

Research Projects undertaken/ongoing/Financial assistance received:**Dr. Narpinder Singh**

S.No	Title of project	Funding Agency	Amount (Rs)	Status
(i)	Peptidyl Prolyl Cis-Trans Isomerases: Role in Storage Protein Deposition in Wheat Relevance to Industry <i>Co-Principal Investigator</i> (2008-2011)	Department of Biotechnology	67.74 lakh	Ongoing
(ii)	Ramanna Fellowship (2007-2010)	Department of Science & Technology, Ministry Science and Technology	34.80 lakh	Ongoing
(iii)	Isolation and characterization of starch and protein from different legumes (2007-2010)	Department of Science and Technology, Ministry Science and Technology	31.69 lakh	Ongoing
(iv)	Production, characterization and modification of gluten proteins (2007-2010)	University Grants Commission	8.21 lakh	Ongoing
(v)	Creation of infrastructure facilities	Ministry of Food Processing Industries, Govt. of India	49 lakh	Completed
(vi)	Isolation, characterization and utilization of starch from broken Indian rice (2002-2005)	Indian Council of Agricultural Research	12.38 lakh	Completed
(vii)	Screening potato cultivars for novel properties (2003-2006)	Department of Science and Technology, Ministry Science and Technology	19.57 lakh	Completed
(viii)	Studies on the processing behaviour of Indian corn types (2003-2006)	All India Council of Technical Education	8.5 lakh	Completed
(ix)	Studies on the utilization of sunflower meal (1995-98)	Indian Council of Agricultural Research	6.72 lakh	Completed
(x)	Studies on Utilization and prevention of crystal formation in honey (1994-1997)	Indian National Science Academy	1.50 lakh	Completed

List of publications**(*Publications as corresponding author)***Research Papers*

1. Amrit Pal Kaur, **Narpinder Singh***, Rajarathnam Ezekiel and Navdeep Singh Sodhi. Properties of starches separated from potatoes stored under different conditions. *Food*

2. **Narpinder Singh***, Richa Bedi, Rhythm Garg, Mukti Garg and Jaghmohan Singh. Physico-chemical, thermal and pasting properties of fractions obtained during three successive reduction milling of different corn types. *Food Chemistry*, **2009**, 113, 71-77.
3. Normell Jhoe E de Mesa, Sajid Alavi, **Narpinder Singh**, Yong-Chen Shi, Hulya Dogan and Yijun Sang. Effect of soy protein concentrate and extruder screw speed on the physico-chemical, textural and cellular properties of corn starch-based expanded snacks. *Journal of Food Engineering*, **2009**, 90, 262-270.
4. Amritpal Kaur, **Narpinder Singh***, and Rajarathnam Ezekiel. Quality parameters of potato chips from different potato cultivars: effect of prior storage and frying temperature. *International Journal of Food Properties*, 2008, 11, 1-12.
5. **Narpinder Singh***, Yoshiko Nakaura, Naoyoshi Inouchi, Katsuyoshi Nishinari. Structure and viscoelastic properties of starches separated from different legumes. *Starch/Starke*, **2008**, 60, 349-357.
6. Sandeep Singh, Gurpreet Singh, Prabhjeet Singh and **Narpinder Singh*** Effect of water stress at different stages of grain development on the characteristics of starch and protein of different wheat varieties. *Food Chemistry*, **2008**, 108, 130-139.
7. **Narpinder Singh***, Naoto Isono, Sathaporn Srichuwong, Takahiro Noda, and Katsuyoshi Nishinari. Structural and viscoelastic properties of potato starches. *Food Hydrocolloids*, **2008**, 22, 979-988.
8. Kawaljit Singh Sandhu, Maninder Kaur, **Narpinder Singh** and Seung-Taik Lim. A comparison of native and oxidized normal and waxy corn starches: Physicochemical, thermal, morphological and pasting properties. *LWT - Food Science and Technology*, **2008**, 41, 1000-1010.
9. Vani Aggarwal, **Narpinder Singh***, Sukhdev Singh Kamboj. Preparation and characterization of acid modified starch from mung and pea cultivars. *Journal of Food Science and Technology*, **2008**, 45, 143-147.
10. Kawaljit Singh Sandhu, **Narpinder Singh** and Seung-Taik Lim. Functional properties of normal, waxy and sugary corn starches. *Journal of Food Science and Technology*, **2007**, 44, 565-571.
11. Navdeep Singh Sodhi and **Narpinder Singh***. Characteristics of acid modified starches prepared from selected rice cultivars of India. *Journal of Food Science and Technology*, **2007**, 44, 572-578.
12. Rajarathnam Ezekiel, Gauri Rana, **Narpinder Singh*** and Sandeep Singh. Physico-chemical, thermal and pasting properties of starch separated from γ -irradiated and stored potatoes. *Food Chemistry* **2007**, 105, 1420-1429.
13. Maninder Kaur and **Narpinder Singh**. Relationships between various functional, thermal and pasting properties of flours from different Indian black gram (*Phaseolus*

mungo L.) cultivars. *Journal of the Science of Food and Agriculture*, **2007**, 87, 974-984.

