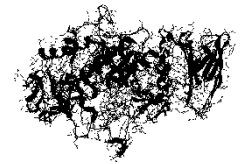


DETERGENT ADDITIVES

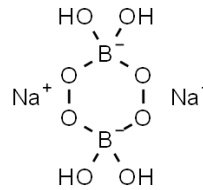
Biological Enzymes

- ✓ Amylases, proteases, cellulases, lipases...
- ✓ Remove protein stains (e.g. blood)



Sodium perborate

- ✓ Whitening agent
- ✓ Convert stains colourless



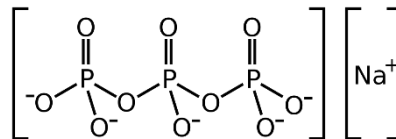
Fluorescent dyes

- ✓ Optical whitener
- ✓ Add brightness and whiteness to fabrics



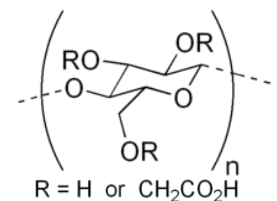
Sodium tripolyphosphate

- ✓ Builder
- ✓ Softens water



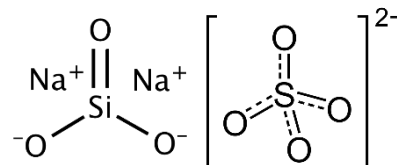
Carboxymethylcellulose

- ✓ Suspension agent
- ✓ Prevent removed dirt from redepositing



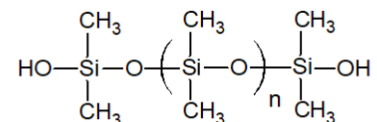
Sodium sulphate, sodium silicate

- ✓ Filler
- ✓ Add bulk to ease pouring



Silicones

- ✓ Foam control agent



PRESERVATIVES (slow down or prevent microbial growth to prolong shelf life)

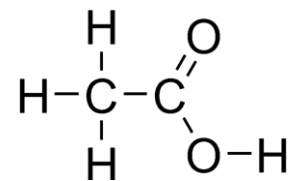
Salt, sugar

- ✓ Salted fish and jam
- ✓ Draws water out to retard microbial growth
- Might cause high BP, strokes, obesity, tooth decay, diabetes etc.



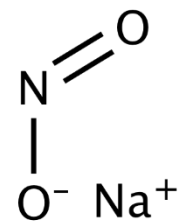
Vinegar

- ✓ Pickled mangoes
- ✓ Provides acidic conditions to inhibit microbial growth



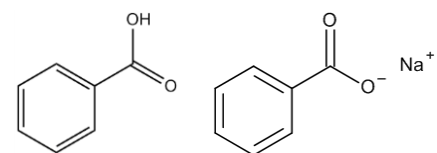
Sodium nitrite, sodium nitrate

- ✓ Burgers, sausages, luncheon meat
- ✓ Retard microbial growth
- ✓ Stabilises red colour
- Might cause cancer due to nitrosamine production



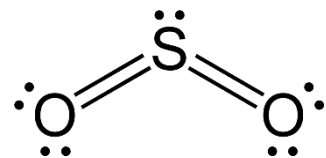
Benzoic acid, sodium benzoate

- ✓ Oyster sauce, tomato sauce, chilli sauce, fruit juice
- ✓ Retard microbial growth



Sulphur dioxide

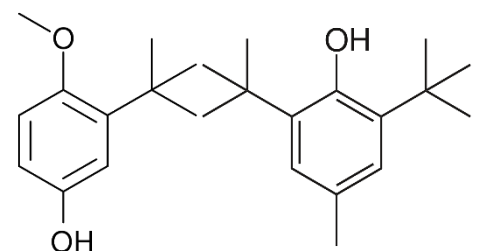
- ✓ Fruit juice
- ✓ Retard microbial growth
- Might cause allergic reactions



ANTIOXIDANTS (prevent oxidation)

