

# **FIVE YEAR REVIEW OF THE HEALTH STAR RATING (HSR) SYSTEM**

**HSR Technical Advisory Group (TAG)**

---

**Salty snacks and hot potato products**

## Contents

Summary .....	3
Problem definition .....	5
Defining nutrients for this category .....	5
Consumption data – salty snacks and hot potato products.....	7
Issues identified in five year review .....	9
Alignment with system objectives and priorities.....	9
Linkages with other TAG work.....	9
Dietary guidelines.....	9
Classifying potato as a vegetable.....	10
Consideration of issues raised in submissions .....	11
Methods .....	11
Results.....	11
Removal of positive HSR components for salty snacks.....	14
Discussion of additional analysis.....	17
Options to address identified issues for salty snacks .....	18
Discussion and conclusion.....	21
APPENDIX 1: Australian Bureau of Statistics classification of snack foods and potato products as FFG or discretionary .....	22
APPENDIX 2: Component sensitivities for salty snack foods and hot potato products .....	31
APPENDIX 3: Summary of submissions related to salty snack foods.....	35
APPENDIX 4: TAG Database: salty snack products (n=131) .....	36
APPENDIX 5: Proposed changes to the Guide for Industry (Option 2).....	45

## Summary

Australian and New Zealand dietary guidelines recommend limiting the intake of salty snacks such as crisps, and hot potato products such as chips, because of their high energy, saturated fat and salt content.<sup>1,2</sup> These products are referred to as 'discretionary' choices in the Australian Dietary Guidelines (ADG) and contribute to excess energy intake in the Australian and New Zealand diet.

Many of these products are obtaining a higher than expected HSR because of their:

- high potato, other vegetable or legume content (contributing FVNL points) and positive nutrient content (contributing fibre and/or protein points); and
- relatively lower saturated fat and sodium content within the category.

A large proportion of these products (1 in 5 salty snacks and all hot potato products) obtain a HSR of 3.0 or above. This may give consumers the false impression that these foods do not need to be limited and undermine consumer trust in the system, particularly when some of these products receive a higher rating than some Five Food Group (FFG) foods.

Analysis of these products in the TAG database shows that:

- Hot potato products available in the supermarket, such as oven baked chips, have lower mean energy, saturated fat and sodium content and higher FVNL content than both salty snacks and their take-away hot chips equivalent. They also have a better nutritional profile than some hot potato products that are not considered to be discretionary, such as potato bake. For this reason, this paper concludes they are not considered to be discretionary foods and proposes no changes to these products.
- For salty snack products, the 1 in 5 products with a HSR of 3.0 or above represent relatively healthier products within this category, being lower in saturated fat and sodium and higher in fibre and FVNL content. However, they remain higher in saturated fat and energy than the hot potato products. Disallowing fibre points to be counted has the largest impact on the HSR of all salty snack products although disallowing FVNL content also impacts on the HSR for some. The combination of disallowing all positive components (FVNL, fibre and protein) to be counted reduces the mean (range) HSR from 2.0 (0.5-5.0) to 1.5 (0.5-3.0). These revised HSRs could be considered to be more appropriate for these products and in line with Australian and New Zealand recommendations.

A number of options have been considered to address salty snack outliers:

- If no change is made (Option 1), the 1 in 5 products scoring 3.0 or above could risk continuing to undermine the system.
- Disallow this product category from counting FVNL, fibre and/or protein points when calculating Star Points (Option 2). The Australian Health Survey Discretionary Food List could be used to help identify these products. This option may however limit further reformulation in this category. A sub-category for these salty snacks foods under HSR Category 2 (all foods other than those included in Category 1, 1D, 2D, 3 or 3D) would need be created but not re-scaled.
- Create a sub-category for discretionary foods under HSR Category 2 that would include salty snacks (Option 3). This sub-category could then be scaled separately to other foods in HSR Category 2 to better reflect their nutritional composition and

<sup>1</sup> National Health and Medical Research Council, 2017, Eat For Health, Australian Guide to Healthy Eating 2017, available at: <https://www.eatforhealth.gov.au/guidelines/australian-guide-healthy-eating>

<sup>2</sup> Ministry of Health, 2015, Eating and Activity Guidelines for New Zealand Adults, available at: <https://www.health.govt.nz/publication/eating-and-activity-guidelines-new-zealand-adults>

dietary guidelines classification. This could provide a more consistent approach to discretionary foods and could include setting an upper HSR limit for these products, although this may impact on product reformulation.

- Option 4 considers not allowing potato products to count FVNL points and takes into account dietary guidelines recommendations that potato form only part of the daily vegetable serves. This option would mainly impact hot potato products that already have a better nutritional composition than salty snacks. It will not address the increasing range of salty snack products that are made from vegetables other than potatoes.

Options 2 and 3 are the only options that will result in a lower HSR for salty snack products that could be considered to be in line with dietary guidelines and their discretionary food classification.

It is important to note that this analysis has been based on a small number of products in the TAG database and may not be representative of the full range of products in the market, reducing the ability to draw general conclusions. These options should also be considered in conjunction with the outcome of other TAG papers.

## Problem definition

Salty snack and hot potato products are classified as food items to “limit” in Australian and New Zealand dietary guidelines because of their typically higher salt, saturated fat and energy (kilojoule) content.<sup>3, 4</sup> A full list of these products considered to be discretionary in the ADG is in Appendix 1.

The high HSR of some of these products does not align with dietary recommendations and thus risks undermining consumer trust in the HSR System. Although high scoring crisps represent healthier versions of these items, because of their relatively lower levels of saturated fat and sugar, and moderate sodium levels, they still contribute excess energy and saturated fat to the diet.

## Defining nutrients for this category

Salty snack products such as crisps made from vegetables (mainly potato or corn but also legumes) and hot potato products such as oven-baked chips and wedges are classified under HSR Category 2 (all foods other than those included in Category 1, 1D, 2D, 3 or 3D).

These products contain each of the positive and negative components (aside from sugar) that contribute to the calculation of the HSR. However, as shown Figure 1, the key defining components contributing to the overall HSR across these categories are saturated fat, sodium, fibre and, in some cases, FVNL. The influence of positive HSR components varies between sub-categories of products, with FVNL affecting the HSR for potato-based products and fibre affecting the HSR for extruded wholegrain snack products (see Appendix 2).

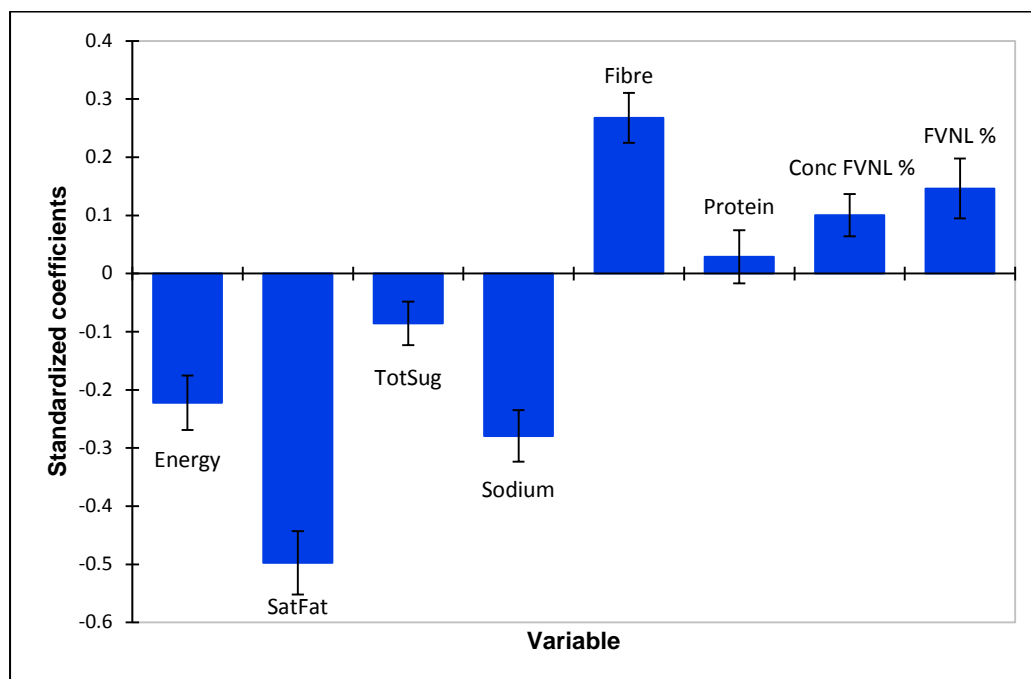


Figure 1: Nutrient sensitivities for salty snacks and hot potato products, shown by component contribution to Star Points, with 95% confidence interval.

<sup>3</sup> National Health and Medical Research Council, 2017, Eat For Health, Australian Guide to Healthy Eating 2017, available at: <https://www.eatforhealth.gov.au/guidelines/australian-guide-healthy-eating>

<sup>4</sup> Ministry of Health, 2015, Eating and Activity Guidelines for New Zealand Adults, available at: <https://www.health.govt.nz/publication/eating-and-activity-guidelines-new-zealand-adults>

Based on data in the TAG database for 166 products, the mean HSR of salty snacks is 2.0, with around 20% scoring  $\geq 3.0$  stars and all hot potato products receiving  $\geq 3.0$  stars. As shown in Table 3 (see later section), this is estimated to represent 31% of the salty snacks and 56% of the hot potato products in the market.

The spread of HSR values for each sub-category of salty snacks and hot potato products is shown in Figure 2. Hot potato products are obtaining higher HSRs than the salty snack sub-categories. Within the salty snack sub-categories, extruded snacks, corn chips and popcorn are spread across all HSR values, while potato crisps, vegetable crisps and other snacks are generally sitting at the lower end of the HSR. The other snack category includes products such as pretzels, pappadums, prawn crackers, etc.

The FVNL (potato) content of hot potato products with a HSR of 4.0-5.0 is around 95%, allowing these products to obtain 7 out of a possible 8 modifying points in the HSR algorithm. Potato crisps have a FVNL content sufficient to obtain some FVNL modifying points. This, combined with use of lower saturated fats and oils in product development, low-moderate sodium and low sugar content, and moderate fibre and protein content, explains the high rating of some of these products.

