



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

Inert Ingredients Eligible for FIFRA 25(b) Pesticide Products (Last Addition of New Ingredients December 20, 2010; Clarifying Information added July 2014)

Provided below are the inert ingredients that can be used in pesticide products that are exempt from Federal regulation under the Minimum Risk Exemption regulations in 40 CFR 152.25(f).

How to Use this List: To determine if an inert ingredient can be used in minimum risk pesticide products, locate the ingredient in the table below by using the CAS Reg. No. or the chemical name. Once the ingredient has been located, go to the last three columns. All inert ingredients identified below can be used on non-food use sites (e.g., ornamental plants, highway right-of-ways, rodent control). If the inert ingredient can be used in minimum risk pesticides applied to food-use sites (i.e., used on food, food crops, food contact surfaces, or animal feed commodities), there will be a checkmark in the food-use column. When a manufacturer intends to label their minimum risk pesticide product for a food-use, the tolerance exemption citation (third column) provides information on the appropriate food-use sites for a particular chemical substance. This information must be consulted to ensure that each of the ingredients used in the product meet the 40 CFR part 180 requirements for the particular food-use site(s) on that product label.

If the inert ingredient is NOT specifically listed in the table below, then it cannot be used as an inert ingredient in a minimum risk product, UNLESS:

The ingredient is described as a commonly consumed food commodity, animal feed item, or edible fat and oil as specified in 40 CFR 180.950(a), (b), or (c), respectively. Any substance meeting the criteria described in 40 CFR 180.950(a), (b), or (c) may be used as an inert ingredient in any minimum risk pesticide product applied to food-use sites and/or nonfood use sites.

EPA also notes that the specific chemical substances listed under 40 CFR 180.950(e) that are also acceptable for use as inert ingredients in minimum risk pesticide products are duplicated in the following table.

CAS Reg. No.	Chemical Name	Nonfood Use	Food Use	Tolerance Exemption Citation 40 CFR 180.xxx ¹
77-90-7	Acetyl tributyl citrate [Citric acid, 2-(acetyloxy)-, tributyl ester]	x	x	950(e)
9002-18-0	Agar	x		
N/A	Almond hulls	x	x	950(b)
N/A	Almond shells	x	x	950(b)
10016-20-3	alpha-Cyclodextrin	x	x	950(e)
1327-36-2	Aluminatesilicate	x		

DRAFT: Deliberative- Do Not Cite, Quote, or Release

CAS Reg. No.	Chemical Name	Nonfood Use	Food Use	Tolerance Exemption Citation 40 CFR 180.xxx ¹
1327-43-1	Aluminum magnesium silicate [Silicic acid, aluminum magnesium salt]	x		
12736-96-8	Aluminum potassium sodium silicate [Silicic acid, aluminum potassium sodium salt]	x		
1335-30-4	Aluminum silicate	x		
1344-00-9	Aluminum sodium silicate [Silicic acid, aluminum sodium salt]	x	x	910
12003-51-9	Aluminum sodium silicate (1:1:1) [Silicic acid (H ₄ SiO ₄), aluminum sodium salt (1:1:1)]	x		
1863-63-4	Ammonium benzoate [Benzoic acid, ammonium salt]	x		
1002-89-7	Ammonium stearate [Octadecanoic acid, ammonium salt]	x	x	910
113894-85-2	Amylopectin, acid-hydrolyzed, 1-octenylbutanedioate	x	x	950(e)
125109-81-1	Amylopectin, hydrogen 1-octadecenylbutanedioate	x	x	950(e)
N/A	Animal glue	x	x	950(e)
137-66-6	Ascorbyl palmitate	x	x	910, 930
12174-11-7	Attapulgate-type clay	x	x	910, 930
8012-89-3	Beeswax	x	x	950(e)
1302-78-9	Bentonite	x	x	910
85049-30-5	Bentonite, sodian	x		
7585-39-9	beta-Cyclodextrin	x	x	950(e)
68409-75-6	Bone meal	x		
N/A	Bran	x	x	1071

