Zig Zag Education

Food and Nutrition **GCSE (9–1) | AQA | 8585**

2016 specification
first exams in 2018

Ingredient Cards

For GCSE AQA Food Preparation and Nutrition

Sauces, Stocks, Reductions & Condiments

zigzageducation.co.uk **POD 7730a**

Contents

Teacher's Introduction

This resource is designed to help you teach and discover the fascinating world of food we eat every day. Ingredient Cards are written with in mind the students who have chosen the challenge of studying the new subject – AQA GCSE Food Preparation and Nutrition.

What it covers

This part of Ingredient Cards introduces carefully chosen food ingredients – some to represent British cuisine and some to introduce world foods. The resource comprises 24 Sauces and Condiments sheets and 11 Task sheets.

How to use this resource

This resource covers all aspects of the new AQA GCSE specification for Food Preparation and Nutrition and is designed to increase the knowledge, improve the skills, arouse the curiosity and trigger the creativity of those using it.

Each Ingredient Card is dedicated to one ingredient. You can print and laminate these so that they can be safely used in the kitchen, without the risk of staining or damaging them.

- **What is It?** Briefly describes what a given sauce or condiment is made from and provides some trivia to make it more interesting for the student.
- **Common Cuisines**. This part indicates where a given ingredient comes from and where it is usually used in the world.
- **Nutritional Information**. Contains data about macro- and micronutrients present in a given food ingredient, both in 100 g and in a portion or piece, to help evaluate the nutritional value of the dishes made using it. It is presented in the form of a table, containing information about macro- and micronutrients as required by the AQA GCSE specification.

If there is a '-' it means that there is no data available about the given nutrient. If there is a '0' it means that the ingredient does not contain the given nutrient.

- **Health Benefits**. Indicates the health benefits of consuming the given food ingredient, with special attention to vitamins, minerals, unsaturated fats, protein, phytosterols, naturally occurring antioxidants and essential oils (where applicable).

IMPORTANT:
If a product contains cholesterol, or any other substances not listed in the table, it is indicated in the 'allergy and health risks' section.

Please bear in mind that nutritional data is estimated, and may differ depending on the brand, ingredients used, storage conditions and any processing applied to the food during manufacturing.

- **Allergy and Health Risks**. Points out the main health hazards relating to the consumption of a given food ingredient, including the risk of an allergic reaction.
- **Alternatives**. Contains a list of other food products which can be used instead of the described ingredient in case of shortage, health conditions or other reasons why the original ingredient cannot be used.
- **Cooking Uses**. A catalogue of culinary uses of a given food ingredient. Indicates whether it can be eaten alone or cooked, and whether there are any special requirements for cooking or preparation (where applicable). It also lists the kinds of dish in which the ingredient can be used, in order to fully appreciate its features and value.
- **Storage**. Conditions in which to store the given product in order to preserve its nutritional value, colour, texture and flavour.

The sauces and condiments are combined into small groups, and each group is followed by a **Task sheet** focused on the given ingredients. The purpose of each Task sheet is to check students' knowledge and encourage them to research more information, as well as experiment with the ingredient and discover its potential in cooking. Each task has been assigned a reference number to help cover the whole spectrum of the AQA GCSE Food Preparation and Nutrition specification. Simply copy one Task sheet per student for them to work on either during the lesson or at home. There are also exemplary answers to help you assess your students' progress and determine more challenging exercises which require more effort.

The nutritional data is, in most cases, based on the United States Department of Agriculture database and McCance and Widdowson Composition of Foods database for Great Britain.

Where appropriate, other sources of information have been used, such as FODMAPer application issued by Monash University and label information for products most popular in Great Britain.

Specification Specific Information

The Ingredient Cards contain a wide range of information, including data about vitamins and minerals. Please note that the nutritional values supplied do not always reflect the requirements of the AQA GCSE specification for Food Preparation and Nutrition, as they provide additional data on potassium and magnesium.

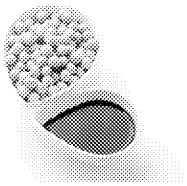
We believe that the additional information provided will broaden the students' knowledge and improve their understanding of how nutrients work together in the human body.

However, there is no need for students to focus on the vitamins or minerals not covered by the specification. The following table indicates which vitamins and minerals the AQA specification covers.

Minerals		
Calcium		✓
Iron		✓
Sodium		✓
Fluoride		✓
Iodine		✓
Phosphorus		✓
Potassium		
Magnesium		
Vitamins		
Fat soluble	Vitamin A	✓
	Vitamin D	✓
	Vitamin E	✓
	Vitamin K	✓
Water soluble	Vitamin B1 (Thiamine)	✓
	Vitamin B2 (Riboflavin)	✓
	Vitamin B3 (Niacin)	✓
	Vitamin B9 (Folic acid)	✓
	Vitamin B12 (Cobalamin)	✓
	Vitamin C (Ascorbic acid)	✓

September 2017

1. Soy Sauce



What is It?

Soy sauce is the product of fermenting soy beans and wi
from *Aspergillus* family.

Common Cuisines:

Soya is a co in ient used in Asian cooking, and was originally developed i as a method of preserving and salting foods.

Nutritional Information:

These values may differ between similar products.

Nutritional value: typical value	Per 100 g	Per 1 tsp (approx. 6 g)
Energy	60 kcal	4 kcal /
Macronutrients		
Fat	0.10 g	0.01 g
Saturated fats	0.011 g	0.001 g
Monounsaturated fats	0.017 g	0.001 g
Polyunsaturated fats	0.044 g	0.003 g
Carbohydrates	5.57 g	0.33 g
Starch (polysaccharides)	-	-
Sugars (mono- and disaccharides)	1.70 g	
Fibre	g	0.10 g
Protein	10.51 g	0.63 g
Micronutrients		
Vitamin A	0	0
Vitamin D	0	0
Vitamin E	0	0
Vitamin K	0	0
Vitamin B1 (Thiamine)	0.059 mg	0.004 mg
Vitamin B2 (Riboflavin)	0.152 mg	0.009 mg
Vitamin B3 (Niacin)	3.951 mg	0.237 mg
Folic acid	0	0
Vitamin B12	0	0
Vitamin C (Ascorbic acid)	0	0
Calcium	20 mg	g
Iron	2.38	4 mg
Sodium	5.6 g	335 mg
Fluoride	-	-
Iodine	-	-
Phosphorus	130 mg	8 mg
Potassium	212 mg	13 mg
Magnesium	40 mg	2 mg

g – grams, **mg** – milligrams, **mcg** – micrograms

Nutritiona

Health Benefits:

Soy sauce is low in saturated fat
great source of group B vitamin
phosphorus. It also provides ad

Soy sauce is a great source of so
proper conduction of nerve sign
controls water balance in the bo
less sodium than a teaspoon of
is rec to obtain the desired
rs s sodium intake under co

Soy sauce is also a source of soy
natural antioxidants, protecting
of free radicals.

Allergy and Health Risks:

Most soy sauces contain wheat,
individuals who suffer from coel
wheat allergies.

With its high sodium content, so
consumed in reduced amounts,
thereby increasing blood volum
pressure (and can cause other ca

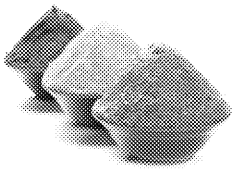
Alter

For a glut n-free alternative, u
co tle gluten – do check
F wer sodium intake, use r

Cooking Uses:

- **Spray** on top of a dish as
- **Mix** into a marinade for f
  work too)
- **Splash** into stews and sti
- **Spice up** sauces for meat
- **Dip in**, e.g. with sushi

2. Miso



What is It?

Thick, salty paste made from soy, rice, barley and other in
with Aspergillus oryzae mould (a
i). Available in jars,

Common Cuisines:

Miso is very popular in Ja
t is used to prepare the famous miso soup, and as
gent in many dishes.

Nutritional Information:

These values may differ between similar products.

Nutritional value: typical value	Per 100 g	Per 1 tbsp (17 g)
Energy	198 kcal	34 kcal
Macronutrients		
Fat	6.01 g	1.02 g
Saturated fats	1.025 g	0.174 g
Monounsaturated fats	1.118 g	0.19 g
Polyunsaturated fats	2.884 g	0.49 g
Carbohydrates	25.37 g	4.31 g
Starch (polysaccharides)	-	-
Sugars (mono- and disaccharides)	6.2 g	1.05 g
Fibre	5.4 g	0.9 g
Protein	12.79 g	2.17 g
Micronutrients		
Vitamin A	4 mcg	1 mcg
Vitamin D	0	0
Vitamin E	-	-
Vitamin K	29.3 mcg	5 mcg
Vitamin B1 (Thiamine)	0.098 mg	0.017 mg
Vitamin B2 (Riboflavin)	0.233 mg	0.04 mg
Vitamin B3 (Niacin)	0.906 mg	0.154 mg
Folate	19 mcg	3 mcg
Vitamin B12	0.08 mcg	0.01 mcg
Vitamin C (Ascorbic acid)	0	0
Calcium	57 mg	10 mg
Iron	2.49 mg	0.4 mg
Sodium	3728 mg	634 mg
Fluoride	-	-
Iodine	0	0
Phosphorus	159 mg	27 mg
Potassium	210 mg	36 mg
Magnesium	48 mg	8 mg

g – grams, **mg** – milligrams, **mcg** – micrograms

Nutrition

Health Benefits:

As with many other fermen
probiotic bacteria, which su
digestive system. Due to hi
vitamin B12, miso can be u
vegetarian and vegan recip
it still has less than classic k
instead of it in dishs, provid
adding a slightly brown col

Allergy and Health Risks:

Miso can contain barley – a
its content to make sure it's
sodium and protein makes
kidney diseases, and for tho
fact that over 50% of soybe
modified may be important

Alter

For use in soups, stews ar
cube.
For use as a dip, substitute
tahini.
For pickling, use vinegar.

Cooking Uses:

- **flavour** to soups, s
- **mprove** salad dressings
  mushrooms
- **Add** when making Japa
- **Spice up** marinades for
- **Use** as a dip for vegetabl
- **Dissolve in water** to ea
  as a main or side dish
- **Spread** onto sushi, or le

3. Fish Sauce

What is It?

Fish sauce is made by ferment[illegible] with salt. The result is liquid with an umami [illegible]te [illegible].

Common [illegible]ines:

Fish sauce is used to prepare many dishes, especially in Vietnamese, Japanese and Korean cuisines.

Nutritional Information:

These values may differ between similar products.

Nutritional value: typical value	Per 100 g	Per 1 tbsp (15 g)
Energy	35 kcal	6 kcal
Macronutrients		
Fat	0.01 g	0
Saturated fats	0.003 g	0
Monounsaturated fats	0.002 g	0
Polyunsaturated fats	0.003 g	0
Carbohydrates	3.64 g	0.66 g
Starch (polysaccharides)	0	0
Sugars (mono- and disaccharides)	[illegible]	0.66 g
Fibre	0	0
Protein	5.06 g	0.91 g
Micronutrients		
Vitamin A	4 mcg	1 mcg
Vitamin D	0	0
Vitamin E	0	0
Vitamin K	0	0
Vitamin B1 (Thiamine)	0.012 mg	0.002 mg
Vitamin B2 (Riboflavin)	0.057 mg	0.01 mg
Vitamin B3 (Niacin)	2.313 mg	0.416 mg
Folate	51 mcg	9 mcg
Vitamin B12	0.48 mcg	0.09 mcg
Vitamin C (Ascorbic acid)	0.5 mg	0.1 mg
Calcium	43 mg	8 mg
Iron	0.78 mg	0.14 mg
Sodium	7851 mg	1413 mg
Fluoride	-	
Iodine	-	-
Phosphorus	7 mg	1 mg
Potassium	288 mg	52 mg
Magnesium	175 mg	32 mg

g – grams, **mg** – milligrams, **mcg** – micrograms

Nutritional

Health Benefits:

Fish sauce is quite unique a[illegible] because it contains vitamin[illegible] performance of the nervous[illegible] healthy red blood cells. It p[illegible] prevent[illegible] anaemia. Fish sauc[illegible] a[illegible]ugh all of them come f[illegible] magnesium, which supports[illegible] tablespoon provides 10% o[illegible]

Allergy and Health Risks:

Since it's made of fish, it sh[illegible] Also, it is very high in sodiu[illegible] suffering from hypertensio[illegible]

Alte[illegible]

For saltiness, replace with [illegible]
For flavour, use anchovies [illegible]

Cooking Uses:

- **Stir into** curries, stews, [illegible]
- **Spice up** marinades, es[illegible] [illegible]u[illegible]ry
- **Improve the flavour** of [illegible]
- **Add** to home-made chu[illegible]

1. Research and list five recipes that use miso to help complement the fl

   i. .....

   ii. .....

   iii. .....

   iv. .....

   v. .....

2. Briefly describe the production of soy sauce from soybeans. [3.6.2.1]

   .....

   .....

   .....

