



8th Central European Congress on Food

Food Science for Well-being  
23-26 May 2016, Kyiv, Ukraine



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ВИРОБНИКІВ ДИТЯЧОГО ХАРЧУВАННЯ,  
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The congress addressed the following topics:

FOOD EXPERTISE, SAFETY AND TECHNOLOGIES

- **Food Expertise and Safety**
- **Food Technologies**

ENERGY SYSTEMS FOR FOOD CHAIN

- **Energy Efficiency**
- **Machine Building for Food Chain**
- **Intelligent Control Systems**

NATURAL BIOACTIVE COMPOUNDS, FUNCTIONAL AND NATURAL FOOD PRODUCTS, PACKING, STORING AND PROCESSING

- **Natural Bioactive Compounds, Functional and Local Food Products**
- **Packaging, Storing and Processing**
- **Food Processing**

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**UKRAINE**

### **POWER OF TECHNOLOGICAL FUNCTIONING OF PRODUCTIONS OF THE FOOD INDUSTRY**

Determination of efficiency of production processing equipment is necessary for the reasonable solution of the following tasks:

- planning of power supply of technological productions;
- assessment of an actual state of the concrete technological scheme;
- identification of the most power-intensive technological processes and devices;
- obtaining initial information for optimization of energy consumption by production of the wide range of finished goods.

Functioning of production of any production demands existence of various sources of energy resources — electric energy, steam, water, gas, etc. In a general view, the power scheme of any production can be presented in the following form.

As on the power value, these sources significantly differ, for determination of efficiency of production processing equipment the universal indicator has to be used. Besides, this indicator has to allow estimating, both energy resources, and finished goods.

The criterion of efficiency of production processing equipment can be presented in the ratio form between the size  $E$  and total specific technological effect that is reached in a ready-made product after implementation of processing. This criterion can be designated by  $A$  and in case of sterilization of the preserved food products has dimension (KJ/kg \* sterilization value).

**KEY WORDS:** *food industry, energy, efficiency of production processing*