

เอกสารอ้างอิง

1. ขนิษฐา ทานีฮิล (2552) ฤทธิ์ต้านมะเร็ง ต้านอนุมูลอิสระ และกระตุ้นระบบภูมิคุ้มกันของข้าวฮาง การนำเสนอผลงานวิจัยแห่งชาติ 2552. ณ ศูนย์ประชุมบางกอกคอนเวนชันเซ็นเตอร์ เซ็นทรัลเวิลด์ ราชประสงค์ กรุงเทพฯ.
2. นันทรัตน์ มหาสวัสดิ์, ทรงศิลป์ พจน์ชนะชัย, ณีฎฐา เลหากุลจิตต์ และ อรพิน เกิดชูชื่น (2552) การศึกษาการเปลี่ยนแปลงคุณค่าทางโภชนาการของข้าวกล้องงอกพันธุ์ข้าวดอกมะลิ 105 และข้าวหอมแดง. ว. วิทย. กษ., 40: 361-364.
3. ปวีณา รัตนเสนา และ ประภัสสร บุขหมั่น (2556) กิจกรรมต้านอนุมูลอิสระ สารประกอบฟีนอลิกทั้งหมดและปริมาณกรดแกมมาอะมิโนบิวทริกในสารสกัดจากข้าวกล้องงอกและข้าวฮางอกของไทย. วารสารวิทยาศาสตร์ มศว., 29: 95-109.
4. สำนักงานกองทุนสนับสนุนการสร้างเสริมสุขภาพ (สสส.) แผนงานฐานทรัพยากรอาหาร บทความเผยแพร่ใน มหกรรมสมุนไพรแห่งชาติครั้งที่ 5 (ข้าวไทย ชีวิตไทย ชีวิตโลก) ณ ศูนย์ประชุมอิมแพค เมืองทองธานี จ. นนทบุรี วันที่ 3-7 กันยายน 2551.
5. อภิชาติ อัจฉาเสียว (2553) ผลของกระบวนการแช่ที่มีการเติมสารเร่งและการงอกที่มีผลต่อปริมาณสาร GABA ในข้าวเปลือกงอกหอมมะลิ 105. วิศวกรรมสาร มข., 37: 131-139.
6. อรทัย ขำคำ, อรพิน เกิดชูชื่น และ ณีฎฐา เลหากุลจิตต์ (2552) การเปลี่ยนแปลงปริมาณวิตามินบี 1 แกมมาอะมิโนบิวทริก และสารฟีนอลิกของข้าวเจ้างอกและธัญพืชงอก 4 ชนิด. ว. วิทย. กษ., 40: 73-76.
7. อิงฟ้า คำแพง, อรพิน เกิดชูชื่น และ ณีฎฐา เลหากุลจิตต์ (2552) การเปลี่ยนแปลงสารอาหารของข้าวและธัญพืชในระหว่างการงอก. ว. วิทย. กษ., 40: 341-344.
8. ADWAN, G., ABU-SHANAB, B. & ADWAN, K. (2010) Antibacterial activities of some plant extracts alone and in combination with different antimicrobials against multidrug-resistant *Pseudomonas aeruginosa* strains. *Asian Pacific Journal of Tropical Medicine*, 3: 266-269.
9. APAK, R., GORINSTEIN, S., BÖHM, V., SCHAICH, K. M., ÖZYÜREK, M. & GÜÇLÜ, K. (2013) Methods of measurement and evaluation of natural antioxidant capacity/activity (IUPAC Technical Report). *Pure Appl. Chem.*, 85: 957-998.
10. BANCHUEN, J., THAMMARUTWASIK, P., OORAIKUL, B., WUTTIJUMNONG, P. & SIRIVONGPAISAL, P. (2009) Effect of Germinating Processes on Bioactive Component of Sangyod Muang Phatthalung Rice. *Thai Journal of Agricultural Science*, 42: 191-199.
11. BUTSAT, S. & SIRIAMORNUN, S. (2010) Antioxidant capacities and phenolic compounds of the husk, bran and endosperm of Thai rice. *Food Chemistry*, 119: 606-613.
12. CHOI, Y., JEONG, H.S., LEE, J. (2007) Antioxidant activity of methanolic extracts from some grains consumed in Korea. *Food Chemistry*, 103: 130-138.

