

**PATIENT ID:**

20240814-0643

**PATIENT NAME:**

Ben Ramsden-Stein

**DATE OF BIRTH:**

10/30/1984

**SAMPLE ID:**

20240814-0643-1

**QR-CODE:**

80AFP11F

**ANALYZED ON:**

8/22/2024

**TESTED ANTIGENS:**

287

**TEST METHOD:**

FOX

**REFERRING PHYSICIAN:**

Ben Ramsden-Stein DO

**ADDITIONAL INFORMATION:**

The internal QC (Plausibility check for GD) was within acceptance range.

## Lab report: Overview of the IgG profile



### Highest measured IgG concentration

0 - 9.99 µg/ml



Low IgG level

10 - 19.99 µg/ml



Intermediate IgG level

≥ 20 µg/ml



Highly elevated IgG level

## Milk & Egg

Buttermilk	10.69 µg/ml	●●	Cow's milk Bos d 8 * (Casein)	≤ 5.00 µg/ml	●
Camembert	≤ 5.00 µg/ml	●	Buffalo milk	≤ 5.00 µg/ml	●
Emmental	≤ 5.00 µg/ml	●	Camel milk	≤ 5.00 µg/ml	●
Gouda	≤ 5.00 µg/ml	●	Goat cheese	≤ 5.00 µg/ml	●
Cottage cheese	≤ 5.00 µg/ml	●	Goat milk	≤ 5.00 µg/ml	●
Cow's milk	≤ 5.00 µg/ml	●	Quail egg	≤ 5.00 µg/ml	●
Mozzarella	5.45 µg/ml	●	Egg white	29.92 µg/ml	●●●
Parmesan	≤ 5.00 µg/ml	●	Egg yolk	20.10 µg/ml	●●●
Cow's milk Bos d 4 * (Alpha-Lactalbumin)	≤ 5.00 µg/ml	●	Sheep cheese	≤ 5.00 µg/ml	●
Cow's milk Bos d 5 * (Beta-Lactoglobulin)	≤ 5.00 µg/ml	●	Sheep milk	≤ 5.00 µg/ml	●

## Meat

Duck	≤ 5.00 µg/ml	●	Chicken	≤ 5.00 µg/ml	●
Beef	7.77 µg/ml	●	Turkey	≤ 5.00 µg/ml	●
Veal	≤ 5.00 µg/ml	●	Rabbit	≤ 5.00 µg/ml	●
Venison	≤ 5.00 µg/ml	●	Lamb	≤ 5.00 µg/ml	●
Goat	≤ 5.00 µg/ml	●	Ostrich	≤ 5.00 µg/ml	●
Stag	≤ 5.00 µg/ml	●	Pork	≤ 5.00 µg/ml	●
Horse	≤ 5.00 µg/ml	●	Boar	≤ 5.00 µg/ml	●

## Fish & Seafood

Caviar	≤ 5.00 µg/ml	●	Trout	≤ 5.00 µg/ml	●
Eel	≤ 5.00 µg/ml	●	Oyster	≤ 5.00 µg/ml	●
Crayfish	≤ 5.00 µg/ml	●	Northern prawn	≤ 5.00 µg/ml	●
Cockle	7.13 µg/ml	●	Scallop	6.76 µg/ml	●
Crab	≤ 5.00 µg/ml	●	Razor shell clam	≤ 5.00 µg/ml	●
Atlantic herring	≤ 5.00 µg/ml	●	European plaice	≤ 5.00 µg/ml	●
Carp	≤ 5.00 µg/ml	●	Thornback Ray	≤ 5.00 µg/ml	●
Anchovy	≤ 5.00 µg/ml	●	Venus clam	6.08 µg/ml	●
Northern pike	≤ 5.00 µg/ml	●	Salmon	≤ 5.00 µg/ml	●
Atlantic cod	≤ 5.00 µg/ml	●	European pilchard	≤ 5.00 µg/ml	●

Abalone	5.40 µg/ml	●	Turbot	≤ 5.00 µg/ml	●
Lobster	≤ 5.00 µg/ml	●	Mackerel	≤ 5.00 µg/ml	●
Shrimp mix	≤ 5.00 µg/ml	●	Atlantic redfish	≤ 5.00 µg/ml	●
Squid	≤ 5.00 µg/ml	●	Sepia	≤ 5.00 µg/ml	●
Monkfish	≤ 5.00 µg/ml	●	Sole	≤ 5.00 µg/ml	●
Haddock	≤ 5.00 µg/ml	●	Gilt-head bream	≤ 5.00 µg/ml	●
Hake	≤ 5.00 µg/ml	●	Tuna	≤ 5.00 µg/ml	●
Common mussel	6.96 µg/ml	●	Swordfish	≤ 5.00 µg/ml	●
Octopus	≤ 5.00 µg/ml	●			

