

Professional Diploma in Nutrition

Module 1

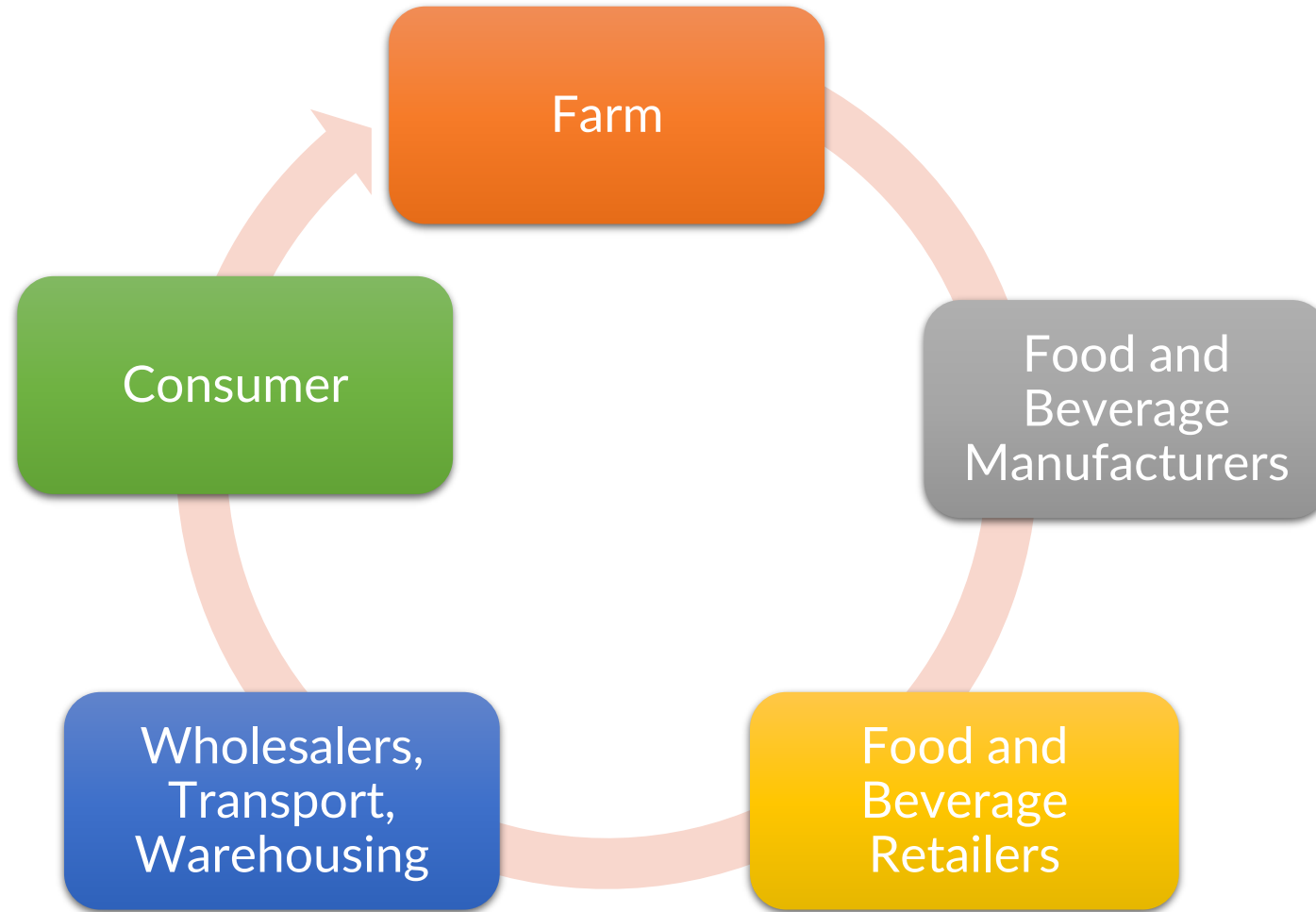
Lesson 8: Specialised Diets



EQF Level 5
Professional Diploma



From Farm to Fork



Food labelling awareness

- Often false claims are made
- Foods may claim to be good for you but are packed with harmful ingredients
- If you don't know how to read a food label it is near to impossible to make healthy food choices
- Believe it or not but food industries do not always have your best interests at heart
- It is your responsibility to make an informed decision!!

nutrient	per 100g	per 1/4 pack	% adult daily intake
Energy	1007	2014	20%
Total Fat	24g	48g	48%
Saturated Fat	8.4g	16.8g	37%
Carbohydrates	20.6g	41.2g	17%
Sugars	1.8g	3.6g	4%
Salt	18.8g	37.6g	39.1%
Fiber	13.7g	27.4g	57.0%
Protein	5.7g	11.4g	7.5%
Iron	5.9g	11.8g	16.7%
Calcium	1.5g	3.0g	16%
Vitamin C	0.9g	1.8g	16%
Vitamin D	0.50g	1.00g	16%
Vitamin E	0.20g	0.40g	16%

