

## GENERAL INSTRUCTIONS ON SAFE USE OF FOODSTUFFS

Finnish Food Authority

Updated April 2025

### TARGET GROUP:

Pregnant and breastfeeding women, infants (under 12 months), toddlers (1–6 years), children (age specified), children and adolescents (under 18 years), adults, the elderly, individuals with weakened immunity and individuals who are sensitive to caffeine. Concerning some foodstuffs the whole population. If an age group recommendation differs from the above, it is specified separately in the recommendation.

The foodstuffs known at present to involve potential risks are listed in this Table. The Table is maintained by Finnish Food Authority. These instructions are included in the "Eating together" food recommendations for families with children, issued by the National Nutrition Council and the National Institute for Health and Welfare (THL). A balanced, varied and moderate diet is the best way to avoid the effects of any harmful substances contained in food. Good hygiene in the kitchen and in handling foodstuffs as well as correct cooking and storage temperatures help reduce the risk of food poisoning. The instructions for use provided on the labelling of the food product should also be observed.

**TABLE 1.** General instructions for the safe use of foods. This table lists the currently known foods whose use involves potential hazards. The table is maintained on the Finnish Food Authority's website.

FISH and FISH PRODUCTS			
Foodstuff/ food product	Applicable to	Correct use	Basis for guidelines
Fish	Whole population	<p>Fish should be eaten 2–3 times a week according to recommendations. The health benefits obtained from fish are greater than the potential adverse effects. <b>Varied use</b> of different species eliminates any concern about levels of environmental contaminants.</p> <p>It is recommended that lake fish, farmed fish and sea fish (e.g. coalfish, rainbow trout, Arctic char, roach). Good alternatives also include fish balls, fish patties and canned fish such as lake fish products. People who eat inland water fish on a daily basis should favour species other than pike, large perch, zander and burbot, which are predatory fish that accumulate mercury.</p> <p>Regionally, it may be necessary to avoid the excessive consumption of predatory fish due to higher levels of foreign substances.</p>	<p>Mercury, PFAS and/or dioxins and PCBs that accumulate in certain fish.</p> <p><a href="https://www.ruokavirasto.fi/en/foodstuffs/instructions-for-consumers/safe-use-of-foodstuffs/safe-use-of-fish/">https://www.ruokavirasto.fi/en/foodstuffs/instructions-for-consumers/safe-use-of-foodstuffs/safe-use-of-fish/</a></p>
	Toddlers	<p>Restrictions on use:</p> <p>Farmed fish and roach caught in inland waters can be eaten without restriction.</p> <p>Fish in the Baltic Sea</p> <ul style="list-style-type: none"> <li>– 1–2 times per month: Trout, pike-perch, bream, whitefish, perch, pike or vendace. Vary the species of fish.</li> <li>– Once every two months: Wild salmon, lamprey, or large Baltic herring that is over 19 cm long when uncleaned</li> <li>– A couple of times per year: Smelt</li> </ul> <p>Fish in inland waters</p> <ul style="list-style-type: none"> <li>– Once a week: Pike-perch, bream, whitefish, perch or pike. Vary the species of fish.</li> <li>– 2 times per month: Smelt, vendace.</li> </ul>	