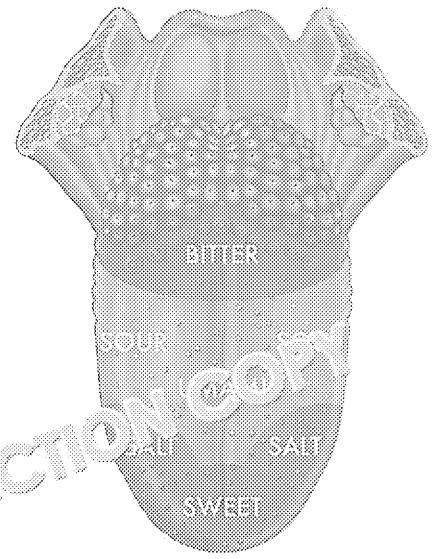
   .....

3. Soy sauce is common in Chinese cooking. Name two other cultures or soy sauce is common. [3.5.2]

   .....

   .....

4. Circle as of the tongue that would be most receptive to soy sau

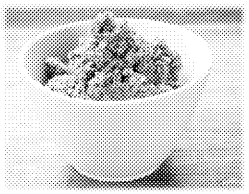


No
buds
not

Extension (3.5.3):

Complete a ranking test for between three and five different soy sauces of soy sauce ranks highest for the area of the tongue you circled in Que

4. CURRY PASTE



What is It?

Curry paste is a thick mixture made from various spices b
usually contains lemongrass, garlic, shallot, ginger, curry p
dried chilli (red curry), green and Kaffir lime (green c
may also use some kind of fish, which would change the n
of the prod

Common

Curry paste is especially commonly used in Indian and Thai cuisines, where it is used to prepare yellow, red or green curry.

Nutritional Information:

These values may differ between similar products.

Nutritional value: typical value	Per 100 g	Per 1 tbsp (15 g)
Energy	253 kcal	38 kcal
Macronutrients		
Fat	21.3 g	3.2 g
Saturated fats	-	-
Monounsaturated fats	-	-
Polyunsaturated fats	-	-
Carbohydrates	11.3 g	1.7 g
Starch (polysaccharides)	4.3 g	0.65 g
Sugars (mono- and disaccharides)	7 g	1.05 g
Fibre	6.8 g	1.02 g
Protein	4.7 g	0.7 g
Micronutrients		
Vitamin A	-	-
Vitamin D	-	-
Vitamin E	-	-
Vitamin K	-	-
Vitamin B1 (Thiamine)	0.09 mg	0.014 mg
Vitamin B2 (Riboflavin)	0.13 mg	0.02 mg
Vitamin B3 (Niacin)	1.8 mg	0.27 mg
Folic acid	-	-
Vitamin B12	-	-
Vitamin C (Ascorbic acid)	0	0
Calcium	150 mg	22.5 mg
Iron	12.8 mg	1.92 mg
Sodium	1520 mg	228 mg
Fluoride	-	-
Iodine	0	0
Phosphorus	110 mg	16.5 mg
Potassium	-	-
Magnesium	-	-

g – grams, **mg** – milligrams, **mcg** – micrograms

Nutritional

Health Benefits:

As with many other hot spi
improve digestion and stim
gastric juices. Its componen
chemicals which can preven
many other diet-related dis
ingredients work as antibio
alleviating a blocked nose.

Allergy and Health Risks:

The turmeric in curry can in
to avoid curry if you're taki
awaiting surgery. Excessive
stomach ache, nausea and d
spiciness and high sodium c

Alte

For colour, use garam mas
For colour and aroma, try
For spiciness and colour, u

Cooking Uses:

- **Splash into** marinades
- **Add** to sauces, curries, s
- **Spice up** a salad dressi
- **Infuse** rice/quinoa/cous
- **Add** a hint to a bread d
  and colour, best served
- **Mix into** stuffing, e.g. f
- **Sprinkle onto** pastes a

5. Coconut Milk (Cann

What is It?

A thick, creamy liquid made of pressed/squeezed coconut fle
Depending on the quality, the canned product will have from
coconut extract. Also a pure crea[illegible]onut (sometimes w
preservative) is available i[illegible]which need to be dissolve
a coconut milk.

Common Cuisines:

Coconut m[illegible]or[illegible]non cooking ingredient, often added to curries, de[illegible]s and cocktails to make them sweet and creamy. It is most popular in Asian and Caribbean cuisines.

Storage:
Sealed cans can
temperature. Or
a non-metallic co

Nutritional Information:

These values may differ between similar products.

Nutritional value: typical value	Per 100 g	Per 1 tbsp (15 g)
Energy	197 kcal	11 kcal
Macronutrients		
Fat	21.33 g	3.2 g
Saturated fats	18.915 g	2.84 g
Monounsaturated fats	0.907 g	0.136 g
Polyunsaturated fats	0.233 g	0.035 g
Carbohydrates	2.81 g	0.42 g
Starch (polysaccharides)	0	0
Sugars (mono- and disaccharides)	[illegible]	0.74 g
Fibre	0	0
Protein	2.02 g	0.3 g
Micronutrients		
Vitamin A	0	0
Vitamin D	0	0
Vitamin E	-	-
Vitamin K	-	-
Vitamin B1 (Thiamine)	0.022 mg	0.003 mg
Vitamin B2 (Riboflavin)	0	0
Vitamin B3 (Niacin)	0.637 mg	0.096 mg
Folate	14 mcg	2 mcg
Vitamin B12	0	0
Vitamin C (Ascorbic acid)	1 mg	0.1 mg
Calcium	18 mg	3 mg
Iron	3.3 mg	[illegible] mg
Sodium	[illegible]	2 mg
Fluoride	[illegible]	-
Iodine	-	-
Phosphorus	96 mg	14 mg
Potassium	220 mg	33 mg
Magnesium	46 mg	7 mg

g – grams, **mg** – milligrams, **mcg** – micrograms

Nutritiona

Health Benefits:

The name of the coconut i
fruit, and, therefore, may u
with nut allergies. It is low i
group B vitamins, such as n
also provides potassium, n
blood pressure. Although
th[illegible]namely lauric acid
ir[illegible]eases the HDL ('good' c
and, therefore, lowers the
Studies have proven that M
fatty acids are beneficial fo
metabolism ratio and preve

Allergy and Health Risks:

Coconut milk is often prese
which are important allerg
avoid health complications
used in moderation.

Alte

For the creamy texture, t
silken tofu.
For colour and fewer calo
cheese or cream.
[illegible]w etness, replace wit

Cooking Uses:

- **Simmer** to make a curry
- **Use instead of** cow's mi
  panna cotta, puddings (e
  creams...
- **Boil** to cook rice and qu
  bit if it's too thick)
- **Shake or blend** to make
  as pina colada)

CURRY PASTE AND COCONUT MILK – T

1. List the ingredients of yellow, green and red curry pastes. Underline th

   Yellow curry .....

   .....

   Green curry .....

   .....

   Red cu .....

   .....

2. Evaluate which is healthier: cow's milk or coconut milk. Justify your rea

   .....

   .....

   .....

   .....

3. Coconuts are very hard and cause around 15 th each year. Can y are so hard that it's almost impossib o br k them open? [3.5.2, 3.7]

   .....

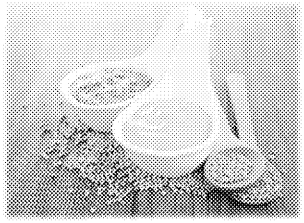
   .....

Extension (3.2.3.3):

Create a consumer's guide in which you compare five different brands c can either go to a shop and photograph the labels or find some on the i

Pay extra attention to the amount of coconut extract and preservatives ingredients? Which brand would you recommend, and why?

6. MUSTARD



What is It?

Thick sauce made from whole or ground mustard se
water, vinegar, salt and flavourings. There are many
from bright yellow to da w , from sweet and m
and from smooth to gr

Common Cuisines:

Dijon must n e by the French in the thirteenth century and is seen as a cl ement of French cuisine. In England, mustard was known from the end of the fourteenth century – although the flavour differed from the French one. Today, mustard is especially popular in Europe and the USA.

Sto
Usua
open

Nutritional Information:

These values may differ between similar products. Data shown is for Colman's mustard, or is an estimated average where no data was available.

Nutritional value: typical value	Per 100 g	Per 1 tsp (5 g)
Energy	195 kcal	10 kcal
Macronutrients		
Fat	12 g	0.6 g
Saturated fats	0.7 g	0.1 g
Monounsaturated fats	-	-
Polyunsaturated fats	-	-
Carbohydrates	13	0.7 g
Starch (polysacc		-
Sugars (m d disaccharides)	13 g	0.7 g
Fibre	2.6 g	0.13 g
Protein	6.8 g	0.5 g
Micronutrients		
Vitamin A	0	0
Vitamin D	0	0
Vitamin E	1.06 mg	0.053 mg
Vitamin K	1.1 mcg	0.055 mcg
Vitamin B1 (Thiamine)	0.169 mg	0.008 mg
Vitamin B2 (Riboflavin)	0.055 mg	0.003 mg
Vitamin B3 (Niacin)	0.994 mg	0.05 mg
Folate	34 mcg	1.7 mcg
Vitamin B12	0	0
Vitamin C (Ascorbic acid)	1.5 mg	0.075 mg
Calcium	56 mg	mg
Iron	e mg	0.1 mg
Sodium	3400 mg	170 mg
Fluoride	-	-
Iodine	-	-
Phosphorus	174 mg	8.7 mg
Potassium	152 mg	8 mg
Magnesium	48 mg	2 mg

g – grams, **mg** – milligrams, **mcg** – micrograms

Nutritional

Health Benefits:

The mustard seed content
because most of mustard'
seeds. Mustard seeds are a
(important for the nerve c
pressure low) and seleniu
ca e . They are also rich
n cessary for healthy eyes
seeds stimulate the work o
pancreas, improving diges

Allergy and Health Risks:

Mustard seeds are an imp
indicated on food labels. T
condiment makes it inapp
hypertension or kidney dis
irritate the stomach, espec
stomach ulcers.

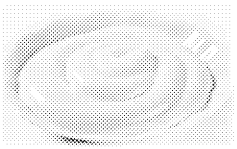
Alte

For colour and spiciness,
For texture and creamine
For hotness, replace with h

Cooking Uses:

- **Use as a sauce** with
burgers and hot dog
- **Splash** into a vinaigr
- **Spice up** marinades
- **Improve the flavou**
cream soup, sauces a
- **Blend** into mayonna
- **Emulsify** a hollanda
- **Cook** to make a Dut
- **Mix into** stuffing, e.g

7. MAYONNAISE



What is It?

Thick sauce made from oil, egg yolk, vinegar and flavour
yolk is an emulsifier and helps to s lise the mixture.

Common Cuisines:

The name 'mayonnaise' su nes from France – but many sources indic at ated in Spain! (Although, the French popularised ay, mayonnaise is most popular in European countries.

Nutritional Information:

These values may differ between similar products. Data shown is for Hellmann's mayo, or is an estimated average where no data was available.

Nutritional value: typical value	Per 100 g	Per 1 tbsp (13 g)
Energy	692 kcal	90 kcal
Macronutrients		
Fat	77 g	10 g
Saturated fats	11.54 g	1.5 g
Monounsaturated fats	19.23 g	2.5 g
Polyunsaturated fats	46.15 g	6 g
Carbohydrates	2.4 g	0.31 g
Starch (polysaccharides)	-	-
Sugars (mono- and disaccharid		0.5 g
Fibre	-	-
Protein	0	0
Micronutrients		
Vitamin A	78 mcg	10.14 mcg
Vitamin D	0	0
Vitamin E	22.1 mg	2.87 mg
Vitamin K	0	0
Vitamin B1 (Thiamine)	0	0
Vitamin B2 (Riboflavin)	0.1 mg	0.013 mg
Vitamin B3 (Niacin)	0.1 mg	0.013 mg
Folate	9 mcg	1.17 mcg
Vitamin B12	0.3 mg	0.039 mg
Vitamin C (Ascorbic acid)	0	0
Calcium	2 mg	0.26
Iron	0.16	.021 mg
Sodium		90 mg
Fluoride	-	-
Iodine	7 mcg	0.91 mcg
Phosphorus	5 mg	0.65 mg
Potassium	20 mg	3 mg
Magnesium	1 mg	0 mg

g – grams, **mg** – milligrams, **mcg** – micrograms

Sto
Seale
ambie
keep r

Nutritional A

Health Benefits:

Any benefits of mayonnaise
provides vitamin A, group B
source of lecithin, which im
memory and ability to focu
increases immunity and im
blood to the cells. Some be
other ingredients, such as m
usu very small quanti

Allergy and Health Risks:

Each tablespoon of mayo c
10 g of fat. Together they n
vessels – forming plaque an
risk of heart attack or stroke
sodium content, which incre
the kidneys. Since it is very
low-calorie diets.

