	<5	6	NA	NA	<5	<5	14	NA	NA	<5	NA	NA	NA
All other foods	7	9	10	8	NA	11	4	11	NA	6	17	NA	21	18

Note: grey shading indicates that the food is not a major contributor for the age
NA = Not Analysed

Appendix 4

Table A4.1: Estimated dietary exposures to added colours for Australian children aged 2-5 years

			Estimated dietary exposures for consumers only							
			Mean Colours Scenario				Maximum Colours Scenario			
			Mean		90th Percentile		Mean		90th Percentile	
Colour	No. of consumers	Consumers as a % of total respondents	mg/day	mg/kg bw/day	mg/day	mg/kg bw/day	mg/day	mg/kg bw/day	mg/day	mg/kg bw/day
Allura Red AC	762	65	0.25	0.01	0.45	0.03	1.63	0.09	3.86	0.22
Amaranth	680	58	0.09	0.005	0.24	0.01	0.9	0.05	2.98	0.16
Annatto	1148	97	0.11	0.01	0.24	0.01	0.26	0.01	0.58	0.03
Azorubine	903	77	0.3	0.02	0.7	0.04	1.78	0.1	4.63	0.26
Brilliant Black BN	173	15	0.01	0.001	0.02	0.002	0.06	0.004	0.11	0.01
Brilliant Blue FCF	1086	92	0.34	0.02	0.81	0.05	1.81	0.1	3.97	0.24
Brown HT	734	62	0.31	0.02	0.89	0.05	0.75	0.04	2.1	0.13
Carminic Acid	952	81	0.1	0.01	0.18	0.01	0.33	0.02	0.78	0.05
Green S	66	6	0.001	0.0001	0.002	0.0001	0.03	0.002	0.05	0.002
Indigotine	454	39	0.04	0.002	0.06	0.003	0.3	0.02	0.75	0.04
Ponceau 4R	1057	90	0.07	0.004	0.2	0.01	0.46	0.03	1.07	0.06
Quinoline Yellow	392	33	0.03	0.002	0.09	0.005	0.11	0.01	0.28	0.02
Sunset Yellow FCF	999	85	0.42	0.02	1.07	0.06	1.71	0.1	4.24	0.24
Tartrazine	1000	85	0.52	0.03	1.32	0.08	2.56	0.15	6.59	0.38

Table A4.2: Estimated dietary exposures to added colours for Australian children aged 6-12 years

			Estimated dietary exposures for consumers only							
			Mean Colours Scenario				Maximum Colours Scenario			
			Mean		90th Percentile		Mean		90th Percentile	
Colour	No. of consumers	Consumers as a % of total respondents	mg/day	mg/kg bw/day	mg/day	mg/kg bw/day	mg/day	mg/kg bw/day	mg/day	mg/kg bw/day
Allura Red AC	1472	70	0.39	0.01	0.8	0.03	2.59	0.08	6.08	0.21
Amaranth	1428	68	0.14	0.004	0.36	0.01	1.75	0.05	5.87	0.17
Annatto	2054	98	0.15	0.005	0.37	0.01	0.34	0.01	0.85	0.03
Azorubine	1753	84	0.45	0.01	1.01	0.03	2.64	0.08	6.8	0.2
Brilliant Black BN	344	16	0.01	0.0004	0.03	0.001	0.07	0.002	0.16	0.005
Brilliant Blue FCF	1956	94	0.57	0.02	1.43	0.04	2.42	0.07	5.6	0.17
Brown HT	1162	56	0.6	0.02	1.76	0.05	1.27	0.04	3.77	0.1
Carminic Acid	1698	81	0.11	0.003	0.18	0.01	0.28	0.01	0.67	0.02
Green S	107	5	0.002	0.00005	0.003	0.0001	0.03	0.001	0.07	0.002
Indigotine	913	44	0.05	0.002	0.12	0.003	0.41	0.01	0.25	0.04
Ponceau 4R	1849	88	0.1	0.003	0.27	0.008	0.62	0.02	1.42	0.04
Quinoline Yellow	687	33	0.04	0.001	0.1	0.003	0.15	0.005	0.36	0.01
Sunset Yellow FCF	1908	91	0.81	0.02	2.22	0.06	3.48	0.1	10.4	0.29
Tartrazine	1904	91	0.82	0.02	1.96	0.06	4.39	0.13	11.01	0.33

Table A4.3: Estimated dietary exposures to added colours for Australian children aged 13-16 years

			Estimated dietary exposures for consumers only							
			Mean Colours Scenario				Maximum Colours Scenario			
			Mean		90th Percentile		Mean		90th Percentile	
Colour	No. of consumers	Consumers as a % of total respondents	mg/day	mg/kg bw/day	mg/day	mg/kg bw/day	mg/day	mg/kg bw/day	mg/day	mg/kg bw/day
Allura Red AC	784	64	0.62	0.01	2.16	0.04	3.82	0.06	12	0.2
Amaranth	728	60	0.15	0.003	0.4	0.01	2.03	0.04	6.26	0.12
Annatto	1168	96	0.16	0.003	0.37	0.01	0.34	0.01	0.81	0.01
Azorubine	959	79	0.54	0.01	1.31	0.02	3.11	0.05	8.03	0.14
Brilliant Black BN	139	11	0.02	0.0003	0.03	0.001	0.09	0.002	0.26	0.003
Brilliant Blue FCF	1090	89	0.66	0.01	1.55	0.03	2.68	0.05	6.33	0.11
Brown HT	593	49	0.69	0.01	1.73	0.03	1.5	0.03	4.29	0.07
Carminic Acid	892	73	0.17	0.003	0.25	0.005	0.36	0.01	0.87	0.02
Green S	30	2	0.001	0.00003	0.004	0.0001	0.03	0.001	0.09	0.001
Indigotine	479	39	0.08	0.001	0.17	0.003	0.65	0.01	2.23	0.04
Ponceau 4R	997	82	0.11	0.002	0.3	0.01	0.59	0.01	1.37	0.02
Quinoline Yellow	333	27	0.04	0.001	0.11	0.002	0.21	0.004	0.46	0.01
Sunset Yellow FCF	1061	87	0.96	0.02	2.57	0.04	4.27	0.07	11.96	0.21
Tartrazine	1055	87	0.93	0.02	2.2	0.04	4.84	0.08	12.2	0.21