

DAFTAR PUSTAKA

- Agnihotri, S. A., Mallikarjuna, N. N. & Aminabhavi, T. M., 2004. Recent advances on chitosan-based micro- and nanoparticles in drug delivery. *Journal of Controlled Release*, Volume 100, pp. 5-28.
- Alagusundaram.M, M. S. C. U., 2009. MICROSPHERES AS A NOVEL DRUG DELIVERY SYSYTEM. *International Journal of ChemTech Research*, Volume 1, pp. 526-534.
- Allaoui-Attarki, A. et al., 1998. Mucosal Immunogenicity Elicited in Mice by Oral Vaccination with Phosphorylcholine Encapsulated in Poly (D,L-Lactide-co-glycolide) Microsphere. *Vaccine*, Volume 16, pp. 685-691.
- Alleoni, A. C. C., 2006. Albumen Protein and Functional Properties of Gelation and Foaming. *Science Agriculture*, Volume 63, pp. 91-298.
- Amidi, M., Romeijna, S. G., Borchard, G. & Junginger, H. E., 2006. Preparation and characterization of protein-loaded N-trimethyl chitosan nanoparticles as nasal delivery system. *Journal of Controlled Release*, Volume 111, pp. 107-116.
- Angell, C., 1995. Formation of glasses from liquid and biopolymers. *Science* , Volume 267, p. 1924–1935.
- Benoit, M. A., Baras, B. & Gillard, J., 1999. Preparation and characterization of protein-loaded poly(o-caprolactone) microparticles for oral vaccine delivery. *International Journal of Pharmaceutics*, Volume 184, pp. 73-84.
- Borges, O et al. 2006. Uptake studies in rat Peyer's Patches, cytotoxicity and release studies of alginate coated chitosan nanoparticles for

mucosal vaccination, *Journal of controlled release*, Volume 114, pp. 348-358.

Brayden, D. J., Jepson, M. A. & Baird, A. W., 2005. Intestinal Peyer's patch M cells and oral vaccine targeting. *DDT*, Volume 10, pp. 1145-1157.

Chen, H. & Langer, R., 1998. Oral particulate delivery: status and future trends. *Advanced Drug Delivery Reviews*, Volume 34, pp. 339-350.

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Corveleyn, S. & Remon, J., 1996. Maltodextrin- γ -irradiated yoprotectants in the lyophilization of a model protein, LDH. *Pharm. Res.*, Volume 13, pp. 146-150.

Dash, M., Chiellini, F., Ottenbrite, R. M. & Chiellini, E., 2011. Chitosan—A versatile semi-synthetic polymer in biomedical applications. *Progress in Polymer Science*, Volume 36, pp. 981-1014.

Dekeyser, P. M., Corveleyn, S., Demeester, J. & Remon, J. P., 1997. Stabilization of fully active chymopapain by lyophilization. *International Journal of Pharmaceutics*, Volume 159, pp. 19-25.

Delie, F., 1998. Evaluation of nano- and microparticle uptake by the gastrointestinal tract. *Advanced Drug Delivery Reviews*, Volume 34, pp. 221-233.

Dragnet, K. & Taylor, C., 2011. Chemical, Physical and Biological Properties of Alginat and Their Biomedical Implications. *Food Hydrocolloids*, Volume 25, pp. 251-256.

Eldridge, J. et al., 1990. Controlled Vaccine Release in the Gut-Associated Lymphoid Tissue : I. Orally Administered Biodegradable Microsphere target to Peyer's Patches. *Journal of Control Release*, Volume 11, pp. 205-214.

- Fox, K., 1995. Putting proteins under glass. *Science*, Volume 267, p. 1922–1923..
- Gulati, N., Nagaich, U., Sharma, V. K. & Khosa, R. L., 2011. Effect of Polymer and Cross Linking Agent on In Vitro Release of Quercetin from Microbeads. *Asian Journal of Pharmacy and Life Science*, Volume 4, pp. 401-405.
- Hagen, S. H. J. E. W., 1996. Germinate rebinding and conformational dynamics of myoglobin embedded in a glass at room temperature. *J. Phys. Chem*, Volume 100, p. 12008–12021.
- Hariyadi, D. M., Hendradi, E. & Piay, O. L., 2013. Optimasi Mikrosfer Ovalbumin-Alginat yang Diproduksi dengan Teknik Aerosolasi. *PharmaScientia*, Volume 2, pp. 21-30.
- Hariyadi, D. M. et al., 2014. Effect Of Cross Linking Agent And Polimer on the Characteristic of Ovalbumin Loaded Alginate Microsphere. *International Journal of Pharmacy and Pharmaceutical Sciences*, 6(4), pp. 469-474.
- Howe, S. E. et al., 2014. The uptake of soluble and particulate antigens by epithelial cells in the mouse small intestine. *Trends in Immunology*, Volume 9, pp. 1-10
- Huntington, J. A. & Stein, P. E., 2001. Structure and properties of ovalbumin. *Journal of Chromatography B*, Volume 756, pp. 189-198.
- Jinchen, S. & Huaping, T., 2013. Alginate-Based Biomaterials for Regenerative Medicine Applications. *Materials*, Volume 6, pp. 1285-1309.
- Lan, Y. et al., 2014. Therapeutic efficacy of antibiotic-loaded gelatin microsphere/silk fibroin scaffolds in infected full-thickness burns. *Acta Biomaterialia*, Volume 10, p. 316703176.