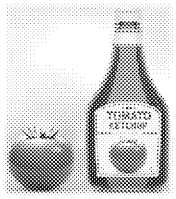
Alte

For texture and colour, rep
For texture and creamine
For flavour, replace with m
For a better nutritional va
For texture and better nut

Co ing Uses:

- **Use as a dressing** in sala
  coleslaw
- **Splash onto** sandwiches
- **Serve with** meats, cold c
  eggs, frittata...
- **Improve** other sauces, e
- **Cream or blend** to make
- **Decorate** salads, devilled
  finger foods
- **Pour over** chips – Belgia

8. Ketchup



What is It?

Thick sauce made from tomatoes, sugar, vinegar, seasoning a
tomatoes used the better, as they provide itamins, antioxidan

Common Cuisines:

Tomato ketchup as t was popularised only at the beginning of the twentie un the USA. From there, it spread worldwide, and is now a popu diment in Australia, Europe, South Africa, India and many other countries.

Sto
Onc

Nutritional Information:

These values may differ between similar products. Data shown is for Heinz ketchup or is an estimated average where no data was available.

Nutritional value: typical value	Per 100 g	Per 1 tbsp (15 g)
Energy	102 kcal	15 kcal
Macronutrients		
Fat	0.1 g	0
Saturated fats	0	0
Monounsaturated fats	-	-
Polyunsaturated fats	-	-
Carbohydrates	23.2 g	3
Starch (polysaccharides)	-	
Sugars (mon and disaccha	8 g	3.4 g
Fibre	0.9 g	0.135 g
Protein	1.2 g	0.2 g
Micronutrients		
Vitamin A	79 mcg	11.85 mcg
Vitamin D	0	0
Vitamin E	1.01 mg	0.15 mg
Vitamin K	-	-
Vitamin B1 (Thiamine)	1 mg	0.15 mg
Vitamin B2 (Riboflavin)	0.09 mg	0.0135 mg
Vitamin B3 (Niacin)	2.1 mg	0.315 mg
Folate	1 mcg	0.15 mcg
Vitamin B12	0	0
Vitamin C (Ascorbic acid)	2 mg	0.3 mg
Calcium	13 mg	1.95 mg
Iron	0.3 mg	0.04
Sodium	720	108 mg
Fluoride	-	-
Iodine	0	0
Phosphoru	31 mg	4.65 mg
Potassium	350 mg	52 mg
Magnesium	19 mg	2.85 mg

g – grams, **mg** – milligrams, **mcg** – micrograms

Nutrition

Health Benefits:

What makes the tomato re
which – good news – is ab
It is a potent antioxidant, s
in the skin and slows dow
in the prevention of heart
studies are ongoing.

Allergy and Health Risks:

Ketchup – like many other
so it has to be avoided by
also quite high in sugar, so
suffering from diabetes, in
blood sugar levels.

Alte

For colour and flavour, u
pesto sauce.
For colour, replace with re
For flavour, use chilli or B

Cooking Uses:

- **Pour** over chips.
- **Splash** onto sandwiche
- **Spice up** marinades, e
- **Blend** to make a dress
- **Spice up** soups, sauce
- **Make dressings**, such
  sauce and sweet-and-

MUSTARD, MAYONNAISE AND KETCHUP –

1. Ketchup, mustard and mayonnaise are the most popular sauces in the
consider the healthiest, and why? [3.2.3.1, 3.2.3.3]

I think the healthiest sauce is.....

This is because .....

.....

.....

2. For a 16-year-old of your gender, calculate the percentage of RNI pro
Then colour-code the label using the traffic light labelling system to in
reflects your nutritional needs. [3.2.3.1, 3.2.3.3, 3.5.1.3]

Nutritional value: typical value	RNI for me	Per 100 g
Energy		692 kca
Fat		77 g
saturates		11.54 g
Sugars (mono- and disaccharides)		3.85 g
Sodium		692 m

L	Fat	Saturates	Sugars	Salt
692 kcal	77 g	11.54 g	3.85 g	1.73 g
___%	___%	___%	___%	___%

3. Briefly describe how mayonnaise is made and what the functions of ea
3.6.2.1]

.....

.....

.....

Ingredient 1: _____ Function(s): _____

Ingredient 2: _____ Function(s): _____

Ingredient 3: _____ Function(s): _____

Ingredient 4: _____ Function(s): _____

Ingredient 5: _____ Function(s): _____

4. What are the indicators of a good-quality ketchup? What would you p
buying a ketchup? [3.4.2.1, 3.5.1.1, 3.5.1.2, 3.2.3.3]

.....

.....

.....

.....

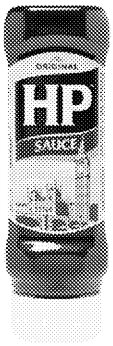
5. Indicate three ha[illegible]el[illegible]its and three disadvantages of tomato ketch

Health benefit	Di

Extension (3.5.3)

Complete a ranking test for five different types of mustard. Assess the s
colour and taste of each one. Are there any other features you could as
carrier?

9. HP Brown Sauce



What is It?

Very popular in Great Britain. Sauce made from tomatoes, malt vineg
sugar and flavourings.

Common Cuisines

HP brown sauce is one of the most popular condiments in
Britain. It was created at the end of the nineteenth century in
Nottingham. In 2014, 13 million kilograms of the sauce were
sold in the UK alone!

Sto
Once

Nutritional Information:

These values may differ in other brands of brown sauce.

Nutritional value: typical value	Per 100 g	Per 1 tbsp (15 g)
Energy	122 kcal	18 kcal
Macronutrients		
Fat	0.1 g	0
Saturated fats	0	0
Monounsaturated fats	-	-
Polyunsaturated fats	-	-
Carbohydrates	28.3 g	4.2 g
Starch (polysaccharides)	5.8 g	0.87 g
Sugars (mono- and disaccharides)	23.1 g	3.5 g
Fibre	1.1 g	0.2 g
Protein	0.9 g	0.1 g
Micronutrients		
Vitamin A	7 mcg	1.05 mcg
Vitamin D	0	0
Vitamin E	-	-
Vitamin K	-	-
Vitamin B1 (Thiamine)	0.09 mg	0.014 mg
Vitamin B2 (Riboflavin)	0.06 mg	0.007 mg
Vitamin B3 (Niacin)	0.1 mg	0.015 mg
Folate	5 mcg	0.75 mg
Vitamin B12	0	0
Vitamin C (Ascorbic acid)	0	0
Calcium	23 mg	3.45 mg
Iron	2.12 mg	0.36 mg
Sodium	520 mg	78 mg
Fluoride	-	-
Iodine	-	-
Phosphorus	14 mg	2.1 mg
Potassium	221 mg	33 mg
Magnesium	36 mg	5.4 mg

g – grams, **mg** – milligrams, **mcg** – micrograms

Nutritional

Health Benefits:

Health benefits of brown s
and – less so – from dates
vitamins and antioxidants.
calories.

Allergy and Health Risks:

As with any other condime
should be avoided if you h
issues. Also, it is high in su
diabetics. It contains barley
gluten, so it should be avo

Alte

For acidity and flavour, r
For the sweet-and-sour t
vinegar and maple syrup.

Cooking Uses:

- **Splash onto** meat pie
bacon, chips...
- **Serve with** eggs and c
- **Add to** sandwiches, so
- **Spice up** marinades, e

10. Worcester Sauc

What is It?

Flavouring sauce made from a mixture of barley and spirit vinegar, m
anchovies and various herbs and spices, mat together for 18 mo

Common Cuisines:

The modern was invented in 1830 in Worcestershire, E nd, gained popularity at the beginning of the th century. It is now used worldwide as a flavouring.

Sto
Once
Do no

Nutritional Information:

These values may differ between similar products.

Nutritional value: typical value	Per 100 g	Per 1 tbsp (15 g)
Energy	79 kcal	13 kcal
Macronutrients		
Fat	0	0
Saturated fats	0	0
Monounsaturated fats	0	0
Polyunsaturated fats	0	0
Carbohydrates	19.45 g	3.3 g
Starch (polysaccharides)	-	-
Sugars (mono- and disaccharides)	10.03 g	1.71 g
Fibre		0
Protein	0	0
Micronutrients		
Vitamin A	5 mcg	1 mcg
Vitamin D	0	0
Vitamin E	0.08 mg	0.01 mg
Vitamin K	1 mcg	0.2 mcg
Vitamin B1 (Thiamine)	0.07 mg	0.012 mg
Vitamin B2 (Riboflavin)	0.13 mg	0.022 mg
Vitamin B3 (Niacin)	0.7 mg	0.119 mg
Folate	8 mcg	1 mcg
Vitamin B12	0	0
Vitamin C (Ascorbic acid)	13 mg	2.2 mg
Calcium	107 mg	18 mg
Iron	5.3 mg	0
Sodium	980 mg	mg
Fluoride		-
Iodine	mcg	0.15 mcg
Phosphorus	60 mg	10 mg
Potassium	800 mg	134 mg
Magnesium	13 mg	2 mg

g – grams, **mg** – milligrams, **mcg** – micrograms

Nutritional

Health Benefits:

Since Worcester sauce is pa
contains some calcium and
absorbed by the body. It al
vitamins, which are necessa
foods. The garlic and onion
immunity, while vitamin C i

Allergy and Health Risks:

it contains anchovies,
Worcester sauce should be
fish. As with other condime
therefore, shouldn't be eate
hypertension or kidney dise
sugar in each spoonful, so i
people who wish to lose we

Alte

For flavour and colour, try
vinegar.
For saltiness, use soy sauc

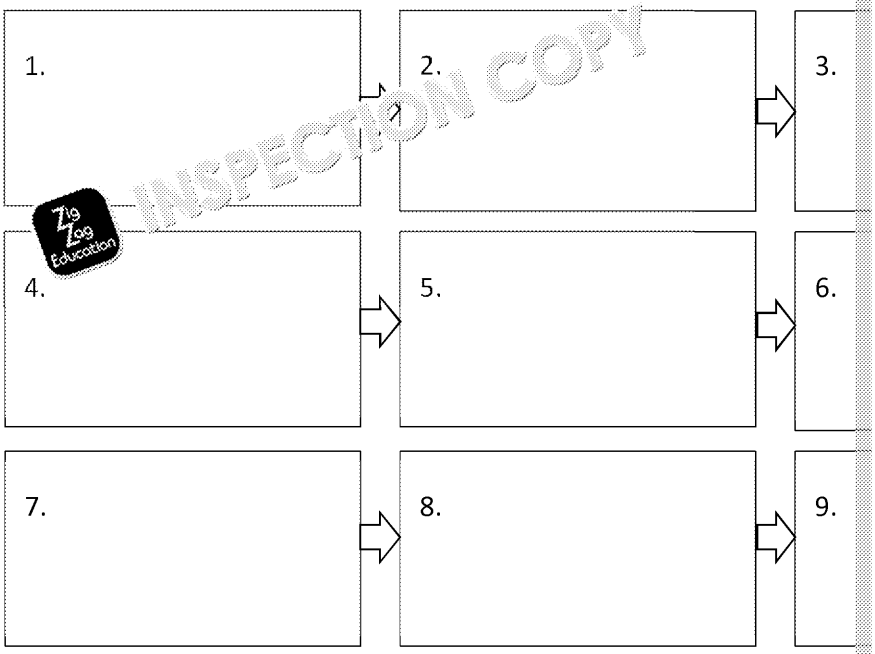
You can make your own sa
soy sauce, cider or vinegar,

Cooking Uses:

- Always shake before u
sediment that settles a
- **Spice up** marinades fo
- **Add to** minced meat
- **Splash into** stews, dip
- **Serve with** casseroles
- **Pour over** wraps
- **Blend** into drinks and

HP BROWN SAUCE AND WORCESTER SAUCE: BR
– TASK SHEET

1. Outline how Worcester sauce is made. [3.6.2.1]



2. Indicate with what health conditions the overconsumption of HP sauc be avoided. [3.2.3.1, 3.2.3.4]

.....

.....

.....

3. What kind of date mark should be included on a bottle of HP sauce, a

.....

.....

4. Can Worcester sauce be considered a perishable food? Justify your an

.....

.....

5. What ingredient is used in the production of both H sauce and Worc

.....

Extens 7, 3

Try prep your own brown sauce. What ingredients will you use, an your sauce with one of the brand sauces available on the market, and ir

11. Tabasco Sauce


What is It?

Very hot sauce made from chilli peppers with vinegar and sa
three years in oak whisky barrels. The ness of Tabasco sa
2,500 SHU and 5,000 SHU on the Scoville scale. Today, there
the sauce, differing in colour, main ingredients and spiciness
version of chilli sauce, chipotle sauce, which is made from s

Common Uses:

Tabasco is a popular condiment in the USA, where it is used to prepare marinades for meat and seafood, and nacho dips.

Storage:
Store in a cool p
direct sunlight (a
opening, the colo
but this won't aff

Nutritional Information:

These values may differ between similar products.

