

MEMORANDUM

Attention

Reference Aligning the Health Star Rating of Category 3D cheeses with the Australian Dietary Guidelines

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The Problem

- The 2013 Australian Dietary Guidelines (ADG) recommend the consumption of all milk, cheese and yoghurt as a Five Food Group (FFG).
- The Heart Foundation 2019 evidence-based guidelines on healthy eating, recommend full-fat milk, yoghurt and cheese as an option for healthy Australians – updated from previously recommending reduced fat dairy. This represents a significant change in public health recommendations from the ADG.
- Dairy is the second most under consumed FFG: only 10% adults and 20% children meet their daily dairy serves, resulting in more than 50% not meeting calcium recommendations.
- The poor HSR that FFG cheeses receive has the potential to further exacerbate this public health issue.
- A founding principle for the development and validation of the Health Star Rating (HSR) algorithm was *for all FFG foods, as per the ADG, to receive a minimum of 3 stars*.
- From the HSR Report to the five-year review, the Ministerial Forum asked for further advice on dairy recategorisation for both Category 2D (FFG yoghurts and dairy desserts) and Category 3D (cheeses):
 - Category 2D: the dairy industry supports the outcome achieved from redefining and rescaling, with 90% of FFG yoghurts scoring a minimum of 3 stars (proposed calculator 1).
 - Category 3D: redefining and rescaling has not achieved an improved result:
 - Current: **50%** FFG cheeses score <3 stars – validated by FSANZ modelling of the TAG data (**55%**).
 - Calculator 1: **47%** FFG cheeses would receive <3 stars (dairy industry data).
 - Calculator 2: the situation would worsen, with **55%** FFG cheeses scoring <3 stars.
- Further work is required to address the anomalies for category 3D FFG cheeses, *targeting ≤10% of FFG cheeses to score <3 stars*. Options could include: additional rescaling; changing the weighting of saturated fat in the algorithm; or, the ability for FFG cheeses to score protein points.
- **Until the anomalies and implications for Category 3D FFG cheeses are resolved, the dairy industry cannot support a proposed October 1, 2020 implementation date.**

Background

The Australian and New Zealand Ministerial Forum on Food Regulation (the Forum) asked the Food Regulation Standing Committee (FRSC) for further advice on dairy recategorisation, following the outputs from the Health Star Rating (HSR) Report to the five-year review. This related to both Category 2D (yoghurts) and Category 3D (cheeses):

- Recommendation 4D: that dairy categories be redefined and rescaled to ensure Five Food Group (FFG) dairyⁱ receives a higher HSR and improves comparability between dairy products.

The dairy industry acknowledges and supports this recommendation and the intended outcome of better aligning the HSR system with the ADG and the HSR calibration principles where *'foods considered to be core typically score at least 3 stars'*. Of all the FFG categories, dairy foods had the highest proportion of foods scoring 3 stars or less.

For Category 2D, rescaling and reclassification has delivered a significant improvement for FFG yoghurts, an outcome whereby FFG yoghurts will mostly score ≥ 3 stars and more stars than dairy desserts – thereby delivering greater alignment with the scientific evidence and the ADG. Dairy industry data indicates that FFG yoghurt will improve from 35% yoghurt <3 stars to **9.8% of yoghurts <3 stars (calculator 1)**. The dairy industry supports this outcome.

For Category 3D, rescaling and reclassification has not delivered substantial improvements in the star ratings for FFG cheeses, with an average of **50% of FFG cheeses continuing to score less than 3 stars** – an anomaly constantly raised by the dairy industry throughout the five-year HSR review consultation process.

Until the anomalies and implications for Category 3D FFG cheeses are resolved, the dairy industry cannot support a proposed October 1, 2020 implementation date.

Public Health rationale for improving the HSR of Five Food Group dairy foods and cheese'

The under-consumption of all ADG FFG foods and beverages is a significant problem for Australian's. The Australian Health Survey (AHS) showed that the **dairy food group is the second most under-consumed food group**, after vegetables – with 90% of Australians not consuming their recommended serves of dairy each dayⁱⁱ, resulting in more than 50% of Australians aged two years and over, not meeting their daily calcium requirementsⁱⁱⁱ.

On average, adults consumed only 1.5 serves of dairy a day (milk, cheese and yoghurt), contributing only 7% to an adult's daily energy intake [with discretionary foods contributing 35%, increasing to 41% in children]^{iv}.

More concerning, is that more than 90% of women 50 years and over, and adolescent girls 14 to 18 years did not meet their calcium requirements – two critical periods for managing bone loss and building peak bone mass, respectively. If Australians increased their intake of dairy foods to the ADG recommendations, research has shown at least \$2 billion could be saved from the annual healthcare budget^v.

Looking at cheese, almost one third of Australians eat cheese each day and consume a mean daily intake of only 12g^{vi} – less than one-third of the ADG recommended serving size of 40g. Hard cheese is the most (67%) commonly consumed cheese, and it is hard cheeses that predominantly score low HSR (<3 stars).

