# Section 1

## Category

Sugar

## Ingredient

High Fructose Corn Syrup (HFCS)

## Potential Harm

Obesity, type 2 diabetes, non-alcoholic fatty liver disease, increased risk of heart disease, tooth decay

## How to Identify

Listed as "high fructose corn syrup" or "HFCS"

## Citation

Link

# Section 3

## Category

Sugar

## Ingredient

Invert Sugar Syrup

## Potential Harm

Increased risk of obesity, type 2 diabetes, heart disease

## How to Identify

Listed as "invert sugar" or "invert sugar syrup"

## Citation

Link

# Section 4

## Category

Sugar

## Ingredient

Maltodextrin

## Potential Harm

Rapid increase in blood sugar levels, may alter gut bacteria, can cause digestive issues

## How to Identify

Listed as "maltodextrin"

## Citation

Link

# Section 5

## Category

Sugar

## Ingredient

Dextrose

## Potential Harm

Rapid blood sugar spike, weight gain, tooth decay

## How to Identify

Listed as "dextrose"

## Citation

Link

# Section 6

## Category

Sugar

## Ingredient

Agave Nectar

## Potential Harm

High in fructose, may contribute to insulin resistance and liver problems

## How to Identify

Listed as "agave nectar" or "agave syrup"

## Citation

Link

# Section 7

## Category

Sugar

## Ingredient

Artificial Sweeteners like Aspartame, Sucralose, Acesulfame Potassium, Saccharin

## Potential Harm

Potential metabolic changes, possible alterations in gut microbiome; mixed evidence regarding cancer risk

## How to Identify

Listed as "aspartame," "sucralose," "acesulfame potassium," "saccharin"

## Citation

Link

# Section 8

## Category

Fat

## Ingredient

Trans Fats

## Potential Harm

Increased LDL cholesterol, decreased HDL cholesterol, increased risk of heart disease and stroke

## How to Identify

Look for "partially hydrogenated oils"

## Citation

Link

# Section 9

## Category

Fat

## Ingredient

Palm Olein Oil

## Potential Harm

High in saturated fats; potential negative effects on blood lipid profiles

## How to Identify

Listed as "palm oil," "palm olein oil," or "edible vegetable oil (palm olein)"

## Citation

Link

# Section 10

## Category

Fat

## Ingredient

Interesterified Fats

## Potential Harm

May raise blood glucose levels and decrease insulin sensitivity

## How to Identify

Look for "interesterified" or "fully hydrogenated" oils

## Citation

Link

# Section 11

## Category

Processed food

## Ingredient

Refined Grains

## Potential Harm

Rapid blood sugar increase, less fiber and nutrients, may contribute to overeating

## How to Identify

Terms like "enriched flour," "white flour," or "wheat flour" (without "whole")

## Citation

Link

# Section 12

## Category

Processed food

## Ingredient

Modified Starches

## Potential Harm

May cause digestive issues, rapid blood sugar spikes

## How to Identify

Look for "modified" before any starch name

## Citation

Link

# Section 13

## Category

Salt

## Ingredient

Sodium Chloride

## Potential Harm

High blood pressure, increased risk of heart disease and stroke, may increase risk of stomach cancer

## How to Identify

Listed as "sodium chloride" or "salt"

## Citation

Link

# Section 14

## Category

Salt

## Ingredient

Monosodium Glutamate (MSG)

## Potential Harm

Headaches, nausea, chest pain in some people; may increase appetite

## How to Identify

Listed as "monosodium glutamate," "MSG," "yeast extract," or "hydrolyzed vegetable protein"

## Citation

Link

# Section 15

## Category

Salt

## Ingredient

Sodium Nitrate/Nitrite

## Potential Harm

May form potentially carcinogenic compounds (nitrosamines), especially when heated

## How to Identify

Listed as "sodium nitrate" or "sodium nitrite"

## Citation

Link

# Section 17

## Category

Raising Agents

## Ingredient

Sodium Bicarbonate (INS 500ii)

