

10 October 2001
05/02

FINAL ASSESSMENT (Inquiry - section 24)

PROPOSAL P247

DEFINITION OF CARBOHYDRATE IN STANDARD 1.2.8

EXECUTIVE SUMMARY

The objective of this Proposal is to determine the best way for manufacturers to calculate carbohydrate values for inclusion in Nutrition Information Panels (NIPs). It aims to provide manufacturers with a definition of carbohydrate that will allow them to provide accurate information to consumers about the carbohydrate content of their food, while retaining flexibility to choose the method of calculating carbohydrate best suited to their food product.

Currently, carbohydrate is defined in both Volume 1 and Volume 2 of the *Food Standards Code* and the *New Zealand Food Regulations 1984* (NZFR) as carbohydrate by difference. Carbohydrate by difference is calculated in Volume 2 by subtracting from 100, the average quantity expressed as a percentage of water, protein, fat, dietary fibre, ash and if quantified, any other unavailable carbohydrate and the substances listed in column 1 of Table 2 to subclause 2(2).

Applying the definition of carbohydrate by difference relies on the use of proximate composition data (water, ash, fat, protein and fibre) expressed per 100 g food. Ideally, the sum of these components should add to 100 g. In practice this does not always occur and therefore carbohydrate by difference may sometimes be over- or under-estimated. This in turn means that there can be some anomalies in carbohydrate values for some foods, including negative values and values less than the total sugars level from direct analysis. This issue was reviewed as part of Proposal P167 - Review of Nutrition Labelling. However, no submissions were received that pointed to the shortcomings of using carbohydrate by difference.

These anomalies have the potential to mislead or confuse consumers because, due to analytical error or the presence of other unanalysed compounds, carbohydrate values reported in the NIP may not be a true representation of the carbohydrate value of the food, and may even be negative values for some foods.

ANZFA therefore proposed at Full Assessment to allow manufacturers to calculate carbohydrate under Standard 1.2.8 of Volume 2 as either:

1. carbohydrate by difference, calculated by subtracting from 100, the average quantity expressed as a percentage of water, protein, fat, dietary fibre, ash, alcohol, and if quantified, any other unavailable carbohydrate and the substances listed in column 1 of Table 2 to subclause 2(2); or
2. available carbohydrate, which is calculated by summing the average quantity of total available sugars and starch, and if quantified, any available oligosaccharides, glycogen and maltodextrin.

In the majority of cases both these methods will give a similar value for average carbohydrate.

As this proposal raises issues of minor significance and complexity only, ANZFA omitted, pursuant to section 36 of the *Australia New Zealand Food Authority Act 1991*, the first round of public consultation on the Proposal.

Previous Authority consideration

The Full Assessment Report for Proposal P247 was released by ANZFA for public comment on 22 August 2001. Only one round of public comment was undertaken as this issue was considered to be of minor significance. Submissions closed on 5 September 2001. ANZFA canvassed three possible options:

Option 1. Retain the status quo i.e. retain the definition of carbohydrate as defined in Volume 2, Standard 1.2.8 as carbohydrate by difference calculated by subtracting from 100, the average quantity expressed as a percentage of water, protein, fat, dietary fibre, ash and if quantified, any other unavailable carbohydrate and the substances listed in column 1 of Table 2 to subclause 2(2).

Option 2. Change the definition of carbohydrate in Volume 2, Standard 1.2.8 so that it is defined as either carbohydrate calculated by difference or as available carbohydrate.

Option 3. Change the definition of carbohydrate in Volume 2, Standard 1.2.8 so that it is defined as only available carbohydrate.

Summary of submissions received

A total of eight submissions were received in response to the Full Assessment Report. Three submissions were from the food industry, three from government, and one each from public health and consumer organisations.

