



Risk Categorisation of Ingredients

Module 4

Learning Objectives

At the end of this module, you should be able to:

- ✓ Understand the importance of product specifications & labels
- ✓ Recognise the different risk categories
- ✓ Recognise the required documents needed for corresponding risk categories
- ✓ Identify the appropriate category for a particular ingredient

Clause in Muis Halal Certification Conditions

All ingredients and food products prior to purchase shall be substantiated with **product specifications or labels**. In addition, ingredients and food products which are categorised as Medium-Low, Medium-High or High Halal risk will require additional documents for approval (refer to Annex A):

(a) Medium-Low

- Muis general questionnaire (if necessary)

(b) Medium-High

- Muis general questionnaire;
- Muis-recognised Halal certificate* or laboratory analysis report by an accredited laboratory (if necessary)

(c) High

- Halal certificates* from Muis and/or Muis-recognised Halal certification bodies.

Imagine this...

You are sick in bed, and a friend offered to cook for you with whatever that is in your fridge. She opened the fridge and saw this.



How will she know if there is tofu in the fridge for soup?

- She can check the food items based on the name reflected on the **product labels**.

How will she know if the food in the fridge is alright to eat?

- She can check the expiry dates on the different **product labels or packaging**.

Imagine this...

You are sick in bed for the past week. Your friend offered to get some groceries for you to top up your fridge. You reminded your friend that you are highly allergic to nuts.

Contains Gluten containing ingredients, Soy and Tree Nuts as indicated in bold type.
Whole Grain **Oats** (53%), Glucose, Chicory Root Fibre, Sunflower Oil, Brown Sugar, **Almond** Meal, Honey, Blueberry Fruit Pieces [Blueberry Puree (0.5%), **Wheat** Fibre], Currants, Strawberry Fruit Pieces [Strawberry Puree (0.3%), **Wheat** Fibre], Glycerine, Tapioca Starch, Mineral (Calcium Carbonate), **Wheat** Protein, Emulsifier (**Soy** Lecithin), Mineral Salts (450, 500) (**Wheat**), Flavour.
May contain Peanuts, Egg, other Tree Nuts, Milk, Sesame, Sulphites and Lupin.

How will she know if the groceries she is buying does not contain any nuts or traces of it?

- She can check the food items by looking at its list of ingredients (product specification).

Product Specifications & Labels

With proper product labels or product specifications, it is easier to

- ✓ **Identify the food** – PRODUCT NAME
- ✓ **Identify the ingredients in the food** – PRODUCT SPECIFICATION
- ✓ **Identify where it was manufactured** – MANUFACTURING ADDRESS

The food item can then be **checked based on its ingredients** or **traced back to its supporting document** to determine its Halal status.

**ALL FOOD PRODUCTS PRIOR TO PURCHASE SHALL BE
SUBSTANTIATED WITH PRODUCT SPECIFICATIONS OR LABELS**

Types of Halal Risk Categories

Low	Medium-Low	Medium-High	High
Primarily derived from non-animal sources, which are unprocessed or minimally processed . It also includes synthetic chemicals.	Primarily derived from non-animal sources that go through further processing without any animal-based additives .	Have been highly processed , may involve fermentation or have animal-derived substances added .	Contain flavouring, gelatine or meat and its derivatives .

DOCUMENTS REQUIRED

General questionnaire
(if necessary)

General questionnaire

OR

Laboratory analysis report
(if necessary)

OR

Muis-recognised Halal
certificate*

Muis-recognised Halal
certificate*

***All items to be supported with product specifications or labels.**

Risk Category: **LOW**

Low

Primarily derived from non-animal sources, which are **unprocessed or minimally processed**. It also includes synthetic chemicals.

MINIMALLY PROCESSED is limited to simple physical processes such as cutting, filleting, freezing, grinding and peeling. There should be no addition of other items to the food.

