CURRICULUM VITAE

BRUCE R. HAMAKER
Distinguished Professor of Food Science

Department of Food Science and
Whistler Center for Carbohydrate Research
Purdue University
West Lafayette, Indiana 47907

Academic Record

Degree Received	Institution	Date
B.S., Biological Sciences	Indiana University, Bloomington	May 1977
M.S., Human Nutrition	Purdue University, West Lafayette	May 1983
Ph.D., Food Chemistry	Purdue University, West Lafayette	December 1986

Professional Experience

1/2014 – present	Distinguished Professor, Department of Food Science, Purdue University
2/2008 – present	Roy L. Whistler Chair, Department of Food Science, Purdue University, Affiliation: Whistler Center for Carbohydrate Research
7/2003 – present	Director, Whistler Center for Carbohydrate Research, Purdue University
9/1999 – present	Professor, Department of Food Science, Purdue University. Affiliations: Whistler Center for Carbohydrate Research, Center for Enhancing Foods to Protect Health
8/1993 - 8/1999	Associate Professor (tenured 1995), Department of Food Science, Purdue University. Affiliation: Whistler Center for Carbohydrate Research.
2/1992 - 8/1993	Visiting Associate Professor, Department of Food Science, Purdue University.
6/1988 - 1/1992	Assistant Professor, Department of Food Science, University of Arkansas.
9/1986 - 5/1988	Post-Doctoral Research Associate, Instituto de Investigación Nutricional/Johns Hopkins University, Lima, Perú.
9/1977 - 12/1979	U.S. Peace Corps Volunteer, Liberia, West Africa.

Awards and Honors

- IFT Fellow, Institute of Food Technologists, 2014
- Distinguished Professor, Purdue University, 2013
- American Association of Cereal Chemists International, Alsberg-French-Schoch Award, 2013
- WK Kellogg International Food Security Award, Institute of Food Technologists, 2012
- Hall of Fame recognition, Foods and Nutrition Department , Purdue University, 2010
- Outstanding Graduate Educator, College of Agriculture, Purdue University, 2009-2010

Memberships in Academic, Professional and Scholarly Societies

- Institute of Food Technologists
- American Association of Cereal Chemists
- American Chemical Society
- American Society of Nutrition
- Phi Tau Sigma (Honor Society for Food Science)
- Gamma Sigma Delta (Honor Society of Agriculture)

Research Publications

Refereed Papers (recent 15 publications of 248)

234. Kaur, A., Chen, T., Green, S., Mutlu, E., Martin, B., Rumpagaporn, P., Keshavarzian, A., Hamaker, B.R. 2019. Physical inaccessibility of a resistant starch to Bacteroidetes shifts mouse gut microbiota to butyrogenic Firmicutes. *Molecular Nutrition and Food Research* 63:1081012, https://doi.org/10.1002/mnfr.201801012. (IF=5.151)
235. Zhang, X., Chen, T., Lim, J., Gu, F., Fang, F., Cheng, L., Campanella, O.H., Hamaker, B.R. 2019. Acid gelation of soluble laccase-crosslinked corn bran arabinoxylan and possible gel formation mechanism. *Food Hydrocolloids* 92:1-9. (IF=5.089)
236. Lim, J., Kim, D.K., Shin, H., Hamaker, B.R., Lee, B.H. 2019. Different inhibition properties of catechins on the individual subunits of mucosal α-glucosidases as measured by partially-purified rat intestinal extract. *Food & Function* 10:4407-4413 doi:10.1039/C9FO00990F.
237. Zhang, X., Chen, T., Lim, J., Xie, J., Zhang, B., Yao, T., Hamaker, B.R. 2019. Fabrication of a soluble crosslinked corn bran arabinoxylan matrix supports a shift to butyrogenic gut bacteria. *Food & Function* 10, 4497-4504. (IF=3.289)
238. Cheng, L., Zhu, X., Zhang, H., Hamaker, B.R., Zhang, H., Campanella, O.H. 2019. Complexation process of amylose with different concentrations of linoleic acid using molecular dynamics simulation. *Carbohydrate Polymers* 216:157-166. (IF=5.158)
239. Li, M., George, J., Hunter, S., Hamaker, B.R., Mattes, R.D., Ferruzzi, M.G. 2019. Potato product form impacts in vitro starch digestibility and glucose transport but only modestly impacts 24h blood glucose response in humans. *Food & Function* 10:1846-1855. (IF=3.289)
240. Na-Nakorn, K., Kulrattanarak, T., Hamaker, B.R., Tongta, S. 2019. Starch digestion kinetics of extruded reformed rice is changed in different ways with added protein or fiber. *Food & Function* 10:4577-4583.
241. Cantu-Jungles, T.M., Rasmussen, H.E., Hamaker, B.R. 2019. Potential of prebiotic butyrogenic fibers in Parkinson's disease. Frontiers in Neurology https://doi.org/10.3389/fneur.2019.00663.
242. Debelo, H., Ndiaye, C., Kruger, J., Hamaker, B., Ferruzzi, M.G. 2019. African *Adansonia digitata* fruit pulp (baobab) modifies provitamin A carotenoid bioaccessibility from composite pearl millet porridges. *Journal of Food Science and Technology* doi:10.1007/s13197-019-04173-y.
243. Bishehsari, F., Engen, P.A., Voigt, R.M., Swanson, G., Shaikh, M., Wilber, S., Naqib, A., Green, S.J., Shetuni, B., Forsyth, C.B., Saadalla, A., Osman, A., Hamaker, B.R., Keshavarzian, A., Khazaie, K. 2020. Abnormal eating patterns cause circadian disruption and promote alcohol-associated colon carcinogenesis. *Cellular and Molecular Gastroenterology and Hepatology* 9:219-237.
244. Glowacki, R.W.P., Pudlo, N.A., Tuncil, Y., Luis, A.S., Sajjakulnukit, P., Terekov, A.I., Lyssiotis, C.A., Hamaker, B.R., Martens, E.C. 2020. A ribose-scavenging system confers

colonization fitness on the human gut symbiont *Bacteroides thetaiotaomicron* in a diet-specific manner. *Cell Host & Microbe* 27:6-8 http://dx.doi.org/10.2139/ssrn.3354892.
245. Fang, F. Martinez, M.M., Campanella, O.H., Hamaker, B.R. 2020. Long-term low shear induced highly viscous waxy potato starch gel formed through intermolecular double-helices. *Carbohydrate Polymers* 232:115815.
246. Hayes, A.M.R Swackhamer, C., Mennah-Govela, Y., Martinez, M.M., Diatta, A., Bornhorst, G.M., Hamaker, B.R. 2020. Pearl millet (Pennisetum glaucum) couscous breaks down faster than wheat couscous in the Human Gastric Simulator, though has slower starch hydrolysis. *Food & Function* DOI:10.1039/C9FO01461F.
247. Ferruzzi, M.G., Hamaker, B.R., Bordenave, N. 2020. Phenolic compounds are less degraded in presence of starch than in presence of proteins through processing in model porridges. *Food Chemistry* 309:125769.
248. Cantu-Jungles, T.M., Hamaker, B.R. 2020. A new view on dietary fiber selection for predictable shifts in the gut microbiota. *mBio* 11:e02179-19.