

# **TRANSFER TEKNOLOGI VERTIKAL DAN REKAYASA PRODUK KIMIA YANG TERPADU DALAM PEMBANGUNAN AWAL INDUSTRI PAKAN ANJING DALAM NEGERI**

Tony Handoko

**Jurusan Teknik Kimia, Fakultas Teknologi Industri  
Universitas Katolik Parahyangan, Bandung**

## **ABSTRACT**

Recently, having dog as a hobby has increased in some numbers and followed by the demand for dog foods. For all these years, dog foods in Indonesia are imported products due to the lack of good technology transfer in formulation and production technology, especially for small scale industry.

The objective of this research is to study the formulation of dog food, to study the innovation of equipment using non-extrusion process, and finally to carry out vertical technology transfer management based the research results. The method used in this research, namely; survey of dog food through the owner, generalized and selecting ideas to formulate dog food, design equipment and process of non-extrusion, trial of the equipment in order to produce dog food, analyzing product, and finally to carry out vertical technology transfer to small scale dog food industry in Indonesia through equipment scale-up. Outputs of this research are: non extrusion technology for producing dog food, dog food, scale-up equation, and the obstacles of transfer technology.

The research result shows that integrated product design and vertical transfer of technology can give the best formulation and technology of non extrusion in developing dog food industry. It also identified the critical points and obstacles in dog food industry. Formulation 1: 2, using chicken dog food meat and rice flour, has fulfilled the nutrition requirements for international standard. Technology of extrusion can be replaced by technology of non extrusion for it has the same results in nutrition. Dog food in this research has a good flavor which can fulfilled dog's appetite and the needs of breeder and owner. The scale-up model uses the density of dough to estimate the mixer dimension.

Key words: Raw material and dog products, product design, vertical transfer of technology, innovation of design of equipment and non-extrusion process, scale-up