13. CHUNG, H. S. & SHIN, J. C. (2007) Characterization of antioxidant alkaloids and phenolic acids from anthocyanin-pigmented rice (*Oryza sativa* cv. Heugjinjubyeo). *Food Chemistry*, 104: 1670-1677.
14. DONKOR, O. N., STOJANOVSKA, L., GINN, P., ASHTON, J. & VASILJEVIC, T. (2012) Germinated grains – Sources of bioactive compounds. *Food Chemistry*, 135: 950-959.
15. ESA, N. M., KADIR, K.-K. A., AMOMD, Z. & AZLAN, A. (2013) Antioxidant activity of white rice, brown rice and germinated brown rice (in vivo and in vitro) and the effects on lipid peroxidation and liver enzymes in hyperlipidaemic rabbits. *Food Chemistry*, 141: 1306-1312.
16. FERNANDEZ-OROZCO, R., FRIAS, J., ZIELINSKI, H., PISKULA, M. K., KOZLOWSKA, H. & VIDAL-VALVERDE, C. (2008) Kinetic study of the antioxidant compounds and antioxidant capacity during germination of *Vigna radiata* cv. emerald, *Glycine max* cv. jutro and *Glycine max* cv. merit. *Food Chemistry*, 111: 622-630.
17. FRIAS, J., MIRANDA, M. L., DOBLADO, R. & VIDAL-VALVERDE, C. (2005) Effect of germination and fermentation on the antioxidant vitamin content and antioxidant capacity of *Lupinus albus* L. var. Multolupa. *Food Chemistry*, 92: 211-220.
18. GELMEZ, N., KINCAL, N. S. & YENER, M. E. (2009) Optimization of supercritical carbon dioxide extraction of antioxidants from roasted wheat germ based on yield, total phenolic and tocopherol contents, and antioxidant activities of the extracts. *The Journal of Supercritical Fluids*, 48: 217-224.
19. HAGIWARA, H., SEKI, T. & ARIGA, T. (2004) The Effect of Pre-germinated Brown Rice Intake on Blood Glucose and PAI-1 Levels in Streptozotocin-induced Diabetic Rats. *Bioscience, Biotechnology, and Biochemistry*, 68: 444-447.
20. HEEMS, D., LUCK, G., FRAUDEAU, C. & VERETTE, E. (1998) Fully automated pre-column derivatization, on-line dialysis and high-performance liquid chromatographic analysis of amino acids in food, beverages and feedstuff. *J. Chromat. A*, 789: 9-17.
21. HTWE, N. N., SRILAONG, V., TANPRASERT, K., TONGCHITPAKDEE, S., KANLAYANARAT, S. & UTHAIRATANAKIJ, A. (2010) Effects of storage time and temperature on radical scavenging activities and bioactive compounds in colored rice varieties. *Journal of Food, Agriculture & Environment*, 8: 26 - 31.
22. ISHIZONE, S., MARUTA, F., SUZUKI, K., MIYAGAWA, S., TAKEUCHI, M., KANAYA, K., OANA, K., HAYAMA, M., KAWAKAMI, Y. & OTA, H. (2007) In vivo bactericidal activities of Japanese rice-fluid against *H. pylori* in a Mongolian gerbil model. *Int. J. Med. Sci.*, 4: 203-208.
23. JENSEN, S., OSTDAL, H., SKIBSTED, L. H. & THYBO, A. K. (2011) Antioxidants and shelf life of whole wheat bread. *Journal of Cereal Science*, 53: 291-297.