Guideline Daily Amounts are based on UK government guidelines and personal requirements, gender, weight and activity level

Labelling legislation

1. Europe: European Commission

New Food Information Regulation 1169/2011/ EU replaces the current labelling rules and will apply from 13th December 2014

2. United States: FDA

3. Canada: Health Canada through Food and Drugs Act

4. Australia and New Zealand: Food Standards Australia New Zealand (FSANZ)

5. Asia- all different authorities e.g. Singapore Food Regulations

Nutrition F

Serving size:

Calories:

Total fat	...g
Saturated fat	...g
Cholesterol	...g
Sodium	...g
Total carbohydrate	...g
Dietary Fiber	...g
Sugar	...g
Protein	...g

Vitamin A	...%	Vitamin C
Calcium	...%	Iron

Percent Daily Values are based on 2.000 calorie diet. Values may be higher or lower depending on your calorie requirements.

What's on a food label?

Date Marking

This is the 'Use By', 'Sell By' and 'Best Use Before' date. It gives the date by which the food should be eaten.

Product Name

Usually beside the brand name. Tells you what the food is.

Net Weight

This gives the actual weight of the food excluding the packaging. For canned foods packed in liquid, the net weight is the weight of the drained food.



Ingredient List

This shows all the ingredients that make up the product. The ingredients are listed in descending order by weight.

Nutrition Information

This panel shows the nutrients found in one serving or in 100 g / 100 ml of the food.

Usage Instructions

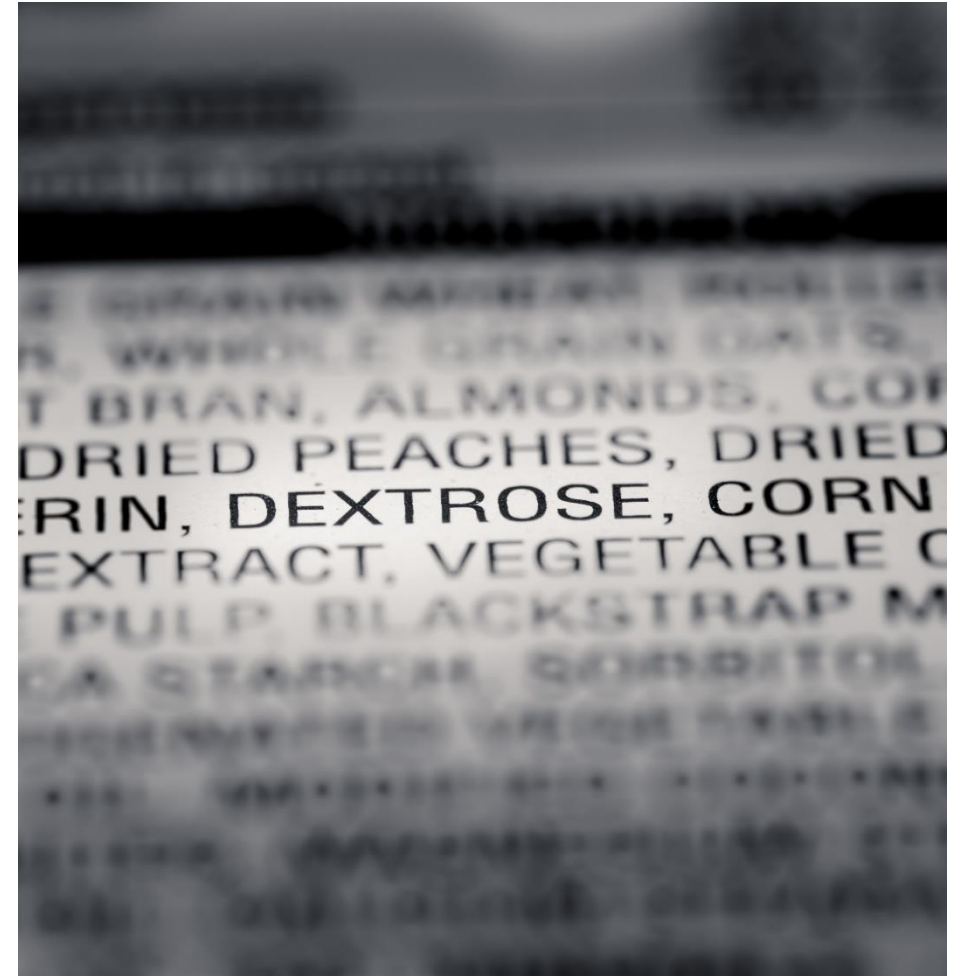
These are instructions for storing or using the product.

Manufacturer's Details

Every label includes the name and address of the manufacturer, importer or distributor.