Nutritional value: typical value	Per 100 g	Per 1 tsp. (approx. 5 g)
Energy	12 kcal	1 kcal
Macronutrients		
Fat	0.76 g	0.04 g
Saturated fats	0.106 g	0.005 g
Monounsaturated fats	0.061 g	0.003 g
Polyunsaturated fats	0.401 g	0.019 g
Carbohydrates	0.8 g	0
Starch (polysaccharides)	-	
Sugars (m nd disaccha	0.13 g	0.01 g
Fibre	0.6 g	0
Protein	1.29 g	0.06 g
Micronutrients		
Vitamin A	82 mcg	4 mcg
Vitamin D	0	0
Vitamin E	0.01 mg	0
Vitamin K	0.2 mcg	0
Vitamin B1 (Thiamine)	0.032 mg	0.002 mg
Vitamin B2 (Riboflavin)	0.084 mg	0.004 mg
Vitamin B3 (Niacin)	0.178 mg	0.008 mg
Folate	2 mcg	0
Vitamin B12	0	0
Vitamin C (Ascorbic acid)	4.5 mg	0.2 mg
Calcium	12 mg	
Iron		0.05 mg
Sodium	633 mg	30 mg
Fluoride	-	-
Iodine	-	-
Phosphorus	23 mg	1 mg
Potassium	128 mg	6 mg
Magnesium	12 mg	1 mg

g – grams, **mg** – milligrams, **mcg** – micrograms

Nutritional

Health Benefits:

Capsaicin from the chilli pe
and anti-inflammatory age
ghrelin, it helps to reduce h
pe who are trying to lo
vi ally calorie-free, which
other sauces and condime
sodium, the amount of Tab
a teaspoon) is usually safe,

Allergy and Health Risks:

As Tabasco sauce is very h
desensitisation of the taste
small quantities. Its ingredi
reactions, so it's always bes
potential allergens.

Alte

For hotness, replace with chill
For the sour taste, use vinega
For colour and spiciness, use
For very hot flavour, use cay
For milder hotness, try using
For very mild flavour, replac

Cooking Uses:

- **Spice up** marinades, sa
- **Add** to guacamole or
- **Blend into** cocktails, s
  such as gazpacho
- **Season** salads, sandwi
  tacos, tortillas, omelett
- **Stir into** rice and pasta
- **Splash into** chocolate

12. BBQ Sauce

What is It?

Type of sauce made from vinegar, tomato paste, liquid smoke a

Sto
Once

Common

The first BB was manufactured in Atlanta, USA. From there it spread to Eur

Nutritional Information:

These values may differ between similar products.

Nutritional value: typical value	Per 100 g	Per 1 tbsp (15 g)
Energy	129 kcal	19 kcal
Macronutrients		
Fat	0.2 g	0
Saturated fats	0	0
Monounsaturated fats	-	-
Polyunsaturated fats	-	-
Carbohydrates	29 g	4.4 g
Starch (polysaccharides)	6.2 g	0.93 g
Sugars (mono- and disaccharides)	27.8 g	4
Fibre		0.075 g
Protein		0.2 g
Micronutrients		
Vitamin A	84 mcg	12.6 mcg
Vitamin D	0	0
Vitamin E	0.91 mg	0.14 mg
Vitamin K	0	
Vitamin B1 (Thiamine)	0.03 mg	0.004 mg
Vitamin B2 (Riboflavin)	0.02 mg	0.003 mg
Vitamin B3 (Niacin)	0.4 mg	0.06 mg
Folic Acid	5 mcg	0.75 mg
Vitamin B12	0	0
Vitamin C (Ascorbic acid)	3 mg	0.45 mg
Calcium	17 mg	2.55 mg
Iron	0.6 mg	0.09 mg
Sodium	600 mg	90 mg
Fluoride	-	-
Iodine	1 mcg	
Phosphorus	27	mg
Potassium		37 mg
Magnesium	13 mg	2 mg

g – grams, **m** rams, **mcg** – micrograms

Nutrition

Health Benefits:

As BBQ sauce contains tom
it may provide potential he
lycopene and antioxidants.
necessary for proper growt
bones, and vitamin C, whic

Allergy and Health Risks:

read the label of e
be different, and differe
allergens. BBQ sauce is hig
avoided by people with hy
Also, the high content of su

Alte

For colour and acidity, us
For colour and flavour, tr
For flavour, replace with V
For the smoky aroma, use

Cooking Uses:

- **Spice up** marinades fo
- **Pour over** sandwiches
  chops, steaks, grilled
- **into** baked beans
- **Add a kick** to spaghe

Tabasco sauce and BBQ sauce – T

1. Compare the labels of three different BBQ sauces and list the allergen attach a picture of each label to support your answer. [3.5.1.3]

BBQ Sauce 1	BBQ Sauce 2	

2. Where does Tabasco sauce get its colour from? [3.6.2.2]

.....

.....

3. What is the Scoville scale used to measure? [3.7]

.....

.....

4. Research and explain what receptors are most responsive to chilli. [3.5.3]

.....

.....

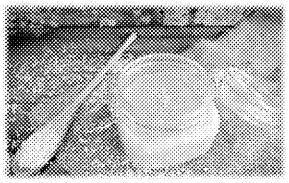
.....

.....

Extens [3.1, 3.2]

Sugar is often added to sauces containing tomatoes, such as BBQ sauce tomato juice (without any additives) and to each sample add a different what amount is best for the optimum taste of the sauce.

13. Tahini



What is It?

Also called sesame butter, it's a thick paste made fro
seeds.

Storage:
Tahini can be sa
temperature. Yo
it in crumbly pas

Common Cuisines:

Tahini is used mostly in
countries a
hummus or

Nutritional Information:

These values may differ between similar products.

Nutritional value: typical value	Per 100 g	Per 1 tbsp (16 g)
Energy	586 kcal	94 kcal
Macronutrients		
Fat	50.87 g	8.14 g
Saturated fats	7.124 g	1.14 g
Monounsaturated fats	19.209 g	3.073 g
Polyunsaturated fats	22.296 g	3.567 g
Carbohydrates	0.9 g	0.144 g
Starch (polysaccharides)	0.5 g	0.08 g
Sugars (mono- and disaccharides)	0.4 g	[illegible] g
Fibre	[illegible] g	0.9 g
Protein	18.08 g	2.89 g
Micronutrients		
Vitamin A	3 mcg	0
Vitamin D	0	0
Vitamin E	2.57 mg	0.41 mg
Vitamin K	-	-
Vitamin B1 (Thiamine)	0.24 mg	0.038 mg
Vitamin B2 (Riboflavin)	0.2 mg	0.032 mg
Vitamin B3 (Niacin)	6.7 mg	1.072 mg
Folate	100 mcg	16 mcg
Vitamin B12	0	0
Vitamin C (Ascorbic acid)	0	0
Calcium	960 mg	[illegible] mg
Iron	[illegible]	3.07 mg
Sodium	[illegible] mg	2 mg
Fluoride	-	-
Iodine	0	0
Phosphorus	659 mg	105 mg
Potassium	414 mg	62 mg
Magnesium	95 mg	14 mg

g – grams, **mg** – milligrams, **mcg** – micrograms

Nutrition

Health Benefits:

Raw, unprocessed tahini is a
fats and protein, which mak
vegetarian and vegan recip
folate and iron, necessary t
amounts of calcium, which
bones and teeth. As it cont
regulate bowel movements
prevent muscle cramps, an
important electrolyte. It's al
may help to prevent certain

Allergy and Health Risks:

Tahini is made from sesame
allergens which must be inc
high in calories, so should b
fat or low-calorie diet. The
that it can't be eaten by pe
dysfunctions, as the protein
correctly, causing harm to t

Alter

For the creamy texture, repla
almond, cashew or peanut but
For a bitter flavour, use a pas
For the flavour and colour, t
For t re, try using blended

Cooking Uses:

- **Blend** into hummus
- **Spread** on sandwiches and
- **Thicken** salad dressings o
- **Stir** with honey and/or yog
  snacks and meat
- **Combine** instead of mayo
- **Substitute** for butter in ca
  e.g. peanut butter cookies
- **Cream** with sugar to make
  pastries and cakes)

1. For a 16-year-old of your gender, calculate the percentage of RNI prov… colour-code the traffic light label below to show how a 100 g serving o… dietary needs. [3.5.1.3]

Nutritional value: typical values	RNI for me	Per 100 g	% RN… m…
Energy		586 kcal	
Fat		50.87 g	
saturates		7.124 g	
Sugars (mono- and disaccharides)		0.4 g	
Sodium		12 mg	

Energy	Fat	Saturates	Sugars	Salt
586 kcal	50.87 g	7.124 g	0.4 g	0.03 g
___%	___%	___%	___%	___%

2. Discuss whether tahini can be considered a good source of dietary iro…

....

....

....

....

....

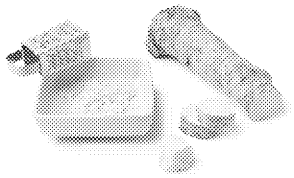
3. Tahini is commonly associated with Arabic cuisine. What other cultures…

....

....

Extension (3.2.3.3):
Tahini is used to prepare halva. Create a consumer's guide in which you … of halva with regards to sesame content, sugar content and other ingre… value of each product. Which one would you recommend, and why?

14. Horseradish



What is It?

Horseradish sauce is a hot paste made from grated h
the addition of vinegar or len ice. Interestingly, h
the same family as ca ba d Brussels sprouts!

Common Cuisines:

In Eastern E ho sh is an important ingredient used to prepare many sauce as white sauce (served with eggs) or red sauce (made from grated beetroot). In Japan, they use the local version of horseradish – wasabi – which is hotter and green in colour.

Nutritional Information:

These values may differ between similar products.

Nutritional value: typical value	Per 100 g	Per 1 tsp. (approx. 5 g)
Energy	48 kcal	4.25 kcal
Macronutrients		
Fat	0.69 g	0.03 g
Saturated fats	0.09 g	0.004 g
Monounsaturated fats	0.13 g	0.007 g
Polyunsaturated fats	0.339 g	0.017 g
Carbohydrates	11.29 g	[illegible]
Starch (polysaccharides)	0	
Sugars (m no disaccha	7.99 g	0.4 g
Fibre	3.3 g	0.2 g
Protein	1.18 g	0.06 g
Micronutrients		
Vitamin A	0	0
Vitamin D	0	0
Vitamin E	0.01 mg	0
Vitamin K	1.3 mcg	0.1 mcg
Vitamin B1 (Thiamine)	0.008 mg	0
Vitamin B2 (Riboflavin)	0.024 mg	0.001 mg
Vitamin B3 (Niacin)	0.386 mg	0.019 mg
Folate	57 mcg	3 mcg
Vitamin B12	0	0
Vitamin C (Ascorbic acid)	25 mg	1.2 mg
Calcium	56 mg	[illegible]
Iron	[illegible]	0.02 mg
Sodium	20 mg	21 mg
Fluoride	-	-
Iodine	0	0
Phosphorus	31 mg	2 mg
Potassium	246 mg	12 mg
Magnesium	27 mg	1 mg

g – grams, **mg** – milligrams, **mcg** – micrograms

Nutritiona

Health Benefits:

Horseradish itself is low in c
folate, calcium and vitamin
(namely, sinigrin, which is a
clear blocked sinuses, acts a
antifungal, improves immu
stimu ing the production
b wh en freshly grated, a
check the label to see wha
horseradish sauce.

Allergy and Health Risks:

Horseradish can irritate the
lot of sulfites (just as when
find yourself crying when g
quite high in sodium and s
amount consumed. As it p
best avoided by people wi
thyroid issues should also a

Alte

For hotness, replace with
For the pungent aroma a
For a milder flavour, try g

Cooking Uses:

- **Serve with** meats and
sandwiches
- **Mix with** cream or yo
dip/sauce/dressing; yo
such as cranberry past
- **Spice up** béchamel/w
mashed potato and sa
- **Stir into** soups and sa
- **Spread onto** sushi or

15. Tartare Sauce

What is It?

Type of cold, white sauce based on mayonnaise, cream o
pieces of chopped onions, dill and pickled vegetables (g
mushrooms or capers) and lemon juice.

Common Cuisines:

Tartare sauce was inven[illegible] e tern France in the nineteenth [illegible]. It also popular in Europe, USA and in Australia. It [illegible]mmon condiment for seafood dishes.

Storage:
Store in a cool p
from direct sunli
opening, the colo
this won't affect i

Nutritional Information:

These values may differ between similar products.

