The aim of this research was to determine the proper comparison between soy milk powder with skim milk and stevia with sucrose in the manufacture of Chocolate Candy.

The experimental design used in this research was factorial pattern (3x3) in a randomized block design (RBD) with three replications. The design of the treatment carried out in this research consisted of two factors: the ratio of soy milk powder with skim milk (A), which consists of three levels which are a1 = 1:0 (soy milk powder : skim milk), a2 = 1:1 (soy milk powder : skim milk), and a3 = 0:1 (soy milk powder: skim milk) and a comparison of stevia with sucrose (B), which consists of three levels which are b1 = 1:0 (stevia : sucrose), b2 = 1:1 (stevia : sucrose), and b3 = 0:1 (stevia : sucrose). Therefore it has been obtained 27 experimental replication unit. Organoleptic response variables include taste, flavor, texture and aftertaste. Chemical analysis conducted was fat content, protein content, carbohydrate content, and moisture content as well as physical analysis which was conducted towards the toughness of the Chocolate Candy.

The results indicated that the best Chocolate Candy product which is with treatment a3b2 (comparison of soy milk with skim milk 0:1, and the comparison of stevia with sucrose 1:1) based on panelist responses on organoleptic test by 11.05% fat content, 13.44% protein content, 25.28% carbohydrate content, water content of 1.17% and has a toughness test value of 1.23 mm/sec/100gram.