List of Ingredients

- Side of package
- Show what product contains
 - ✓ Including additives
- Contents in order of order of amount
 - ✓ Descending order
- Must highlight allergens
 - ✓ Nuts
 - ✓ Eggs
 - ✓ Soya
 - ✓ Gluten
- “May Contain”
 - ✓ Precautionary



Allergens

- Certain ingredients or substances can cause allergies in consumers. These MUST be declared!

Allergens	
Cereals containing gluten	Shellfish
Eggs	Fish
Soybeans	Milk
Celery and celeriac	Mustard
Sesame seeds	Sulphur dioxide and sulphites (SO ²)
Peanuts	Tree nuts
Molluscs	Lupins



EGG FREE



GMO FREE



NUTS FREE



SUGAR FREE



Expiration dates?

USE BY
01-01-07

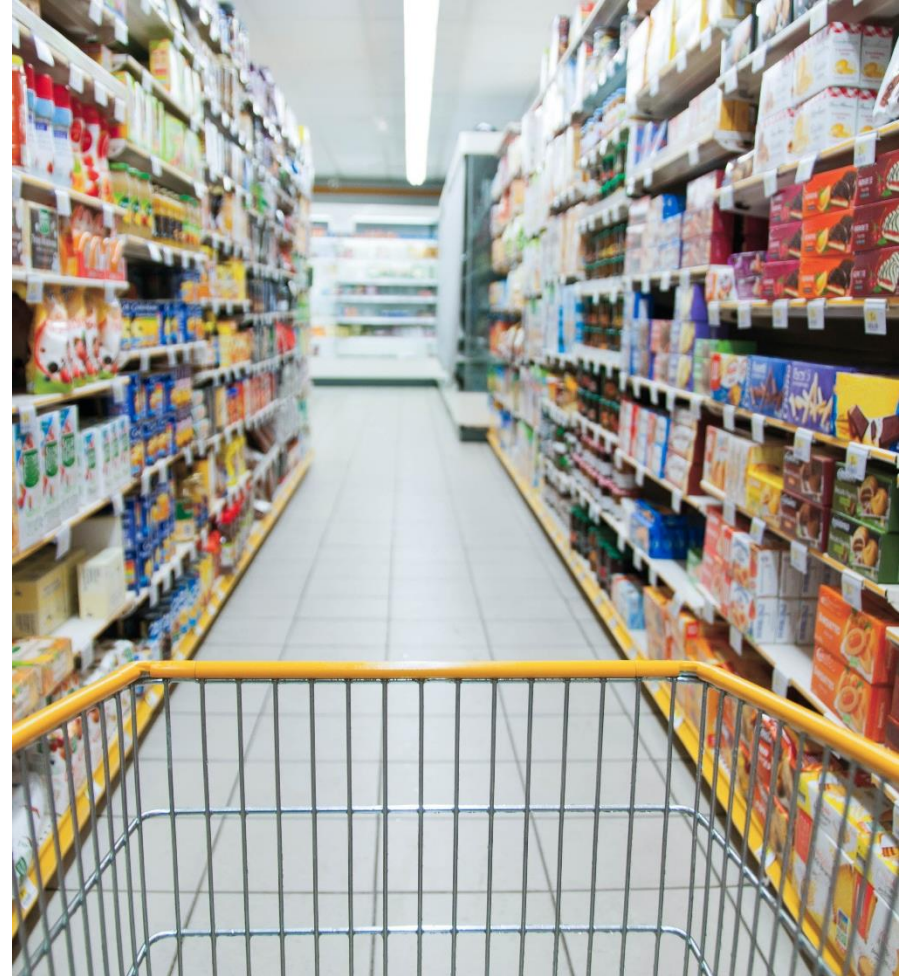
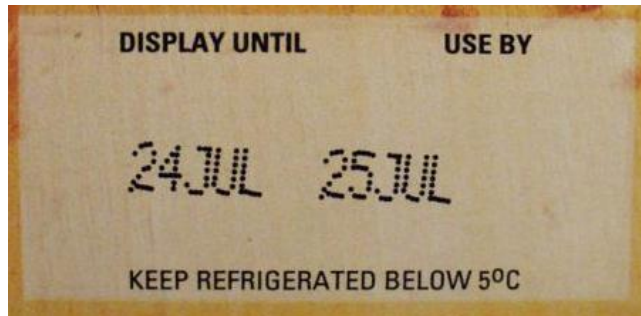
- Go off quickly: Smoked fish, Meat products, Ready-made salads.
- Don't use after this date - put health at risk
- Follow manufacturers guidelines upon opening product