## Potential Harm

When consumed in excess: metabolic alkalosis, potential neurological symptoms

## How to Identify

Listed as "sodium bicarbonate," "baking soda," or "INS 500ii"

## Citation

https://www.ncbi.nlm.nih.gov/books/NBK559139/

# Section 18

## Category

Raising Agents

## Ingredient

Potassium Bromate

## Potential Harm

Potential carcinogen, banned in many countries but still used in some

## How to Identify

Listed as "potassium bromate"

## Citation

https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9898660/#:~:text=Free%20radicals%20of%20potassium%20bromate,tumors%20in%20rats%20%5B16%5D.

# Section 19

## Category

Artificial Colors

## Ingredient

Red 40, Yellow 5, Blue 1, etc.

## Potential Harm

Potential hyperactivity in children, allergic reactions in some individuals

## How to Identify

Look for color names or numbers in ingredient list

## Citation

Artificial food colors and hyperactivity Link

# Section 20

## Category

Artificial Preservatives

## Ingredient

BHA (Butylated hydroxyanisole)

## Potential Harm

Potential carcinogen, endocrine disruptor

## How to Identify

Look for "BHA" or full name

## Citation

https://pubmed.ncbi.nlm.nih.gov/10541460/

# Section 21

## Category

Artificial Preservatives

## Ingredient

BHT (Butylated hydroxytoluene)

## Potential Harm

Potential liver and kidney effects, possible carcinogen

## How to Identify

Look for "BHT" or full name

## Citation

https://pubmed.ncbi.nlm.nih.gov/10541460/

# Section 22

## Category

Artificial Preservatives

## Ingredient

Sodium Benzoate

## Potential Harm

May form benzene (a carcinogen) when combined with vitamin C, potential hyperactivity in children

## How to Identify

Look for "sodium benzoate"

## Citation

https://pubmed.ncbi.nlm.nih.gov/29243862/#:~:text=Abstract,deficit%2Dhyperactivity%20disorder%20in%20children.

# Section 23

## Category

Emulsifiers

## Ingredient

Carrageenan

## Potential Harm

May cause gastrointestinal inflammation, potential to alter gut microbiome

## How to Identify

Look for "carrageenan" in ingredient list

## Citation

https://pubmed.ncbi.nlm.nih.gov/38732613/#:~:text=Carrageenan%20increases%20the%20content%20of,reduction%20of%20the%20mucin%20layer.

# Section 24

## Category

Emulsifiers

## Ingredient

Polysorbate 80

## Potential Harm

May promote intestinal inflammation, potential to alter gut microbiome

## How to Identify

Look for "polysorbate 80"

## Citation

No evidence

# Section 25

## Category

Phosphates

## Ingredient

Sodium phosphate, Calcium phosphate

## Potential Harm

May increase cardiovascular disease risk, particularly in people with kidney problems

## How to Identify

Look for "phosphate" in ingredient names

## Citation

Phosphates and cardiovascular risk Link

# Section 26

## Category

Thickeners and Stabilizers

## Ingredient

Xanthan gum

## Potential Harm

Generally considered safe, but may cause digestive issues in some people

## How to Identify

Look for "xanthan gum"

## Citation

Xanthan gum and digestive effects Link

# Section 27

## Category

Thickeners and Stabilizers

## Ingredient

Carboxymethylcellulose (CMC)

## Potential Harm

May alter gut microbiome, potentially promote intestinal inflammation

## How to Identify

Look for "carboxymethylcellulose" or "cellulose gum"

## Citation

Carboxymethylcellulose and gut health Link

# Section 28

## Category

Bleaching Agents

## Ingredient

Azodicarbonamide

## Potential Harm

Potential respiratory issues, banned in some countries

## How to Identify

Look for "azodicarbonamide"

## Citation

Azodicarbonamide and health effects Link

# Section 29

## Category

Bleaching Agents

## Ingredient

Benzoyl Peroxide

## Potential Harm

May cause skin and eye irritation, destroys nutrients in flour

## How to Identify

Look for "benzoyl peroxide"