Nutritional value: typical value	Per 100 g	Per 1 tbsp. (approx. 15 g)
Energy	597 kcal	90 kcal
Macronutrients		
Fat	65 g	10 g
Saturated fats	9.1 g	1.4 g
Monounsaturated fats	30 g	4.6 g
Polyunsaturated fats	22.4 g	3.4 g
Carbohydrates	0.6 g	0.1 g
Starch (polysaccharides)	-	-
Sugars (mono- and disaccharides)	0.6 g	[illegible]
Fibre	[illegible] g	0
Protein	2.4 g	0.4 g
Micronutrients		
Vitamin A	98 mcg	14.9 mcg
Vitamin D	1.6 mcg	0.2 mcg
Vitamin E	17.3 mg	2.6 mg
Vitamin K	46.2 mcg	7 mcg
Vitamin B1 (Thiamine)	0	0
Vitamin B2 (Riboflavin)	0.1 mg	0 mg
Vitamin B3 (Niacin)	0.1 mg	0 mg
Folate	26.5 mcg	4.0 mcg
Vitamin B12	1 mcg	0.2 mcg
Vitamin C (Ascorbic acid)	10.8 mg	1.6 mg
Calcium	33.7 mg	5.1 mg
Iron	1.5 mg	0.2 mg
Sodium	607.7 mg	92.3 mg
Fluoride	-	-
Iodine	16.4 [illegible] g	[illegible] mcg
Phosphorus	[illegible] g	12.6 mg
Potassium	[illegible] mg	11.8 mg
Magnesium	7.1 mg	1.1 mg

g – grams, **mg** – milligrams, **mcg** – micrograms

Nutritional

Health Benefits:

Tartare sauce is a source of v
healthy eyesight, and vitami
build strong bones and teet
provides some polyunsatura
the work of the nervous sys
necessary for the proper wo

[illegible]g and Health Risks:

Unfortunately, tartare sauce
salt, making it unsuitable fo
who are obese / trying to lo
from hypertension or coron
recipe is often is based on e
sauce can cause severe aller
of fat in tartare sauce can a
of heartburn.

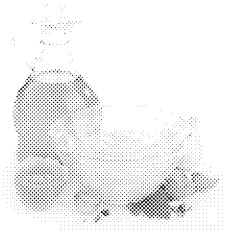
Alte

For the colour, use mayon
For the creamy texture, try
For flavour, replace with m

Cooking Uses:

- **Serve** as a dip with
- **Spread** on toast and
- **Splash** onto boiled
- **Add** to dishes conta
  fried seafood, such a

16. AIOLI



What is It?

A creamy emulsion made from garlic and olive oil blende
mortar. More modern recipes also
egg yolk, lemon ju
and mustard to make the
ce
cker and adjust its fla

Storage:
Store in a cool place
sunlight (a cupboard
colour of the sauce m
its quality or taste.

Common Cuisine:

Aioli comes
Mediterranean countries and is
especially po
in the south of Europe. Recipes for aioli
are different in Spain, southern France and Italy, but they
all use best-quality olive oil and large amounts of garlic
as a base.

Nutritional Information:

These values may differ between similar products.

Nutritional value: typical value	Per 100 g	Per 1 tbsp (approx. 10 g)
Energy	812 kcal	87 kcal
Macronutrients		
Fat	89.6 g	9.6 g
Saturated fats	13 g	1.4 g
Monounsaturated fats	65 g	7 g
Polyunsaturated fats	7.5 g	0.8
Carbohydrates	0.6	0.1 g
Starch (polysacc	g	0.1 g
Sugars (n d disaccharides)	0.1 g	0
Fibre	0.2 g	0
Protein	1 g	0.1 g
Micronutrients		
Vitamin A	17.8 mcg	1.9 mcg
Vitamin D	0.5 mcg	0.1 mcg
Vitamin E	4.7 mg	0.5 mg
Vitamin K	52.1 mg	5.6 mg
Vitamin B1 (Thiamine)	0	0
Vitamin B2 (Riboflavin)	0	0
Vitamin B3 (Niacin)	0	0
Folate	5.2 mcg	0.6 mcg
Vitamin B12	0.3 mcg	0
Vitamin C (Ascorbic acid)	1.1 mg	0.1 mg
Calcium	10.6 m	mg
Iron		0.1 mg
Sodium	34.5 mg	68.2 mg
Fluoride	-	-
Iodine	5.8 mcg	0.6 mcg
Phosphorus	31.4 mg	3.4 mg
Potassium	39.3 mg	4.2 mg
Magnesium	4.5 mg	0.5mg

g – grams, **mg** – milligrams, **mcg** – micrograms

Nutritional

Health Benefits:

Since aioli is mainly based o
good source of unsaturated
working of the nervous syst
provides some vitamin A fr
the eyesight, and iron and f
blo lls. Aioli also provi
ol d clotting. The garlic is
help to prevent many disea
disease or inflammatory dis

Allergy and Health Risks:

Aioli is very high in calories, s
on low-fat or low-calorie diet
it can be pretty high in sodiu
people with hypertension. Th
can cause severe allergic rea
label carefully when choosin

Alte

For colour and texture, us
For the creamy texture, tr
guacamole.
For flavour, replace with g
or guacamole.

Cooking Uses:

- **Serve** with fish and seafo
- **Splash** onto boiled pota
  beetroot, fennel, celery,
  beans
- **Add** to boiled eggs and s
- **Spread** on toast, instead
- **Sprinkle** on top of a pizz
- **Serve** with a classic chee

1. Why is vinegar or lemon juice added to horseradish? Explain what hap
horseradish, and indicate other foods susceptible to this process. [3.3.2.4

.....

.....

.....

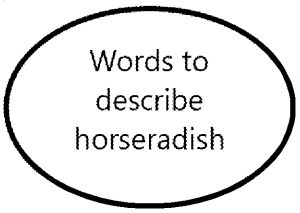
.....

Other f susceptible to .....

include: .....

.....

2. It's time to practise your vocabulary. List at least 10 words which could
and aroma of horseradish. Avoid using words such as 'bad' or 'good', a



3. Research three different recipes for aioli and compare their nutritional
calculator (for example **http://explorefood.foodafactoflife.org.uk/**). Sug
healthiest, and why. [3.2.3.3, 3.2.3.4]

Nutritional value: typical value	100 g recipe 1	100 g recipe 2
Energy		
Macronutrients		
Fat		
Saturated fats		
Monounsaturated fats		
Polyunsaturated fats		
Carbohydrates		
Starch (polysaccharides)		
Sugars (mono- and disaccharides)		
Fibre		
Protein		
Micronutrients		
Vitamin A		
Vitamin D		
Vitamin E		
Vitamin K		
Vitamin B1 (Thiamine)		
Vitamin B2 (Riboflavin)		
Vitamin B3 (Niacin)		
Folate		
Vitamin B12		
Vitamin C (Ascorbic acid)		
Calcium		
Iron		
Sodium		
Fluoride		
Iodine		
Phosphorus		
Potassium		
Magnesium		

g – grams, **mg** – milligrams, **mcg** – micrograms

4. Compare the labels of three different tartare sauces available in the sh additives are used during the production of each sauce. [3.5.1.3, 3.5.1.2]

Tartare sauce 1	Tartare sauce 2	

5. Review the label of one tartare sauce again, and try to describe the fu ingredients: [3.3.2.1, 3.3.2.2, 3.3.2.3, 3.3.2.4, 3.6.2.2]

Vinegar .....

Egg yolk .....

Modified starch .....

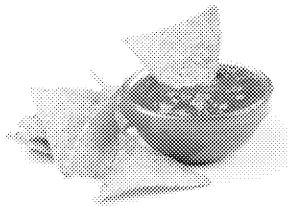
Potassium sorbate .....

Rapeseed oil .....

Extens

Design a starter, a soup and a main dish, all of which contain horseradis experience? Is it easier to use horseradish in some dishes than in others?

17. Salsa Roja Picant



What is It?

Red sauce made from tomatoes, with the addition of o
salt and pepper. The sauce can be made cold or cook
flavour, texture and nutriti[illegible]e. Depending on t
of spices used, salsa r[illegible] be more or less hot. The
and can be u[illegible]ame any kind of sauce or dip.

Common Cuisine

This kind o[illegible] originated in Mexico, but is now popular everywhere a[illegible]s commonly served as a dip with nachos or other savoury snacks. The word 'salsa' is a common name for sauce in Italy and Spain.

Storage:
*Store in a cool p
sunlight (a cupb
the colour of the
won't affect its q*

Nutritional Information:

These values may differ between similar products.

Nutritional value: typical value	Per 100 g	Per 1 tbsp (approx. 30 g)
Energy	21.5 kcal	6.5 kcal
Macronutrients		
Fat	0.1 g	0
Saturated fats	0	0
Monounsaturated fats	0	0
Polyunsaturated fats	0.1 g	0
Carbohydrates	4.6 g	[illegible] g
Starch (polysacch[illegible])	[illegible]	0.2 g
Sugars (n[illegible]d disacchari[illegible]	4 g	1.2 g
Fibre	1.2 g	0.4 g
Protein	0.9 g	0.3 g
Micronutrients		
Vitamin A	65.5 mcg	19.8 mcg
Vitamin D	0	0
Vitamin E	0.5 mg	0.1 mg
Vitamin K	6.3 mcg	1.9 mcg
Vitamin B1 (Thiamine)	0.1 mg	0
Vitamin B2 (Riboflavin)	0	0
Vitamin B3 (Niacin)	0.6 mg	0.2 mg
Folate	20.8 mcg	6.3 mcg
Vitamin B12	0	0
Vitamin C (Ascorbic acid)	24.6 mg	7.4 mg
Calcium	14.4 m[illegible]	[illegible] mg
Iron	[illegible]	0.1 mg
Sodium	[illegible]2.3 mg	197.3 mg
Fluoride	-	-
Iodine	2.6 mcg	0.8 mg
Phosphorus	28 mg	8.5 mg
Potassium	240.7 mg	72.8 mg
Magnesium	11.4 mg	3.5 mg

g – grams, **mg** – milligrams, **mcg** – micrograms

Nutrition

Health Benefits:

Salsa, like any other sauce
vitamin C, potassium and a
also contains vitamins A a
and maintenance of health
[illegible]um lowers blood p
[illegible]ories as usually no oil is
suitable for people on low
diets. The basic recipe con

Allergy and Health Risks:

Depending on how much s
suitable for consumption b
hypertension. If you're bu
label carefully as it may co
sulfites and gluten (from s
sauce). Capsaicin from the
mild irritant.

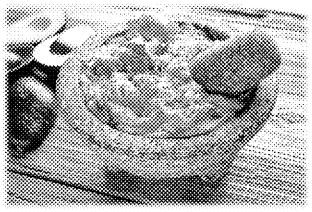
Alter

For hotness, replace with l
For texture, replace with a
ma[illegible]om Sharon fruit.
For colour, use ketchup, r

Cooking Uses:

- **Serve** as a dip with na
  quesadillas
- **Sprinkle** on top of ch
- **Splash** into sandwiche
- **Spice up** a tomato so
- **Spread** on toast inste
- **Stuff** pancakes and ba

18. Guacamole



What is It?

Thick sauce/dip made from mashed avocados with s
call for the addition of oil, lime juice, chopped red o
cherry tomatoes, chopped c ander or ground pep

Common Cuisines:

Guacamole origina co, from where it spread to the USA and th f t e world. Today it is a popular sauce used in many cou with savoury dishes and snacks.

Storage:
Store in a coo
sunlight (a cup
the colour of th
won't affect its

Nutritional Information:

These values may differ between similar products.

Nutritional value: typical value	Per 100 g	Per 1 tbsp (approx. 15 g)
Energy	94 kcal	14 kcal
Macronutrients		
Fat	9 g	1.4 g
Saturated fats	1.9 g	0.3 g
Monounsaturated fats	5.5 g	0.8 g
Polyunsaturated fats	1.1 g	0.2 g
Carbohydrates	2.4 g	0.4 g
Starch (polysaccharides)	0.7 g	0
Sugars (mono- and disaccharid		0.2 g
Fibre	2.9 g	0.4 g
Protein	1.4 g	0.2 g
Micronutrients		
Vitamin A	73 mcg	11 mcg
Vitamin D	0	0
Vitamin E	1.7 mg	0.3 mg
Vitamin K	16 mcg	2.4 mcg
Vitamin B1 (Thiamine)	0.1 mg	0
Vitamin B2 (Riboflavin)	0.1 mg	0
Vitamin B3 (Niacin)	0.8 mg	0.1 mg
Folate	13.5 mcg	2 mcg
Vitamin B12	0	0
Vitamin C (Ascorbic acid)	16.9 mg	2.6 mg
Calcium	18.8 mg	2.8 mg
Iron	0.5 mg	0
Sodium	275.4 m	mg
Fluoride		-
Iodine	mcg	0.2 mcg
Phosphoru	30 mg	4.5 mg
Potassium	314.2 mg	47.5 mg
Magnesium	18.6 mg	2.8 mg

g – grams, **mg** – milligrams, **mcg** – micrograms

Nutrition

Health Benefits:

The main ingredient of gua
rich in polyunsaturated fat
functioning of the nervous
Guacamole, depending on
a source of vitamin C (whic
prevent anaemia) and pota
It also provides lutein and
gl , and beta-sitoster
olesterol levels.

Allergy and Health Risks:

As guacamole is quite calo
moderation by those on a l
monounsaturated fatty aci
increase the risk of auto-in
reactions are very rare – bu
ingredients used.

