

codex alimentarius commission



FOOD AND AGRICULTURE
ORGANIZATION
OF THE UNITED NATIONS

WORLD
HEALTH
ORGANIZATION



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Agenda Item 4

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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON NUTRITION AND FOODS FOR SPECIAL DIETARY USES

Twenty-second Session

Berlin, Germany, 19-23 June 2000

DRAFT REVISED STANDARD FOR GLUTEN-FREE FOODS

- Comments at Step 6 of the Procedure -

Enclosure 1

Adverse reactions to gluten reported in Sweden, 1992 - 1998

Consumers' complaints over adverse reactions have led to analysis of the suspected offending food and documentation of these cases. Since 1992 we have been informed of 12 cases, where consumers have reacted.

Food (Month/year)	Reaction	Content gluten (ppm)	Cause
Buckwheat flour (05/92)	Stomach pain, diarrhoea <i>Adult with coeliac disease</i>	13 000	15-25 % wheat flour identified, may emanate from the mill
Corn pasta (12/92)	Allergic reaction <i>Child with allergy against wheat, rye, egg</i>	3000	Contamination

"Gluten free" pasta (02/96) [Case 1]	<i>A boy, 9 years old, with coeliac disease, is vomiting at three occasions after having eaten the pasta</i>	10 000	Contamination of the raw material or during production
[Case 2]	<i>A girl, 8 years old, with an allergy to cereals suffers at three occasions from breathing difficulties and asthma after having eaten the pasta at school lunch</i>		
"Gluten free" pasta (spirals) (11/96)	Stomach pain, vomiting <i>Child with coeliac disease</i>	200	Contamination during production. Gluten content was 5% in one piece of "band" pasta found in the package
Bisquits, glutenfree (03/96) [Case 3]	Stomach pain, skin symptoms <i>Adult with coeliac disease</i>	140	Contamination during production
Potato croquettes (07/93)	Stomach pain <i>Adult with coeliac disease</i>	900	The manufacturer had "forgotten" to declare the ingredient wheat flour
Snacks (03/97) [Case 4]	Vomiting <i>Boy, 6 years old with coeliac disease</i>	10 000	The ingredient (gluten or wheat flour) was not declared
Chocolate (12/95)	Stomach pain <i>Child with coeliac disease</i>	4 200	Misleading declaration. The ingredient label says rice crisps, the picture shows wheat crisps
Chocolate bar with rice crisps (11/94) [Case 5]	Stomach pain, diarrhoea <i>Adult with coeliac disease</i>	70	The rice had been treated with gluten, this was not declared
Wafer (01/97) [Case 6]	Stomach pain <i>Child, with coeliac disease</i>	70	Naturally gluten free product, contaminated with wheat gluten
Ice cream cone (06/98) [Case 7]	Vomiting <i>Child, 7 years, with coeliac disease</i>	860	Falsely labelled as gluten free alternatively contaminated with wheat

Estimation of the amount of gluten, causing adverse reactions

In seven of these cases, shown in the above table, we have also been able to estimate the amount of ingested gluten causing the adverse reaction. It was found that sensitive individuals might react at a dose of as little as 7-10 mg gluten.

Case	Food	Gluten content ppm	Estimated dose	
			g food	mg gluten
1 and 2	Pasta	10 000	50	500
3	Bisquits	140	50	7
4	Snacks	10 000	10-50	100-500
5	Chocolate bar	70	100-200	7-14
6	Wafer	70	100-150	7-10
7	Ice cream cone	860	10	8.6