FISH and FISH PRODUCTS			
Foodstuff/ food product	Applicable to	Correct use	Basis for guidelines
<b>Fish</b>	Individuals of childbearing age Pregnant women Breastfeeding women	Restrictions on use:  Farmed fish and roach caught in inland waters can be eaten without restriction.  Fish in the Baltic Sea – 3–4 times per month: Pike-perch, bream, whitefish, perch, pike or vendace. Vary the species of fish. – Once every two months: Wild salmon, trout, lamprey, or large Baltic herring that is over 19 cm long when uncleaned – A couple of times per year: Smelt  Fish in inland waters – Up to 2 times per week: Pike-perch, bream, whitefish, perch, pike or vendace. Vary the species of fish. – 2 times per month: Smelt	Mercury, PFAS and/or dioxins and PCBs that accumulate in certain fish.  <a href="https://www.ruokavirasto.fi/en/foodstuffs/instructions-for-consumers/safe-use-of-foodstuffs/safe-use-of-fish/">https://www.ruokavirasto.fi/en/foodstuffs/instructions-for-consumers/safe-use-of-foodstuffs/safe-use-of-fish/</a>
<b>Raw fish and crustaceans, salt cured and cold-smoked fish products as well as unpasteurised roe and foods containing these, such as sushi</b>	Pregnant women Elderly Individuals with weakened immunity	The following products should only be eaten heated (cooked to a minimum temperature of 70C throughout): – Raw fish – Salt cured or cold-smoked fish (incl. prepacked and non-prepacked and/or homemade products) – Vacuum packed herring products – Uncooked crustaceans – Unpasteurised roe – Foods containing the above, incl. sushi.  Semi-preserves made of fish (i.e. pickled herring in jars) can be eaten as such.	Risk of listeriosis. In pregnant women, listeriosis can lead to miscarriage, premature birth or infection in the newborn.  In the elderly and individuals who have weakened immune defence due to a primary disease or medication, listeriosis usually manifests as sepsis or meningitis.  <a href="https://www.ruokavirasto.fi/listeria">https://www.ruokavirasto.fi/listeria</a> (In Finnish)
<b>Oysters</b>	Whole population	Heated through in a temperature of at least 90 degrees for 2 minutes before consuming.	Risk of norovirus <a href="https://www.ruokavirasto.fi/osterit">https://www.ruokavirasto.fi/osterit</a> (In Finnish)

MEAT, MEAT PRODUCTS, POULTRY and GAME			
Foodstuff/ food product	Applicable to	Correct use	Basis for guidelines
<b>Sausages, frankfurters and deli meats</b>	Infants (under 12 months)	Sausages, frankfurters and deli meats are not to be used.	Nitrite used as an additive (E249, E250). Large amounts of nitrite may have adverse effects on oxygen delivery in the body of a small child.
	Toddlers	1–2 year-olds: At most one meal containing sausage per week, and at most 3–4 slices of deli meats (one slice weighs abt. 10 g) per week.  Over 2-year-olds: The total weekly amount of sausages, frankfurters and deli meats may not exceed 150 g, which means: 1 meal containing sausage per week and 1 slice of deli meats per day or 2 meals containing sausage per week, no deli meats or 2 slices of deli meats per day.	The hard fat and salt contained in sausages have also been taken into account in the recommendation.  <a href="https://www.ruokavirasto.fi/makkarat">https://www.ruokavirasto.fi/makkarat</a> (In Finnish)  <a href="https://www.ruokavirasto.fi/en/about-us/publications/finnish-food-authority-publications/riskinarviointiraportit/">https://www.ruokavirasto.fi/en/about-us/publications/finnish-food-authority-publications/riskinarviointiraportit/</a>  Kvantitatiivinen riskinarviointi lasten ja aikuisten altistumisesta nitraatille ja nitriitille 2013. (In Finnish)
<b>Cooked meat products, cold cuts</b>	Pregnant women Elderly Individuals with weakened immunity	Heat before eating or preferably eat well before the use-by date.	Risk of listeriosis. In pregnant women, listeriosis can lead to miscarriage, premature birth or infection in the newborn.  In the elderly and individuals who have weakened immune defence due to a primary disease or medication, listeriosis usually manifests as sepsis or meningitis.  <a href="https://www.ruokavirasto.fi/listeria">https://www.ruokavirasto.fi/listeria</a> (In Finnish)
<b>Liver, liver foods</b>	Infants (under 12 months)	Liver and liver products are not used.	High level of vitamin A. Excessive intake of vitamin A may for children result in malfunctions of liver and metabolism.
<b>Liver sausage and pâté</b>	Toddlers	Weekly consumption of liver sausage and liver pâté may not exceed 70 g (abt. 4–5 slices/week), and at most 300 g of liver casserole (3/4 of a processed casserole pan) may be eaten per month. Liver with gravy and liver steaks should be avoided in that case.	<a href="#">Evara Research Reports, 2008</a> (Intake of vitamin A from liver foods among Finnish 1-, 3- and 6- year old children)  <a href="https://www.ruokavirasto.fi/en/food-stuffs/instructions-for-consumers/safe-use-of-foodstuffs/liver-and-liver-based-foods/">https://www.ruokavirasto.fi/en/food-stuffs/instructions-for-consumers/safe-use-of-foodstuffs/liver-and-liver-based-foods/</a>
	Pregnant women	Liver foods (whole and ground liver patties, liver with gravy, liver casserole) to be avoided during the whole pregnancy.  Consumption of liver sausage and liver pâté may not exceed 200 g per week or 100 g at one meal. If liver sausage or pâté is used daily, consumption should not exceed 30 g (= 2 Tbsp. = 2 slices) per day.	Excessive intake of vitamin A during pregnancy may increase the risk of malformations and miscarriage. The upper limit of the safe intake of vitamin A (retinol) for adults is 3,000 µg/day. A higher daily intake from dietary supplements during pregnancy has increased the risk of harm to the foetus.  <a href="https://www.ruokavirasto.fi/en/foodstuffs/instructions-for-consumers/safe-use-of-foodstuffs/liver-and-liver-based-foods/consumption-of-liver-and-liver-based-food-during-pregnancy/">https://www.ruokavirasto.fi/en/foodstuffs/instructions-for-consumers/safe-use-of-foodstuffs/liver-and-liver-based-foods/consumption-of-liver-and-liver-based-food-during-pregnancy/</a>  <a href="#">Eviran riskinarviointiraportti, 2007</a> (English abstract)