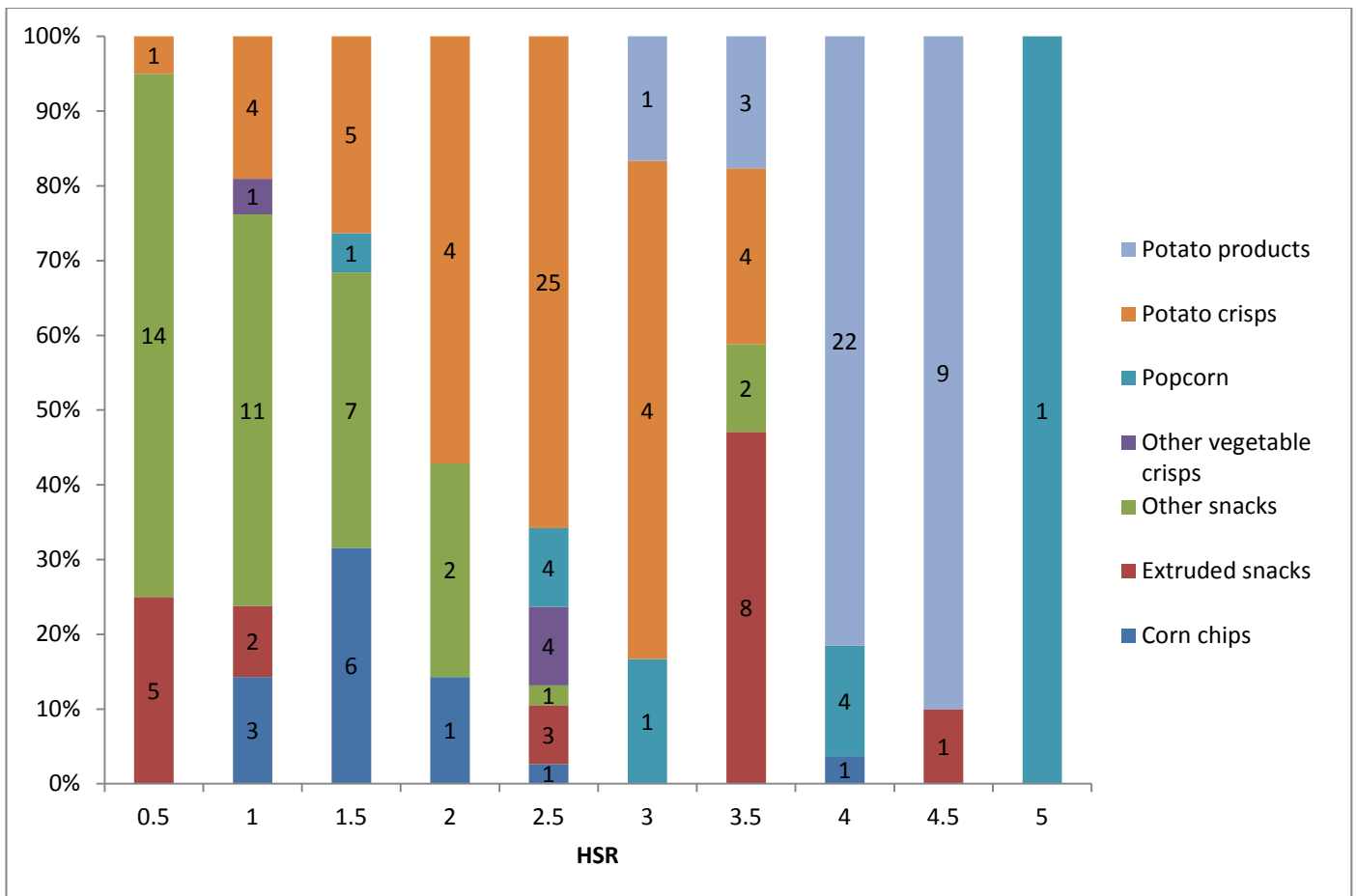


Figure 2: Spread of HSRs per sub-category of salty snacks and for hot potato products

## **Consumption data – salty snacks and hot potato products**

Recent consumption data in New Zealand and Australia for salty snacks and hot potato products are shown in Table 1. New Zealand and Australian dietary surveys classify salty snack and hot potato products differently, making it difficult to compare dietary intake of these foods between the two countries. Despite this, the surveys suggest that New Zealanders obtain more energy and saturated fat from potato products, including both hot chips and potato crisps, than Australians. While the overall contribution of potato products to negative nutrient intake in the Australian diet may be relatively low, potato products within this category that were classified as 'discretionary', including take-away chips, contributed more energy to the population's intake than the FFG types. The contribution of the higher HSR-rated hot potato products found in the supermarket to saturated fat intake is likely to be low given their mean saturated fat intake is 0.9 g/100 g (Table 3).

Table 1: Consumption patterns of salty snacks and hot potato products in Australia and New Zealand and their contribution to nutrient intake

Classification	Consumption of salty snacks	Consumption of hot potato products
<b>Australia<sup>5</sup></b>		
<i>Data from the 2011-2012 Australian Health Survey</i>		
<p>'Snack food' category, which includes potato, corn, extruded or reformed snacks, and other snacks.</p> <p>'Potatoes' category, which includes products considered discretionary (hot potato chips and wedges) and FFG (baked, roasted, mashed potatoes).</p>	<ul style="list-style-type: none"> <li>• <i>Potato snacks</i> were the most commonly consumed of these products - 16.5% of all respondents reported consuming them on the survey day, and 21% of children 9-13 years.</li> <li>• <i>Extruded or reformed snacks</i> had the highest median consumption of 40.0 g across all age groups (2 years and over). Median consumption of <i>potato and corn snacks</i> by eaters was 21 g and 25 g, respectively.</li> <li>• 'Snack foods' contributed, on average, 1.9% of sodium, 2.0% of saturated fat and 1.5% of energy intakes for Australians aged 2 years and over.</li> <li>• However, 'snack foods' and discretionary 'potato products' contributed, on average, 13% of the total energy coming from discretionary foods in the diet of children aged 2-18 years (8% for adults).</li> </ul>	<ul style="list-style-type: none"> <li>• 52% of all potatoes consumed were boiled, baked, roasted, fried or grilled; 32% eaten as hot chips, fries, wedges or similar; the remainder (16%) eaten in mixed dishes, such as mashed potato or potato bake.</li> <li>• The 'potato' category contributed, on average, 1.4% of sodium intake for the population (2 years and over) and was the main contributor to sodium intake from vegetables.</li> <li>• Within the 'potato' category, discretionary products contributed, on average, 1.7% of total energy and FFG products contributed 1.5% of total energy intake for the population aged 2 years and over.</li> <li>• Consumption was higher in children, contributing on average up to 3.4% of energy in children 14-18 years.</li> </ul>
<b>New Zealand<sup>6</sup></b>		
<i>Data from the 2008/09 New Zealand Adult Nutrition Survey and the NZ Food NZ Children</i>		
<p>'Snack foods' category (corn chips, popcorn, extruded snacks, grain crisps)</p> <p>'Potatoes, kumara and taro' category, which includes mashed, boiled, baked potatoes and kumara, hot chips, crisps, hash browns, wedges, potato dishes [stuffed, scalloped potatoes], taro roots and stalks.</p>	<ul style="list-style-type: none"> <li>• 'Snack food' category represented 0.6% of energy and 0.8% of saturated fat sources for age groups 15 years and above. 'Potato, kumara and taro' category, which includes <u>potato crisps</u>, contributed, on average, 6.4% of energy intake for the population 15 years and over.</li> <li>• Consumption of crisps from the 'potatoes, kumara and taro' category was the 2nd highest dietary source of saturated fat at an average 6.3%. Males (15-18 years) consumed the highest at 9.7% and females (15-18 years) consumed 9.2%.</li> <li>• For children, on average 8.0% of energy and 9.0% of saturated fat came from the 'potatoes, kumara and taro' category.</li> <li>• Contribution of consumption of 'snack foods' and 'potatoes, kumara and taro' categories to sodium intake are not available from this survey.</li> </ul>	<ul style="list-style-type: none"> <li>• 'Potatoes, kumara and taro' category represented 6.4% of energy intake for the total population 15 years and over. Younger males (15-18 years) obtained more energy from this category (8.8%) compared with males aged 29 and older (average 6.3%).</li> <li>• For children, on average, 8.0% of energy and 9.0% of saturated fat came from the 'potatoes, kumara and taro' category.</li> <li>• The contribution of consumption of 'snack foods' and 'potatoes, kumara and taro' categories to sodium intake are not available from this survey.</li> </ul>

<sup>5</sup> Australian Bureau of Statistics, 2014, Australian Health Survey: Nutrition First Results - Foods and Nutrients, 2011-12, tables 4,5,6, 8, 9, and 10, available at: <http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/4364.0.55.0072011-12?OpenDocument>

<sup>6</sup>Ministry of Health, 2011, A Focus on Nutrition: Key Findings from the 2008-09 NZ Adult Nutrition Survey, pp. 28, 38-39, 45, 50, available at: <https://www.health.govt.nz/publication/focus-nutrition-key-findings-2008-09-nz-adult-nutrition-survey>



## Issues identified in five year review

A full overview of the issues raised for this category by respondents to the Five Year HSR review is provided in Appendix 3. They are summarised as follows:

- The HSR system enables some salty snacks, crisps and chips made from vegetables to obtain modifying points because of their FVNL, fibre and/or protein content, which means that a number of discretionary foods such as fried potato and corn products (salty snacks and chips) and legume-based snacks such as wasabi peas, are receiving a higher than expected HSR.
- The high HSR for salty snack food items is inconsistent with both the ADG and the New Zealand Eating and Activity Guidelines (NZEAG), where salty snack food items are classified as food items to “limit” due to their high energy, saturated fat, and salt and/or sugar content.<sup>7, 8</sup>
- Respondents noted that the high HSR suggests to consumers that salty snack foods made with FVNL are equally as healthy as FFG foods with a similar HSR.
- Respondents expressed concern for the potential impact that a high HSR for a known discretionary food item (such as potato crisps), will have on the credibility of the HSR system.

## Alignment with system objectives and priorities

### Linkages with other TAG work

This topic links with the following other TAG topics:

- Alignment of the HSR with the Australian and New Zealand Dietary Guidelines
- Saturated fat
- Sodium.

Any decisions made in relation to this paper should also be considered with the decisions made for other discretionary food categories covered in other papers, e.g. muesli bars, jelly, etc., to ensure a consistent approach.

### Dietary guidelines

The Australia<sup>7</sup> and New Zealand<sup>8</sup> dietary guidelines both recommend limiting salty snacks and hot chips because of their potentially high energy, saturated fat and sodium content. They also recommend eating more of the non-starchy vegetables than the starchy vegetables such as potato, corn and kumara (see Table 2).

---

<sup>7</sup> National Health and Medical Research Council, 2017, Eat For Health, Australian Guide to Healthy Eating 2017, available at: <https://www.eatforhealth.gov.au/guidelines/australian-guide-healthy-eating>

<sup>8</sup> Ministry of Health, 2017, Eating and Activity Guidelines for New Zealand Adults, Available at: <https://www.health.govt.nz/publication/eating-and-activity-guidelines-new-zealand-adults>

Table 2: Dietary recommendations in Australia and New Zealand relating to salty snacks and hot potato products

Australian Dietary Guidelines (Australian Guide to Healthy Eating <sup>9</sup> )	Eating and Physical Activity Guidelines for New Zealand <sup>10</sup>
<ul style="list-style-type: none"> <li>• Salty snack foods are classified as discretionary food choices which are not recommended for regular consumption. Many of these foods are high in saturated fats, sugars, salt and/or alcohol, and are therefore described as energy-dense but nutrient-poor.</li> <li>• Starchy vegetables (e.g. sweet potato, taro, cassava or sweet corn) are considered to be FFG foods but are recommended to form only part of the recommended vegetable intake of 5-6 serves a day.</li> <li>• Advice is to limit the intake of energy-dense hot fried potato chips as these are considered to be discretionary foods.</li> </ul>	<ul style="list-style-type: none"> <li>• Recommendations are to eat a diet that is low in salt (sodium) and limit foods high in saturated fat and salt. Foods high in (saturated) fat include hot chips, crisps, hash browns, wedges and potato dishes.</li> <li>• There is also a recommendation to consume foods that are mostly 'whole' and less processed. Processed foods that are high in sodium include savoury snacks e.g. crisps.</li> <li>• Starchy vegetables provide nutrients such as carbohydrate and some vitamins and minerals to the diet and can be filling. However, they tend to be denser in energy (kilojoules) so it is healthier to have more non-starchy vegetables than starchy vegetables on the plate.</li> </ul>

## Classifying potato as a vegetable

The recommended number of vegetable serves in the Australian Five Food Groups was based on the assumption that half of all vegetables eaten are potatoes, and potato is considered as a vegetable in the Australian Guide to Healthy Eating (AGHE).

The HSR is based on the FSANZ Nutrient Profiling Scoring Criteria (NPSC) for health claims eligibility on foods. The NPSC was in turn modelled on the UK Nutrient Profile model in which potato and other starchy vegetables such as yams and cassava are not classified as vegetables for that purpose, but rather as bread due to their nutrient profile being more closely aligned to bread.<sup>11</sup> By allowing potatoes to score as vegetables in the NPSC (and subsequently the HSR), it changed the classification of ten potato products, mainly chips, from being ineligible to being eligible for health claims and six potato salads changed from being ineligible to becoming 'uncertain' owing to missing information about the percentage of potato in them.

Given the above background, there is some ambivalence over including potatoes (and other tubers) with other vegetables for the purposes of calculating the HSR. As potato crisps are a discretionary food, it could be argued that potato is not nutritionally equal to other vegetables due to its high starch content and therefore should not be treated as equal in FVNL points.