***All items to be supported with product specifications or labels.**



Vegetables



Fruits



Pure Seafood



Rice



Salt & Sugar



Synthetic Chemicals



Spices



Legumes & Lentils

Food for thought
Are ready-to-eat
fruits considered
low risk?
YES

Risk Category: MEDIUM-LOW

Medium-Low

Primarily derived from non-animal sources that go through **further processing without any animal-based additives.**

DOCUMENT(S) REQUIRED

General questionnaire
(if necessary)



Soy Beans Products

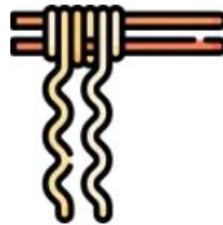


Flour



Synthetic Vinegar

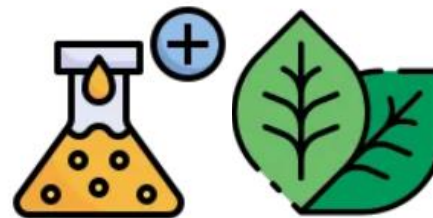
Made from industrially produced acetic acid



Noodles



Pasta

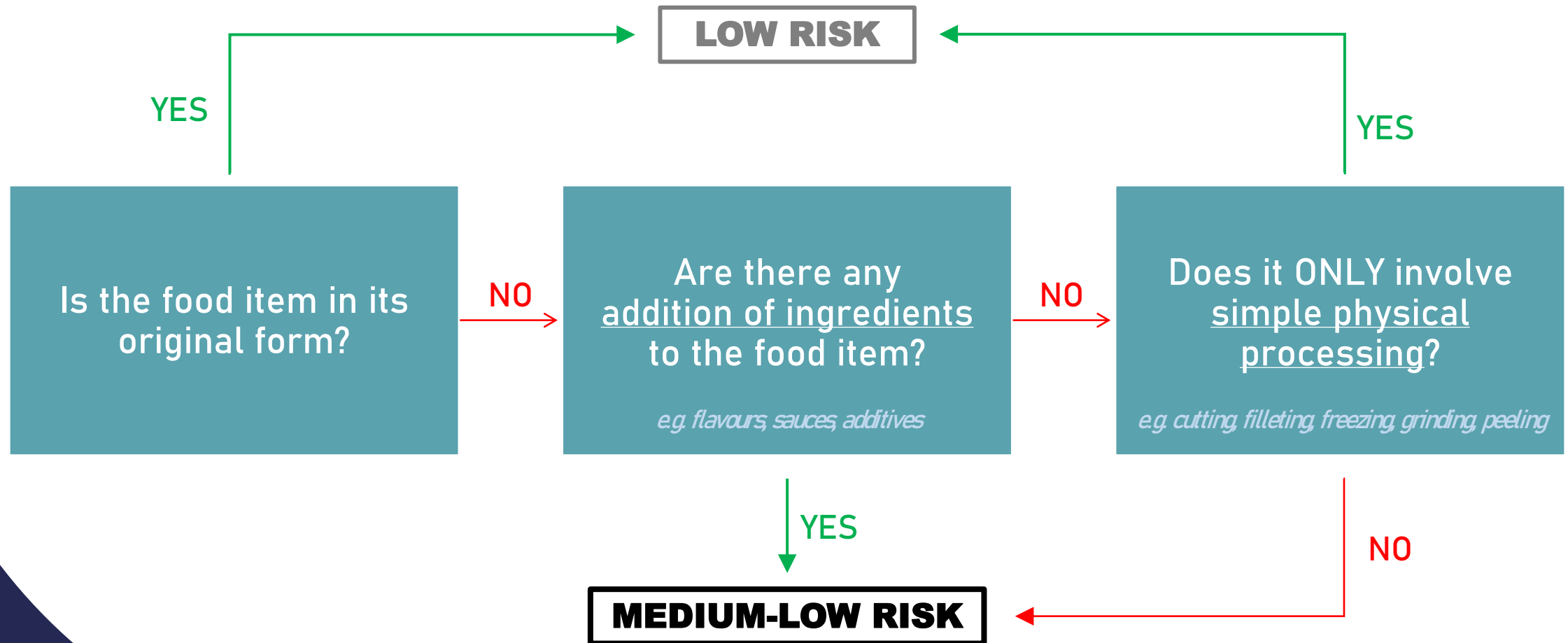


Food Additives
(excluding animal-derived E400s)

***All items to be supported with product specifications or labels.**

Food for thought
Pure vinegar is **naturally fermented**.
Hence, it is "riskier" and is considered **MEDIUM-HIGH** risk.

