Editorial

Obesity: not just the scale problem

Obesity is one of the leading metabolic disorders in the world, and has made World Health Organization put it as a global epidemic condition. It was stated that approximately 300 million people in the world are obese, and the trend shows a consistent increased number.[1]

Obesity is defined as BMI greater than 30 kg/m^2 worldwide,[2] but in Asia Pacific, including Indonesia, obesity is defined by BMI greater than 25 kg/m^2.[3] In the USA, in 2003-2004 the prevalence of obesity is 31.1 %, and in women 33.2 %.[4] The prevalence of obesity by RISKEDAS DEPKES 2007 among > 15 years old population is 13,9 % in men and 23,8 % in women, with the prevalence of central obesity with waist circumference greater than 90 cm in men and greater than 80 cm in women is 18,8%.[5]

The real problem with obesity arises as many complications would occur from it, and up to this date it is well known to be the risk factors of many diseases. Obesity is known to be the risk for cardiovascular diseases, respiratory diseases, and endocrine conditions. Such a health risk does not only occur in adults, but also nowadays in, children and adolescents.[6] Together they may account for as many as 15-30% of death from coronary heart disease (CHD) and 65-75% of new cases of type 2 diabetes mellitus.[2]

A study in this journal investigates the risk of pulmonary dysfunction in adolescent in relation to obesity. The basic underlying condition that would explain the problems arising with obesity is possibly due to the alteration occur in the lipogenesis, and then would affect other metabolic regulations, some of which would occur in form of metabolic disorders, such as diabetes mellitus.[1]

Obesity occurs when over a period of time there is a positive energy balance because more kilocalories are ingested than the body's energy needs. The excessive energy is stored as triglyceride in adipose tissue. In the early development of obesity, the fat cells get larger. However, if the existing fat cells are full and the calories still continue to consume, they will make more adipocytes. An average adult has between 40 billion and 50 billion adipocytes. Each fat cell can store the maximum 1.2µg triglycerides. [7]

Obesity is avoidable. In order to do that, however, the risk of obesity should be noticed. The risk factors of obesity are based on 3 factors: genetic, environmental, and behavioral.[8] A couple of years ago, obesity was thought as midlife condition, but in 2007 a study in US revealed that 17% of its child and adolescent population were obese.[9] Although the risk of obesity would increase with age,[2] the probability of children and adolescents to suffer from obesity still stand.

Behavioral factor, however, remains a contradiction. Nowadays, physical activities and dietary intake were thought to be the strongest contributors in the development of obesity. Besides used as a prevention strategy, behavioral factors such as food intake could also be used in treating obesity. In order to manage an obesity condition, a dietary fat intake should be control. Previous studies had mentioned an increase risk of weight gain in short term and long term with the consumption of full-fat-dairy products.[10] A study in this book would reveal how dietary fat intake would affect a pathologic process in the development of obesity.

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