## MEAT, MEAT PRODUCTS, POULTRY and GAME

Foodstuff/ food product	Applicable to	Correct use	Basis for guidelines
<b>Raw meat, poultry, raw ground meat and steak tartare</b>	Whole population	Meat must be appropriately cooked ( <a href="https://www.ruokavirasto.fi/liha">https://www.ruokavirasto.fi/liha</a> ). Pork, poultry, all ground meat foods, such as hamburger patties, meatballs and meatloaf, are always served cooked through. The same utensils must not be used with uncooked and cooked products.	Raw meat can contain various pathogens.  <a href="https://www.ruokavirasto.fi/liha">https://www.ruokavirasto.fi/liha</a> (In Finnish)
<b>Raw whole cuts of meat, preserved sausages (salami, mettwurst), air-dried ham, cold-smoked meat and uncooked dried meat (dried reindeer meat)</b>	Pregnant women	All meat products that have not been heated at any point shall be avoided. Also whole cuts of meat (steaks, joints of meat) must be thoroughly cooked. Alternatively the products are frozen – for a period of at least 72 hours at –18C before use to kill the toxoplasma gondii parasite (toxoplasmosis).	Risk for toxoplasmosis especially in pregnant women.  <u>Toksoplasmoosi</u> (In Finnish)
<b>Liver and kidneys of deer older than 1 year</b>	Whole population	Not to be used (not authorised as food).  Handling guidelines must be followed when handling game.	High levels of heavy metals (cadmium) in the internal organs of deer.  <u>Ministry of Agriculture and Forestry Decree on food control 315/2021</u> (In Finnish)  See handling guidelines: Finnish Food Authority, 2020. <u>Luonnonvaraisen riistan lihan käsittely ja lihan toimittaminen myyntiin.</u> (In Finnish)