14. Maninder Kaur and **Narpinder Singh***. Characterization of protein isolates from different chickpea cultivars (*Cicer arietinum*). *Food Chemistry*, **2007**, 102, 366-374.
15. Maninder Kaur and **Narpinder Singh***. A comparison between the properties of seed, starch, flour and protein separated from chemically hardened and normal kidney beans. *Journal of the Science of Food and Agriculture*, **2007**, 87, 729-737.
16. Kawaljit Singh Sandhu, **Narpinder Singh** and Seung-Taik Lim. A comparison of native and acid thinned normal and waxy corn starches: Physicochemical, thermal, morphological and pasting properties. *LWT - Food Science and Technology*, **2007**, 40, 1527-1536.
17. Maninder Kaur, Kawaljit Singh Sandhu and **Narpinder Singh**. Comparative study of the functional, thermal and pasting properties of flours from different field pea (*Pisum sativum* L.) and pigeon pea (*Cajanus cajan* L.) cultivars. *Food Chemistry*, **2007**, 104, 259-267.
18. **Narpinder Singh***, Yoshiko Nakaura, Naoyoshi Inouchi, Katsuyoshi Nishinari. Fine structure, thermal and viscoelastic properties of starches separated from *Indica* rice cultivars. *Starch-Starke*, **2007**, 59, 10-20.
19. Lovedeep Kaur, Jaspreet Singh, **Narpinder Singh** and Rajaranganathan Ezekiel. Textural and pasting properties of potatoes as affected by storage temperature. *Journal of the Science of Food and Agriculture*, **2007**, 87, 520-526.
20. Kawaljit Singh Sandhu, **Narpinder Singh*** and Nachhattar Singh Malhi. Some properties of corn grains and their flours I. Physicochemical, functional and chapati making properties of flours. *Food Chemistry*, 101, **2007**, 938-946.
21. Kawaljit Singh Sandhu and **Narpinder Singh***. Some properties of corn starches II. Physicochemical, gelatinization, retrogradation, pasting and gel textural properties. *Food Chemistry*, 101, **2007**, 1499-1507.
22. Amritpal Kaur, **Narpinder Singh***, Rajrathnam Ezekiel, and Harmeet Singh Guraya. Physico-chemical, thermal and pasting properties of starches separated from different potato cultivars grown at different locations. *Food Chemistry*, 101, **2007**, 643-651.
23. Baljit Singh, K.S.Sekhon and **Narpinder Singh**. Effects of moisture, temperature, and levels of pea grits on extrusion behaviour and product characteristics of rice. *Food Chemistry*, 100, **2007**, 198-202.
24. Amritpal Kaur and **Narpinder Singh***. Effect of guar gum coating on moisture content, oil uptake and textural properties of fried (French fries) potato from different cultivars. *Journal of Food Science and Technology*, 44, **2007**, 115-117.
25. Maninder Kaur and **Narpinder Singh***. Relationships between selected properties of seeds, flours and starches from different chickpea cultivars. *International Journal of Food Properties*, 9, **2006**, 597-608.

26. Navdeep Singh Sodhi, **Narpinder Singh** and Komal. Osmotic dehydration kinetic of carrots. *Journal of Food Science and Technology*, **2006**, 43, 410-415.
27. Lovedeep Kaur, Jaspreet Singh and **Narpinder Singh**. Effect of cross-linking on some properties of potato starches. *Journal of the Science of Food and Agriculture* **2006**, 85, 1945-1954.
28. **Narpinder Singh***, Navdeep Singh Sodhi, Vani Bhambari and Harinder Singh. Effect of acetic anhydride on physicochemical, thermal, retrogradation and pasting properties of rice starches differing in crystallinity. *Journal of Food Science and Technology* **2006**, 43, 624-633.
29. **Narpinder Singh***, Naoyoshi Inouchi and Katsuyoshi Nishinari. Structural, thermal and viscoelastic characteristics of starches separated from normal, sugary and waxy maize. *Food Hydrocolloids*, **2006**, 20, 923-935.
30. Balmeet Singh and **Narpinder Singh***. Physico-chemical, water and oil absorption and thermal properties of gluten isolated from different Indian wheat cultivars. *Journal of Food Science and Technology*, **2006**, 43, 251-255.
31. **Narpinder Singh***, Lovedeep Kaur, Kawaljeet Singh Sandhu, Jagdeep Kaur, Katsuyoshi Nishinari. Relationships between physicochemical, morphological, thermal, rheological properties of rice starches. *Food Hydrocolloids* **2006**, 20, 532-542.
32. M.S. Bakshi, N Kaur, R.K.Mahajan, J Singh and **N. Singh**. Estimation of degree of counterion binding and related parameters of monomeric and dimeric cationic surfactants from cloud point measurements by using triblock polymer as probe. *Colloid and Polymer Science*, **2006**, 284, 879-885
33. S. Balasubramanian, **N. Singh**, S. M. Ilyas and O. D. Wanjari. Effect of selected decorticated legumes proteins on rheology of maize extrudate pastes. *Journal of Food Science and Technology*, 43, **2006**, 522-525.
34. **Narpinder Singh***, Deepika Dhanoa and Navdeep Singh Sodhi. Physico-chemical and textural properties of apples from different cultivars. *Journal of Food Science and Technology*, 43, **2006**, 148-152
35. **Narpinder Singh**, Naoyoshi Inouchi and Katsuyoshi. Morphological, structural, thermal and rheological characteristics of starches separated from apples of different cultivars. *Journal of Agriculture and Food Chemistry*, **2005**, 53, 10193-10199.
36. Balmeet Singh Gill, **Narpinder Singh** and Navdeep Singh Sodhi. Studies on physico-chemical, textural and functional properties of wheat flour from different Indian cultivars. *Journal of Food Science and Technology*, **2005**, 43, 56-64.
37. **Narpinder Singh***, Seerat Preet Kaur, Lovedeep Kaur and Navdeep Singh Sodhi. Physico-chemical, rheological and chapatti making properties of flours from some Indian potato cultivars. *Journal of Food Science and Technology*, **2005**, 42, 344-348
38. **Narpinder Singh***, Lovedeep Kaur, Rajarathnam Ezekiel and Harmeet Singh Guraya. Microstructural, cooking and textural characteristics of potato (*Solanum tuberosum* L) tubers in relation to physico-chemical and functional properties of their flours. *Journal Science of Food and Agriculture*, **2005**, 85, 1275-1284.
39. Maninder Kaur and **Narpinder Singh***. Studies on functional, thermal and pasting properties of flours from different chickpea cultivars, *Food Chemistry*, **2005**, 91, 403-411.

