

## BHUTAN MANDATORY STANDARD FOR HEAVY METALS IN FOOD

### 1. PREAMBLE

This standard is issued pursuant to the Food Rules and Regulations of Bhutan 2017. This standard is based mainly on the latest version of the Codex General Standard for Contaminants and Toxins in Food and Feed (CODEX STAN 193-1995)

### 2. SCOPE

This standard applies to Heavy Metals in foods.

### 3. DEFINITIONS

**Maximum level (ML)** for a contaminant in a food or feed commodity is the maximum concentration of that substance to be legally permitted in that commodity.

### 4. HEAVY METALS

Heavy metal Levels (ML) in foods specified as follows:

<i>Serial No.</i>	<i>Heavy metals</i>	<i>Commodity</i>	<i>Maximum Level (ML) mg/kg</i>
<b>4.1.</b>	<b>Arsenic</b>	Edible fats and oils	0.1
		Fat spreads and blended spreads	0.1
		Natural mineral waters	0.01
		Rice, polished	0.2
		Salt, food grade	0.2
		Fish & fish products (as inorganic As)	0.1
		Meat	0.5
		Milk	0.1
		Milk powder	0.5
<b>4.2</b>	<b>Cadmium</b>	Brassica vegetables (Cabbage, Cauliflower, broccoli)	0.05
		Bulb vegetables (Onion, garlic etc.)	0.05
		Fruiting vegetable (maize, sweet and fresh)	0.05
		Leafy vegetables	0.2

		Legume vegetables	0.1
		Pulses except Soybean	0.1
		Root and tuber vegetables	0.1
		Stalk and stem vegetables (Artichoke, Asparagus, Celery, Rhubarb)	0.1
		Cereals except rice, wheat and buckwheat	0.1
		Rice, polished	0.4
		Wheat	0.2
		Cephalopods (Cuttle fish, Octopus and Squids)	2.0
		Natural mineral waters	0.003
		Salt, food grade	0.5
		Seaweeds	0.5
		Meat and meat product	0.5
		Fish (in general after removing digestive tract)	0.3
<b>4.3</b>	<b>Lead</b>	Berries and other small fruits except Cranberry, Currant and Elderberry	0.1
		Cranberry	0.2
		Currant	0.2
		Elderberry	0.2
		Fruits with the exception of berries and other small fruits(including mango, pineapple, pome fruits etc)	0.1
		Brassica vegetables, bulb vegetables	0.1
		Fruiting vegetable (maize, sweet and fresh) except mushrooms	0.05
		Leafy brassica vegetables except spinach	0.3
		Legume vegetables	0.1
		Pulses (Legumes)	0.2
		Root and tuber vegetables	0.1
		Canned fruits except berries and small fruits	0.1
		Canned raspberries	1.0

		Canned strawberries	1.0
		Jams (fruit reserves and jellies)	1.0
		Mango chutney	1.0
		Canned vegetables except brassica, leafy and legume all canned	0.1
		Preserved tomatoes	1.0
		Canned green beans and canned peas	1.0
		Pickled cucumbers	1.0
		Processed tomato concentrates	1.5
		Canned chestnut, canned chestnut puree	1.0
		Fruit juices except juices of berries and other small fruits	0.03
		Fruit juices exclusively from berries and other small fruits	0.05
		Cereal grains except buckwheat	0.2
		Meat of cattle, pigs and sheep and fat from the meat	0.1
		Meat and fat of poultry	0.1
		Edible offal of Cattle, meat and poultry	0.1
		Edible fats and oils	0.1
		Fat spreads and blended spread	0.1
		Milk and secondary Milk products	0.02
		Natural mineral waters	0.01
		Fish	0.3
		Salt, food grade	2.0
		Wine	0.2
		Seaweeds	5.0
<b>4.4</b>	<b>Mecury</b>	Natural mineral waters	0.001
		Salt, food grade	0.1
		Meat and meat products	1.0
		Seaweeds	0.1

<b>4.5</b>	<b>Methyl mercury</b>	Fish except predatory fish	0.5
		Predatory fish	1.0
<b>4.6</b>	<b>Tin</b>	Canned foods (other than beverages) Except non-tinplate canned cooked cured chopped meat, cooked Cured ham, cooked cured pork shoulder, corned beef and luncheon meat	250
		Canned beverages	150
		Cured chopped meat, Cured ham, cured pork shoulder all cooked, in containers other than tinplate containers	50
		Corned beef, luncheon meat all in containers other than tinplate containers	50
		Sea weeds	5