MILK and DAIRY PRODUCTS			
Foodstuff/ food product	Applicable to	Correct use	Basis for guidelines
<b>Raw milk and unpasteurised milk</b>	Whole population	Use only when heated.  Note! Food involving a particular risk to children, pregnant women, elderly and individuals with weakened immunity.	Risk of Yersinia, listeria, EHEC-, salmonella and campylobacter.  <a href="https://www.ruokavirasto.fi/raakamaito">https://www.ruokavirasto.fi/raakamaito</a> (In Finnish)
<b>Cheeses and other products made from unpasteurised milk</b>	Pregnant women Elderly Individuals with weakened immunity Children	Use only when heated.  Very hard cheeses such as Grana Padano and Parmigiano Reggiano can be used as such.	Same as for raw milk (See under raw milk).
<b>Blue and white soft cheeses, and washed rind cheeses made from pasteurised milk</b>	Pregnant women Elderly Individuals with weakened immunity	Blue and white soft cheeses, and washed rind cheeses such as Brie, Gorgonzola, chèvre, Vacherol and Taleggio, are not recommended to be eaten unheated even though they are made from pasteurised milk. Heat throughout to at least 70C to kill listeria.	Risk of listeriosis. In pregnant women, listeriosis can lead to miscarriage, premature birth or infection in the newborn.  In the elderly and individuals who have weakened immune defence due to a primary disease or due to medication, listeriosis usually manifests as sepsis or as meningitis.
<b>Other soft cheeses made from pasteurised milk</b>		Cottage cheese and fresh and processed cheeses packaged into their containers when hot can be eaten as such. Likewise, soft cheeses (excluding blue and white soft cheeses, and washed rind cheeses) made from pasteurised milk can also be used without heating but it is advisable to use them when fresh and in good time before the use by date.	<a href="https://www.ruokavirasto.fi/listeria">https://www.ruokavirasto.fi/listeria</a> (In Finnish)

**VEGETABLES, MUSHROOMS and PROCESSED FOODS**

Foodstuff/ food product	Applicable to	Correct use	Basis for guidelines
<b>Vegetables that accumulate nitrate</b>	Infants (under 12 months)	Vegetables high in nitrate to be avoided: <ul style="list-style-type: none"> <li>- spinach, nettle,</li> <li>- beetroot,</li> <li>- various lettuces (including rocket),</li> <li>- napa cabbage, kale, kohlrabi,</li> <li>- pumpkin (including all varieties of pumpkin, but not zucchini),</li> <li>- radish, celery, fennel,</li> <li>- fresh herbs, sprouts,</li> <li>- root vegetable juices (and green smoothies made from the vegetables mentioned above),</li> <li>- tops of root vegetables</li> </ul>	High nitrate content. Large amounts of nitrate may have adverse effects on oxygen delivery in the body of a small child.  <a href="https://www.ruokavirasto.fi/nitraatti">https://www.ruokavirasto.fi/nitraatti</a> (In Finnish)
<b>Frozen vegetables and processed foods (commercial, e.g. casseroles, soups, pizzas, balls, pies, plant protein products, warm-smoked fish, chopped vegetables)</b>	Pregnant women Elderly Individuals with weakened immunity	All frozen vegetables are to be heated before use (for salads, brought to boil and cooled before use).  Processed foods are to be heated throughout before eating or preferably eaten well before the use-by date.  See also Cooked meat products, cold cuts.	Risk of listeriosis. In pregnant women, listeriosis can lead to miscarriage, premature birth or infection of the newborn.  In the elderly and individuals who have weakened immune defence due to a primary disease or medication, listeriosis usually manifests as sepsis or meningitis.  <a href="https://www.ruokavirasto.fi/listeria">https://www.ruokavirasto.fi/listeria</a> (In Finnish)
<b>Foreign frozen berries</b>	Whole population	To be heated to 90C for 5 minutes before use or boiled for 2 minutes.	Risk of Noro virus and Hepatitis A virus.  <a href="https://www.ruokavirasto.fi/pakaste-marjat">https://www.ruokavirasto.fi/pakaste-marjat</a> (In Finnish)
<b>Early potatoes, new potatoes</b>	Infants (under 12 months)	Early potatoes are not recommended for infants who are being introduced to solid foods.	At the early stage of growth, in the early summer, potatoes may contain high levels of solanine and/or nitrate. When the bulbs are fully developed (skin and flesh), these harmful substances have disappeared.  <a href="https://www.ruokavirasto.fi/luontaisetmyrkyt">https://www.ruokavirasto.fi/luontaisetmyrkyt</a> (In Finnish)  <a href="https://www.ruokavirasto.fi/glykoalkaloidit">https://www.ruokavirasto.fi/glykoalkaloidit</a> (In Finnish)
<b>Green, sprouted or damaged potatoes</b>	Whole population	Not to be used	High solanine levels (natural toxin).  <a href="https://www.ruokavirasto.fi/glykoalkaloidit">https://www.ruokavirasto.fi/glykoalkaloidit</a> (In Finnish)  <a href="https://www.ruokavirasto.fi/luontaisetmyrkyt">https://www.ruokavirasto.fi/luontaisetmyrkyt</a> (In Finnish)
<b>Unripe tomatoes</b>	Whole population	Not to be used	High tomatine levels (natural toxin).  <a href="https://www.ruokavirasto.fi/glykoalkaloidit">https://www.ruokavirasto.fi/glykoalkaloidit</a> (In Finnish)  <a href="https://www.ruokavirasto.fi/luontaisetmyrkyt">https://www.ruokavirasto.fi/luontaisetmyrkyt</a> (In Finnish)