## Cereals & Seeds

Amaranth	15.72 µg/ml	●●	Pine nut	≤ 5.00 µg/ml	●
Oat	12.73 µg/ml	●●	Rye	17.45 µg/ml	●●
Canola	43.67 µg/ml	●●●	Sesame	42.16 µg/ml	●●●
Hempseed	27.05 µg/ml	●●●	Wheat	25.71 µg/ml	●●●
Quinoa	41.42 µg/ml	●●●	Wheat bran	13.42 µg/ml	●●
Pumpkin seed	21.73 µg/ml	●●●	Wheat gliadin Tri a Gliadin *	16.81 µg/ml	●●
Buckwheat	18.04 µg/ml	●●	Wheatgrass	≤ 5.00 µg/ml	●
Sunflower	42.41 µg/ml	●●●	Gluten wheat	38.87 µg/ml	●●●
Barley	≤ 5.00 µg/ml	●	Emmer wheat	22.36 µg/ml	●●●
Malt (barley)	10.51 µg/ml	●●	Durum wheat	21.16 µg/ml	●●●
Flaxseed	9.07 µg/ml	●	Einkorn wheat	26.50 µg/ml	●●●
Lupine seed	≤ 5.00 µg/ml	●	Polish wheat	17.50 µg/ml	●●
Rice	≤ 5.00 µg/ml	●	Spelt	9.82 µg/ml	●
Millet	≤ 5.00 µg/ml	●	Corn	≤ 5.00 µg/ml	●
Poppyseed	35.98 µg/ml	●●●			

## Nuts

Cashew	38.03 µg/ml	●●●	Hazelnut	38.58 µg/ml	●●●
Brazil nut	38.25 µg/ml	●●●	Tigernut	≤ 5.00 µg/ml	●
Pecan nut	24.82 µg/ml	●●●	Walnut	43.38 µg/ml	●●●
Sweet chestnut	≤ 5.00 µg/ml	●	Macadamia	32.88 µg/ml	●●●
Coconut milk	≤ 5.00 µg/ml	●	Pistachio	27.56 µg/ml	●●●
Coconut	≤ 5.00 µg/ml	●	Almond	49.01 µg/ml	●●●
Kola nut	≤ 5.00 µg/ml	●			

\* Molecular Antigen

The assays performance characteristics were determined by Diagnostic Solutions Laboratory.

## Legumes

Peanut	≤ 5.00 µg/ml	●	Green bean	20.64 µg/ml	●●●
Chickpea	29.79 µg/ml	●●●	Pea	13.06 µg/ml	●●
Soy	7.90 µg/ml	●	Sugar pea	≤ 5.00 µg/ml	●
Lentil	17.61 µg/ml	●●	Tamarind	≤ 5.00 µg/ml	●
White bean	23.62 µg/ml	●●●	Mung bean	≤ 5.00 µg/ml	●

## Fruits

Kiwi	6.94 µg/ml	●	Date	≤ 5.00 µg/ml	●
Pineapple	5.01 µg/ml	●	Physalis	≤ 5.00 µg/ml	●
Papaya	≤ 5.00 µg/ml	●	Apricot	≤ 5.00 µg/ml	●
Lime	≤ 5.00 µg/ml	●	Cherry	≤ 5.00 µg/ml	●
Lemon	≤ 5.00 µg/ml	●	Plum	≤ 5.00 µg/ml	●
Watermelon	≤ 5.00 µg/ml	●	Peach	≤ 5.00 µg/ml	●
Grapefruit	≤ 5.00 µg/ml	●	Nectarine	≤ 5.00 µg/ml	●
Tangerine	≤ 5.00 µg/ml	●	Pomegranate	≤ 5.00 µg/ml	●
Orange	≤ 5.00 µg/ml	●	Pear	≤ 5.00 µg/ml	●
Melon	≤ 5.00 µg/ml	●	Gooseberry	≤ 5.00 µg/ml	●
Fig	≤ 5.00 µg/ml	●	Red currant	≤ 5.00 µg/ml	●
Strawberry	≤ 5.00 µg/ml	●	Blackberry	≤ 5.00 µg/ml	●
Lychee	≤ 5.00 µg/ml	●	Raspberry	≤ 5.00 µg/ml	●
Apple	≤ 5.00 µg/ml	●	Elderberry	≤ 5.00 µg/ml	●
Mango	≤ 5.00 µg/ml	●	Blueberry	6.80 µg/ml	●
Mulberry	17.59 µg/ml	●●	Cranberry	≤ 5.00 µg/ml	●
Banana	7.24 µg/ml	●	Grape	≤ 5.00 µg/ml	●
Passion fruit	≤ 5.00 µg/ml	●	Raisin	≤ 5.00 µg/ml	●

## Vegetables

Shallot	≤ 5.00 µg/ml	●	Caper	≤ 5.00 µg/ml	●
Onion	≤ 5.00 µg/ml	●	Endive	≤ 5.00 µg/ml	●
Leek	≤ 5.00 µg/ml	●	Radicchio	≤ 5.00 µg/ml	●
Garlic	15.71 µg/ml	●●	Chicorée	≤ 5.00 µg/ml	●
Chives	≤ 5.00 µg/ml	●	Pumpkin Butternut	≤ 5.00 µg/ml	●
Wild garlic	≤ 5.00 µg/ml	●	Pumpkin Hokkaido	≤ 5.00 µg/ml	●