BEST BEFORE
01-01-07

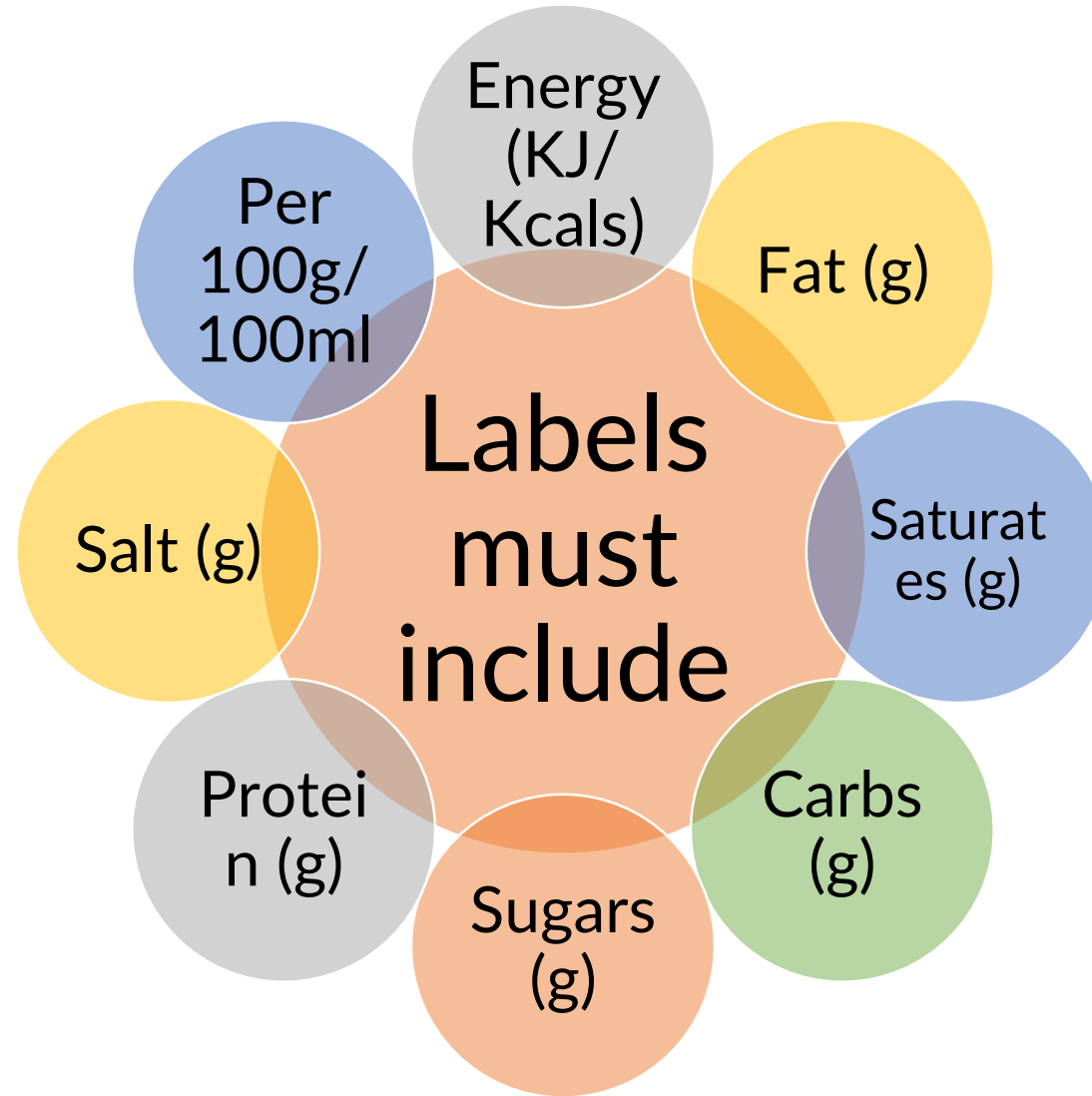
- Frozen, dried, tinned
- Quality: Not safety
- Food not harmful when date passed - begin to lose flavour & texture
- Legal to sell after best before date- usually discounted

Important to Note

- Display Until
- Sell By
- Instructions for shop staff
- Not for consumer
- Focus on 'Use By' and 'Best Before'

