

POLICY BRIEF

SUMMARY

- The Health Star Rating System (HSRS) is a voluntary, interpretative, front-of-pack labelling (FoPL) system which rates the healthiness of products using a 5-star scale and aims to encourage people to make healthier food choices.
- The HSRS has had significant uptake by industry in certain product ranges and consumer awareness and use of HSRS is also increasing. There is also some evidence that the HSRS encourages manufacturers to reformulate their products to obtain a higher star rating.
- While the HSRS is effective overall, there are significant flaws that prevent its widespread implementation and impact on its public credibility.
- The HSRS has the potential to be an important instrument to inform consumers and motivate their purchasing behaviour toward healthier choices if certain improvements are introduced.

WHAT IS THE HEALTH STAR RATING SYSTEM (HSRS)?

The HSRS is a voluntary scheme that can be applied to the front of all packaged, manufactured or processed foods presented ready for sale in the retail sector – i.e. those required to carry a Nutrient Information Panel. It uses a scale from half a star to 5 stars on the front of food packages to rate the healthiness of products, using a calculator designed to assess positive and risk nutrients in food. The HSRS uses half star increments with a 'slider' above the stars and a corresponding number to highlight the star rating of the food.

IMPROVING THE EFFECTIVENESS OF THE HEALTH STAR RATING SYSTEM

The full HSRS labels include nutrient information icons displaying the kilojoule, saturated fat, sugar and sodium content of products per 100g. Manufacturers have the option of displaying a single positive nutrient icon (e.g. relating to fibre or calcium). Manufacturers also have the option of using the word 'high' to describe the positive nutrient or 'low' to describe negative nutrients (saturated fat, sugar or sodium) where applicable.



Figure – Health Star Rating System

HOW AND WHY WAS THE HSRS DEVELOPED?

High consumption of energy-dense ultra-processed foods is a key cause of rising rates of overweight and obesity.¹ Consumers need access to adequate information on packaging to make informed choices based on the nutritional composition of products. Prior to the introduction of the HSRS, food labels (including the mandatory Nutrient Information Panel and industry Daily Intake Guide labels) failed to provide simple, accessible and consistent nutrition information to assist consumers to readily interpret and understand the healthiness of products. Food labels are particularly difficult to understand for consumers from low socio-economic and culturally and linguistically diverse groups and consumers with low literacy.²

A clear, simple and consistent front of pack labelling (FoPL) system, which interprets the nutritional content of food products and which is readily

understandable by consumers across demographic groups, is therefore essential for enabling consumers to make informed and healthy food choices.

The HSRS was developed through a collaborative process involving government, industry, public health and consumer stakeholders. This process began in 2011, following the 2011 Comprehensive Review of Food Labelling Law and Policy (Blewett Review).³ This review recommended that an interpretive FoPL system be developed that is reflective of a comprehensive nutrition policy and agreed public health priorities. The Department of Health and Ageing then convened a Project Committee of stakeholders to develop a FoPL system based on the broad Blewett Review recommendations to develop an interpretive front of pack scheme. The HSRS has been developed through this committee as well through feedback and input from the Health Star Rating Advisory Committee, which replaced the Project Committee from early 2014.

The HSRS calculates ratings using a modified Nutrient Profiling Scoring Criteria, originally developed by Food Standards Australia New Zealand for the regulation of health claims under the Food Standards Code.⁴ The nutrients and ingredients used to inform the profiling system are based on the evidence underpinning the 2013 Australian Dietary Guidelines and vary depending on the food category. A process was developed for addressing anomalies that arise for particular products.

One key benefit of the HSRS is to empower consumers to effectively compare the nutritional value of foods within a particular product range, and increase awareness of foods that may contribute to positive or negative health outcomes. It aims to reduce the likelihood of consumers being confused or misled by claims, descriptions and images on product packaging, and to influence the food industry to reformulate and develop healthier food products

IMPLEMENTATION OF THE HSRS

The HSRS was introduced in July 2014 as a voluntary scheme, to be reviewed after two years and again after five years. When endorsed, it was noted that the HSRS could become mandatory if the system was not widely and consistently adopted.⁵

There has been some resistance to the scheme's implementation. Throughout the latter stages of negotiations around the HSRS in 2013 and 2014, the Australian Food and Grocery Council (AFGC), representing food manufacturers, lobbied against the HSRS, arguing the system is flawed and too expensive for the food industry to implement. In particular, the AFGC sought that the industry's preferred Daily Intake Guide (DIG) labels (which are calculated per serve and are not standardised) appear alongside the star ratings.⁶

Public health and consumer groups argued that retaining the DIG was unnecessary and superfluous, and may confuse or mislead consumers, undermining the value of the HSRS. Further, the new interpretive scheme was initially intended to operate without the DIG on packaging, to simplify the information provided to consumers. See the OPC's Policy Brief 'Problems with Daily Intake Guide scheme' (at www.opc.org.au) for more information. Later in the process the Health Star Rating Advisory Committee agreed to the Style Guide that acknowledged the DIG could co-exist with the HSRS.