40. Navdeep Singh Sodhi and **Narpinder Singh***. The physico-chemical, thermal and rheological properties of acetylated starch from different rice cultivars. *Journal of Food Engineering*, **2005**, 70, 117-127.
41. S. S. Bedi, Kirti Jindal and **Narpinder Singh**. Elastic behaviour of syrups. *Journal of Food Engineering*, **2005**, 70, 183-188.
42. Maninder Kaur, **Narpinder Singh*** and Navdeep Singh Sodhi. Physico-chemical, cooking, textural and roasting characteristics of chickpea (*Cicer arietinum* L.) cultivars. *Journal of Food Engineering*, **2005**, 511-517.
43. Kawaljit Singh Sandhu, **Narpinder Singh*** and N. S. Malhi. Physicochemical, thermal and morphological properties of starches separated from corn produced from crosses of two germ pools. *Food Chemistry*, **2005**, 89, 541-548.
44. **Narpinder Singh***, Maninder Kaur and Kawaljit Singh Sandhu, Physicochemical and functional properties of freeze-dried and oven ried corn gluten meals. *Drying Technology*, **2005**, 23, 1-14.
45. **Narpinder Singh***, Lovedeep Kaur, Navdeep Singh Sodhi and Kashmira Singh Sekhon. Physico-chemical, cooking and textural properties of milled rice from different Indian rice cultivars. *Food Chemistry*, **2005**, 89, 53-259.
46. Jaspreet Singh, Lavedeep Kaur, and **Narpinder Singh**. Effect of acetylation on some properties of corn and potato starches. *Starch-Starke*, **2004**, 56, 586-601.
47. **Narpinder Singh***, Maninder Kaur, Kanwaljit Singh Sandhu and Harmeet Singh Guraya 2004. Physico-chemical, thermal, morphological and pasting properties of starches from some Indian black gram varieties (*Phaseolus mungo*. L). *Starch-Starke*, **2004**, 535-544.
48. **Narpinder Singh*** and Lovedeep Kaur. Morphological, thermal, rheological and retrogradation properties of starch fractions varying in granule size. *Journal of The Science of Food and Agriculture* **2004**, 84, 241-1252.
49. Maninder Kaur, **Narpinder Singh***, Kawaljit Singh Sandhu and Harmeet Singh Guraya. Physico-chemical, morphological, thermal and rheological properties of starches separated from kernels of some Indian mango cultivars (*Mangifera indica* L). *Food Chemistry*, **2004**, 85, 131-140.
50. **Narpinder Singh***, Lovedeep Kaur and Jaspreet Singh. Relationships between various physico-chemical, thermal and rheological properties of starches separated from different potato cultivars. *Journal of the Science of Food and Agriculture*, **2004**, 84, 714-720..
51. Maninder Kaur, **Narpinder Singh*** and K. S. Sandhu. Relationship between selected properties of black gram seeds and their composition. *International Journal of Food Properties*, **2004**, 7, 541-552.
52. Kawaljit Singh Sandhu, **Narpinder Singh*** and Maninder Kaur. Characteristics of the different corn types and their grain fractions: physico-chemical, thermal, morphological and rheological properties of starches. *Journal of Food Engineering*, **2004**, 64, 119-127.
53. Balmeet Singh Gill, N S Sodhi, **Narpinder Singh**, Maninder Singh and Davinder Singh. Effects of °Brix, Sodium Alginate and Drying Temperature on the Colour, Textural and Sensory Properties of Dushehari Mango Leather. *Journal of Food Science and Technology*, **2004**, 41, 373-378.
54. Vani Aggarwal, **Narpinder Singh*** and Sukhdev Singh Kamboj. Some properties of