24. JIMÉNEZ, I. & SPEISKY, H. (2000) Effects of copper ions on the free radical-scavenging properties of reduced glutathione: implications of a complex formation. *Journal of Trace Elements in Medicine and Biology*, 14: 161-167.
25. KAOSA-ARD, T. & SONGSERMPONG, S. (2012) Influence of germination time on the GABA content and physical properties of germinated brown rice. *As. J. Food Ag-Ind.*, 5: 270-283.
26. KAYAHARA, H., TSUKAHARA, K. & TATAI, T. (2000) Flavor, health and nutritional quality of pre-germinated brown rice. 10th international flavor conference. Paros, Greece.
27. KIM, H. Y., HWANG, I. G., KIM, T. M., WOO, K. S., PARK, D. S., KIM, J. H., KIM, D. J., LEE, J., LEE, Y. R. & JEONG, H. S. (2012) Chemical and functional components in different parts of rough rice (*Oryza sativa* L.) before and after germination. *Food Chemistry*, 134: 288-293.
28. KOMATSUZAKI, N., TSUKAHARA, K., TOYOSHIMA, H., SUZUKI, T., SHIMIZU, N. & KIMURA, T. (2007) Effect of soaking and gaseous treatment on GABA content in germinated brown rice. *Journal of Food Engineering*, 78: 556-560.
29. KRINGS, U., EL-SAHARTY, Y. S., EL-ZEANY, B. A., PABEL, B. & BERGER, R. G. (2000) Antioxidant activity of extracts from roasted wheat germ. *Food Chemistry*, 71: 91-95.
30. KRINGS, U. & BERGER, R. G. (2001) Antioxidant activity of some roasted foods. *Food Chemistry*, 72: 223-229.
31. KRINGS, U., JOHANSSON, L., ZORN, H. & BERGER, R. G. (2006) In vitro DNA-protective activity of roasted wheat germ and fractions thereof. *Food Chemistry*, 97: 712-718.
32. KUMAR, P. K. P., MANOHAR, R. S., INDIRAMMA, A. R. & KRISHNA, A. G. G. (2014) Stability of oryzanol fortified biscuits on storage. *J Food Sci Technol*, 51: 2552-2559.
33. LIMA, C. F., FERNANDES-FERREIRA, M. & PEREIRA-WILSON, C. (2006) Phenolic compounds protect HepG2 cells from oxidative damage: Relevance of glutathione levels. *Life Sciences*, 79: 2056-2068.
34. LIN, P. Y. & LAI, H. M. (2011) Bioactive compounds in rice during grain development. *Food Chemistry*, 127: 86-93.
35. LIU, R., HE, X., SHI, J., NIRASAWA, S., TATSUMI, E., LI, L. & LIU, H. (2013) The effect of electrolyzed water on decontamination, germination and gamma-aminobutyric acid accumulation of brown rice. *Food Control*, 33: 1-5.
36. MAMIYA, T., KISE, M., MORIKAWA, K., AOTO, H., UKAI, M. & NODA, Y. (2007) Effects of pre-germinated brown rice on depression-like behavior in mice. *Pharmacology Biochemistry and Behavior*, 86: 62-67.
37. MASSARETTO, I. L., MADUREIRA ALVES, M. F., MUSSI DE MIRA, N. V., CARMONA, A. K. & LANFER MARQUEZ, U. M. (2011) Phenolic compounds in raw and cooked rice (*Oryza sativa* L.) and their inhibitory effect on the activity of angiotensin I-converting enzyme. *Journal of Cereal Science*, 54: 236-240.

38. MIURA, D., ITO, Y., MIZUKUCHI, A., KISE, M., AOTO, H. & YAGASAKI, K. (2006) Hypocholesterolemic action of pre-germinated brown rice in hepatoma-bearing rats. *Life Sciences*, 79: 259-264.
39. MOONGNGARM, A. & SAETUNG, N. (2010) Comparison of chemical compositions and bioactive compounds of germinated rough rice and brown rice. *Food Chemistry*, 122: 782-788.
40. OHTSUBO, K., SUZUKI, K., YASUI, Y. & KASUMI, T. (2005) Bio-functional components in the processed pre-germinated brown rice by a twin-screw extruder. *Journal of Food Composition and Analysis*, 18: 303-316.
41. PARADISO, V. M., SUMMO, C., TRANI, A. & CAPONIO, F. (2008) An effort to improve the shelf life of breakfast cereals using natural mixed tocopherols. *Journal of Cereal Science*, 47: 322-330.
42. PASCUAL, C. D. S. C. I., MASSARETTO, I. L., KAWASSAKI, F., BARROS, R. M. C., NOLDIN, J. A. & MARQUEZ, U. M. L. (2013) Effects of parboiling, storage and cooking on the levels of tocopherols, tocotrienols and γ -oryzanol in brown rice (*Oryza sativa* L.). *Food Research International*, 50: 676-681.
43. PEÑA, C. J., REVERTE, A., HERNANDEZ, L. B., MERAZ, S. & JIMÉNEZ, M. (2011) Antimicrobial, antioxidant and toxic effects of *Senna skinneri* Bentham, Irwin and Barneby (Leguminosae). *Journal of Medicinal Plants Research*, 5: 3224-3228.
44. SAMAN, P., VÁZQUEZ, J. A. & PANDIELLA, S. S. (2008) Controlled germination to enhance the functional properties of rice. *Process Biochemistry*, 43: 1377-1382.
45. SEKI, T., NAGASE, R., TORIMITSU, M., YANAGI, M., ITO, Y., KISE, M., MIZUKUCHI, A., FUJIMURA, N., HAYAMIZU, K. & ARIGA, T. (2005) Insoluble Fiber Is a Major Constituent Responsible for Lowering the Post-Prandial Blood Glucose Concentration in the Pre-Germinated Brown Rice. *Biological and Pharmaceutical Bulletin*, 28: 1539-1541.
46. SHARMA, P., GUJRAL, H.S. (2010) Antioxidant and polyphenol oxidase activity of germinated barley and its milling fractions. *Food Chemistry*, 120: 673-678.
47. SHARMA, P. & GUJRAL, H. S. (2011) Effect of sand roasting and microwave cooking on antioxidant activity of barley. *Food Research International*, 44: 235-240.
48. SHEN, Y., JIN, L., XIAO, P., LU, Y. & BAO, J. (2009) Total phenolics, flavonoids, antioxidant capacity in rice grain and their relations to grain color, size and weight. *Journal of Cereal Science*, 49: 106-111.
49. SHOICHI, I. (2004) Marketing of value-added rice production in Japan: germinated brown rice and rice bread. *FAO Rice conference*. Rome, Italy.
50. TIAN, S., NAKAMURA, K. & KAYAHARA, H. (2004) Analysis of phenolic compounds in white rice, brown rice, and germinated brown rice. *Journal of Agricultural and Food Chemistry*, 52: 4808-4813.