## Citation

Benzoyl peroxide and its effects Link

# Section 30

## Category

Hormones and Antibiotics

## Ingredient

rBGH, Various antibiotics

## Potential Harm

Potential disruption of human hormone balance, concerns about antibiotic resistance

## How to Identify

Not always listed; look for "hormone-free" or "antibiotic-free" claims

## Citation

rBGH and hormone disruption Link

# Section 31

## Category

GMOs

## Ingredient

Various GMO ingredients

## Potential Harm

Ongoing debate about long-term effects; main concerns are potential allergenicity and environmental impact

## How to Identify

Look for "GMO" or "genetically engineered" on label, or absence of "Non-GMO" claim

## Citation

GMO foods and health concerns Link

# Section 32

## Category

Pesticide Residues

## Ingredient

Various pesticides

## Potential Harm

Potential neurological effects, hormone disruption, cancer risk (varies by pesticide)

## How to Identify

Not listed on ingredients; look for "organic" certification

## Citation

Pesticide residues and health risks Link

# Section 33

## Category

Phthalates

## Ingredient

Various phthalates

## Potential Harm

Endocrine disruption, potential reproductive and developmental effects

## How to Identify

Not usually listed; can leach from plastic packaging

## Citation

Phthalates and endocrine disruption Link

# Section 34

## Category

Bisphenol A (BPA)

## Ingredient

BPA

## Potential Harm

Endocrine disruption, potential effects on brain development and behavior

## How to Identify

Not listed; found in some food packaging and can linings

## Citation

BPA and its health effects Link

# Section 35

## Category

Propylene Glycol

## Ingredient

Propylene Glycol

## Potential Harm

Generally recognized as safe, but may cause allergic reactions in some people

## How to Identify

Listed as "propylene glycol"

## Citation

Propylene glycol and health safety Link

# Section 36

## Category

Carboxymethylcellulose

## Ingredient

Carboxymethylcellulose

## Potential Harm

May alter gut microbiome, potentially promote intestinal inflammation

## How to Identify

Listed as "carboxymethylcellulose" or "cellulose gum"

## Citation

Carboxymethylcellulose and gut health Link

# Section 37

## Category

Calcium Disodium EDTA

## Ingredient

Calcium Disodium EDTA

## Potential Harm

May interfere with mineral absorption, potential to promote oxidative stress

## How to Identify

Listed as "calcium disodium EDTA"

## Citation

Calcium disodium EDTA and mineral absorption Link

# Section 38

## Category

Brominated Vegetable Oil

## Ingredient

Brominated Vegetable Oil

## Potential Harm

Potential thyroid problems, neurological issues

## How to Identify

Listed as "brominated vegetable oil" or "BVO"

## Citation

Brominated vegetable oil and health effects Link

# Section 39

## Category

Olestra

## Ingredient

Olestra

## Potential Harm

May cause gastrointestinal distress, interferes with absorption of fat-soluble vitamins

## How to Identify

Listed as "olestra" or "olean"

## Citation

Olestra and gastrointestinal effects Link

# Section 40

## Category

Caramel Color

## Ingredient

Caramel Color

## Potential Harm

Some forms may contain 4-methylimidazole, a potential carcinogen

## How to Identify

Listed as "caramel color" or "caramel coloring"

## Citation

Caramel color and potential carcinogenic effects Link

# Section 41

## Category

Carrageenan

## Ingredient

Carrageenan

## Potential Harm

May cause gastrointestinal inflammation, potential to alter gut microbiome

## How to Identify

Listed as "carrageenan"

## Citation

Carrageenan and gastrointestinal effects Link

# Section 42

## Category

Sodium Aluminum Phosphate

## Ingredient

Sodium Aluminum Phosphate

## Potential Harm

Potential neurotoxicity, may contribute to kidney problems

## How to Identify

Listed as "sodium aluminum phosphate" or "SALP"