IMPACT OF THE HSRS

In implementing the HSRS Australia has satisfied one of the key global recommendations of reports such as the World Health Organization's recent Commission on Ending Childhood Obesity, to implement an interpretive front-of-pack labelling supported by public education of both adults and children for nutrition literacy.⁷ Australia has been assessed as meeting best practice with the adoption of the HSRS when considering implementation of policies to improve population nutrition.⁸

The two year review of the impact of the HSRS found that the HSR was displayed on over 5,500 products in Australia and over 800 products in New Zealand in 2016.⁹ It was also noted that food manufacturers are selectively applying HSRs to their products. The result is that the most prevalent HSR used on packaging is four stars¹⁰, with food manufacturers choosing to display HSR on products that score more highly.

There is also evidence that the HSRS is having an impact on consumers and is creating behaviour change. The two year review noted that awareness

of the HSRS is increasing and that the HSRS is increasingly being used to help make healthier choices when shopping, with 16% (or one sixth) of respondents changing their shopping behaviour based on the HSRS.¹¹ Further, almost three in five respondents who reported purchasing a product with a HSR reported that the rating scale had influenced their purchasing decision. More than half of those who had been influenced purchased a different product to what they would normally purchase and would continue to buy it.¹²

Despite this positive impact, a large number of consumers do not have, or have lost confidence in the HSR system; only 52% of surveyed respondents said that they trust in the system.¹³

PROBLEMS WITH THE HSRS

While the HSRS is effective overall, there are significant problems with the system as described below.

Voluntary application

The uptake of the system by industry has been limited, with the two year review noting that only 14.4% of products in the nominated database of eligible foods were displaying HSRs at the end of the 2 year evaluation period.¹⁴

As a result, the capacity of consumers to successfully make comparisons between products is hampered by the voluntary nature and limited uptake of the HSRS. This prevents the realisation of the overarching objective of the HSRS to provide nutrition information on food packages to assist consumers to make healthier choices. Indeed the review found that 65% of consumers want to see HSR on more products.¹⁵

Inconsistencies in the system are not addressed

The HSRS has received significant negative media attention and surveys reveal that a growing number of consumers do not have, or have lost confidence in, the system.¹⁶ This is mainly due to the perception that the current HSRS results in inappropriately high ratings for some foods with relatively high levels of added sugar, sodium and saturated fat, all ingredients which are considered to increase the risk of chronic disease. A selection of nutrient poor, energy dense discretionary foods: cakes, biscuits, chips, jelly, and icy poles are scoring relatively high ratings of 3 to 5 stars. In contrast, the HSR Calculator rates some core foods, such as plain full fat dairy foods, at the lower end of the rating scale.

This is contrary to the Australian Dietary Guidelines (ADG) and can mislead consumers as to the healthiness of foods when comparing between food categories – in particular between core foods and discretionary foods. This problem is especially significant in relation to added sugar, particularly sugar derived from fruit. The current HSR system is based on total sugars in a product and makes no distinction between products with high levels of added sugar and those with intrinsic sugars – which are not considered dangerous to health, which makes it difficult to determine the relative healthiness of a product. It also does not appropriately score foods that are very high in added sugars but relatively low in the other negatively scored nutrients – saturated fat and sodium. The OPC would like to see the HSRS changed so that it is based on added sugars, not total sugars.

The OPC also believes that sugars should be defined to include sugars from syrups and honey as well as sugars from fruit sources, for example fruit juice concentrate, purees and concentrates. This aligns with the World Health Organization's definition of 'free sugar' and would see sugar from fruit counted as added sugar, rather than as fruit and vegetable points which may increase the HSR of a product.

Currently, the HSR of many products that are relatively high in any one of sugar, sodium or saturated fat may be inflated through the addition of nutrients that attract modifying points – such as protein and fibre. For example a processed protein bar and chips made of rice and beans can achieve a HSR of 5 and a highly processed, chocolate flavoured snack bar can achieve a HSR of 4. This current modelling incentivises manufacturers to increase the fibre or protein content with the addition of highly processed forms of fibre or protein, without adequately addressing the sugar, saturated fat or sodium content or the highly processed nature of the food.