VEGETABLES, MUSHROOMS and PROCESSED FOODS			
Foodstuff/ food product	Applicable to	Correct use	Basis for guidelines
<b>Raw beetroot</b>	Whole population	To be properly cooked. Raw beetroot is not to be used.	Risk of food poisoning.  <a href="https://www.ruokavirasto.fi/punajuuri">https://www.ruokavirasto.fi/punajuuri</a> (In Finnish)
<b>Sprouts</b>	Children Elderly  Pregnant women Individuals with weakened immunity	To be heated before use.  Heated through before consuming, or eaten preferably well before the expiry date.	Risk of <i>EHEC</i> and <i>salmonella bacteria</i> in unheated sprouts.  Risk of listeriosis. In pregnant women, the elderly and individuals who have weakened immune defence due to (see also Frozen vegetables and processed foods).  <a href="https://www.ruokavirasto.fi/idut">https://www.ruokavirasto.fi/idut</a> (In Finnish)
<b>Mushrooms</b>	Whole population	Mushroom species and its edibility to be verified, <u>processing</u> (In Finnish) according to species.	Natural toxins of some mushrooms.
<b>False morel (<i>Gyromitra esculenta</i>)</b>	Pregnant women Breastfeeding women Children	Not to be used	Despite processing, residues of the false morel toxin (gyromitrin) have been detected.  <u>See false morel processing instructions</u> (In Finnish)  <a href="https://www.ruokavirasto.fi/myrkyllisetsienet">https://www.ruokavirasto.fi/myrkyllisetsienet</a> (In Finnish)

