

# MEMORANDUM

CLASSIFICATION

TO Mr. M.T. Robberstad,  
A Head,  
Food Program Section,  
Bureau of Operations.

YOUR FILE No.  
Votre dossier

OUR FILE No.  
Notre dossier

FROM Division of Toxicology.  
De

DATE August 20, 1970.

SUBJECT Arsenic in the Yellowknife vegetable samples.  
Sujet

Here are the results on the arsenic determinations in the vegetable samples received from Yellowknife. We used the samples as we received them: no attempt was made to clean them from dust and soil particles. I think in this way we get more information on the contamination of the area.

As you can see, most samples contain more than the maximum arsenic level permitted in the Regulations, though I think that proper washing would reduce the arsenic levels in most of these vegetables to less than 1 ppm.

The natural arsenic content of vegetables is generally less than 0.1 ppm. The arsenic concentrations found show clearly that heavy contamination occurs. To get a more reliable picture of the situation, we should get samples collected according to the principles agreed upon on last July 21st in our meeting at your office.

*E. Sandi*  
E. Sandi,



Arsenic in vegetables from Yellowknife

	<u>Location</u>	<u>Description</u>	<u>Arsenic ppm</u>
96	Site 4	1. Lettuce	2.65
		2. Swiss chard	3.15
		3. Carrots, leaves & small roots	3.10
		4. Beets, leaves	0.52
		5. Lettuce	2.00
		6. Lettuce	1.32
		7. Lettuce	1.07
		8. Carrots, leaves & small roots	4.15
97	Giant Mine	9. Beets, leaves	3.10
		9A. Beet roots of same sample, heavily contaminated with soil	4.80
99	Site 2, Town	10. Carrots, leaves, small roots	2.20
		11. Lettuce	2.25
98	Site 3, Con Mine	12. Lettuce	1.42
		13. Lettuce	1.55
		14. Swiss chard	1.05
		15. Carrots, mostly leaves	1.36
95	Site 1, Town	16. Carrots, mostly leaves	1.15
		17. Cabbage	0.48
		18. Beets, roots	0.61
		19. Lettuce	1.10
		20. Green pea pods	0.14
		21. Kohlrabi	0.67