<sup>9</sup> National Health and Medical Research Council, 2017, Eat For Health, Australian Guide to Healthy Eating 2017, available at: <https://www.eatforhealth.gov.au/guidelines/australian-guide-healthy-eating>

<sup>10</sup> Ministry of Health, 2017, Eating and Activity Guidelines for New Zealand Adults, Available at: <https://www.health.govt.nz/publication/eating-and-activity-guidelines-new-zealand-adults>

<sup>11</sup> Food Standards Australia New Zealand, 2007, Proposal P293: Attachment 6: Modelling of Compositional Criteria to Determine the Eligibility of Foods to carry a Health Claim, available at: <http://www.foodstandards.gov.au/code/proposals/documents/P293%20Health%20claims%20PFAR%20Att%206%20-%20Modelling%20of%20Compositional%20Criteria%20FINAL.pdf>

## Consideration of issues raised in submissions

Analysis was undertaken to assess:

1. the nutritional composition of high scoring hot potato products and their classification as discretionary foods
2. the impact of removing FVNL, fibre and/or protein points from the HSR calculation for salty snack products.

### Methods

The TAG database, which includes product component data for 5,885 foods and drinks across 42 food categories according to the Australian Guide to Healthy Eating, was used for this analysis. Data was supplied by industry and includes actual HSR values. Fibre and FVNL data were supplied voluntarily by industry and are therefore not available for all products.

Salty snack products in this dataset that are classified as 'discretionary' are those classified as falling into groups 261, 262, 263 and 264 in the AHS Discretionary Food List. They were analysed at the 8 digit level.

The nutritional composition of hot potato products classified as 'discretionary' according to the AHS Discretionary Food List (classified as 241 at the 3 digit level) was compared with the nutritional composition of fast food versions of these products, hot potato products (not classified as discretionary) and salty snacks. Comparison products were sourced from the NUTTAB 2010 on-line searchable database.<sup>12</sup> If a suitable comparator was not available in NUTTAB 2010, data from the AUSNUT 2011-13 Food Nutrient database<sup>13</sup> was used instead.

### Results

Table 3 contains details of the findings of this analysis:

- As expected, salty snack products scoring 3.0 stars or higher have a healthier nutritional profile (lower in negative HSR components and higher in positive HSR components) than the lower scoring products. The only product scoring 5.0 stars is plain popcorn which is not considered to be a discretionary food.
- The mean nutritional profile of the hot potato products is lower in all negative HSR components and is higher in FVNL content than the mean nutritional profile of the salty snack products.
- Hot potato products have a healthier nutritional profile than the take-away chip comparator and salty snacks as they are lower in energy, saturated fat and sodium and higher in FVNL. Their nutritional composition is comparable to, or better than, hot potato products that are not classified as discretionary such as mashed potato and potato bake.

---

<sup>12</sup> Food Standards Australia New Zealand, 2010, NUTTAB 2010 Online Searchable Database, available at: <http://www.foodstandards.gov.au/science/monitoringnutrients/nutrientables/nuttab/Pages/default.aspx>

<sup>13</sup> Food Standards Australia New Zealand, 2016, AUSNUT 2011-2013, available at: <http://www.foodstandards.gov.au/science/monitoringnutrients/ausnut/pages/default.aspx>

Table 3: Summary statistics for salty snacks and hot potato products in the TAG database, including comparison component profiles

Category	Number of products	Mean HSR (range)	% scoring ≥3.0 stars	Mean nutrient content for key HSR components per food and drink category (comparator products where used were sourced from NUTTAB 2010 or AUSNUT 2011-13 database)							Estimated total no products in category <sup>14</sup>
				Per 100 g	Energy (kJ)	Sat.fat (g)	Sodium (mg)	Fibre (g)	Protein (g)	FVNL (%)	
<b>Salty snacks</b>	<b>131</b>	<b>2.0</b> <b>(0.5-5.0)</b>	<b>20%</b>								417  (crisps and similar snacks)
<i>Potato</i>	47	2.3	15%								
<i>Corn chips</i>	12	3.4	8%	Mean (median)	1942 (2050)	7.5 (4.3)	612 (572)	3.6 (3.0)	9.0 (7.6)	18.6 (0)	
<i>Extruded snacks</i>	19	2.3	47%	Products scoring < 3.0 stars							
<i>Other snacks</i>	37	1.1	5%								
<i>Vegetable crisps</i>	5	2.5	0%	Mean (median) for products scoring ≥ 3.0 stars	2029 (2030)	2.6 (2.1)	391 (402.5)	5.2 (6.1)	8.9 (7.7)	29.5 (0)	
<i>Popcorn</i>	11	3.1	54%								

<sup>14</sup> Information obtained from FoodTrack™ food and drink database and matched to most closely corresponding food and drink category. Commonwealth Scientific and Industrial Research Organisation, 2016, FoodTrack™ - food and nutrient database, available at: <https://www.csiro.au/en/Research/Health/CSIRO-diets/FoodTrack>

Category	Number of products	Mean HSR (range)	% scoring ≥3.0 stars	Mean nutrient content for key HSR components per food and drink category (comparator products where used were sourced from NUTTAB 2010 or AUSNUT 2011-13 database)	Estimated total no products in category <sup>14</sup>																																			
Hot potato products	35	4.0 (3.0-4.5)	100%	<table border="1"> <thead> <tr> <th>Per 100 g</th> <th>Energy (kJ)</th> <th>Sat. fat (g)</th> <th>Sodium (mg)</th> <th>Fibre (g)</th> <th>Prot'n (g)</th> <th>FVNL (%)</th> </tr> </thead> <tbody> <tr> <td>Mean (median)</td> <td>639 (599)</td> <td>0.89 (0.6)</td> <td>253.6 (249)</td> <td>2.5 (2.5)</td> <td>2.4 (2.3)</td> <td>84.3 (89)</td> </tr> <tr> <td>Take-away chips –discretionary comparator product</td> <td>968</td> <td>4.5</td> <td>201</td> <td>3.0</td> <td>-</td> <td>-</td> </tr> <tr> <td>Mashed potato product – FFG comparator product 1</td> <td>417</td> <td>3.5</td> <td>55</td> <td>0.8</td> <td>-</td> <td>-</td> </tr> <tr> <td>Potato bake made with cheese and cream - FFG comparator product 2</td> <td>720</td> <td>7.39</td> <td>79</td> <td>1.4</td> <td>-</td> <td>-</td> </tr> </tbody> </table> <p><i>Comparator products:</i></p> <p><i>Discretionary comparator - Potato, chips, regular, deep fried, blended oil, from take-away outlet, salted (NUTTAB Food ID: 13A11505),</i></p> <p><i>FFG comparator 1 - Potato, coliban, peeled, mashed with milk and butter (NUTTAB Food ID: 13A11604)</i></p> <p><i>FFG comparator 2 - potato bake made with cheese and cream (AUSNUT Food ID: 13A12170).</i></p>	Per 100 g	Energy (kJ)	Sat. fat (g)	Sodium (mg)	Fibre (g)	Prot'n (g)	FVNL (%)	Mean (median)	639 (599)	0.89 (0.6)	253.6 (249)	2.5 (2.5)	2.4 (2.3)	84.3 (89)	Take-away chips –discretionary comparator product	968	4.5	201	3.0	-	-	Mashed potato product – FFG comparator product 1	417	3.5	55	0.8	-	-	Potato bake made with cheese and cream - FFG comparator product 2	720	7.39	79	1.4	-	-	62 (frozen potato products)
Per 100 g	Energy (kJ)	Sat. fat (g)	Sodium (mg)	Fibre (g)	Prot'n (g)	FVNL (%)																																		
Mean (median)	639 (599)	0.89 (0.6)	253.6 (249)	2.5 (2.5)	2.4 (2.3)	84.3 (89)																																		
Take-away chips –discretionary comparator product	968	4.5	201	3.0	-	-																																		
Mashed potato product – FFG comparator product 1	417	3.5	55	0.8	-	-																																		
Potato bake made with cheese and cream - FFG comparator product 2	720	7.39	79	1.4	-	-																																		

## **Removal of positive HSR components for salty snacks**

Tables 4a, 4b and 4c show the impact of disallowing %FVNL, concentrated %FVNL, protein and/or fibre content (points) to be included in the HSR calculation, both individually and combined, for each sub-category of salty snacks. The full dataset is in Appendix 4. These results demonstrate that fibre is the key positive HSR component impacting on the HSR of these products and that FVNL is also important for some sub-categories. Protein content has a relatively small impact.

- Disallowing fibre points reduces the HSR by 0.5-1.0 stars in the majority of products (and up to 1.5 stars for popcorn) across all sub-categories. Disallowing FVNL and protein decreases the HSR for some products only.
- When FVNL-fibre-protein disallowance is combined, all products in the category are impacted by a decrease in HSR from 0.5-2.0. Disallowing positive points in the HSR to be counted results in a decrease in the mean HSR from 2 (0.5-5) to 1.5 (0.5-3.0) for salty snack products.

Table 4a: Salty snacks: change in HSR with the removal of %FVNL and %Concentrated FVNL modifying points

Product group	TAG database no. products	No. declaring %FVNL	Range of %FVNL	No. of products where HSR changed	Change of HSR status FVNL=0	No. declaring %conc. FVNL	Range of %conc. FVNL	No. of products where HSR changed	Change of HSR status Conc. FVNL=0
Potato crisps	47	37	60-76	11	1	3*	all 87	3	0.5-1
Corn chips	12	0	0	0	0	0	0	0	0
Extruded snacks	19	0	0	0	0	0	0	0	0
Other snacks	37	0	0	0	0	0	0	0	0
Other vegetable crisps	5	3	59-64	0	0	2	60-64	2	0.5
Popcorn	11	0	0	0	0	0	0	0	0
<b>Sum</b>	<b>131</b>								

Table 4b: Salty snacks: change in HSR with the removal of fibre and protein modifying points

Product group	No. declaring fibre	No. of products where HSR changed	Change of HSR status fibre=0	No. declaring protein	No. of products where HSR changed	Change of HSR status protein=0
Potato crisps	36	33	0.5	47	7	0.5
Corn chips	12	8	0.5 - 1	12	1	1
Extruded snacks	19	12	0.5-1	19	8	0.5-1
Other snacks	14	3	0.5-1	37	1	0.5
Other vegetable crisps	5	4	0.5 - 1	5	0	0
Popcorn	11	11	1-1.5	11	5	0.5-1

Table 4c Salty snacks: change in HSR with the combined removal of FVNL, fibre and protein modifying points

Product group	No. products where HSR changed when FVNL+ fibre+ protein	HSR range before	HSR range after	Max. HSR change	HSR mean before	HSR mean after
Potato crisps	37	0.5-3.5	0.5-2	1.5	2.2	1.7
Corn chips	8	1.0-4.0	0.5 - 2.5	1.5	1.7	1.2
Extruded snacks	13	0.5-4	0.5 - 2.5	2	2.3	1.6
Other snacks	4	0.5-3.5	0.5-3	1	1.1	1.1
Other vegetable crisps	5	1-2.5	0.5-2	1	2.2	1.4
Popcorn	11	1.5-5	0.5-3	2	3.2	1.9



## Discussion of additional analysis

A report examining the NSW Healthy Food Provision Policy with the Health Star Rating System<sup>15</sup> of a larger dataset of foods, found a similar proportion of salty snack and hot potato products achieving a high HSR (in this case  $\geq 3.5$  stars) (see Table 5) and also identified these products as outliers.

Table 5: Results from Technical Report: Alignment of NSW Healthy Food Provision Policy with the Health Star Rating System<sup>15</sup>

Category	Category description	Category food examples scoring $\geq 3.5$ stars	Total number of products in category	Mean HSR of category (range)	% scoring $\geq 3.5$ stars
<b>Oven Baked Potato Products</b>	Includes healthier versions of chips and wedges, prepared using healthier (lower saturated fat) oil and less salt	Frozen chips, wedges, hash browns	78	3.8 (3.5-4.0)	100%
<b>Salty snacks, chips, pretzels</b>	Includes all snack products such as potato crisps, extruded snacks, corn chips, pretzels, popcorn and snack packs	Corn chips, tuna/cracker packs, legume-based snacks (e.g. wasabi peas), popcorn, some potato crisps	435	2.8 (0.5-5.0)	41% (179 products)

Foods in the salty snack category that receive a high HSR are the major concern, given their overall poorer nutritional profile and the large size of this category (Table 3). It is important to note that the higher scoring salty snacks do represent healthier versions within this category but the high rating may not appropriately reflect their status as foods 'to limit'. Salty snacks and hot potato products are not large contributors to sodium, sugar, saturated fat or kilojoules in the diet, however, this tends to be true for all individual discretionary foods and drinks. It is the combined small contributions of all discretionary food outliers that are contributing to excess energy intake in the Australian and New Zealand diet.