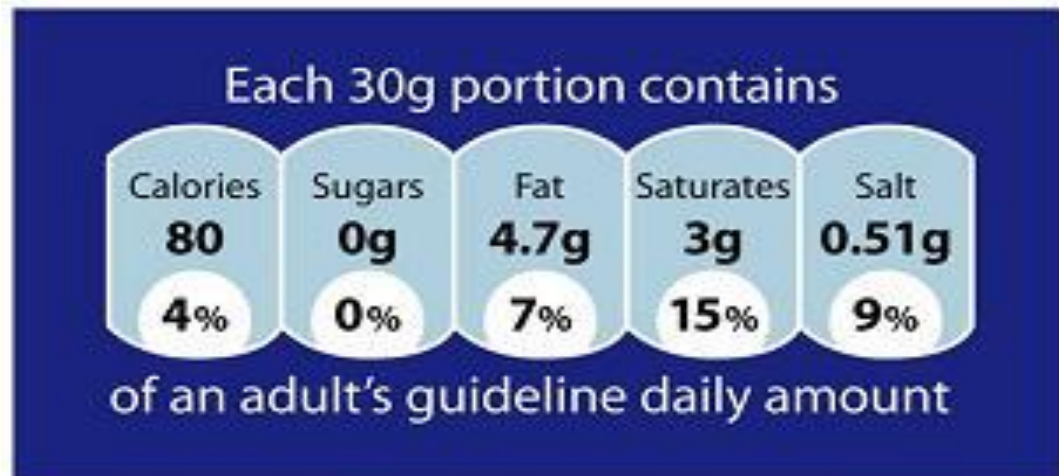
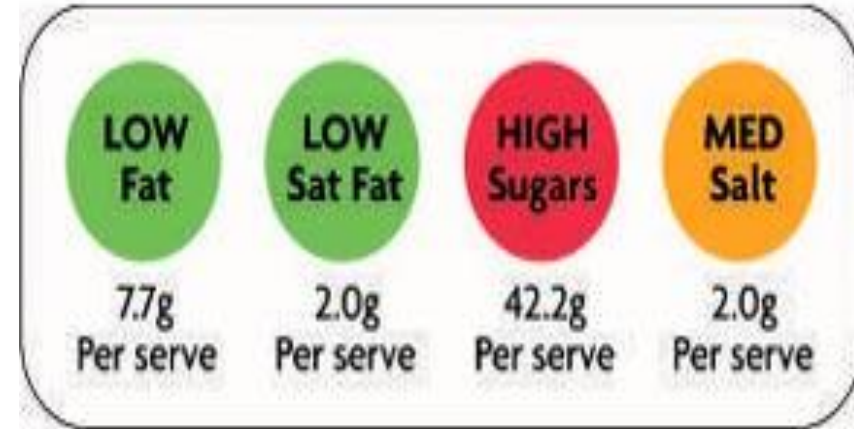


Nutrition Information



Nutritional Information: Quick Guides

Traffic Light System

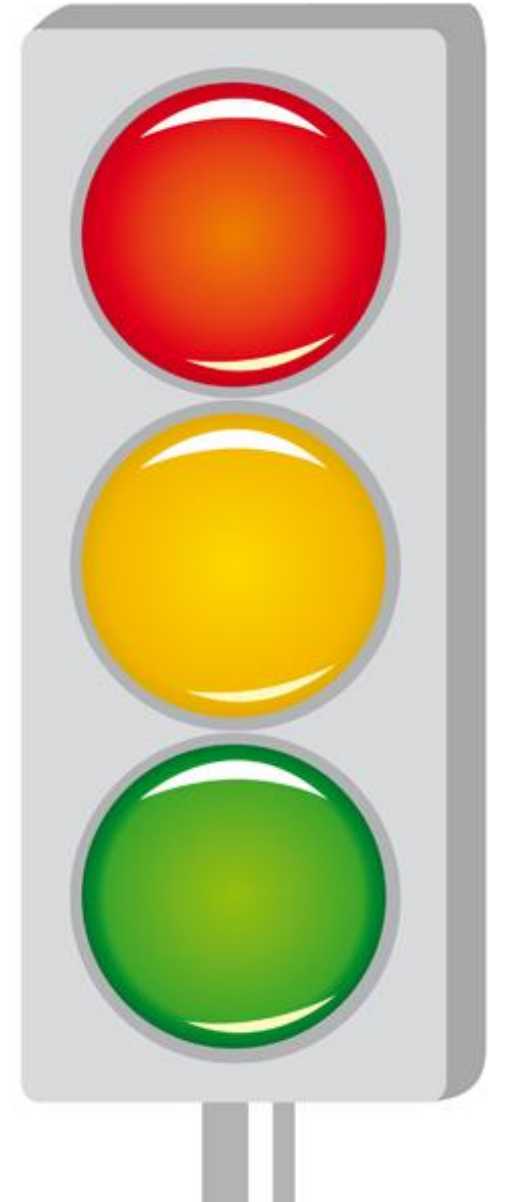


Guideline Daily Amount

Traffic Light System

Benefits:

- Front of package
- Easy to understand
- Universal
- Easy to compare food products
- Nutritional content at a glance



