Cacao is native from America, and its cultivation has spread in many countries. Currently is one of the main ingredients in the chocolate industry, cosmetic, pharmaceutical, confectionery, and pastry. The lipids are present as the major component in cocoa. These compounds technologically involved in food processing, mainly in the structure, flavor, appearance, texture and color of the food end. In the present study focused on the qualitative and quantitative evaluation of various physicochemical parameters of samples of cocoa, as well as lipid profile before (CST) and after heat treatment of roasting (CT). It was found that samples of CT showed a lower moisture content from 2.2 %, 0.7% ether extract and 2 % protein, but also had an increase in the ash content of 0.9 % and 3.5 % of dietary fiber with respect the CST. The content of free fatty acids in CT was lower with 14.5% compared to the CST, while the oxidation rate was higher in CT than in CST 0.4 meq peroxide / Kg. The iodine value and saponification CT had a decrease of 1.4 g I\(_2\)/ 100 g and 40 mg KOH / g lipid values respectively in relation to CST, all this due in part to the degradation and oxidizing conditions of heat treatment. Know the physicochemical changes in the lipid profile of high-fat ingredients, such as cocoa, is important since it is known that fat can influence the processing and sensory properties of cocoa-based foods or roasted cocoa fat.