**Objective:** Adulterated herbal slimming products with undeclared synthetic drugs are common and responsible for many cases of serious health damage and occasionally even to death. The purpose of the study was to determine five synthetic adulterants in eight common herbal weight loss supplements sold in the Iranian market to verify that these substances are not mention on the labels.

**Materials and methods:** Eight common herbal slimming samples were obtained from Iranian market after advertising in satellite channels in Persian language and internet. Five pharmacological classes drugs used for weight loss, namely sibutramine, phenolphthalein, phenytoin, bumetanid and rimonabant, were investigated and quantified in them by GC-MS for the first three and LC-MS for the last second.

**Results:** The most undeclared ingredients which is added illegally were sibutramine, phenolphthalein, bumetanid, and phenytoin in Original super slim, Herbaceous essence, Green lean super slim, and Herbaceous essence respectively. Rimonabant was not found in them. Caffeine, pseudoephedrine, theobromine and amfepramone were also qualitatively found in the supplements by GC-MS library.

**Conclusion:** The life-threatening of illegally sold herbal weight-loss and dietary supplements have increased. These adulterated products have the health problem risks.