## COFFEE AND OTHER CAFFEINE-CONTAINING BEVERAGES and PRODUCTS

Foodstuff/ food product	Applicable to	Correct use	Basis for guidelines
<b>Coffee and other caffeine-containing beverages</b>	Pregnant women Breastfeeding women Children and adolescents Individuals sensitive to caffeine	<p>The safe daily caffeine intake limit from <b>all sources and in single doses is</b></p> <ul style="list-style-type: none"> <li>– 400 mg/day for adults, and 200 mg/ single serving</li> <li>– 200 mg/day for pregnant women</li> <li>– 200 mg/day for breastfeeding women or a single serving</li> <li>– for children and adolescents (1–18 years) under 3 mg/body weight</li> </ul> <p>200 mg of caffeine is obtained from about 3 dl (= about two cups) of regular filter coffee or 1 dl of espresso. About 8 dl of black tea contains an equal amount of caffeine. The caffeine content of cocoa is 3–5 mg/dl.</p> <p>Beverages that contain caffeine can be consumed on a random basis, but the limits specified for daily consumption and single doses should be taken into account, and for small children and adolescents the limitations are calculated per kilo body weight.</p>	<p>Caffeine passes through the placenta to the foetus and through breast milk to the baby. There is not much scientific evidence on the safe intake limits of caffeine for young children and adolescents. The safe intake limit for young children and adolescents has been derived from the values specified for adults.</p> <p>Even small doses of caffeine may cause palpitations, tremor and insomnia to individuals sensitive to caffeine as well as to pregnant women and children, if consumed before retiring to bed. Caffeine can also cause sleep disturbances when 1.4 mg/kilo body weight or more is taken before going to sleep.</p>
<b>Energy drinks</b>	Pregnant women Breastfeeding women Children and adolescents Individuals sensitive to caffeine	<p>Not recommended for pregnant women or children and adolescents under the age of 15 years.</p> <p>When the caffeine content of a product is more than 150 mg/l the caffeine content has to be labelled (mg/100 ml) and include the warning: “High caffeine content. Not recommended for children or pregnant or breastfeeding women.” In addition, the caffeine content of the beverage (mg/100 ml) and the maximum daily intake limit must be marked on the packaging. The caffeine content of energy drinks varies between products, so always check the caffeine content of the beverage and the maximum daily intake limit on the packaging.</p>	<p><a href="https://www.ruokavirasto.fi/en/food-stuffs/instructions-for-consumers/safe-use-of-foodstuffs/energy-drinks/">https://www.ruokavirasto.fi/en/food-stuffs/instructions-for-consumers/safe-use-of-foodstuffs/energy-drinks/</a></p>
<b>Cola drinks</b>	Pregnant women Breastfeeding women Children and adolescents Individuals sensitive to caffeine	<p>Cola drinks containing caffeine are only suited for random consumption.</p> <p>When a product contains more than 150 mg/l caffeine, the same warnings have to be displayed on the product as for energy drinks. A can (3.3 dl) of cola beverage usually contains about 25–60 mg of caffeine and a bottle (5 dl) about 35–90 mg.</p>	<p>Caffeine passes through the placenta to the foetus and through breast milk to the baby. There is not much scientific evidence on the safe intake limits of caffeine for young children and adolescents. The safe intake limit for young children and adolescents has been derived from the values specified for adults.</p> <p>Even small doses of caffeine may cause palpitations, tremor and insomnia to individuals sensitive to caffeine as well as to pregnant women and children, if consumed before retiring to bed. Caffeine can also cause sleep disturbances when 1.4 mg/kilo body weight or more is taken before going to sleep.</p>
<b>Products with added caffeine, e.g. sweets, bubble gum and chocolate bars, as well as food supplements</b>	Pregnant women Breastfeeding women Children and adolescents Individuals sensitive to caffeine	<p>The labelling of food products containing caffeine shall present the following warning: “Contains caffeine. Not recommended for children or pregnant women” and an indication of the caffeine content in mg/100 g. The amount of caffeine varies (6–60 mg/serving). For food supplements, the caffeine content of the recommended daily dosage shall be indicated in the labelling. For adults, the maximum single dosage of 200 mg and the daily dosage of 400 mg of caffeine must not be exceeded. Caffeine is also used as an aroma. Caffeine is in that case indicated in the product’s list of ingredients under aromas.</p>	

## ALCOHOLIC BEVERAGES

Foodstuff/ food product	Applicable to	Correct use	Basis for guidelines
<b>Beverages containing alcohol (beer, cider, wine and spirits)</b>	Pregnant women	Not to be used	Alcohol passes through the placenta to the embryo and the foetus and endangers normal growth and development of the child. Even occasional binge drinking increases the risk of adverse effects. The risk limit of foetal alcohol exposure is not known. It is advisable to stop the consumption of alcohol already when planning a pregnancy.
	Breastfeeding women	Not to be used	Alcohol drunk by the mother passes to breastmilk increasing the alcohol content of breastmilk to the same level as that of the mother's blood.  A mother should avoid breastfeeding after drinking of alcohol for as long as she has alcohol in her blood. Heavy use of alcohol by a breast-feeding mother is a risk to the safety of the child.
	Children and adolescents	Under 18 years of age: Not to be used  Selling alcoholic beverages to and buying alcoholic beverages for individuals under 18 years of age is prohibited.	The developing brain and body of children and young people are more vulnerable to the effects of alcohol than adults. Alcohol often reduces blood sugar in young people, which may cause dangerous situations. Alcohol also causes mental, physical and social addiction.