Traffic Light System



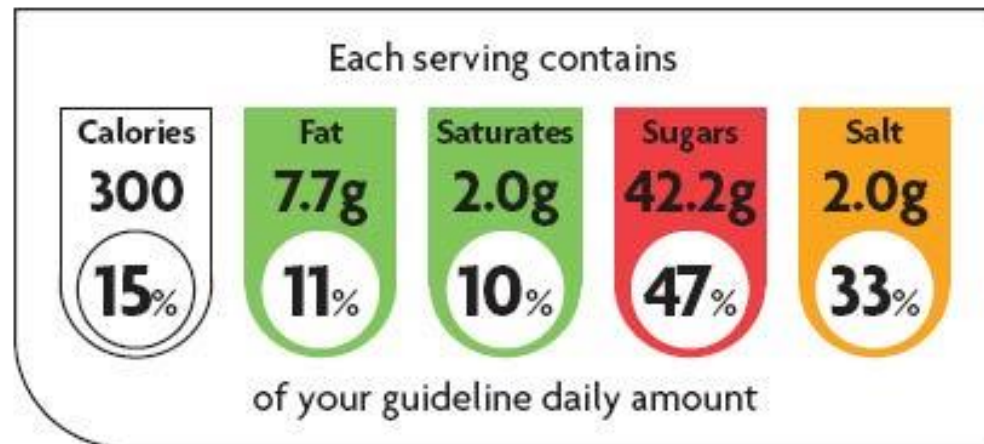
HIGH: Enjoy once in a while

MEDIUM: OK most of the time

LOW: Go for it

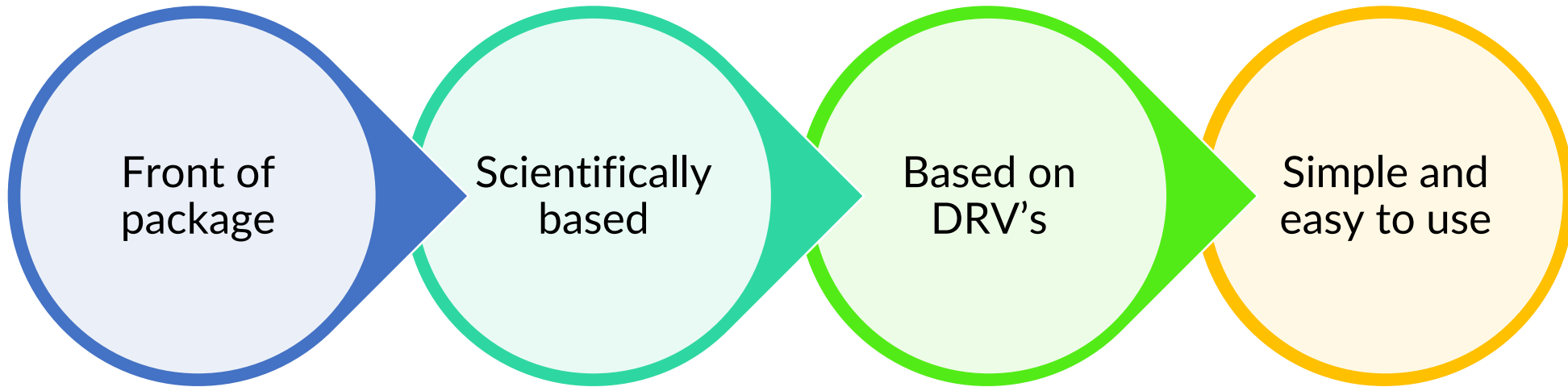
Example

Medium fat	Low saturate fat	High sugars	High salt
7.7g per serving	2.0g per serving	42.2g per serving	2.0g per serving



Guideline Daily Amount

- Help make sense of nutrition information: Calories, Fat, Saturates, Sugar and Salt
- Averages for men & women daily - healthy adults & children
- GDA's not individual based
- Very difficult to achieve GDA's in one day



Guideline Daily Amount



PER 60g SERVE

Nutrition Facts
Serving Size 1 Cup Cherries (156g / 4.5oz)

Amount Per Serving	
Calories 87	Calories from Fat 2
% Daily Value*	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 0mg	0%
Total Carbohydrates 27g	7%
Dietary Fiber 3g	12%
Sugars 16g	
Protein 1g	
Vitamin A 2%	Vitamin C 18%
Calcium 2%	Iron 3%

*Percent Daily Values are based on a diet of other people's secrets.

	Calories	2,000	2,500
Total Fat	Less than	65g	80g
Saturated Fat	Less than	35g	45g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,300mg
Total Carbohydrate		300g	375g
Dietary Fiber		40g	50g

Spartan
World's Strongest People

Examples

This icon provides information about the energy content of one serving of the product that you intend to eat. In this example, each serving of product contains 226 Calories (or kcal) of energy.

Each serving contains



of your guideline daily amount

This is the percentage of your daily calorie allowance contained in a product serving. In this example, each serving of product covers 11 % of the daily energy allowance (2000 kcal): $226/2000 \times 100 = 11 \%$

Nutrition information			
Typical values	Per 100g	Per 1/4 pot	% based on GDA for women
Energy	256 kJ 61 kcal	320 kJ 76 kcal	3.8%
Protein	4.9g	6.1g	13.6%
Carbohydrate	6.9g	8.6g	3.7%
of which sugars	6.9g	8.6g	9.6%
of which starch	nil	nil	-
Fat	1.5g	1.9g	2.7%
of which saturates	0.9g	1.1g	5.5%
mono-unsaturates	0.4g	0.5g	-
polyunsaturates	nil	nil	-
Fibre	nil	nil	nil
Salt	0.2g	0.3g	5.0%
of which sodium	trace	0.1g	4.2%
Vitamins & minerals			% of RDA Recommended daily amount
Calcium	168mg	210mg	26%