N/A	Bread crumbs	x	x	1071
34451-19-9	(+)-Butyl lactate [Lactic acid, n-butyl ester, (S)]	x	x	950(e)
138-22-7	Butyl lactate [Lactic acid, n-butyl ester]	x	x	950(e)
123-95-5	Butyl stearate [Octadecanoic acid, butyl ester]	x	x	950(e)
N/A	Calcareous shale	x	x	910
13397-26-7	Calcite (Ca(Co3))	x	x	910, 930
62-54-4	Calcium acetate	x		
5743-26-0	Calcium acetate monohydrate [Acetic acid, calcium salt, monohydrate]	x		
2090-05-3	Calcium benzoate [Benzoic acid, calcium salt]	x		
471-34-1	Calcium carbonate	x	x	910, 930
7693-13-2	Calcium citrate [Citric acid, calcium salt]	x	x	950(e)

CAS Reg. No.	Chemical Name	Nonfood Use	Food Use	Tolerance Exemption Citation 40 CFR 180.xxx ¹
6107-56-8	Calcium octanoate	x	x	910
12168-85-3	Calcium oxide silicate (Ca3O(SiO4))	x		
1344-95-2	Calcium silicate [Silicic acid, calcium salt]	x	x	910, 930
1592-23-0	Calcium stearate [Octadecanoic acid, calcium salt]	x	x	910, 930, 940(a), 940(c)
7778-18-9	Calcium sulfate	x		
10101-41-4	Calcium sulfate dihydrate	x		
10034-76-1	Calcium sulfate hemihydrate	x		
N/A	Canary seed	x	x	950(b)
7440-44-0	Carbon	x		
124-38-9	Carbon dioxide	x	x	910, 930
9000-11-7	Carboxymethyl cellulose [Cellulose, carboxymethyl ether]	x		
N/A	Cardboard	x	x	950(e)
8015-86-9	Carnauba wax	x	x	950(e)
9000-40-2	Carob gum [Locust bean gum]	x	x	950(e)
9000-07-1	Carrageenan	x	x	910, 920, 930
9000-71-9	Caseins	x		

8001-79-4	Castor oil	x	x	950(e)
8001-78-3	Castor oil, hydrogenated	x	x	950(e)
N/A	Cat food	x		
9004-34-6	Cellulose	x	x	950(e)
9004-35-7	Cellulose acetate	x	x	950(e)
51395-75-6	Cellulose, mixture with cellulose carboxymethyl ether, sodium salt	x	x	950(e)
65996-61-4	Cellulose, pulp	x	x	950(e)
68442-85-3	Cellulose, regenerated	x	x	950(e)
N/A	Cheese	x	x	950(a) or 1071
479-61-8	Chlorophyll a	x		
519-62-0	Chlorophyll b	x		
N/A	Citrus meal	x	x	950
77-92-9	Citric acid	x	x	950(e)
5949-29-1	Citric acid, monohydrate	x	x	950(e)
9000-69-5	Citrus pectin	x		
68514-76-1	Citrus pulp	x	x	950(b)
N/A	Clam shells	x		
8002-31-1	Cocoa	x	x	950(a)
N/A	Cocoa shell flour	x		
N/A	Cocoa shells	x	x	950(b)

CAS Reg. No.	Chemical Name	Nonfood Use	Food Use	Tolerance Exemption Citation 40 CFR 180.xxx ¹
8001-69-2	Cod-liver oil	x	x	910
68916-18-7	Coffee grounds	x	x	950(e)
N/A	Cookies	x	x	950 or 1071
61789-98-8	Cork	x		
N/A	Corn cobs	x	x	950(b)
N/A	Cotton	x		
68424-10-2	Cottonseed meal	x		
N/A	Cracked wheat	x	x	1071
26402-22-2	Decanoic acid, monoester with 1,2,3-propanetriol	x	x	910
9004-53-9	Dextrins	x	x	950(e)
49553-76-6	Diglyceryl monooleate [9-Octadecenoic acid, ester with 1,2,3-propanetriol]	x	x	910
12694-22-3	Diglyceryl monostearate [9-Octadecanoic acid, monoester with xybis(propanediol)]	x	x	910
27638-00-2	Dilaurin [Dodecanoic acid, diester with 1,2,3-propanetriol]	x	x	910
26657-95-4	Dipalmitin [Hexadecanoic acid, diester with 1,2,3-propanetriol]	x	x	910
3609-96-9	Dipotassium citrate [Citric acid, dipotassium salt]	x	x	950(e)
144-33-2	Disodium citrate [Citric acid, disodium salt]	x	x	950(e)
7727-73-3	Disodium sulfate decahydrate	x		
61790-53-2	Diatomaceous earth (less than 1% crystalline silica) [Kieselguhr; Diatomite]	x	x	910, 930, 1017
27215-38-9	Dodecanoic acid, monoester with 1,2,3-propanetriol	x	x	910
16389-88-1	Dolomite	x	x	910
N/A	Douglas fir bark	x	x	920
N/A	Egg shells	x		
N/A	Eggs	x	x	1071
687-47-8	(+)-Ethyl lactate [Lactic acid, ethyl ester, (S)]	x	x	950(e)
97-64-3	Ethyl lactate [Lactic acid, ethyl ester]	x	x	950(e)
68476-25-5	Feldspar	x		
N/A	Fish meal	x	x	1071
8016-13-5	Fish oil (not conforming to 40 CFR 180.950)	x		

