

## **Prevention and Control of Colorectal Cancer as a Model of Lifestyle-related Disease**

SHINKAN TOKUDOME

Director-General

National Institute of Health and Nutrition

### **< Summary >**

Chronic disease, including cancer, heart disease, cerebrovascular disease, diabetes mellitus and metabolic syndrome, is now called lifestyle-related disease because it is caused by lifestyle factors and interactions between host and lifestyle factors with a long latency period and/or aging. Genetic factors are of interest for health promotion and disease prevention, but they are not manageable. Lifestyle factors include dietary habit, smoking, alcohol consumption, work, physical activity/sports, sleep, mental stress and infection. For practical prevention of lifestyle-related disease, interventions must be made to modify lifestyle factors, such as adopting more preventive factors and quitting or avoiding risk factors. As a model, this article picks up colorectal cancer and discusses associations with smoking, diet and physical activity, in particular, because not only the number but also the rates of incidence and mortality are increasing both in men and women. Furthermore, colorectal cancer shares lifestyle factors associated with obesity, diabetes, and metabolic syndrome. According to the reports by World Cancer Research Fund/the American Institute of Cancer Research and the International Agency for Research on Cancer, a definite preventive factor is physical activity and risk factors include smoking, processed meat, alcoholic drinks (men), body fatness, abdominal fatness and adult attained height. Probable preventive factors are food items containing dietary fiber, garlic, milk and calcium and risk factor includes alcoholic drinks (women). The Research Group for Evaluation of Cancer Screening reported that hemo-occult blood testing has proven effective in early detection of colorectal tumors. Thus, lifestyle modification and examination of hemo-occult blood testing are advised to prevent the onset of and death from colorectal cancer. After the model of colorectal cancer, relevant primary and secondary preventive measures and strategies can be adopted for preventing and controlling other lifestyle-related disease.