

.....47	4.4 長期攝食克弗爾對SHR組織型態之影響.....	52	4.5 利用逆相高效能液相層析純化克弗爾.....	55	4.6 初純化之克弗爾勝?扣蹠HR之抗高血壓活性分析.....	58
	於SHR收縮壓之影響.....	58	4.6.2 純化之克弗爾於SHR舒張壓之影響.....	58	4.6.3 純化之克弗爾於SHR平均動脈壓之影響.....	59
	4.6.1 純化之克弗爾於SHR心跳之影響.....	59	4.7 Fraction A於二維電泳之分析.....	65	4.8 Fraction A之胺基酸定序.....	68
	第五章 結論.....	71	第六章 參考文獻.....	73		

參考文獻

- 第六章 參考文獻 丁予安。1999。臨床高血壓學。藝軒出版社。臺北。劉?X睿。2001。克弗爾特性與機能活性之研究。國立臺灣大學畜產學研究所博士論文。陳彥伯。2004。克弗爾抑制血管緊縮素轉化? 妖蹠O及血管緊縮素轉化? “ 蹠?扣蹠腸桿菌中之表現。國立臺灣大學畜產學研究所碩士論文。Abubakar, A., T. Saito, H. Kitazawa, Y. Kawai, and T. Itoh. Structural analysis of new antihypertensive peptides derived from cheese whey protein by proteinase K digestion. *J. Dairy Sci.* 81:3131-3138. Ali, M. K., G. K. Mahmoud, and S. Masoud. 2006. Lisinopril ameliorates paraquat-induced lung fibrosis. *Clinica. Chimica. Acta.* 367:170-174. Arihara, K., Y. Nakashima, T. Mukai, S. Ishikawa, and M. Itoh. 2001. Peptide inhibitors for angiotensin converting enzyme from enzymatic hydrolysates of porcine skeletal muscle proteins. *Meat Sci.* 57:319-324. Belem, M. A. F., B. F. Gibbs, and B. H. Lee. 1999. Proposing sequences for peptides derived from whey fermentation with potential bioactive sites. *J. Dairy Sci.* 82:486-493. Blanca, H. L., I. Recio, M. Ramos, and L. Amigo. 2002. Preparation of ovine and caprine -lactoglobulin hydrolysates with ACE-inhibitory activity. Identification of active peptides from caprine -lactoglobulin hydrolysed with thermolysin. *Int. Dairy J.* 12:805-812. Blanca, H. L., M. Ramos, I. Recio, and L. Amigo. 2006. Effect of -lactoglobulin hydrolysis with thermolysin under denaturing temperatures on the release of bioactive peptides. *J. Chromatogr.* 1116:31-7. Choi, H. S., H. Y. Cho, H. C. Yang, K. S. Ra, and H. J. Suh. 2001. Angiotensin converting enzyme inhibitor from *Grifola frondosa*. *Food Res. Intern.* 34:178-178. Fuglsang, A., D. Nilsson, and N. C. B. Nyborg. 2002. Cardiovascular effects of fermented milk containing angiotensin converting enzyme inhibitors evaluated in permanently catheterized, spontaneously hypertensive rats. *Appl. Environ. Microbiol.* 68:3566-3569. Fujita, H., H. Usui, K. Kurahashi, and M. Yoshikawa. 1995. Isolation and characterization of ovokinin, a bradykinin B1 agonist peptide derived from ovalbumin. *Peptides.* 16:785-790. German, J. B., C. J. Dillard, and R. E. Ward. 2002. Bioactive components in milk. *Curr. Opin. Clin. utr. Metab. Care.* 5:653-658. Guron, G., N. Marcussen, A. Nilsson, B. Sundelin, and P. Friberg. 1999. Postnatal Time Frame for Renal Vulnerability to Enalapril in rats. *J. Am. Soc. Nephrol.* 10:1550-1560. Guzik, T. J., and D. G. Harrison. 2006. Vascular NADPH oxidases as drug targets for novel antioxidant strategies. *Drug.* 11:524-533. He, H., X. Chen, C. Sun, Y. Zhang, and P. Gao. 2006. Preparation and functional evaluation of oligopeptide-enriched hydrolysate from shrimp (*Acetes chinensis*) treated with crude protease from *Bacillus sp.* SM98011. *Bioresour. Technol.* 97:385-390. Hsu, F. L., Y. H. Lin, M. H. Lee, C. L. Lin, and W. C. Hou. 2002. Both dioscorin, the tuber storage protein of yam (*Dioscorea alata cv. Tainong No.1*), and its peptic hydrolysates exhibited angiotensin converting enzyme inhibitory activities. *J. Agric. Food Chem.