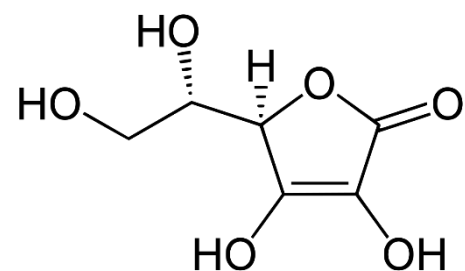
Butylated hydroxyanisole, butylated hydroxytoluene

- ✓ Margarine
- ✓ Retard oil rancidity
- ✓ Produced adverse reactions in dogs



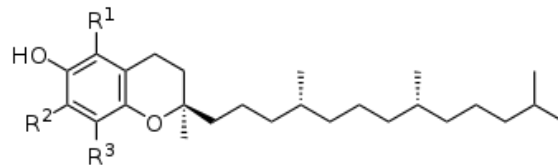
Vitamin C (Ascorbic acid)

- ✓ Fruit juice
- ✓ Preserve juice colour
- ✓ Inhibits carcinogenic nitrosamines
- ✓ Stimulates immune system
- ✓ Protects chromosome breakage



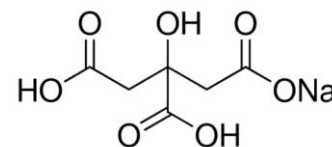
Vitamin E (Alpha tocopherol)

- ✓ Vege oils
- ✓ Retard oil rancidity
- ✓ Neutralises free radicals
- ✓ Reduce risk of heart disease and cancer



Sodium citrate

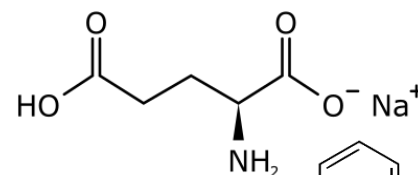
- ✓ Cooked cured meat
- ✓ Retard fat rancidity



FLAVOURINGS (improve and restore taste due to processing)

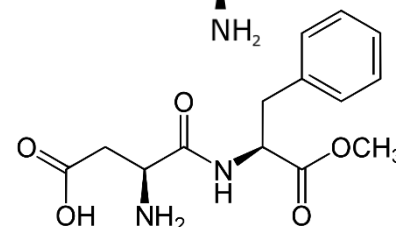
Monosodium glutamate

- ✓ Frozen food, spices, canned soups, salads, meat, fish
- ✓ Brings out the flavour of food



Aspartame

- ✓ Diet drinks, frozen desserts
- ✓ Sweeten food



Pentyl ethanoate

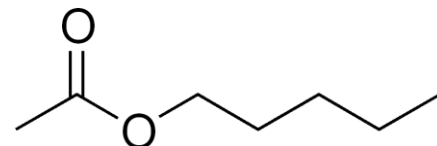
- ✓ Banana flavour

Octyl ethanoate

- ✓ Orange flavour

Methyl butanoate

- ✓ Apple flavour



Ethyl butanoate

- ✓ Pineapple flavour

STABILISERS (prevent emulsions from separating out)

Lecithin

- ✓ Margarine, butter, ice cream, salad cream



Mono/diglycerides

Acacia gum

THICKENERS (thicken food)

Modified starch

- ✓ Instant soups and puddings

Pectin

- ✓ Jam

Gelatine

- ✓ Yogurt

Acacia gum

- ✓ Chewing gum, jelly, wine

Xanthan gum

- ✓ Sauce and salad



DYES (add/restore colour to enhance visual appeal and match consumer's expectations)

Turmeric

- ✓ Natural yellow dye



Tartrazine

- ✓ Artificial yellow azo dye
- ✓ Orange drinks, custard powder, sweets, apricot jam
- Might cause hyperactivity



Brilliant blue FCF

- ✓ Artificial blue triphenyl dye
- ✓ Beverages, jellies, confections, syrups



TRADITIONAL MEDICINES (medicines derived from plants or animals)

