A new form of dried products for Ukrainian consumers is fruit and vegetable crisps. These include crisps from apples, pears, persimmons, quinces, bananas, beets, carrots, white roots, etc. Fruit or vegetable crisps are thin lamina of fruits or vegetables obtained without frying. Fruit or vegetable crisps obtained by drying to low residual moisture. Their characteristic is the lack in the composition of cholesterol, carcinogens and more.

Scientific development technologies drying crisps involved in many countries (USA, China, Korea, Thailand, Serbia, Poland, Hungary, Russia and Belarus), but Ukraine does not pay enough attention to such studies.

The article describes the innovative technologies that are used in the world for the production of fruit and vegetables crisps, in particular apple crisps. The main disadvantages of the methods for producing crisps are also indicated. Objects of research were Reinette Simirenko apples. The optimal degrees regimes of drying of apples in the production of fruit crisps are presented in the article. The drying curves Reinette Simirenko apples and organoleptic properties apple chips are analyzed. The obtained energy-efficient mode of drying apples with thermal and humidity of the drying agent parameters: temperature 80...60°C, speed of 1,5–2 m/s, moisture content of 10 g/kg dry air. The proposed regime will reduce energy consumption by 10–15%. The proposed regime allows to obtain a quality product with maximum preservation of vitamins, minerals, nutrients, flavor and color.

The results used to develop energy efficient production technology of apple crisps, developed and approved technical specifications "Chips fruit and vegetable". The technology is protected by 9 patents of Ukraine.

Keywords: apple crisps, thermal and humidity parameters of the drying agent, phasic dehydration, energy efficiency.