## Citation

Sodium aluminum phosphate and neurotoxicity Link

# Section 44

## Category

Banned by EU, Japan, Australia, Canada

## Ingredient

Brominated Vegetable Oil (BVO)

## Potential Harm

Accumulates in tissues; neurological symptoms, thyroid dysfunction, potential reproductive issues

## How to Identify

"Brominated Vegetable Oil," "BVO"

## Citation

European Commission - Food Additives  
Health Canada - Food Additives

# Section 45

## Category

Banned by EU, Canada, Brazil, China

## Ingredient

Potassium Bromate

## Potential Harm

Classified as a possible human carcinogen; linked to kidney and thyroid tumors in animal studies

## How to Identify

"Potassium Bromate," "Bromated Flour," "E924"

## Citation

IARC Monographs  
EFSA - Food Additives

# Section 46

## Category

Banned by EU, Australia

## Ingredient

Azodicarbonamide (ADA)

## Potential Harm

Can cause respiratory issues; breaks down into semicarbazide, linked to cancer in animal studies

## How to Identify

"Azodicarbonamide," "ADA," "E927"

## Citation

European Commission - Food Additives  
FSANZ - Food Additives

# Section 47

## Category

Banned by EU, China, Russia

## Ingredient

Ractopamine

## Potential Harm

May cause cardiovascular issues; not permitted in meat products in these countries

## How to Identify

Not usually listed; used in livestock feed  
  
Other names - Paylean (pigs), Optaflexx (cattle), Ractopamine hydrochloride

## Citation

EFSA Opinion on Ractopamine  
FAO - Ractopamine Residues

# Section 48

## Category

Banned by UK, Canada

## Ingredient

Olestra

## Potential Harm

May cause digestive issues like diarrhea, abdominal cramps; inhibits absorption of fat-soluble vitamins

## How to Identify

"Olestra," "Olean"

## Citation

Health Canada - Food Additives  
UK FSA - Food Additives

# Section 49

## Category

Banned by EU (only some GMOs), Russia

## Ingredient

Certain GMOs

## Potential Harm

Environmental concerns, allergenicity, long-term health effects; some countries exercise precaution despite scientific consensus on safety

## How to Identify

Labels may state "Non-GMO" or "Contains GMO"  
  
Different name - Bioengineered ingredients

## Citation

European Commission - GMOs  
Russian GMO Regulations

# Section 50

## Category

Banned by EU, Canada, Australia, Japan

## Ingredient

Recombinant Bovine Growth Hormone (rBGH/rBST)

## Potential Harm

Concerns over increased IGF-1 levels in milk, which may be linked to cancer risk

## How to Identify

Milk products may state "rBGH-free"  
  
aka - Recombinant bovine somatotropin, rBST

## Citation

European Commission - rBGH Prohibition  
Health Canada - rBST Decision

# Section 51

## Category

Banned by EU

## Ingredient

Chlorine-Washed Chicken

## Potential Harm

Concerns over masking poor hygiene; potential formation of harmful chlorinated compounds

## How to Identify

Not applicable; pertains to processing methods  
  
aka - Chlorinated chicken, chlorinated poultry

## Citation

European Commission - Poultry Meat Hygiene  
EFSA - Chlorine Safety

# Section 52

## Category

Banned by EU (requires warning labels), Norway, Austria

## Ingredient

Certain Artificial Food Colorings

## Potential Harm

Linked to hyperactivity in children; potential allergenic effects

## How to Identify

"Tartrazine," "Sunset Yellow," "Allura Red," E-numbers like E102, E110, E129

## Citation

EFSA - Food Colors  
UK FSA - Food Additives

# Section 53

## Category

Banned by EU (BHA banned in infant foods), Japan (BHT banned)

## Ingredient

BHA and BHT

## Potential Harm

Potential carcinogens; may cause liver enlargement, affect blood clotting

## How to Identify

"Butylated Hydroxyanisole (BHA)," "Butylated Hydroxytoluene (BHT)"  
E320 (BHA), E321 (BHT)

