



A NOTE ON THE VITAMIN B CONTENT OF KOREAN RICE¹

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In a country such as Korea, where much of the rice destined for human food is milled in small roadside or village rice mills, the issue of the degree of refinement and consequent vitamin content of the milled rice is of significance. Accordingly, it appeared desirable to collect and analyze a sufficient number of typical samples of Korean milled rice to determine that variability, as well as the average of the content of certain constituents. The resulting data might thus serve as a basis for appraising the adequacy of the Korean diet and the possible desirability of some supplementation, as, for example, the enrichment of such rice.

A summary of the analytical data resulting from this study is recorded in Table I. It appears that the thiamine content of these Korean rice samples is about double that reported by Geddes (1) from the data of Kik and Van Landingham (2,3,4), and of Williams, Knox, and Fieger (6). The riboflavin content of the Korean samples is slightly, although significantly, higher than that reported by Kik *et al.* (2,3,4), while the niacin content is in approximately the same range.

The average thiamine content of the milled rice of Far Eastern countries reported by Woot-Tsuen Wu Leung *et al.* (5) was 1.2 parts per million, which is about double that reported by Geddes (1), and in the same range as the 1.39 p.p.m found in the regular rice collected from Korean mills. Likewise the ash and crude protein content of the composites of the Korean rice samples were quite similar to the rice studied by Leung *et al.* (5). It appears, therefore, that the relative degree of refinement of the Korean rice is equivalent to that of rice

¹ Manuscript received May 4, 1959. Scientific Journal Series No. 4124, Minnesota Agricultural Experiment Station, St. Paul, Minn.

TABLE I
COMPOSITION OF KOREAN MILLED RICE

	REGULAR RICE FROM MILLS, 18 SAMPLES	"SOFT TYPE" RICE FROM MILLS, 8 SAMPLES	STREET MARKET RICE, 30 SAMPLES
	ppm	ppm	ppm
Thiamine			
Minimum	1.12	1.54	1.34
Maximum	1.83	1.83	1.83
Average	1.39	1.68	1.54
Riboflavin			
Minimum	0.33	0.35	0.33
Maximum	0.44	0.44	0.53
Average	0.38	0.40	0.40
Niacin			
Average	13.4	15.4	23.1
	%	%	%
Crude protein (N × 5.95)			
Average, 14% moisture basis	6.43	6.54	6.37
Ash			
Average, 14% moisture basis	0.65	0.97	0.58

of the Far Eastern countries generally. Accordingly, substantial rice enrichment might well be applied in Korea, as has been done in other areas of the Orient, in order to include a reasonably adequate supply of certain essential B vitamins, notably thiamine and niacin, in the Korean diet.

Acknowledgments

Grateful acknowledgment is made of the efficient services of Professor Roy O. Bridgford, Over-All Advisor in Agriculture to Seoul National University of Korea under the University of Minnesota's contract with the U. S. International Cooperation Administration, who collected the 56 samples of rice from Korean rice mills and street markets; also of Merck & Co., Inc., of Rahway, N. J., whose experienced analysts determined the vitamin content of the Korean rice samples included in this study.

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