LOW or MEDIUM-LOW *How to know?*



Risk Category: MEDIUM-HIGH

Medium-High

Have been **highly processed**, may **involve fermentation** or have **animal-derived substances added**.

DOCUMENT(S) REQUIRED

General questionnaire

OR

Laboratory analysis report
(if necessary)

OR

Muis-recognised Halal
certificate*

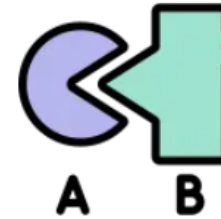
***All items to be supported with
product specifications or labels.**



Canned
Foods



Yeast



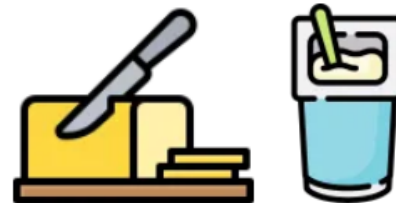
Enzymes



Pure Vinegar



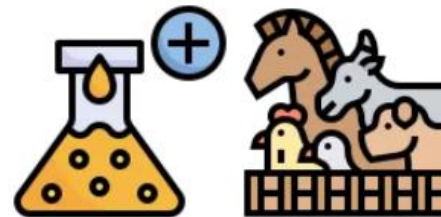
*Made from plant
sources such as
fruits and **malt***



Dairy Products



Cheese



Food Additives
(animal-derived E400s)

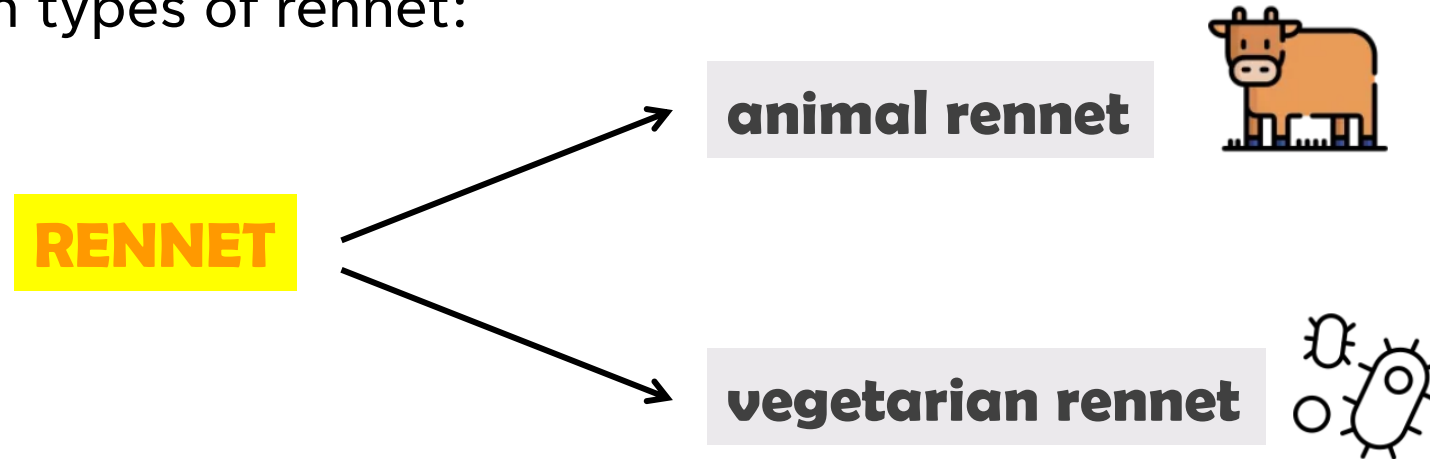
Food for thought

Cheese is
considered as
MEDIUM-HIGH risk
due to **RENNET**.

CHEESE & RENNET

During the cheese-making process, **rennet** is used to set the cheese.

There are 2 main types of rennet:



Hence, it is important to determine the source of the rennet that is used for the cheese.

