



Public Health Association
AUSTRALIA

Public Health Association of Australia

Submission to Draft Methodological Framework for the Review of the Nutrient Reference Values

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Contents

Introduction	3
Public Health	3
The Public Health Association of Australia	3
Advocacy and capacity building	3
Preamble	4
Response to Draft Framework	5
a) Overarching Comments	5
b) Addressing both nutritional deficiency and chronic disease prevention	6
c) Proposed methodology for deriving NRV recommendations for chronic disease prevention...	7
d) Roles and composition of Nutrient EWGs	8
e) Public consultation.....	8
f) Miscellaneous	8
Recommendations	9
Conclusion	9
References.....	11

Introduction

The Public Health Association of Australia Incorporated (PHAA) is recognised as the principal non-government organisation for public health in Australia and works to promote the health and well-being of all Australians. The Association seeks better population health outcomes based on prevention, the social determinants of health and equity principles. The PHAA has a vision for a healthy region, a healthy nation and healthy people living in a healthy society and a sustaining environment while improving and promoting health for all.

Public Health

Public health includes, but goes beyond the treatment of individuals to encompass health promotion, prevention of disease and disability, recovery and rehabilitation, and disability support. This framework, together with attention to the social, economic and environmental determinants of health, provides particular relevance to, and expertly informs the Association's role.

The Public Health Association of Australia

PHAA is a national organisation comprising around 1900 individual members and representing over 40 professional groups concerned with the promotion of health at a population level.

Key roles of the organisation include the development of policy, capacity building and advocacy. Core to our work is an evidence base drawn from a wide range of members working in public health practice, research, administration and related fields who volunteer their time to inform policy, support advocacy and assist in capacity building within the sector. PHAA supports a preventive approach for better population health outcomes by championing appropriate policies and providing strong support for Australian governments and bodies such as the National Health and Medical Research Council in their efforts to develop and strengthen research and actions in public health. The PHAA is an active participant in a range of population health alliances including the *Australian Health Care Reform Alliance*, the *Social Determinants of Health Alliance*, the *National Complex Needs Alliance* and the *National Alliance for Action on Alcohol*.

PHAA has Branches in every State and Territory and a wide range of Special Interest Groups. The Branches work with the National Office in providing policy advice, in organising seminars and public events and in mentoring public health professionals. This work is based on the agreed policies of the PHAA. Our Special Interest Groups provide specific expertise, peer review and professionalism in assisting the National Organisation to respond to issues and challenges as well as providing a close involvement in the development of policies. In addition to these groups the PHAA's Australian and New Zealand Journal of Public Health (ANZJPH) draws on individuals from within PHAA who provide editorial advice, and review and edit the Journal.

Advocacy and capacity building

In recent years PHAA has further developed its role in advocacy to achieve the best possible health outcomes for the community, both through working with all levels of governments and agencies, and promoting key policies and advocacy goals through the media, public events and other means.

Preamble

PHAA welcomes the opportunity to provide input to the Draft Methodological Framework to Review 2006 NHMRC Nutrient Reference Values for Australia and New Zealand (the NRVs).

The NRVs are an important component of the tools we have for conveying nutrition recommendations. The NHMRC has previously positioned the role of the NRVs in relation to the wider food and nutrition policy context, as shown in the following figure:¹