- seeds and starches separated from mung (*Phaseolus mungo*) cultivars. *Journal of Food Science and Technology*, 41, **2004** 341-343.
55. **Narpinder Singh***, Kawaljit Singh Sandhu and Maninder Kaur. Characteristics of starches from Indian chickpea cultivars. *Journal of Food Engineering* 63, **2004**, 441-449.
56. Maninder Kaur and **Narpinder Singh***. Effect of ammonium bicarbonate on extrusion behaviour of rice and corn grit. *Journal of Food Science and Technology*, **2004**, 41, 223-225.
57. **Narpinder Singh***, Maninder Kaur, Kawaljit Singh Sandhu and Navdeep Singh Sodhi. Physico-chemical, cooking and textural characteristics of some Indian black gram varieties (*Phaseolus mungo*. L). *Journal of Science of Food and Agriculture*, 84 **2004**, 977-982.
58. B. S. Chadha, G. Harmeet, M. Mandeep, HS. Saini and **N. Singh**. Phytase production by the thermophilic fungus *Rhizomucor pusillus*. *World Journal of Microbiology & Biotechnology*, 20, **2004**, 105-109.
59. Balmeet Singh Gill, **Narpinder Singh*** and S. K. Saxena. The impact of starch properties on noodle making properties of Indian wheat cultivars. *International Journal of Food Properties*, 7, **2004**, 59-74.
60. Vani Agarwal, **Narpinder Singh*** and Sukhdev Singh Kamboj. Some properties of seeds and starches separated from different Indian pea cultivars. *Food Chemistry*, 85, **2004**, 585-590.
61. Lovedeep Kaur, **Narpinder Singh*** and Jaspreet Singh. Factors influencing the properties of hydroxypropylated potato starches. *Carbohydrate Polymers*, 55, **2004**, 211-223.
62. Jaspreet Singh and **Narpinder Singh*** Effect of process variables and sodium alginate on extrusion behaviour of nixtamalized corn grit. *International Journal of Food Properties*, **2004**, 7, 329-340.
63. **Narpinder Singh*** and Lovedeep Kaur. Morphological, thermal, rheological and retrogradation properties of starch fractions varying in granule size. *Journal of The Science of Food and Agriculture*, 84, **2004**, 1241-1252.
64. **Narpinder Singh***, Deepika Chawla and Jaspreet Singh. Influence of acetic anhydride on physico-chemical, morphological and thermal properties of corn and potato starches. *Food Chemistry*, **2004**, 86, 601-608.
65. Navdeep Singh Sodhi, **Narpinder Singh***, Munish Arora and Jaspreet Singh. Changes in physico-chemical, thermal, cooking and textural properties of rice during aging. *Journal of Food Processing and Preservation* 27, **2003**, 387-400.
66. Jaspreet Singh, **Narpinder Singh***, T. R. Sharma and S. K. Saxena. Physicochemical, rheological and cookie-making properties of corn and potato flours. *Food Chemistry* 83, **2003**, 387-393.
67. **Narpinder Singh***, N.S. Sodhi, Manmeet Kaur, S.K. Saxena. Physico-chemical, morphological, thermal, cooking and textural properties of chalky and translucent rice kernels. *Food Chemistry* 82, **2003**, 339-499.
68. Navdeep Singh Sodhi and **Narpinder Singh***. Morphological, thermal and rheological properties of starches separated from rice cultivars grown in India. *Food Chemistry*, 80, **2003**, 99-108.

69. **Narpinder Singh***, Jaspreet Singh and Navdeep Singh Sodhi. Morphological, thermal, rheological and noodles making properties of potato and corn starch. *Journal of the Science of Food and Agriculture*, 82, **2002**, 1376-1386.
70. M. S. Bakshi, S. Sachar, N. Mahajan, I. Kaur, G. Kaur, **Narpinder Singh**, P. Sehgal and H. Doe. Mixed-micelle formation by strongly interacting surfactant binary mixtures: effect of head-group modification. *Colloid and Polymer Science*, 280, **2002**, 990-1000.
71. Jaspreet Singh and **Narpinder Singh***. Studies on the morphological and rheological properties of granular cold water soluble corn and potato starches. *Food Hydrocolloids*, 17, **2002**, 63-72.
72. **Narpinder Singh***, Shaveta Gupta, Navdeep Singh Sodhi and R. P. Singh. The effect of additives on dough and cookie making properties of flour. *International Journal of Food Properties*, 5, **2002**, 547-562.
73. **Narpinder Singh***, Inderpreet Kaur Bajaj, R. P. Singh and Hardeep Singh Gujral. Effect of different additives on mixograph and bread making properties of flour. *Journal of Food Engineering* 56, **2002**, 89-95.
74. Hardeep Singh Gujral, Amrit Kaur, **Narpinder Singh** and Navdeep Singh Sodhi. Effect of liquid whole egg, fat and textured soy protein on the textural and cooking properties of raw and baked patties from goat meat. *Journal of Food Engineering*, 53, **2002**, 377-385.
75. Lovedeep Kaur, **Narpinder Singh***, Navdeep Singh Sodhi and Hardeep Singh Gujral. Some properties of potatoes and their starches I. Cooking, textural and rheological properties of potatoes *Food Chemistry*, 79, **2002**, 18-192.
76. Lovedeep Kaur, **Narpinder Singh*** and Navdeep Singh Sodhi. Some properties of potatoes and their starches II. Morphological, thermal and rheological properties of starches. *Food Chemistry*, 79, **2002**, 183-192.
77. Rubinder Kaur, B. S. Chadha, **N. Singh**, H. S. Saini and S. Singh. Amylase hyperproduction by deregulated mutants of thermophilic fungus *Thermomyces lanuginosus*. *Journal of Industrial Microbiology and Biotechnology*, 29, **2002**, 70-74.
78. Hardeep Singh Gujral, Abhishek Sharma and **Narpinder Singh**. Effects of hydrocolloids, storage temperature and duration on the consistency of tomato ketchup. *International Journal of Food Properties*, 5, **2002**, 179-191.
79. Jaspreet Singh, **Narpinder Singh*** and S. K. Sexana. Effect of fatty acids on the rheological properties of corn and potato starch. *Journal of Food Engineering*, 52, **2002**, 9-16.
80. Hardeep Singh Gujral, Jaswant Singh, Navdeep Singh Sodhi and **Narpinder Singh**. Effect of milling variables on the degree of milling of unparboiled and parboiled rice. *International Journal of Food Properties* 5, **2002**, 193-204.
81. Hardeep Singh Gujral and **Narpinder Singh***. Extrusion behaviour and product characteristics of brown and milled rice. *International Journal of Food Properties*, 5, **2002**, 307-316.
82. Kulwinder Kaur, **Narpinder Singh*** and Hardeep Singh. Studies on the effect of skim