Alte

For the colour, try green p
coriander.
For the creamy texture, r
hummus.
For fl our, try using blen

Cooking Uses:

- **Serve** as a dip with na
quesadillas
- **Splash** into sandwiche
- **Spread** on toast, inste
- **Stuff** tacos, tortillas o
- **Serve** as a salad with

SALSA ROJA PICANTE AND GUACAMOLE -

1. Salsa roja picante and guacamole are just two of the many sauces orig
five other sauces which come from that country. [3.5.2]

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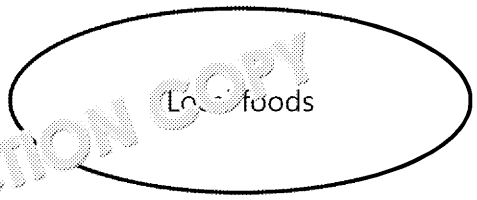
2. The ingredients for salsa and guacamole are usually sourced locally. W
buying locally produced foods? [3.6.1.1, 3.6.1.2]



3. What kind of date mark would appear on the packaging of guacamole

.....

.....

4. Avocado (which is the main ingredient of guacamole) is a source of ur
other plant foods which are rich in these substances. [3.2.1.2]

a) .....

b) .....

c) .....

d) .....

e) .....

5. Study the labels of various types of salsa available in a supermarket, a
are responsible for their spiciness. [3.7]

.....

.....

.....

.....

.....

.....

Extension (3.5.3):

Only for the bravest! Set up a taste panel to compare three to five diffe
them from the mildest to the hottest. Is there anything you need to cor

19. MARMITE

What is It?

Sticky, dark brown, salty paste made of yeast extract, which is
brewing. It gained popularity during World War I as a source
beriberi disease. Marmite is a sour[illegible]ami taste.

Common Cuisines:

Marmite is a popular [illegible] condiment in Great Britain and Australia. As [illegible]'s slogan suggests, some people love it, some people hate it for yourself!

Nutritional Information:

These values may differ in similar yeast extracts.

Nutritional value: typical value	Per 100 g	Per portion (4 g)
Energy	250 kcal	10 kcal
Macronutrients		
Fat	0.5 g	0.002 g
Saturated fats	0.5 g	0.002 g
Monounsaturated fats	-	-
Polyunsaturated fats	-	-
Carbohydrates	24 g	1 g
Starch (polysaccharides)	1.9 g	0.076 g
Sugars (mono- and disaccharides)	1 g	[illegible]
Fibre	[illegible]	0.14 g
Protein	[illegible] g	1.56 g
Micronutrients		
Vitamin A	0	0
Vitamin D	0	0
Vitamin E	0	0
Vitamin K	0	0
Vitamin B1 (Thiamine)	5.8 mg	0.23 mg
Vitamin B2 (Riboflavin)	7 mg	0.28 mg
Vitamin B3 (Niacin)	160 mg	6.4 mg
Folic Acid	2500 mcg	100 mcg
Vitamin B12	15 mcg	0.6 mcg
Vitamin C (Ascorbic acid)	0	0
Calcium	70 mg	2.8 mg
Iron	2.9 mg	0.116 mg
Sodium	3920 mg	156.8 mg
Fluoride	-	-
Iodine	49 mcg	[illegible] g
Phosphorus	[illegible]	[illegible] mg
Potassium	[illegible] mg	84 mg
Magnesium	160 mg	6.4 mg

g – grams, **mg** – [illegible]rams, **mcg** – micrograms

Sto
Mar
a cup

Nutritio

Health Benefits:

Marmite is a source of prote
and vegan diets instead of m
vitamins – thiamine, riboflav
release energy from foods, v
prevent anaemia, and calciu
Marmite also provides some
proper functioning of the th
metabolism. It is gluten-free
is a[illegible]ch in potassium, wh

Allergy and Health Risks:

The original recipe contains
allergen. Also, Marmite is ve
portion (4 g) provides 6.5%
sparingly to avoid health co
people with hypertension o

Alte

For the colour, try using m
For saltiness, use a vegetal
For flavour, try replacing w

Cooking Uses:

- **Spread** on toast, crum
- **Sti[illegible] into** gravy, onion
[illegible]oc[illegible]atoes
- **Add a kick** to sauces,
- **Serve with** fried sausa

20. Stock Cubes

What is It?

Concentrated and dried vegetable, chicken or beef stock flavour to dishes.

Common Cuisines:

Stock cubes significantly facilitate cooking, even for unexperienced cooks, all around the world. The earliest stock cubes were known in seventeenth century England, and became popularised at the beginning of the twentieth century. Nowadays they are used worldwide.

Nutritional Information:

These values may differ between similar products.

Nutritional value: typical value	Per 100 g	Per 1 cube (6 g)
Energy	217 kcal	13 kcal
Macronutrients		
Fat	17.3 g	1.04 g
Saturated fats	-	-
Monounsaturated fats	-	-
Polyunsaturated fats	-	-
Carbohydrates	0	0
Starch (polysaccharides)	0	0
Sugars (mono- and disaccharides)	0	0
Fibre	[illegible]	0.11 g
Protein	[illegible] g	0.81 g
Micronutrients		
Vitamin A	-	-
Vitamin D	-	-
Vitamin E	-	-
Vitamin K	-	-
Vitamin B1 (Thiamine)	-	-
Vitamin B2 (Riboflavin)	-	-
Vitamin B3 (Niacin)	-	-
Folic Acid	-	-
Vitamin B12	-	-
Vitamin C (Ascorbic acid)	-	-
Calcium	47 mg	2.82 mg
Iron	2.8 mg	0.17 mg
Sodium	16800 mg	1008 mg
Fluoride	-	-
Iodine	0	[illegible]
Phosphorus	120 [illegible]	[illegible] mg
Potassium	[illegible]	23.4 mg
Magnesium	44 mg	2.64 mg

g – grams, **mg** – milligrams, **mcg** – micrograms

Nutritional

Health Benefits:

Stock cubes provide flavour, be said about their positive chicken stocks usually have fat and sodium.

Allergy and Health Risks:

Stock cubes are usually qui quality) and are very high i cardiovascular health

Alte

For saltiness, use salt, soy seasoning.
For flavour, use home-ma

Cooking Uses:

- **Season** soups, stews, s
- **Spice up** marinades fo crumbled stock with o
- **Add** to meatballs, bur add flavour and moist
- **Improve the flavour** o
- **Colour** cooked rice, n

1. Calculate what percentage of the daily RNI for salt is provided in one p and stock cube. What colour would you mark it if you were using the t

Amount of sodium/salt in one portion of Marmite		Amount of sodium in one portion of s cube
RNI for sodiu		RNI for sodium
% RNI ded in one portion of Marmite		% RNI provided in portion of stock cu

The label would be coloured .....

2. Discuss whether stock cubes can be considered a vegetarian food pro

.....

.....

.....

.....

.....

.....

Task

3. Assess the nutritional value of a portion of Marmite (4 g) and indicate y
provides for a 16-year-old individual of your gender for each of the nu
below.

Nutritional value: typical value	RNI for	Portion of Marmite (4 g)	% for
Energy		10 kcal	
Macronutrients			
Fat		0.002 g	
Carbohydrates		1 g	
Starch (polysaccharides)		0.076 g	
Sugars (mono- and disaccharides)		0.04 g	
Fibre		0.14 g	
Protein		1.56 g	
Micronutrients			
Vitamin B1 (Thiamine)		0.23 mg	
Vitamin B2 (Riboflavin)		0.28 mg	
Vitamin B3 (Niacin)		6.4 mg	
Folate		100 mcg	
Vitamin B12		0.6 mcg	
Calcium		2.8 mg	
Iron		0.116 mg	
Sodium		156.8 mg	

Now evaluate whether it's a good idea for a 16-year-old to eat
Marmite on toast. Use the recommendations for your age and gend

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.....

.....

Extension (3.5.3)

Dissolve various kinds of stock cubes and rank them in order from the l
Compare your results with the stated salt content on each of the labels – does th
labels correspond with the perceived saltiness of the solutions? Try to e

21. VINEGAR

What is It?

Acidic solution made of fermented alcohol, wine or cider. Coc
contains from 5% to 20% of acetic acid

Common Cuisines:

There are ma pe egar, and some of them are specific to different co or regions. For example, balsamic vinegar comes from Italy, wh rice vinegar is more popular in Asian cuisine. The most popular vinegar is distilled spirit vinegar.

Stor
Vineg
ambie

Nutritional Information:

These values may differ between similar products. Data is shown for a distilled spirit vinegar.

Nutritional value: typical value	Per 100 g	Per 1 tbsp (15 g)
Energy	18 kcal	3 kcal
Macronutrients		
Fat	-	-
Saturated fats	-	-
Monounsaturated fats	-	-
Polyunsaturated fats	-	-
Carbohydrates	0.04g	
Starch (polysacch)		-
Sugars (n nd disaccharid	0.04g	0.04g
Fibre	-	-
Protein	-	-
Micronutrients		
Vitamin A	-	-
Vitamin D	-	-
Vitamin E	-	-
Vitamin K	-	-
Vitamin B1 (Thiamine)	-	-
Vitamin B2 (Riboflavin)	-	-
Vitamin B3 (Niacin)	-	-
Folic Acid	-	-
Vitamin B12	-	-
Vitamin C (Ascorbic acid)	-	-
Calcium	6 mg	
Iron		0
Sodium	mg	0
Fluoride	-	-
Iodine	-	-
Phosphorus	4 mg	1 mg
Potassium	2 mg	0
Magnesium	1 mg	0

g – grams, **mg** – milligrams, **mcg** – micrograms

Nutritional

Health Benefits:

Depending on the type of vin
and health outcomes. Apple c
help with weight loss by decre
increasing insulin sensitivity, w
diabetes. Balsamic vinegar co
effect lowering LDL chol
bi ng healthy blood pres
proteins, it makes them more

Allergy and Health Risks:

All vinegars are very acidic. Th
in vinegar, can wear away too
decay. Also, the acid can be a
especially in people suffering

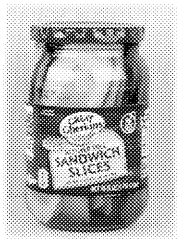
Alter

For a milder flavour, try red or c
For an acidic but sweeter taste,
For use in dressings, marinades a
For marinades, especially for mc
try buttermilk.

Cooking Uses:

- **p** marinades for all k
- **egars** (e.g. sherry vinega
- **Stir into** salad dressings, BB
- **Splash onto** chips and stir-f
- **Add** apple cider vinegar to c refreshing drink.
- **Add** a few drops to vegetab taste
- **Pickle** vegetables, such as s
- **Intensify the flavour** of ice with balsamic cream
- Vegans may choose to use a whites in recipes, such as fo

22. PICKLED GHERKI



What is It?

Cucumbers pickled in vinegar or brine. Depending on the met
will contain different flavour, herbs and additives added, and h

Sto
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Refr
spoi

Common Cuisines:

Cornichons, [illegible]cumbers pickled in a vinegar solution, are characteristi[illegible]nce. In Poland, cucumbers are pickled in salt water, which leads to fermentation and the production of lactic acid, which provides certain health benefits. In Sweden and Denmark, cucumbers are pickled i which gives them a specific sweet taste.

Nutritional Information:

These values may differ between similar products. Data shown is for a cornichon (average).

Nutritional value: typical value	Per 100 g	Per 1 cucumber (60 g)
Energy	61 kcal	36.6 kcal
Macronutrients		
Fat	0.1 g	0.06 g
Saturated fats	-	-
Monounsaturated fats	-	-
Polyunsaturated fats	-	-
Carbohydrates	2.6	[illegible].56 g
Starch (polysacc[illegible])	[illegible] g	0.12 g
Sugars (m[illegible]d disaccharides)	2.4 g	1.44 g
Fibre	1.5 g	0.9 g
Protein	0.9 g	0.54 g
Micronutrients		
Vitamin A	-	-
Vitamin D	0	0
Vitamin E	-	-
Vitamin K	-	-
Vitamin B1 (Thiamine)	0	0
Vitamin B2 (Riboflavin)	0.02 mg	0.012 mg
Vitamin B3 (Niacin)	0.1 mg	0.06 mg
Folate	6 mcg	3.6 mg
Vitamin B12	0	0
Vitamin C (Ascorbic acid)	1 mg	0.6 mg
Calcium	20 [illegible]	[illegible] mg
Iron	[illegible]	0.42 mg
Sodium	690 mg	414 mg
Fluoride	-	-
Iodine	-	-
Phosphorus	22 mg	13.2 mg
Potassium	117 mg	70 mg
Magnesium	7 mg	4.2 mg

g – grams, **mg** – milligrams, **mcg** – micrograms

Nutrition

Health Benefits:

As cucumbers pickled in [illegible] are considered a source [illegible] very beneficial for human prevent constipation and [illegible]gens and produce [illegible] [illegible]cumbers are low in calo group B vitamins. Some [illegible] herbs and flavourings use horseradish will improve help to lower blood pres

Allergy and Health Risks:

Although cucumbers are [illegible] is recommended to caref[illegible] may contain allergens, su[illegible] generally high in sodium on a low-salt diet.