### Hot potato products

Hot potato products (such as hot chips and wedges) have a higher HSR than expected for discretionary foods. These products are relatively low in negative nutrients such as saturated fat (owing to the use of healthier oils), and have inherently low sugar levels. Their nutritional profile is considerably better than that of salty snacks or a regular take-away hot chip product and similar to that of potato bakes and mashed potato, which are not classified as discretionary (Table 3). For this reason, they are not considered discretionary in this context, and no options for HSR change are put forward.

### Salty snacks

Salty snacks foods currently obtain a higher than expected HSR primarily because of their fibre levels, and to some extent their FVNL content, in combination with their relatively low saturated fat content (being often cooked in low saturated fat oils), moderate sodium and protein contents and inherently low sugar contents. Many have been reformulated through

15 Dunford, E., Cobcroft, M., Thomas, M., & Wu, J.H., 2015, Technical Report: Alignment of NSW Healthy Food Provision Policy with the Health Star Rating System. Sydney, NSW: NSW Ministry of Health.

participation in the the Food and Health Dialogue and the Australian Division of World Action on Salt and Health (AWASH) activities.

Results from modelling show that disallowing FVNL points has minimal impact on changing the HSR of salty snacks products, and it is only when fibre (and for some products, protein) is also disallowed that the HSR changes significantly. The limited impact of FVNL alone on the HSR is due to the combined effect that fibre contribution and the lower negative nutrient content have.

The maximum decrease in HSR across the salty snacks category, when a combined FVNL-fibre-protein disallowance is applied, is 2.0 for extruded snacks and popcorn, followed by 1.5 for potato crisps and corn chips, and 1.0 for all other snacks and other vegetable crisps.

Salty snacks can be considered discretionary food outliers of the HSR system and a number of options to address this issue are provided below.

## **Options to address identified issues for salty snacks**

Options to improve the consistency of the salty snack category with dietary guidelines are provided in Table 6.

## Options Summary

Table 6: Outline of options to address issues associated with the HSR of salty snacks

Option number	Option	Benefits	Disadvantages
1	Status quo	<ul style="list-style-type: none"> <li>No change to the HSR calculator is required</li> </ul>	<ul style="list-style-type: none"> <li>The high HSR of these products risks undermining the system – they have been identified as an outlier by many respondents to the Five Year Review.</li> </ul>
2	<p>Disallow modifying points to be counted for FVNL, fibre +/- protein for salty snack products as identified by the AHS Discretionary Food List.</p> <p>A new sub-category would be created under HSR category 2 but no rescaling would need to occur.</p> <ul style="list-style-type: none"> <li>The recommended changes to the Industry Guide are outlined in Appendix 5.</li> <li>This approach could be expanded to include other discretionary food outliers such as muesli bars and processed meat.</li> </ul>	<ul style="list-style-type: none"> <li>Dietary guidelines recommend these products are limited, so the rationale for not counting positive components is clear.</li> <li>This would result in a lower HSR range for salty snacks of 1.5-2.5 than at present.</li> <li>Would have minimal impact on industry from a labelling perspective as most of these products are not (yet) using the HSR label.</li> <li>Will slightly improve the demarcation between FFG and discretionary foods.</li> <li>Can use the AHS Discretionary Food List to help identify and define these products.</li> <li>Can provide a consistent approach to addressing discretionary outliers.</li> </ul>	<ul style="list-style-type: none"> <li>Could discourage reformulation as it effectively caps HSR scores. Higher scoring products that have been reformulated to be lower in saturated fat and sodium would be penalised with the reduced range in HSR values.</li> <li>The definition of salty snack products would need regular revision to ensure it continues to reflect the salty snack market.</li> <li>Could be perceived to be unfairly targeting only some discretionary foods.</li> </ul>
3	<p>Create a new sub-category for discretionary foods under HSR Category 2. Re-scale this category to move the HSR down and reduce the range by capping.</p>	<p>As per option 2 plus:</p> <ul style="list-style-type: none"> <li>Could offer a broader solution to address discretionary foods.</li> <li>Provides a more consistent approach to all discretionary foods rather than singling out specific products.</li> <li>Could significantly improve demarcation between FFGs and discretionary foods,</li> </ul>	<p>As per option 2 plus:</p> <ul style="list-style-type: none"> <li>Would have a significant impact on the algorithm, requiring the creation of a new sub-category under HSR Category 2 and re-scaling of the other categories from which discretionary foods or drinks were removed.</li> <li>Requires more work to agree a clear</li> </ul>

		<p>depending on where the cap is set.</p> <ul style="list-style-type: none"> <li>• Could continue to support reformulation depending on where the cap was set.</li> </ul>	<p>definition of discretionary foods, which may be easy for some products but less so for others such as mixed foods, and which would need to be regularly reviewed to reflect constant changes to the food supply.</p>
4	<p>Exclude potato from definition of FVNL for processed potato/corn products, or other vegetables when used in products such as chips or crisps.</p>	<ul style="list-style-type: none"> <li>• Supports the dietary guidelines treatment of potato as not being equal to other vegetables.</li> <li>• A relatively simple solution.</li> </ul>	<ul style="list-style-type: none"> <li>• Would penalise the healthier hot potato products because they have a high FVNL content and would have minimal impact on salty snacks.</li> <li>• Would continue to permit salty snacks made from other vegetables and legumes to obtain a high rating.</li> </ul>

## **Limitations of analysis**

The modelling used to inform the recommendations was based on a small data set of the TAG database of 166 products (of which 131 were salty snacks) and therefore may not be representative of the full category of these products in the market, particularly for the large salty snacks category. It is also limited by the data provided by industry for this database. All foods in the TAG database had a fibre value, with any missing data imputed based on the fibre content of similar products. For FVNL, values provided by the industry were used which resulted in some level of inconsistency between similar products.

## **Discussion and conclusion**

One in 5 salty snack products in the TAG database have been identified as outliers in this analysis because they are obtaining a high HSR (3.0 or above) despite a recommendation to limit their intake in dietary guidelines. This paper concludes that the hot potato products found in supermarkets are not outliers as they are lower in saturated fat, energy and sodium than salty snacks or their take-away hot chips equivalent.

Options 2 and 3 are the only options that will result in a lower HSR for salty snack foods that reflects more appropriately their discretionary food status. However, both require changes to the HSR algorithm and will require the creation of a new sub-category under HSR Category 2. Option 2 (to remove modifying points from FVNL, fibre and protein) could be applied only to salty snacks or to other discretionary foods that have been identified as outliers, such as muesli bars and processed meats. No re-scaling would be required. Option 3 takes a broader approach to discretionary foods by removing these foods from HSR Category 2 and re-scaling them down.

A challenge with both approaches will be to clearly define the products included in the new sub-category of salty snacks, or discretionary foods more broadly, and to keep this definition up-to-date. This is perhaps easier for salty snacks where the AHS Discretionary Food List already identifies many of these products, but more challenging for other discretionary food products, especially when New Zealand Dietary Guidelines do not use this terminology. It is important to note that Options 2 and 3, in reducing the HSR range for salty snacks, are also likely to discourage reformulation in these categories. However, this may not be of concern given the recommendation in dietary guidelines to limit the intake of these products in general.

## APPENDIX 1: Australian Bureau of Statistics classification of snack foods and potato products as FFG or discretionary<sup>16</sup>

Reported at the 2, 3, 5 and 8-digit food classification level

Note: this list was developed for the purpose of analysing the results of the Australian Health Survey 2011-13 in 2014 so caution is needed when applying it to other uses.

All snack foods are identified as discretionary while only some hot potato products are identified as discretionary.

	<b>26</b>	<b>Snack foods</b>
	<b>261</b>	<b>Potato snacks</b>
<i>Discretionary</i>	<i>26101</i>	<i>Potato crisps</i>
Discretionary	26101002	Potato crisps or chips, flavoured, reduced fat
Discretionary	26101003	Potato crisps or chips, plain, salted
Discretionary	26101004	Potato crisps or chips, plain, unsalted
Discretionary	26101005	Potato crisps or chips, salt & vinegar flavoured
Discretionary	26101006	Potato crisps or chips, sour cream based flavours
Discretionary	26101007	Potato crisps or chips, other flavours
Discretionary	26101008	Potato crisps or chips, reformed, cheese flavour, salted
Discretionary	26101009	Potato crisps or chips, reformed, plain, salted
Discretionary	26101010	Potato crisps or chips, reformed, salt & vinegar flavoured
Discretionary	26101011	Potato crisps or chips, reformed, sour cream & chives flavour, salted
Discretionary	26101012	Potato crisps or chips, reformed, other flavours, salted
Discretionary	26101013	Potato crisps or chips, not further defined

<sup>16</sup> Australian Bureau of Statistics, 2014, Australian Health Survey Users' Guide – Discretionary Foods, available at: <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/4363.0.55.001Chapter65062011-13>

Discretionary	26101014	Potato straws, French fries, plain
Discretionary	26101015	Potato straws, French fries, salt & vinegar flavoured
<i>Discretionary</i>	<i>26102</i>	<i>Other vegetable crisps</i>
Discretionary	26102001	Beetroot crisps or chips, plain, salted
Discretionary	26102002	Vegetable crisps or chips, plain, salted
	<b>262</b>	<b>Corn snacks</b>
<i>Discretionary</i>	<i>26201</i>	<i>Corn chips</i>
Discretionary	26201002	Corn chips, other flavours, salted
Discretionary	26201003	Corn chips, plain, toasted, no added salt
Discretionary	26201004	Corn chips, plain toasted, salted
Discretionary	26201005	Corn chips, puffed, plain, salted
Discretionary	26201006	Corn chips, not further defined
Discretionary	26201007	Taco shell, from corn flour, plain
	<i>26202</i>	<i>Popcorn</i>
FFG	26202001	Popcorn, air-popped, no added fat or salt
Discretionary	26202002	Popcorn, commercial, butter flavoured, salted
Discretionary	26202003	Popcorn, microwaved, butter flavoured, salted
Discretionary	26202004	Popcorn, regular, unflavoured, salted, vegetable oil
Discretionary	26202005	Popcorn, regular, unflavoured, unsalted, vegetable oil
Discretionary	26202006	Popcorn, commercial, sugar coating
Discretionary	26202003	Popcorn, microwaved, butter flavoured, salted
Discretionary	26202004	Popcorn, regular, unflavoured, salted, vegetable oil
Discretionary	26202005	Popcorn, regular, unflavoured, unsalted, vegetable oil

Discretionary	26202006	Popcorn, commercial, sugar coating
	<b>263</b>	<b>Extruded or reformed snacks</b>
<i>Discretionary</i>	<i>26301</i>	<i>Extruded snacks</i>
Discretionary	26301002	Extruded snack, cheese flavoured
Discretionary	26301003	Extruded snack, non-cheese flavoured
Discretionary	26301004	Grain waves wheat snack, plain, original
Discretionary	26301005	Grain waves wheat snack, cheese or sour cream & chives
Discretionary	26301006	Grain waves wheat snack, other flavours
Discretionary	26301007	Rice crisps or chips, extruded, flavoured
	<b>264</b>	<b>Other snacks</b>
<i>Discretionary</i>	<i>26401</i>	<i>Other snacks</i>
Discretionary	26401002	Cracker, with cheese not further defined
Discretionary	26401003	Noodle snack, wheat, flavoured, dry
Discretionary	26401004	Pappadam, raw
Discretionary	26401005	Pappadam, deep fried
Discretionary	26401006	Pappadam, microwaved without oil or salt
Discretionary	26401007	Pork rind snack
Discretionary	26401008	Prawn cracker, Asian, commercial, fried
Discretionary	26401009	Pretzels, salted
Discretionary	26401010	Snack mix, Bhuja
Discretionary	26401011	Snack pack, savoury, corn & rice biscuit with salsa