Celery Bulb	≤ 5.00 µg/ml	●	Kiwano	≤ 5.00 µg/ml	●
Celery Stalk	≤ 5.00 µg/ml	●	Zucchini	≤ 5.00 µg/ml	●
Horseradish	≤ 5.00 µg/ml	●	Cucumber	≤ 5.00 µg/ml	●
Asparagus	≤ 5.00 µg/ml	●	Artichoke	≤ 5.00 µg/ml	●
Bamboo sprouts	≤ 5.00 µg/ml	●	Carrot	≤ 5.00 µg/ml	●
Chard	≤ 5.00 µg/ml	●	Arugula	≤ 5.00 µg/ml	●
Red beet	≤ 5.00 µg/ml	●	Fennel (bulb)	≤ 5.00 µg/ml	●
Cabbage	≤ 5.00 µg/ml	●	Sweet potato	≤ 5.00 µg/ml	●
Cauliflower	≤ 5.00 µg/ml	●	Watercress	≤ 5.00 µg/ml	●
White cabbage	≤ 5.00 µg/ml	●	Olive	≤ 5.00 µg/ml	●
Brussels sprouts	≤ 5.00 µg/ml	●	Parsnip	≤ 5.00 µg/ml	●
Kohlrabi	≤ 5.00 µg/ml	●	Avocado	≤ 5.00 µg/ml	●
Broccoli	≤ 5.00 µg/ml	●	Radish	≤ 5.00 µg/ml	●
Romanesco	≤ 5.00 µg/ml	●	Eggplant	≤ 5.00 µg/ml	●
Red cabbage	≤ 5.00 µg/ml	●	Potato	≤ 5.00 µg/ml	●
Green cabbage	≤ 5.00 µg/ml	●	Tomato	5.09 µg/ml	●
Savoy cabbage	≤ 5.00 µg/ml	●	Spinach	≤ 5.00 µg/ml	●
Turnip	≤ 5.00 µg/ml	●	Nettle leaves	5.25 µg/ml	●
Bok Choy	≤ 5.00 µg/ml	●	Lamb's lettuce	≤ 5.00 µg/ml	●
Chinese cabbage	≤ 5.00 µg/ml	●			

## Spices

Dill	≤ 5.00 µg/ml	●	Mint	≤ 5.00 µg/ml	●
Tarragon	≤ 5.00 µg/ml	●	Basil	7.26 µg/ml	●
Paprika	5.96 µg/ml	●	Majoram	≤ 5.00 µg/ml	●
Cayenne pepper	≤ 5.00 µg/ml	●	Oregano	≤ 5.00 µg/ml	●
Chili (red)	≤ 5.00 µg/ml	●	Parsley	≤ 5.00 µg/ml	●
Caraway	≤ 5.00 µg/ml	●	Anise	≤ 5.00 µg/ml	●
Cinnamon	≤ 5.00 µg/ml	●	Pepper (black/white/green/red/yellow)	12.52 µg/ml	●●
Curry	≤ 5.00 µg/ml	●	Rosmary	≤ 5.00 µg/ml	●
Coriander	≤ 5.00 µg/ml	●	Sage	≤ 5.00 µg/ml	●
Cumin	≤ 5.00 µg/ml	●	Mustard	10.30 µg/ml	●●
Turmeric	≤ 5.00 µg/ml	●	Clove	≤ 5.00 µg/ml	●
Lemongrass	≤ 5.00 µg/ml	●	Thyme	6.11 µg/ml	●

Cardamom	≤ 5.00 µg/ml	●	Fenugreek	≤ 5.00 µg/ml	●
Juniper berry	≤ 5.00 µg/ml	●	Vanilla	≤ 5.00 µg/ml	●
Bay leaf	≤ 5.00 µg/ml	●	Ginger	≤ 5.00 µg/ml	●
Nutmeg	≤ 5.00 µg/ml	●			

## Edible Mushrooms

White mushroom	≤ 5.00 µg/ml	●	Enoki	≤ 5.00 µg/ml	●
Boletus	≤ 5.00 µg/ml	●	French horn mushroom	≤ 5.00 µg/ml	●
Chanterelle	≤ 5.00 µg/ml	●	Oyster mushroom	≤ 5.00 µg/ml	●

## Novel Foods

House cricket	13.89 µg/ml	●●	Ginseng	≤ 5.00 µg/ml	●
Baobab	≤ 5.00 µg/ml	●	Guarana	≤ 5.00 µg/ml	●
Aloe	≤ 5.00 µg/ml	●	Almond milk	23.12 µg/ml	●●●
Greater burdock root	≤ 5.00 µg/ml	●	Nori	≤ 5.00 µg/ml	●
Aronia	≤ 5.00 µg/ml	●	Chia seed	19.20 µg/ml	●●
Safflower oil	≤ 5.00 µg/ml	●	Yacón root	≤ 5.00 µg/ml	●
Chlorella	8.74 µg/ml	●	Spirulina	≤ 5.00 µg/ml	●
Ginkgo	≤ 5.00 µg/ml	●	Dandelion root	≤ 5.00 µg/ml	●
Maca root	≤ 5.00 µg/ml	●	Mealworm	≤ 5.00 µg/ml	●
Migratory locust	≤ 5.00 µg/ml	●	Wakame	≤ 5.00 µg/ml	●
Tapioca	≤ 5.00 µg/ml	●			