Shopping Tips

Ready Made Meals

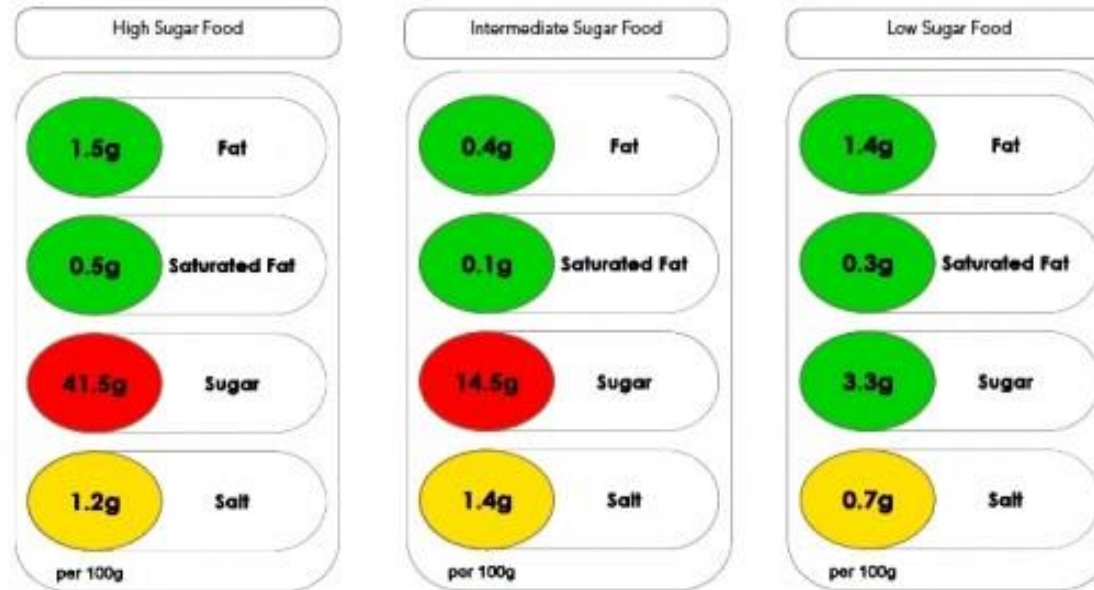


- Nutrition label on front?
- Compare product energy, fat, saturated fat , sugar and salt

Colour coding used?



- Go for the product with the most amber and greens and the least reds



Nutritional Claims

- Regulated by each country
- Rules for use of nutritional claims
 - Any claim made on food label
 - Accurate
 - Based on evidence
 - Food Safety Authority
- Foods with false nutrition claims
 - Mislead consumer
 - Removed from market



What conditions must be fulfilled?

- Claims must be easy to understand for the consumer
- Must be present in a form that can be used by the body
- Product must contain sufficient quantities of nutrients
- Scientific evidence



Food Additives

Appear on labels as E-numbers

Common Additives	
Acids/ alkalis	Flavour Enhancers
Anti-caking agents	Foaming Agents
Antioxidants	Gelling Agents
Bulking Agents	Glazing Agents
Colourings	Humectants
Emulsifiers	Preservatives
Firming Agents/stabilisers	Sweeteners

E-Numbers

Needs to be approved by European Food Safety Authority before obtaining an E-number

Series	Function	Example	
E100	Colours	E102	Tartrazine- yellow colour for drinks and confectionary
E200	Preservatives	E210	Benzoic acid, preservative in beer
E300	Antioxidants	E321	BHT-helps prevent fats going rancid
E400 +	Miscellaneous	E415	Xanthan gum- stabiliser or thickener used in salad dressing

Awareness of Special Diets

- You could be giving harmful advice to someone who requires specialised dietary advice
- You could end up suffering from diet related diseases long-term
- You must be aware of reasons why people eat what they eat
- Nutrition is not always straight forward!