Discretionary	26401012	Snack pack, savoury, rice cracker with reduced fat cheddar cheese
Discretionary	26401013	Snack pack, savoury, white wheat flour biscuit with cheese
Discretionary	26401014	Snack pack, savoury, white wheat flour biscuit with processed cheese spread
Discretionary	26401015	Snack pack, savoury, white wheat flour biscuit with processed vegemite flavoured cheese spread
Discretionary	26401016	Snack pack, savoury, wholemeal wheat flour biscuit with processed cheese spread
	<b>241</b>	<b>Potatoes</b>
<i>FFG</i>	<i>24101</i>	<i>Potatoes</i>
FFG	24101001	Potato, coliban, peeled, raw
FFG	24101002	Potato, coliban, peeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, no added fat
FFG	24101003	Potato, coliban, peeled, boiled, microwaved or steamed, drained
FFG	24101004	Potato, desiree, peeled, raw
FFG	24101005	Potato, desiree, peeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, no added fat
FFG	24101006	Potato, desiree, peeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, fat not further defined
FFG	24101007	Potato, desiree, peeled, boiled, microwaved or steamed, drained
FFG	24101008	Potato, desiree, unpeeled, raw
FFG	24101009	Potato, desiree, unpeeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, no added fat
FFG	24101010	Potato, new, peeled or unpeeled, raw
FFG	24101011	Potato, new, peeled or unpeeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, no added fat
FFG	24101012	Potato, new, peeled or unpeeled, boiled, microwaved or steamed, drained
FFG	24101013	Potato, pontiac, peeled, raw
FFG	24101014	Potato, pontiac, peeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, no added fat
FFG	24101015	Potato, pontiac, peeled, boiled, microwaved or steamed, drained

FFG	24101016	Potato, sebago, peeled, raw
FFG	24101017	Potato, sebago, peeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, animal fat
FFG	24101018	Potato, sebago, unpeeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, no added fat
FFG	24101019	Potato, sebago, unpeeled, boiled, microwaved or steamed, drained
FFG	24101020	Potato, pale skin, peeled, raw
FFG	24101021	Potato, pale skin, peeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, no added fat
FFG	24101022	Potato, pale skin, peeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, butter, dairy blend or margarine
FFG	24101023	Potato, pale skin, peeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, canola oil
FFG	24101024	Potato, pale skin, peeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, olive oil
FFG	24101025	Potato, pale skin, peeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, other oil
FFG	24101026	Potato, pale skin, peeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, fat not further defined
FFG	24101027	Potato, pale skin, peeled, boiled, microwaved or steamed, drained
FFG	24101028	Potato, pale skin, peeled, boiled, microwaved or steamed, drained, added butter, dairy blend or margarine
FFG	24101029	Potato, pale skin, peeled, boiled, microwaved or steamed, drained, added oil
FFG	24101030	Potato, pale skin, peeled, boiled, microwaved or steamed, drained, added fat not further defined
FFG	24101031	Potato, pale skin, unpeeled, raw
FFG	24101032	Potato, pale skin, unpeeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, no added fat
FFG	24101033	Potato, pale skin, unpeeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, butter, dairy blend or margarine
FFG	24101034	Potato, pale skin, unpeeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, canola oil
FFG	24101035	Potato, pale skin, unpeeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, olive oil
FFG	24101036	Potato, pale skin, unpeeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, other oil
FFG	24101037	Potato, pale skin, unpeeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, fat not further defined
FFG	24101038	Potato, pale skin, unpeeled, boiled, microwaved or steamed, drained

FFG	24101039	Potato, pale skin, unpeeled, boiled, microwaved or steamed, added fat not further defined
FFG	24101040	Potato, red skin, peeled, raw
FFG	24101041	Potato, red skin, peeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, no added fat
FFG	24101042	Potato, red skin, peeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, fat not further defined
FFG	24101043	Potato, red skin, peeled, boiled, microwaved or steamed, drained
FFG	24101044	Potato, red skin, unpeeled, raw
FFG	24101045	Potato, red skin, unpeeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, no added fat
FFG	24101046	Potato, red skin, unpeeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, fat not further defined
FFG	24101047	Potato, red skin, unpeeled, boiled, microwaved or steamed, drained
FFG	24101048	Potato, red skin, unpeeled, boiled, microwaved or steamed, added fat not further defined
FFG	24101049	Potato, peeled, raw, not further defined
FFG	24101050	Potato, peeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, no added fat
FFG	24101051	Potato, peeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, butter, dairy blend or margarine
FFG	24101052	Potato, peeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, canola oil
FFG	24101053	Potato, peeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, olive oil
FFG	24101054	Potato, peeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, other oil
FFG	24101055	Potato, peeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, fat not further defined
FFG	24101056	Potato, peeled, boiled, microwaved or steamed, drained
FFG	24101057	Potato, peeled, boiled, microwaved or steamed, drained, added butter, dairy spread or margarine
FFG	24101058	Potato, peeled, boiled, microwaved or steamed, added fat not further defined
FFG	24101059	Potato, unpeeled, raw, not further defined
FFG	24101060	Potato, unpeeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, no added fat
FFG	24101061	Potato, unpeeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, butter, dairy blend or margarine

FFG	24101062	Potato, unpeeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, olive oil
FFG	24101063	Potato, unpeeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, other oil
FFG	24101064	Potato, unpeeled, baked, roasted, fried, stir-fried, grilled or BBQ'd, fat not further defined
FFG	24101065	Potato, unpeeled, boiled, microwaved or steamed, drained, with or without added fat
<i>Discretionary</i>	<i>24102</i>	<i>Potato products</i>
Discretionary	24102001	Starch, potato
Discretionary	24102002	Potato, chips, regular, fast food outlet, deep fried, blended oil, salted
Discretionary	24102003	Potato, chips, regular, fast food outlet, deep fried, monounsaturated oil, salted
Discretionary	24102004	Potato, chips, regular, independent takeaway outlet, cafe or restaurant, deep fried, blended oil, no added salt
Discretionary	24102005	Potato, chips, regular, independent takeaway outlet, cafe or restaurant, deep fried, blended oil, salted
Discretionary	24102006	Potato, chips, regular, purchased frozen, baked or roasted, no added fat
Discretionary	24102007	Potato, chips, regular, purchased frozen, baked or roasted, fat not further defined
Discretionary	24102008	Potato, chips, regular, purchased frozen, deep fried or fried, fat not further defined
Discretionary	24102009	Potato, chips, reduced fat, purchased frozen, baked or roasted, no added fat
Discretionary	24102010	Potato, chips, homemade from fresh potato, deep fried or fried, canola oil
Discretionary	24102011	Potato, chips, homemade from fresh potato, deep fried or fried, olive oil
Discretionary	24102012	Potato, chips, homemade from fresh potato, deep fried or fried, other oil
Discretionary	24102013	Potato, chips, homemade from fresh potato, deep fried or fried, fat not further defined
Discretionary	24102014	Potato, fries, fast food outlet, deep fried, blended oil, salted
Discretionary	24102015	Potato, fries, fast food outlet, deep fried, monounsaturated oil, no added salt
Discretionary	24102016	Potato, fries, fast food outlet, deep fried, monounsaturated oil, salted
Discretionary	24102017	Potato, fries, independent takeaway outlet, cafe or restaurant, deep fried, blended oil, no added salt
Discretionary	24102018	Potato, fries, independent takeaway outlet, cafe or restaurant, deep fried, blended oil, salted

Discretionary	24102019	Potato, fries, regular, purchased frozen, par-fried in canola oil, raw
Discretionary	24102020	Potato, fries, regular, purchased frozen, baked or roasted, no added fat
Discretionary	24102021	Potato, fries, regular, purchased frozen, deep fried or fried, fat not further defined
Discretionary	24102022	Potato, fries, homemade from fresh potato, peeled, deep-fried, fat not further defined
Discretionary	24102023	Potato, gem, nugget or royal, independent takeaway outlet, cafe or restaurant, deep fried, fat not further defined
Discretionary	24102024	Potato, gem, nugget or royal, regular, purchased frozen, par-fried in canola oil, raw
Discretionary	24102025	Potato, gem, nugget or royal, regular, purchased frozen, baked or roasted, with or without added fat
Discretionary	24102026	Potato, gem, nugget or royal, regular, purchased frozen, deep fried or fried, fat not further defined
Discretionary	24102027	Potato, hash brown, McDonalds
Discretionary	24102028	Potato, hash brown, independent takeaway outlet, cafe or restaurant, deep fried, oil not further defined
Discretionary	24102029	Potato, hash brown, purchased frozen, par-fried in canola oil, raw
Discretionary	24102030	Potato, hash brown, purchased frozen, baked, roasted, grilled or BBQ'd, no added fat
Discretionary	24102031	Potato, hash brown, purchased frozen, baked or roasted, fat not further defined
Discretionary	24102032	Potato scallop, deep fried, saturated frying fat, salted
Discretionary	24102033	Potato, wedges, independent takeaway outlet, cafe or restaurant, deep fried, blended oil, salted
Discretionary	24102034	Potato, wedges, regular, purchased frozen, par-fried in canola oil, raw
Discretionary	24102035	Potato, wedges, regular, purchased frozen, baked or roasted, no added fat
Discretionary	24102036	Potato, wedges, regular, purchased frozen, deep fried or fried, fat not further defined
<i>FFG</i>	<i>24103</i>	<i>Potato mixed dishes</i>
FFG	24103001	Potato, mashed, dried powder
FFG	24103002	Potato, mashed, prepared from dried powder with cows milk or water
FFG	24103003	Potato, mashed, with gravy, as purchased from a fast food outlet
FFG	24103004	Potato, sebago, peeled, boiled & mashed without added ingredients