This is why cheese is categorised as MEDIUM-HIGH.

SAUCES

Sauces, in general, contain additives and processing aids.

Examples of sauces:



Mustard



Mayonnaise



Soy Sauce



Soy Sauce

Sauces and condiments are deemed as highly processed food items.
For some, it may involve fermentation such as soy sauce.

This is why sauces are categorised as MEDIUM-HIGH.

MSG

Sauces, in general, contain additives and processing aids.

Examples of sauces:



Mustard



Mayonnaise



Soy Sauce

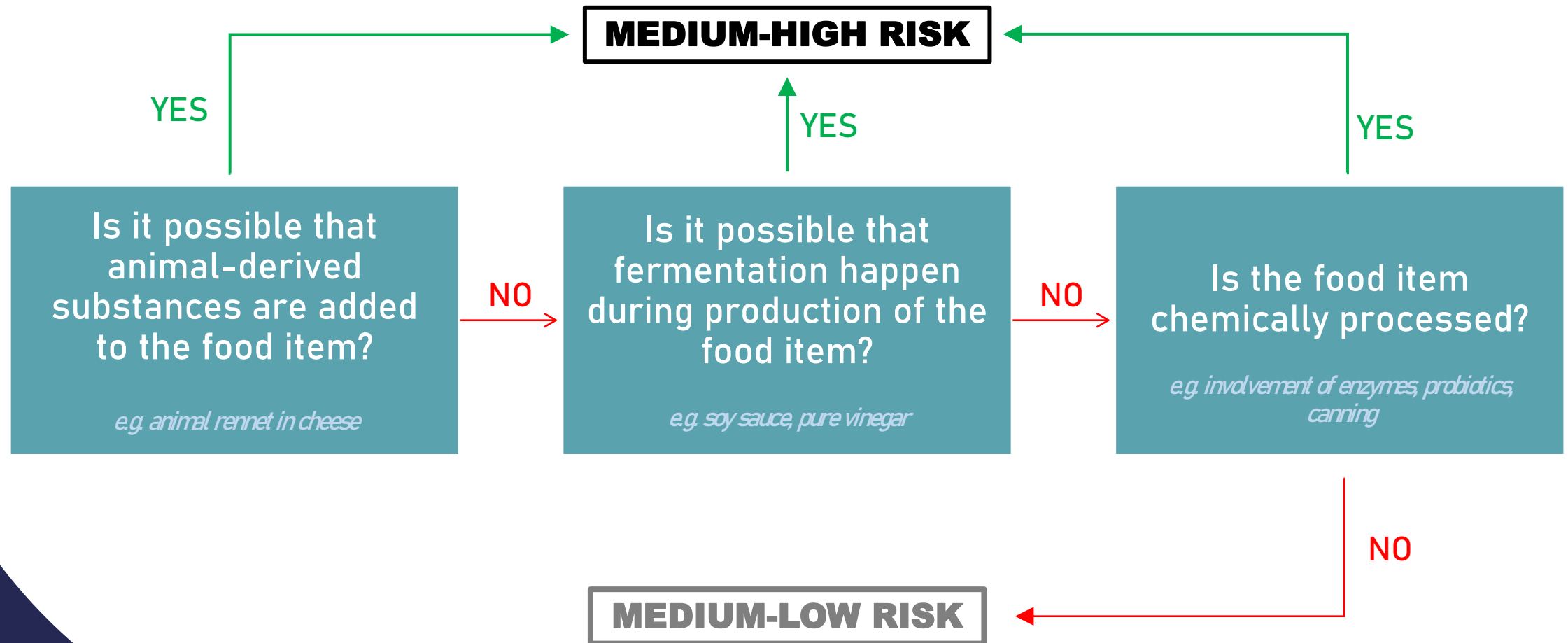


Soy Sauce

Sauces and condiments are deemed as highly processed food items.
For some, it may involve fermentation such as soy sauce.

This is why sauces are categorised as MEDIUM-HIGH.

MEDIUM-LOW or MEDIUM-HIGH *How to know?*



Risk Category: HIGH

High

Food that contains
flavouring, gelatine
or **meat and its**
derivatives.