The nutritional value of adding fibre and protein to processed products is questionable, particularly protein, given the Australian population is not deficient in this nutrient.¹⁷ We recommend that where a product exceeds the specified amount of any nutrient that attracts baseline points (i.e. saturated fat, sodium or sugar), the calculation of the HSR rating should not include positive points derived from other added nutrients and that processed foods do not achieve additional modifying points through the addition of protein.

An additional problem is that the HSRS treats fruit juice as equal to whole fruit, which creates a situation where some fruit juices would receive a 5 star rating and some whole fruits would not. That the ADGs recommend that fruit juice is only substituted for whole fruit occasionally is evidence that the National Health and Medical Research Council does not regard fruit juice as the equivalent of whole fruit. We accordingly recommend changes be made to ensure that 100% fruit juice does not score 5 health stars.

An associated issue is that under the current HSR calculation, not all whole fruit and vegetables receive a 5 star rating, presumably due to intrinsic sugar or sodium content. This is inconsistent with the ADGs which recommend that individuals “enjoy a wide variety of nutritious foods from the five food groups every day.” The OPC recommends that a HSR of 5 stars is applied to all fresh unprocessed fruit and vegetables and to those that have had minimal processing, for example frozen or peeled fruit and vegetables.

The OPC contends that even if inconsistencies exist for only a small number of products, they have a major impact on public confidence and trust in the HSR system, ultimately undermining its utility and effectiveness overall.

The ‘as prepared’ rules create confusion

The Guide for Industry to the HSR calculator (the Guide) provides guidance for the calculation of the HSR for products that are not intended to be consumed ‘as sold’ but must be prepared prior to consumption. The Guide allows products to display a HSR based on the product ‘as prepared’ according to the instructions on the packaging. This has created difficulties where products may be prepared in multiple ways.

For further information about the problems with the ‘as prepared’ rules, please refer to the OPC’s submission on the review of the ‘as prepared rules’ for the HSRS at www.opc.com.au.

The OPC recommends that the current ‘as prepared’ rules be replaced by a new option whereby the HSR of products would be calculated on the basis of products ‘as sold’, apart from products that are required to be drained or reconstituted with water prior to consumption.

Consumers confused about the use of HSRS

The two year evaluation of the HSR campaign has revealed that there is confusion about some elements of the HSRS. In particular,

the HSRS is perceived to promote processed foods, as opposed to promotion of a balanced, healthy diet consistent with the ADGs. One sixth of respondents thought that the HSR campaign conveyed the message that they should buy packaged instead of unpackaged food.¹⁸

Many consumers believe that the HSRS should be used to compare foods in different categories, as 65% of respondents reported that they were using the system to compare products in different categories. Consumers had not received the information that the HSRs have been designed to be used to compare similar products within a category.

Coexistence of the DIG and HSRS is confusing

Research conducted since the introduction of the HSRS, which compares different interpretive front of pack labelling options, has confirmed consumer preference for the HSR.¹⁹

Problems with continuing to allow the DIG scheme on packaging are that it can be confusing and difficult to interpret. This is particularly true for consumers with low literacy or from lower socio-economic groups.²⁰ For further information regarding problems with the DIG system, refer to the OPC's Policy Brief 'Problems with Daily Intake Guide scheme', at www.opc.org.au

Simplicity has long been one of the objectives of the HSRS.²¹ The OPC believes that the DIG should no longer be permitted on the packaging as it only serves to confuse customers who prefer uniform labelling across all food packages.²² Further this was one of the aims of the introduction of the system, to reduce consumer confusion.

ACTION NEEDED

The OPC continues to support the HSRS as evidence shows that interpretive front of pack nutrition labelling can play an important role in improving Australian diets. This recommendation is an important element of a comprehensive approach to improve diets and to reduce levels of overweight, obesity and chronic disease.

It is imperative to retain the HSRS as a front of pack labelling system, to assist consumers to make comparisons at a glance between similar products at the supermarket and to make healthier choices. However, the HSRS does have flaws that prevent its widespread implementation and contributes to diminishing consumer confidence and public credibility. The OPC recommends that:

1. The HSRS become mandatory.
2. The HSRS calculator be modified to address the following concerns:
 - Foods high in sugar, sodium and saturated fat receiving high health star ratings
 - The current treatment of fruit juices in the system

- Unprocessed fruit and vegetables are not scoring a universally high rating.
3. The current 'as prepared' rules be replaced by a new option whereby the HSR of products would be calculated on the basis of products 'as sold', apart from products that are required to be drained or reconstituted with water prior to consumption.
 4. The allocation of significant funds to promoting the key messages of the HSRS firmly in the context of a healthy diet across a wide range of media.
 5. The use of the DIG on packaging be prohibited as multiple labelling systems create consumer confusion.