8031-18-3	Fuller's earth	x	x	910
110-17-8	Fumaric acid	x	x	950(e)
17465-86-0	gamma-Cyclodextrin	x	x	950(e)
9000-70-8	Gelatins	x	x	950(a)
71010-52-1	Gellan gum	x	x	950(e)

CAS Reg. No.	Chemical Name	Nonfood Use	Food Use	Tolerance Exemption Citation 40 CFR 180.xxx ¹
68476-37-9	Glue (as depolymd. animal collagen)	x		
56-81-5	Glycerin [1,2,3-Propanetriol]	x	x	950(e)
111-03-5	Glycerol monooleate [9-Octadecenoic acid (Z)-, 2,3-dihydroxypropyl ester]	x	x	910
36354-80-0	Glyceryl dicaprylate [Octanoic acid, diester with 1,2,3-propanetriol]	x	x	910
53563-63-6	Glyceryl dimyristate [Tetradecanoic acid, diester with 1,2,3-propanetriol]	x	x	910
25637-84-7	Glyceryl dioleate [9-Octadecenoic acid (9Z)-, diester with 1,2,3-propanetriol]	x	x	910
1323-83-7	Glyceryl distearate	x	x	910
27214-38-6	Glyceryl monomyristate [Tetradecanoic acid, monoester with 1,2,3-propanetriol]	x	x	910
26402-26-6	Glyceryl monooctanoate [Octanoic acid, monoester with 1,2,3-propanetriol]	x	x	910
25496-72-4	Glyceryl monooleate [9-Octadecenoic acid (9Z)-, monoester with 1,2,3-propanetriol]	x	x	910, 930
31566-31-1	Glyceryl monostearate [Octadecanoic acid, monoester with 1,2,3-propanetriol]	x	x	910, 930
11099-07-3	Glyceryl stearate [Octadecanoic acid, ester with 1,2,3-propanetriol]	x	x	910
N/A	Granite	x	x	910
7782-42-5	Graphite	x	x	910
9000-30-0	Guar gum	x	x	950(e)
9000-01-5	Gum arabic	x	x	910
9000-65-1	Gum tragacanth	x		
13397-24-5	Gypsum	x	x	910, 930
1317-60-8	Hematite (Fe ₂ O ₃)	x		
1415-93-6	Humic acid	x	x	950(e)

68334-00-9	Hydrogenated cottonseed oil	x	x	950(c)
84681-71-0	Hydrogenated rapeseed oil	x	x	950(c)
8016-70-4	Hydrogenated soybean oil	x	x	950(c)
9004-62-0	Hydroxyethyl cellulose [Cellulose, 2-hydroxyethyl ether]	x	x	950(e)
9004-64-2	Hydroxypropyl cellulose [Cellulose, 2-hydroxypropyl ether]	x	x	950(e)
9004-65-3	Hydroxypropyl methyl cellulose [Cellulose, 2-hydroxypropyl methyl ether]	x	x	950(e)
12068-86-9	Iron magnesium oxide (Fe ₂ MgO ₄)	x		