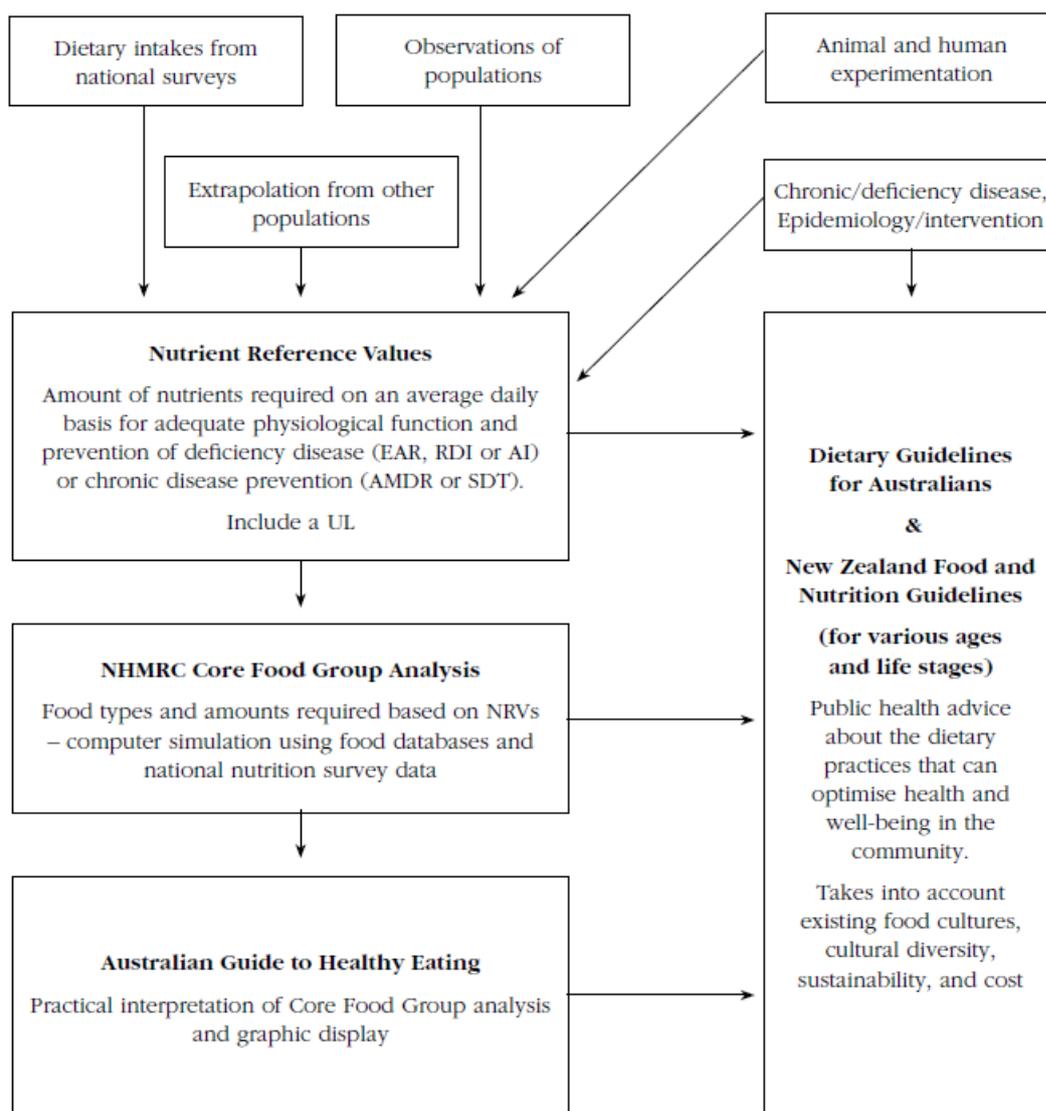


FIGURE 1. INTERRELATIONSHIPS BETWEEN THE EVIDENCE BASE, NRVs, CORE FOOD GROUP ANALYSIS, DIETARY AND FOOD GUIDELINES AND HEALTHY EATING GUIDES

This positioning and the rationale behind it are central to many of the comments we have on the draft framework.

The PHAA notes that the development of this draft framework followed the recommendations of the Scoping study, for:

- greater transparency in the decision making process including clear justification for inclusion of experts and determination of nutrient values
- clear documentation of all underlying decisions, evidence, assumptions and rounding processes
- development of robust methodologies to construct recommendations, particularly for nutrients with gaps in the data for specific population groups.

We acknowledge that the purpose of the framework is to guide Nutrient Expert Working Groups who are appointed by the Steering group to review priority nutrients and that the framework focusses on three areas:

1. Clarification of conceptual basis and application of the NRVs
2. Process for review of NRVs
3. Method for deriving NRV recommendations.

We also note that the framework is intended for application across a range of nutrients (both micro and macronutrients), and should provide high level guidance that should not be affected by characteristics unique to individual nutrients.

We applaud the Department of Health for supporting the development of the NRVs which form one important component of the broad food and nutrition policy context.

Response to Draft Framework

a) Overarching Comments

It is pleasing to see the attempt to develop a robust methodology that aims to contribute to transparency and consistency of approach in future reviews. PHAA generally supports:

- Improved clarification regarding the uses and application of the NRVs – for both the EWGs and end users;
- The methods for deriving NRV recommendations insofar as they deal with nutrient deficiencies and upper limits for nutrients.

Recognition of the place of NRVs in relation to other well developed approaches to dietary advice, such as the Dietary Guidelines and the Australian Guide to Healthy Eating would significantly enhance the framework by recognising the existence of these other tools, would demonstrate the relationships between the tools and would make clear the unnecessary duplication of effort that is currently recommended.

The PHAA **does not support** the use of NRVs for **chronic disease prevention** and **does not support** the **proposed methodology** for determining an NRV for chronic disease prevention.

The proposed framework **does not sufficiently** address the recommendations of the scoping study for **consistency of approach across all nutrients**, adequate **documentation of underlying decisions particularly around use of evidence**, and sufficient rationale for **inclusion of experts**.