51. VADIVEL, V., NANDETY, A. & BIESALSKI, H. (2011) Antioxidant potential and health relevant functionality of traditionally processed *Cassia hirsuta* L. seeds: an Indian underutilized food legume. *Plant Foods Hum Nutr.*, 66: 245-253.
52. VARANYANOND, W., TUNGTRAKUL, P., SUROJANAMETAKUL, V., WATANASIRITHAM, L. & LUXIANG, W. (2005) Effects of Water Soaking on Gamma-Aminobutyric Acid (GABA) in Germ of Different Thai Rice Varieties. *Kasetsart J. (Nat. Sci.)*, 39: 411 - 415.
53. VELUPPILLAI, S., NITHYANANTHARAJAH, K., VASANTHARUBA, S., BALAKUMAR, S. & ARASARATNAM, V. (2009) Biochemical Changes Associated with Germinating Rice Grains and Germination Improvement. *Rice Science*, 16: 240-242.
54. VICHAPONG, J., SOOKSERM, M., SRIJESDARUK, V., SWATSITANG, P. & SRIJARANAI, S. (2010) High performance liquid chromatographic analysis of phenolic compounds and their antioxidant activities in rice varieties. *LWT - Food Science and Technology*, 43: 1325-1330.
55. VISCIDI, K. A., DOUGHERTY, M. P., BRIGGS, J. & CAMIRE, M. E. (2004) Complex phenolic compounds reduce lipid oxidation in extruded oat cereals. *Lebensm.-Wiss. u.-Technol.*, 37: 789-796.
56. WICHAMANEE, Y. & TEERARAT, I. (2012) Production of germinated Red Jasmine brown rice and its physicochemical properties. *International Food Research Journal*, 19: 1649-1654.
57. YAFANG, S., GAN, Z. & JINSONG, B. (2011) Total phenolic content and antioxidant capacity of rice grains with extremely small size. *African Journal of Agricultural Research*, 6: 2289-2293.
58. YAN, J., CAO, J., JIANG, W. & ZHAO, Y. (2012) Effects of preharvest oligochitosan sprays on postharvest fungal diseases, storage quality, and defense responses in jujube (*Zizyphus jujuba* Mill. cv. Dongzao) fruit. *Scientia Horticulturae*, 142: 196-204.
59. ZHANG, C. H. & GE, Y. (2008) Response of Glutathione and Glutathione S-transferase in Rice Seedlings Exposed to Cadmium Stress. *Rice Science*, 15: 73-76.
60. ZHANG, G., MALIK, V. S., PAN, A., KUMAR, S., HOLMES, M. D., SPIEGELMAN, D., LIN, X. & HU, F. B. (2010a) Substituting Brown Rice for White Rice to Lower Diabetes Risk: A Focus-Group Study in Chinese Adults. *Journal of the American Dietetic Association*, 110: 1216-1221.
61. ZHANG, R., LU, H., TIAN, S., YIN, J., CHEN, Q., MA, L., CUI, S. & NIU, Y. (2010b) Protective effects of pre-germinated brown rice diet on low levels of Pb-induced learning and memory deficits in developing rat. *Chemico-Biological Interactions*, 184: 484-491.
62. ZHOU, Z., ROBARDS, K., HELLIWELL, S. & BLANCHARD, C. (2004) The distribution of phenolic acids in rice. *Food Chemistry*, 87: 401-406.

63. ZIELINSKI, H., DEL CASTILLO, M. D., PRZYGODZKA, M., CIESAROVA, Z., KUKUROVA, K. & ZIELINSKA, D. (2012) Changes in chemical composition and antioxidative properties of rye ginger cakes during their shelf-life. *Food Chemistry*, 135: 2965-2973