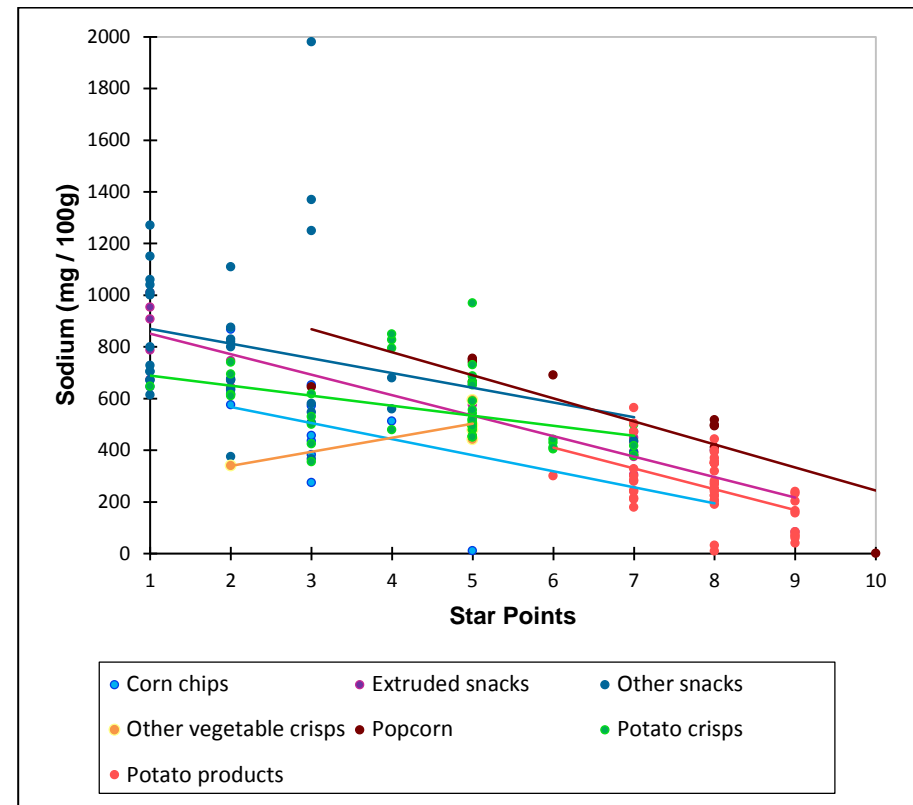
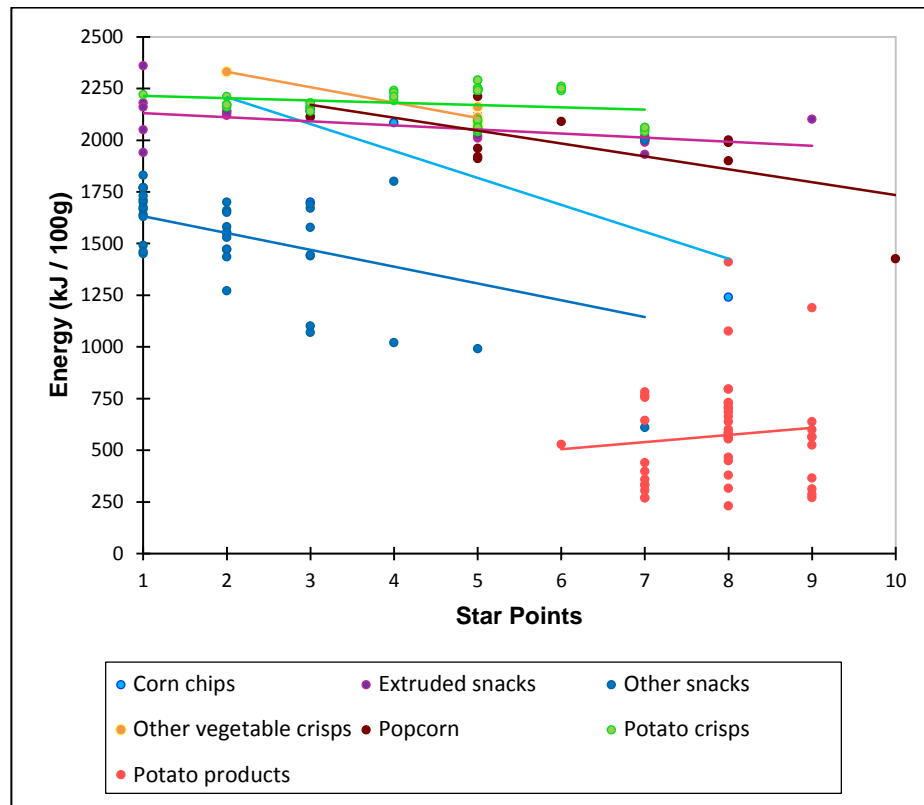
FFG	24103005	Potato, pale skin, peeled or unpeeled, mashed with cows milk & butter or dairy blend
FFG	24103006	Potato, pale skin, peeled or unpeeled, mashed with cows milk & margarine spread
FFG	24103007	Potato, red skin, peeled or unpeeled, mashed with cows milk & butter or dairy blend
FFG	24103008	Potato, peeled or unpeeled, mashed with cows milk & butter or dairy blend
FFG	24103009	Potato, peeled or unpeeled, mashed with cows milk & margarine spread
FFG	24103010	Potato, peeled or unpeeled, mashed with cows milk & oil
FFG	24103011	Potato, peeled, mashed, prepared, from cafe or restaurant
FFG	24103012	Potato bake, made with bacon, cheese &/or cream
FFG	24103013	Potato bake, made with cheese
FFG	24103014	Potato bake, made with cream
FFG	24103015	Potato bake, made with cheese & cream
FFG	24103016	Potato bake, made with mixed vegetables & cream &/or cheese
FFG	24103017	Potato, for stuffed potato recipes
FFG	24103018	Potato, filled with bacon, cheese &/or sour cream
FFG	24103019	Potato, filled with cheese &/or sour cream
FFG	24103020	Potato, filled with legumes &/or vegetables
FFG	24103021	Potato, filled with meat & cheese &/or sour cream

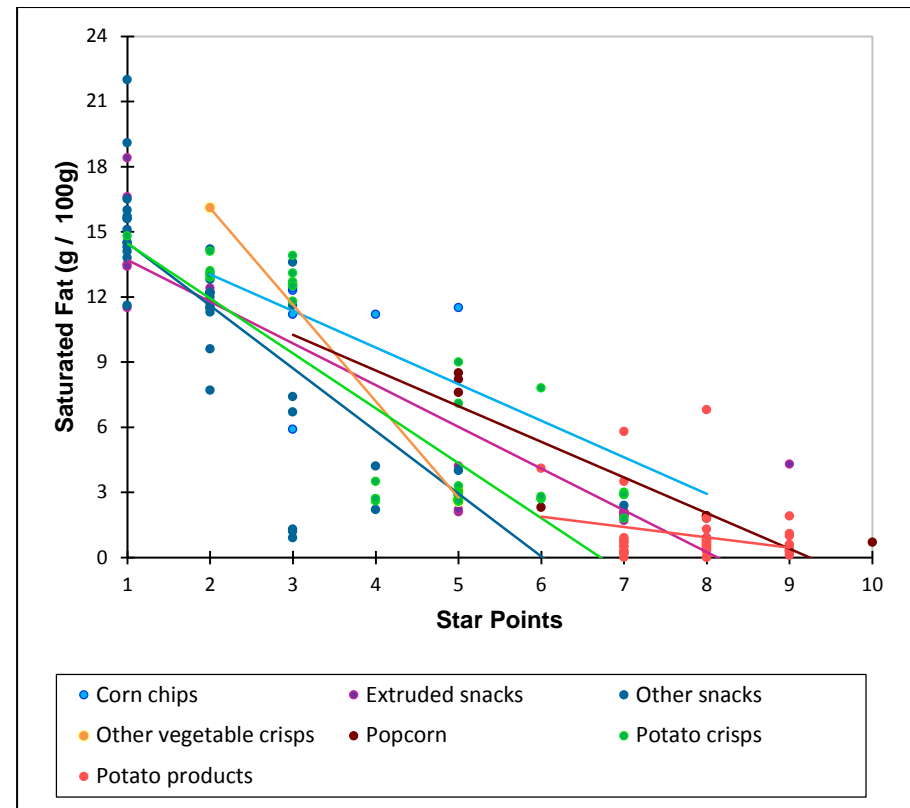
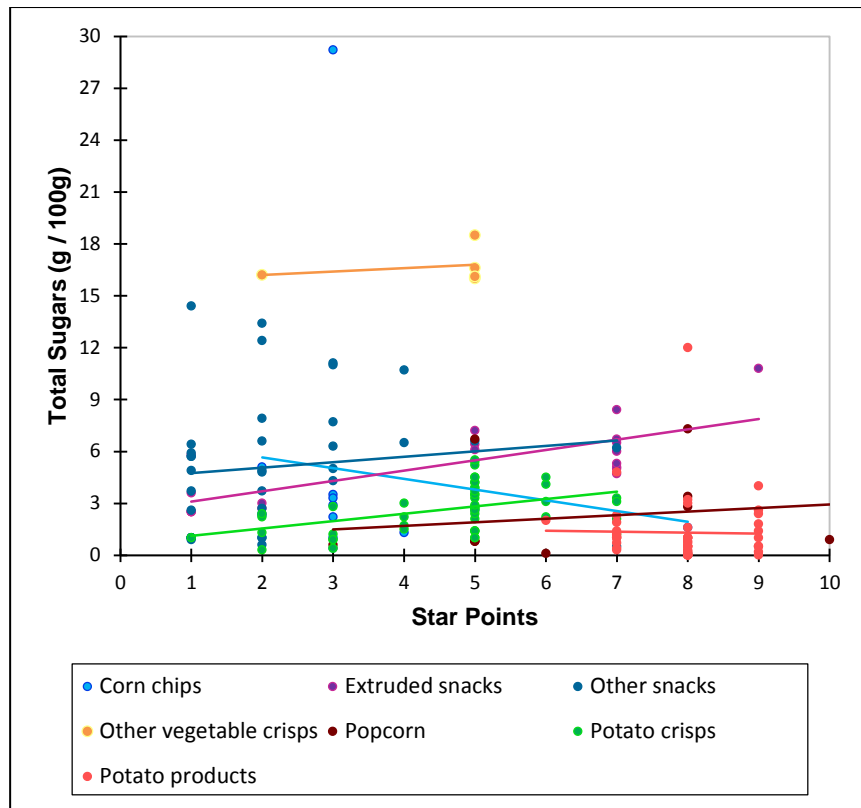
## APPENDIX 2: Component sensitivities for salty snack foods and hot potato products

- Salty snack sub-categories are: corn chips, potato crisps, extruded snacks, other vegetables crisps, popcorn and other snacks
- Potato products are hot product products such as chips and wedges

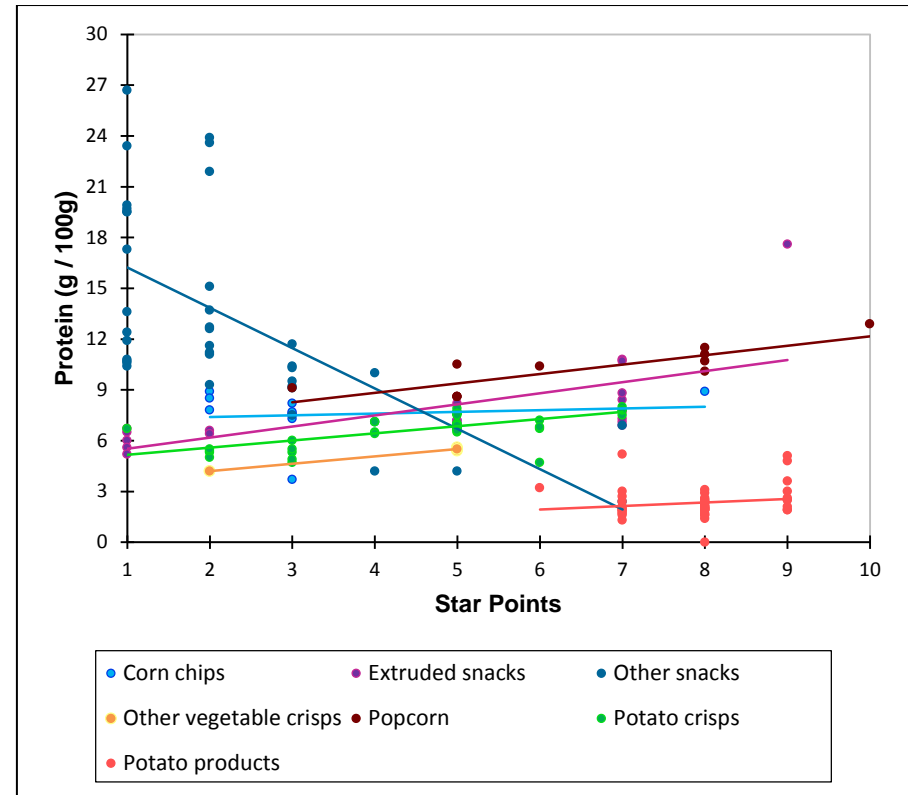
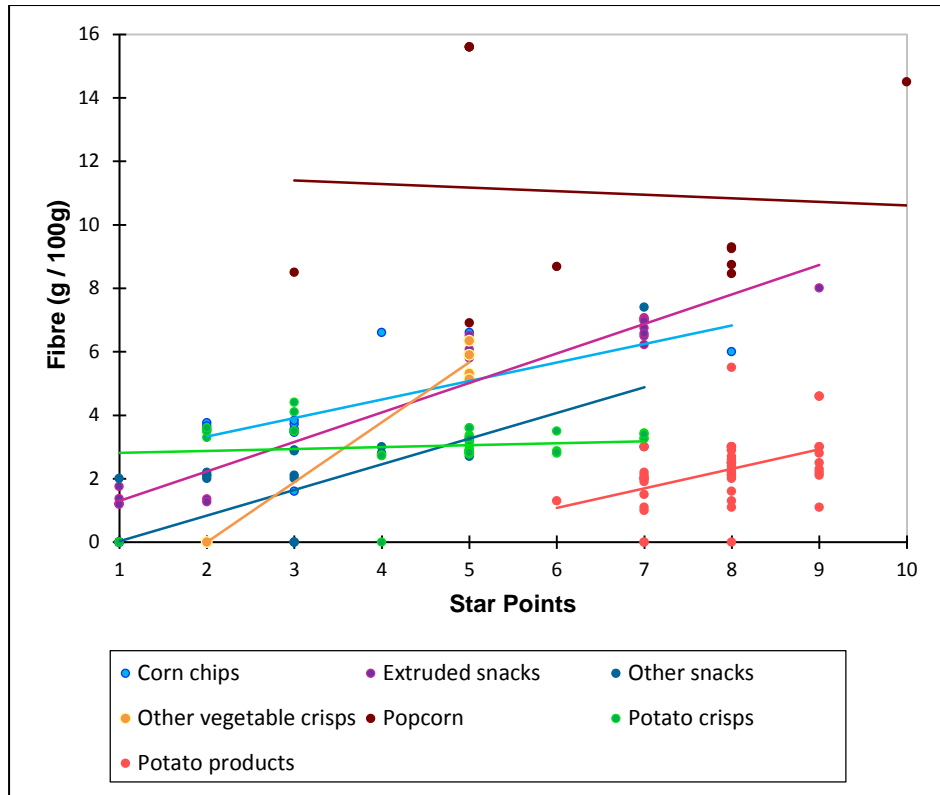
The key **negative components** driving the HSR for these products are saturated fat and sodium. However, energy is also influencing the HSR of some sub-categories. As expected, total sugars content is not influencing the HSR for these categories.