Five submissions agreed with option 2, to change the definition of carbohydrate in Volume 2, Standard 1.2.8 so that it is defined as either carbohydrate calculated by difference or as available carbohydrate. Of these, two commented on the inclusion of alcohol in the definition of carbohydrate by difference. One submission supported option 3, to change the definition of carbohydrate in Volume 2, Standard 1.2.8 so that it is defined as only available carbohydrate. Two submissions did not indicate a preferred option but disagreed with the definitions used for carbohydrate by difference and total carbohydrate. A number of other comments were raised by submitters and these are outlined in more detail below.

Recommendations made at Full Assessment

At Full Assessment it was recommended that the definition of carbohydrate in Volume 2, Standard 1.2.8 be changed so that it is defined as either carbohydrate calculated by difference or as available carbohydrate.

Changes to Full Assessment Resulting from Final Assessment

As a result of submissions received at Full Assessment a number of minor drafting changes have been made to Standard 1.2.8.

ASSESSMENT OF ISSUES RAISED IN PUBLIC SUBMISSIONS

Option 2 – Change the definition of carbohydrate in Volume 2, Standard 1.2.8 so that it is defined as either carbohydrate calculated by difference or as available carbohydrate.

Comments received

Goodman Fielder, Nestlé, Unilever, Dietitians Association of Australia (DAA) and the Department of Human Services (DHS), South Australia all supported Option 2.

DHS also expressed concern that the inclusion of another definition of carbohydrate may allow manufacturers to intentionally mislead consumers in relation to the carbohydrate content of their food. For example, a manufacturer may opt to declare either the higher or lower value that provides the greater marketing advantage.

Assessment

The average variations in values between analysed carbohydrate and carbohydrate by difference over the broad range of foods is only about 1.4%. On this basis, ANZFA considers that there is limited scope for manufacturers to intentionally mislead consumers by opting for a value that provides a greater marketing advantage.

Option 3 – Change the definition of carbohydrate in Volume 2, Standard 1.2.8 so that it is defined as only available carbohydrate

Comments received

National Council of Women of Australia (NCWA) supported Option 3. They stated that ‘available carbohydrate’ is a more accurate determination and does not result in the anomalies from measuring carbohydrate by difference. The Council also noted that this method is used in the Australian and New Zealand official national food composition databases, and is internationally accepted.

Assessment

ANZFA acknowledges that for some foods available carbohydrate does not result in the anomalies from measuring carbohydrate by difference. However, as some manufacturers will have already changed labels to comply with Volume 2, to calculate carbohydrate by difference, removing the current permission may result in additional costs to industry, which may in turn be passed on to consumers.

Use of the term ‘Carbohydrate, total’

Comments received

John Ward from Dunn Son and Stone, Unilever and Nestlé commented that the term ‘carbohydrate, total’ as currently reflected on the NIP, and proposed in P247, is incorrect as it has some other unavailable carbohydrate subtracted from it. Nestlé stated that the declaration of total carbohydrate is misleading to consumers and in breach of the trade practices legislation.

Unilever and **Nestlé** suggested that ‘Carbohydrate, total’ should be amended to the more general term ‘Carbohydrate’.

Assessment

The word ‘total’ after carbohydrate is used to indicate that it is immediately followed by a sub-group. This also applies to other macronutrients where a related sub-group is also listed in a NIP. Given the problems particularly in relation to carbohydrate, it is proposed to delete the requirement for the word ‘total’ to appear when related sub-groups are declared and to rely solely on the formatting by indentation of the sub-groups.

Definition of Carbohydrate by Difference

Comments received

Goodman Fielder and the DAA agreed with the revised definition of carbohydrate by difference to include alcohol. Whilst **NCWA** did not support the retention of carbohydrate by difference, they had no objection to the inclusion of alcohol under the proposed definition of carbohydrate. They also suggested a minor editorial amendment.

John Ward and **Lee Kennedy from Dunn Son and Stone**, disagreed with the current definition of carbohydrate by difference, stating that ‘Total carbohydrate’ should include both available (e.g. sugars and other) and partially available (e.g. dietary fibre) forms, although dietary fibre can be reported separately as a sub-category of carbohydrate.

