**Supplementary Table 1**

MUPs and their individual compounds within the nine categories1

|  |  |  |
| --- | --- | --- |
| **Category** | **MUPs** | **Individual compound** |
| **Cosmetic additives** |
| 1. Flavours
 | 1. Flavour
 | FlavorFlavour |
| 1. Flavour enhancers
 | 1. E62\*
 | E620 – E629 |
| 1. E63\*
 | E630 – E637 |
| 1. E640
 | E640 |
| 1. E650
 | E650 |
| 1. Flavour enhancer
 | Flavour enhancer |
| 1. Glutam\*
 | [Calcium diglutamate](https://en.wikipedia.org/wiki/Calcium_diglutamate)Glutamic acid[Magnesium diglutamate](https://en.wikipedia.org/wiki/Magnesium_diglutamate)[Monoammonium glutamate](https://en.wikipedia.org/wiki/Monoammonium_glutamate)[Monopotassium glutamate](https://en.wikipedia.org/wiki/Monopotassium_glutamate)[Monosodium glutamate](https://en.wikipedia.org/wiki/Monosodium_glutamate) |
| 1. Glycine
 | Glycine[Glycine](https://en.wikipedia.org/wiki/Glycine) and its sodium salt  |
| 1. Guanyl\*
 | [Calcium guanylate](https://en.wikipedia.org/wiki/Calcium_guanylate)[Dipotassium guanylate](https://en.wikipedia.org/wiki/Dipotassium_guanylate)[Disodium guanylate](https://en.wikipedia.org/wiki/Disodium_guanylate)[Guanylic acid](https://en.wikipedia.org/wiki/Guanylic_acid)Sodium guanylate |
| 1. Inosin\*
 | [Calcium inosinate](https://en.wikipedia.org/wiki/Calcium_inosinate)[Dipotassium inosinate](https://en.wikipedia.org/wiki/Dipotassium_inosinate)[Disodium inosinate](https://en.wikipedia.org/wiki/Disodium_inosinate)[Inosinic acid](https://en.wikipedia.org/wiki/Inosinic_acid)  |
| 1. Maltol
 | Ethyl maltolMaltol |
| 1. MSG
 | MSG |
| 1. Ribonucleotide\*
 | [Calcium 5'-ribonucleotides](https://en.wikipedia.org/wiki/Calcium_5%27-ribonucleotides)[Disodium 5'-ribonucleotides](https://en.wikipedia.org/wiki/Disodium_5%27-ribonucleotide) |
| 1. Zinc acetate
 | Zinc acetate |
| 1. Colouring agents
 | 1. Colour
 | ColourColour stabiliser |
| 1. Dye
 | Dye |
| 1. Sweeteners
 | 1. Acesulfame
 | Acesulfame KSalt of aspartame-acesulfame |
| 1. Advantame
 | Advantame |
| 1. Aspartame
 | AspartameSalt of aspartame-acesulfame |
| 1. Cyclam\*
 | CyclamateCyclamic acid |
| 1. E420
 | E420 |
| 1. E421
 | E421 |
| 1. E95\*
 | E950 – E959  |
| 1. E96\*
 | E960 – E969  |
| 1. Erythritol
 | Erythritol |
| 1. Isomalt
 | Isomalt |
| 1. Lactitol
 | Lactitol |
| 1. Maltitol
 | MaltitolMaltitol syrup |
| 1. Mannitol
 | Mannitol |
| 1. Neohesperidine
 | Neohesperidine DC |
| 1. Neotame
 | Neotame |
| 1. Polyglycitol
 | Polyglycitol |
| 1. Saccharin
 | Saccharin |
| 1. Sorbitol
 | SorbitolSorbitol syrup |
| 1. Steviol
 | Steviol glycoside |
| 1. Sucralose
 | Sucralose |
| 1. Sweetener
 | Sweetener |
| 1. Thaumatin
 | Thaumatin |
| 1. Xylitol
 | Xylitol |
| 1. Processing aids
 | 1. Bulking
 | Anti-bulkingBulking agent |
| 1. Caking
 | Anti-caking agentAnticaking agent |
| 1. Carbonating
 | Carbonating agent |
| 1. Emulsif\*
 | EmulsifierEmulsifying salts |
| 1. Firming
 | Firming agent |
| 1. Foaming
 | Anti-foaming agentDe-foaming agentFoaming agent |
| 1. Gelling
 | Gelling agent |
| 1. Glazing
 | Glazing agent |
| 1. Humectant
 | Humectant |
| 1. Sequestrant
 | Sequestrant |
| 1. Thickener
 | Thickener |
| **Non-culinary ingredients** |
| 1. Varieties of sugar
 | 1. Barley malt extract
 | Barley malt extract# |
| 1. Dextrose
 | DextrosePolydextrose# |
| 1. Fructose
 | FructoseFructose-glucose syrup# Glucose-fructose syrup#High-fructose corn syrup |
| 1. Invert\*
 | Inverted refiners syrup#Inverted sugar syrup#Invert sugar  |
| 1. Lactose
 | Lactose |
| 1. Maltodextrin
 | Maltodextrin |
| 1. Modified oils
 | 1. Hydrogenated
 | Hydrogenated oil |
| 1. Interesterified
 | Interesterified oil |
| 1. Protein sources
 | 1. Casein
 | Casein |
| 1. Gluten
 | Gluten |
| 1. Hydrolysed
 | Hydrolysed protein |
| 1. Isolate\*
 | Isolated soy proteinProtein isolate#Soy protein isolate |
| 1. Mechanically separated meat
 | Mechanically separated meat |
| 1. Whey
 | Dried whey#Whey#Whey derivatives#Whey permeate#Whey powder#Whey proteinWhey solids# |
| 1. Fibres
 | 1. Fibre
 | FibreFibre isolate#Insoluble fibreSoluble fibre |

1Individual compounds are based on NOVA group 4(3,13). \*Indicates that all variations of the word are possible (e.g., glutamic and glutamate are possible for glutam\*). #Indicates individual compounds which are not literally mentioned in the two publications(3,13) but which are related to the ultra-processing compounds mentioned.