The process of **targeted consultation** used for this particular consultation is inconsistent with the desire for improved transparency and accountability. We are aware of numerous omissions of important and relevant groups who have been excluded from participating. This approach to consultation will not allow for comprehensive feedback and creates suspicion around motives which could lead to undermining of the value of future work in this area.

b) Addressing both nutritional deficiency and chronic disease prevention

The use of NRVs for both purposes is anathema to our understanding of the uses and derivation of NRVs and food based guidelines for chronic disease prevention.

It is clearly stated in the document (and well understood) that the basis for developing EARs and RDIs is adequate physiological or metabolic function and/or avoidance of deficiency states (p.21) – this is the accepted approach predicated on understanding the mechanisms underlying a fairly linear cause-effect relationship. PHAA supports the use of NRVs for this purpose. The “reductionist” approach has generally served us well for this purpose (although this needs to be broadened out further based on more current research relating the effects of the food matrix and synergies between nutrients).²

Methods for considering nutrition advice for chronic disease prevention are quite different since relationships are complex, multi-causal and non-linear. Indeed there are many reasons for rejecting the reductionist approach for the purposes of developing advice regarding chronic disease prevention:

- People don't eat nutrients, they eat food and, more importantly, diets
- Foods/diets are not composed solely of nutrients, there are many other compounds in foods/diets that have health effects and so determining the health effects of foods/diets cannot be reduced to studying the effects of isolated nutrients³
- Food components may act in synergy so that the whole is much more than the sum of its parts²
- The food/diet matrix affects the nutritional effects of foods/diets²
- Diet related chronic disease is not only related to food/diets, there are many other factors such as smoking, physical activity that also play a part
- Foods are not drugs – there are many effects that foods/diets have on health and these are likely not to follow an easily measurable dose-response relationship³
- A simplification of dietary messages becomes apparent where food groups are linked to one specific nutrient eg dairy products and calcium – this simplification may lead to unbalanced diets, may cause confusion about the “healthiness” of certain foods eg dairy products (due to saturated fat content)²
- Encourages the development of functional foods, nutritional supplements, fortified foods and nutraceuticals – the health effects are not generally studied and may be deleterious at worst and confusing to food consumers at least. It also encourages the notion that individual nutrients can be used in the treatment of disease eg antioxidants and cancer.²

A coherent and meaningful rationale for developing NRVs for chronic disease prevention is not evident. Australia already has dietary advice for chronic disease prevention in the form of Dietary Guidelines and the Guide to Healthy Eating. These were developed using a very robust methodology. Any attempt to develop new advice (based on the methodology proposed) will lead to professional and consumer confusion and will undermine confidence in both the NRVs and the Dietary Guidelines. It is a waste of time, effort and public funds to undertake this process when we have only recently had the dietary guideline process completed.

c) Proposed methodology for deriving NRV recommendations for chronic disease prevention

For all of the reasons above, PHAA believes that there is **no role** for **Suggested Dietary Targets (SDTs) nor Acceptable Macronutrient Distribution Ranges (AMDRs)** within the NRVs. However, since they have been discussed within the proposed framework, we offer the following critique.

The **methodology proposed** for the establishment of NRVs for chronic disease prevention is **flawed and is inconsistent with contemporary best practice** and with the approach for nutrient deficiency/toxicity related NRVs (which goes against a stated objective – consistency of approach regardless of nutrient).

The proposed methodology is inconsistent with the Procedures and Requirements for meeting the 2011 NHMRC Standard for Clinical Practice Guidelines and the NHMRC guideline development processes. Additionally, it is **less robust** than that used to assess the evidence for the development of the **Dietary Guidelines**.

There is also confusion as to which assessment process will be used to grade the level of evidence – currently both the NHMRC levels of evidence are suggested (which PHAA would support) but as well, the WHO GRADE system is proposed. There needs to be consistency of approach here – something that the framework aims to achieve but is not successful here.

The **use of lower levels of evidence** (such as observational studies) for chronic disease prevention is flawed and will **likely result in erroneous recommendations**. It is also at odds with the levels of evidence proposed for the establishment of NRVs for nutrient deficiencies.

In particular, the PHAA is concerned with the approach proposed for the establishment of **SDTs**. It is proposed in the framework that a SDT be based on a “convincing” relationship between a nutrient and a primary health outcome. However the term “convincing” is not defined. If it is defined as the strongest available evidence of a relationship (as it should be to be consistent with NHMRC terminology) then this is at odds with the glossary definition of SDT - which suggests that it is a measure of intake that “may” help in the prevention of chronic disease. Clarification is needed about the definition of SDTs and PHAA would recommend that they only be established based on “convincing” evidence (Grade A – NHMRC).