Lee Kennedy also stated that the current system of excluding dietary fibre from the definition of carbohydrate, does not align with United States NIPs.

Assessment

The definition of carbohydrate by difference to exclude dietary fibre was revised as part of Proposal P167 - Review of Nutrition Labelling which adopted the recommendations from P177, Derivation of Energy Factors. The previous definition of carbohydrate by difference included all forms of carbohydrate, (both available and unavailable) and assigned the available carbohydrate energy factor to the total carbohydrate content of the food. This led to an overestimation of the energy content of high fibre foods. As a result, a revised definition of carbohydrate by difference was adopted to exclude dietary fibre and other substances, where quantified, from both energy calculation and declaration in the NIP. This approach was also made to align with Codex.

Definition of Available Carbohydrate

Comment received

Lee Kennedy disagreed with the definition of available carbohydrate in terms of the analyses performed, specifically, the use of the words ‘...and if quantified...’, as this implies that if something is not tested for, then it is not present. He also commented that glycerol should not be excluded from the definition of available carbohydrate as it is available for use by the body.

Goodman Fielder suggested that the proposed definition of available carbohydrate be amended from ‘and if quantified, any available oligosaccharides, glycogen and maltodextrin’ to read ‘and any other available carbohydrate where it has been quantified or added to the food’.

Nestlé commented that, under the proposed drafting for available carbohydrate, organic acids, such as citric acid when used as a food additive, would need to be declared in the NIP, even if used in insignificant nutritional amounts. This information would not necessarily be meaningful to consumers.

Nestlé also commented that this is a different requirement to that proposed under the carbohydrate by difference definition. Using this definition, organic acids would need to be declared in the NIP only if they are ‘quantified’ and therefore subtracted from 100 to obtain the carbohydrate by difference value.

Assessment

Glycerol, together with other polyols, is excluded from the definition of available carbohydrate. Unlike sugars and starch which are 100% absorbed, polyols are passively absorbed across the intestinal wall and their level of absorption is variable. Also, the inclusion of polyols as carbohydrates would create an added complexity in terms of energy calculation, given that they have separate energy factors.

Given the differing views about the status of polyols as carbohydrates, the adoption of Goodman Fielder’s suggestion to refer generally to ‘other available carbohydrates’, while allowing for other substances not currently mentioned to be included, does not provide the manufacturer with sufficient guidance to ensure a consistently applied approach. An editorial note would be required to clarify the recognised forms of ‘other available carbohydrate’.

It is acknowledged that there may be a problem with the use of the term ‘quantified’ in Standard 1.2.8. This is because it is used in two different ways – on its own in the two definitions of carbohydrate, but also qualified by the additional term ‘or added to a food’ in subclause 5(6). The use of the term ‘or added to a food’ has the effect of restricting the term to quantified other than by recipe calculation, most likely by analysis of the final product. Using the narrow interpretation of ‘quantified’ there may be an inconsistency in the range of substances declared in the NIP, depending on the definition of carbohydrate used. For example, polyols added to foods but not analysed would not require separate declaration in the NIP using the carbohydrate by difference definition, but would do so on the basis of the available carbohydrate definition.

The words ‘added to the food’ were included in the drafting of subclause 5(6) to ensure that substances such as polyols which are listed in Column 1 of Table 2 to subclause 2(2) and may be added to some foods in significant amounts above food additive use, are separately quantified in the NIP. This was done on the assumption that the ‘if quantified’ in the definition of carbohydrate by difference included known recipe amounts. Polyols may have a laxative effect in sensitive individuals, when consumed in excess and thus it is reasonable that their content in the food be declared. Organic acids are also listed in Column 1 of Table 2 to subclause 2(2) and are required to be declared in the NIP when ‘quantified or added to the food’. Unlike polyols, however, organic acids are not associated with adverse health effects and therefore should not require separate declaration in the NIP.