CAS Reg. No.	Chemical Name	Nonfood Use	Food Use	Tolerance Exemption Citation 40 CFR 180.xxx ¹
1309-37-1	Iron oxide (Fe ₂ O ₃)	x	x	910, 930
12259-21-1	Iron oxide (Fe ₂ O ₃), hydrate	x	x	910
1317-61-9	Iron oxide (Fe ₃ O ₄)	x	x	910
1345-25-1	Iron oxide (FeO)	x	x	950(b)
67-63-0	Isopropyl alcohol [2-Propanol]	x	x	950(e)
110-27-0	Isopropyl myristate	x	x	910, 930
1332-58-7	Kaolin	x	x	910, 930, 1180
63-42-3	Lactose	x	x	950(a)
64044-51-5	Lactose monohydrate	x	x	950(a)
8006-54-0	Lanolin	x	x	950(e)
N/A	Latex rubber	x		
143-07-7	Lauric acid	x	x	950(e)
8002-43-5	Lecithins	x	x	950(e)
68916-91-6	Licorice extract	x	x	950(e)
12001-27-3	Lime (chemical) dolomitic	x	x	910
1317-65-3	Limestone	x	x	910, 930
8001-26-1	Linseed oil	x	x	950(c)
546-93-0	Magnesium carbonate [Carbonic acid, magnesium salt (1:1)]	x	x	910, 930
553-70-8	Magnesium benzoate	x		
1309-48-4	Magnesium oxide	x	x	910, 940a, 940c
12207-97-5	Magnesium oxide silicate (Mg ₃ O(Si ₂ O ₅) ₂), monohydrate	x	x	9
1343-88-0	Magnesium silicate	x	x	910
1343-90-4	Magnesium silicate hydrate	x	x	910, 930
14987-04-3	Magnesium silicon oxide (Mg ₂ Si ₃ O ₈)	x	x	

557-04-0	Magnesium stearate [Octadecanoic acid, magnesium salt]	x	x	910
7487-88-9	Magnesium sulfate	x	x	910
10034-99-8	Magnesium sulfate heptahydrate	x	x	910
6915-15-7	Malic acid	x		
8002-48-0	Malt extract	x	x	950(a)
N/A	Malt flavor	x	x	950(a)
9050-36-6	Maltodextrin	x	x	950(e)
9004-67-5	Methylcellulose [Cellulose, methyl ether]	x	x	950(e)
12003-38-2	Mica	x	x	910
12001-26-2	Mica-group minerals	x		
8049-98-7	Milk	x	x	1071
N/A	Millet seed	x	x	950(a)
8012-95-1	Mineral oil (U.S.P.)	x	x	910, 930

CAS Reg. No.	Chemical Name	Nonfood Use	Food Use	Tolerance Exemption Citation 40 CFR 180.xxx ¹
142-18-7	1-Monolaurin [Dodecanoic acid, 2,3-dihydroxypropyl ester]	x	x	910
589-68-4	1-Monomyristin [Tetradecanoic acid, 2,3-dihydroxypropyl ester]	x	x	910
53998-07-1	Monomyristin [Decanoic acid, diester with 1,2,3-propanetriol]	x		
26657-96-5	Monopalmitin [Hexadecanoic acid, monoester with 1,2,3-propanetriol]	x	x	910
866-83-1	Monopotassium citrate [Citric acid, monopotassium salt]	x	x	950(e)
18996-35-5	Monosodium citrate [Citric acid, monosodium salt]	x	x	950(e)
1318-93-0	Montmorillonite	x	x	910, 930
544-63-8	Myristic acid	x	x	910
37244-96-5	Nepheline syenite	x		
7727-37-9	Nitrogen	x		
N/A	Nutria meat	x		
N/A	Nylon	x		
764-71-6	Octanoic acid, potassium salt	x	x	910
1984-06-1	Octanoic acid, sodium salt	x	x	910
8007-69-0	Oils, almond	x		
68917-73-7	Oils, wheat	x	x	1071

112-80-1	Oleic acid	x	x	910, 930
N/A	Oyster shells	x		
8002-75-3	Palm oil	x	x	950(c)
68514-74-9	Palm oil, hydrogenated	x	x	950(c)
57-10-3	Palmitic acid [Hexadecanoic acid]	x	x	910
N/A	Paper	x	x	950(e)
8002-74-2	Paraffin wax	x		
N/A	Peanut butter	x	x	1071
N/A	Peanut shells	x	x	950(b)
N/A	Peanuts	x	x	1071
N/A	Peat moss	x		
9000-69-5	Pectin	x		
130885-09-5	Perlite	x		
93763-70-3	Perlite, expanded	x		
26499-65-0	Plaster of paris	x		
9002-88-4	Polyethylene	x	x	910, 930
9007-48-1	Polyglyceryl oleate	x	x	910
9009-32-9	Polyglyceryl stearate	x	x	910, 930
127-08-2	Potassium acetate [Acetic acid, potassium salt]	x		