About the Obesity Policy Coalition

The Obesity Policy Coalition (OPC) is a partnership between the Cancer Council Victoria, Diabetes Victoria and the Global Obesity Centre at Deakin University, a World Health Organization Collaborating Centre for Obesity Prevention. The OPC advocates for evidence-based policy and regulatory change to address overweight, obesity and unhealthy diets in Australia, particularly among children.

Contact us

Obesity Policy Coalition
615 St Kilda Road
Melbourne, Victoria, Australia 3004

Phone (03) 9514 6100

Fax (03) 9514 6800

Website: www.opc.org.au

Email: opc@opc.org.au



[@opcaustralia](https://twitter.com/opcaustralia)



facebook.com/ObesityPolicyCoalition

REFERENCES

- ¹ World Health Organisation, Report of the Commission on Ending Childhood Obesity, 2016.
- ² Review Panel. Labelling logic: review of food labelling law and policy. Canberra: Commonwealth of Australia. 2011; Viswathan M, Hastak M, Gau R. Understanding and facilitating the usage of nutritional labels by low-literate consumers. *Journal of Public Policy and Marketing*, 28(2), 2009, 135-45.
- ³ Review Panel. Labelling logic: review of food labelling law and policy. Canberra: Commonwealth of Australia. 2011.
- ⁴ Guide for industry to the Health Star Rating Calculator (HSRC) Version 2, September 2014.
- ⁵ Australian and New Zealand Ministerial Forum on Food regulation. Front-of-pack labelling update 14 June 2013.
- ⁶ Australian Food and Grocery Council. Media release: Key flaws unresolved with new food labelling system. 14 June 2013.
- ⁷ World Health Organisation, Report of the Commission on Ending Childhood Obesity, 2016.
- ⁸ The Healthy Food Environment Policy Index (Food-EPI) that was developed by [INFORMAS](#)
- ⁹ Health Star Rating Advisory Committee. Two Year Progress Review Report on the Implementation of the Health Star Rating System-June 2014–June 2016. 2017.
- ¹⁰ Heart Foundation, Report on the monitoring of the implementation of the Health Star Rating system in the first two years of implementation: June 2014 to June 2016, p169.
- ¹¹ Parker G and Frith R, Health Star Rating System: campaign evaluation report, June 2016, p3
- ¹² Health Star Rating Advisory Committee, Two year progress review on the implementation of the Health Star Rating system-June 2014- June 2016, April 2017, p13.
- ¹³ Health Star Rating Advisory Committee. Two Year Progress Review Report on the Implementation of the Health Star Rating System-June 2014–June 2016. 2017, p13
- ¹⁴ Health Star Rating Advisory Committee, Two year progress review on the implementation of the Health Star Rating system-June 2014- June 2016, April 2017.
- ¹⁵ Ibid, p24.
- ¹⁶ Choice, Health star ratings and added sugars, a consumer perspective, 2016, p4.
- ¹⁷ Australian Bureau of Statistics, 2011-2. Australian Health Survey, Usual nutrition intakes, <http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/4364.0.55.008~2011-12~Main%20Features~Macronutrients~200>
- ¹⁸ Health Star Rating Advisory Committee, Two year progress review on the implementation of the Health Star Rating system-June 2014- June 2016, April 2017, p29.
- ¹⁹ Pettigrew S, Talati Z, Miller C, Dixon H, Kelly, B and Ball, K , *The Types and aspects of front of pack labelling schemes preferred by adults and children*, *Appetite*, 109 (2017) 115-123.
- ²⁰ Kelly B, Hughes C, Chapman K, Louie J, Dixon H, and King L. (On behalf of a collaboration of public health and consumer research groups) *Front-of-Pack Food Labelling: Traffic Light Labelling Gets the Green Light*. Sydney: Cancer Council, 2008; Viswathan M, Hastak M, Gau R. Understanding and facilitating the usage of nutritional labels by low-literate consumers. *Journal of Public Policy and Marketing*, 28(2), 2009, 135-45; Food Standards Australia New Zealand. Technical report: consumer research on percentage daily intake – qualitative research into the interpretation of %DI and %RDI labelling. Report prepared by TNS Research, Canberra: FSANZ, 2007.
- ²¹ FoPL Project Committee – objectives and principles for the development of a FoPL system.
- ²² Kelly B et al, Consumer testing of the acceptability and effectiveness of front-of-pack labelling systems for the Australian grocery market, *Health Promotions International*, 2009 Vol 24 No 2 p126.