



September 22, 2010

Ms. Philippa Smith, Chair
Mr. Steve McCutcheon, CEO
Food Standards Australia & New Zealand
Boeing House, 55 Blackall Street
Barton ACT 2600
Australia

Dear Ms. Smith and Mr. McCutcheon:

The Center for Science in the Public Interest (CSPI) is an independent nonprofit organization that seeks to improve the safety and healthfulness of the North American food supply. In that capacity, we have led efforts to obtain Nutrition Facts labels, restrict the use of nitrite, sulfites, and other unsafe food additives, and win passage of legislation to prevent foodborne illnesses. By way of background, CSPI is funded largely by the 850,000 subscribers to our Nutrition Action Healthletter, the world's largest-circulation health newsletter; we do not accept funding from industry or government.

A novel substance that entered the human food supply, beginning in the United Kingdom, then the United States, and most recently in Australia, is a fungus that is processed into Quorn-brand imitation meat products. The producer calls the substance "mycoprotein." In theory, the products make nutritional sense, because they can be cholesterol-free and low in saturated fat.

The FSANZ Web site asserts that "Reported cases of adverse events (gastrointestinal disturbance and allergy) are very rare. No safety concerns identified."¹ In fact, though, the mycoprotein in Quorn foods is a powerful allergen.

CSPI has received over 1,500 bona fide reports of adverse reactions, mostly from the UK and the U.S. (See www.cspinet.org/Quorn for information about CSPI's activities.) The symptoms include nausea, projectile vomiting that is sometimes so violent that blood vessels in the throat or eyes burst, hives, and potentially fatal anaphylactic reactions (though we have not yet identified fatalities).

We have published some of this information in scientific journals.² Another published report identifies the particular ribosomal protein that is the specific allergen, though other

¹ www.foodstandards.gov.au/srcfiles/Novel%20Foods%20-%20Record%20of%20views%20Jan%2009%20Update.doc (accessed August 26, 2010)

² Jacobson, M.F. *Allergy*. 2003 May;58(5):455-456.

proteins might also be allergenic, that caused an asthmatic reaction.³ Judging from a large random telephone survey that we commissioned in the UK, a higher percentage of consumers are sensitive to Quorn foods than any of the common food allergens, including peanuts, milk, and shellfish.⁴

At a time when there is great concern about protecting consumers from food allergens, governments, including yours, have allowed the entry into their food supplies of this totally unnecessary and powerful allergen. CSPI has urged the UK and U.S. governments to bar the sale of Quorn foods, but the governments disagreed. However, through complaints to local agencies in the UK and direct communications with the maker of Quorn foods, we got the company to at least change labels indicating that the products were made from mushroom-like foods rather than from a vat-grown fungus. CSPI's Litigation Project also represents a victim in a lawsuit in the United States against the maker of Quorn foods to try to obtain a warning notice on packages.

I write, because in the past several weeks Quorn has started to be marketed in Australia (and possibly New Zealand), and we have begun receiving adverse reaction reports from Australian consumers. Reports include the following:

- **31-year-old woman:** Violent vomiting as I have never before experienced. The first round was mostly liquid, the second was the lasagne, the third was just bile and stomach acid and towards the end I felt as though I was going to expel my internal organs. Thankfully no blood. I have a red rash spread on my neck, coughing and tightness in chest. I just have to wait until later on this afternoon until my husband comes home with our only car. I am at home caring for our two small children, and sincerely hope nothing happens to me between now and his return
- **32-year-old woman:** This is the 4th time this has occurred but have only just made link to Quorn. It starts as a faint pain in my stomach and general feeling of unwell, stomach cramps increase, diarrhoea, nausea, restlessness... Have travelled the world eating food from street vendors in 3rd world countries and I have never felt this ill!
- **44-year-old woman:** Approx 3 weeks ago I developed nausea and vomiting approx 5 hours after eating Quorn Sausages. I did not associate the vomiting with the product as I had previously eaten 2 sausages from the same packet without any problem. Last night I ate 2 more sausages from the same packet and developed nausea and vomiting at approx 10.30pm. The reaction was more severe than the first episode with more violent vomiting that went on for several hours. I have also developed small red spots on skin around my eyes which still remain this morning.
- **34-year-old woman:** had quorn mince and became very ill. severe nausea and diarrhoea, but thought it was a stomach bug. 2 weeks later i ate quorn chicken dippers, again i got sick but much much worst, diarrhoea, vomiting, nausea, fever and the shakes.
- **41-year-old woman:** gnawing pain in upper abdomen, burping, excessive saliva, hot and cold feelings, tingling feelings,

³ Hoff et al. *J Allergy Clin Immunol*. 2003 May;111(5):1106-1110.

⁴ Jacobson, M.F. *Am J Med* 2003 Sep;115:334.

severe and sudden vomiting over a period of 6 hours, which filled up 1 and a half laundry buckets, plus watery severe, cramping, sudden diahorea, at same time as vomiting, at times. terrible abdominal pain with and before and after vomiting bloody diahorea. then huge electrolyte imbalance, fluid loss, with extreme thirst. took phergan to stop the vomiting and panadeine to stop the diahorea and the awful abdominal pain and cramps. very weak for a few days, felt tired for at least a week, and nauseated having to eat blandly and also drink blandly.

- **60-year-old male:** Nausea, dizziness and stomach aches.
- **40-year-old woman:** Nausea and vomiting up stomach contents around 2 hours after consumption of quorn.
- **47-year-old woman:** After eating Quorn southern style burgers I became violently sick on two occasions, the first time not realising what had caused the sickness. I also had diarrhea and very bad nausea and headaches for the following three days. Was unable to do my work and on the second occasion my husband had to take time off work to take me to the doctors

The adverse-reaction reports that we received through our Web site are certainly only the tip of the iceberg. To submit a report, people have to link consumption of the product with their symptoms, use the Internet and make the effort to search for Quorn problems, find our Web site, and then fill out a questionnaire. I estimate that hundreds of people have gotten sick for every report that we have received.

Though some foods, such as peanuts and shellfish, also cause severe allergic reactions, they are traditional dietary components and not appropriate to outlaw; their allergenicity is widely known. In contrast, mycoprotein is a novel ingredient in the human supply, and the severe reactions it causes are totally avoidable. I urge Food Standards Australia & New Zealand to protect consumers by barring the sale of Quorn mycoprotein-containing products. At the very least, a prominent notice on the fronts of packages should advise consumers that the products can cause serious and potentially fatal allergic reactions.

Sincerely,



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cc: Hon Mark Butler MP, Parliamentary Secretary for Health,
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