CAS Reg. No.	Chemical Name	Nonfood Use	Food Use	Tolerance Exemption Citation 40 CFR 180.xxx ¹
1327-44-2	Potassium aluminum silicate, anhydrous	x	x	910
582-25-2	Potassium benzoate [Benzoic acid, potassium salt]	x		
298-14-6	Potassium bicarbonate [Carbonic acid, monopotassium salt]	x	x	950(e)
7447-40-7	Potassium chloride	x	x	950(e)
7778-49-6	Potassium citrate [Citric acid, potassium salt]	x	x	950(e)
68514-28-3	Potassium humate [Humic acids, potassium salts]	x	x	950(e)
13429-27-1	Potassium myristate [Tetradecanoic acid, potassium salt]	x	x	910
143-18-0	Potassium oleate [9-Octadecenoic acid (9Z)-, potassium salt]	x	x	910

7492-30-0	Potassium ricinoleate [9-Octadecenoic acid, 12-hydroxy-, monopotassium salt, (9Z,12R)-]	x		
24634-61-5	Potassium sorbate [Sorbic acid, potassium salt]	x	x	950(e)
593-29-3	Potassium stearate [Octadecanoic acid, potassium salt]	x	x	1068
7778-80-5	Potassium sulfate	x	x	910
7646-93-7	Potassium sulfate [Sulfuric acid, monopotassium salt]	x		
108-32-7	1,2-Propylene carbonate [1,3-Dioxolan-2-one, 4-methyl-]	x	x	950(e)
1332-09-8	Pumice	x		
N/A	Red cabbage color (expressed from edible red cabbage heads via a pressing process using only acidified water)	x	x	950(e)
N/A	Red cedar chips	x		
N/A	Red dog flour	x		
9006-04-6	Rubber	x		
N/A	Sawdust	x		
N/A	Shale	x		
112945-52-5	Silica, amorphous, fumed (crystalline free)	x	x	950(e)
7699-41-4	Silica, amorphous, precipitated and gel	x	x	950(e)
7631-86-9	Silica (crystalline free)	x	x	
63231-67-4	Silica gel	x	x	950(e)
112926-00-8	Silica gel, precipitated, crystalline-free	x	x	950(e)
10279-57-9	Silica, hydrate	x	x	950(e)
60676-86-0	Silica, vitreous	x	x	950(e)

CAS Reg. No.	Chemical Name	Nonfood Use	Food Use	Tolerance Exemption Citation 40 CFR 180.xxx ¹
13776-74-4	Silicic acid (H ₂ SiO ₃), magnesium salt (1:1)	x	x	910, 930
N/A	Soap (The water soluble sodium or potassium salts of fatty acids produced by either the saponification of fats and oils, or the neutralization of fatty acid)	x	x	950(e)
1393-03-9	Soapbark [Quillaja saponin]	x	x	950(e)
308076-02-0	Soapstone	x	x	910, 930
127-09-3	Sodium acetate [Acetic acid, sodium salt]	x	x	950(e)