It is proposed that **SDTs** should be the median of the desirable population intake and it is suggested that this is then analogous to the AI. This is incorrect, as AI is based on “actual” intake not “desirable” intake and thus the two measures are not equivalent.

PHAA recommends that **SDTs and AMDRs be removed from the NRVs** and, if this is not the case, that **only methods entirely consistent with the NHMRC** procedures and assessment of evidence be

approved for use in defining and determining NRVs, particularly in relation to prevention of chronic disease.

d) Roles and composition of Nutrient EWGs

PHAA **does not agree** that one of the primary responsibilities of the EWGs is **an assessment of the implications of proposed changes to NRVs** eg whether food fortification or supplementation might be required. These types of assessments would be best achieved by **alternate expert groups** who could consider the range of policy options available and careful consideration of the **health, regulatory and other impacts**.

PHAA supports the **exclusion of food, supplement and drug industry** representatives but this **should be extended** to include **those receiving research funding from these groups** as well as **groups representing the interests of these industry groups**. This applies to the **Advisory Committee** as well.

PHAA suggests there be additional **expertise in public health nutrition** on the **Advisory Committee** and the EWGs. This would include those who have a high level of skill in reviewing food and diet pattern based literature and its relationship to chronic disease as well as expertise in public policy development. The committee should have an **even mix** of those with skills and expertise in nutrient deficiency and those in public health nutrition and **not be dominated** by any one group in particular.

e) Public consultation

PHAA supports open and transparent consultative processes where **all stakeholders** have the opportunity to comment. The details relating to public consultation are supported, however, there needs to be further detail relating to how evidence submitted will be assessed and, where appropriate, incorporated.

f) Miscellaneous

Glossary of abbreviations and definitions - would suggest the term “**nutrient**” be defined so as to make very clear what is and is not covered by the NRVs.

S1.1 (p8) – uses of NRVs – the commentary states that “Recommendations are intended for use by professionals (rather than consumers)” This begs the question then as to why they can be included on nutrition information panels (presumably for consumer use) and why they can be utilised by industry to form the basis of a Front of Pack labelling system meant to inform consumer food choice?

S2.1 (p16) – Adequate intakes – the final sentence recommends caution when using AI values and a recognition that they can’t be used to clearly define inadequate intake. The PHAA would therefore recommend that they **never be used in Nutrition Information panels** nor as a basis for considering **nutrition and/or health claims**.

Recommendations

PHAA recommends:

- **Recognition of the place of NRVs** in relation to other well developed approaches to dietary advice, such as the Dietary Guidelines and the Australian Guide to Healthy Eating. This would significantly enhance the framework by recognising the existence of these other tools, would demonstrate the relationships between the tools and would make clear the unnecessary duplication of effort that is currently recommended.
- The use of NRVs **only** for their **original intended purpose** – determining nutrient requirements for deficiency disease and/or toxicity prevention. Their use for chronic disease prevention is not warranted.
- Removal of **SDTs and AMDRs** from the NRVs.
- Recognition that we have an **established set of dietary guidelines** which provides for advice on chronic disease prevention already.
- Clarification relating to the **definition of SDTs** and their establishment based only on “**convincing**” evidence.
- The use of **only methods entirely consistent with the NHMRC** procedures and assessment of evidence be approved for defining and determining NRVs, particularly in relation to prevention of chronic disease.
- Removal of **assessment of the implications of proposed changes to NRVs** from the responsibilities of the EWG.
- Inclusion of more expertise in public health nutrition and public policy on all groups.
- **Extension of this targeted consultation** to ensure all relevant stakeholders have the opportunity to participate.

Conclusion

The PHAA appreciates the opportunity to make this submission and looks forward to the possibility of further participation in future work on the revision of the NRVs.

Please do not hesitate to contact the PHAA should you require additional information or have any queries in relation to this submission.



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References

1. NHMRC and NZMoH (2006) Nutrient reference values for Australia and New Zealand including recommended dietary intakes. Commonwealth of Australia, Canberra
2. Fardet A and Rock E. Toward a new philosophy of preventive nutrition: From a reductionist to a holistic paradigm to improve nutritional recommendations. *Advances in Nutrition* 2014;5:430-446.
3. Jacobs DR and Orlich MJ. Diet pattern and longevity: do simple rules suffice? A commentary. *Am J Clin Nutr* 2014;100(suppl):3 13S-9S

A number of NHMRC documents are referred to including:

- NHMRC (2000) How to use the evidence: assessment and application of scientific evidence. Canberra: Commonwealth of Australia, 2000. Available at <http://www.nhmrc.gov.au/publications/synopses/cp69syn.htm>
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