milk powder, sprouted wheat flour and pH on rheological and bread making properties of flour. *International Journal of Food Properties*, 5, **2002**, 13-24.

83. **Narpinder Singh***, Hardeep Singh Gujral and Jaspreet Singh. Effect of ingredients and mixing duration on dough development, gas release and bread making properties. *Journal of Food Quality*, 25, **2002**, 305-315.
84. Jaspreet Singh and **Narpinder Singh***. Studies on the morphological, thermal and rheological properties of starch separated from some Indian potato cultivars. *Food Chemistry*, 75, **2001**, 67-77.
85. Hardeep Singh Gujral, **Narpinder Singh*** and Baljit Singh. Extrusion behaviour of grits from flint and sweet corn. *Food Chemistry*, 74, **2001**, 303-308.
86. Hardeep Singh, **Narpinder Singh***, Lakhwinder Kaur and S. K. Saxena. Effect of sprouting conditions on functional and dynamic rheological properties of wheat. *Journal of Food Engineering*, 47, **2001**, 23-29.
87. Hardeep Singh, Prianka Sharma, **Narpinder Singh** and Dalbir Singh. Effect of hydrocolloids on the rheology of tamarind sauce. *Journal of Food Science and Technology* 38, **2001**, 316-320.
88. Hardeep Singh and **Narpinder Singh***. Relationship between parboiling, degree of milling, ash distribution and conductivity in rice. *Journal of Food Science and Technology*, 38, **2001**, 622-631.
89. Hardeep Singh and **Narpinder Singh***. Relationship between debranning, ash distribution pattern and conductivity in maize. *International Journal of Food Properties*, 4, **2001**, 261-269.
90. Parminder Kaur Bath and **Narpinder Singh***. Effect of microwave heating on HMF formation and colour development in *Helianthus annuus* and *Eucalyptus lanceolatus* honey. *Journal of Food Science and Technology*, 38, **2001**, 367-369.
91. Lakhwinder Kaur, **Narpinder Singh***, Kulwinder Kaur and Baljit Singh. Effect of mustard oil and process variables on extrusion behaviour of rice grits. *Journal of Food Science and Technology*, 37, **2000**, 656-660.
92. **Narpinder Singh***, Sanjeev Sharma and Baljit Singh. Effect of sodium bicarbonate and glycerol monostearate addition on the extrusion behaviour of maize grits. *Journal of Food Engineering*, 46, **2000**, 61-66.
93. Kulwinder Kaur and **Narpinder Singh***. Amylose-lipid complex formation during cooking of rice flour. *Food Chemistry*, 71, **2000**, 511-517.
94. A. S. Bawa and **Narpinder Singh**. Effect of incorporating extruded wheat flour on the quality of goat meat sausages. *Journal of Scientific and Industrial Research*, 59, **2000**, 241-245.
95. **Narpinder Singh***, Kulwinder Kaur, Hardeep Singh and Harmit Singh. Effect of starch-lipids complex formation on functional properties of flour in tandoori roti. *Food Chemistry*, 69, **2000**, 129-133.