9005-38-3	Sodium alginate	x	x	950(e)
532-32-1	Sodium benzoate [Benzoic acid, sodium salt]	x	x	950(e)
144-55-8	Sodium bicarbonate	x	x	950(e)
9004-32-4	Sodium carboxymethyl cellulose [Cellulose, carboxymethyl ether, sodium salt]	x	x	950(e)
7647-14-5	Sodium chloride	x	x	950(e)
994-36-5	Sodium citrate	x	x	950(e)
68131-04-4	Sodium humate [Humic acids, sodium salts]	x	x	950(e)
143-19-1	Sodium oleate	x	x	910
5323-95-5	Sodium ricinoleate [9-Octadecenoic acid, 12-hydroxy-, monosodium salt, (9Z,12R)-]	x		
822-16-2	Sodium stearate [Octadecanoic acid, sodium salt]	x	x	910
7757-82-6	Sodium sulfate	x	x	910, 930
50-70-4	Sorbitol [D-glucitol]	x	x	950(e)
N/A	Soy protein	x		
8030-76-0	Soya lecithins [Lecithins, soya]	x	x	950(e)
N/A	Soybean hulls	x	x	950(b)
68308-36-1	Soybean meal	x	x	1071
68513-95-1	Soybean, flour	x	x	1071
57-11-4	Stearic acid [Octadecanoic acid]	x	x	910, 930
7704-34-9	Sulfur	x		
68425-17-2	Syrups, hydrolyzed starch, hydrogenated	x	x	950(e)
71012-10-7	Tetraglyceryl monooleate [9-Octadecenoic acid (9Z)-, monoester with tetraglycerol]	x		
813-94-5	Tricalcium citrate [Citric acid, calcium salt (2:3)]	x	x	950(e)

CAS Reg. No.	Chemical Name	Nonfood Use	Food Use	Tolerance Exemption Citation 40 CFR 180.xxx ¹
77-93-0	Triethyl citrate [Citric acid, triethyl ester]	x	x	950(e)
866-84-2	Tripotassium citrate [Citric acid, tripotassium salt]	x	x	950(e)

6100-05-6	Tripotassium citrate monohydrate [Citric acid, tripotassium salt, monohydrate]	x	x	950(e)
68-04-2	Trisodium citrate [Citric acid, trisodium salt]	x	x	950(e)
6132-04-3	Trisodium citrate dehydrate [Citric acid, trisodium salt, dehydrate]	x	x	950(e)
6858-44-2	Trisodium citrate pentahydrate [Citric acid, trisodium salt, pentahydrate]	x	x	950(e)
57455-37-5	Ultramarine blue [C.I. Pigment Blue 29]	x	x	950(e)
57-13-6	Urea	x	x	950(e)
121-33-5	Vanillin [Benzaldehyde, 4-hydroxy-3-methoxy-]	x	x	950(e)
1318-00-9	Vermiculite	x	x	910
8028-52-2	Vinegar (maximum 8% acetic acid in solution)	x	x	950(a)
50-81-7	Vitamin C [L-Ascorbic acid]	x	x	950(e)
1406-18-4	Vitamin E	x	x	910
N/A	Walnut flour	x		
N/A	Walnut shells	x	x	950(b)
N/A	Wheat	x	x	1071
N/A	Wheat flour	x	x	1071
8006-95-9	Wheat germ oil	x	x	950(c)
92129-90-3	Whey	x	x	1071
8042-47-5	White mineral oil (petroleum)	x	x	910, 930
68917-75-9	Wintergreen oil	x		
13983-17-0	Wollastonite (Ca(SiO ₃))	x		
N/A	Wool	x		
11138-66-2	Xanthan gum	x	x	950(e)
68876-77-7	Yeast	x		
1318-02-1	Zeolites (excluding erionite (CAS Reg. No. 66733-21-9))	x	x	910
68989-22-0	Zeolites, NaA	x		
12063-19-3	Zinc iron oxide	x		
1314-13-2	Zinc oxide (ZnO)	x	x	910, 930

CAS Reg. No.	Chemical Name	Nonfood Use	Food Use	Tolerance Exemption Citation 40 CFR 180.xxx ¹
557-05-1	Zinc stearate [Octadecanoic acid, zinc salt]	x	x	920, 930

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If the tolerance exemption appears in.....	Then the inert ingredient may be included in a minimum risk product that is applied to:
40 CFR180.910	Growing crops or raw agricultural commodities after harvest.
40 CFR 180.920	Growing crops
40 CFR 180.930	Animals
40 CFR 180.940(a)	Food-contact surfaces in public eating places, dairyprocessing equipment, and food-processing equipment and utensils
40 CFR 180.940(b)	Dairy-processing equipment, and food-processing equipment and utensils
40 CFR 180.940(c)	Food-processing equipment and utensils
40 CFR 180.950	Any food-use site
40 CFR 180.960	Any food-use site
40 CFR 180.1071	One of the 14 specified use patterns appropriate for peanuts, tree nuts, milk, soybeans, eggs, fish, crustacea, and wheat..

