

Factors of progressive development in food industry

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Dynamics and regularities of development of the consumer's food market continues to exert a strong influence on the growth and change of the product's structure of the industry of food ingredients, raw materials, additives, assistive technology equipment, flavors and concentrates. On the example of Chinese ingredients in the last decade was seen improvement in the quality and subsequent significant increase in sales volumes. Such dynamics and processes of the market's transforming once again forced to pay increased attention to the aspects of strategic development, the factors of quality assurance of its own products and its competitive advantages.

Main directions of the innovation strategy choice for the development of the product is a search for new and unique products, technologies, materials, quality criteria, services and other unique factors that will meet all known and even unknown needs of customers. Naturally, such solutions cannot be realized currently without using of special techniques. The formation of food industry of USA and Europe, world experience and common trends have shown that in the early 20th century the accumulated scientific and engineering knowledge and experience as well as consumer demands have forced manufacturers to adopt quality standards adopted by the pharmaceutical industry. American experience had circulated GMP standard to 50-60 years of XX century around the world not only for the production of medicines and medical equipment, but also to active ingredients, food additives and food. Already long flowing transition from the world of common food technology purely to high intersectoral technologies requires a completely different approach. Manufacturers and developers were faced obvious tasks of introducing a higher level of quality as well as entirely different standards organization of production, management and monitoring of the technological processes change the security settings, the introduction of new parameters and characteristics in the specification of raw materials, additives and finished products itself. In contrast to the quality control procedures by examining the sample, standards GMP and GHP reflect a holistic approach to regulate and evaluate actual parameters of production and laboratory practice. Starting with the introduction of GMP and GHP, then some other quality management systems, and at the beginning 90s the HACCP system food industry of world leaders has approached the stage of modeling and design of both the production and the food. In regular practice of developers have long been part systems of computer modeling, expert database systems of analysis and forecasting of properties.

Side which slows down the development of the food complex is specialists and their level of training. It's no secret that today the foundation of the success of the company and the foundation of

successful product development is staff's qualifications and experience and accumulated within the firm interdisciplinary explicit and implicit knowledge stocks. Because of the complexity of the product development process, strong dependence of the properties and qualities of a unique object of creation on the production technology and the influence of other factors there is a pressing need to development team works closely with a group of experts of the enterprise. That is why in recent years more and more is talking about collective creativity - the team designing products. The term "food design" is increasingly gaining the recognition of experts, and greater qualification requirements are applied to creative team: "... like pharmaceuticals - to the developer of the food lies not only professional, but also an ethical responsibility, because the level of development, the accuracy of testing and literacy of organization of the whole complex of works from marketing to manufacturing begin to play paramount implemented in projects ...".

The reasons of the numerous failures lie in elementary things and blunders: beginning from ignorance of the basic foundations of the chemical and physical regularities, the characteristics of multiphase media and aspects of their interaction, misunderstanding criterias and conditions for realization of technological processes, scaling errors, incorrect transport of development model and engineering process for the functioning manufacture until the System Errors in the organization and equipping of the enterprise. World practice shows that only a combination of highly qualified personnel and the regular use of the latest scientific and engineering achievements can effectively operate in a highly competitive modern enterprise and innovation-active medium. For effective practical activities of modern manufacturer of ingredients is needed a team of technologists: engineering technologist, chemist and food industry worker, which will combine versatile scientific and engineering knowledge and extensive practical experience. Widely held view about the tandem "chemist and food industry worker" wrongly because an important set of aspects of the development is overlooked. It is important to not only come up with a product, it is important to preserve the essence of the idea to the end - going through all the stages and cycles. Because the result is not just an idea or a new miracle chemistry ingredient, and, of course, is not the final food product. It is a specific product, which is the product of the process.

References:

1. <http://en.wikipedia.org/>
2. www.ift.org
3. Mary D. Earle. Food product development: Maximising success/ Mary D. Earle, Richard L. Earle, Allan M. Anderson - ISBN 1 84569 722 7, ISBN-13: 978 1 84569 722 8, September 2001

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