

TECHNICAL ISSUES ON NUTRITION LABELLING

– ROUNDING RULES –

BACKGROUND

Rounding nutrient values is one of the steps in formulating nutrition labels. It involves the work of translating the results of nutrient analysis (i.e., direct analysis) or data from food composition database (i.e., indirect analysis) to labelling value of nutrients on food labels. Currently there is no internationally recognized rounding rules for nutrition information on food labels (i.e., rounding is not specified in the Codex Guidelines on Nutrition Labelling). However, rounding rules can be found in most nutrition labelling regulations/guidelines worldwide (Annex I).

SETTING ROUNDING RULES

2. Different rounding rules may be applied on different nutrients and/or different concentrations of the same nutrient. There are three common approaches to round energy and nutrient content values on nutrition labels: -

- i. Rounding by specifying the increment levels;
- ii. Rounding by means of significant figures; and
- iii. Rounding by means of decimal place.

3. Similar to tolerance limits, rounding rules may affect the compliance limits. Examples below show that the same label value with different compliance limits due to different rounding approaches.

Example 1 (assumed there is a $\pm 20\%$ tolerance limit): -

	Label value	Min pre-round	Max pre-round	20% tol.	Compliance limit (pre-round $\pm 20\%$ tol.)
0.5-g increment	1.5	1.25	1.74	0.30	0.95; 2.04
2 Significant figures	1.5	1.46*	1.54	0.3	1.16; 1.84
1 Decimal Place	1.5	1.45	1.54	0.30	1.15; 1.84

*According to "AS 2706-2003: Numerical values - Rounding and interpretation of limiting values", the value 1.45 would round to 1.4.

Example 2 (assumed there is a $\pm 20\%$ tolerance limit): -

	Label value	Min pre-round	Max pre-round	20% tol.	Compliance limit (pre-round $\pm 20\%$ tol.)
1-g increment	10	9.5	10.4	2.0	7.5; 12.4
2 Significant figures	10	9.95	10.4	2.0	7.95; 12.4
1 Decimal Place	10.0	9.95	10.04	2.0	7.95; 12.04

Proposed Rounding Rules for the Nutrition Labelling Scheme in Hong Kong

4. During the consultation exercise, the trade has repeatedly expressed their wish to have the same labelling scheme on nutrition information as the Mainland. Although the Mainland’s scheme is not yet forthcoming, they have already proposed a set of rounding rules. Taking the trade’s comments into consideration, it is proposed that the rounding rules proposed by the Mainland be adopted for the NL scheme in Hong Kong, details as follows : -

- Energy/Nutrient value expressed in gram with the value ≥ 10 : round to the nearest full integer; and
- Nutrient value expressed in g with value < 10 or in mg or μg ; round to one decimal place.

VIEWS SOUGHT

5. Representatives from the trade and laboratory services providers are invited to comment on the proposed rounding rules for the nutrition labelling scheme in Hong Kong.

Food and Environmental Hygiene Department

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