OTHER BEVERAGES			
Foodstuff/ food product	Applicable to	Correct use	Basis for guidelines
Herbal beverages/ infusions (other than infusions made from the tea plant)	Infants (under 12 months) Toddlers Pregnant women	Not to be used	Safety not known, can contain naturally harmful substances.
	Breastfeeding women	Not recommended	Safety not known, can contain naturally harmful substances.
Cocoa/ cocoa drinks	Infants (under 12 months)	Not to be used	Raw cocoa and cocoa powder have a high cadmium content.  <a href="#">Eviran riskinarviointiraportti lasten altistumisesta raskasmetalleille, 2015 (English summary)</a>
Rice drink	Infants (under 12 months)	Not to be used	Nutritional content does not meet children's needs.
	Toddlers	Not to be used under 6 years of age as the primary beverage (e.g. at meals).	High levels of heavy metals (inorganic arsenic).  <a href="https://www.ruokavirasto.fi/arseenijariisi">https://www.ruokavirasto.fi/arseenijariisi</a> (In Finnish)  <a href="#">Eviran riskinarviointiraportti lasten altistumisesta raskasmetalleille, 2015 (English summary)</a>
Foods (fruit and berry based beverages) containing benzoic acid (E210) and benzoates (E211, E212 and E213)	Infants (under 12 months)  Toddlers	Not to be used  Fruit and berry based beverages containing benzoic acid as an additive are not recommended for daily consumption.  Water is recommended as the primary beverage.	Safe daily intake limit can be exceeded (additive use), if consumption of beverages containing benzoic acid (E210) and benzoates (E211, E212, E213) is high or several products with added benzoic acid or benzoates are used.

SWEETS and HONEY			
Foodstuff/ food product	Applicable to	Correct use	Basis for guidelines
Liquorice and salty liquorice sweets	Pregnant women	Not recommended	<p>Liquorice and salty liquorice sweets contain glycyrrhizin, for which the safe intake is not known. A high glycyrrhizin content increases blood pressure and causes swelling, and may carry a risk of miscarriage and can be linked with developmental disorders of the child.</p> <p>Small doses (e.g. a serving of liquorice ice cream or a few sweets) are not harmful.</p>
Honey	Infants (under 12 months)	Not to be used in foods or as such for infants under the age of 1 (Warning in the Decree on Honey (392/2015)).	<p>May contain spores of <i>Clostridium botulinum</i> bacteria. <i>C. botulinum</i> bacteria can produce dangerous botulinum toxin. Infants run a risk of infant botulism because the spores can in infants be converted into bacteria capable of growing and producing toxin due to the undeveloped intestinal microflora of the child.</p> <p><a href="https://www.ruokavirasto.fi/clostridiumbotulinum">https://www.ruokavirasto.fi/clostridiumbotulinum</a> (In Finnish)</p>