Some polyols and organic acids are also used as food additives, and under the drafting of subclause 5(6)(b) at full assessment, the separate declaration of these substances in the NIP would be required at all times where available carbohydrate is declared. As the original intention was to require the declaration of unavailable carbohydrate and the declaration of the substances listed in Column 1 of Table 2 to subclause 2(2) when present in nutritionally significant amounts, it is proposed to amend the proposed drafting of Standard 1.2.8 to reflect this.

Other comments

DAA suggested that dietary fibre and any other sources of unavailable (or partially available) carbohydrate be listed in the NIP when either of the two definitions of carbohydrate is used.

Assessment

This recommendation is considered beyond the scope of P247. The issue of mandating the declaration of dietary fibre in the NIP was addressed in Proposal P167 - Nutrition Labelling. It was considered that dietary fibre be excluded from mandatory declaration except where a related claim is made.

CHANGES TO FULL ASSESSMENT RESULTING FROM FINAL ASSESSMENT

The following changes have been made to the proposal made at Full Assessment as a result of the submissions received:

- organic acids will not be required to be separately declared in the NIP where they have been subtracted in the calculation of carbohydrate by difference; or where they have been quantified or added to the food, when available carbohydrate is used;
- when available carbohydrate is used, polyols and polydextrose will be required to be separately declared in the NIP where they have been singly or in combination added to the food in an amount of no less than 5g/100g. Levels below 5g/100g are considered insignificant and should not require separate declaration in the NIP;
- when carbohydrate by difference is used, polyols and polydextrose will be required to be separately declared in the NIP where they have been subtracted in the calculation of carbohydrate by difference, and where they are either singly or in combination present in the final food in an amount of no less than 5 g/100g. Levels below 5 g/100g are considered insignificant for labelling purposes and should not require separate declaration in the NIP;
- the words ‘added to the food’ will be included in the definition of carbohydrate by difference and available carbohydrate to ensure that the substances declared in the NIP are consistent using either carbohydrate definition;
- the word ‘total’ will be removed from ‘Carbohydrate, total’ in the NIP, wherever it occurs in Standard 1.2.8, as it does not accurately reflect the total carbohydrate content of the food; and

- the requirement to declare unavailable carbohydrate other than dietary fibre on the NIP will be removed, when available carbohydrate is used.

CONCLUSIONS

Given the changes made to the assessment of this matter since Full Assessment, it is concluded that Standard 1.2.8 - Nutrition Information Requirements, be amended to permit manufacturers to calculate carbohydrate as either 'by difference' or 'available carbohydrate'. This will allow manufacturers to determine the most appropriate method for declaring carbohydrate in the NIP and ensure meaningful information is available for consumers.

FOOD STANDARDS SETTING IN AUSTRALIA AND NEW ZEALAND

The Governments of Australia and New Zealand entered an Agreement in December 1995 establishing a system for the development of joint food standards. On 24 November 2000, Health Ministers in the Australia New Zealand Food Standards Council (ANZFS) agreed to adopt the new *Australian New Zealand Food Standards Code*. The new Code was gazetted on 20 December 2000 in both Australia and New Zealand as an alternate to existing food regulations until December 2002 when it will become the sole food code for both countries. It aims to reduce the prescription of existing food regulations in both countries and lead to greater industry innovation, competition and trade.

Until the joint *Australia New Zealand Food Standards Code* is finalised the following arrangements for the two countries apply:

- **Food imported into New Zealand other than from Australia** must comply with either Volume 1 (known as *Australian Food Standards Code*) or Volume 2 (known as the joint *Australia New Zealand Food Standards Code*) of the *Australian Food Standards Code*, as gazetted in New Zealand, or the *New Zealand Food Regulations 1984*, but not a combination thereof. However, in all cases maximum residue limits for agricultural and veterinary chemicals must comply solely with those limits specified in the *New Zealand (Maximum Residue Limits of Agricultural Compounds) Mandatory Food Standard 1999*.
- **Food imported into Australia other than from New Zealand** must comply solely with Volume 1 (known as *Australian Food Standards Code*) or Volume 2 (known as the joint *Australia New Zealand Food Standards Code*) of the *Australian Food Standards Code*, but not a combination of the two.
- **Food imported into New Zealand from Australia** must comply with either Volume 1 (known as *Australian Food Standards Code*) or Volume 2 (known as *Australia New Zealand Food Standards Code*) of the *Australian Food Standards Code* as gazetted in New Zealand, but not a combination thereof. Certain foods listed in Standard T1 in Volume 1 may be manufactured in Australia to equivalent provisions in the *New Zealand Food Regulations 1984*.
- **Food imported into Australia from New Zealand** must comply with Volume 1 (known as *Australian Food Standards Code*) or Volume 2 (known as *Australia New Zealand Food Standards Code*) of the *Australian Food Standards Code*, but not a combination of the two. However, under the provisions of the Trans-Tasman Mutual Recognition Arrangement,

food may **also** be imported into Australia from New Zealand provided it complies with the New Zealand *Food Regulations 1984*.

- **Food manufactured in Australia and sold in Australia** must comply with Volume 1 (known as *Australian Food Standards Code*) or Volume 2 (known as *Australia New Zealand Food Standards Code*) of the *Australian Food Standards Code* but not a combination of the two. Certain foods listed in Standard T1 in Volume 1 may be manufactured in Australia to equivalent provisions in the New Zealand *Food Regulations 1984*.

In addition to the above, all food sold in New Zealand must comply with the New Zealand *Fair Trading Act 1986* and all food sold in Australia must comply with the Australian *Trade Practices Act 1974*, and the respective Australian State and Territory *Fair Trading Acts*.

Any person or organisation may apply to ANZFA to have the *Food Standards Code* amended. In addition, ANZFA may develop proposals to amend the *Australian Food Standards Code* or to develop joint Australia New Zealand food standards. ANZFA can provide advice on the requirements for applications to amend the *Food Standards Code*.

ATTACHMENTS

1. Proposed Draft Variations as amended
2. Statement of Reasons
3. Summary of Submissions

DRAFT VARIATIONS TO THE *FOOD STANDARDS CODE*

To commence: On gazettal

[1] *Standard 1.2.8 of Volume 2 of the Food Standards Code is varied by –*

[1.1] *omitting the definition of carbohydrate in clause 1, substituting –*

carbohydrate means –

- (a) ‘carbohydrate by difference’, calculated by subtracting from 100, the average quantity expressed as a percentage of water, protein, fat, dietary fibre, ash, alcohol, and if quantified or added to the food, any other unavailable carbohydrate and the substances listed in column 1 of Table 2 to subclause 2(2); or
- (b) ‘available carbohydrate’, calculated by summing the average quantity of total available sugars and starch, and if quantified or added to the food, any available oligosaccharides, glycogen and maltodextrins.

[1.2] *omitting subclause 5(6), substituting –*

(6) The nutrition information panel must include declarations of unavailable carbohydrate where the unavailable carbohydrate has been subtracted in the calculation of ‘carbohydrate by difference’ as defined in clause 1.

(6A) The reference to ‘unavailable carbohydrate’ in subclause (6) does not include dietary fibre.

(6B) The nutrition information panel must include individual declarations of those substances listed in column 1 of Table 2 to subclause 2(2) where they are present, either singly or in combination, in the final food in an amount of no less than 5g/100g, and where –

- (a) any of the substances listed in column 1 have been subtracted in the calculation of ‘carbohydrate by difference’ as defined in clause 1; or
- (b) any of the substances listed in column 1 have been quantified or added to the food, if ‘available carbohydrate’ as defined in clause 1 is used.

(6C) The reference to ‘substances listed in column 1 of Table 2 to subclause 2(2)’ in subclause (6B) does not include organic acids.