Cheese is sometimes less than fully endorsed by health professionals due to its sodium and saturated fat content and many consumers see it as an indulgent food. In the AHS, cheese intake accounted for 7.2% of saturated fat and 3.9% of sodium intake, however it was the second largest provider of dietary calcium, contributing 9.6%^{vii}. Cheese also provides key nutrients such as protein, vitamin A, riboflavin, niacin, vitamin B12, vitamin K2, iodine, phosphorus, selenium and zinc in the diets of Australians.

Since the release of the 2013 ADG, the evidence for the consumption of cheese and health outcomes has continued to strengthen. Systematic reviews and meta-analysis show that cheese consumption is associated with a reduced risk of stroke and type 2 diabetes and is not associated with hypertension and overweight and obesity in adults^{viii}. Cheese, is composed of a highly complex matrix of nutrients and when nutrients such as saturated fat and sodium are consumed as part of a food, together with other essential nutrients and bioactive components, they work synergistically to affect health – different to how the nutrients may act on their own^{ix}.

There is an opportunity to increase the intake of FFG cheese to meet ADG recommendations, without health consequences.

New recommendations for cheese

The 2013 ADG recommend dairy foods are to be consumed each day, mostly reduced fat^x – recommending on average 2-4 serves per day.

In 2019, the Heart Foundation released their revised evidence-based guidelines on healthy eating, including dairy^{xi}. These independent guidelines reviewed the latest scientific evidence on the way certain foods can impact your heart health. They concluded: ***"We have removed our restriction for healthy Australians on eating full-fat milk, cheese and yogurt. While the evidence was mixed, this type of dairy was found to have a neutral effect, in that it doesn't increase or decrease your risks for heart disease or stroke"***^{xii}.

The guidelines represent a significant change in public health recommendations since the 2013 ADG.

Australian children and adults under consume their recommended daily serves for dairy foods and fail to meet calcium recommendations. The poor HSR that Five Food Group (FFG) cheeses receive has the potential to further exacerbate this public health issue.

Category 3D and the Health Star Rating

Initial HSR work by the NSW Ministry of Health (2015) found that 34% of dairy foods, including 37% of cheeses, had a HSR ≤ 3 – despite all cheeses being classified as a FFG^{xiii}. It was this data that triggered the Five-year HSR review recommendation to improve the HSR for FFG cheeses.

Both the HSR Report to the Five-year review and the Ministerial Forum recommended rescaling and reclassification of Category 3D FFG cheeses to improve the HSR and achieve better alignment with the outcomes with the ADG. Unfortunately, significant improvements in HSR scores have not been achieved, with an average of **50% of FFG cheeses continuing to score <3 stars – increasing to 55% with calculator 2** (Table 1).

The dairy industry has consistently raised this anomaly throughout the HSR review consultation process.

Table 1. HSR calculations – Industry and FSANZ data

| Category 3D FFG cheese | Percentage of FFG Cheese scoring <3 stars | | |
|------------------------|---|-----------------------|-----------------------|
| | Current HSR | Proposed Calculator 1 | Proposed Calculator 2 |
| Industry data (n= 467) | 50.7% | 46.5% | 54.8% |
| FSANZ TAG data (n=443) | 55% | 48% | |

Recently, FSANZ undertook further modelling to validate the FFG cheeses anomaly for category 3D FFG cheeses. They reviewed the dairy industry’s database of 467 cheeses and compared it to the Technical Advisory Group (TAG) database of 443 cheeses. Based on the current calculator, FSANZ confirmed that **55%** (or 243) of FFG cheeses received a HSR of less than 3, compared to 50.7% with the dairy industries data. For calculator 1, 213 (or 48%) of Category 3D cheeses received a HSR of less than 3 stars^{xiv}.

Figure 1 demonstrates the impact of the calculator modifications on the spread of star ratings for category 3D FFG cheeses and highlights the inconsistencies that exist for FFG cheeses and the HSR calibration principles where “foods considered to be core to typically score at least 3 stars”^{xv}.