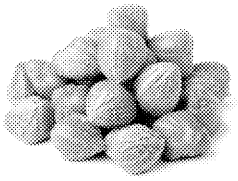
Alte

For flavour and texture, re[illegible] capers.
For c[illegible]our and flavour, use[illegible]
[illegible]ch crunchiness, try fresh g[illegible]

Cooking Uses:

- **Serve** as a snack, use in[illegible]
- **Slice** to add to sandwi[illegible] salad)
- **Grate brine gherkins** a[illegible]
- **Grate or chop** into col[illegible]
- **Serve whole or cut** wi[illegible]
- **Grate or chop finely** t[illegible] cheese with gherkins a[illegible]

23. CAPERS



What is It?

Edible flower buds of the caper bush, about the size of a green colour similar to that of olives. Their flavour place mustard, black pepper and horseradish. Usually used sa Caper leaves may be used instead of rennet in the proc

Common Cuisines:

Capers are popular in all of the Mediterranean countries, from Morocco and Spain to Italy. They are added to salads, meat dishes and pasta, as well as sauces such as tartare sauce.

Nutritional Information:

These values may differ between similar products.

Nutritional value: typical value	Per 100 g	Per 1 tbsp (8 g)
Energy	23 kcal	2 kcal
Macronutrients		
Fat	0.86 g	0.07 g
Saturated fats	0.233 g	0.02 g
Monounsaturated fats	0.063 g	0.005 g
Polyunsaturated fats	0.304 g	0.026 g
Carbohydrates	4.89 g	0.42 g
Starch (polysaccharides)	-	-
Sugars (mono- and disaccharides)	[illegible]	0.04 g
Fibre	3.2 g	0.3 g
Protein	2.36 g	0.2 g
Micronutrients		
Vitamin A	7 mcg	1 mcg
Vitamin D	0	0
Vitamin E	-	-
Vitamin K	24.6 mcg	2.1 mcg
Vitamin B1 (Thiamine)	0.018 mg	0.002 mg
Vitamin B2 (Riboflavin)	0.139 mg	0.012 mg
Vitamin B3 (Niacin)	0.023 mg	0.002 mg
Folate	23 mcg	2 mcg
Vitamin B12	0	0
Vitamin C (Ascorbic acid)	4.3 mg	0.4 mg
Calcium	40 mg	[illegible] mg
Iron	1.67 [illegible]	0.14 mg
Sodium	[illegible] mg	202 mg
Fluoride	-	-
Iodine	-	-
Phosphorus	10 mg	1 mg
Potassium	40 mg	3 mg
Magnesium	33 mg	3 mg

g – grams, **mg** – milligrams, **mcg** – micrograms

Nutritional

Health Benefits:

Capers contain some beta c eyesight and healthy skin, a the LDL cholesterol levels in of quercetin, which inhibits t and, therefore, alleviates all contain a lot of kaempferol, antibacterial and an anti-in and prevents diabetes.

Allergy and Health Risks:

Due to their production me sodium. They should, there people with hypertension a diseases. Excessive consum allergic reaction, especially i consumption of capers low they are best avoided by pe

Alter

For colour and flavour, us
For spiciness, try using pic
For flavour and texture, t
For colour and saltiness, r pickled shallots.

Cooking Uses:

- Rinse before use to ren
- **Add whole** to salads, s
- **Sprinkle** on top of roas
- **Spice up** roasted chick
- **Use** in starters, snacks,
- **Serve with** cold cuts a
- **Chop** to add to sauces
- **Improve** the flavour of
- **Fry** in a little oil to ope garnish

Vinegar and pickles – Task

1. Briefly describe how vinegar is made. Is the same process used in the p products? [3.6.2.1, 3.4.1.3]

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2. Suggest why vinegar can help when poaching eggs. [3.3.2.1]

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3. Cucumbers pickled in brine undergo a kind of fermentation. What is p production of what other food products uses the same process? [3.6.2.1,

During fermentation .....

Other food products produced using fermentation include:

.....

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4. Vinegar is an ingredient of many sauces and condiments. List at least t

1. .....

2. .....

3. .....

Task

5. Compare the nutritional values of distilled spirit vinegar and balsamic v
healthier to use, and why. [3.2.3.3]

Nutritional value: typical value	Per 100 g distilled spirit vinegar	Per 100 g b vinega
Energy	18 kc	
Carbohydrates	4 g	
Sugar (monosaccharides)	0.04 g	
Calcium	6 mg	
Iron	0.03 mg	
Sodium	2 mg	
Phosphorus	4 mg	
Potassium	2 mg	
Magnesium	1 mg	

Extension [3.7]
Design five different starters / finger foods / canapés which use pickles c
of ingredients.

24. CUSTARD

What is It?

Dessert sauce made from milk or cream and … addition of sugar and flavourings, such as va… nutmeg, and som… …ornstarch for thick… ready-made … …ns, cans and plastic pots… … water or milk.

Common Cuisines:

Custard is … British cuisine, where it is poured over desserts and puddin… …ench cuisine, custard is thickened with cornstarch to make a crème pâtissière, which is used to fill choux pastry and other types of baked goods.

Nutritional Information:

These values may differ between similar products.

Nutritional value: typical value	Per 100 g	Per 1 tbsp (10 g)
Energy	95 kcal	9.5 kcal
Macronutrients		
Fat	3.4 g	0.34 g
Saturated fats	1.57 g	0.16 g
Monounsaturated fats	1.07 g	0.1 g
Polyunsaturated fats	0.28 g	0.03 g
Carbohydrates	10.9 g	1.09 g
Starch (polysaccharides)	-	-
Sugars (mono- and disaccharides)	10.9 [illegible]	[illegible].09 g
Fibre	-	-
Protein	5.9 g	0.59 g
Micronutrients		
Vitamin A	43 mcg	0.43 mcg
Vitamin D	0.6 mcg	0.06 mcg
Vitamin E	0.28 mg	0.028 mg
Vitamin K	-	-
Vitamin B1 (Thiamine)	0.04 mg	0.004 mg
Vitamin B2 (Riboflavin)	0.3 mg	0.03 mg
Vitamin B3 (Niacin)	0.1 mg	0.01 mg
Folate	12 mcg	1.2 mcg
Vitamin B12	1.3 mcg	0.13 mcg
Vitamin C (Ascorbic acid)	1 mg	0.1 mg
Calcium	130 mg	13 mg
Iron	0.37 mg	0.04 mg
Sodium	73 mg	[illegible]
Fluoride	-	
Iodine	[illegible]	4 mcg
Phosphorus	[illegible] mg	13 mg
Potassium	129 mg	12.9 mg
Magnesium	9 mg	0.9 mg

g – grams, **mg** – milligrams, **mcg** – micrograms

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Us…
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ne…

Nutritiona…

Health Benefits:

As custard contains milk an… such as calcium, vitamin D, … a source of HBV proteins. C… necessary for the proper fu… and potassium, necessary f… pressure.

Allergy and Health Risks:

As custard is usually a swee… calories, so shouldn't be ea… want to lose weight. Also, a… lactose, so should be avoid… Remember that milk and eg… contains cholesterol, which … struggling with high blood …

Alte…

For texture and flavour, u… can also be used in an egg-… **For thickening** mixtures ar…

Cooking Uses:

- **…ir** over desserts, su… sponge, ice creams an…
- **Thicken** with cornstarc… ideal for filling puff pa…
- **Set** with gelatine and … fruit sauces
- **Sweeten** a natural yog…
- **Freeze** to obtain custa…

Custard – Task Sheet

1. What ingredients/components of custard increase the risk of cardiova

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2. Describe the st[illegible]n making custard (you can draw a picture of each what [illegible]s [illegible] each stage in terms of heat transfer and scientific pri
[skill 8, 3.3.[illegible], 3.3.1.1]

1. .....

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2. .....

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3. .....

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4. .....

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5. .....

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6. .....

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3. Why, when cooking custard, does it require constant stirring? [3.3.2.2]

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4. Depen[illegible]or. [illegible]gredients and their amount, custard can be called any of [illegible] [3.5.2, 3.7]

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5. Compare the labels from five or six different brands of custard, and lis brand. [3.5.1.3]

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Extension [3.3.1, 3.3.2]

Custard is usually made of milk/cream, egg yolk, sugar and cornstarch. investigate how various ingredients affect the quality of custard.

You could check: different types of milk (e.g. skimmed, semi-skimmed, cream (e.g. single, whipping, double, low fat), different amounts or type caster, icing), different amounts or types of flour (e.g. cornstarch, plain

Soy sauce, miso, fish sauce

1. Any five recipes using miso, e.g. *misoshiru* (miso soup), stir-fry, miso-glazed fi

2. First the soybeans are soaked in water and then cooked.
   - Wheat is roasted and crushed.
   - Then the soybeans are mixed with the wheat and *Aspergillus oryzae* fungu
   - The whole mixture is brewed in brine and fermented.
   - After fermentation is finished, the liquid is drained and collected by pr
   - The soy sauce is then pasteurised to stop any further fermentation a

3. Burmese, Chinese, Filipino, Hawaiian, Indonesian, Japanese, Korean, Taiwan Vietnamese, Singaporean, etc.
   Also, soy sauce is used more and more often in cuisines all around the world.

4. Salt and umami

Curry paste and coconut milk

1. Yellow curry usually contains: shallot, lemongrass, yellow chilli, ginger, garli cinnamon, nutmeg, cumin, tamarind, coriander, lime, Kaffir lime peel

   Green curry usually contains: garlic, shallot, green chilli, lemongrass, galanga coriander seeds, white pepper, turmeric, paprika

   Red curry usually contains: red chilli, garlic, lemongrass, shallot, galangal, sh pepper

2. Coconut milk can be seen as healthier than cow's milk because:
   - It is not an allergen so it is safe for those allergic to milk
   - It doesn't contain lactose so it is safe for lactose-intolerant people
   - It is high in saturated fats
   - It has a lot of potassium, which lowers blood pressure
   - It is cholesterol free
   - It provides magnesium to support muscle contractions

   Cow's milk can be seen as healthier than coconut milk because:
   - It contains vitamin A to support eyesight, healthy skin and membranes
   - It contains vitamin D to support calcium absorption and bone health
   - It provides more calcium than coconut milk
   - It is low in calories

3. The hardest nut is macadamia, which requires around 300 pounds of pressur

Mustard, mayonnaise and ketchup

1. Students should indicate either ketchup or mustard as being the healthiest o relevant explanation behind their choice.

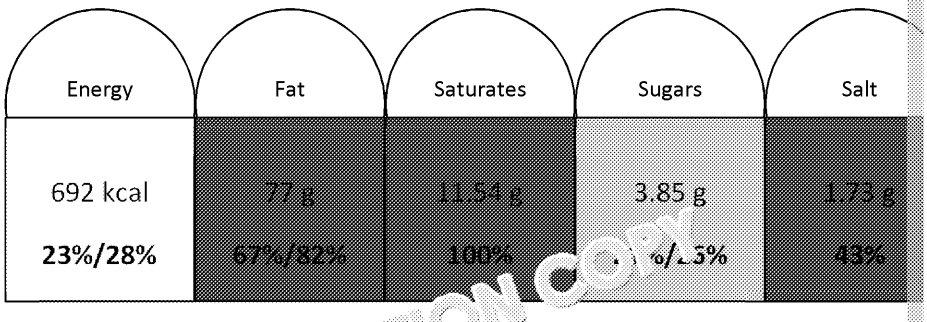
   Ketchup might be considered healthier because:
   - It is low in calories
   - It is fat-free
   - It is rich in vitamin A
   - It provides antioxidants
   - It is high in potassium, which lowers blood pressure

   Mustard might be considered healthier because:
   - It is low in fat
   - It is low in sugars
   - It provides dietary fibre
   - It is a source of group B vitamins
   - It is rich in potassium, which lowers blood pressure
   - It provides selenium, which acts as an anticarcinogenic
   - It provides lutein and zeaxanthin, which support proper vision
   - It improves digestion and prevents heartburn

2. Calculated with the use of **https://www.nutrition.org.uk/nutritionscience/n ingredients/nutrient-requirements.html?limit=1&start=2**

Nutritional value: typical value	RNI for boys aged 16	RNI for girls aged 16	Per 100 g
Energy	2,964 kcal	2,414 kcal	692 kcal
Fat	115 g	77 g	77 g
saturates	11.54 g	11.5 g	11.54 g
Sugars (mono- and disaccharides)	18.5 g	15 g	3.85 g
Sodium	1,600 mg	1,600 mg	692 mg

   Students should leave the 'energy' traffic light white.
   - Sugar – green
   - Fats – red
   - Saturates – red
   - Sodium/salt – red



3. Students briefly describe the stages of mayonnaise production, in the correct
   1. Eggs are washed to remove bacteria and prevent salmonellosis.
   2. Eggs are broken and separated into yolk and white (although dried egg
   3. The egg yolk is mixed with milk and/or water, and spices (salt, sugar, vi
   4. Then the oil is added slowly and blended into the mixture.
   5. The mixture is then pumped through membranes to homogenise it and p in the future.