## Coffee & Tea

Tea, black	≤ 5.00 µg/ml	●	Chamomile	≤ 5.00 µg/ml	●
Tea, green	≤ 5.00 µg/ml	●	Peppermint	7.29 µg/ml	●
Coffee	≤ 5.00 µg/ml	●	Moringa	7.94 µg/ml	●
Hibiscus	≤ 5.00 µg/ml	●	Cocoa	≤ 5.00 µg/ml	●
Jasmine	≤ 5.00 µg/ml	●			

## Others

Agar Agar	6.08 µg/ml	●	Cane sugar	5.98 µg/ml	●
Honey	≤ 5.00 µg/ml	●	Brewer's yeast	≤ 5.00 µg/ml	●
Aspergillus niger	6.21 µg/ml	●	Elderflower	≤ 5.00 µg/ml	●

Hops ≤ 5.00 µg/ml ●

Baker's yeast ≤ 5.00 µg/ml ●

M-Transglutaminase, meat glue ≤ 5.00 µg/ml ●

## CCD

Human Lactoferrin ≤ 5.00 µg/ml ●

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8/24/2024



# Number of tested food sources

283



## MILK & EGG

17

Buffalo milk, Buttermilk, Camel milk, Camembert, Cottage cheese, Cow's milk, Egg white, Egg yolk, Emmental, Goat cheese, Goat milk, Gouda, Mozzarella, Parmesan, Quail egg, Sheep cheese, Sheep milk



## MEAT

14

Beef, Boar, Chicken, Duck, Goat, Horse, Lamb, Ostrich, Pork, Rabbit, Stag, Turkey, Veal, Venison



## FISH & SEAFOOD

37

Abalone, Atlantic cod, Atlantic herring, Atlantic redfish, Carp, Caviar, Cockle, Common mussel, Crab, Eel, Anchovy, European pilchard, European plaice, Gilt-head bream, Haddock, Hake, Lobste, Mackerel, Monkfish, Crayfish, Northern pike, Northern prawn, Octopus, Oyster, Razor shell clam, Salmon, Scallop, Sepia, Shrimp mix, Sole, Squid, Swordfish, Thornback Ray, Trout, Tuna, Turbot, Venus clam



## CEREALS & SEEDS

29

Amaranth, Barley, Buckwheat, Corn, Durum wheat, Einkorn wheat, Emmer wheat, Hempseed, Flaxseed, Lupine seed, Malt (barley), Millet, Oat, Pine nut, Polish wheat, Poppyseed, Pumpkin seed, Quinoa, Canola, Rice, Rye, Sesame, Spelt, Sunflower, Wheat, Gluten wheat, Wheat bran, Wheatgrass



## NUTS

13

Almond, Brazil nut, Cashew, Coconut, Coconut milk, Hazelnut, Kola nut, Macadamia, Pecan nut, Pistachio, Sweet chestnut, Tigernut, Walnut



## LEGUMES

10

Chickpea, Green bean, Lentil, Mung bean, Peanut, Pea, Soy, Sugar pea, Tamarind, White bean



## FRUITS

36

Apple, Apricot, Banana, Blackberry, Blueberry, Cherry, Cranberry, Date, Elderberry, Fig, Gooseberry, Grape, Grapefruit, Kiwi, Lemon, Lime, Lychee, Mango, Melon, Mulberry, Nectarine, Orange, Papaya, Passion fruit, Peach, Pear, Physalis, Pineapple, Plum, Pomegranate, Raisin, Raspberry, Red currant, Strawberry, Tangerine, Watermelon



## VEGETABLES

51

Artichoke, Arugula, Avocado, Bamboo sprouts, Broccoli, Brussels sprouts, Cabbage, Caper, Carrot, Cauliflower, Celery Bulb, Celery Stalk, Chard, Chicorée, Chinese cabbage, Chives, Cucumber, Eggplant, Endive, Fennel (bulb), Garlic, Green cabbage, Horseradish, Kiwano, Kohlrabi, Lamb's lettuce, Leek, Nettle leaves, Olive, Onion, Parsnip, Bok Choi, Potato, Pumpkin Butternut, Pumpkin Hokkaido, Radicchio, Radish, Red beet, Red cabbage, Romanesco, Savoy cabbage, Shallot, Spinach, Sweet potato, Tomato, Turnip, Watercress, Asparagus, White cabbage, Wild garlic, Zucchini



## SPICES

31

Anise, Basil, Bay leaf, Caraway, Cardamom, Cayenne pepper, Chili (red), Cinnamon, Clove, Coriander, Cumin, Curry, Dill, Fenugreek, Ginger, Juniper berry, Lemongrass, Marjoram, Mint, Mustard, Nutmeg, Oregano, Paprika, Parsely, Pepper (black/white/green/red/yellow), Rosemary, Sage, Tarragon, Thyme, Turmeric, Vanilla



## EDIBLE MUSHROOMS

6

Boletus, Chanterelle, Enoki, French horn mushroom, Oyster mushroom, White Mushroom



## NOVEL FOODS

21

Almond milk, Aloe, Aronia, Baobab, Chia seed, Chlorella, Dandelion root, Ginkgo, Ginseng, Greater burdock root, Guarana, House cricket, Maca root, Mealworm, Migratory locust, Nori, Safflower oil, Spirulina, Tapioca, Wakame, Yacón root



## COFFEE & TEA

9

Chamomile, Cocoa, Coffee, Hibiscus, Jasmine, Moringa, Peppermint, Tea black, Tea green



## OTHERS

9

Agar Agar, Aspergillus niger, Baker's yeast, Brewer's yeast, Cane sugar, Elderflower, Honey, Hops, M-Transglutaminase meat glue

## Interpretation Summary

### Milk & Eggs

#### Buttermilk

Your IgG level for buttermilk is 10.69 µg/ml.

