



UK metric association

Campaigning for a **single** *rational* system of measurement

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Consultation on the Provision of calorie labelling at point of choice in catering outlets

Dear Mr Horne,

I am writing to give the response of the UK Metric Association (UKMA) to the above consultation.

UKMA is an independent, non-party political, single issue organisation which advocates the full adoption of the international metric system ("Système International" - SI) for all official, trade, legal, contractual and other purposes in the United Kingdom as soon as practicable. UKMA is financed entirely by membership subscriptions and personal donations.

Our response is based on consultation with our members through a private internet forum and was approved by our Committee on 22 February 2010.

Introduction

Our comments are restricted to the units of measurement that are proposed to be used to indicate food energy content at "point of choice in catering establishments". As such our comments are mainly directed at the consultation document's questions Q1 and Q3.

Q1. Are there any other principles that you believe should be considered as part of the scheme? Please explain why.

Q3. Please let us have any comments on the details of specific principles. If you believe the principles should be changed, please explain how and why.

www.ukma.org.uk

*Patrons: The Rt Hon the Lord Howe of Aberavon, Kt, CH, QC;
Ian Taylor MP; The Lord Taverne, QC; Dr Nick Palmer MP*



The use of the kilojoule (kJ) vs. the use of the calorie (cal), Calorie (Cal), and kilocalorie (kcal)

We applaud the principle of giving consumers the ability to make purchasing decisions based on the energy content in food. However the consultation document's proposed continued use of obsolete measurement units presents several issues:

The "calorie" is often confused with, or used in equivalence to, the "kilocalorie". A convention is sometimes applied which attempts to avoid the inevitable misunderstanding that this causes. This involves the use of a capital letter 'C' when "calories" are to read as "kilocalories", such that:

$$1000 \text{ calories} = 1 \text{ kilocalorie} = 1 \text{ Calorie}$$

Indeed, the consultation document itself is a good illustration of this issue as it uses the word "calorie" erroneously in several instances where the word "kilocalorie" or "Calorie" is intended. e.g. Annex H, 7.3 :

"Note: "kcal" is used in these statements but "calories" should be substituted if "calories" are declared as the energy information at point of choice."

The consultation document acknowledges that ...

"36. To aid consumer understanding and contribute to consistency of labelling only one form of expression (either kcal or calories) should be used in an outlet. "

However, this stipulation will not prevent inconsistency of labelling across different establishments.

In their 1972 report on nutritional sciences, the Royal Society identified the problem of the continued use of calories to describe energy content of food. Its conclusions remain valid nearly 40 years later:

"We are very much aware of the problems that arise because as a result of 30 years of education the public has an awareness of the term 'calorie'. We cannot see any easy solution to the problem of substituting the concept that man has a requirement for the energy-yielding constituents derived from food, and this is measured in **joules**, ..."

"We recommend that editors of journals should not allow the use of the word 'calorie' and list below some obvious alternatives :

| | |
|---------------------|-------------------------|
| calorie intake | energy intake |
| calorie requirement | energy requirement ..." |

The Units Of Measurements Regulations, which implements Directive 80/181/EEC, requires that energy should be measured using the SI derived unit, the joule. The fact that the calorie is not an SI unit, and is not listed in the Directive, means that calories can only be authorised for use as supplementary indications, and should not appear more prominently than the primary measurement, in joules (J) or kilojoules (kJ).

Many packaged foods are already labelled in kilojoules (kJ).



Progressive countries such as Australia, have already adopted the kilojoule as the primary unit of energy to indicate energy content of food.

Conclusion

A single unit, the **joule**, used for all purposes regarding energy (not just food), will both benefit the consumer, and increase the general public's understanding of the concept of energy in general.

It is for these reasons that we strongly recommend that the opportunity that this consultation presents should be taken to begin the phasing out of the obsolete unit "calorie" in favour of the "joule" (which incidentally is named after the British scientist, James Prescott Joule).

I hope these comments, which are being submitted by post and e-mail, are helpful. I should appreciate a copy of the Department's response in due course.

Yours sincerely

Derek Pollard
Secretary

References:

REPORT OF THE ROYAL SOCIETY'S BRITISH NATIONAL COMMITTEE FOR NUTRITIONAL SCIENCES

METRIC UNITS, CONVERSION FACTORS AND NOMENCLATURE IN NUTRITIONAL AND FOOD SCIENCES

Report of the Subcommittee on Metrication of the British National Committee for Nutritional Science

Proc Nutr Soc. 1972 Sep;31(2):239-47.

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type=1&fid=980848&jid=PNS&volumeld=31&issuelid=02&aid=655296](http://journals.cambridge.org/action/displayFulltext?type=1&fid=980848&jid=PNS&volumeld=31&issuelid=02&aid=655296)

BIPM - *SI brochure* – unit of energy - joule

http://www.bipm.org/en/si/si_brochure/chapter2/2-2/table3.html

UK Metric Association (UKMA) (2004) *A very British mess* UKMA