

Profile of Xanthosoma sagittifolium supplementation on body weight of prediabetic subjects

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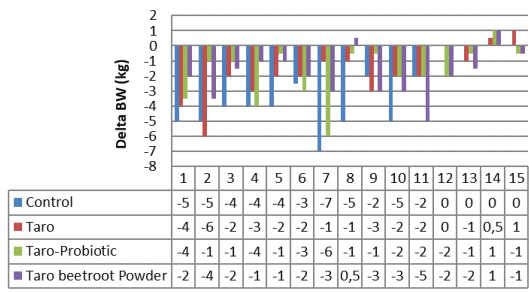
Statement of the Problem: Taro is a monocot plant of the Araceae family originating from tropical regions around the Indo-Malaysian peninsula with better nutritional content than rice, and high fiber content so it is suitable for maintaining digestive health. Utilization of taro will support food security and sovereignty in Indonesia, supports food diversification and moreover, providing functional foods for Indonesian community, especially in preventing metabolic syndrome, including diabetes, overweight and obesity, which have a positive impact on quality of life and productivity.

Methodology & Theoretical Orientation: This study is an experimental laboratory study with cross four double blind controlled clinical trials on subjects with pre-diabetic or early type 2 diabetes. 15 subjects were supplemented with Xanthosoma sagittifolium (taro) and 4 variation addition treatment (Control, Taro, Taro Probiotic and Taro Beetroot Powder). Xanthosoma sagittifolium (taro) were given in the form of noodle, bread, biscuit, cookies, and hot chocolate, for 2 weeks in each treatment, during 4 months of 4 treatments with 2 weeks wash out period in between the treatment. Bodyweight and body mass index at baseline and end line.

Findings: After two weeks taro supplementation most of subjects has a body weight loss. At the end of each treatment, there was body weight loss was -3.03 ± 1.983 kg (Control treatment), -1.87 ± 2.083 kg (Taro treatment), -1.73 ± 2.133 kg (Taro-Probiotic treatment), -1.83 ± 1.583 kg (taro beetroot powder Treatment). Mean body Mass Index at baseline was 28.36 ± 2.486 kg and at end line, mean Body Mass Index was 26.61 ± 2.510 kg. Profile of body weight changes assumed more influenced by intake programme.

Conclusion & Significance: Diet of Belitung taro consumption keeps the body weight combination with diet programme.

Profile of Delta Body Weight Changes



Biography

Pratiwi D Kusumo is a lecturer in Universitas Kristen Indonesia. She is interested in the study of probiotic and its correlation with immune system, microbiome profile (microbiota and metabolite like SCFA). As a biomedical lecturer, she wants to learn more about microbiome, and it is ecological environment system.

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