Nutrition Labelling:
A tool to implement WHO's strategy on promoting healthy diet

In 2004, WHA endorsed the Global Strategy on Diet, Physical Activity and Health (DPAS)
→ requested Codex to support implementation in its work

As part of implementing DPAS, WHO has been working with CCFL and CCNFSDU since 2005 to:

• Amend the aim of Codex Guidelines to include reference to reducing risk factors for NCDs
• Amend list of mandatory nutrients to be declared on labels of all pre-packaged food – sodium, total sugars, SFA and TFA
• Develop NRVs for nutrients associated with risk of NCDs – i.e. sodium and SFA developed based on WHO guidelines, potassium being reviewed at present
• Develop conditions for nutrients content claims for SFA and TFA – i.e. In the case of the claims for SFA and cholesterol, TFA should be taken into account where applicable.
WHO NCD Action Plan 2013-2020 (WHA 66.10)
Policy options for Member States: promoting a healthy diet

Such policies and programmes should include a monitoring and evaluation plan and would aim to:

(a) Appropriate breastfeeding practices
(b) Marketing of foods and non-alcoholic beverages to children
(c) Food producers and processors, other commercial operators, and consumers, to:
   - Reduce salt/sodium
   - Increase fruit and vegetables
   - Reduce/replace saturated fatty acids
   - Replace trans-fatty acids
   - Reduce sugars
   - Limit excess calorie intake, reduce portion size and energy density of foods.
(d) Food retailers/caterers to improve availability, affordability and acceptability of healthier food products
(e) Healthy food in all public institutions, i.e. schools, workplaces
(f) Economic tools, e.g. taxes and subsidies
(g) Healthy agricultural products and foods
(h) Evidence-informed public campaigns and social marketing
(i) Health- and nutrition-promoting environments
(j) Nutrition labelling, e.g. Codex Alimentarius
Landscaping of nutrition labelling (2006)
To develop effective implementation guidance, in early 2014 undertook a scoping on:

- Which countries are implementing nutrition labelling?
- What kind of nutrition labelling being implemented (i.e. front-of-pack, back-of-pack)?
- Is nutrition labelling voluntary or mandated by legislation?
- If mandated by legislation, what is the legislation or regulatory measure taken to ensure its implementation and monitoring? When was it adopted?
- What does the legislation encompass? Are there mandatory nutrients that should be included?
- Are they in line with the Codex guideline?
- Other relevant information?
WHO Catalogue of Nutrient Profile Models

- Draft of 4th March 2013
- 119 models identified - 54 met the inclusion criteria
- 12: food labelling
- 11: school food provision
- 9: marketing restrictions
- Only 19 of the included models have been validated in any way
# Nutrition labeling

## Nutrition

<table>
<thead>
<tr>
<th>Typical values</th>
<th>100g Each slice (typically contains 44g) contains</th>
<th>% RI* for an average adult</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>985kJ</td>
<td>8400kJ</td>
</tr>
<tr>
<td></td>
<td>235kcal</td>
<td>2000kcal</td>
</tr>
<tr>
<td>Fat</td>
<td>1.5g</td>
<td>70g</td>
</tr>
<tr>
<td>of which saturates</td>
<td>0.3g</td>
<td>20g</td>
</tr>
<tr>
<td>Carbohydrate</td>
<td>45.5g</td>
<td>90g</td>
</tr>
<tr>
<td>of which sugars</td>
<td>3.8g</td>
<td>2%</td>
</tr>
<tr>
<td>Fibre</td>
<td>2.8g</td>
<td>1.7g</td>
</tr>
<tr>
<td>Protein</td>
<td>7.7g</td>
<td>1.2g</td>
</tr>
<tr>
<td>Salt</td>
<td>1.0g</td>
<td>3.4g</td>
</tr>
</tbody>
</table>

This pack contains 16 servings

*Reference intake of an average adult (8400kJ / 2000kcal)

## PER 1 CUP SERVING

<table>
<thead>
<tr>
<th>140 CALORIES</th>
<th>1g SAT FAT</th>
<th>410mg SODIUM</th>
<th>5g SUGARS</th>
<th>1000mg POTASSIUM</th>
<th>VITAMIN A</th>
</tr>
</thead>
<tbody>
<tr>
<td>5% DV</td>
<td>17% DV</td>
<td>29% DV</td>
<td>20% DV</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## World Health Organization
## Colour coding in front-of-the-pack