96. Parminder Kaur Bath and **Narpinder Singh***. Chemical changes during storage in *Helianthus annuus* and *Eucalyptus lanceolatus* honey. *Journal of Food Quality*, 23, **2000**, 443-451.
97. Kulwinder Kaur, **Narpinder Singh*** and Hardeep Singh. The effect of extruded flour and fermentation time on some quality parameters of idli. *Journal of Food Quality*, 23, **2000**, 15-25.
98. **Narpinder Singh***, Hardeep Singh, Kulwinder Kaur and Mandeep Singh Bakshi. Relationship between degree of milling, ash distribution pattern and conductivity in brown rice. *Food Chemistry*, 69, **2000**, 147-151.
99. Hardeep Singh and **Narpinder Singh***. Effect of additives on dough development, gaseous release and bread making properties. *Food Research International*, 32, **1999**, 691-697.
100. Jaspreet Singh and **Narpinder Singh***. Effects of different ingredients and microwave power on popping characteristics of popcorn. *Journal of Food Engineering*, 42, **1999**, 161-165.
101. Parminder Kaur Bath and **Narpinder Singh***. A comparison between *Helianthus annuus* and *Eucalyptus lanceolatus* honey. *Food Chemistry* 67, **1999**, 389-307.
102. Kulwinder Kaur and **Narpinder Singh***. Effect of acetic acid and CMC on rheological and baking properties of flour. *Journal of Food Quality*, 22, **1999**, 317-327.
103. **Narpinder Singh***, Randir Singh, Kulwinder Kaur and Harmit Singh. Studies on the physico-chemical properties and polyphenoloxidase activity in seeds from hybrid sunflower varieties grown in India. *Food Chemistry*, 66, **1999**, 241-247.
104. Kulwinder Kaur, **Narpinder Singh***, Baljit Singh and K. S. Sekhon. Effect of hydrocolloids on extrusion behaviour of rice grits. *Journal of Food Science and Technology*, 36, **1999**, 127-132.
105. **Narpinder Singh** and Andrew C. Smith. Rheological behaviour of different cereals using capillary rheometry. *Journal of Food Engineering*, 39, **1999**, 203-209.
106. **Narpinder Singh***, Kulwinder Kaur, Baljit Singh and K. S. Sekhon. Effects of phosphate salts on extrusion behaviour of rice grits. *Food Chemistry*, 64, **1999**, 481-488.
107. **N. Singh**, P. Cairns, V. J. Morris and A. C. Smith. Physical properties of extruded wheat starch-additive mixtures. *Cereal Chemistry*, 75, **1998**, 325-330.
108. **Narpinder Singh**, Andrew. C. Smith and N. D. Frame. Effect of process variables and glycerol monostearate on extrusion of maize grits using two sizes of extruders. *Journal of Food Engineering*, 35, **1998**, 91-109.
109. **Narpinder Singh***, Hardeep Singh and Mandeep Singh Bakshi. Determining distribution of ash in wheat using debranning and conductivity. *Food Chemistry*, 62, **1998**, 169-172.

110. Hardeep Singh, **Narpinder Singh*** and Kulwinder Kaur. Effects of additives and pH on dough development and gaseous release characteristics of sound and sprouted wheat. *Journal of Food Science and Technology*, 35, **1998**, 393-398.
111. **Narpinder Singh*** and Parminder Kaur Bath. Relationship between heating and HMF formation in different honey types. *Journal of Food Science and Technology*, 35, **1998**, 154-156.
112. **Narpinder Singh** and Andrew C. Smith. A comparison of wheat starch, whole wheat meal and oat flour in the extrusion cooking process. *Journal of Food Engineering*, 34, **1997**, 15-32.
113. **Narpinder Singh*** and Parminder Kaur Bath. Quality evaluation of different types of Indian honey. *Food Chemistry*, 58, **1997**, 129-133.
114. P. Cairns, V. J. Morris, **N. Singh**, and A. C. Smith. X-ray diffraction studies on extruded maize grits. *Journal of Cereal Science*, 26, **1997**, 23-227.
115. K. S. Sekhon, S. S. Dhillon, **Narpinder Singh*** and Baljit Singh. Suitability of commercial milled bran in India for use in different products. *Plant Foods for Human Nutrition*, 50, **1997**, 127-140.
116. J. S. Sidhu, A. S. Bawa and **Narpinder Singh**. Effect of hydrocolloids on viscosity of tomato ketchup. *Journal of Food Science and Technology*, 34, **1997**, 423-424.
117. **Narpinder Singh***, Usha Bajwa and K. S. Sekhon. Pasting and papad making properties of wheat/rice-mung flour blends. *Journal of Food Science and Technology*, 33, **1997**, 224-228.
118. **Narpinder Singh***, Baljit Singh, K. S. Sandhu, A. S. Bawa and K. S. Sekhon. Extrusion behaviour of wheat, rice and potato blends. *Journal of Food Science and Technology*, 33, **1997**, 291-294.
119. **Narpinder Singh***, A. S. Bawa and K. S. Sekhon. Quality improvement of idli using extruded rice flour. *Journal of Food Quality*, 18, **1995**, 193-202.
120. Baljit Singh, K. S. Sekhon and **Narpinder Singh**. Suitability of full fat and defatted rice bran obtained from Indian rice for use in food products. *Plants Food for Human Nutrition*, 47, **1995**, 191-198.
121. K. S. Sekhon, **Narpinder Singh***, K. Harinder and H. P. S. Nagi. Improving the functional and bread making properties of sprouted wheat. *Journal of Food Processing and Preservation*, 19, **1995**, 147-164.
122. **Narpinder Singh**, K. S. Sekhon and H. P. S. Nagi. Effect of temperature on the extrusion behaviour of sound and sprouted wheat flour. *Journal of Food Science and Technology*, 31, **1994**, 233-235.
123. K. S. Sekhon, H. P. S. Nagi, **Narpinder Singh** and Savita Sharma. Effect of vital gluten and disodium phosphate on the quality of flat bread and noodles from sprouted wheat flour. *Journal of Food science and Technology*, 31, **1994**, 505-507.