- LeFreve, M., Olivo, R., Vanderhoff, J. & Joel, D., 1978. Accumulation of Latex in Peyer's Patches and Its Susequent Appearance in Villi and Mesentric Lymph Nodes. *Pro. Soc. Exp. Biol. Med*, Volume 159, pp. 298-302.
- Levine, H. & Slade, L., 1986. A polymer physico-chemical approach to the study of commercial starch hydrolysis products (SHPs). *Carbohydr. Polym*, Volume 6, p. 213–244.
- Lubben, I. v. et al., 2000. In Vivo Uptake of Chitosan Microparticles by Murine Peyer's Patches: Visualization Studies using Confocal Laser Scanning Microscopy and Immunohistochemistry. *Journal of Drug Targeting*, Volume 9, pp. 39-41.
- Lubben, I. v. et al., 2001. Chitosan microparticles for oral vaccination: preparation, characterization and preliminary in vivo uptake studies in murine Peyer's patches. *Biomaterials*, Volume 22, pp. 687-694.
- Maindra, H. M. C., 2014. *Uji Hemaglutinasi Pemberian Vaksin Oral Mikrosfer Ovalbumin - Alginat pada Mencit (Mus Musculus)*, Surabaya: Fakultas Farmasi Universitas Airlangga.
- Moldoveanu, Z., Oliver, F., Mestecky, J. & Elson, C. O., 2004. Failure to Suppress an Existing Immune Response by Oral Antigen Administration. *New York Academy of Sciences*, pp. 299-309.
- Mullins, J. M., 1999. Overview of Fluorochromes. Dalam: L. C. Javois, penyunt. *Immunocytochemical Methods and Protocols*. New Jersey: Humana Press, pp. 97-105.
- Musumeci, T. et al., 2006. Lyoprotected Nanosphere Formulation for Paclitaxel Controlled Delivery. *J. Nanosci Nanotech*, Volume 6, pp. 457-503.
- Nirmala, R. N., 2014. *Pengaruh Lyoprotektan Laktosa dan Maltodekstrin terhadap Karakteristik Fisik Mikrosfer Ovalbumin-Alginat pada*

Proses Freeze Drying, Surabaya: Fakultas Farmasi Universitas Airlangga.

- Paddock, S. W. & Eliceiri, K. W., 2014. Laser Scanning Confocal Microscopy: History, Applications, and Related Optical Sectioning Techniques. Dalam: S. W. Paddock, penyunt. ***Confocal Microscopy Methods and Protocols***. USA: Springer Science, pp. 9-44.
- Pikal, M. J., 2010. Mechanisms of Protein Stabilization During Freeze-Drying Storage: The Relative Importance of Thermodynamic Stabilization and Glassy State Relaxation Dynamics. Dalam: R. Louis & M. C. Joan, penyunt. ***Freeze Drying/Lyophilization of Pharmaceutical and Biological Products***. USA: Informa Healthcare, pp. 198-222.
- Prasanth, v. v., Moy, A. C., Mathew, S. T. & Mathapan, R., 2011. Microspheres - An Overview. ***International Journal of Research in Pharmaceutical and Biomedical Sciences***, Volume 2, pp. 332-338.
- Pygall, S. R., Whetstone, J., Timmins, P. & Melia, C. D., 2007. Pharmaceutical applications of confocal laser scanning microscopy: The physical characterisation of pharmaceutical systems. ***Advanced Drug Delivery Reviews***, Volume 59, pp. 1434-1452.
- Rastogi, R. et al., 2007. Alginate microspheres of isoniazid for oral sustained drug delivery. ***International Journal of Pharmaceutics***, Volume 334, p. 71-77.
- Raymond, R. C., Paul, J. S. & Marian, Q. E., 2009. ***Handbook of Pharmaceutical Excipients***. 6th penyunt. London: Pharmaceutical Press.
- Rieux, A. d. et al., 2006. Nanoparticles as potential oral delivery systems of proteins and vaccines: A mechanistic approach. ***Journal of Controlled Release***, Volume 116, pp. 1-27.

- Salman, H. H. et al., 2007. Bioadhesive capacity and immunoadjuvant properties of thiamine-coated nanoparticles. *Vaccine*, Volume 25, pp. 8123-8132
- Schulz, O & Pabst, O. Antigen sampling in the small intestine. *Trends in immunology*, Volume 4, pp.157-161
- Tabata, Y. et al., 1996. Size effect on systemic and mucosal immune responses induced by oral administration of biodegradable microsphere. *Vaccine*, Volume 14, pp. 1677-1685
- Tewes, F., Boury, F. & Benoit, J. P., 2005. Biodegradable Microspheres: Advances in Production Technology. Dalam: S. Benita, penyunt. *Microencapsulation Methods and Industrial Application*. France: Taylor and Francis Group, pp. 1-41.
- Vadehra, D. & Nath, K., 1973. Eggs as a source of protein. *Critical Reviews in Food Technology*, Volume 4, pp. 193-308.
- Wang, W., 2000. Lyophilization and development of solid protein pharmaceuticals. *International Journal of Pharmaceutics*, Volume 203, pp. 1-60.
- White, Nick & Errington, Rachel. 2005. Fluorescence techniques for drug delivery research : theory and practice. *Advance Drug Delivery Review*, Volume 57, pp.17-42
- Yogesh K. Katare, A. K. P., 2006. Influences of excipients on in vitro release and in vivo performance of tetanus toxoid loaded polymer particles. *European journal of pharmaceutical sciences*, Volume 28, pp. 179-188.
- Zimmermann, T., Marrison, J., Hogg, K. & O'Toole, P., 2014. Clearing Up the Signal: Spectral Imaging and Linear Unmixing in Fluorescence Microscopy. Dalam: S. W. Paddock, penyunt. *Confocal Microscopy Methods and Protocols*. USA: Springer Science, pp. 129-131.