DOCUMENT(S) REQUIRED

Muis-recognised Halal
certificate*

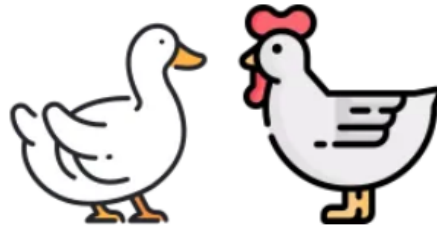


Flavours



Gelatine

*There is **fish gelatine** too.
A Halal certificate is still
required for it.*



Poultry &
Poultry-based Items



Red Meat &
Red Meat-based
Items

***All items to be supported with
product specifications or labels.**

Food for thought
Chicken seasoning may
not necessarily be
HIGH risk as some do
not contain any
meat-based extract.

Natural Ethanol in Halal Food Flavouring

A Fatwa (religious order by Mufti) on the permissibility of ethanol:

The Fatwa Committee has received a question from the Halal Certification Strategic Unit, Muis, on the use of natural ethanol in halal food flavouring/coloring.

After research and gathering information on ethanol product, the Fatwa Committee finds that the ethanol content in food flavorings (which are used as solvents) is less than 0.5%. This percentage is not at the intoxicating level.

The ethanol used is not produced from prohibited products like khamr. Hence, it is not considered impure.

The permissibility of using ethanol is exclusively for the purpose of flavoring. Ethanol used in a food or beverage product not for the purpose of flavoring is not permitted.

The Fatwa Committee opines that the use of ethanol (natural and synthetic) as a solvent is allowed as long as it is not produced from prohibited products. The content of ethanol in the flavoring should not exceed 0.5%, and the content of ethanol in the end-product should not exceed 0.1%.

Source: <https://www.muis.gov.sg/officeofthemufti/Fatwa/English-Ethanol>

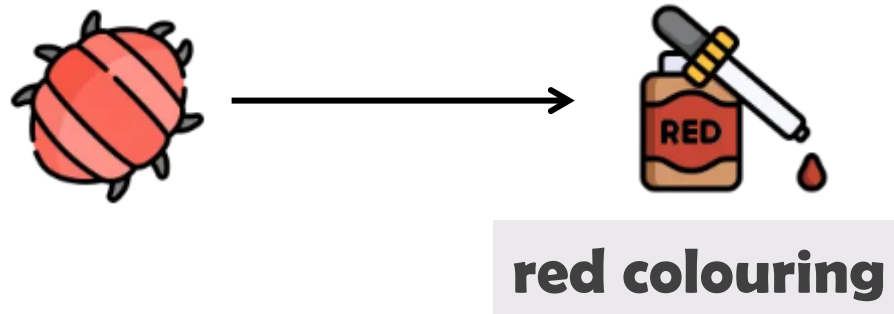
ETHANOL CONTENT

Flavours → not exceeding **0.5%**

End-product → not exceeding **0.1%**

Food colouring from cochineal (carmine)

Carmine (E120) is used as **red food colouring**. It is extracted from an insect, cochineal.



Based on a fatwa issued by Muis, the use of carmine red food colouring is **ALLOWED**. It belongs to the **LOW** Halal risk category.

Practice Time!

1

Which of the following products is considered as medium-low risk?

- a. Olive oil
- b. Ghee
- c. Butter
- d. Margarine

Answer: A. Olive oil is extracted by further processing and does not contain any animal-based additives. On the other hand, ghee and butter are considered dairy products and margarine is a chemically processed product.

Practice Time!

2

What is the risk categorisation for the food items shown below?



Yeast



Sugar



Flour



Butter

Answer: Yeast (Medium-High), Sugar (Low), Flour (Medium-Low), Butter (Medium-High).

Conclusion

Product specifications and labels are important as it helps to identify the products, its ingredients and place of manufacture. This will **allows for traceability between the product and its supporting document.**

Halal risk categorisation depends on **level of processing** and **type of substances added** to a particular food. This will determine the type of documents required.

In the next module, we will look at traceability and verification of ingredients.