

Studies on the Effects of Green Tea Weight-Loss Meal Replacements on Body Weight and Lipid Profile Control of Taiwanese

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ABSTRACT

In this study, we use the grinding machine, by adding the green tea powder, chitosan and selenium to develop the weight-reducing meal replacement and conducting clinical trials to evaluate its effectiveness. The operating parameters of the response surface experiment are green tea powder, selenium yeast, and glucose of the corresponding viscosity, to identify the optimal package of meal processing conditions and nutritional composition. The clinical trial subjects will be screen and assigned according to the following conditions: the body mass index higher than 27, randomly assigned to the three groups: control group, green tea group and the chitosan group ; a total of 45 subjects will participate the 12-week weight control program to compare the difference in their anthropometric measurements values, biochemical values and the values in physiological responses. The testing results indicate that the optimum operating parameters condition is under the green tea powder: 5.4 ± 0.7 g, selenium yeast: 1.3 ± 0.2 g, glucose powder 7.5 ± 0.2 g. The closest to the design value of the formulation viscosity 78 CPS (p

Keywords : Experimental design, green tea, meal replacement, weight-control, clinical trial

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