## **CURRICULUM VITAE**

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#### [관심분야]

Exploring the association between time-restricted eating, meal cycles, low-carb diets, dietary sugar, carb quality and their associations with obesity, metabolic syndrome, and type 2 diabetes

#### [논문]

- 1. Song J, Oh TJ, Song Y. Individual postprandial glycemic responses to meal types by different carbohydrate levels and their associations with glycemic variability using continuous glucose monitoring. Nutrients 2023, 15, 3571.
- 2. Kim J, Song Y. Early time-restricted eating reduces weight and improve glycemic response in young adults: a pre-post single-arm intervention study. Obesity Facts 2023;16:69-81.
- 3. Park S, Yang J, Song Y. The effect of four weeks dietary intervention with 8-hour time-restricted eating on body composition and cardiometabolic risk factors in young adults. Nutrients 2021,13, 2164.
- 4. Ha K, Nam K, Song Y. A moderate-carbohydrate diet with plant protein is inversely associated with cardiovascular risk factors: the Korea National Health and Nutrition Examination Survey 2013-2017. Nutrition Journal 2020;19:84.
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# The effects of intermittent fasting on cardiometabolic health: Pros

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Intermittent fasting was initially studied among individuals fasting for religious reasons like Ramadan fasting or shift workers. Recently, it has expanded to the general population as a new strategy for weight loss. Major types have emerged, including the 5:2 method, which designates fasting days weekly; alternate-day fasting (ADF) where fasting occurs every other day; and time-restricted eating (TRE), where a daily eating window is designated. The mechanism underlying intermittent fasting involves synchronizing eating and fasting periods with the body's circadian rhythm to improve metabolism efficiency. Various studies have reported weight loss effects for each type, with recent meta-analyses supporting these findings. Although some studies did not observe significant weight loss, favorable effects in certain cardiovascular risk factors were reported. Among the types of intermittent fasting, TRE has been the most extensively studied recently. A major issue in TRE are the length and timing of the eating window. The most common

form involves fasting for 16 hours and eating within an 8-hour window (16:8). However, there is no conclusion on whether shortening the eating window maximizes health benefits. Additionally, another issue is whether starting the eating window early in the morning (early TRE) yields better effects on blood glucose control and cardiovascular risk factors compared to starting later (late TRE). Although research varies in terms of when the eating window starts, optimizing the eating window is essential for individuals to maximize the benefits. Other issues include the applicability of intermittent fasting in populations with underlying conditions like type 2 diabetes. A few studies reported efficacy of TRE, suggesting its applicability in those population. In summary, intermittent fasting positively impacts cardiovascular health through weight loss and improvements in cardiovascular risk factors. However, it is crucial to understand that individualized approaches tailored to each person's characteristics to maximize intermittent fasting's benefits.