[1.3] *omitting Carbohydrate, total from the Table immediately following subclause 5(1) titled NUTRITION INFORMATION, substituting -*

Carbohydrate

[1.4] *omitting* Carbohydrate, total *from the Table immediately following subclause 5(7) titled NUTRITION INFORMATION, substituting -*

Carbohydrate

[1.5] *omitting* Carbohydrate, total *from the Table immediately following subclause 7(2) titled NUTRITION INFORMATION, substituting -*

Carbohydrate

[1.6] *omitting the second sentence in the Editorial note to following subclause 5(7), substituting –*

The word ‘total’ following ‘fat’, dietary fibre’ or ‘protein’ in the first column of the panel need only be included if it is immediately followed by the sub-group.

[1.7] *omitting the Editorial note immediately following subclause 15(4), substituting -*

Editorial note:

The declaration of the lactose and galactose content of a food in the nutrition information panel should be in the following form:

Carbohydrate

- sugars

-lactose

-galactose

STATEMENT OF REASONS

PROPOSAL P247 – DEFINITION OF CARBOHYDRATE

FOR RECOMMENDING A VARIATION TO STANDARD 1.2.8 - NUTRITION INFORMATION REQUIREMENTS OF VOLUME 2 OF THE FOOD STANDARDS CODE - TO PERMIT AN ALTERNATE METHOD OF CALCULATION OF CARBOHYDRATE AS AVAILABLE CARBOHYDRATE

The Australia New Zealand Food Authority (ANZFA) had before it a Proposal to amend the *Food Standards Code* to permit an alternate method of calculation of carbohydrate as available carbohydrate.

This relates to the calculation of the carbohydrate content of a food, to be shown in the Nutrition Information Panel (NIP) on that food.

ANZFA recommends the adoption of the draft variation, as amended, for the following reasons:

- The current definition of carbohydrate “by difference” relies on the use of proximate composition data (water, ash, fat, protein and fibre) expressed per 100 g food. Ideally, the sum of these components should add to 100 g. In practice this does not always occur and therefore carbohydrate by difference may sometimes be over- or under-estimated. This in turn means that there can be some anomalies in carbohydrate values for some foods, including negative values and values less than the total sugars level from direct analysis.
- These anomalies have the potential to mislead or confuse consumers because, due to cumulative analytical error or the presence of other unanalysed compounds, carbohydrate values reported in the NIP may not be a true representation of the carbohydrate value of the food, or the relative contents of carbohydrate components.
- However, for a majority of foods, the current definition does not raise these computational problems for consumers or manufacturers and it would be desirable not to abandon the current definition as this would force unnecessary change on most labels which already carry carbohydrate content information.

The principal purpose of the change is therefore to give food companies the option of calculating carbohydrate content by the existing “by difference” method or by analysis.

The drafting prepared after Full Assessment is also amended for the following reasons:

- remove the requirement for organic acids to be separately declared in the NIP where they have been subtracted in the calculation of carbohydrate by difference; or where they have been quantified or added to the food, when available carbohydrate is used as organic acid content is not meaningful to consumers;

- when available carbohydrate is used, include the requirement to separately declare polyols and polydextrose in the NIP only where they have been singly or in combination added to the food in an amount of no less than 5 g/100g. Levels below 5 g/100g are considered insignificant and should not require separate declaration in the NIP.
- when carbohydrate by difference is used, include the requirement to separately declare polyols and polydextrose in the NIP where they have been subtracted in the calculation of carbohydrate by difference, and only where they are singly or in combination present in the final food in an amount of no less than 5 g/100g. Levels below 5 g/100g are considered insignificant for labelling purposes and should not require separate declaration in the NIP.
- include the words ‘added to the food’ in the definition of carbohydrate by difference and available carbohydrate to clarify the meaning of the term ‘if quantified’;
- delete the word ‘total’ from ‘Carbohydrate, total’ in the NIP, wherever it occurs in Standard 1.2.8, as it does not accurately reflect the prescribed carbohydrate value to be declared in the NIP; and
- remove the requirement to declare unavailable carbohydrate other than dietary fibre in the NIP, when available carbohydrate is used as it is not considered meaningful.