Special Diets

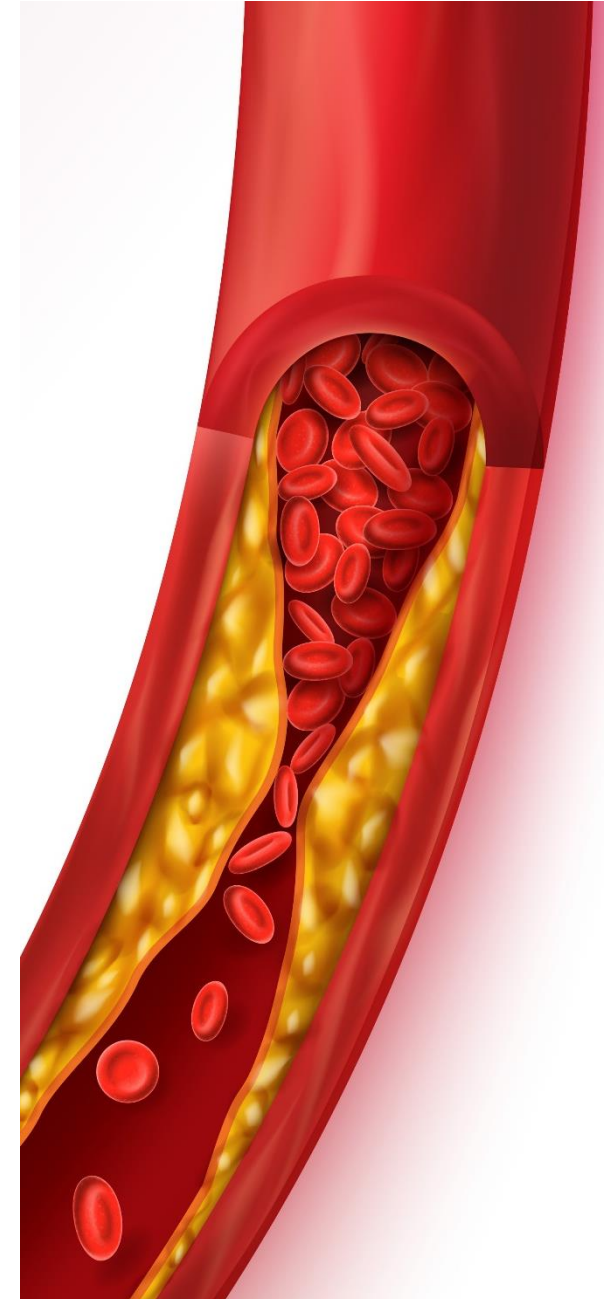
- Religious beliefs
 - Coeliac
- Lactose Intolerance
- Reduced calorie
- Diabetes type 2

Special Dietary Considerations



Lowering Cholesterol

- Eat less saturated fat- commonly found in meat and dairy: butter, cream, cheese, full fat dairy, meat and meat products e.g. sausages and pudding
- Avoid trans fats- in processed foods and hydrogenated oils
- Choose low fat cooking method
- Trim fat off meat
- Choose unsaturated oils e.g. olive or rapeseed oil
- Increase your fibre intake e.g. fruit & veg/wholegrains
- Beans/lentils- 3-4 times a week (fibre)
- Beta-glucan- found in barley- can help lower cholesterol
- Plant sterols/stanols- 1.5-2.4g/day- reduce cholesterol 7-10% in 3 weeks



Diabetes Diet

- No special diet
- Healthy eating
- Regular activity
- Maintaining a healthy weight
- Tablets or insulin may be needed where diabetes is poorly controlled



Plant Based Diet

Lacto-Vegetarians - eat dairy foods but exclude meat, fish, poultry and eggs as well as foods that contain them

Lacto-ovo vegetarians - eat dairy products and eggs but exclude meat, fish or poultry

Ovo-vegetarians - eat eggs but avoid all other foods including dairy

Vegans - avoid all animal products and animal by-products e.g. honey, fur



Plant Based Diet

	Dairy/fish	Vegetable
Protein	eggs, milk, cheese, yoghurt	beans, lentils, chickpeas, tofu, quorn, soya, nuts, seeds
Iron	Dried beans and peas, lentils, fortified breakfast cereal, dark green leafy veg	
Vitamin C	Strawberries, oranges, tomatoes, citrus fruits, cabbage and broccoli	
Calcium	milk, cheese, yoghurt	Dark green veg, fortified breads, nuts, peas, lentils, tofu and dried fruit
Vit D (sunlight)	oily fish, eggs, dairy foods	Fortified breakfast cereal
Vit B12	eggs, yeast extract, soya milks and yoghurts, textured vegetable protein and fortified breakfast cereals.	
Omega 3 Fatty acids	canola oil, walnuts, soy oil, ground flaxseeds and soy beans	

Coeliac Disease

- Permanent intolerance to gluten
- **Gluten:** Protein found in wheat, barley, oats and rye
- **Consumption** - damages small bowel
- **Reduced** absorption of nutrients
- **Results in:** weight loss, anaemia, fatigue
- **Cause:** unknown
- **Treatment:** follow a life-long gluten free diet
- **Complications:** Osteoporosis, cancer



Lactose Intolerance

- Unable to digest lactose
- Naturally occurring sugar in milk
- Found in milk, cheese, yoghurts
- Body produces little or no Lactase (enzyme needed to break down lactose)

3 types;

1. Hereditary
2. Primary
3. Secondary



Lactose Intolerance

Feel unwell 30mins to 2 hours after eating a lactose containing food.

Symptoms:

- Diarrhoea
- Excess wind
- Bloating
- Cramps
- Nausea

** Overall not considered harmful to health



Professional Diploma in Nutrition

Module 1

Q&A | Congratulations - Module 1 Complete