124. **Narpinder Singh***, Baljit Singh and K. S. Sekhon. Relationship between fissured kernels and cooking characteristics of rice. *Journal of Food Science and Technology*, 30, **1993**, 74-75.
125. P. P. Gupta, **Narpinder Singh** and K. S. Sekhon. Studies on the improvement of quality of Karnal bunt infected wheat. IV. Histopathological effects. *International Journal of Animal Science*, 8, **1993**, 149-152.
126. **Narpinder Singh***, K. S. Sekhon, Usha Bajwa and Shyama Gopal. Cooking and parching characteristics of chickpea. *Journal of Food Science and Technology*, 29, **1992**, 347-350.
127. K. S. Sekhon, **N. Singh** and H. P. S. Nagi. Effect of pearling and blending on the bread making properties of sprout-damaged wheat. *Cereal Foods World*, 37, **1992**, 715-716, 721-724.
128. K. S. Sekhon, **Narpinder Singh** and R. P. Singh. Studies on the improvement of quality of Karnal bunt infected wheat. I. Milling, rheological and baking properties. *Cereal Chemistry*, 69, **1992**, 50-54.
129. **Narpinder Singh**, K. S. Sekhon, A. K. Srivastava and P. P. Gupta. Studies on the improvement of quality of Karnal bunt infected wheat. II. Nutritional and biological effects. *Cereal Chemistry*, 69, **1992**, 55-60.
130. **Narpinder Singh**, K. S. Sekhon and Rajvir Singh. Studies on the improvement of quality of Karnal bunt infected wheat. III. Minerals composition, chapatie and cookies making properties. *Journal of Food Science and Technology*, 29, **1992**, 1-4.
131. **Narpinder Singh***, K. Harinder, K. S. Sekhon and Bhupinder Kaur. Studies on the improvement of functional and bread making properties of wheat-chickpea flour blends. *Journal of Food Processing and Preservation*, 15, **1991**, 391-402.
132. **Narpinder Singh**, K. S. Sekhon and Amarjit Kaur. Effect of pre-harvest flooding of paddy on milling and cooking quality of rice. *Journal of the Science of Food and Agriculture*, 52, **1990**, 28-34.
133. **Narpinder Singh**, K. S. Sekhon, Amarjit Kaur, R. P. Singh and H. P. S. Nagi. Hailstorms damage to wheat: grain quality and functional properties of flour. *Cereal Foods World*, 35, **1990**, 358-360.
134. A. K. Bakshi, A. K. Sexena, K. S. Sekhon and **Narpinder Singh**. Bread making quality of different roller mill flours. I. Physico-chemical and rheological characteristics. *The Indian Baker*, 20, **1989**, 90-94.
135. K. S. Sandhu, Sukhcharanjit Singh, **Narpinder Singh**, A. S. Bawa. and K. S. Sekhon. 1989. Effect of pectic enzymes treatment on juice yield and composition. *Indian Food Packer*, 46, **1989**, 12-14.
136. **Narpinder Singh***, Amarjit Kaur, R. P. Singh and K. S. Sekhon. Rheological and cookie making studies on wheat-rice flour blends. *Journal of Food Science and Technology*, 26, **1989**, 90-94.
137. **Narpinder Singh**, K. S. Sekhon and R. P. Singh. Studies on the substitution of wheat flour with corn starch in relation to rheological and baking characteristics. *The Indian*

Baker, 19, **1988**, 11-16.

138. **Narpinder Singh**, K. S. Sekhon and H. P. S. Nagi. Laboratory sprout damage and heat treatment on milling and baking properties of Indian wheats. *Journal of Food Science*, 52, **1987**, 176-179.

Book reviews

139. **Narpinder Singh** 'Carbohydrate Chemistry for Food Scientists, 2nd Edition, edited by **James N. BeMiller**. *International Journal of Food Science and Technology*, (in press).
140. **Narpinder Singh** 'Bakery Products Science and Technology' edited by Y. H. Hui. *International Journal of Food Science and Technology*, 43, **2008**, 1910-1911.
141. **Narpinder Singh**. 'Starch in food: structure, function and applications' edited by Ann-Charlotte Eliason. *International Journal of Food Science and Technology*, 41, **2006**, 108-109.
142. **Narpinder Singh**. 'Rice Chemistry and Quality' edited by B. O. Juliano. *International Journal of Food Science and Technology*, 40, **2005**, 571.

Review/Technical papers

- 143 **Narpinder Singh***, Kawaljeet Singh Sandhu and Maninder Kaur. Physicochemical, thermal, pasting and morphological properties of starches from normal, waxy, high amylose and sugary corn. *Progress in Food Biopolymer Research (e-journal)*, 1, 2004, 37-47.
- 144 **Narpinder Singh***, Jaspreet Singh, Lovedeep Kaur, Navdeep Singh Sodhi and Balmeet Singh Gill. Morphological, thermal and rheological properties of starches from different botanical sources: A Review. *Food Chemistry*, 81, **2003**, 219-231.
- 145 B. S. Gill, **N. Singh** and N. S. Sodhi. Opportunities for starch utilization from wheat and rice. *Processed Food Industry* 6, **2003**, 23-25.
- 146 **Narpinder Singh***. Techniques to improve quality of wheat and its products. *Everyman's Science*, XXXII, **1998**, 10-15.
- 147 C. Smith and **N. Singh**. New applications of extrusion technology. *Indian Food Industry*, 15, **1996**, 14-23.
- 148 **Narpinder Singh*** and A. S. Bawa. Wheat quality in relation to natural calamities. *Special Souvenir 1940-1995*. Published by Roller Flour Miller Federation of India, **1996**, 55-57.
- 149 **Narpinder Singh*** and Guninderjit Kaur. Preventing crystals in honey. *The Tribune*, 12th Nov., **1992**.
- 150 K. S. Sekhon and **Narpinder Singh**. Disease in wheat in relation to milling and baking properties. In proceeding of the symposium on "Recent Development and Future Trends in Milling and Baking Technology" held at Mysore, 10th to 12th May, **1990**, pp 14-25.
- 151 **Narpinder Singh***, Sukhcharanjit Singh, A. S. Bawa and K. S. Sekhon. Honey-its food uses. *Indian Food Packer*, 42, **1988**, 15-25.
- 152 **Narpinder Singh*** and K. S. Sekhon. Mold-damage, its effect on physico-chemical and functional properties of wheat. *Indian Food Industry*, 7, **1988**, 9-11.