Amendments to Volume 1 of the *Food Standards Code* have not been prepared in relation to this Proposal. Subject to the identification of any specific regulatory need, ANZFA’s policy is to limit variations to the *Food Standards Code* to the new Volume 2, given that Volume 1 will cease to have effect in or around December 2002. In ANZFA’s view amendments to Volume 1 for this Proposal are not necessary, principally because the issue is relevant to the new provisions in Standard 1.2.8 of Volume 2 alone.

The commencement date of the draft variations will be the date of gazettal.

REGULATION IMPACT

ANZFA has undertaken a regulation impact assessment process which also fulfils the requirement in New Zealand for an assessment of compliance costs. That process concluded that the amendment to the Code is necessary, cost effective and of benefit to both producers and consumers.

WORLD TRADE ORGANIZATION (WTO) NOTIFICATION

Australia and New Zealand are members of the WTO and are bound as parties to WTO agreements. In Australia, an agreement developed by the Council of Australian Governments (COAG) requires States and Territories to be bound as parties to those WTO agreements to which the Commonwealth is a signatory. Under the agreement between the Governments of Australia and New Zealand on Uniform Food Standards, ANZFA is required to ensure that food standards are consistent with the obligations of both countries as members of the WTO.

In certain circumstances Australia and New Zealand have an obligation to notify the WTO of changes to food standards to enable other member countries of the WTO to make comment. Notification is required in the case of any new or changed standards which may have a significant trade effect and which depart from the relevant international standard (or where no international standard exists).

This matter was not notified to the WTO because it does not have a significant trade effect. It is proposed to add an additional definition of carbohydrate, but since manufacturers can still continue to use the previous definition the proposal does not constitute a barrier to trade.

SUMMARY OF SUBMISSIONS

P247 – DEFINITION OF CARBOHYDRATE IN STANDARD 1.2.8

	Submitter	Submission
1	Goodman Fielder	<ul style="list-style-type: none"> • Supported option 2. • Noted that this is the most flexible option for industry and will allow manufacturers to supply the most appropriate and accurate information about food carbohydrate values. • Agreed with the amendment to include alcohol in the definition of carbohydrate by difference. • Suggested that the proposed definition of available carbohydrate be amended from ‘and if quantified, any available oligosaccharides, glycogen and maltodextrin’ to read ‘and any other available carbohydrate where it has been quantified or added to the food’. • Acknowledged that the food composition tables define carbohydrates as sugars and starch which is consistent with the alternative available carbohydrate definition noting that information could therefore be easily obtained from these tables.
2	Nestlé	<ul style="list-style-type: none"> • Supported option 2. • Noted that, under the proposed drafting for available carbohydrate, organic acids, such as citric acid when used as a food additive, would need to be declared in the NIP, even if used in insignificant nutritional amounts. This information would not necessarily be meaningful to consumers. • Commented that this is a different requirement to that proposed under the carbohydrate by difference definition. Using this definition, organic acids would need to be declared in the NIP only if they are ‘quantified’ and therefore subtracted from 100 to obtain the carbohydrate by difference value. • Recommended that the format for the declaration of carbohydrate be changed from ‘total carbohydrate’ to ‘carbohydrate’. The declaration of ‘total carbohydrate’ would be misleading to consumers because the figure declared does not include the unavailable carbohydrate such as dietary fibre. • Requested that ANZFA review the format for declaration of carbohydrate to satisfy the statutory objective of preventing misleading or deceptive conduct.
3	Unilever	<ul style="list-style-type: none"> • Supported option 2. • Noted that this allows the manufacturer to choose the most appropriate method for the information they have available. • Proposed that the general term ‘Carbohydrate’ be used in the NIP with the two defined methods of determination, rather than the more specific statement ‘Carbohydrate, total’, when the calculations do not reflect this. • Commented that there is a degree of complexity surrounding the definitions of carbohydrate, dietary fibre, available and unavailable carbohydrate. If the general term ‘Carbohydrate’ could be used in the NIP, further details can be provided by manufacturers to interested consumers explaining how the figures are determined, without the concern of providing misleading information, as is the case with the use of the current term ‘Carbohydrate, total’.