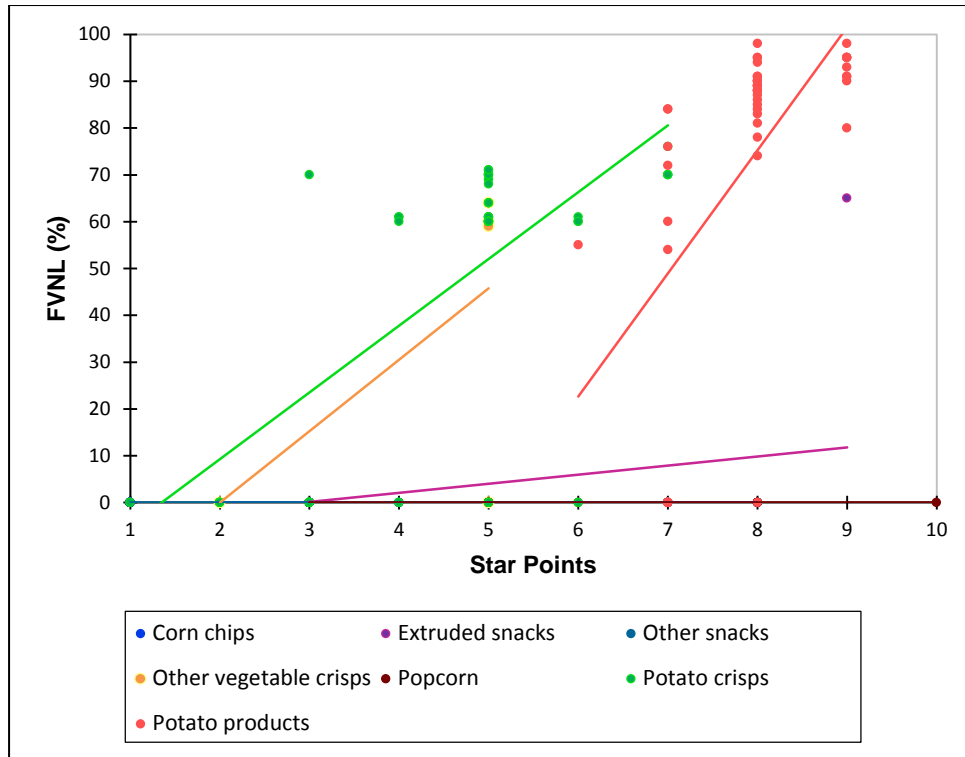
The **key positive components** influencing these products are fibre for most sub-categories and FVNL for some product sub-categories such as potato crisps and potato products. Protein has a small effect only.











## APPENDIX 3: Summary of submissions related to salty snack foods

The Summary Report on Submissions to the HSR Five Year Review<sup>17</sup> identified the high rating of some chip products as an issue. The detail in the submissions related to this are:

### Key concerns raised:

- The HSR system enables products to obtain positive points for fruit, nuts, vegetables and legumes (FVNL), which means that a number of discretionary foods such as fried potato and corn products (salty snacks and chips), and legume based snacks such as wasabi peas and chickpea crisps receive a higher HSR due to their FVNL content.
- These products are discretionary foods and contribute to excess energy in the Australian diet.
- Salty snacks, chips and pretzels made up 3% of the 14% of discretionary foods that receive 3.5 stars or more.
- It is not completely clear in the calculator how modifying points for potato and corn products should be counted e.g. should low moisture foods such as the potato content of potato chips be counted as %concentrated FVNL or %FVNL or not at all. Should cereals that are also vegetables, such as corn be counted as FVNL %?
- Choice survey (2016) – nationally representative sample: *“I think it's a good concept, but sometimes it's a bit hard to understand how some foods, such as potato chips [sic], can get a high star rating. Tends to throw some doubt on the credibility of the system”.*
- There was concern for what some believed was a variation in the weighting of points between the fat content and salt and sugar content of a food product in the HSR algorithm, resulting in a greater loss of points for a food item with a high fat content than for a food item with a high sugar or salt content. The example given was the salted potato or chips that achieve a HSR of 4.
- These are often high profile products. Specific examples include: Birds Eye chilli and sea salt seasoned chips, containing 394 mg of sodium per 100 g, rates 4 stars; Coles beer-battered potato chips (4 stars).

### Solutions proposed:

- Some respondents recommended updating the Guide for Industry to the HSR Calculator<sup>18</sup> to include better clarification in the form of explanatory notes around how to rate the FVNL content for processed potato products as well as more detailed information on how to distinguish between those foods that can count as %FVNL and concentrated FVNL and those which cannot. Explanatory notes could include a list of foods that can count %FVNL content and foods that can't (i.e. foods that are classified as 'discretionary' under the ABS classification of snack foods and potato products [see Appendix 1] no longer to be counted as having FVNL). This would stop manufacturers from having to constantly refer to the HSR guidance documents, particularly when references to the Food Standards Code such as Standard 1.2.7 are required.
- Disallow potato to be counted as FVNL in processed potato products (these would need to be defined), as well as other vegetables when used in salty snack and chips/wedges products.
- Consider a cap on the star rating of these products (along with other discretionary products) – suggestions include no more than 2.5 stars (supported by consumer research) or 3.5 stars.

---

<sup>17</sup>. mpconsulting, 2017, Report on submissions to the Five Year Review of the Health Star Rating System, available at: <http://www.healthstarrating.gov.au/internet/healthstarrating/publishing.nsf/Content/formal-review-of-the-system-after-five-years>

<sup>18</sup> FoPL Secretariat, 2016, Guide for industry to the Health Star Rating Calculator (HSRC), Version 5, available at: <http://healthstarrating.gov.au/internet/healthstarrating/publishing.nsf/Content/guide-for-industry-document>

## APPENDIX 4: TAG Database: salty snack products (n=131)

Note: All component values are per 100 g of food

Food	HSR	Energy (kJ)	Saturated fat (g)	Total sugars (g)	Sodium (mg)	Fibre (g)	Protein (g)	Concentrated FVNL(%)	FVNL (%)
potato crisps	1.0	2170	12.7	0.4	500	0.0	4.7	0	0
potato crisps	0.5	2170	13.2	2.2	695	0.0	5.3	0	0
potato crisps	1.0	2180	13.9	2.8	425	0.0	5.3	0	0
potato crisps	0.5	2210	14.1	0.3	740	0.0	5	0	0
potato crisps	2.5	2092	7.1	1.4	664	3.6	6.8	87	0
potato crisps	2.0	2097	9	1.4	970	3.6	6.8	87	0
potato crisps	2.5	2238	7.8	2.2	430	3.5	4.7	87	0
potato crisps	0.5	2220	14.8	1	647	0.0	6.7	0	0
potato crisps	2.0	2190	3.5	1.7	479	0.0	7.1	0	0
potato crisps	1.5	2160	11.8	0.9	618	3.5	6	0	70
potato crisps	1.0	2160	12.9	2.4	615	0.0	5.4	0	0
potato crisps	1.0	2170	13	1.3	610	0.0	5.5	0	0
potato crisps	1.0	2180	13.1	1.2	530	0.0	5.5	0	0
potato crisps	1.5	2140	12.5	0.9	355	0.0	4.9	0	0
potato crisps	2.5	2060	2.9	4.2	479	0.0	7.6	0	70
potato crisps	2.5	2050	2.9	5.4	522	3.2	7.7	0	69
potato crisps	3.5	2050	3	3.3	379	3.3	7.5	0	70
potato crisps	2.5	2060	3.3	3.9	514	3.3	7.7	0.0	70
potato crisps	2.5	2040	3	5.2	687	3.2	7.9	0.0	68

Food	HSR	Energy (kJ)	Saturated fat (g)	Total sugars (g)	Sodium (mg)	Fibre (g)	Protein (g)	Concentrated FVNL(%)	FVNL (%)
potato crisps	2.5	2050	2.9	2.7	542	3.2	7.6	0.0	70
potato crisps	3.5	2060	2.9	2.1	381	3.4	7.8	0.0	70
potato crisps	2.5	2050	3	2.1	496	3.3	7.6	0.0	70
potato crisps	2.5	2060	2.9	3.1	417	3.3	7.8	0.0	70
potato crisps	2.5	2040	1.8	1.2	499	3.4	8	0.0	76
potato crisps	2.5	2050	2.9	2.7	731	3.2	7.6	0.0	71
potato crisps	2.5	2060	2.9	1.4	512	3.3	7.5	0.0	71
potato crisps	2.5	2250	2.6	2.8	455	2.9	6.7	0.0	61
potato crisps	2.5	2250	2.7	2.4	590	2.8	7	0.0	61
potato crisps	2.5	2250	2.7	3.5	492	2.8	6.9	0.0	60
potato crisps	3.0	2250	2.7	4.1	442	2.8	6.7	0.0	60
potato crisps	2.5	2240	2.7	3.9	494	2.8	6.7	0.0	60
potato crisps	2.5	2250	2.6	3.3	493	2.9	6.7	0.0	61
potato crisps	2.0	2240	2.7	2.2	827	2.7	7.1	0.0	61
potato crisps	3.0	2260	2.7	3.1	405	2.9	7.2	0.0	61
potato crisps	2.5	2240	2.6	2.6	502	2.8	7	0.0	61
potato crisps	2.5	2240	2.6	4.5	519	2.9	6.7	0.0	60
potato crisps	2.5	2240	2.7	2.9	453	2.8	7	0.0	60
potato crisps	2.5	2290	2.7	1	556	2.9	6.7	0.0	64
potato crisps	2.0	2230	2.6	3	795	2.7	6.5	0.0	61
potato crisps	2.5	2250	2.6	4.2	498	2.9	6.9	0.0	60

Food	HSR	Energy (kJ)	Saturated fat (g)	Total sugars (g)	Sodium (mg)	Fibre (g)	Protein (g)	Concentrated FVNL(%)	FVNL (%)
potato crisps	2.5	2240	2.6	4.5	653	3.0	6.8	0.0	60
potato crisps	2.5	2290	2.7	1	517	2.9	6.7	0.0	64
potato crisps	2.0	2210	2.7	1.5	849	2.7	6.4	0.0	60
potato crisps	2.5	2240	2.8	3.5	451	2.9	6.9	0.0	60
potato crisps	3.0	2250	2.8	4.5	411	2.8	6.8	0.0	60
potato crisps	2.5	2250	2.6	3.7	493	2.8	6.5	0.0	60
potato crisps	2.5	2240	2.6	5.5	452	2.8	6.6	0.0	60
extruded snack	2.5	2062	4.2	7.2	575	5.8	7.1	0.0	0.0
extruded snack	4.0	2100	4.3	10.8	84	8.0	17.6	0.0	0.0
extruded snack	0.5	2180	13.5	2.5	953	1.8	6.5	0.0	0.0
extruded snack	0.5	2160	16.6	3.6	673	1.2	6	0.0	0.0
extruded snack	3.5	1990	2	5	393	6.2	8.4	0.0	0.0
extruded snack	3.5	1930	1.7	5.1	375	6.7	8.8	0.0	0.0
extruded snack	2.5	2010	2.1	6.4	454	6.1	8.2	0.0	0.0
extruded snack	2.5	2020	2.2	6.1	596	6.5	7.2	0.0	0.0
extruded snack	3.5	2010	2.1	6.7	386	6.5	7.1	0.0	0.0
extruded snack	3.5	2000	1.9	8.4	380	6.6	6.9	0.0	0.0
extruded snack	3.5	2010	2	6.5	472	7.1	10.8	0.0	0.0
extruded snack	3.5	2010	2.1	5.3	305	7.0	7.7	0.0	0.0
extruded snack	3.5	2020	2	6	448	7.0	10.7	0.0	0.0
extruded snack	3.5	2000	1.9	4.7	432	7.0	7.3	0.0	0.0