* 50:6109-6113. Hsueh, W. A., and D. Bruemmer. 2004. Peroxisome proliferators-activated receptor : implications for cardiocascular disease. *Hypertens.* 43:297-305. Igarashi, K., K. Yoshioka, K. Mizutani, M. Miyakoshi, T. Murakami, and T. Akizawa. 2006. Blood pressure-depressing activity of a peptide derived from silkworm fibroin in spontaneously hypertensive rats. *Biosci. Biotechnol. Biochem.* 70:517-520. Je, J. Y., P. J. Park., J. Y. Kwon, and S. K. Kim. 2004. A novel angiotensin converting enzyme inhibitory peptide from Alaska Pollack (*Theragra chalcogramma*) frame protein hydrolysate. *J. Agric. Food Chem.* 52:7842-7845. Je, J. Y., P. J. Park, H. G. Byun, W. K. Jung, and S. K. Kim. 2005. Angiotensin converting enzyme (ACE) inhibitory peptide derived from the sauce of fermented blue mussel, *Mytilus edulis*. *Bioresour. Technol.* 96:1624-1629. Kawamura, T., K. Youshida, A. Sugawara, M. Nagasaka, N. Mori, K. Takeuch, and M. Kohzuki. 2004. Regulation of skeletal muscle peroxisome proliferator-activated receptor expression by exercise and angiotensin converting enzyme inhibition in fructose-fed hypertensive rats. *Hypertens. Res.* 27:61-70. Kim, J. M., K. S. Ra, D. Noh, and H. J. Suh. 2002. Optimization of submerged culture conditions for the production of angiotensin converting enzyme inhibitor from *Flammulina velutipes*. *J. Ind. Microbiol. Biotechnol.* 29:292-295. Kilimura, K., S. Takai, D. Jin, M. Muramatsu, K. Kishi, K. Yoshikawa, M. Nakabayashi, Y. Mino, and M. Miyazaki. 2005. Role of chymase-dependent angiotensin II formation in regulating blood pressure in spontaneously hypertensive rats. *Hypertens. Res.* 28:457-464. Kuba, M., K. Tanaka, S. Tawata, and Y. Takeda. 2003. Angiotensin converting enzyme inhibitory peptides isolated from tofuyo fermented soybean food. *Biosci. Biotechnol. Biochem.* 67:1278-1283. Lee, D. H., J. H. Kim, J. S. Park, Y. J. Choi, and J. S. Lee. 2004. Isolation and characterization of a novel angiotensin converting enzyme inhibitory peptide derived from the edible mushroom *Tricholoma giganteum*. *Peptide.* 25:621-627. Leppala, A. P., T. Rokka, and H. Korhonen. 1998. Angiotensin converting enzyme inhibitory peptides derived from bovine milk proteins. *Int. Dairy J.* 8:325-331. Li, C. H., T. Matsui, K. Matsumoto, R. Yamasaki, and T. Kawasaki. 2002. Latent production of angiotensin converting enzyme inhibitors from buckwheat protein. *J. Pept. Sci.* 8:267-274. Li, G. H., J. Z. Wan, G. W. Le, and Y. H. Shi. 2006. Novel angiotensin converting enzyme inhibitory peptides isolated from alcalase hydrolysate of mung bean protein. *J. Pept. Sci.* 8:1-6. Li, G. H., G. W. Le, Y. H. Shi, and S. Shrestha. 2004. Angiotensin converting enzyme inhibitory peptides derived from food proteins and their physiological and pharmacological effects. *Nutr. Res.* 24:469-486. Lijun, W., M. Saito, E. Tatsumi, and L. Lite. 2003. Antioxidative and angiotensin converting enzyme inhibitory activity of sufu (fermented tofu) extracts. *J. A. R. Q.* 37:129-132. Liu, J. R., M. J. Chen, and C. W. Lin. 2005. Antimutagenic and antioxidant properties of milk-kefir and soymilk-kefir. *J. Agric. Food Chem.* 53:2467-2474. Lo, W.