Functions of the ingredients:

- oil is the main ingredient of mayonnaise; it is a bulking agent, provides nutri
- egg yolk is an emulsifier and colourant, and provides nutritional value
- milk or water is added for texture and to act as a solvent for other ingre
- vinegar, salt, sugar and other ingredients, such as paprika, are added fo

4. When buying a ketchup it is important to pay attention to (students should i the following):
   - Use-by date – to make sure the pro[illegible] overdue'
   - Amount of tomatoes used [illegible] indicated as '100 g of product was m more tomatoes, th[illegible]
   - Amo[illegible] added
   - A[illegible] of salt added
   - Oth[illegible] ingredients, such as preservatives and potential allergens
   - A buyer can also pay attention to such features as: the provenance of ing organic, Fairtrade), if any GM ingredients or animals were used during p ingredients used are kosher, what the cost of a bottle/jar/kilogram/litre is

5. Students indicate at least three from:

Health benefits:

- a source of lycopene (prevents cancer/slows down ageing)
- a source of Vitamin C (boosts immunity, stimulates production of collag
- contains vitamin C to boost immunity
- provides vitamin A (necessary for healthy eyesight)

Disadvantages:

- has high sodium levels which may increase blood pressure
- contains sugar and acid which together may cause faster tooth decay
- has a lot of sugar so cannot be eaten by diabetics

HP brown sauce and Worcester sauce: British favourites

1. Studen[illegible] ca[illegible] stages of Worcester sauce production in the correct ord
   1. Fi[illegible]ons and garlic are put into a pickling barrel with malt vinegar, a
   2. In other barrels, anchovies cured in salt are stored for several months.
   3. Once the other ingredients (onion/garlic mix and anchovies) are matured prepared as a preliminary stage of the actual production of the sauce.
   4. First, malt and white vinegar are put into a large vat, then tamarind, mol
   5. The liquid is mixed and then the pickled onions and garlic are added, to pickled in.
   6. The mixture is mixed again, and then salt, sugar and spices are added.
   7. The whole mixture is pumped into maturation tanks, where it is kept fo
   8. The sauce is then pressed through a sieve to remove larger bits, and blen
   9. The sauce is then pasteurised and bottled.

2. The sauces should be avoided in such health conditions as:
   - Hypertension and kidney diseases (high amount of sodium)
   - Diabetes (high amount of sugar)
   - Fish allergy – anchovies in Worcester sauce
   - Coeliac disease – [illegible] gluten from malt vinegar
   - Stomach and duodenal ulcers (high amount of vinegar may be an irritant)

3. The sau[illegible]uld be stamped with a 'best before' date mark as it is naturally therefore, shouldn't be susceptible to spoilage.

4. Worcester sauce is not a perishable food, despite the fact that it is moist and c It is naturally preserved with vinegar and, therefore, is not susceptible to spo

5. The common ingredient is tamarind.

Tabasco sauce and BBQ sauce

1. Depending on the brand, BBQ sauce may contain various ingredients which a such as preservatives, mustard and celery.

   Students should study three labels to pick at least three out of the 14 allergen include on a food label (from: celery; cereals containing gluten: wheat, barley, lupin; milk; molluscs; mustard; nuts; peanuts; sesame ds; soya; sulfur dio

2. Tabasco sauce owes its colour to the chilli pe used during the productio colourants in original Tabasco s

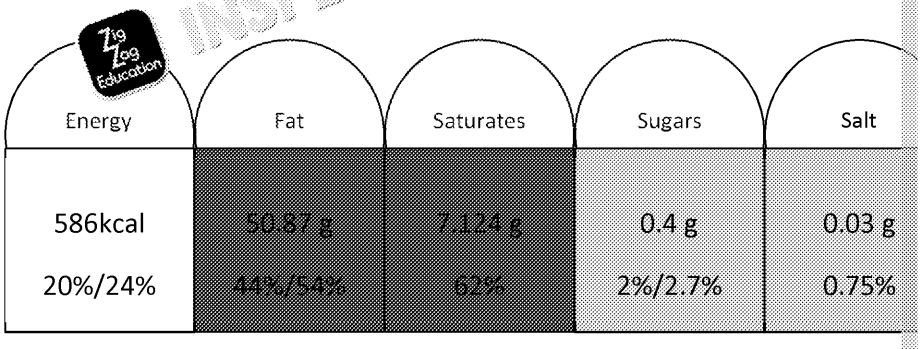
3. It is a scale used to the pungency (hotness) of chilli peppers (in Scov

4. - Pa ptors on the tongue and in the mouth.
   - Pu cy/spiciness/hotness of chilli peppers is not a taste so it is not rec
   - It is, in fact, a pain experience.

Tahini

1. Calculated with the use of **https://www.nutrition.org.uk/nutritionscience/n ingredients/nutrient-requirements.html?limit=1&start=2**

Nutritional value: typical value	RNI for boys aged 16	RNI for girls aged 16	Per 100 g
Energy	2,964 kcal	2,414 kcal	586 kca
Fat	115 g	94 g	50.87 g
saturates	11.5 g	1.5 g	7.124 g
Sugars (mono- and disaccharides)	18	15 g	0.4 g
Sodium	1,500 mg	1,600 mg	12 mg



(Energy stays white, fat and saturates – red, sugars and salt – green)

2. - Although tahini is quite rich in iron, it has to be remembered that it is a absorbed by the digestive system.
   - Also, there is no vitamin C in tahini, which crease the absorptio
   - Overall, tahini cannot be considered a good dietary source of iron, desp

3. Tahini is also used in Chi cuisine, Greek, Israeli, Korean, Japane under different na

Horseradish, tartare sauce and aioli

1.
   - The reason why acid is added to grated horseradish is to prevent enzym
   - When grated, the cells of horseradish are damaged, and the enzymes in
   - The oxygen in the air activates those enzymes, causing them to transfor in the horseradish into brown pigments (melanin).
   - Adding vinegar or lemon juice deactivates the enzymes and, therefore,
   - Other food ingredients susceptible to enzymic browning are bananas, p name but a few.

2. Students should use words such as pungent, hot, spicy, nippy, aromatic, bitt

3. Students should be able to find three different recipes for aioli (e.g. one using egg y oil, and one using low-sodium salt).

   Students identify at least two macro- or micronutrients which make one of th two, e.g. high content of polyunsaturated fatty acids, low content of sodium,

4. Students carefully read the labels and identify various food additives in tarta additives from colourants, stabilisers, thickeners, preservatives, antioxidants e.g. acidity regulator (acetic acid), modified maize (thickener), stabiliser (gua flavour enhancer (glucose fructose syrup), thickener (xanthan gum), preserv colourant (turmeric), acidity regulator (citric acid).

5. Vinegar – preservative, flavouring
   Egg yolk – emulsifier, nutritional value, colour
   Modified starch – thickener
   Potassium sorbate – preservative
   Rapeseed oil – bulking agent, nutritional value, textur
   Or any other suitable answer.

Salsa roja picante and guacamole

1. Students list at least three other sauces originating in Mexico, e.g. pico de gallo negra, mango salsa, chipotle sauce, corn salsa, or any other suitable exa

2. Students show their knowledge and understanding about how food product food quality. Students list at least four advantages of locally produced foods
   - no need for transportation
   - low carbon footprint, low gas emission
   - supporting local farmers
   - supporting local economy
   - food is fresher
   - food is cheaper

3. There are two kinds of guacamole available on the market.
   - Fresh guacamole is packed in plastic bowls/containers and has a use-by any preservatives.
   - Processed guacamole is packed in glass bottles and sealed, often wi process, and would display a best before date, but, once opened, should of days to a week.

4. Students list at least two plant foods rich in unsaturated fatty acids, e.g peanut oil, cashew nuts, sunflower seeds, flaxseeds, chia seeds, pla

   Cocoa butter and coconuts should **not** be considered as they contain mainly s chain triglycerides) fatty acids.

5. Students list ingredients used in salsa sauces which make them hot and spicy extract, cayenne pepper, chilli extract, guajillo peppers, dried jalapeno.

Marmite and stock cubes

1. A portion of marmite (4 g) provides 9.8% of RNI for sodium, while a portion of RNI for sodium.

   Both should be labelled as red.

2. - Vegetable stock cubes contain only herbs and spices so can be considered
   - Chicken stock cubes contain small amounts (around 2%) of chicken-derived cannot be considered vegetarian.
   - Beef stock cubes contain 4% beef extract, and also cannot be considered
   - The exercise should prompt students into checking various stock cube labels listed and pay attention to detail – the animal-derived ingredients are

3. i)

Nutritional Value: typical value	RNI for boys aged 16	RNI for girls aged 16	Portion of Marmite
Energy	2,964 kcal	2,414 kcal	10 kc
		Macronutrients	
Fat	115 g	94 g	0.002
Carbohydrates	370 g	301.75 g	1
Starch (polysaccharides)	351.5 g	287 g	0.07
Sugars (mono- and disaccharides)	18.5 g	15 g	0.0
Fibre	25 g	25 g	0.1
Protein	111 g	90 g	1.5
		Micronutrients	
Vitamin B1 (Thiamine)	[illegible] mg	0.8 mg	0.23 m
Vitamin B2 (Riboflavin)	1.3 mg	1.1 mg	0.28 m
Vitamin B3 (Niacin)	18 mg	14 mg	6.4 m
[illegible]	200 mcg	200 mcg	100 m
Vitamin B12	1.5 mcg	1.5 mcg	0.6 m
Calcium	1,000 mg	800 mg	2.8 m
Iron	11.3 mg	14.8 mg	0.116 m
Sodium	1,600 mg	1,600 mg	156.8 m

   ii) Students should consider points for and against the idea of consuming t

   For consuming two portions daily:
   - Two portions of Marmite would provide around 50% of RNI for thi to 90% of RNI for niacin, 100% RNI for folate and 80% RNI for vitam
   - As thiamine, riboflavin, folate and vitamin B12 are water-soluble, th them from the body, preventing the effects of overdosage, so from a good part of an everyday diet.
   - Also, it is high in vitamin B12, which does not occur in plant-derived choice for vegetarians and vegans who might otherwise lack that v

   Against consuming two portions daily:
   - Two portions of Marmite a day would provide almost 20% of the re
   - Given that this mineral is widely present in many foods, it is best to minimum – for that reason, Marmite consumption should be limite

Vinegar and pickles

1. Students indicate fermentation as the process used in the production of vine
   - First, alcoholic fermentation is conducted by yeast.
   - During that process, the sugars in the liquid are transformed into alcoh
   - This same process is used in the production of wine, beer and cider.
   - Yeast fermentation is also used in bread manufacturing.
   - The second step is acidic fermentation condu[illegible]y bacteria.
   - During this stage, the alcohol is turn[illegible] i[illegible] to [illegible], changing the flavour o

2. Poached eggs are cooked wit[illegible] t[illegible] shell – instead the egg yolk and egg w

   The addit[illegible] o[illegible] s[illegible]eds up the process of egg white denaturation, which
   poach[illegible] (w[illegible]out so-called 'feathering').

3. The fermentation is conducted by *Lactobacillus* – as a result, lactic acid is proc
   The same kind of fermentation is used in the production of sauerkraut, yogu

4. Vinegar is commonly used to prepare mayonnaise, mustard, ketchup, some
   horseradish, etc., or any other appropriate examples.

5.

Nutritional value: typical value	Per 100 g distilled spirit vinegar	
Energy	18 kcal	8
Carbohydrates	0.04 g	1
Sugars (mono- and disaccharides)	0.04 g	1
Calcium	6 mg	2
Iron	0.03 m[illegible]	0
Sodium	[illegible]	2
Phosphorus	[illegible] mg	1
Potassium	2 mg	1
Mag[illegible]m	1 mg	1

Balsam[illegible]egar might be healthier to use because:
- It is higher in calcium, which is needed for bone health
- It is higher in potassium, which lowers blood pressure
- It contains magnesium, which supports muscle contractions

Distilled spirit vinegar might be healthier to use because:
- It is lower in sugars, so doesn't contribute towards obesity or tooth deca
- It is very low in calories
- It is lower in sodium, so doesn't increase blood pressure

Custard

1. Saturated fats, sugar, sodium and cholesterol all increase the risk of cardiova

2. A basic recipe for custard goes as follows:
   1. First the egg yolk is beaten with sugar – whisking – mechanical leavening
   2. Then the cornstarch is added – beating – mechanical leavening – incorp
   3. Separately, milk and cream are cooked together – duction and conve
   4. Meanwhile, milk and cream can be infus[illegible] vanilla – infusion
   5. Hot milk/cream mixture is slow[illegible] eggs – the temperature caus coagulate
   6. The whole mix[illegible] again together – conduction and convectio co[illegible] gelatinisation, potentially sugar caramelisation

3. During [illegible]ng, starch particles from cornstarch absorb water and burst. If not stirred constantly, they would set at the bottom of the pan forming una

4. - Crème anglaise is a thin, sauce-like custard poured over desserts.
   - Crème patissière is a thick, creamy version, used to fill pastries, doughn
   - Crème brûlée and Spanish flan are very similar, but contain no starch.
   - Custard cream should **not** count as it is a kind of a biscuit, not a cream/s

5. The allergens present in custard include milk, cream (milk), egg yolk (egg). Some ready-to-use products may also contain other allergens, such as butter powder (milk), wheat flour (gluten), etc.