Associated food intolerance symptoms after consuming buttermilk include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing buttermilk include biscuits, cakes, mashed potatoes, soups, fried chicken, hamburger buns, cornbread, ranch dressing, smoothies, pancakes, ice cream, and cream cheese.

Possible alternatives (non-dairy) for buttermilk include soy-based options such as a combination of soy milk and acid (e.g., lemon juice or vinegar), vegan sour cream and water, or unsweetened plant milk (e.g., coconut, almond, or cashew) and acid (e.g., lemon juice or vinegar).

#### Egg white

Your IgG level for egg white is 29.92 µg/ml.

Associated food intolerance symptoms after consuming egg white include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes containing egg whites include all kinds of egg dishes (omelettes, fried eggs, scrambled eggs, etc.), as well as breaded and battered foods, salad dressing, cream pies, cream puffs, crepes, waffles, custards, puddings, marshmallows, marzipan, mayonnaise, meatloaf, meatballs, meringue, frosting, pasta, sauces, soufflés, surimi, and in some cases, wine. On food labels, egg proteins may be referred to as albumin, globulin, lecithin, livetin, lysozyme, ovalbumin, ovaglobulin, ovomucin, ovovitellin, or vitellin.

Possible alternatives for egg whites include aquafaba (liquid found in canned chickpeas or beans) for meringues and marshmallows. If a whole egg is used to add moisture to baked goods, mashed banana is a possible alternative. To make baked goods heavier and denser, ground flaxseeds and chia seeds are good alternatives for eggs. If the egg is used as a leavining agent, 1/4 cup of carbonated water per egg works as a substitute. Silken tofu is used as a scrambled egg substitute.

#### Egg yolk

Your IgG level for egg yolk is 20.1 µg/ml.

Associated food intolerance symptoms after consuming egg yolk include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes containing egg yolks include all kinds of egg dishes (omelettes, fried eggs, scrambled eggs, etc.), as well as breaded and battered foods, salad dressing, cream pies, cream puffs, crepes, waffles, custards, puddings, marshmallows, marzipan, mayonnaise, meatloaf, meatballs, meringue, frosting, pasta, sauces, soufflés, and surimi. On food labels, egg proteins may be referred to as albumin, globulin, lecithin, livetin, lysozyme, ovalbumin, ovaglobulin, ovomucin, ovovitellin, or vitellin.

Possible alternatives for egg yolks include soy lecithin (a byproduct of soybean oil). If a whole egg is used to add moisture to baked goods, mashed banana is a possible alternative. To make baked goods heavier and denser, ground flaxseeds and chia seeds are good alternatives for eggs. If the egg is used as a leavining agent, 1/4 cup of carbonated water per egg works as a substitute. Silken tofu is used as a scrambled egg substitute.

### Cereals & Seeds

#### Amaranth

Your IgG level for amaranth is 15.72 µg/ml.

Associated food intolerance symptoms after consuming amaranth include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing amaranth, amaranth flour, amaranth flakes, sprouted amaranth, or puffed amaranth seeds include salads, cereal bars, vegetarian burger patties, pancakes, flat breads, pastas, and biscuits.

Possible alternatives for amaranth include buckwheat, corn, millet, quinoa, teff, wild rice, and sorghum.

#### Buckwheat

Your IgG level for buckwheat is 18.04 µg/ml.

Associated food intolerance symptoms after consuming buckwheat include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing buckwheat or buckwheat flour include Kasha bread, buckwheat pancakes, Japanese soba noodles, Middle Eastern tabbouleh, buckwheat tea, and buckwheat whisky.

Possible alternatives for buckwheat include barley, amaranth, corn, millet, quinoa, teff, wild rice, and sorghum.

### **Chickpea**

Your IgG level for chickpea is 29.79 µg/ml.

Associated food intolerance symptoms after consuming chickpea include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing chickpeas or chickpea flour include hummus, falafel, curry, aquafaba, and salads.

Possible alternatives for chickpeas include black beans, cannellini beans, green peas, lentils, and soybeans.

### **Durum**

Your IgG level for durum is 21.16 µg/ml.

Associated food intolerance symptoms after consuming durum include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing durum wheat include semolina flour, pasta, couscous, breakfast cereals, puddings, bulgur, unleavened bread, and pizza dough.

Possible alternatives to durum flour (semolina) include all-purpose flour, amaranth flour, corn semolina, garbanzo flour, quinoa flour, and rice flour

### **Einkorn**

Your IgG level for einkorn is 26.5 µg/ml.

Associated food intolerance symptoms after consuming einkorn include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing einkorn or einkorn flour include breads, crackers, flatbreads, cereal bars, cookies, protein bars, muffins, and other baked goods.

Possible alternatives to einkorn flour include spelt flour, amaranth flour, emmer flour, barley flour, and rice flour.