## Citation

European Commission - Food Additives  
IARC Monographs on BHA

# Section 54

## Category

Banned by EU

## Ingredient

Degraded Carrageenan

## Potential Harm

Linked to gastrointestinal inflammation and ulcerations in animal studies

## How to Identify

"Carrageenan," "Processed Eucheuma Seaweed," "E407", Irish Moss

## Citation

European Commission - Food Additives  
JECFA Reports

# Section 56

## Category

Declared harmful by FDA/NIN

## Ingredient

Safrole and Sassafras Oil

## Potential Harm

Carcinogenic; associated with liver cancer in animal studies

## How to Identify

"Safrole," "Sassafras oil," "Sassafras extract," "Sassafras tea"  
  
Shikimol, Sassafras root oil, Sassafras albidum

## Citation

FDA CFR Title 21, §189.180

# Section 57

## Category

Declared harmful by FDA/NIN

## Ingredient

Coumarin

## Potential Harm

Liver damage; anticoagulant effects may cause bleeding disorders

## How to Identify

"Coumarin," ingredients like tonka beans  
  
1,2-Benzopyrone, Tonka bean extract, Cumarine

## Citation

FDA CFR Title 21, §189.130

# Section 58

## Category

Declared harmful by FDA/NIN

## Ingredient

Calamus and Calamus Oil

## Potential Harm

Contains beta-asarone; carcinogenic in animal studies

## How to Identify

"Calamus," "Calamus oil," "Sweet flag"  
  
Acorus calamus, Sweet flag, Rat root

## Citation

FDA CFR Title 21, §189.110

# Section 59

## Category

Declared harmful by FDA/NIN

## Ingredient

Cinnamyl Anthranilate

## Potential Harm

Carcinogenic; causes liver tumors in animal studies

## How to Identify

"Cinnamyl anthranilate"  
Ester of anthranilic acid and cinnamyl alcohol

## Citation

FDA CFR Title 21, §189.135

# Section 60

## Category

Declared harmful by FDA/NIN

## Ingredient

Monochloroacetic Acid

## Potential Harm

Highly toxic; skin burns, respiratory distress, systemic toxicity

## How to Identify

"Monochloroacetic acid," "Chloroacetic acid"  
  
Chloroacetic acid, MCA

## Citation

FDA CFR Title 21, §189.175

# Section 61

## Category

Declared harmful by FDA/NIN

## Ingredient

Thiourea

## Potential Harm

Carcinogenic; thyroid dysfunction, liver tumors

## How to Identify

"Thiourea"  
Thiocarbamide

## Citation

FDA CFR Title 21, §189.220

# Section 62

## Category

Declared harmful by FDA/NIN

## Ingredient

Diethylpyrocarbonate (DEPC)

## Potential Harm

Forms urethane (carcinogen), especially in alcoholic beverages

## How to Identify

"Diethylpyrocarbonate," "DEPC"

## Citation

FDA Substances Prohibited in Human Food

# Section 63

## Category

Declared harmful by FDA/NIN

## Ingredient

P-4000 (Red Dye No. 2)

## Potential Harm

Suspected carcinogen; linked to tumors in animal studies

## How to Identify

"FD&C Red No. 2," "Amaranth," "E123"

## Citation

FDA Color Additives Backgrounder

# Section 64

## Category

Declared harmful by FDA/NIN

## Ingredient

Brominated Vegetable Oil (BVO)

## Potential Harm

Accumulates in tissues; neurologic symptoms, thyroid dysfunction

## How to Identify

"Brominated vegetable oil," "BVO"

## Citation

FDA CFR Title 21, §180.30

# Section 65

## Category

Declared harmful by FDA/NIN

## Ingredient

Cyclamate Salts

## Potential Harm

Linked to bladder cancer in animal studies

## How to Identify

"Calcium cyclamate," "Sodium cyclamate," "Cyclamic acid"  
  
E952, Cyclamic acid salts

## Citation

FDA Removal of Cyclamate from GRAS List