conferenceseries.com

17th World Congress on Nutrition and Food Chemistry

14th Euro **Obesity and Endocrinology Congress**

September 13-15, 2018 | London, UK

Truly coherent policies of microalgae with food technologies

Armen B Avagyan Armenian National Agrarian University, Armenia

Currently, fruits and vegetables contain small amounts of key nutrients. As a result, the need of people and animals to Guse high quality food and feed additives to compensate for a lack of physiologically active components has increased. Microalgae contain, among other elements, high quantities of proteins, enzymes, amino acids, pigments, lipids, and a fairly high concentration of vitamins, compared with other plants or animals. Microalgae food and feed additives is optimal way for increasing of human and animal well-being, resistance to illnesses and improvements of food quality as well as removal of the use of antibiotics in animal feed (microalgae contain acids with high antibacterial action). Based on these challenges, the use of microalgae Chlorella as a food and feed additive could become the best solution. The food waste of 1.3 billion tones is critical problem to our society like environmental pollution (GHG emissions of 3.3 billion tons of CO₂ per year), health risk, and scarcity of dumping. Incineration and anaerobic digestion of food waste reduce the economic value of the substrate. Termohydrolyzation of food waste with the use of effluent gases can be used for producing of microalgae as our high value added answer on global challenges. In concrete pools of 26.85 ha the cost of dry Chlorella biomass will be lower than \$1/kg which is competitive compared with costs of used feed additives. In case manufacturing on an area of 121,976 ha, produced volumes of dry Chlorella powder will be equal to 417,659 t (investment of \$607 million) can absorb up to 0.764 MtCO₂ (in addition, reduction of NOx and VOCs) and produce 0.559 MtO₂. This quantity can be used as feed additive (1%) and will meet the total demand of Canada on 213%, USA on 25%, or Europe on 20% per year.

armin.av@hotmail.com