	Submitter	Submission
4	Dietitians Association of Australia	<ul style="list-style-type: none"> • Supported option 2. • Commented that the alternative definition of carbohydrate allows the summation of available carbohydrate to be used as the value for carbohydrate. • Suggested that dietary fibre and any other sources of unavailable (or partially available) carbohydrate be listed in the NIP if possible. • Supported the inclusion of alcohol in the approach to calculating carbohydrate by difference.
5	Department of Human Services (DHS) South Australia	<ul style="list-style-type: none"> • Supported option 2. • Expressed some concern that the inclusion of another definition of carbohydrate may allow manufacturers to intentionally mislead consumers in relation to the carbohydrate content of their food. For example, a manufacturer may opt to declare either the higher or lower value that provides the greater marketing advantage. Similarly, the higher of the two carbohydrate values may be opted for to support a high carbohydrate claim e.g. for a formulated supplementary sports food → Recommended a suitable clause or editorial note to address this issue.
6	John Ward, Dunn Son and Stone	<ul style="list-style-type: none"> • Did not indicate a preferred option. • Disagreed with the current definition of carbohydrate by difference, stating that ‘Total carbohydrate’ should include both available (eg sugars and other) and partially available (eg dietary fibre) forms, although dietary fibre can be reported separately as a sub-category of carbohydrate.
7	Lee Kennedy, Dunn Son and Stone	<ul style="list-style-type: none"> • Did not indicate a preferred option. • Disagreed with the current definition of carbohydrate by difference, stating that ‘Total carbohydrate’ should include all forms of carbohydrate, including dietary fibre. • Stated that the current system of excluding dietary fibre from the definition of carbohydrate does not align with United States NIPs and does not assist the consumer. • Disagreed with the definition of unavailable carbohydrate in terms of the analyses performed, specifically, the use of the words ‘...and if quantified...’, as it is illogical to suggest that a carbohydrate is only there if quantified. • Disagreed with the definition of available carbohydrate in terms of the analyses performed, specifically, the use of the words ‘...and if quantified...’, as it is illogical to suggest that if something is not tested for, then it is not present. He also commented that glycerol should not be excluded from the definition of available carbohydrate as it is an available carbohydrate and has a calorific value of 18kJ.
8	National Council of Women of Australia (NCWA)	<ul style="list-style-type: none"> • Supported option 3 for the following reasons: <ul style="list-style-type: none"> • it is the most accurate determination of carbohydrate; • it does not result in the anomalies from measuring carbohydrate by difference; • method used in both the Australian and New Zealand official national food composition databases; • internationally accepted (Codex). • Noted that whilst the anomalies from carbohydrate by difference only occurred in a limited number of foods these were primary foods that are consumed as the basis for most meals and should therefore accurately reflect true composition and energy value to consumers

	Submitter	Submission
8	National Council of Women of Australia (NCWA) Cont'd	<ul style="list-style-type: none"> • Noted that whilst option 2 would provide industry with the means to make more accurate claims by utilising the 'available carbohydrate' option, there is no compulsion for them to do so and many may choose not to provide this more meaningful and accurate information by adhering to carbohydrate by difference data if it remains lawful. • Argued that it was doubtful that industry has already made the required label changes stating that in any event consumers always pay the cost of any label changes. • Whilst NCWA did not support the retention of carbohydrate by difference, they had no objection to the inclusion of alcohol under the proposed definition of carbohydrate. They also suggested a minor editorial amendment. • Expressed concern in relation to the insufficient time for adequate consultation.