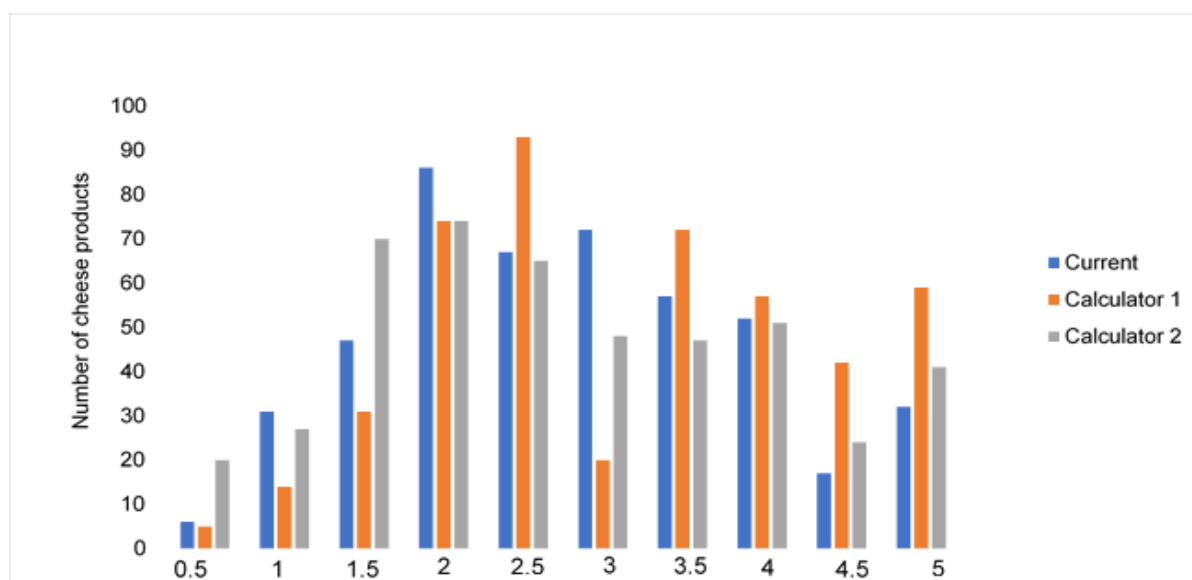


Figure 1. Spread of HSR for Category 3D FFG cheese (based on industry data, n=467).

The dairy industry recognises the end goal of balancing comparability and discernment across the relevant food and beverage categories, however attempting to retro fit a bell-shaped curve distribution to a product category containing all FFG foods (cheese), is not sound policy. Such a solution overlooks the intent of the HSR system, the calibration principles and the ADG recommendations.

The HSR system must deliver an equitable outcome for all FFG foods and beverages. The current proposal is not equitable for FFG cheeses and further analysis is required to achieve an improved outcome for FFG cheeses with a greater percentage achieving a minimum of 3 stars.

Solution for improving Category 3D FFG cheese

Further work is required to address the anomalies for FFG cheeses and improve the HSR. The dairy industry proposes the following options for consideration:

1. additional rescaling.
2. changing the weighting of saturated fat in the algorithm.
3. the ability for FFG cheeses to score protein points.

The target outcome is for **≤10% of FFG cheeses to score <3 stars.**

For example, if we consider harder scaling for FFG cheeses: modifying the back end of the algorithm: this recognises that all cheeses are FFG foods, and pushes lower scoring cheeses, such as cheddar cheese, to receive a minimum of 3 stars. By improving the HSR of cheeses **currently scoring 2 and 2 ½ stars** (mostly hard/ cheddar cheeses), they would achieve a minimum of 3 stars (Table 2). This could be through:

1. **Increasing low rating FFG cheeses upwards by starting the points scale at 2 instead of a ½ star.**
2. Compressing higher rating variants towards 5 stars.
3. Modifying the points scaling table.

Table 2. HSR analysis of cheese – proposed calculator 1, N=467

| HSR | N | Energy | Sat Fat | Sodium | Protein | Cheddar/tasty |
|-----|----|--------|---------|--------|---------|---------------|
| ½ | 5 | 1553 | 21.7 | 1562 | 18.4 | 0 |
| 1 | 14 | 1759 | 24.5 | 854 | 20.1 | 0 |
| 1.5 | 31 | 1605 | 22.0 | 998 | 21.9 | 12 (39%) |
| 2 | 74 | 1714 | 22.8 | 701 | 23.7 | 57 (77%) |
| 2.5 | 93 | 1629 | 20.9 | 746 | 24.0 | 47 (50%) |
| 3 | 20 | 1533 | 18.6 | 864 | 25.4 | 2 (1%) |
| 3.5 | 72 | 1501 | 19.4 | 678 | 22.2 | 9 (13%) |
| 4 | 57 | 1382 | 17.0 | 707 | 22.8 | 9 (16%)* |
| 4.5 | 42 | 1317 | 15.2 | 718 | 23.5 | 9 (21%)* |
| 5 | 59 | 1230 | 13.6 | 507 | 23.2 | 9 (15%)* |

*Reduced fat cheddar/tasty

In summary, the HSR system must deliver an equitable outcome for all FFG foods and beverages. It is imperative that Category 3D FFG cheeses undergo additional modelling to improve the HSR and achieve **≤10% scoring less than 3 stars.**

We welcome the opportunity to work with government on an appropriate solution.

The dairy industry cannot support a proposed October 1, 2020 implementation date until the anomalies and implications for Category 3D FFG cheeses are resolved.

Yours sincerely

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References

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- ^x Where more than 50% of the food group was made up of a specific characteristic, e.g. Reduced fat varieties. This descriptor ensures that the variety of foods chosen not only meet nutrient needs but are also within individual energy requirements. 2013, ADG p 146
- ^{xi} Heart Foundation, August 2019. [Dietary position statement: dairy and heart healthy eating](#)
- ^{xii} Heart Foundation, August 2019. Media release 21 August, [New advice from the Heart Foundation on meat, dairy and eggs](#)
- ^{xiii} Dunford, E, Cobcroft, M, Thomas, M, & Wu, J (2015). Technical Report: Alignment of NSW Health Food Provision Policy with the Health Star Rating System. Sydney, NSW: Ministry of Health.
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