Aloe vera

- ✓ Skin wounds

Pegaga

- ✓ Depression and for longevity



Tongkat Ali

- ✓ Increase male libido

Misai kucing

- ✓ Gout, diabetes, rheumatism



Hempedu bumi

- ✓ Diarrhoea, fever, diabetes



Selasih

- ✓ Coughs, colds, bronchitis

Sea cucumber

- ✓ Japanese encephalitis and heart hole



Centipede

- ✓ Lockjaw and convulsions

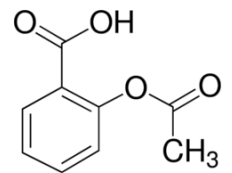
Ants

- ✓ Hepatitis B

ANALGESICS (relieve pain without causing numbness or unconsciousness)

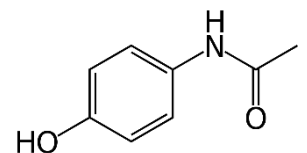
Aspirin

- ✓ Acetylsalicylic acid
- ✓ For inflammation such as arthritic pain and dental pain
- Might cause internal bleeding / ulceration, thus it is swallowed with water
- Might cause brain and liver damage in children with flu or chicken pox



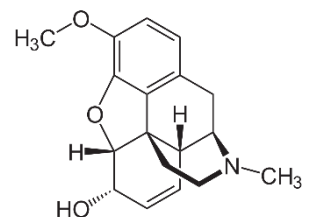
Paracetamol

- ✓ Headaches, muscle and joint pains, backaches, period pains
- Might cause liver damage if overdosed



Codeine

- ✓ Headache, coughs
- Might cause depression, addiction and nausea if abused



ANTIBIOTICS (kill or slow down bacterial growth)

Penicillin

- ✓ Tuberculosis, pneumonia

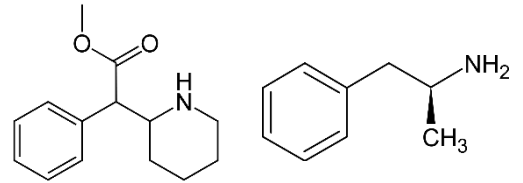
Streptomycin

- ✓ Tuberculosis, whooping cough, pneumonia

PSYCHOTHERAPEUTIC MEDICINES (alter abnormal thinking, feelings or behaviours)

Methylphenidate, Dextroamphetamine, Amphetamine

- ✓ Stimulants: Reduce fatigue and mood
- Might cause anxiety and hallucinations if overdosed

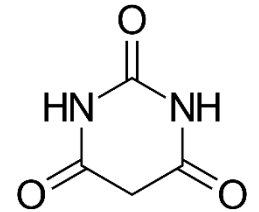


Tranquillisers

- ✓ Antidepressant: Reduce tension and anxiety
- Might cause drowsiness, poor coordination, or even coma

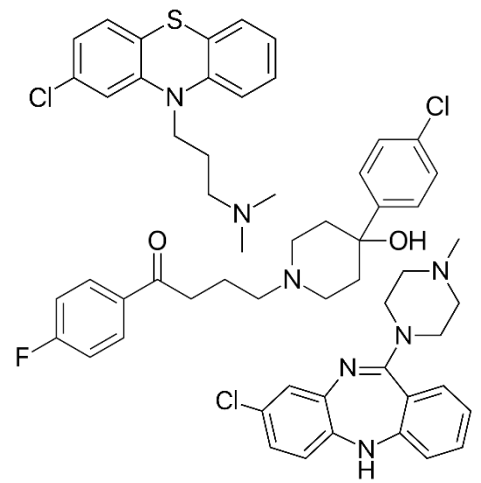
Barbiturates

- ✓ Antidepressant: Reduce tension and anxiety
- Might cause addiction to death



Chlorpromazine, Haloperidol, Clozapine

- ✓ Antipsychotic: Treat psychiatric illness (*schizophrenia*)
- Might cause drowsiness, rapid heartbeats and dizziness



DRUGS

Ecstasy

- Causes depression for weeks

Ice

- Causes stroke and liver/kidney damage