### **Emmer**

Your IgG level for emmer is 22.36 µg/ml.

Associated food intolerance symptoms after consuming emmer include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing emmer or emmer flour include breads, crackers, flatbreads, cereal bars, cookies, protein bars, muffins, and other baked goods.

Possible alternatives to emmer flour include spelt flour, einkorn flour, amaranth flour, barley flour, and rice flour.

### **Gluten**

Your IgG level for gluten is 38.87 µg/ml.

Associated food intolerance symptoms after consuming gluten include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing gluten include wheat, wheat varieties (spelt, durum, couscous, semolina, farina, farro, kamut, einkorn, bulgur, wheat bran, wheat starch, emmer, seitan, graham flour, rye, barley), bread, pittas, bagels, flatbreads, rolls, pasta, crackers, biscuits, pastry, breakfast cereals, breadcrumbs, croutons, beers, ales, and lagers. On food labels, gluten may be referred to as triticum vulgare (wheat), triticale (cross between wheat and rye), hordeum vulgare (barley), secale cereale (rye), and triticum spelta (spelt).

Possible alternatives to gluten products include buckwheat (groats and flour), quinoa (grain or flour), rice (grain or flour), potato flour, soy flour, chickpea flour, corn, amaranth, millet, gluten-free oats, sorghum, and tapioca. Gluten-free pasta alternatives are made from lentils, peas, corn, rice, or buckwheat. Vegetable noodles are made from zucchini, carrot, or squash.

## Hemp seed

Your IgG level for hemp seed is 27.05 µg/ml.

Associated food intolerance symptoms after consuming hemp seeds include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing hemp seeds include hemp milk, hemp oil, hemp cheese substitutes, and hemp protein powder.

Possible alternatives to hemp seeds include flax seeds, pumpkin seeds, sesame seeds, chia seeds, and desiccated coconut.

## Malt

Your IgG level for malt is 10.51 µg/ml.

Associated food intolerance symptoms after consuming malt include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing malted grains and malt syrup are beer, whiskey, malted milk, malt vinegar, confections such as Maltesers and Whoppers, flavored drinks such as Horlicks, Ovaltine, and Milo, and baked goods such as malt loaf and bagels.

Possible alternatives for malt syrups include honey, molasses, brown rice syrup, maple syrup, maltose, and sugar.

## Oat

Your IgG level for oat is 12.73 µg/ml.

Associated food intolerance symptoms after consuming oats include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing oats and oat flour include oatmeal, porridge, oat milk, cereal, granola, flapjacks, cookies, breads, cakes, and oat bran.

Possible alternatives for oats include sorghum, millet, corn, polenta, and rice.

## Polish wheat

Your IgG level for Polish wheat is 17.5 µg/ml.

Associated food intolerance symptoms after consuming Polish wheat include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing Polish wheat and Polish wheat flour include pilafs, risottos, salads, breads, and baked goods.

Possible alternatives for Polish wheat flour include almond flour, buckwheat flour, sorghum flour, amaranth flour, teff flour, arrowroot flour, brown rice flour, and oat flour.

## Poppy seed

Your IgG level for poppy seed is 35.98 µg/ml.

Associated food intolerance symptoms after consuming poppy seeds include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing poppy seeds include bagels, breads, cakes, muffins, granola, and salad dressing.

Possible alternatives for poppy seeds are black sesame seeds and chia seeds.

## Pumpkin seed

Your IgG level for pumpkin seed is 21.73 µg/m

Associated food intolerance symptoms after consuming pumpkin seeds include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing pumpkin seeds include pumpkin seed butter, cookies, granola, pesto, and bread. Pumpkin seeds are often used as garnish for salads, pasta, risotto, and oatmeal.

Possible alternatives for pumpkin seeds include sunflower seeds.

## Quinoa

Your IgG level for quinoa is 41.42 µg/ml.

Associated food intolerance symptoms after consuming quinoa include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing quinoa are salads, granola bars, risottos, soups, and non-meat burger patties.

Possible alternatives for quinoa include barley, buckwheat, amaranth, corn, millet, teff, wild rice, and sorghum.

### **Canola**

Your IgG level for canola is 43.67 µg/ml.

Associated food intolerance symptoms after consuming canola include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing canola include canola oil.

Possible alternatives for canola oil include olive oil, avocado oil, and pumpkin seed oil.

### **Rye**

Your IgG level for rye is 17.45 µg/ml.

Associated food intolerance symptoms after consuming rye include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing rye and rye flour include sandwich bread, crisp bread, pretzels, crackers, as well as rye whiskey and rye beer.

Possible alternatives for rye and rye flour include barley and barley flour.

### **Sesame**

Your IgG level for sesame is 42.16 µg/ml.

Associated food intolerance symptoms after consuming sesame include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing sesame seeds and sesame oil include bagels, bread, breadsticks, hamburger buns, bread crumbs, cereal, crackers, hummus, tahini, baba ghanoush, dressings, marinades, sauces, falafel, hummus, processed meats and sausages, energy bars, sushi, tempeh, vegetarian burgers, and a lot of Asian cuisine. On food labels, sesame may be referred to as benne, benne seed, benniseed, gingelly, gingelly oil, gomasio, halvah, sesame flour, sesame oil, sesame paste, sesame salt, sesame seed, sesamol, sesamum indicum, sesamolina, sim sim, tahini, tahina, tehina, and til.

