



Sulphur dioxide/sulphites in meat

Purpose

This document provides general advice to butchers, meat processors or manufacturers, retailers and consultants in interpreting and applying the requirements on the use of sulphur dioxide/sulphites (as a preservative) in accordance with the Australia New Zealand Food Standards Code (the Food Standards Code).

There is a reported lack of understanding in the meat industry as a whole regarding the permitted levels (if any) of added sulphur dioxide/sulphites in meat and meat products.

What is the risk?

Foods containing sulphur dioxide/sulphites can provoke asthma attacks, severe allergic reactions or gastric irritation and some consumers may exceed safe amounts (Acceptable Daily Intake (ADI)) which is why its use is controlled and labelling is required under the Food Standards Code.

Definitions – what are we dealing with?

Sulphur dioxide/sulphites are food additives used as a preservative in some foods, including processed comminuted (ground) meats e.g. sausages.

Definitions

Term	Definitions
Sulphur dioxide/sulphites	Means the following food additives: Sulphur dioxide (220), Sodium sulphite (221), Sodium bisulphite (222), Sodium metabisulphite (223), Potassium metabisulphite (224), Potassium sulphite(225), Potassium bisulphite (228)
Processed meat	Means a meat product containing no less than 300 g/kg meat, where meat either singly or in combination with other ingredients or additives, has undergone a method of processing other than boning, slicing, dicing, mincing or freezing, and includes manufactured meat and cured and/or dried meat flesh in whole cuts or pieces.
Comminuted meat	There is not a formal definition in the Food Standards Code, but the term is used to apply to smallgoods such as frankfurters, saveloys, kranisky, sausages, some salamis, liverwurst, brawn, mettwurst, pepperoni, some meat pastes or spreads. In these products the meat is more finely chopped than mincing.

Use of sulphur dioxide/sulphites in meat products

Important Note: Sulphur dioxide/sulphites are only permitted to be in specified foods, up to a maximum permitted level that is specified in the Food Standards Code.

The Food Standards Code provides the permission to add sulphur dioxide/sulphites to processed comminuted meat products. These are the only meats where these preservatives may be added. When using sulphur dioxide/sulphites in products it is important that a business properly categorises products into those where addition is permitted, and those where it isn't. For example sliced, diced or minced meats do not meet the definition of processed meat and cannot have added sulphur dioxide/sulphites.

What meat products are permitted to contain sulphur dioxide/sulphites?

Standard 1.3.1 of the Food Standards Code permits the following meat categories to contain added sulphur dioxide/sulphites		
Food Types	Examples	Relevant meat category in Standard 1.3.1
<ul style="list-style-type: none"> Processed meat, poultry and game products that are, or are produced using, comminuted meats Sausages and sausage meat 	<ul style="list-style-type: none"> Hamburger patties made from sausage meat or meat with herbs or other seasonings Sausage rissoles, chipolatas, frankfurters, luncheon meats, salami, pepperoni. 	<ul style="list-style-type: none"> 8.3 Processed comminuted meat, poultry and game products, including fermented, uncooked processed comminuted meat products and sausage and sausage meat.
<ul style="list-style-type: none"> Sausage casings 		<ul style="list-style-type: none"> 8.4 Edible casings

Permitted amounts in meat products

If sulphur dioxide/sulphites is permitted to be added to the product then less than 500 mg/kg of sulphur dioxide/sulphites (calculated as sulphur dioxide) can be present in the final product as sold.

Labelling

Any food that contains added sulphites in concentrations of 10 mg/kg or more must declare the presence on the pack label. If a food product is not required to be labelled, the statements regarding added sulphites may be made on or in connection with the food, or declared to the purchaser on request.

What meat products are not permitted to contain added sulphur dioxide/sulphites?

Standard 1.3.1 of the Food Standards Code does not permit the following meat categories to contain added sulphur dioxides/sulphites	
Food Types / Examples	Relevant meat category in Standard 1.3.1

<ul style="list-style-type: none"> • Whole sides or cuts of fresh raw meat, game or poultry • Raw minced beef, chicken, lamb, pork, venison etc. • '100% meat' hamburger patties (these are not processed meats) 	<ul style="list-style-type: none"> • 8.1 Raw meat, poultry and game
<ul style="list-style-type: none"> • Processed (including cured) whole meat cuts such as shoulder or leg ham, corned beef, silverside, • Marinated meat • Cured meats such as bacon, prosciutto, pastrami, smoked chicken or turkey • Dried meats such as jerky 	<ul style="list-style-type: none"> • 8.2 processed meat, poultry and game products in whole cuts or pieces (including cured and dried meat)

Sulphur dioxide/sulphites in ingredients used in meat products

Some ingredients used to make meat products may contain added sulphur dioxide/sulphites. For example, the Food Standards Code permits sulphur dioxide/sulphites in dried fruits or vegetables, and sauces up to specified maximum levels (*refer to Standard 1.3.1*). The Food Standards Code allows for the carry over of sulphur dioxide/sulphites from such ingredients into other foods and so some meat products may contain sulphur dioxide because of this. The amount present would not be at a level that acts as a preservative in the meat.

Offences & Penalties

The incorrect use of sulphur dioxide/sulphites breaches the Food Standards Code, the Food Act 1981 and the Animal Products Act 1999. Under the Food Act 1981, failure to comply with the Food Standards Code can result in a fine of up to \$5,000 for an individual and \$20,000 for a body corporate.

Operators may also face potential penalty under the Animal Products Act 1999 including a term of imprisonment of up to 2 years and a fine of \$100,000 for an individual and \$500,000 for a body corporate.

More information

- The Food Standards Code is available to view online at:
<http://www.foodstandards.gov.au/code/Pages/default.aspx>
[Standard 1.3.1 Food additives](#)
[Standard 2.2.1 Meat and meat products](#)
- Ministry for Primary Industries Food Safety website:
www.foodsafety.govt.nz
 - Phone the Ministry for Primary Industries on 0800 693 721

Note This information is a general summary and cannot cover all situations. Food businesses are required to comply with all of the provisions of the Food Standards Code, the Food Act 1981 and the Animal Products Act 1999.