List of papers published in Conferences /Symposia /Seminars, etc.:

- 153 K S. Sekhon and **Narpinder Singh**. 1990. Disease in wheat in relation to milling and baking properties. In proceeding of the symposium on "Recent Development and Future Trends in Milling and Baking Technology" held at Mysore, 10th to 12th May, pp 14-25.
- 154 K. S. Sekhon, H. P. S. Nagi and **Narpinder Singh*** 1996. Effect of sprouting of wheat on bread and chapati making properties. *Special Souvenir 1940-1995*

Annexure IV

- (i) Presented two research papers in 3rd International Food Convention held at Mysore from 7-12 September 1993.
- (ii) Presented a research paper in ICFOST-1994 held at New Delhi on September 2-3, 1994.
- (iii) Delivered an invited lecture in a seminar on Near Infrared Spectrophotometer and Non-Dispersive Infrared Analyser and Applications held at Hyderabad on 12th August, 1995.
- (iv) Presented two invited lectures and chaired one technical session in National Seminar on Recent Trends in Food Processing held from 17-18th April 1998 organized by Guru Jamadeswer University, Hissar.
- (v) Presented two research papers in 83rd American Association of Cereal Chemists Annual Meeting held from September 13-17, 1998 at Minneapolis, USA.
- (vi) Delivered two lectures as subject expert in the Refresher course for university scientists and teachers on “Advances in Food Science & Technology” on 30-12-2001 at Guru Jambheshwar University, Hisar.
- (vii) Delivered an invited lecture in Rotary Club Amritsar on 6th Feb., 2002.
- (viii) Delivered a lecture on “Elderly people diet” in Chinmaya Mission, Amritsar on 17th March, 2002.
- (ix) Delivered two lectures as subject expert in the summer school “Advances in Food Science and Technology” sponsored by ICAR, New Delhi, in Dept. of Food Science and Technology, PAU, Ludhiana on 12th June, 2002.

- (x) Co-chaired “Starch Processing Technical Session” in the 87th Annual Meeting of American Association of Cereal Chemists held from Oct 13-17, 2002 at Montreal, Canada.
- (xi) Presented two research papers in Annual Meeting of American Association of Cereal Chemists held at Montreal, Canada from Oct 13-17, 2002.
- (xii) Delivered a lecture in “World Food Day” on 16th Oct, 2003 in the GNDU, Amritsar.
- (xiii) Organized a workshop on “Soy enriched bakery/food products” on 26th March, 2004.
- (xiv) Delivered on lecturer in a Seminar on 11th August, 2004 in Graduate School of Human Life Science, Osaka City University, Japan.
- (xv) Delivered a lecture in symposium on ‘Starch’ on 13th Dec, 2004 organized by Graduate School of Human Life Science, Osaka City University, Japan.
- (xvi) Delivered a lecture as resource person in General Orientation Course-65 on 10th June, 2005 organised by GNDU, Amritsar.
- (xvii) Delivered two lectures in the Summer school (ICAR) as resource person in the Summer School (ICAR) organized by CSK Himachal Pradesh Agricultural University, Palampur (HP) on 10-3-2006.
- (xviii) Delivered lecture “Ingredients functionality, sugars and lipids” in the short course on “Extrusion Technology” organized by ASSOCOM-India Pvt. Ltd., Department of Grain Science and Technology, Kansas State University and American Soyabean Association on 20-3-06 at Vadodra.
- (xix) Delivered lecture “Extrusion Applications Breakfast Cereals and Snacks” in the short course on “Extrusion Technology” organized by ASSOCOM-India Pvt. Ltd., Department of Grain Science and Technology, Kansas State University and American Soyabean Association on 21-0306 at Vadodra.
- (xx) Delivered a lecturer on ‘starch processing and functionality’ in the extrusion course on 17th August, 2006 by International Grain Programme, Kansas State University, USA.
- (xxi) Delivered a lecturer on ‘Moprphological, thermal, rheological and retrogradation properties of starch from different plant sources’ in the Department of Grain Science and Technology, Kansas State University, USA on 22nd August, 2006.
- (xxii) Delivered a lecture ‘Functional food for better health’ on 7th March, 2007 in the Seminar organized by GNDU, Amritsar.
- (xxiii) Delivered two lectures as resource person in General Orientation Course-70 organised on 21st May, 2007 by GNDU, Amritsar.
- (xxiv) Delivered a lecture in a motivational programme organized for talented standard students by Punjab State Council for Science and Technology on 10th July, 2008.
- (xxv) Delivered a Lecture on ‘Food for better health’ in Rotary club, Amritsar on 4t August, 2008.

(xxvi) Delivered an invited lecture “Functional properties of normal, waxy and sugary corn starch’ in the international conference (15th to 19th December, 2008) organized by the Association of Food Scientists and Technologist (I) at Mysore.