Avocado (Persea Americana) is considered a healthy fruit for its monounsaturated oil similar to olive and content of tocopherols, phytosterols and polyphenols. The objectives of this research were to determine the content of tocopherols (by HPLC), total polyphenols (Folin Ciocalteu) and antioxidant capacity jointly by the DPPH and Rancimat methods of three varieties of avocado, Hass, Esther and Negra La Cruz of Chile (Quillota). The fruits were analyzed at the level of pulp, skin and seed. The results indicated that the tocopherol content was higher in Esther oil (10 mg/g lipid) in Hass (6.9 mg/g lipid) and Negra La Cruz (5.7 mg/g lipid). The higher content of tocopherols indicate a lower induction time (5.4 and 2.8 hr/s 12.5 h of Hass). Moreover, Negra La Cruz pulp had higher content Hass and Esther (17.7, 15.3 and 13 mg gallic ac./g fruit, respectively). The seed polyphenols (60.5 mg gallic ac./g) and skin (50.6 gallic ac./g) were superior to Hass of La Cruz (51.6 and 36.0 mg gallic ac./g respectively) and Esther (52.2 and 13 mg gallic ac./g respectively). In pulp Esther found more DPPH antiradical capacity, than the other varieties. On the other hand, seed and skin Hass antiradical power was higher. It is concluded that the different varieties of avocado and industrial wastes (seed and skin) may be used as good sources of antioxidant ingredients.