**SEEDS, SPICES, HERBS and SEAWEED**

Foodstuff/ food product	Applicable to	Correct use	Basis for guidelines
<b>Oil plant seeds</b> (e.g. flax-, pine-, chia-, hemp-, sesame-, pumpkin-, poppy and sunflower seeds)	Adults	At most 2 tbsp. (ca. 15 g) of flaxseeds or other oil plant seeds per day.	Oil plants have a natural ability to accumulate heavy metals from the soil, particularly nickel and cadmium, in their seeds.  <a href="https://www.ruokavirasto.fi/pellavan-siemenet">https://www.ruokavirasto.fi/pellavan-siemenet</a> (In Finnish)  Öljysiementen kartoitus- ja valvontahanke -loppuraportti. Elintarvikevalvontavirasto. Helsinki: Evira 2019. (In Finnish)
	Pregnant women Breastfeeding women	Flaxseeds should not be used as such, ground or soaked during pregnancy and breastfeeding for treatment of constipation. Small amounts of flaxseeds in e.g. bread are not harmful.	
	Infants (under 12 months) Toddlers	Not to be used At most 1 tbsp. (ca. 6-8 g) per day using a variety of seeds.	
<b>Apricot kernels</b> (raw)	Infants (under 12 months) Toddlers	Not to be used  1–3 year-olds: Not to be used	Contain naturally-occurring toxin (amygdalin). Amygdalin converts to cyanide in the intestine and pose a risk of cyanide poisoning.  <a href="https://www.ruokavirasto.fi/aprikoosinsimenet">https://www.ruokavirasto.fi/aprikoosinsimenet</a> (In Finnish)
	Adults	Maximum 3 small kernels (total 0.37 g) per day.	
<b>Cinnamon</b> (Chinese cassia)	Infants (under 12 months)	Not to be used	High coumarin (natural toxin) levels in Chinese cassia ( <i>Cinnamomum cassia</i> , <i>Cinnamomum aromaticum</i> or <i>Cinnamomum burmannii</i> ). Chinese cassia is a commonly used cinnamon. The more rarely used Ceylon cinnamon ( <i>Cinnamomum zeylanicum</i> ) has considerably lower coumarin levels.  <a href="https://www.ruokavirasto.fi/kaneli">https://www.ruokavirasto.fi/kaneli</a> (In Finnish)
	Toddlers	1–6-year-olds should not consume cinnamon or products containing cinnamon (e.g. cinnamon sugar in porridge) on a daily basis. In terms of safety, higher consumption of cinnamon temporarily during e.g. the Christmas season is not a concern.	
<b>Ginger products</b> (ginger as a concentrate or extract), ginger tea and food supplements containing ginger	Pregnant women	Use is not recommended  There is no harm in using ginger fresh or dried as a spice.	Contain harmful substances, safe consumption limits are not known.
<b>Seaweed products</b>	Infants (under 12 months) Toddlers	Not to be used	Harmfully high levels of iodine contents have been found in some sea-weeds. High levels of heavy metals (arsenic, cadmium and lead) have also been detected in some seaweeds. Excessive iodine intake has adverse effects on thyroid function and foetal growth.  <a href="https://www.ruokavirasto.fi/arseeni">https://www.ruokavirasto.fi/arseeni</a> (In Finnish)  FAQ 6: <a href="https://www.ruokavirasto.fi/teemat/terveytta-edistava-ruokavalio/ravitsemus-ja-ruokasuositukset/useinkysyttya-ravitsemussuosituksista/imevaisikaisten-ja-lasten-ruokavalio/">https://www.ruokavirasto.fi/teemat/terveytta-edistava-ruokavalio/ravitsemus-ja-ruokasuositukset/useinkysyttya-ravitsemussuosituksista/imevaisikaisten-ja-lasten-ruokavalio/</a> (In Finnish)
	Pregnant women Breastfeeding women	Not to be used, if iodine content is not known or is high.	
<b>Brazil nut</b>	Adults	Up to 2–3 nuts per day	Brazil nuts contain a very high amount of selenium. Regular use exceeding the recommendation may lead to excessive intake of selenium.
	Children	Children under 4: not recommended 4–10-year-olds: up to 1 nut per day 11–14-year-olds: up to 2 nuts per day	

FOOD SUPPLEMENTS			
Foodstuff/ food product	Applicable to	Correct use	Basis for guidelines
<b>Food supplements, plant based</b>	Infants (under 12 months) Toddlers Pregnant women Breastfeeding women	Use is not recommended	Safe consumption limits are not known. May contain naturally harmful substances.  <a href="#">Kasviravintolisien riskiprofiili -raportti 2019 (In Finnish)</a>
<b>Food supplements</b>	Infants (under 12 months) Toddlers Pregnant women Breastfeeding women	Recommendations for the use of food supplements are in the nutrition recommendations for use of each target group. Instructions for use for individual needs are available from the maternity and child health clinics.	<a href="#">Eating together – food recommendations for families with children 2019</a>