Food	HSR	Energy (kJ)	Saturated fat (g)	Total sugars (g)	Sodium (mg)	Fibre (g)	Protein (g)	Concentrated FVNL(%)	FVNL (%)
extruded snack	0.5	2360	18.4	2.5	1010	1.2	5.6	0.0	0.0
extruded snack	0.5	1940	11.5	5.8	908	1.4	6.7	0.0	0.0
extruded snack	0.5	2050	13.4	2.5	788	1.2	5.2	0.0	0.0
extruded snack	1.0	2120	11.5	3	645	1.4	6.6	0.0	0.0
extruded snack	1.0	2140	12.4	2.7	746	1.3	6.4	0.0	0.0
other veg crisps	2.5	2160	3.1	18.5	478	5.9	5.5	60.0	0.0
other veg crisps	1.0	2330	16.1	16.2	340	0.0	4.2	64.0	0.0
other veg crisps	2.5	2090	2.6	16.6	442	5.3	5.6	0.0	60.0
other veg crisps	2.5	2110	2.7	16.0	497	5.1	5.4	0.0	64.0
other veg crisps	2.5	2070	2.8	16.1	594	6.3	5.5	0.0	59.0
corn chips	1.5	1700	5.9	29.2	275	1.6	3.7	0.0	0.0
corn chips	2.0	2083	11.2	1.3	512	6.6	7.1	0.0	0.0
corn chips	2.5	2123	11.5	2.6	11	6.6	7.2	0.0	0.0
corn chips	1.5	2150	12.5	3.5	382	3.6	7.6	0.0	0.0
corn chips	1.0	2170	13.1	2.4	618	3.6	8.9	0.0	0.0
corn chips	1.5	2140	12.3	2.9	572	3.5	7.7	0.0	0.0
corn chips	1.5	2140	12.4	2.2	652	3.7	7.3	0.0	0.0
corn chips	1.0	2130	12.2	2.3	868	3.8	8.5	0.0	0.0
corn chips	1.5	2110	11.2	1	435	3.8	8.2	0.0	0.0
corn chips	1.5	2160	12.5	3.3	457	3.5	7.5	0.0	0.0
corn chips	1.0	2140	12.2	5.1	575	3.7	7.8	0.0	0.0

Food	HSR	Energy (kJ)	Saturated fat (g)	Total sugars (g)	Sodium (mg)	Fibre (g)	Protein (g)	Concentrated FVNL(%)	FVNL (%)
corn chips	4.0	1240	0.9	1.6	400	6.0	8.9	0.0	0.0
popcorn	5.0	1426	0.7	0.9	1	14.5	12.9	0.0	0.0
popcorn	1.5	2115	12.6	0.6	645	8.5	9.1	0.0	0.0
popcorn	2.5	1960	7.6	0.8	750	15.6	8.6	0.0	0.0
popcorn	2.5	1920	8.2	0.8	755	15.6	8.6	0.0	0.0
popcorn	2.5	1910	8.5	0.8	740	15.6	8.6	0.0	0.0
popcorn	3.0	2090	2.3	0.1	691	8.7	10.4	0.0	0.0
popcorn	4.0	1990	1.9	3.4	517	8.7	10.7	0.0	0.0
popcorn	4.0	1990	1.9	0.1	494	9.3	11.1	0.0	0.0
popcorn	4.0	1900	1.8	2.8	497	9.2	11.5	0.0	0.0
popcorn	4.0	2000	1.9	7.3	411	8.5	10.1	0.0	0.0
popcorn	2.5	2210	3	6.7	665	6.9	10.5	0.0	0.0
other snacks	0.5	1640	15.7	3.7	1150	2.0	10.7	0.0	0.0
other snacks	0.5	1630	14.3	5.7	1000	0.0	11.9	0.0	0.0
other snacks	0.5	1665	14.1	5.9	1040	0.0	10.4	0.0	0.0
other snacks	0.5	1675	14.5	4.9	1010	0.0	10.6	0.0	0.0
other snacks	0.5	1450	13.8	6.4	1270	0.0	10.8	0.0	0.0
other snacks	0.5	1700	15.1	5.7	1060	0.0	12.4	0.0	0.0
other snacks	0.5	1770	15.6	1	671	0.0	19.5	0.0	0.0
other snacks	0.5	1770	15.6	1	671	0.0	19.5	0.0	0.0
other snacks	0.5	1710	14.5	1	645	0.0	19.7	0.0	0.0



Food	HSR	Energy (kJ)	Saturated fat (g)	Total sugars (g)	Sodium (mg)	Fibre (g)	Protein (g)	Concentrated FVNL(%)	FVNL (%)
other snacks	0.5	1490	11.6	14.4	800	0.0	13.6	0.0	0.0
other snacks	0.5	1830	19.1	2.6	728	0.0	17.3	0.0	0.0
other snacks	0.5	1770	22	1	704	0.0	23.4	0.0	0.0
other snacks	0.5	1460	16	1	705	0.0	26.7	0.0	0.0
other snacks	0.5	1730	16.5	0.9	614	0.0	19.9	0.0	0.0
other snacks	1.0	1700	12.8	4.9	830	2.1	11.6	0.0	0.0
other snacks	1.0	1660	12.2	4.8	800	2.2	11.2	0.0	0.0
other snacks	1.0	1650	11.7	6.6	875	2.1	11.1	0.0	0.0
other snacks	1.0	1550	12	1	633	0.0	23.9	0.0	0.0
other snacks	1.0	1580	11.8	1	671	0.0	21.9	0.0	0.0
other snacks	1.0	1270	7.7	13.4	820	0.0	15.1	0.0	0.0
other snacks	1.0	1435	14.2	2.7	375	0.0	9.3	0.0	0.0
other snacks	1.0	1554	11.5	12.4	672	0.0	12.6	0.0	0.0
other snacks	1.0	1472	11.5	7.9	676	0.0	12.7	0.0	0.0
other snacks	1.0	1530	11.3	0.6	637	0.0	23.6	0.0	0.0
other snacks	1.0	1470	9.6	3.7	1110	2.0	13.7	0.0	0.0
other snacks	1.5	1578	1.3	0.4	1980	2.0	11.7	0.0	0.0
other snacks	1.5	1440	11.6	4.3	508	2.1	7.5	0.0	0.0
other snacks	1.5	1070	6.7	6.3	547	0.0	9.2	0.0	0.0
other snacks	1.5	1100	7.4	7.7	581	0.0	9.5	0.0	0.0
other snacks	1.5	1444	13.6	5	366	0.0	9.1	0.0	0.0

Food	HSR	Energy (kJ)	Saturated fat (g)	Total sugars (g)	Sodium (mg)	Fibre (g)	Protein (g)	Concentrated FVNL(%)	FVNL (%)
other snacks	1.5	1670	0.9	11.1	1370	2.9	10.4	0.0	0.0
other snacks	1.5	1690	1.2	11	1250	2.9	10.3	0.0	0.0
other snacks	2.0	1020	4.2	6.5	680	3.0	4.2	0.0	0.0
other snacks	2.0	1800	2.2	10.7	559	2.8	10	0.0	0.0
other snacks	2.5	990	4	6.6	655	2.7	4.2	0.0	0.0
other snacks	3.5	610	0.2	6.2	435	3.0	2.4	0.0	0.0
other snacks	3.5	2000	2.4	0.5	392	7.4	6.9	0.0	0.0
MEAN	2.0								

## Hot potato products (n=35)

Note: All component values are per 100 g of food

Food	HSR	Energy (kJ)	Saturated fat (g)	Total sugars (g)	Sodium (mg)	Fibre (g)	Protein (g)	Concentrated FVNL (%)	FVNL (%)
Potato products	4	230	0	0.5	240	1.3	1.4	0	95
Potato products	4.5	271	0.1	4	157	2.8	3	0	90
Potato products	4.5	285.2	0.2	1.8	203	3	2.5	0	93
Potato products	4.5	313	1.1	1	40	1.1	2.6	0	95
Potato products	4	379	1.3	0.2	32	1.1	2.4	0	95
Potato products	4	465.1	1.8	1	443	2.5	2.9	0	94
Potato products	4.5	524	0.3	0.5	73	2.2	1.9	0	95
Potato products	3	527.7	4.1	2	300	1.3	3.2	0	55
Potato products	4	553.9	0.4	0.5	208	2.9	2.1	0	90
Potato products	4	557	0.5	1	249	3	3.1	0	88
Potato products	4	561	0.3	1	190	2.3	2	0	91
Potato products	4.5	563	0.4	0	232	2.5	2.1	90	91
Potato products	4.5	564.3	0.3	0.5	68	2.3	1.9	0	95
Potato products	4	566.7	0.4	0	225	2.7	1.6	0	91
Potato products	4	578.4	0.5	0	224	2.9	2	0	90
Potato products	4	580	0.3	12	267	3	1.7	0	74
Potato products	4	585.7	0.6	0.2	358	2.1	2.3	0	89
Potato products	4.5	599	1.9	1.4	165	3	2.5	0	91
Potato products	4	600.7	0.4	0	203	2	2.5	0	90

Food	HSR	Energy (kJ)	Saturated fat (g)	Total sugars (g)	Sodium (mg)	Fibre (g)	Protein (g)	Concentrated FVNL (%)	FVNL (%)
Potato products	4	637	0.9	1	400	3	1.6	0	83
Potato products	4.5	637	0.3	2.6	84	4.6	5.1	0	80
Potato products	4	662	0.7	0	370	2.2	2.1	0	89
Potato products	4	684.3	0.7	0	394	2.5	2.3	0	85
Potato products	4	701.53	0.49	0.7	249	2.4	2.19	0	86
Potato products	4	709.2	0.6	0.5	273	2.6	2	0	84
Potato products	4	727	0.6	0.5	319	2.1	1.9	0	81
Potato products	4	730	0.8	0.8	350	3	2.5	0	89
Potato products	3.5	755	0.7	1	564	3	3	0	72
Potato products	3.5	764.3	0.8	0.4	472	2.2	2.4	0	84
Potato products	3.5	781	0.7	2.3	504	2.1	5.2	0	54
Potato products	4	795	0.8	0	350	2.5	1.9	0	88
Potato products	4	795.3	0.8	0	350	2.5	1.9	0	88
Potato products	4	1076	6.8	0.3	250	5.5	2.6	0	98
Potato products	4.5	1188	0.6	0.2	60	4.6	4.8	0	98
Potato products	4	1410	0	1.6	9	0	0	100	0

## **APPENDIX 5: Proposed changes to the Guide for Industry (Option 2)**

### **Step 4 (pp. 10-11)**

HSR Protein (P) points can be scored if a food scores less than 13 baseline points. A food that scores equal to or more than 13 baseline points can only score protein points if the food scores 5 or more V points.

**P points cannot be scored for –**

- (a) Salty snacks, specifically potato or other potato crisps, extruded snacks or a similar low moisture vegetable product.**

HSR Fibre (F) points can be scored for Category 2, 2D, 3 and 3D foods only. Category 1 and 1D foods (beverages) cannot score F points.

**F points cannot be scored for –**

- (a) Salty snacks, specifically potato or other potato crisps, extruded snacks or a similar low moisture vegetable product.**

...

V points cannot be scored for –

(a) a constituent, extract or isolate of a food e.g. peanut oil, fruit pectin and de-ionised juice;  
or

(b) cereal grains mentioned as a class of food in Schedule 22.

**(c) Salty snacks, specifically potato or other potato crisps, extruded snacks or a similar low moisture vegetable product.**