M. Y., and E. C. Y. L. Chan. 2005. Angiotensin converting enzyme inhibitory peptides from in vitro pepsin-pancreatin digestion of soy protein.

Megias, C. M. D. M., Yust, J. Pedroche, H. Lquari, J. G. Calle, M. Alaiz, F. Millan, and J. Vioque. 2004. Purification of an ACE inhibitory peptide after hydrolysis of sunflower (*Helianthus annuus* L.) protein isolates. *J. Agric. Food Chem.* 52:1928-1932. Minercvini, F., F. Algaron, C. G. Rizzello, P. F. Fox, V. Monnet, and M. Gobetti. 2003. Angiotensin converting enzyme inhibitory and antibacterial peptides from *Lactobacillus helveticus* PR4 proteinase-hydrolyzed casein of milk from six species. *Appl. Environ. Microbiol.* 69:5297-5305. Motoi, H., and T. Kodama. Isolation and characterization of angiotensin converting enzyme inhibitory peptides from wheat gliadin hydrolysate. *Nahrung.* 47:354-358.

Nakamura, Y., N. Yamamoto, K. Sakai, and T. Takano. 1995. Antihypertensive effect of sour milk and peptides isolated from it that are inhibitors to Angiotensin converting enzyme. *J. Dairy Sci.* 78:1253-1257. Nakamura, Y., N. Yamamoto, K. Sakai, and T. Takano. 1995. Antihypertensive effect of sour milk and peptides isolated from if that are inhibitors to angiotensin converting enzyme. *J. Dairy Sci.* 78:1253-1257. Ondetti, M. A., and D. W. Cushman. 1982. Enzyme of the renin-angiotensin system and their inhibitors. *Ann. Rev. Biochem.* 51:283-308. Pedroche, J., M. M. Yust, J. G. Calle, M. Alaiz, F. Millan, and J. Vioque. 2002. Utilisation of chickpea protein isolates for production of peptides with angiotensin converting enzyme (ACE) – inhibitory activity. *J. Sci. Food Agric.* 82:960-965. Quiros, A., B. H. Ledesma, M. Ramos, L. Amigo, and I. Recio. 2005. Angiotensin-converting enzyme inhibitory activity of peptides derived from caprine kefir. *J. Dairy Sci.* 88:3480-3487. Robert, M. C., A. Razaname, M. Mutter, and M. A. Jullerat. 2004. Identification of angiotensin- -converting enzyme inhibitory peptides derived from sodium caseinate hydrolysates produced by *Lactobacillus helveticus* NCC 2765. *J. Agric. Food Chem.* 52:6923-6931. Saglam, M., O. Dogan, A. M. Esen, I. Barutcu, S. Dogan, Y. Karavelioglu, H. Karapinar, T. Akgun, O. Esen, N. Ozdemir, S. Turkmen, and C. Kaymaz. 2006. Contribution of plasma matrix metalloproteinases to development of left ventricular hypertrophy and diastolic dysfunction in hypertensive subjects. *Tohoku. J. Exp. Med.* 208:117-122. Scribner, A. W., J. Loscalzo, and C. Napoli. 2003. The effect of angiotensin converting enzyme inhibition on endothelial function and oxidant stress. *Eur. J. Pharm.* 482:95-99. Sipola, M., P. Finckenberg, J. Santisteban, R. Korpela, H. Vapaatalo, and M. L. Nurminen. 2001. Long-term intake of milk peptides attenuates development of hypertension in spontaneously hypertensive rats. *J. Physio.* 52:745-754. Suetsuna, K., and T. Nakano. 2000. Identification of an antihypertensive peptide from peptic digest of wakame. (*Undaria pinnatifida*) *J. Nutr. Biochem.* 11:450-454. Suh, E. J., J. H. Whang, Y. S. Kim, S. H. Bae, and D. O. Noh. 2003. Preparation of angiotensin converting enzyme inhibitor from corn gluten. *Process Biochem.* 38:1239-1244. Tahira, Y., N. Fukuda, M. Endo, R. Suzuki, Y. Ikeda, H. Takagi, K. Matsumoto, and K. Kanmatsuse. 2002. Transforming growth factor- expression in cardiovascular organs in stroke-prone spontaneously hypertensive rats with the development of hypertension. *Hypertens. Res.* 25:911-918. Takano, T. 2002. Anti-hypertensive activity of fermented dairy products containing biogenic peptides. *Antonie Van Leeuwenhoek.* 82:333-340. Toblli, J. E., I. Stella, O. N. Mazza, L. Ferder, and F. Inserra. 2004. Protection of cavernous tissue in male spontaneously hypertensive rats. *Am. J. Hypertens.* 17:516-522. Vercruyse, L., G. Smaghe, G. Herregods, and J. V. Camp. 2005. ACE inhibitory activity in enzymatic hydrolysates of insect protein. *J. Agric. Food Chem.* 53:5207-5211. Williams, R. N., S. L. Parsons, T. M. Morris, B. J. Rowlands, and S. A. Watson. 2005. Inhibition of matrix metalloproteinase activity and growth of gastric adenocarcinoma cells by an angiotensin converting enzyme inhibitor in in vitro and murine models. *Eur. J. Surg. Oncol.* 10:1-9. Wu, J. and X. Ding. 2001. Hypotensive and physiological effect of angiotensin converting enzyme inhibitory peptides derived from soy protein on spontaneously hypertension rats. *J. Agric. Food Chem.* 49:501-506. Yamamoto, N. 1997. Antihypertensive peptides derived from food proteins. *Biopolymers.* 43:129-34. Yamamoto, N., M. Maeno, and T. Takano. 1999. Purification and characterization of an antihypertensive peptide from a yogurt-like product fermented by *Lactobacillus helveticus* CPN4. *J. Dairy Sci.* 82:1388-1393. Yang, Y., E. D. Marczak, M. Yokoo, H. Usui, and M. Yoshikawa. 2003. Isolation and antihypertensive effect of angiotensin converting enzyme (ACE) inhibitory peptides from Spinach Rubisco. *J. Agric. Food Chem.* 51:4897-4902. Yang, Y., E. D. Marczak, H. Usui, Y. Kawamura, and M. Yoshikawa. 2004. Antihypertensive properties of spinach leaf protein digests. *J. Agric. Food Chem.* 52:2223-2225. Yoshii, H., N. Tachi, R. Ohba, O. Sakamura, H. Takeyama, and T. Itani. 2001. Antihypertensive effect of ACE inhibitory oligopeptides from chicken egg yolks. *Comp. Biochem. Physiol. C.* 128:27-33. Young, I. S., and J. Mcceney. 2001. Lipoprotein oxidation and atherosclerosis. *Biochem. Soci. Trans.* 29:358-362.