### Food (per 100g)\(^3\)

<table>
<thead>
<tr>
<th>Substance</th>
<th>Green (low)</th>
<th>Amber (medium)</th>
<th>Red (high)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fat</td>
<td>less than 3g</td>
<td>between 3g and 20g</td>
<td>more than 20g</td>
</tr>
<tr>
<td>Saturated fats</td>
<td>less than 1.5g</td>
<td>between 1.5g and 5g</td>
<td>more than 5g</td>
</tr>
<tr>
<td>Sugar</td>
<td>less than 5g</td>
<td>between 5g and 12.5g</td>
<td>more than 12.5g</td>
</tr>
<tr>
<td>Salt</td>
<td>less than 0.3g</td>
<td>between 0.3g and 1.5g</td>
<td>more than 1.5g</td>
</tr>
</tbody>
</table>

### Drinks (per 100ml)\(^3\)

<table>
<thead>
<tr>
<th>Substance</th>
<th>Green (low)</th>
<th>Amber (medium)</th>
<th>Red (high)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fat</td>
<td>less than 1.5g</td>
<td>between 1.5g and 10g</td>
<td>more than 10g</td>
</tr>
<tr>
<td>Saturated fats</td>
<td>less than 0.75g</td>
<td>between 0.75g and 2.5g</td>
<td>more than 2.5g</td>
</tr>
<tr>
<td>Sugar</td>
<td>less than 2.5g</td>
<td>between 2.5g and 6.3g</td>
<td>more than 6.3g</td>
</tr>
<tr>
<td>Salt</td>
<td>less than 0.3g</td>
<td>between 0.3g and 1.5g</td>
<td>more than 1.5g</td>
</tr>
</tbody>
</table>
Which? performance testing of labelling schemes 2006

Ability to correctly identify the levels of key nutrients (%)

- FSA Traffic Lights (n = 160): 50% identify all 4 nutrient levels, 16% identify 3 nutrient levels, 18% identify 2 nutrient levels, 11% identify 1 nutrient level, 5% identify 0 nutrient levels.
- Tesco GDA (n = 159): 21% identify 3 nutrient levels, 34% identify 2 nutrient levels, 10% identify 1 nutrient level, 10% identify 0 nutrient levels.
- Manufacturers’ GDA (n = 159): 29% identify 3 nutrient levels, 28% identify 2 nutrient levels, 10% identify 1 nutrient level, 10% identify 0 nutrient levels.
- Tesco with Traffic Lights (n = 158): 27% identify 3 nutrient levels, 25% identify 2 nutrient levels, 26% identify 1 nutrient level, 10% identify 0 nutrient levels.

World Health Organization
Questions

• Is there a clear **rationale for government intervention** (regulation) in the area of nutrition labelling? How should governments calibrate their interventions in the nutrition labelling space?
  – Yes

• How **effective** is nutrition labelling as a means of mitigating the risk it intend to address, and how much do we know about different kinds of labels (for instance front of pack traffic light systems)?
  – Regulations can play a crucial role in enhancing the potential for nutrition labelling and health claims to promote health
Are **existing standards** a good basis for nutrition labelling schemes? Do we need more specific or different standards? Are they a good basis for regulation?

- Understanding NRVs – use of different values
- Use of WHO recommendations for healthy diet - Sugar reference in front of the pack
Nutrition labeling: evidence of effectiveness

• simple, front-of-pack or point-of-purchase labels on packaged foods or in grocery stores, cafeterias, vending machines, or restaurants, and menu labelling to support healthier options can be beneficial (Capacci et al. 2012)
• Nutrition labelling of TFA in Canada raised public awareness and concern, which resulted in a much broader initiative to reduce the amount of TFA in the entire food supply (L’Abbe et al. 2009)
• There is evidence that combining nutrition labelling with additional environmental and/or nutrition education measures can be even more effective in changing consumer behaviour and dietary consumption patterns (Mozaffarian et al. 2012).
• Worksite interventions have demonstrated that labelling foods based on more healthy versus less healthy criteria in conjunction with increased availability of the healthy options can increase the sale of the more healthy options.
• Vending machine prompts, labels, or icons to make healthier choices in the worksite can be successful interventions to change dietary patterns when they are combined with increased availability of healthier food options and/or the provision of nutrition standards for foods served in worksite (Mozaffarian et al. 2012).
• Additionally, combining of strategies to improve dietary patterns can result in greater health benefits than any one strategy and will be more cost-effective (Cecchini et al. 2010).
Labelling provides consumers with information about the nutritional properties of a food and health claims (statements connecting a food, food component or a nutrient to a state of desired health) provide information to consumers about the nutritional and health advantages of particular foods or nutrients.
- General Standard for the Labelling of Prepackaged Foods (Codex Stan 1_1985, revised 1991, 2001): labelling should not be false, deceptive nor misleading
- Guidelines on Nutrition Labelling (CAC/GL 2_1985, revised 1993): nutrition labelling be voluntary unless a nutrition claim is made
  - Revisions on mandatory nutrients; total sugars, sodium, SFA, TFA
  - NRVs
- General Standard for the Labelling of and Claims for Prepackaged Foods for Special Dietary Use (Codex Stan 146_1985): foods for special dietary uses display a nutrition label
- General Guidelines on Claims: food should not be presented in a manner that is false, misleading nor deceptive
- Guidelines for Use of Nutrition Claims: draft? “nutrient function”, “other function”, and “reduction of disease-risk” claims
Summary of the Codex Guidelines on Nutrition Labelling

