

Association between the Body Mass Index and Lifestyle in Freshman Students: from the *Baccalaureate Degree Program* of Fukuoka University

Emiko NAKASHIMA^{1), 2)}, Kaoru HOSOI^{1), 3)}, Kunihiro MATSUO⁴⁾,
Akira KAWAMURA^{1), 5)}, Natsumi MORITO⁵⁾, Hideto SAKO⁵⁾,
Keijiro SAKU^{1), 3), 5)}

¹⁾ *Department of Clinical and Applied Science, Graduate School of Medical Sciences, Fukuoka University*

²⁾ *School of Nursing, International University of Health and Welfare, Fukuoka*

³⁾ *The AIG Collaborative Research Institute of Cardiovascular Medicine, Fukuoka University*

⁴⁾ *Department of Cardiology, Fukuoka University Chikushi Hospital, Fukuoka*

⁵⁾ *Department of Cardiology, Fukuoka University School of Medicine, Fukuoka*

This work was supported by research grants from the the *Baccalaureate Degree Program* Fukuoka University (2011-2013), the Central Research Institute of Fukuoka University (2008-2012), the FU-Global program (2008-2010), the AIG Collaborative Research Institute of Cardiovascular Medicine, Fukuoka University (2011-2013), Endowed Department of Molecular Cardiovascular Therapeutics, Fukuoka University, which is supported by MSD. Co, Ltd, and Endowed Department of Community and Emergency Medicine, Fukuoka University, supported by Izumi City, Kagoshima.

Abstract

The *Baccalaureate Degree Program* “Learning that Life is Precious” was based on the concept that every human life has value, which should be obvious to not only people who work in the healthcare system but also college students, and targeted the self-control of young students with regard to their lifestyle habits.

Methods: In this program, we asked 9,564 freshman students to complete a questionnaire regarding their daily lifestyle, which addressed diet, sleep, exercise, schoolwork, etc., and performed statistic analysis (multiple regression analysis, etc) between the body mass index (BMI) and various lifestyle factors based on the results from 2010-2012.

Results: A low BMI was associated with low levels of exercise (male:p<0.001, female:p=0.028), physical activity (male:p<0.001, female:p<0.001), and irregular dietary habits (male:p=0.009, female:p=0.095) in both males and females, while females with low BMI had a specific body image and composition. BMI values of students at the Faculty of Sports and Health Science were higher than those of other students, and BMI was likely to be affected by stress in females (p=0.025).

Conclusions: Different associations were observed between low BMI and body image and composition. Athletic men and women also have a different sense of body weight. We hope that students and both the teaching staff and clerical employees will heed the present results and apply them, as appropriate, for lifestyle management.

Key words: Freshman student, Lifestyle, BMI, Healthcare system