

NUTRITION AND JAPANESE CREATIVITY

MURAKAMI Yukio

Nutrition Research Institute

INTRODUCTION

Why Japan has been able to accomplish the miraculous feat of growing into the second largest economy of the world despite her poor natural resource endowments and despite the almost complete destruction of social infrastructure at the end of World War II has been a subject of intense debate among economists. Given that land, labor and capital are regarded as the three fundamental factors of production in conventional economics, it is obvious that most arguments in recent years have pointed to the strategic importance of labor, or human capital, in explaining the post World War II performance of the Japanese economy.

Conventional economics has little to offer, however, when it comes to explaining why the Japanese have been so “productive” in their economic life, except to pay lip service to the importance of education. The purpose of the present discussion is to go beyond the conventional explanation of the secret of the Japanese economic miracle by examining the role of nutrition as a crucial factor stimulating creativity and, therefore, contributing to a nation’s productivity in the economic arena.

EMPIRICAL STUDIES OF NUTRITION AND CREATIVITY

Recent empirical studies seem to suggest that there is an important connection between nutrition and creativity. To be more specific, there is growing evidence pointing to the crucial importance of “animal protein” as the physiological basis of creativity (Murakami, 1988).

We have tested this hypothesis in a number of experiments in which the effects of vitamin B₁₂, or vitamin supplement containing B₁₂, are measured. These experiments show that vitamin B₁₂ has a favorable effect on the performance of certain arithmetic operations. Moreover, the nature of the tests used — the Uchida-Kraepelin and other tests — suggests the improved performance of the right hemisphere of the brain. Thus vitamin B₁₂ seems to enhance creativity by increasing the power of pattern recognition, which is controlled by the right hemisphere of the brain.

SOURCES OF ANIMAL PROTEIN FOR THE JAPANESE

Vitamin B₁₂ is different from other vitamin Bs in that it is almost exclusively contained in animal protein. This immediately raises the question of why the Japanese, with their heavy reliance on vegetable-oriented food, have managed to exhibit their creativity and to maintain productivity.

As it turns out, the secret of Japanese creativity can be traced to certain types of their traditional food, namely sea weed and fermented food. These traditional Japanese articles of food constitute a rare exception to the rule that only animal protein contains vitamin B₁₂. Thus, the Japanese, despite their reliance on vegetable diet, have in fact been able to maintain a protein-rich diet throughout the nation's history.

CONCLUSION

Statistical data provided by the United Nations Research Institute for Social Development shows a clear correlation between per capita GNP, a conventional measure of economic development, and the per capital daily intake of animal protein for a nation (Murakami, 1991). Early history of our species also indicates the crucial importance of nutrition in stimulating the development of the brain. More recently, there is clinical evidence showing the effectiveness of vitamin B₁₂ in the treatment of certain neurological disorders. These examples show that nutrition plays a crucial role in the evolution of civilizations. Looking at nutrition thus gives us new insight into the question of creativity which has been neglected in the traditional literature on economic development.

REFERENCES

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