• Nutrition labelling should be voluntary unless a nutrition claim is made.
• When a nutrition claim is made, declaration of four nutrients should be mandatory — energy, protein, available carbohydrate, fat — plus any other nutrient for which a claim is made.
• Where a claim is made for dietary fibre, dietary fibre should be declared.
• If a claim is made for carbohydrates, the amount of sugars should be listed as well as the four basic nutrients.
• When a claim is made on fatty acids, the amount of saturated and polyunsaturated fatty acids should be listed.
• Any other nutrient deemed by national legislation to be important for maintaining good nutritional status may also be listed.
• Nutrients should be listed per 100g or 100ml or per portion (provided that the number of portions is stated).
Summary of key clauses in the Codex Guidelines for Use of Nutrition Claims

• Nutrient claims should be consistent with national nutrition policy and support that policy.
• Nutrient claims are permitted for energy, protein, carbohydrate and fat and their components, and fibre, sodium, vitamins and minerals. Foods can be claimed as being low in, free of, high in, or a source of specified nutrients only if in accordance with nutrient reference values defined in the Guidelines.
• Claims related to dietary guidelines or healthy diets must be consistent with dietary guidelines.
• Foods should not be described as “healthy” or be represented in a manner that implies a food in and of itself will impart health.
• Any food with a nutrition claim should bear a nutrition label in accordance with the Guidelines on Nutrition Labelling.
Labelling environment in countries

• Mandatory
• Voluntary, unless a nutrition claim is made
• Voluntary, except certain foods with special dietary uses
• No regulations
## Nutrition Facts

**Serving Size** 1 cup (228g)  
**Serving Per Container** 2

<table>
<thead>
<tr>
<th>Amount Per Serving</th>
<th>Calories</th>
<th>Calories from Fat</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>250</td>
<td>110</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>% Daily Value*</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Fat 12g</td>
<td>18%</td>
<td></td>
</tr>
<tr>
<td>Saturated Fat 3g</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>Cholesterol 30mg</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Sodium 470mg</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>Total Carbohydrate</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Dietary Fiber 0g</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Sugars 5g</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protein 5g</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Quick Guide to % DV | 5% or less is Low | 20% or more is High |

- **Limit those Nutrients**
- **Got Enough of those Nutrients**

*Percent Daily Values are based on a 2,000 calorie diet. Your Daily Values may be higher or lower depending on your calorie needs.*

<table>
<thead>
<tr>
<th>Calories:</th>
<th>2,000</th>
<th>2,500</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Fat</td>
<td>Less than 65g</td>
<td>80g</td>
</tr>
<tr>
<td>Sat Fat</td>
<td>Less than 20g</td>
<td>25g</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>Less than 300mg</td>
<td>300mg</td>
</tr>
<tr>
<td>Sodium</td>
<td>Less than 2,400mg</td>
<td>2,400mg</td>
</tr>
<tr>
<td>Total Carbohydrate</td>
<td>300g</td>
<td>375g</td>
</tr>
<tr>
<td>Dietary Fiber</td>
<td>25g</td>
<td>30g</td>
</tr>
</tbody>
</table>

**Footnote**
Claim environment in countries

• Claims making reference to disease are specifically prohibited
• Specified disease risk-reduction claims are permitted
• Nutrient function and/or other function claims are permitted
• Specific framework to permit product specific health claims
• No regulations specific to health claims
Claims

• guidelines on health claims would have applied to advertising as well as labelling?
• Health claims may encourage the choice of and consumption of healthful products, but may also have the inadvertent effect of encouraging excessive intake of specific products or nutrients
• health claims made for food targeted at infants
Labelling and trade

• The differences in labelling and health claims regulations between countries may require food exporters to change their labels according to which country they export

• Although TBT does not explicitly mandate international harmonization to the Codex, the standards and guidelines are used as benchmarks to guide and judge national regulations

• Mandatory nutrition labelling is more stringent than the Codex guidelines
different label formats

• List of nutrients
• Quantifying nutrients
• action on nutrition labels and health claims need to be part of an integrated approach that tackles the increasing rates of diet-related non-communicable diseases at a population level, as well as targeting individuals.