Possible alternatives for sesame seeds include poppy seeds and flax seeds. Sesame oil can be substituted with perilla oil, walnut oil, olive oil, canola oil, and avocado oil.

### **Sunflower**

Your IgG level for sunflower is 42.41 µg/ml.

Associated food intolerance symptoms after consuming sunflower include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing sunflower include salads and sunflower tea, which functions as a coffee substitute.

Possible alternatives for sunflower tea include chicory coffee, dandelion tea, and twig tea.

### **Wheat**

Your IgG level for wheat is 25.71 µg/ml.

Associated food intolerance symptoms after consuming wheat include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing wheat and wheat flour include breads, bread crumbs, breakfast cereal, bulgur, biscuits, couscous, crackers, crumpets, durum, einkorn, emmer, farina, farro, kamut, malt, seitan, semolina, scones, pancakes, pizza, pasta, and pastries. On food labels, wheat may be referred to as bromated flour, cereal extract, cracker meal, hydrolyzed vegetable protein, hydrolyzed wheat protein, matzoh, monosodium glutamate (MSG), and triticale. Wheat is sometimes found in artificial flavoring, caramel color, dextrin, food starch, glucose syrup, maltodextrin, soy sauce, surimi, textured vegetable protein, and vegetable gum.

Possible alternatives for wheat include amaranth, buckwheat, millet, quinoa, and teff.

### **Wheat bran**

Your IgG level for wheat bran is 13.42 µg/ml.

Associated food intolerance symptoms after consuming wheat bran include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing wheat bran include cereal, pancakes, muffins, and cookies.

Possible alternatives for wheat bran include oat bran.

### **Wheat gliadin**

Your IgG level for wheat gliadin is 16.81 µg/ml.

Associated food intolerance symptoms after consuming wheat gliadin include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing gliadin include major sources of gluten such as bread, pasta, pizza, dressing, and sauces, as well as barley, rye, and oats.

Possible alternatives for wheat gliadin products include amaranth, millet, buckwheat, and quinoa.

## **Nuts**

### **Almond**

Your IgG level for almond is 49.01 µg/ml.

Associated food intolerance symptoms after consuming almonds include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing almonds, ground almonds, or almond flour include cakes, breads, biscuits, confectionary, ice cream, marzipan, and liqueurs such as Amaretto.

Possible alternatives for almonds include hazelnuts, Brazil nuts, cashews, and unsalted pistachios. Unsalted pumpkin and sunflower seeds, granola, or oatmeal can function as nut-free substitutes. Tahini (sesame seed butter) can be used as a substitute for almond butter.

### **Brazil nut**

Your IgG level for Brazil nut is 38.25 µg/ml.

Associated food intolerance symptoms after consuming Brazil nuts include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing Brazil nuts include cakes, breads, biscuits, confectionary, ice cream, as well as nut loaf and nut roast.

Possible alternatives for Brazil nuts include macadamia nuts, almonds, and raw coconut meat. Unsalted pumpkin and sunflower seeds, beans, and pretzels can function as nut-free substitutes.

### **Cashew**

Your IgG level for cashew is 38.03 µg/ml.

Associated food intolerance symptoms after consuming cashews include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing cashews include pesto, cakes, muesli, confectionary, ice cream, and chocolate. Indian, Chinese, and Thai cuisine frequently uses cashews in their dishes.

Possible alternatives for cashews include pine nuts, almonds, walnuts, and hazelnuts. Unsalted sunflower and pumpkin seeds can function as nut-free substitutes. Tahini (sesame seed butter) can be used as a substitute for cashew butter.

### **Hazelnut**

Your IgG level for hazelnut is 38.58 µg/ml.

Associated food intolerance symptoms after consuming hazelnuts include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing hazelnuts include biscuits, cakes, pastries, chocolate, chocolate spreads, confectionary, cereal, and bread.



Possible alternatives for hazelnuts include almonds, macadamia nuts, walnuts, and cashews. Oats, unsalted sunflower and pumpkin seeds, and raisins can be used as nut-free substitutes in baking.

### **Macadamia**

Your IgG level for macadamia is 32.88 µg/ml.

Associated food intolerance symptoms after consuming macadamia nuts include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing macadamia nuts include biscuits, cakes, pastries, chocolate, confectionary, and cereal.

Possible alternatives for macadamia nuts include Brazil nuts, cashews, almonds, pecan nuts, and walnuts. Unsalted sunflower and pumpkin seeds can function as nut-free substitutes.

### **Pecan nut**

Your IgG level for pecan nut is 24.82 µg/ml.

Associated food intolerance symptoms after consuming pecan nuts include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing pecan nuts include pies, pastries, cakes, chocolate, cookies, and salads.

Possible alternatives for pecan nuts include walnuts, hazelnuts, cashews, and pistachios. Unsalted sunflower and pumpkin seeds can function as nut-free substitutes.

### **Pistachio**

Your IgG level for pistachio is 27.56 µg/ml.

Associated food intolerance symptoms after consuming pistachios include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing pistachios include ice cream, confectionary (e.g., marzipan, Turkish baklava), and chocolate.

Possible alternatives for pistachios include pine nuts, almonds, hazelnuts, and cashews.

### **Walnut**

Your IgG level for walnut is 43.38 µg/ml.

Associated food intolerance symptoms after consuming walnuts include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing walnuts include pesto sauces, salads, cakes, biscuits, confectionary, and ice cream.

Possible alternatives for walnuts include hazelnuts and almonds. Unsalted sunflower and pumpkin seeds can function as nut-free substitutes.

## **Legumes**

### **Green bean**

Your IgG level for green bean is 20.64 µg/ml.

Associated food intolerance symptoms after consuming green beans include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing green beans include soups, stews, sautéés, stir fries, casseroles, and salads.

Possible alternatives for green beans include asparagus, wax beans, peas, lentils, string beans, and broccoli.

### **Lentil**

Your IgG level for lentil is 17.61 µg/ml.

Associated food intolerance symptoms after consuming lentils include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing lentils include Indian cuisine (e.g., curry, dal), vegetarian burgers, soups, salad bowls, and purees.

Possible alternatives for lentils include beans (e.g., chickpea, black, pinto, lima, fava) and peas.

## Pea

Your IgG level for pea is 13.06 µg/ml.

Associated food intolerance symptoms after consuming peas include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing peas include soups, salads, pasta dishes, fried rice dishes, vegetable purees, and pesto.

Possible alternatives for peas include black-eyed peas, lima beans, and edamame.

## White bean

Your IgG level for white bean is 23.62 µg/ml.

Associated food intolerance symptoms after consuming white beans include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing white beans include stews, chilis, hummus, soups, and salads.

Possible alternatives for white beans include peas, lentils, and other beans (e.g., chickpea, black, pinto, lima, fava).

## Fruits

### Mulberry

Your IgG level for mulberry is 17.59 µg/ml.

Associated food intolerance symptoms after consuming mulberry include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing mulberries include pastries (e.g., tarts, pies, crumbles, muffins, cakes, etc. ), jams, compotes, smoothies, and salads.

Possible alternatives for mulberries include cranberries, blueberries, and raisins.

## Vegetables

### Garlic

Your IgG level for garlic is 15.71 µg/ml.

Associated food intolerance symptoms after consuming garlic include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes typically containing garlic include pasta dishes, soups, stews, sauces, butters and oils, dips, dressings, and chutneys.

Possible alternatives for garlic include chives, shallot, onion, and lemon zest.

## Spices

### Mustard

Your IgG level for mustard is 10.3 µg/ml.

Associated food intolerance symptoms after consuming mustard include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Food products and dishes using mustard seeds as a flavoring agent include sauces, curries, and chutneys in Indian cooking. Mustard paste is used for salad dressings, as well as meat and fish dishes (as a glaze).

Possible alternatives for mustard seeds include caraway seeds and horseradish.

### Pepper (black/white/green/red/yellow)

Your IgG level for pepper is 12.52 µg/ml.

Associated food intolerance symptoms after consuming pepper include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.



Food products and dishes using pepper as a flavoring agent include soups, stocks, sauces, marinades, and stews. Pepper is often used as a dry rub for meats, poultry, and fish before roasting or cooking.

Possible alternatives for pepper include cumin, coriander seeds, mustard seeds, and nutmeg.

## Novel Foods

### Almond milk

Your IgG level for almond milk is 23.12 µg/ml.

Associated food intolerance symptoms after consuming almond milk include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Almond milk is a plant-based substitute for cow's milk and is used for cooking porridge, oatmeal, cream-based soups, creamy sauces, gravies, as a coffee creamer, smoothies, ice creams, and other desserts.

Possible alternatives (plant-based) to almond milk include oat milk, rice milk, coconut milk, soy milk, hemp milk, and cashew milk.

### Chia seed

Your IgG level for chia seed is 19.2 µg/ml.

Associated food intolerance symptoms after consuming chia seed include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Chia seeds are known for having a lot of fiber and omega-3 fatty acids. Food products and dishes commonly containing chia seeds include smoothies, juices, yogurts, oatmeal, salads and baked goods.

Possible alternatives for chia seeds are line seeds (also known as flax seeds), oat bran, and quinoa.

### House cricket

Your IgG level for house cricket is 13.89 µg/ml.

Associated food intolerance symptoms after consuming house cricket include nausea, stomach pain, gas, cramps, bloating, vomiting, heartburn, diarrhea, headaches, irritability, and nervousness.

Crickets are edible insects high in protein and many other nutrients, and are consumed as snacks in several African and Southeast Asian countries.

Possible alternatives for crickets are other edible insects such as grasshoppers and mealworms.

### Disclaimer

The presence of IgG-antibodies may be an indication of food intolerances and has to be analyzed in conjunction with the clinical history and other diagnostic test results.

The Raven Interpretation Software is a tool to assist in the interpretation of FOX results but does not constitute a diagnosis. No liability is accepted for Raven comments and the resulting dietary recommendations. The stated comments are designed exclusively for FOX results.

(The connection between food intake, elevated IgG levels and chronic disorders has been described in peer reviewed publications and case studies. Nonetheless this connection is still debated in the scientific community and a consensus has not been reached thus far.)